

UNIVERSITY OF ZAGREB, SCHOOL OF MEDICINE

PROPOSAL OF THE DOCTORAL STUDY PROGRAMME

BIOMEDICINE AND HEALTH SCIENCES

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A. OVERVIEW OF THE STUDY PROGRAMME

A.1. GENERAL INFORMATION ON THE PROPOSED DOCTORAL STUDY

A.1.1. NAME OF THE PROPOSED DOCTORAL STUDY

University postgraduate doctoral program Biomedicine and Health Sciences

A.1.2. NAME OF THE PROVIDER OF THE STUDY PROGRAMME

University of Zagreb School of Medicine

THE COOPERATING INSTITUTION(S) PARTICIPATING IN THE STARTING AND IMPLEMENTATION OF THE DOCTORAL STUDY

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A.1.3. NAME OF THE IMPLEMENTER OF THE STUDY PROGRAMME

University of Zagreb School of Medicine

A.1.4. SCIENTIFIC OR ARTISTIC FIELD AND DISCIPLINE OF THE PROPOSED STUDY PROGRAMME

Area: biomedicine and health sciences

Field: basic medical sciences; clinical medicinal sciences, public health and health care

Branch (if the doctoral study is performed in a branch):

A.1.5. DURATION OF THE DOCTORAL STUDY IN ACCORDANCE WITH THE REGULATIONS (IN YEARS)

3

A.1.6. NUMBER OF REQUIRED COURSES/MODULES

8

A.1.7. NUMBER OF ELECTIVE COURSES/MODULES OFFERED WITHIN THE DOCTORAL STUDY

78

A.1.8. ACADEMIC TITLE EARNED UPON COMPLETION OF THE DOCTORAL STUDY

Doctor of Science - PhD

A.1.9. PROPOSED SMALLEST NUMBER OF DOCTORAL STUDENTS FOR ONE ACADEMIC YEAR

15

A.1.10 PROPOSED HIGHEST NUMBER OF DOCTORAL STUDENTS FOR ONE ACADEMIC YEAR

50

A.2. INTRODUCTION

A.2.1. REASONS FOR STARTING THE PROPOSED DOCTORAL STUDY

This proposal presents the Postgraduate University (PhD) Programme Biomedicine and Health Sciences at the University of Zagreb, School of Medicine in the process of re-assessment of the study programme after an international evaluation carried out in November 2016.

The reasons for establishing this PhD programme were based on the need to sustain and advance scientific work in the field of medicine and health care in the Republic of Croatia in order to improve and promote people's health through renewal of human resources, primarily in academic, scientific and leading professional institutions (university and clinical hospitals, healthcare institutions and institutes), state administration (ministries, republic and county bureaus, agencies), and in the business sector, which requires complex task solving and decision-making using scientific methodology (in the pharmaceutical industry, biotech companies, etc.).

The PhD programme Biomedicine and Health Sciences at the University of Zagreb, School of Medicine is the first PhD programme in the Republic of Croatia, which has, since its foundation, been continuously developed and improved in accordance with Croatian higher education strategies, mission and Science Strategy of the School of Medicine and European standards (<http://www.orpheus-med.org/images/stories/documents/ORPHEUS-AMSE-WFME-standards-for-PhD-education.pdf>).

Historically, the first PhD thesis at the University of Zagreb, School of Medicine was defended in 1954. Thereafter, the number of PhD theses gradually increased, and in the mid-1970s the PhD thesis became a pre-requisite for scientific-teaching appointments. Only after the establishment of the PhD programme does the PhD thesis become the responsibility of not only mentors and PhD candidates but also universities. Since the mid-1990s, this idea has been gradually developed by the European University Association (EUA) and has become a public policy in 2003 when the Berlin Ministerial Communiqué consequently defined doctoral programmes as the third cycle of the Bologna process (<http://www.ehea.info/cid100938/ministerial-conference-berlin-2003.html>).

PhD programme Biomedicine and Health Sciences started initially as a master's degree program called "Biomedicine" in the academic year 1997/1998, due to legal framework. From the academic year 1999./2000. the study programme changed its aim and the name to "Medical Science", and started enrolling students with the explicit intention of continuing into the 3rd year of study and finishing with a doctoral dissertation, in line with the views of the European University Association (EUA) (link: https://eua-cde.org/downloads/publications/2005_eua_doctoral-programs-european-knowledge-society.pdf). By the amendment of the Law on Scientific Activity and Higher Education in 2003, a Master's degree has been abolished, and the study programme is renamed for the third time in the PhD programme "Biomedicine and Health Sciences". It was the first postgraduate programme in Croatia that followed the ideas of the Bologna process, introduced the European Credits Transfer System and followed the development of synergies between the European Higher Education Area and the European Research Area. In co-operation with the rectorate of the University of Zagreb, this study anticipated the direct demands of the 2003 Berlin Ministerial Conference and from the outset defined PhD programmes as the responsibility of the university and its faculties to provide students with knowledge, skills and competences for independent scientific work (i.e., neither as the introduction to research nor as its crowning achievement).

The School of Medicine has significantly contributed to the development and harmonization of PhD programmes in Europe and has clearly defined rules for initiating and approving PhD programmes in

accordance with international agreements. According to the documents adopted at the two ORPHEUS (Organisation for PhD Education in Biomedicine and Health Sciences in the European System) conferences held in Zagreb (The Declaration of the European Conference on Harmonisation of PhD Programmes in Medicine and Health Sciences in 2004 and Guidelines for Organization of PhD Programs in Biomedicine and Health Sciences in 2005) the first European standards were established that later developed into the Common Standards / Best Practices document by ORPHEUS, the European Association of Medical Schools (AMSE) and the World Medical Association (WFME). The School of Medicine hosted the annual AMSE 2009 Conference which produced the AMSE - Zagreb Declaration on the Role of the Medical School in Postgraduate Education. In summary, the School of Medicine was one of the leading forces in the development of the Bologna Process at the level of doctoral studies not only in Croatia, but also in Europe. As a result of this international initiative of the School, ORPHEUS was founded (the first president from 2006 to 2014 was Professor Zdravko Lacković, now its honorary member), and the headquarters of the organization are today at the School of Medicine in Zagreb. The School of Medicine has significantly contributed to the development and harmonization of PhD programmes in the Republic of Croatia. Immediately after the aforementioned European conferences in 2005 and 2006, in cooperation with the Croatian Academy of Sciences and Arts and its Department of Medical Sciences, meetings of all medical faculties in Croatia were organized precisely for the purpose of harmonizing PhD programmes in Croatia and the European Research Area.

A.2.1.1. Justifiability of starting the new doctoral study with regard to existence of similar doctoral studies at the University of Zagreb

This re-evaluation of the oldest PhD programme of the University of Zagreb and the Republic of Croatia is carried out following an international evaluation conducted in November 2016. At the University of Zagreb, this is the only and the most comprehensive study in biomedicine and health sciences that is providing organized education for research work in the field of expertise and science, including scientific fields of basic medical science, clinical medicine, public health and health care with relevant scientific branches to physicians and other professionals in the medical and health care system. Following the experience and practice of the leading European and world scientific medical institutions, the School of Medicine is focused on improving translational research and integration of basic, clinical and public health programs, which is in turn reflected in the organization of the PhD programme Biomedicine and Health Sciences. Thus, this PhD programme is clearly distinguished from other programs at the University and similar programs in the Republic of Croatia and the surrounding region. The possibility for such a direction of development of research and science at the School is further facilitated by cooperation with the University Hospital Centre Zagreb (UHC Zagreb) and other clinical and health institutions which are both teaching and research bases of the School of Medicine. All this places the School of Medicine and its PhD programme in a unique position to promote research in biomedicine and healthcare in Croatia. Strategic commitment to translational research was established through the founding of the Centre for Translation and Clinical Research of the School of Medicine and UHC Zagreb, the two branches of the School - the Croatian Institute for Brain Research (CIBR) in the field of neuroscience and the School of Public Health (SPH) "Andrija Štampar" in the field of public health, and two recently established Centres of Research Excellence (CoRE) - CoRE for Reproductive and Regenerative Medicine and CoRE for Basic, Clinical and Translational Neuroscience.

A.2.1.2. Usefulness of the proposed doctoral study with regard to needs of research activities in the public and private sectors, and possibilities of employment upon completion of the study program, including the opinion of 3 organizations related to the labour market (e.g. professional associations, employers and their associations, trade unions, public services) on the appropriateness of planned learning outcomes for the needs of the labour market

The PhD programme Biomedicine and Health Sciences educates scientists and researchers who, at the level of the study program as a whole, acquire specific competences and appropriate measurable learning outcomes in accordance with 8.2 of the Croatian Qualifications Framework (CQF). Students are trained to create, design, implement and adopt the processes of independent and original scientific research as well as the use of these skills and knowledge in solving complex scientific and research problems in the field of biomedicine and healthcare and in interdisciplinary areas. This is in full accordance with the proclaimed ambition of the European Union and the Republic of Croatia to attain the achievements of social and economic objectives by acquiring knowledge (exploration). In this concept of a knowledge-based society doctoral studies have a key role. Accordingly, its role to provide a sufficient number of scientists through doctoral studies is not only used to provide scientific and teaching staff for the needs and the renewal of academic and professional (health) potential, but also to provide a critical mass of scientists in the labour market for the needs of the economy, state administration and the like, which is in accordance with the principles of the Salzburg Declaration (http://www.aic.lv/ace/ace_disk/Bologna/Bolsemin/Salzburg/index.htm).

At a time when a growing number of young scientists and holders of PhD degrees are leaving the country and science and education funding is not following an upward trend, there is a continuing national need to provide financial, material and administrative-legal prerequisites for effective education and employment of the critical mass of doctoral degree holders.

The PhD programme Biomedicine and Health Sciences ensures that the number of holders of doctoral degrees (critical mass) is maintained. It also advances scientific work in the field of biomedicine and health care in the Republic of Croatia by educating holders of doctoral degrees employable in the academic and education sector, leading scientific and professional institutions (university and clinical hospitals, healthcare institutions and institutes), government administration (ministries, republic and county bureaus, agencies), and in the business sector, which requires complex task solving and decision-making using scientific methodology (in the pharmaceutical industry, biotech companies, etc.).

The Science Strategy of the School of Medicine particularly emphasizes the need to launch a human resources policy that will enable the recruitment of doctoral and postdoctoral students in basic (institutes), clinical (hospital) and public health scientific areas. In the context of re-evaluation of PhD programmes, the School of Medicine, as a scientific institution, advocates for the possibility of recruiting young scientists, encouraging their interest in research in Croatia, welcoming Croatian scientists to participate in the PhD programme and mentorship, as well as encouraging the return of Croatian scientists from abroad. The School of Medicine considers this to be its responsibility for the advancement of scientific work in biomedicine, which can enhance the position of science and universities in society and contribute to improving Croatia's competitiveness.

A.2.1.3. Usefulness of the proposed doctoral study with regard to the scientific, cultural, social and economic needs

The usefulness and usability of the PhD programme Biomedicine and Health Sciences with regard to scientific, cultural, social and economic needs is indisputable. First of all, PhD education is different from professional degree or higher degree education since the core activity of the PhD candidate is to carry out original research according to academic standards in order to create new knowledge, while developing research skills and acquiring knowledge. Institutions are increasingly viewing holders of PhD degrees as potential new researchers in academic and scientific environments, as well as researchers outside the academic community, as highly qualified "knowledge workers" that bring added value to their employers. In this context, there is also increased sector mobility of PhD candidates and young degree

holders corresponding to their career prospects (academic community, industry, education, government, counselling, etc.).

Taking into account the social and economic influences, we live in a time of high technology that requires integration of science and technology with application in different spheres of society, including applied medicine. Conversely, modern medicine itself strongly influences the development of technology, and in turn initiates certain social and economic developments. Examples can be found in the experiences and cooperation of the School of Medicine in Zagreb with other University faculties, such as the development of 3D printer modelling technology, the development of robotic devices and devices for surgical applications, the development of new materials and bone healing techniques, the development of new diagnostic tests based on molecular analyses and bioinformatics, the development of smart medicines, the development of reproductive medicine, resulting in the development of new accompanying technologies (e.g., seed banks and egg cells), etc. The aforementioned technologies are integral parts of research projects at the School of Medicine and are included in this PhD programme.

A number of PhD degree holders will find their place in state institutions responsible for specific scientific and professional activities in biomedicine, health and science, especially in ministries, state agencies, departments and institutes. The activities of these highly educated professionals in their institutions can significantly influence the development of the profession and the implementation of specific measures with direct consequences on social and economic issues (e.g. financing of specific health or scientific programs, undertaking specific preventive public health measures, health care organizations, public health actions, etc.).

In addition to the public sector and state administration, PhD programmes have great potential for recruiting future biomedical and health care scientists in the private sector. This applies in particular to the medical industry in which PhD degree holders can play a key role in research institutes and management, in biotechnology companies and private contracting research companies, as well as in privately held biotech companies (e.g., pharmaceuticals or food production, etc.). So it follows that the proposed PhD programme has the purpose and real potential for realization of scientific, cultural, social and economic needs, including the private sector.

A.2.1.4. Foundation of the proposed study programme on competitive scientific or artistic research, and on new insights, knowledge and skills

In line with the recommendations of the European University Association (2007) (<https://eua.eu/resources/publications/615:salzburg-ii-%E2%80%93-recommendations.html>) and ORPHEUS (2011) (<http://www.orpheus-med.org/images/stories/documents/ORPHEUS-AMSE-WFME-standards-for-PhD-education.pdf>) and in accordance with the Strategy of Education, Science and Technology of the Ministry of Science, Education and Sports of the Republic of Croatia from 2014 (<https://mzo.hr/en/strategy-education-science-and-technology>) the PhD programme Biomedicine and Health Sciences follows and implements the scientific criteria met by the mentors and teachers of the PhD programme, defines the competences and skills to be adopted by the PhD candidate and the criteria to be fulfilled by the PhD thesis (original contribution to science), all with the aim of improving science as one of fundamental development priorities that can facilitate long-term social stability and economic progress. The programme approaches the European level of competence required for the development of a knowledge-based society at the highest level that allows the present development of science in the Republic of Croatia as a “small” scientific community.

The School of Medicine is recognized and held in high regard for its research achievements in the scientific area of the PhD programme “Biomedicine and Health Sciences”, which is reflected in the scientific work and achievements of teachers and mentors, scientific projects, established scientific centres and research cooperation. The School is particularly focused on improving translational research and integrating basic, clinical and public health programs, which puts the School of Medicine in a unique position in The Republic of Croatia to promote research in biomedicine and health.

More than 370 teachers (40% staff, 60% of title-elected teachers and external associates) take part in the programme. They have published a total of 5,005 papers (average 13/teacher) with a total of 39,575 citations (104/teacher) and with an average teacher h-index of 8.34 (staff 9.53). At the University of Zagreb, the School of Medicine is ranked first by number of published papers (48.6% of all, citation from the thematic issue of the journal *mef.hr*: Scientific Projects in Biomedicine and Health, July 2016, available at www.unizg.mef.hr). According to the SCOPUS database, almost every fourth scientific article published by scientific institutions in the Republic of Croatia has been authored by the faculty of the School of Medicine in Zagreb. According to the SCOPUS database, 42% of the total scientific production in the Republic of Croatia belongs to the field of biomedicine (all fields). Of these, 48% of all biomedical articles have at least one author from the School of Medicine in Zagreb. In the so-called Leiden list of universities that have published more than 1000 articles in the Web of Science over the past 4 years, the University of Zagreb is ranked 419th out of 938 world universities, and the University of Zagreb School of Medicine is ranked 396 in the field of biomedicine and public health. Out of the approximately 400 scientific articles in the Web of Science database published annually by members of the School of Medicine in Zagreb, about 120 are in the first quartile (Q1), and more than 40 are published in journals with the highest scientific impact (M. Klarica. The role of the University of Zagreb School of Medicine in the development of education, health care, and science in Croatia. *Croat Med J*. 2018; 59: 185-188).

Majority of the scientific projects at the School of Medicine in the previous periods (2007-2014) were financed by national funding (Ministry of Science and Education of the Republic of Croatia). These are the 25 scientific programmes with a total of 87 projects and 74 individual projects, or a total of 161 projects. The faculty staff were the holders of 4 projects under the Unity Through Knowledge Fund programme, and during the period of the European Research and Innovation Funding Program (FP), the faculty members participated in 6 projects. Within the recent Horizon 2020 programme, the School participates with 4 approved projects. In recent years, the School has been successful in obtaining projects funded by the Croatian Science Foundation (CSF) with a total of 15 projects (in preparation for a dozen more) and a University Support Program (40 grants). In addition, there is a considerable number of other international projects (COST Actions, TEMPUS, EAHC), bilateral interstate projects, etc. Among them are DAAD (Deutscher Akademischer Austauschdienst), a bilateral programme for the exchange of participants in projects between the Republic of Croatia and the Federal Republic of Germany. Within the framework of bilateral cooperation, the School also cooperates with Italian and French scientific and research institutions. In the aforementioned article published in *Croat Med J* 2018, Table 2, the Dean of the School lists newer and more favourable data as of October 16, 2018. According to the Dean, there were 157 scientific projects at the School of Medicine in Zagreb, out of which six were Horizon 2020 projects (totalling € 21 million), 1 COST project, 4 DAAD projects, 29 CSF projects, one EXPAND project, two BICRO-HAMAG projects, one Adris project and 111 University support projects, not counting the two Centres of Research Excellence projects with HRK 74 million.

The School of Medicine is particularly proud to be the only institution in Croatia to have two appointed scientific Centres of Research Excellence (CoRE) - CoRE for Reproductive and Regenerative Medicine and CoRE for Basic, Clinical and Translational Neuroscience. There is also the Centre for Translational and

Clinical Research at the School of Medicine and the Clinical Hospital Centre Zagreb, established in 2009, which is of particular importance in the transfer of knowledge and technology. It is one of the few national faculties that promote the development of translational sciences. The Centre also has a Research and Technology Transfer Office supporting scientists in writing and implementing research projects and helping transfer knowledge and technology from research laboratories and clinical research to industry, enabling faster and more efficient transfer of results to end users - patients.

The School has its own quality research resources in terms of space, equipment, infrastructure and supporting services in accordance with the requirements of the scientific discipline from which the PhD programme is derived. The PhD programme is carried out at the premises of the School of Medicine, University of Zagreb, clinical and outpatient health institutions in Zagreb and scientific-research institutions (partners) with which the School has entered into a cooperation agreement. In addition to the facilities at the School of Medicine, other facilities are located at its research bases in the health system - two university hospital centres, six clinical hospitals, two health centres and two public health institutes. The School has cooperation agreements with the the Ruđer Bošković Institute, University of Zagreb Faculty of Science, University of Zagreb Faculty of Veterinary Medicine, University of Rijeka Faculty of Food Technology and Biotechnology, University of Split School of Medicine, and University Josip Juraj Strossmayer of Osijek Faculty of Medicine.

A.2.1.5. Innovativeness of the proposed study programme, that is, potential of the proposed study programme for creation of new and relevant knowledge or artistic practices

The postgraduate university (PhD) programme “Biomedicine and Health Sciences” educates scientists and researchers who, at the level of the study programme as a whole, must acquire specific competencies and corresponding measurable learning outcomes.

In this context, the PhD programme “Biomedicine and Health Sciences” is fully aligned with the School's scientific mission and vision, the strategic programme of scientific research at the School, as well as with international standards in the field of PhD programmes (ORPHEUS/AMSE/WFME) (<http://www.orpheus-med.org/images/stories/documents/ORPHEUS-AMSE-WFME-standards-for-PhD-education.pdf>). The School's mission in the field of science is to conduct collaborative, innovation-driven research programmes that connect scientists in the fields of basic, clinical and public health sciences, promoting interdisciplinarity and collaborativeness. The School of Medicine strives to create a stimulating intellectual environment, to promote scientific and humanitarian aspects of medical practice, while carrying out scientific research in the framework of international and national projects that result in the advancement of science, application in the teaching process and improvement of health care.

Research and development strategies of the School of Medicine are underpinned by the fundamental lines of performance pursued by the institution and involve the following:

- Culture promotion strategy and quality assurance system
- Study curricula quality strategy
- Student support strategy
- Research work quality development strategy
- IT/communication technologies development and application strategy
- National-scale collaboration development strategy
- International-scale collaboration development strategy
- Infrastructure, business and work organisation development strategy

These strategies of are based on the School's values themselves, which can be summarized as follows:

- competent teachers who are leaders in their scientific and professional areas in the Republic of Croatia and have national, regional and international reputation;
- previous references of the School of Medicine that guarantee a high level of quality in teaching, research and transfer of knowledge into practice;
- a high-quality infrastructural support of the realization of all activities of the School of Medicine

student-centred teaching in line with the agreed principles and standards of international medical education and standards of PhD programmes.

A.2.2. ANALYSIS OF THE COMPATIBILITY OF THE DOCTORAL STUDY WITH THE RESEARCH STRATEGY OF THE UNIVERSITY OF ZAGREB

The proposed PhD programme is fully in line with the Research Strategy, Technology Transfer and Innovation of the University of Zagreb document (http://www.unizg.hr/fileadmin/rektorat/O_Sveucilistu/Dokumenti_javnost/Dokumenti/Strateski_dokumenti/Izvjesca/Istrazivacka_strategija_verzija.pdf) in which one of the key goals is to improve doctoral education. This applies in particular to increasing the research productivity of young researchers, preparing PhD programmes for different careers after obtaining a PhD (basic medical sciences, clinical medical sciences, public health, industry, public sector) and appointment of young scientists to the University, i.e. the need to redefine the position of assistant professors. The system needs to be arranged to attract a number of international PhD candidates - junior researchers, which is carried out at the School of Medicine through the PhD programme in English.

In the above aspects, the PhD programme “Biomedicine and Health Sciences” is fully aligned with the mission, vision and strategic programme of scientific research of the School of Medicine and the University of Zagreb. The research mission of the School of Medicine consists of the implementation of research programs that are collaborative, focused on innovation and that bring together scientists in the fields of basic, clinical and public health sciences.

The immediate goals of the science strategy that fully correspond to the proclaimed goals of the University are the following:

- to develop and maintain a high level of research work that will enhance the research profile and international reputation of the School;
- to educate future generations of researchers in the field of medicine;
- to create synergies in the fields of science, medicine and technology;
- to facilitate the transition and translation of research findings into clinical and public health practice and collaboration with industry;
- to strengthen the culture of cooperation at national and international level;
- to establish a staff scientific policy;
- to strengthen the high level of research collaboration between biomedical science, clinical research departments and outpatient healthcare institutions;
- to encourage continuous monitoring of public health indicators and their application in the process of improving political decision-making on health and healthcare.

Measures to achieve the goals of the science development strategy at the School of Medicine emphasize the need to initiate a staff scientific policy that will enable the recruitment of young scientists (PhD and postdoctoral students) in basic, clinical and public health fields. In the context of the re-accreditation of

the PhD programme, the School of Medicine, as the responsible scientific institution, advocates the employment of young scientists, stimulating their interest in research and work in Croatia, and encouraging the return of Croatian scientists from abroad. The School considers this its responsibility for the advancement of scientific work in biomedicine, which can influence the better position of science and universities in society and contribute to improving Croatia's competitiveness.

A.2.3. PRIOR EXPERIENCES OF THE PROGRAMME PROPOSER IN IMPLEMENTATION OF DOCTORAL STUDIES

The University of Zagreb School of Medicine is one of the oldest medical schools in this part of Europe, and was the first to establish and carry out postgraduate programmes in accordance to the changing laws and regulations. The first postgraduate programme was introduced in 1947/1948 in public health, with occupational medicine starting in 1949/1950. In short, the School of Medicine has over 70 years of experience in organizing and implementing postgraduate programmes.

Preparations for the establishment of the PhD programme began in a working group led by Prof. Zdravko Lacković in 1996. The programme started in the academic year 1997/1998., due to legal restrictions, first as a master-of-science degree programme called "Biomedicine". From 1999/2000. the programme was called "Medical Sciences", but was organized with the explicit intention that the continuation (the third year of study) should end with a PhD. With the change of the Act on Scientific Activity and Higher Education in 2003 and the Bologna process, the Master's Degree was abolished, and for the third time the study changed its name to the PhD programme "Biomedicine and Health Sciences". As already mentioned, it was the first postgraduate programme in the Republic of Croatia implementing the ideas of the Bologna Process and introducing the European Credits Transfer System, and it followed the development of synergy between the European Higher Education Area and the European Research Area. In cooperation with the Rectorate of the University of Zagreb, from its outset this programme anticipated the direct requests of the Ministerial Conference in Berlin in 2003 and prescribed that PhD programme, as the responsibility of the School of Medicine, should provide students with knowledge, skills and competences for independent scientific work. The University of Zagreb School of Medicine is a European leader in the implementation of the Bologna Process at the PhD level. As a result of this international initiative, ORPHEUS was founded (the first president from 2006 to 2014 was Prof. Zdravko Lacković, today its honorary member), and the headquarters of the organization were at the School of Medicine in Zagreb. As a result, the PhD programme Biomedicine and Health Sciences became widely known in Europe, bringing the School closer to the European level of competence required for the development of a knowledge-based society at the highest level, spurring and facilitating the current development of science in the Republic of Croatia.

The School has significantly contributed to the development and harmonization of PhD programmes in Croatia. Immediately after the ORPHEUS European conferences in 2005 and 2006, in cooperation with the Department of Medical Sciences of the Croatian Academy of Sciences and Arts (HAZU), meetings of all medical schools in Croatia were held with the aim to harmonize PhD programmes in Croatia and the European Research Area.

During the last years, several international and external evaluation processes have been carried out at the School, which, among other things, have included the evaluation of the PhD programme "Biomedicine and Health Sciences":

- The Peer Mission of the European Commission visited the School in 2007 as part of the negotiations for the accession of the Republic of Croatia to the European Union, and in 2012 as part of the monitoring before accession;

- The National Council for Higher Education initiated the School's external evaluation process at the end of 2008 and, on the basis of the Final Report, the Faculty received a work permit in early 2009;
- by the decision of the Agency for Science and Higher Education (ASHE) from 2011, the School of Medicine was selected as one of the three faculties of the University of Zagreb, where an internal and external evaluation of the quality assurance system was carried out according to the ESG guidelines. Based on the final report, in 2013 the Faculty was awarded the ASHE certificate for an efficient, developed and functionally organized quality assurance system;
- The re-accreditation process of the School of Medicine was carried out in 2015. The Final Report states: "Each study programme is defined in accordance with clearly defined learning outcomes and international standards. The institution of higher education has put in place mechanisms to approve, monitor and improve its programmes and qualifications";
- in addition to the aforementioned processes of international and national quality evaluation of the School of Medicine as a whole, 2013/2014. The PhD Programme Committee of the University of Zagreb conducted the evaluation process for the PhD programme "Biomedicine and Health Sciences". The International Commission has given the opinion that the PhD programme "Biomedicine and Health Sciences" is eligible for continuation of the programme at the University of Zagreb, but some improvements have been proposed;
- the process of re-accreditation of the PhD programme "Biomedicine and Health Sciences", conducted by the Agency for Health and Safety in 2016. The International Commission identified examples of good practice in the study, but also made recommendations for improving the quality of study.

A.2.4. INTERNATIONAL RECOGNISABILITY OF THE PROPOSER OF THE DOCTORAL STUDY IN SCIENTIFIC OR ARTISTIC RESEARCH, OR ARTISTIC CREATION

The University of Zagreb School of Medicine is an internationally recognized faculty on several grounds. In particular, two basic points should be emphasized - the School as a driving force for the development of PhD programmes in the Republic of Croatia and a frontrunner of harmonization of PhD programmes in Europe, and the School as a place of quality scientific research activity, which is ultimately manifested by international projects and the number of scientific papers and publications.

The School has contributed significantly to the development and harmonization of PhD programmes in Europe and has clearly established rules for establishing and approving PhD programmes in accordance with international agreements. According to documents adopted at two ORPHEUS conferences held in Zagreb, the first European standards were established, which later evolved into common standards (Standards/Best Practices) by ORPHEUS, the Association of Medical Schools of Europe (AMSE) and the World Federation for Medical Education (WFME). The School hosted the 2009 annual AMSE conference at which the *AMSE - Zagreb Declaration on the Role of the Medical School in Postgraduate Education* was adopted. In short, the School has been the leader in the development of the Bologna process at the PhD level in the European context. As previously already stated, the School was a major force in the establishment of ORPHEUS. Today, ORPHEUS is a large European association with 105 institutional members (faculties / universities) from Europe, several medical colleges from Canada, India, Australia and the United States and four associate members: the British Pharmacological Society, The Federation of European Pharmacologists, EMTRAIN Project and Federation of American Societies for Experimental Biology (FASEB). It is the largest PhD programme association in Europe working to promote and link PhD programmes in biomedical and health research. It also implements the ORPHEUS Evaluation Certificate

and Labelling whose purpose is to assist institutions to reflect on their doctoral training programmes, by providing them with a comprehensive and flexible procedure to assist this process of self-reflection.

In terms of research recognition, the School is strategically focused on improving translational research and integrating basic, clinical and public health programmes. The University Hospital Centre Zagreb and other health care institutions are not only teaching but also research bases of the School of Medicine, which puts the School in a unique position to promote research in biomedicine and health in Croatia.

According to the number of published papers by the University of Zagreb, the School of Medicine is in the first place by the number of published papers (48.6%) (mef.hr: Scientific projects in biomedicine and health, July 2016, available at www.mef.unizg.hr). Regarding international projects and cooperation, the Faculty's teachers were holders of 4 UKF projects, 5 FP6 projects and 6 FP7 European research and innovation funding programmes, and 4 Horizon 2020 projects. In addition, there is a significant number of other international projects (IPA, COST Actions, TEMPUS, EAHC, Michael J. Fox) and bilateral / interstate projects. Among them are the DAAD (Deutscher Akademischer Austauschdienst), a bilateral program for the exchange of participants in projects between the Republic of Croatia and the Federal Republic of Germany. Within the framework of bilateral cooperation, the Faculty also cooperates with Italian and French scientific and research institutions.

The School has numerous international bilateral cooperation agreements with the faculties of renowned world universities, including the American (University of California/San Francisco, Medical College of Wisconsin/Milwaukee, Penn State University, Pennsylvania, University of Georgia College of Public Health, The State University of New Jersey/The Rutgers University, Vanderbilt University/Tennessee, University of Northern Colorado, University of Michigan Medical School, McGill / Montreal, etc.) and several European medical school (Ljubljana, Graz, Moscow, Hamburg, Pécs, Rennes, etc.).

The School is also actively involved in a number of European associations for the promotion of higher education in biomedicine: the Association of Medical Schools of Europe (AMSE), the International Association for Medical Education (AMEE), The European Training Consortium in Public Health & Health Promotion, the Association of Schools of Public Health in the European Region (ASPHER), European Public Health Association (EUPHA), Forum for Public Health in South-East Europe, Organization for PhD Education for Biomedicine & Health in European System (ORPHEUS) and European University Association (EUA).

A.2.5. COMPARABILITY WITH SIMILAR DOCTORAL PROGRAMMES OF HIGHLY RANKED FOREIGN UNIVERSITIES

Various PhD programmes are carried out at European medical schools, a number of which are comparable to this proposed PhD programme, primarily in concept with respect to the scientific and educational components of the study programme. In this context, it should be emphasised once again that the PhD programme at the Zagreb School of Medicine hosted two European conferences on the harmonization of doctoral studies in the field of biomedicine, held in 2004 and 2005. Important documents adopted at these conferences are the so-called Zagreb Declaration, which defines PhD programmes, and the “Zagreb Recommendations on the Organization of Doctoral Studies”. The ORPHEUS - Organisation for PhD Education in Biomedicine and Health Sciences in the European System was founded at the Second Conference, headed by Professor Zdravko Lacković. In 2012, the association published a strategic document entitled “Standards for PhD Education in Biomedical and Health Sciences in Europe - A Proposal from ORPHEUS - AMSE – WFME”. This document proposes a set of standards for PhD programmes and PhD degrees in biomedicine and health sciences. The PhD programme “Biomedicine and Health Sciences” follows the standards set out in that document regarding the structure of the institutions of higher education and the research environment, study outcomes, eligibility criteria, curriculum, mentoring, PhD

thesis proposals, and the evaluation and defence of PhD theses. The definition of a PhD thesis standard is in most cases the assurance of quality PhD education that is internationally accepted.

All this shows the comparability with the programmes of reputable foreign higher education institutions, especially those from the EU, and furthermore that the PhD programme of the School of Medicine at the University of Zagreb has played and still has one of the leading roles in these processes of harmonization in Europe.

A.2.6. REQUIREMENTS FOR ADMISSION TO THE STUDY PROGRAMME

Enrolment quotas are determined on the basis of availability of research, teaching and mentorship capacities. Enrolment quotas are determined by the Council for Postgraduate Programmes based on the proposal of the PhD Programme Coordination Committee. Enrolment in a PhD programme is done on the basis of a public call for applications published in the daily press and on the School's website. The public call for applications to the PhD programme is announced at least one month prior to the start of the courses. Enrolment conditions and selection procedures for students are harmonized with the Zagreb Recommendations of the Second European Conference on the Harmonization of PhD Programmes in Biomedicine and Health Sciences.

The conditions for application are:

- a completed relevant university graduate or university integrated undergraduate and graduate programme in the scientific field of Biomedicine and Health Sciences and related field. Exceptionally, with the explanation and the request, applicants with a completed university graduate programme in other fields of natural, and in the case of public health social sciences, may be admitted;
- a grade point average of at least 3.51 (in the grading system 5-10 or AF grade point average of at least 8.00);
- candidates who have completed integrated undergraduate and graduate programme or graduate programme abroad must undergo a process of academic recognition of a foreign degree of higher education before enrolment (<http://www.unizg.hr/homepage/study-at-the-university-of-zagreb/academic-recognition-of-foreign-higher-education-qualifications/>);
- a letter of recommendation by potential mentor/s, and a research topic proposal
- additional documentation must be submitted with the application (copies of papers and congress summaries, certificates of indexation of papers and congress review, participation in projects);
- a certificate of proficiency in English language (issued by a foreign language school, or other institutions of higher learning) or Croatian language (for candidates whose native language is not Croatian) must also be enclosed;
- candidates who have completed their undergraduate study abroad are required to submit a decision on academic recognition of a foreign degree of higher education prior to enrolment.

A.2.7. DESCRIPTION OF THE SELECTION OF APPLICANTS WITH A SPECIAL EMPHASIS ON DESCRIPTION OF ADMISSION REQUIREMENTS CRITERIA AND TRANSPARENCY OF THE APPLICANT SELECTION PROCEDURE

Candidates are eligible for admission to the programme:

- if they have been ranked among the top fifty candidates determined by the total number of points based on the grade point average in undergraduate and graduate study, professional and

scientific activity (number and type of published papers, participation in congresses and meetings, participation in projects), as well as on the basis of candidate employment contracts in the system of scientific recruits; and

- if they have successfully passed a structured interview with the PhD Programme Coordination Committee.

The table lists the points by individual criteria used when applying for enrolment and ranking candidates in the academic year 2018/2019.

Grade point average in the undergraduate study	2 points for each decimal point between 3.5 – 4.0; 3 points for each decimal point above 4.0
Graduate thesis	1 point for defended research graduate thesis
English language certificate	B1-B2 level 5 points
	C1-C2 level 20 points
Professional and scientific activity:	
Articles indexed in CC (enclose: list of publications, copies of publications and evidence that the journal is indexed)	first author 40 points, co-author 30 points per paper
Articles indexed in other international indices (enclose: list of publications, copies of publications and evidence that the journal is indexed)	first author 20 points, co-author 15 points per paper
Active participation in international scientific conferences (points awarded for active participation per conference – oral or poster presentation with published abstract; enclose: list of abstracts, copies of abstracts and covers of conference proceedings, i.e. conference programmes which indicate that the conference has been organised by an international or European association (institution) or by at least three countries; if there were multiple presentations at the same conference, please submit only one, the most favourable for the candidate)	2 points per conference or active participation as first author, 1 point as co-author; points are awarded per conference, not per abstract
Active participation in domestic scientific conferences (points awarded for active participation per conference –oral or poster presentation with published abstract; enclose: list of abstracts, copies of abstracts and covers of conference proceedings; if there were multiple presentations at the same conference, please submit only one, the most favourable for the candidate)	1 point per conference or active participation as first author, 0,5 points as co-author; points are awarded per conference, not per abstract
Active participation in a project (enclose: signed contract on employment at the project, signed statement of the leader of the project that the candidate is engaged at the project)	for Croatian Science Foundation and EU Horizon 2020 projects 50 points; for other peer-reviewed

	projects 5 points
Dean's award for original scientific work (enclose copy of the award)	10 points
Rector's award for original scientific work (enclose copy of the award)	20 points
Assistant employed by the School of Medicine University of Zagreb or junior researcher on the Croatian Science Foundation project (enclose: copy of the contract)	100 points

The selection of candidates for PhD programme is carried out by a PhD Programme Application Committee consisting of Vice-Dean for Postgraduate Programmes and Director, Deputy Director and Assistant Directors of the PhD Programme. PhD Programme Application Committee awards points to the candidates in accordance with the prescribed criteria (Table). The interview is a structured and mandatory part of the application procedure. There are three basic elements to consider during the interview: a) the research topic proposal and its feasibility with respect to the candidate's circumstances of employment, and the duration of the study (where the research will be conducted, sample assessment / research subjects, materials and methods, hypothesis and aims of research, funding, expected realization, possible difficulties in the realization of the research), b) proposed mentor (competences in relation to the proposed research and in general, previous cooperation with the candidate, expectations, etc.) and c) knowledge and command of the English language. The main goal is to examine and determine the likelihood of the proposed research being completed during the PhD programme.

The Faculty Council makes the decision on the acceptance and enrolment of candidates, which is publicly announced on the School's notice board and website. The decision on acceptance and enrolment of candidates is considered a first instance decision. Candidates whose application for enrolment is not accepted may submit their appeal to the Dean within 15 days from the date of announcement of the decision on the School's notice board and website. The Dean's decision on the appeal is final.

A.2.8. DESCRIPTION OF THE INSTITUTIONAL MANAGEMENT OF THE STUDY

PhD Programme Coordination Committee

PhD Programme Coordination Committee consists of a PhD programme director, his/her deputy and one or more assistants from the ranks of teaching staff with scientific-teaching titles who actively participate in the organisation of the curriculum. The PhD programme director is appointed for a period of three years, and the same person may be re-appointed as a PhD programme director. Programme director, deputy director and director assistants are appointed by the Faculty Council based on the recommendation of the Council for Postgraduate Programmes. PhD programme director organizes the PhD programme and is responsible for the implementation of the curriculum, proposes a plan for implementation of the curriculum, convenes and chairs the meetings of the course leaders of the PhD programme, proposes amendments to the curriculum, and submits annual reports on the courses held at the PhD programme to the Council for Postgraduate Programmes and the Faculty Council

Governing bodies responsible for conducting PhD programmes at the School

1) The Faculty Council, which appoints the PhD programme directors and their deputies; the chairpersons and the members of the boards conducting the PhD programmes; the President and the members of the

Ethics Committee and its working groups; committees for the evaluation of the PhD thesis proposal and for the evaluation and defence of the PhD thesis; mentor and co-mentor of a PhD candidate;

2) The Council for Postgraduate Programmes, which performs the function of the Postgraduate University Study Programmes Council, ensures the equal quality of the teaching plans and curricula of PhD programmes, proposes directors of postgraduate programmes as well as course leaders and in cooperation with boards and committees prepares standards and procedures for the evaluation of postgraduate programmes, evaluates student activities during the PhD programme, determines the ECTS workload of programme contents according to their curricula.

3) The Board for Evaluation of Postgraduate Programmes is a permanent expert committee of the Council for Postgraduate Programmes in charge of coordinating activities and harmonizing standards in designing curricula and evaluation of postgraduate programmes.

4) The Board for Evaluation of Scientific Activity of PhD Candidates is a permanent committee of the Council for Postgraduate Programmes in charge of coordinating activities and harmonizing standards in the process of evaluating the scientific activity of PhD candidates and mentors. The Board evaluates whether the conditions for the public defence of the PhD thesis have been fulfilled, in accordance to the Regulations on PhD Programmes.

5) The Board for PhD Theses and Scientific Degrees harmonizes the criteria and coordinates the activities in the process of attaining the academic degree of doctor of science from the moment of the registration of the PhD thesis proposal up to the public defence of the completed PhD thesis and the graduation ceremony. The Board, in cooperation with the Ethics Committee of the School, carries out the entire procedure of application, evaluation and defence of PhD thesis, and proposes to the Faculty Council the appointment of appropriate committees and the appointment of a mentor and co-mentor of the PhD thesis.

6) The Ethics Committee of the School of Medicine (including the Working Group for Biomedical Research and the Board for Animal Well-being), together with the Board for PhD Theses and Scientific Degrees, participates in the process of academic review, public discussion and the final evaluation of the PhD thesis proposal, using the prescribed combined forms.

The mentor and co-mentor cannot be members of the committees for the evaluation and public discussion of the PhD thesis proposal, nor for the evaluation and defence of the completed PhD thesis. In the procedure of attaining the academic degree of Doctor of Science, the members of the expert committees may not be persons who are related to the PhD candidate (by blood or other close relationship, e.g. parents, grandparents, siblings, spouse) nor persons who share common financial and other material interests with the PhD candidate (e.g. co-authorship or co-ownership of a patent).

A.3. CURRICULUM OF THE DOCTORAL STUDY

A.3.1. DESCRIPTION OF THE STRUCTURE OF THE PROGRAMME OF THE DOCTORAL STUDY

The programme consists of methodological courses (learning research procedures and methods), field-related (elective) courses for the application of scientific-research competences in particular medical fields, and a so-called third-credit group which represents measurable scientific contribution of PhD candidates during their studies. In addition, PhD Day is organised with the aim of improving public awareness of the PhD programmes, facilitating and encouraging the exchange of experience in PhD and mentor research and insight into the quality of PhD candidates' work for everyone involved. The PhD Day includes a one-day public presentation of the ongoing research and preliminary results in the PhD theses of all PhD candidates of the 2nd and 3rd year of the PhD programme. Research progress is presented in the form of poster presentation and abstract in a specially printed publication, while several best abstracts are also selected for oral presentation. Participation in PhD Day awards 4 ECTS credits to each candidate and is considered an integral part of the PhD work-load.

The PhD programme can be attended either full-time or part-time.

Full-time programme is completely research oriented and generally lasts for three years. It can be extended up to a total of five years for justified reasons. After this five-year term, the PhD candidate loses the right to obtain an academic degree of Doctor of Science in that programme. The specified period of five years does not include the temporary suspension of studies for justified reasons.

Part-time programme is intended for candidates who, in addition to their PhD obligations, perform other professional duties during their employment (e.g. clinical work or public health, etc.), and often teaching. Part-time programme is organized to facilitate this as much as possible.

Part-time programme lasts for up to five years. It can be extended up to a total of eight years for justified reasons. After this eight-year term, the PhD candidate loses the right to obtain an academic degree of Doctor of Science in that programme. The specified period of eight years does not include the temporary suspension of studies for justified reasons.

The principal scheme of programme activities and the appertaining student credits is as follows:

First year: methodological courses (12 ECTS), submission of PhD thesis proposal and research work with mentor(s) (28 ECTS), scientific activity (publications, attending conferences, meetings, lectures, etc.) (20 ECTS);

Second year: methodological courses and field-related courses (12 ECTS), PhD Day (4 ECTS), public discussion of the PhD thesis proposal and its acceptance by the Faculty Council, research work with mentor(s) (24 ECTS), scientific activity (publications, attending conferences, meetings, lectures, etc.) (20 ECTS);

Third year: methodological and field-related courses (12 ECTS), PhD Day (4 ECTS), research work with mentor(s), writing and successfully defending the PhD thesis (24 ECTS), scientific activity (publications, attending conferences, meetings, lectures, etc.) (20 ECTS).

A.3.1.1. Methodological courses

Methodological courses are offered during all three years of study with emphasis on the first year. The aim of these courses is to familiarize students with the basics of scientific work as a whole, and the procedures and methods in particular research areas. Although students may not fully learn numerous and very different research methods and procedures by attending these courses, an important goal is to gain knowledge of techniques (e.g. biochemical, molecular or in vitro procedures), some of which will be used as groundwork of their PhD thesis. An additional goal of these subjects is to free students, especially clinicians, from the frequent fear of laboratory methods and procedures and to show them that they would be able to master it. Methodological courses should not consist of more than 30% of lectures on theory, while at least 70% of teaching must be focused on presentation of the methods and practical work. The lesser portion of conventional teaching is compensated by the recommended and compulsory literature. Each of these courses is accompanied by a corresponding reference book prepared by the teachers of the course in question. The courses are, as a rule, organized as integrated and include both preclinical and clinical (or public health) methods of tackling particular problems, since, when it comes to scientific methodology, the boundaries between these areas are narrowing.

A.3.1.2. Field-related courses

The field-related courses aim to introduce scientific knowledge and problems in certain narrower areas of research in the field of biomedicine and health sciences. In addition to extending knowledge, such courses enable students to understand and follow the latest scientific literature on a particular area of research. Field-related courses are offered in all years of the programme, but predominantly after the PhD thesis proposal had already been submitted.

Proposals of new field-oriented courses are accepted and considered at all times and all teachers of the School of Medicine, University of Zagreb are invited to apply with courses in the area of their research. All experts from Croatia or abroad who meet the legal requirements are also welcome to apply. All course proposals are subject to double anonymous scientific peer-review prior to acceptance.

A.3.1.3. Scientific activity

The completion of the organized programme and the one of the conditions for submitting a PhD thesis for assessment is considered to be the day when the PhD candidate fulfilled the requirements of the so-called third-credit group, i.e. his/her scientific activities. The PhD student's scientific activity is valued at 20 ECTS per year (60 ECTS credits in total), and scoring elements include published scientific papers stemming from their PhD research and other papers in the field of research, participation in scientific conferences (abstracts), number of citations, invited lectures on the topic of the PhD thesis and received awards in the field of research. An additional requirement is that the PhD student is the co-author with the mentor or co-mentor of the PhD thesis of a paper that is published (or has been accepted for publication) and that is related to the PhD thesis, that he/she is one of the main authors, and that the paper is published in a peer-reviewed scientific journal in the Web of Science (Core Collection) database.

A.3.2. DESCRIPTION OF THE MANNER OF TRAINING DOCTORAL STUDENTS FOR ACQUISITION OF SCIENTIFIC OR ARTISTIC KNOWLEDGE, EXPERIENCES AND SKILLS THAT WILL ENABLE THEM TO SOLVE COMPLEX SOCIAL AND ECONOMIC PROBLEMS CREATIVELY AND ON THE BASIS OF RESEARCH

The PhD programme aims to enable students to independently conduct original and scientifically relevant research and to critically evaluate the research of others after completing the programme and successfully defending their PhD thesis. Additionally, given the fact that in today's environment, healthcare and biomedical practitioners need to be capable of lifelong learning, the additional goal of the

PhD programme is to further candidates' critical thinking and creative problem solving. The achievement of these goals encourages the use of problem-based learning as part of teaching. These principles include not only the need to dissect a particular problem, but also the acquisition of new knowledge and its practical application in achieving the final results of the research. The aforementioned principles are used in a number of mostly methodological courses carried out as part of the PhD programme, for example in subjects "Structure, methodology and functioning of scientific work 1", "Structure, methodology and functioning of scientific work 2", "Structure, methodology and functioning of scientific work 3: research projects", "Medical statistics 2.1: statistical tools for medical data analysis in planned experimental study design", "Medical statistics 2.2: statistical tools for medical data analysis in quasi-experimental study design", "Medical statistics 2.3: statistical tools for medical data analysis in observational study design with large samples", "Medical statistics 2.4: statistical tools for medical data analysis in observational study design with small samples", "Genomic approaches in biomedical and translational research", "Proteomics in biomedical research", "Medical informatics methods", and others.

A.3.3. DESCRIPTION OF THE PROGRAMME POTENTIAL FOR TRAINING DOCTORAL STUDENTS FOR AN INDEPENDENT, RESEARCH-BASED AND INTERDISCIPLINARY APPROACH TO PROBLEMS, FOR INDEPENDENT RESEARCH AND FOR CRITICAL EVALUATION OF THE WORK OF OTHERS

According to the "Zagreb Declaration", upon completion of the programme, a Doctor of Science has full competences for continuing scientific research work: knowledge of methodology in the field of biomedical and health sciences, is able to write a research proposal, write and publish a paper in a journal indexed on world bases (Web of Science, Scopus, Medline), is able to present, report and defend research findings in the scientific community and to critically evaluate the scientific work of others. They are eligible for postdoctoral training or employment in any of the institutions collaborating in this PhD programme, at other universities in Croatia as well as in collaborative laboratories in the world, in the public sector, in healthcare, research institutions and scientific-educational institutions.

The Postgraduate University (PhD) Programme Biomedicine and Health Sciences is aimed at acquiring new knowledge and skills that enable independent scientific and research work. This applies in particular to the adoption of new methodologies, from molecular, biological and biochemical methods to genomics and proteomics and other research approaches. In addition, through seminars, practical work and journal clubs, discussion of certain aspects of the research is encouraged, and the possible shortcomings of the published research are critically discussed. Within individual courses, such as "Genomic approaches in biomedical and translational research", candidates are encouraged to develop research proposals that contain elements of the methodology presented within the course, and at the end of the course, presentations of research proposals are shared and discussed by all participants. This encourages the development of critical thinking, how to conduct a constructive debate about the results of scientific research, but also how to defend the conclusions drawn from the research results.

Methodological course "Structure, methodology and functioning of scientific work 3: research projects" is especially important for encouraging independent scientific work of students, since within this course students acquire the knowledge and skills necessary for the preparation and application of scientific projects. Since securing financial resources for conducting research is crucial for independent scientific work, the mentioned subject is central for further independent work of PhD candidates. They are introduced to a variety of research funding instruments as well as educational scholarships to facilitate postdoctoral training. The course also contains a practical part during which candidates have to prepare

their own project proposals according to the exact requirements, which specifically prepares them for the requirements of future independent scientific activity.

Another important aspect of PhD programme is that it is interdisciplinary, manifested through various forms of cooperation between PhD candidates and experts of different profiles. For example, many PhD candidates in the programme are clinicians who use specific laboratory, imaging and other methods in their research, which contributes to gaining new insights and creating new knowledge. The requirement for successful cooperation is knowledge and understanding of both areas, whereby the PhD candidate acquires new competences and skills. Another example is dual mentoring, where two experts from different fields jointly pursue PhD research, which is increasingly needed in the dynamic field of biomedicine today.

A.3.4. DESCRIPTION OF THE PROGRAMME POTENTIAL FOR ACQUISITION OF WORK COMPETENCES, INCLUDING LIST OF COURSES FOR DEVELOPMENT OF GENERIC AND TRANSFER SKILLS

A.3.4.1. Learning outcomes at the programme level

The Biomedicine and Health Sciences PhD programme educates scientists / researchers who, at the level of the PhD programme as a whole, must acquire the following specific competencies and their corresponding, measurable learning outcomes in accordance with 8.2 of the Croatian Qualifications Framework (CROQF):

Competence 1. The individual will be able to devise, design, apply and adopt a process of independent, original scientific research.

The measurable learning outcomes related to this competence are as follows: to create new knowledge (entirely new, complement existing, refute existing) by their own distinctive contribution to research through PhD research, create new methods, invent new approaches, instruments or materials that will move the known boundaries in the field of PhD research.

Competence 2. The individual will be able to systematically understand relevant scientific facts, monitor and understand the latest knowledge in the field of PhD research, systematically develop and adopt state-of-the-art methodology and skills in the scientific field of PhD research, and use the acquired knowledge and skills to solve complex scientific research problems.

The measurable learning outcomes related to this competence are the following: to use advanced, highly specialized knowledge and skills independently so that they can develop their own new ideas, theories, facts and procedures in a field of scientific interest.

Competence 3. The individual will be able to assume professional, ethical and social responsibilities independently, professionally and with academic integrity when planning and conducting scientific research, but also upon completion of the research, which includes taking responsibility for the scientific success and social benefit of the PhD research results.

The measurable learning outcomes related to this competence are as follows: to develop a personal, professional and ethical authority at a level that meets all the requirements required to publish research results in scientific publications with international peer review in the field of PhD research.

Competence 4. The individual will be able to communicate in a socially acceptable manner with individuals and groups of different attitudes and opinions, both within the scientific and academic community and within their own profession and beyond.

The measurable learning outcomes related to this competence are as follows: to build their own acceptable and effective forms and methods of interpersonal communication with individuals and groups

of researchers in the process of collaboration on planning and conducting PhD research, PhD thesis and PhD thesis defence, and peer review publication of scientific papers related to PhD thesis.

A.3.4.2. Learning outcomes at the level of methodological courses

The aim of this group of courses is to introduce PhD candidates to the basics of advanced-level scientific work, but also to procedures and methods in particular research areas.

The learning outcomes of the methodological group of courses as a whole, consistent with the 8.2 CROQF level, are as follows:

- independently present advanced knowledge (facts, theories) that underpins modern scientific methodology (biochemical, morphological, molecular - biological, physiological, immunological, microbiological, neuroscientific, psychological and behavioural, pharmacological, organ system imaging, diagnostic and laboratory, pathophysiological, epidemiological, statistical, etc.) and that will be used in PhD research;
- independently present methodological skills and procedures necessary for planning, selecting, performing (collecting and processing data), standardizing and optimizing the scientific method pertaining to PhD research;
- independently or in a team critically evaluate the results published in a presented scientific article, especially in the light of controlling the trial conditions and the multiple factors affecting the research results before and during the experiment.

Examples of learning outcomes for several methodological courses are as follows:

Biochemical methods in biomedical research: Select the latest laboratory analytical methods and judge the biological variability of the sample. Make conclusions on the impact of pre-analytical procedures on the results of specific laboratory analyses. Make conclusions on the possibility of measuring specific analytics in low concentration ranges.

Gene targeting in mammals: Present advanced knowledge of human disease modelling in mice with genetic techniques, including gene knockout gene disabling procedures. Recognize the application of a particular model with a genetically engineered mouse in their own research.

Statistical analysis of medical data 1: Use statistical software (SAS, JMP, Statistica, R). Perform preparation, input and screening of data for statistical analysis on their own. Assess the strength of the test and sample size independently. Perform descriptive statistics procedures independently. Independently test a hypothesis using parametric and non-parametric methods of statistical testing of hypotheses. Independently perform basic statistical and analytical procedures for qualitative data. Independently perform basic statistical modelling procedures by regression (logistic regression, linear regression, Cox regression). Independently present, interpret and generalize statistical results. Journal Club: Critically evaluate the appropriateness of the statistical procedures applied in selected publications.

Epidemiologic methods in research: Plan to conduct epidemiological research. Hypothesize epidemiological research. Calculate and explain frequency and connectivity measures. Make conclusions on possible errors of epidemiological and clinical research (accidental, systematic error; major types of confounding, selection, lead-time, drop-out, etc.). Assess the impact of applied health interventions or health technology on treatment outcomes. Make conclusions on reliability, effectiveness of tests or diagnostic methods. Detect an epidemic based on epidemiological analyses or sudden grouping of events. Make a proposal to address ethical issues specific to epidemiology (research approval, notification, consent, data protection and treatment of newly diagnosed patients).

A.3.4.3. Learning outcomes at the level of field-related courses

Field-related courses aim to introduce students to specific problems and provide the knowledge needed for research in particular narrower branches of biomedicine and health sciences. By incorporating advanced knowledge, extended beyond the graduate and postgraduate specialist level of learning, such courses must enable the student to follow with understanding the latest scientific literature in their field of research. Therefore, critical judgment about selected scientific papers (the Journal Club) is an essential part of field-related courses.

Examples of learning outcomes for several field-related courses in the clinical, preclinical, and public health subjects are as follows:

Experimental oncology: malignant diseases as persistent oxidative stress: Present the latest knowledge on the pathophysiology of oxidative stress and its importance in oncology. Evaluate the purpose and application of specific biochemical methods for the determination of markers of oxidative stress and lipid peroxidation in tumours. Discuss scientific and practical aspects of complementary forms of oncology therapy based on scientific approach. Independently judge a selected scientific article in the subject area (Journal Club).

Pharmacogenomics: Present advanced knowledge in the field. Assess the importance of certain pharmacogenetic analyses. Interpret genotyping findings and apply them to create algorithms and select the optimal drug and dose for the individual patient.

Proteomics in biomedical research: Present advanced knowledge of the fundamentals of mass spectrometer and other tools in proteomic research. Know the capabilities, advantages and limitations of proteomic methods in specific research questions.

Disorders of adrenal gland: Present advanced knowledge of diagnostic treatment of patients with adrenal tumours, diagnosis and treatment of congenital adrenal hyperplasia, hormone replacement therapy for patients with adrenal insufficiency, options for surgical and pharmaceutical treatments of adenomas, pheochromocytomas and adrenal cortical carcinomas. Comment on diagnostic and therapeutic dilemmas in adrenal disease and independently devise possible solutions based on patient presentation. Make critical judgments on your chosen issue through the Journal Club discussion.

A.3.4.4. Generic skills

Generic/transferable skills and competences that can be acquired through the PhD programme Biomedicine and Health Sciences and used outside the scientific, academic and/or clinical careers are:

- solving complex problems using critical thinking, judgment, generalization, synthesis and integration of ideas; know the meaning of evaluation and systematic procedures in the process of evaluating results, projects and programmes;
- ability to transfer and operationalise new technologies and new ideas;
- ability to manage project tasks;
- organisational and leadership skills;
- ability to teach others.

The PhD programme has a number of required courses which develop generic skills of the candidates. They are required to attend three blocks of methodological courses in which they become acquainted with:

- advanced knowledge and skills of scientific communication, both verbally and in writing, in Croatian and English languages;
- advanced statistical methods needed to carry out their research;
- designing research and experiments and the relationship between design and statistics;
- importance of a well-defined hypothesis, the role of pilot studies and preliminary data;
- advanced knowledge of databases, computer and automated data collection;
- specifics of working with human subjects in research;
- specifics of working with experimental animals in research
- basics of intellectual property and patent filing.

A.3.5. POTENTIAL OF THE STUDY FOR ESTABLISHING COOPERATION WITH OTHER HIGHER EDUCATION INSTITUTIONS, RESEARCH INSTITUTES, AND PRIVATE AND PUBLIC BUSINESS SECTORS

The PhD programme “Biomedicine and Health Sciences” features participation of numerous external associates in teaching, which include not only employees of other institutions of higher learning, but also scientists employed at scientific institutes and employees of the public sector active in the field of biomedicine, health care and pharmaceuticals.

In addition to teachers at the University of Zagreb School of Medicine, the PhD programme teachers are employees of several other faculties of the University of Zagreb, including the School of Dental Medicine, Faculty of Pharmacy and Biochemistry and Faculty of Veterinary Medicine (biomedical area), Faculty of Science, Faculty of Education and Rehabilitation Sciences, Faculty of Electrical Engineering and Computing, Catholic Faculty of Theology and Faculty of Law. Also, employees of universities in Rijeka, Split and Osijek participate in a smaller part of the programme. Among the leading scientific institutes, scientists employed at the Rudjer Boskovic Institute, the Institute of Anthropology, the Institute for Medical Research and Occupational Health and the Institute for Physics participate in the teaching and scientific research of the PhD programmes. Finally, employees of all major clinical centres and hospitals that house the clinics of the School of Medicine in Zagreb – University hospital centre Zagreb, University hospital centre "Sestre milosrdnice", University hospital Merkur, University hospital Sveti Duh and University hospital Dubrava are course leaders and lecturers at the PhD programme. Finally, employees of private research companies such as Fidelta (Galapagos, Zagreb) and pharmaceutical companies like Pliva (Teva Pharmaceutical, Zagreb) also participate in the teaching and research components of the programme.

Additional attention is also paid to technology transfer and the financing of scientific research, which is discussed in the three compulsory methodological courses in the series "Structure, methodology and functioning of scientific work". All of the above shows significant openness to collaboration, but more importantly, it provides PhD candidates with new in-depth insights into translational approaches and the pathway of medicine, which could ultimately contribute to the development of new research programmes and significant scientific and economic results.

A.3.6. REQUIREMENTS FOR STUDENTS' ADVANCING DURING THE STUDY

In addition to fulfilling the obligations of the curriculum, the requirements for advancing through the programme are as follows: a) submitting a PhD thesis proposal and choosing mentor(s) for enrolment in

the second year of study; and b) accepted PhD thesis proposal and mentor by the Faculty Council for enrolment in the third year of study.

A.3.7. REQUIREMENTS FOR APPROVING THE PROPOSAL OF THE DOCTORAL DISSERTATION

All PhD candidates may, immediately upon obtaining the student status in a PhD programme, and at the latest before the expiry of the first study year of a PhD programme, submit to the Board for PhD Theses and Scientific Degrees a request to initiate the procedure for attaining the academic degree of doctor of science and to submit a PhD thesis proposal on the prescribed forms of the Board for PhD Theses and Scientific Degrees (form DR.SC.-01A), with the relevant additional documentation. The obligatory part of the additional documentation is a statement of the PhD candidate that he/she did not register an identical PhD thesis proposal at another PhD programme of the University of Zagreb or any other university. The appropriate, completed forms are also submitted simultaneously to the School's Ethics Committee which is included in the process of review of the PhD thesis proposal. All scientific research on or with humans or animals must be conducted in accordance with regulations, with the approval of the School's Ethics Committee, as well as the institution where the research is conducted, and with consent of all research subjects individually, if they are able to give them, or their proxies or legal representatives.

The Board for PhD Theses and Scientific Degrees proposes the appointment of a committee to evaluate the PhD thesis proposal and to select a mentor to the Faculty Council. The proposed mentor and co-mentor cannot be members of the committees for the evaluation and public discussion of the PhD thesis proposal, nor for the evaluation and defence of the completed PhD thesis.

A PhD thesis proposal is presented at a public discussion. The schedule of public discussions on the PhD thesis proposals is announced on the notice board of the PhD programme and on the School's website. Proposed mentor(s), PhD candidate, members of the expert committee, a representative of the Ethics Committee, members of the Board for PhD Theses and Scientific Degrees and other interested members of the academic community participate in the public discussion. All comments and suggestions made during a public discussion are recorded in the form provided for that purpose (form DR.SC.-02), which also includes the final evaluation report on the PhD thesis proposal. The Committee for the evaluation of the PhD thesis proposal in its report to the Board for PhD Theses and Scientific Degrees proposes either: a) acceptance of the PhD thesis proposal with an explicit statement of the original scientific or artistic contribution achieved, or b) correction of the PhD thesis proposal and the final evaluation, or c) rejection of the PhD thesis proposal.

The report from the public discussion and the evaluation of the PhD thesis proposal (DR.SC.-02 form) as well as the corrected PhD thesis proposal (form DR.SC.-01B) are submitted to the Board for PhD Theses and Scientific Degrees no later than six months after the public discussion. If the report and the corrected PhD thesis proposal are not submitted within the prescribed deadline, the public discussion of the PhD thesis proposal is repeated. Based on the final report from the public discussion (form DR.SC.-02) and the submitted corrected PhD thesis proposal (form DR.SC.-01B), the Board for PhD Theses and Scientific Degrees submits to the Faculty Council a proposal to accept or reject the PhD thesis proposal and to appoint a mentor (and a co-mentor, if necessary).

The Faculty Council must make a statement on the motion by the Committee for the evaluation of the PhD thesis proposal and for proposing a mentor until the enrolment of the PhD candidate in the fifth semester, that is, the third study year.

A.3.8. REQUIREMENTS FOR COMPLETION OF STUDY

The PhD programme is completed by passing all exams, mandatory participation in PhD Days, positively evaluated scientific activity and the preparation and public defence of the PhD thesis. Before submitting the completed PhD thesis, the PhD candidate is obliged to submit the evidence that they have fulfilled all the conditions from the curriculum, which include the following:

- a) that they have accumulated 60 ECTS credits on the basis of their scientific activity during the PhD programme, and
- b) that they are a co-author with the mentor or co-mentor of the PhD thesis of a paper that is published (or has been accepted for publication) and that is related to the PhD thesis, that they are one of the main authors, and that the paper is published in a peer-reviewed scientific journal in the Web of Science (Core Collection) database.

A PhD candidate initiates the process of evaluating the completed PhD thesis by submitting unbound copies of the PhD thesis, digital copy of the PhD thesis, declaration of originality and a written approval and opinion of the mentor on the conducted research and the original scientific contribution achieved, in the School's Registration office with the designation: "For the Board for PhD Theses and Scientific Degrees". If the mentor does not wish to give their approval, the PhD candidate is obliged to inform the Board for PhD Theses and Scientific Degrees about this, who will then send a letter to the mentor that they are to make a written statement with the explanation about it within 15 days. In both cases, the mentor's explanation is provided to the members of the committee for the evaluation of the completed PhD thesis, and they take it into consideration during their evaluation.

On the basis of a motion of the Board for PhD Theses and Scientific Degrees, the Faculty Council appoints a committee for evaluation of the completed PhD thesis, which has three or five members, at least one member of whom cannot teach at the PhD programme or is not an employee of the School, and is preferably an employee of another Croatian or foreign university or related institution. Neither the mentor nor the co-mentor can be a member of the committee for the evaluation of the completed PhD thesis.

The members of the committee for the evaluation of the completed PhD thesis and all others who ex officio (or as associates on the project) have access to the completed PhD thesis are obliged to treat all data and insights from the PhD thesis as confidential until its publication, in order to protect the scientific contribution of the PhD thesis and intellectual property rights.

The committee for the evaluation of the completed PhD thesis is obliged to submit a written and signed report with the evaluation of the PhD thesis within two months from its appointment to the Board for PhD Theses and Scientific Degrees. Each member of the committee has the right to submit a separate opinion and evaluation.

The Committee for the evaluation of the completed PhD thesis may propose in its report:

- a) that the PhD thesis is accepted;
- b) to return the PhD thesis to be corrected and completed and then resubmitted for evaluation within three to six months (depending on the planned scope of the corrections), or
- c) to reject the PhD thesis, after which the PhD candidate loses the right to attain the academic degree of doctor of science in that PhD programme.

Explanation is an obligatory part of the report.

Before submitting the completed PhD thesis, the PhD candidate is obliged to submit the evidence that they have fulfilled all the conditions from the curriculum to the Board for PhD Theses and Scientific Degrees and the Board for Evaluation of Scientific Activity of PhD Candidates, which include the following:

- a) that they have accumulated 60 ECTS credits on the basis of their scientific activity during the PhD programme, and
- b) that they are a co-author with the mentor or co-mentor of the PhD thesis of a paper that is published (or has been accepted for publication) and that is related to the PhD thesis, that they are one of the main authors, and that the paper is published in a peer-reviewed scientific journal in the Web of Science (Core Collection) database.

The committee for the public defence of the completed PhD thesis may have the same members as the committee for the evaluation of the completed PhD thesis, but the Faculty Council is obliged to appoint one substitute member based on the proposal of the Board for PhD Theses and Scientific Degrees.

PhD candidates whose PhD thesis proposal and mentor have been accepted are obliged, no later than five years from the date of acceptance of the PhD thesis proposal, and no earlier than 15 days from the date of the PhD thesis acceptance by the University of Zagreb Senate, to initiate the process of evaluation of the completed PhD thesis. Upon expiry of this deadline, the PhD candidate must regulate their student status and is obliged to initiate the procedure of re-evaluation of the PhD thesis proposal, according to the conditions valid at the time of re-submission of the PhD thesis proposal.

A.3.8.2. Procedure of the public defence of a completed PhD thesis

The defence of the PhD thesis is public. The committee for the public defence of the completed PhD thesis makes the evaluation after the defence. Defence scores can be *rite*, *cum laude*, *magna cum laude* and *summa cum laude*. The score is made by a majority vote of the members of the committee for the public defence of the completed PhD thesis. Public defence of the completed PhD thesis can be held only once.

A.3.8.3. Publishing and storage of a completed PhD thesis

The PhD thesis is published in its entirety on the website of the School's Central Medical Library, no later than one month after the successful completion of the public defence. In exceptional situations, on the basis of a written explanation and with the approval of the Board for PhD Theses and Scientific Degrees, publication on the School's website may be postponed for up to two years.

The hard copy of the PhD thesis is stored in the School's Central Medical Library, the National and University Library and in the archives of the University of Zagreb. The PhD thesis must be published on the public university website of the National and University Library at the latest one month after the defence.

A.3.9. LIST OF REQUIRED AND ELECTIVE COURSES/MODULES, WITH NAMES OF COURSE TEACHERS, NUMBER OF INSTRUCTION HOURS AND APPOINTED ECTS (IF ANY)

REQUIRED COURSES:	COURSE TEACHERS	L	S	P	ECTS
Structure, methodology and functioning of scientific work 1	Assoc. Prof. Ana Borovečki, Prof. Zdravko Lacković, Prof. Jelka Petrak	12	10	6	4.0

Structure, methodology and functioning of scientific work 2	Prof. Vladimir Trkulja, Assoc. Prof. Donatella Verbanac, Prof. Zdravko Lacković	14	13	11	5.0
Structure, methodology and functioning of scientific work 3: research projects	Assoc. Prof. Fran Borovečki, Prof. Srećko Gajović	3	3	6	2.0
Statistical analysis of medical data 1	Prof. Zdenko Sonicki, Prof. Davor Ivanković	12	6	20	5.0
Medical statistics 2.1: statistical tools for medical data analysis in planned experimental study design	Prof. Mirjana Kujundžić Tiljak	0	4	12	2.0
Medical statistics 2.2: statistical tools for medical data analysis in quasi-experimental study design	Prof. Mirjana Kujundžić Tiljak	0	4	12	2.0
Medical statistics 2.3: statistical tools for medical data analysis in observational study design with large samples	Prof. Zdenko Sonicki, Prof. Davor Ivanković	0	4	12	2.0
Medical statistics 2.4: statistical tools for medical data analysis in observational study design with small samples	Prof. Zdenko Sonicki, Prof. Davor Ivanković	0	4	12	2.0

ELECTIVE COURSES:

BASIC MEDICAL SCIENCE METHODOLOGY COURSES:

	COURSE TEACHERS	L	S	P	ECTS
Biochemical methods in biomedical research	Prof. Jasna Lovrić, Assoc. Prof. Dunja Rogić	5	9	21	5.0
Methods of molecular biology in medicine	Prof. Florijana Bulić Jakuš, Prof. Jadranka Sertić	14	5	19	5.0
Genomic approaches in biomedical and translational research	Assoc. Prof. Fran Borovečki	11	5	9	4.0
Electrophysiological techniques in medical research	Assoc. Prof. Diana Delić Brkljačić, Assoc. Prof. Aleksandra Dugandžić	12	0	16	4.0
Morphological research methods in biomedical sciences	Prof. Srećko Gajović, Prof. Boris Brkljačić	7	5	11	3.0
Proteomics in biomedical research	Prof. Lovorka Grgurević	4	2	14	3.0
Laboratory animals in biomedical research	Ranko Stojković, PhD, research advisor	14	4	2	3.0



Methods of investigation <i>in vivo</i> and <i>in vitro</i>	Prof. Drago Batinić, Prof. Dora Višnjić	3	4	13	3.0
CLINICAL MEDICAL SCIENCE METHODOLOGY COURSES:	COURSE TEACHERS	L	S	P	ECTS
Telemedicine	Prof. Davor Miličić, Assoc. Prof. Mirza Žižak	6	12	2	3.0
Research methods of psychological functions and behaviour	Prof. Rudolf Gregurek, Prof. Alma Mihaljević Peleš	1	1	14	2.0
Characteristics of clinical medical research	Assoc. Prof. Robert Likić	3	8	4	2.0
PUBLIC HEALTH METHODOLOGY COURSES:	COURSE TEACHERS	L	S	P	ECTS
Epidemiologic methods in research	Assoc. Prof. Nataša Antoljak, Prof. Zvonko Šošić	10	13	9	4.0
Research and evaluation methods of health interventions	Prof. Stjepan Orešković	3	2	15	3.0
GENERAL METHODOLOGY COURSES:	COURSE TEACHERS	L	S	P	ECTS
Medical informatics methods	Assist. Prof. Kristina Fišter, Prof. Jadranka Božikov	6	0	14	3.0
Evidence-based medicine	Prof. Ratko Matijević, Prof. Žarko Alfirević	5	5	10	3.0
FIELD-ORIENTED COURSES:	COURSE TEACHERS	L	S	P	ECTS
Medical image analysis	Assist. Prof. Stanko Težak	15	15	0	4.5
Disorders of adrenal gland	Prof. Darko Kaštelan	3	7	5	2.0
Gene targeting in mammals	Prof. Srećko Gajović	2	5	3	1.5
Diabetes and pregnancy	Prof. Josip Đelmiš, Prof. Marina Ivanišević	10	4	5	2.5
Diagnostic and treatment of female urinary incontinence	Prof. Slavko Orešković	8	4	3	2.5

Experimental oncology: malignant diseases as persistent oxidative stress	Prof. Neven Žarković	15	3	2	3.0
Endocrine tumours of gastrointestinal tract and pancreas	Assist. Prof. Maja Cigrovski-Berković, Prof. Vanja Zjačić-Rotkvić	7	3	2	1.5
Epigenetics	Prof. Maja Vlahović, Assist. Prof. Nino Sinčić	5	10	2	2.5
Pharmacogenomics	Prof. Nada Božina	2	11	7	3.0
Physiology and biochemistry of the uterus in pregnancy and labour	Prof. Marina Ivanišević	9	6	4	3.0
Genotoxicological research of exposure to physical and chemical mutagens in working and living environment	Aleksandra Fučić, PhD, research advisor	2	10	0	1.5
Human reproduction	Prof. Dinka Pavičić Baldani, Prof. Davor Ježek, Tarek El-Toukhy, research associate	9	3	4	2.5
Immunocytokines	Assist. Prof. Alenka Gagro, Assist. Prof. Tomislav Kelava	3	9	4	2.5
Immunological recognition	Prof. Drago Batinić	10	8	0	2.5
Biomaterial infections	Prof. Jasmina Vraneš	4	14	0	2.5
Isotransplantation of mammalian organ primordia	Prof. Gordana Jurić-Lekić	5	4	8	2.5
How to become a neuron?	Prof. Srećko Gajović	0	14	7	3.0
Hand surgery	Assoc. Prof. Rado Žic	13	6	6	3.5
Surgical therapy of pituitary tumours	Prof. Darko Kaštelan, Assist. Prof. Tomislav Sajko	2	8	5	2.0
Clinical neuropharmacology	Prof. Maja Relja	10	10	10	4.5
Clinical nutrition	Prof. Sanja Kolaček, Iva Hojsak, PhD, senior research associate	12	6	14	5.0

Clinical psychopharmacology	Prof. Miro Jakovljević	15	6	4	3.5
Clinical laboratory diagnostics of malignant melanoma with special reference to molecular-biological diagnosis assessment	Prof. Mirna Šitum	12	0	0	2.0
Bone morphogenetic proteins in regeneration of bone and cartilage	Prof. Slobodan Vukičević	9	1	4	2.0
Laboratory approach to transplantation of haematopoietic stem cells	Prof. Drago Batinić	7	10	7	3.5
Medical anthropology	Prof. Pavao Rudan, Assist. Prof. Natalija Novokmet	4	16	0	3.0
Mechanisms of allergic reactions	Assist. Prof. Alenka Gagro	4	11	3	2.5
Metabolic syndrome	Prof. Lea Smirčić-Duvnjak	4	7	2	2.0
Methods in molecular oncology	Prof. Sonja Levanat Assist. Prof. Vesna Musani	2	4	20	4.0
Microvascular tissue transfer	Assoc. Prof. Rado Žic	7	5	13	3.5
Molecular genetics of aging and carcinogenesis	Prof. Ivica Rubelj	20	0	0	3.0
Molecular haematology	Prof. Rajko Kušec	16	5	5	3.5
Molecular oncology – insight into new technologies	Assoc. Prof. Koraljka Gall-Trošelj	10	4	3	2.5
Molecular aspect of lymphocyte development	Prof. Mariastefania Antica	10	5	6	3.0
Molecular and biochemical approach to genetic disorders	Prof. Jadranka Sertić	4	4	7	2.5
Molecular genetics and pharmacogenetics of gastrointestinal tumours	Prof. Sanja Kapitanović	16	4	0	3.0
Multiresistant bacteria associated with nosocomial infections	Prof. Branka Bedenić	5	8	12	3.5

Advanced ultrasonography in gastroenterology and hepatology	Assoc. Prof. Ivica Grgurević, Prof. Boris Brkljačić	4	14	2	2.5
Genomic instability	Prof. Nives Pećina-Šlaus	6	4	5	2.5
Neurobiology of aging	Prof. Goran Šimić	4	12	4	3.0
Fetal and neonatal neurophysiology, fetal behaviour	Prof. Aida Salihagić-Kadić, Prof. Vlatka Mejaški Bošnjak	6	9	8	3.0
Movement disorders	Prof. Maja Relja	10	8	7	3.5
Selected chapters of epileptology of developmental age	Prof. Nina Barišić	6	19	7	4.5
Selected topics in transplantation immunology	Prof. Danka Grčević, Assoc. Prof. Nataša Kovačić	4	9	6	3.0
Selected animal models of psychiatric disorders	Prof. Nela Pivac	4	4	4	1.5
Knowledge discovery in medical domains	Dragan Gamberger, PhD, research advisor Prof. Zdenko Sonicki	6	14	10	4.5
Pathophysiology of the brain and the CSF	Prof. Marijan Klarica	12	6	2	3.0
Pathogenesis of infective diseases	Prof. Jasmina Vraneš	6	20	4	4.5
Use of doppler ultrasound in research and diagnosis of diseases of blood vessels	Prof. Boris Brkljačić, Assist. Prof. Gordana Ivanac	7	8	5	3.0
Understanding bone metabolism – basic science in clinical practice	Prof. Vesna Kušec	8	8	1	2.5
Human developmental neurobiology	Prof. Ivica Kostović, Prof. Miloš Judaš	8	8	2	2.5
Reproduction and workplace	Assist. Prof. Milan Milošević, Prof. Jadranka Mustajbegović	7	7	0	2.0
Synaptic plasticity and mind	Prof. Ivica Kostović	2	10	2	2.0

Liaison and consultative psychiatry	Prof. Rudolf Gregurek	17	10	3	4.5
Translational medicine - from disease to gene	Oliver Vugrek, PhD, senior research advisor	4	2	4	1.5
Kidney transplantation	Ivica Mokos, PhD, research advisor	6	18	6	4.5
Liver transplantation	Assoc. Prof. Tajana Filipec Kanižaj, Prof. Leonardo Patrlj	6	12	4	3.0
Liver transplantation in children	Prof. Jurica Vuković	5	8	5	3.0
The role of immunogenetics in transplantation	Assist. Prof. Renata Žunec	10	6	6	3.0
Mental health service management	Prof. Rudolf Gregurek	6	6	4	2.5
Health and public health risks management in crisis situations	Assoc. Prof. Iskra Alexandra Nola, Prof. Stjepan Orešković	6	5	14	4.0
Viral hepatitis	Prof. Marko Duvnjak, Prof. Adriana Vince	10	15	0	3.5
Scientific approach to transfusion treatment	Prof. Jasna Mesarić	2	14	0	2.5

*L = lectures; S = seminars; P = practical work;

The principal scheme of course enrolment is as follows:

First year: 12 ECTS worth of courses: (REQUIRED) Structure, methodology and functioning of scientific work 1 (4 ECTS) + choice of elective methodological courses (8 ECTS in total)

Second year: 12 ECTS worth of courses: (REQUIRED) Structure, methodology and functioning of scientific work 2 (5 ECTS) and Statistical analysis of medical data 1 (5 ECTS) + choice of elective methodological and field-oriented courses (2 ECTS in total);

Third year: 12 ECTS worth of courses: (REQUIRED) Structure, methodology and functioning of scientific work 3: research projects (2 ECTS) and one of Medical statistics 2 courses, depending on study design (2 ECTS) + choice of elective methodological and field-oriented courses (8 ECTS in total).

A.3.10. POSSIBILITY OF IMPLEMENTATION OF THE DOCTORAL STUDY PROGRAMME IN ENGLISH OR SOME OTHER LANGUAGE AND LIST OF COURSES THAT MAY BE OFFERED IN THAT LANGUAGE

PhD programme "Biomedicine and Health Sciences" in English enrolled its first students in the academic year 2007/2008 and was the first such programme in the Republic of Croatia. The requirement for

enrolment is foreign citizenship, and the teaching is entirely conducted in English. The courses, structure of the programme and the teaching process are fully equivalent to its Croatian counterpart. There is, however, a difference in the teaching schedule itself. Namely, this program promotes the so-called “sandwich” model of teaching and course attendance. Candidates have an intensive month and a half of courses in each academic year. This allows for shorter absences from their workplace and residence in another country. In addition, candidates can have an additional mentor not affiliated with the School of Medicine in Zagreb, one from their home country. This type of mentoring is encouraged since it facilitates that the candidates conduct at least part of their research, if not all, in their home country. This discourages future brain drain for their countries and enables growth of its research and scientific capacities leading to “brain gain”.

According to January 2019 data, a total of 66 applicants from Kosovo, Bosnia and Herzegovina, Canada, Macedonia, Italy and Ukraine enrolled in the programme. Forty-eight of them have finished the courses and are now working on their PhD thesis whose proposals had been successfully accepted. The first graduation ceremony of the two PhD candidates that earned their highest academic title with the completion of the Biomedicine and Health Sciences PhD programme was held on April 1, 2015. So far, 16 students have completed their studies and received the title of Doctor of Science.

There are 48 co-mentors who are foreign nationals. The largest number of those is from Kosovo (18), less from Slovenia (8), the USA (5), Macedonia (3) and Bosnia and Herzegovina, Germany and France (2 comments each). One co-mentor each is from Spain, the Netherlands, Hungary, Belgium, Poland, the Czech Republic, Albania and Canada.

A.3.11. CRITERIA AND REQUIREMENTS FOR ENROLLING IN COURSES/MODULES FROM OTHER DOCTORAL STUDIES

Teaching contents (courses) with final exams at PhD programmes of other medical schools in the Republic of Croatia are as a rule rated in the same way as PhD courses at the School of Medicine, University of Zagreb. However, it is first assessed whether these courses are equivalent to those of this programme. To do this, the candidates must provide course content, course leaders' CVs and other information relevant to the evaluation (similar to the "diploma addendum" in European education terminology).

The same applies to courses taken at PhD programmes of other recognized faculties at home or abroad. In doing so, however, things that are further evaluated are: the enrolment criteria and completion criteria for these programmes, and the inclusion criteria of the course (do courses undergo a review and what kind). Additionally, organized PhD and postdoctoral training with proficiency exams at renowned, non-profit scientific institutes can be also taken into account.

A.3.12. DESCRIPTION OF THE SYSTEM OF ADVISING AND GUIDING DOCTORAL STUDENTS THROUGH THE DOCTORAL STUDY, APPOINTMENT OF STUDY ADVISOR IN THE PROCESS OF ENROLMENT INTO THE DOCTORAL STUDY, AND HIS/HER DUTIES

A three-member study committee is appointed to each PhD candidate enrolled to guide, advise and work with the candidate throughout their studies up to their PhD thesis defence. The study committee consists of the PhD mentor, a head of the department where PhD research is being conducted and one other member of the faculty.

A.3.13. RIGHTS AND OBLIGATIONS OF DOCTORAL STUDENTS, MENTORS AND STUDY PROVIDERS

A.3.13.1. Rights and obligations of PhD candidates

Prior to the enrolment in the first semester of a PhD programme, selected applicants are required to sign a contract on mutual rights and obligations. The contract contains provisions on:

- a) the contracting parties,
- b) PhD candidate's financial obligations,
- c) statements by the PhD candidates and their mentors about the understanding of the commitments they made and their rights and responsibilities during the PhD programme,
- d) the obligations regarding enrolment and completion of the programme, and
- e) other rights and obligations relevant to the completion of the programme.

PhD candidates have the right and obligation to attend all forms of classes, and they are required to attend at least 80% of classes, of which records are kept. The provisions of the Regulations of Graduate Programmes of the School shall be appropriately applied to the questions of attendance, records of classes, taking of examinations and the obligations of PhD candidates.

Upon completion of each study year, PhD candidates are required to certify the year of study. PhD candidates who fail to enrol in the next year of study are required to submit a prescribed form of temporary suspension of studies; otherwise they lose their student status.

A PhD candidate has the right to freely and independently choose a mentor (and a potential co-mentor) for their PhD thesis. A PhD candidate has the right to change the mentor appointed to supervise the accepted PhD thesis proposal once and only for justifiable reasons. A PhD candidate has the right to submit a request to terminate work on the previously accepted PhD thesis proposal once, and to request evaluation and acceptance of a new PhD thesis proposal with the appointment of the same or a new mentor. A PhD candidate may be granted several requests to terminate work on the previously accepted PhD thesis proposal for justified reasons resulting from unforeseen events, extraordinary events and events that could not be prevented, eliminated or avoided.

A PhD candidate is obliged to submit an annual report on their progress to the Council for Postgraduate Programmes. In addition, PhD candidates are required to submit a certificate that in each academic year they spent at least 160 working hours within the laboratory or clinical department or the Referral Centre of the Ministry of Health of the Republic of Croatia or other relevant research dealing with the topic related to the PhD thesis.

A.3.13.1. Rights and obligations of mentors

A person may be appointed as a mentor of the PhD thesis if they are an employee of the School holding a scientific-teaching degree and position or is elected in the title scientific-teaching degree at the School, provided that they are an active researcher in the field for which the PhD thesis is proposed, as evidenced by the simultaneous fulfilment of the following two criteria:

- a) that during the past 5 years they have been a leader of a national or international project or an active contributor to such a project, and
- b) have published at least 3 internationally recognized papers relevant to the research of their PhD candidate's PhD thesis (as evidenced by data from the Web of Science, SCI expanded and SSCI) over the past five years.

Professors emerita and full members of the Croatian Academy for Arts and Sciences can be mentors of PhD theses, if they are active leaders of research projects.

In order to ensure the full and comprehensive development and education of PhD candidates, to enhance interdisciplinary research, the quality of research and the mobility of young researchers, and the quality of PhD theses, the School may appoint a co-mentor if necessary.

Prior to taking up the first mentorship, the prospective mentor must attend a workshop for mentors organized by the University, the School or recognized international schools, or co-mentor one PhD thesis. A person may mentor up to five PhD candidates at a time.

The mentor and co-mentor are obliged to supervise the PhD candidate during the preparation of their PhD thesis, to monitor the quality of their PhD thesis, to encourage the publication of their papers and to enable them to participate fully in scientific research projects.

Primary responsibility for publishing papers co-authored by the PhD candidate is the responsibility of the mentor, who is expected to maintain at least average scientific productivity during the writing of PhD thesis, which means publishing at least one paper per year in internationally peer-reviewed journals cited in WoS, SCI expanded and SSCI.

The mentor is obliged to submit annual reports on the PhD candidate's progress to the Council for Postgraduate Programmes.

A.3.13.3. Rights and obligations of the programme provider

The School of Medicine has established working bodies responsible for the realization and quality assurance of the PhD programme in accordance with the approved curriculum.

PhD Programme Coordination Committee consists of a PhD programme director and one or more assistants from the ranks of teaching staff with scientific-teaching titles who actively participate in the organization of the curriculum. A PhD programme director organizes the PhD programme and is responsible for the implementation of the curriculum, proposes a plan for implementation of the curriculum, convenes and chairs the meetings of the course leaders, proposes amendments to the curriculum, submits annual reports on the courses held and performs other tasks in accordance with laws and regulations. Assistants to the PhD programme director participate in the application process and selection of candidates for admission, in the development of the implementation of the curriculum, in the organization and realization of PhD Day, take care of teaching materials and teaching aids, submit reports on the courses held and conduct programme surveys.

The Board for PhD Theses and Scientific Degrees a permanent expert committee of the Faculty Council, which harmonizes the criteria and coordinates the activities in the process of attaining the academic degree of doctor of science from the moment of the registration of the PhD thesis proposal up to the public defence of the completed PhD thesis and the graduation ceremony.

The Board for Evaluation of Postgraduate Programmes is a permanent expert committee of the Council for Postgraduate Programmes, which coordinates activities and harmonizes standards in the process of designing curricula and evaluating postgraduate programmes.

The Board for Evaluation of Scientific Activity of PhD Candidates is a permanent expert committee of the Council for Postgraduate Programmes, which coordinates the activities and harmonizes the criteria in the process of evaluating the scientific activity of PhD candidates and mentors and evaluates whether the conditions for the public defence of the PhD thesis have been fulfilled.

The Council for Postgraduate Programmes decides on all issues regarding postgraduate programmes within the scope of its jurisdiction, on the basis of proposals from its working bodies (boards). This applies in particular to the harmonization of the quality of the programme curriculum, the analysis and quality

assurance of the PhD programme, the determination of the ECTS points according to the curriculum and the evaluation of the scientific activity of PhD candidates during their studies.

A.3.14. COST OF THE STUDY PROGRAMME PER DOCTORAL STUDENT

The sources of funds for the PhD programme are:

- state scholarships (today the Croatian Science Foundation - HRZZ),
- places of employment of PhD candidates (health care institutions, pharmaceutical industry, agencies, etc.),
- PhD candidates themselves (self-financing), and
- School of Medicine's own funds.

Funds raised for the purpose of PhD programme are allocated clearly and in a manner that ensures the maintenance and improvement of PhD education. Since the total costs are paid in part from the revenues of the state budget of the Republic of Croatia, the city and county budgets, the revenues from scientific projects and courses, the total costs are deducted from the costs paid from own revenues (source 31). Tuition revenues are recorded in accordance with the financial rules of the users of the state budget, but refer to the academic year, not the financial year. For this reason, the revenue from the tuition fees of one academic year is transferred to the revenue of another financial year. Accordingly, the costs of a doctoral degree are also charged to two financial years.

The total costs of the School, paid out of own resources, include expenses for spending according to the following basic categories.

Remuneration for work outside the prescribed standard consists of:

- salaries and wages for teaching and non-teaching staff beyond the prescribed standard;
- payment of work wages to external associates through work contracts;
- overtime pay for all employees;
- costs of hiring new employees (agency fees).

Operating cost and other material costs

The total amount of annual operating cost is calculated by using the financial data for source 31 (revenues from own sources) less the amounts of salaries and wages paid from own source revenues.

The School of Medicine systematically allocates funds from tuition and other own resources to cover the **costs related to scientific research** and the preparation of PhD thesis:

- proper disposal of waste (radioactive, infectious, toxic, animal origin, etc.) resulting from research;
- training of personnel to handle hazardous materials and devices, obtaining licenses to work with experimental animals and the like;
- procurement of appropriate protective equipment;
- renovation of housing and equipment for experimental animals;
- servicing and maintenance of capital, medium and small lab equipment;
- construction and infrastructure renovation of laboratories;

- procurement of chemicals used by a number of research groups (alcohol, acids, alkalis, formalin, liquid nitrogen, etc.);
- publishing in open access journals, poster design, organization of PhD Day, assistance in attending symposia and congresses and the like.

Costs to third parties relate to:

- the University of Zagreb Development Fund and its components;
- candidate compensation for the Croatian Medical Chamber duties.

The tuition fees for the PhD programme “Biomedicine and Health Sciences” at the School of Medicine are calculated on the basis of the costs of staff, external associates, operating costs of the School, procurement and maintenance of equipment, premises and administrative costs resulting from the overall running of the School.

On the basis of cost parameters, number of candidates per year of PhD programme, number of hours of teaching and engaged teaching and administrative staff, an amount of HRK 70,000.00 to 77,000.00 was determined, which would be sufficient to cover the cost of the programme per candidate. The exact amount, on an annual basis, depends on the number of candidates enrolled, the number and academic rank of teachers hired, and the proportion of the cost of pursuing a PhD degree in the total cost. The exact amount of programme costs in 2017 and 2018 is listed in the table below.

PHD PROGRAMME COSTS		
	2017	2018
Operating expenses		
office material	193,803.50	196,990.92
computers and IT material	261,712.89	298,480.14
promotional services	278,465.15	562,653.18
literature	301,609.14	284,368.30
maintenance (cleaning agents, sanitary fittings and accessories) washing services, freight forwarding	657,024.30	554,165.63
small inventory	98,129.14	64,858.21
clothing	122,334.67	57,807.78
teaching assistants	426,501.50	452,921.95
building and equipment maintenance	2,280,690.43	1,109,401.20
animal care	194,126.40	193,092.84
laboratory supplies and chemicals	319,637.50	221,256.99
pest control, chimney maintenance	17,202.36	20,707.78
<i>total</i>	5,151,236.98	4,016,704.92
Expenditure on non-financial assets		
renovation of laboratories and lecture halls	97,954.25	364,833.19
computer equipment	241,251.90	429,208.08
office equipment	197,374.58	305,351.08
maintenance equipment	56,283.56	78,495.75
laboratory equipment	76,055.50	123,795.00
teaching equipment	272,626.68	151,560.56
books	44,014.54	61,369.62

<i>total</i>	985,561.01	1,514,613.28
Employee expenses		
salaries	9,977,283.47	10,532,649.07
wages for PhD programme	726,342.47	
<i>total</i>	10,703,625.94	10,532,649.07
Utilities		
electricity, gas, water, waste disposal	364,214.26	316,091.16
<u>total expenditure</u>	17,204,638.19	16,380,058.44
<u>cost per student</u>	77,150.84	70,909.34

Due to the extremely difficult economic situation in recent years, to the strategic need for medical staff and motivating young doctors to continue their scientific education in the Republic of Croatia and to contribute to the development of the medical profession with their expertise and knowledge, the amount of tuition fees for PhD programmes was set at HRK 20,000.00 per year.

A.4. METHODS OF MONITORING QUALITY OF THE DOCTORAL STUDY

A.4.1. LIST OF QUALITY INDICATORS SUCH AS SCIENTIFIC OR ARTISTIC PRODUCTION OF TEACHERS AND DOCTORAL STUDENTS, QUALITY OF INSTRUCTION, RELEVANCE AND QUALITY OF DOCTORAL DISSERTATIONS, STATISTICAL DATA ON DURATION OF STUDY, STATISTICAL DATA ON THE NUMBERS OF NEW HOLDERS OF DOCTORAL DEGREES IN RELATION TO THE NUMBERS OF DOCTORAL STUDENTS ANNUALLY, INTERNATIONAL COOPERATION REALIZED, EMPLOYABILITY OF NEW HOLDERS OF DOCTORAL DEGREES

A.4.1.1. Scientific production of teachers and PhD candidates

The mentor is required to guide the PhD candidate, monitor the quality of their work, encourage the publication of papers and enable full participation in scientific research projects. Therefore, monitoring and evaluating the quality of a mentor's scientific performance is monitored directly and indirectly.

The quality of mentors is directly monitored on the basis of their scientific production. The mentor must have a scientific or scientific-teaching title of at least a research associate or assistant professor and be an active researcher in the field in which the PhD thesis is prepared. This is substantiated in two ways: (1) that the mentor is a leader or associate on an active domestic or international project and (2) that the mentor has previous scientific achievements (publications) in the last five years, or that they have published at least five papers in journals cited in WoS or at least one paper in Quartile 1 (Q1) or Quartile 2 (Q2). Good selection of mentors is shown by data for the 5-year period 2011/2012 - 2015/2016: 685 active and potential mentors (who have the conditions for mentors but did not have a PhD candidate in the last five years) published 10,774 papers (15.7 per mentor), with an average number of citations of these papers 117.6, with an average h-index of these papers 3.7 and an average h-index of mentors 9.5. The data for the last academic year (2017-2018) also clearly show the high productivity of mentors and their PhD candidates (Table 4.1.).

Table 4.1. Indicators of scientific production of mentors for the academic year 2017/2018.

Number of mentors with PhD candidates	Number of mentors whose PhD candidates defended their thesis successfully	Number of published scientific papers by mentors	Number of published scientific papers by mentors in international journals	Number of mentors' publications with their PhD candidates
303	75	834	689	126

Indirectly, the quality of the mentor is also monitored by the quality of scientific work, that is, by scientific activity of PhD candidates. Data on scientific activity and productivity of PhD candidates for the 2011/2012 - 2015/2016 is also satisfactory. Of the 543 PhD students for whom data was collected, 174 completed their studies and received the title of Doctor of Science. During their studies, these PhDs published, on average, 1.33 papers from their PhD thesis, with a citation number of 1234 and an average number of citations of 5.3.

A.4.1.2. Quality of teaching

The quality of teaching and the content of the courses is assessed by a student survey, which has been continuously conducted since the beginning of the programme. PhD Programme Coordination Committee has the right and duty to periodically attend classes. For smaller courses, an anonymous survey is conducted when submitting the exam grade slips to the student office. The students are familiar with the

e-mail addresses of the members of the PhD Programme Coordination Committee and the Vice-dean for Postgraduate Programmes, and have the opportunity to express their complaints without any consequences to them. Warranted complaints are reported to the course leaders, with the name of the plaintiff not given without their consent. In order to ensure continuity of the teaching part of the PhD programme, all retired course leaders must have co-leaders, and course leaders who are foreign nationals should, as a rule, have co-leaders resident in the Republic of Croatia (commonly from the University of Zagreb School of Medicine).

According to the annual academic report for the year 2017/2018, PhD candidates of the PhD programme “Biomedicine and Health Sciences” from all three study years ($n = 348$) evaluated the study with a score of 4.06 (expressed as median). Teachers' quality was rated 4.21, availability of teaching materials (scripts, website, articles, handouts) 4.1, usefulness of teaching materials 4.03, lectures 4.1, seminars 4.07, and practical work 4.06. Graduate study organization rating was 4.03. In general, PhD candidates praised the quality and accessibility of their teachers, interesting presentations and valuable practical knowledge they gained in conducting their own research. There were complaints about occasional unannounced absences of teachers, some lengthy theoretical lectures and lack of teaching materials in some courses.

The concrete suggestions of the PhD candidates for improving the quality of teaching were: to introduce even more practical work, to communicate more clearly with the students, and to explain more clearly what is expected in the exams from individual PhD courses.

A.4.1.3. Relevance and quality of PhD theses

The quality of the PhD theses is reflected in the quality and number of scientific publications resulting from the research during the PhD programme. Data on scientific productivity of PhD candidates in 2011/2012 - 2015/2016 speak in favour of satisfactory scientific productivity. Out of the total number of PhD candidates who graduated and/or were still studying during this period, data was collected for 58.5% of PhD candidates. The number of papers resulting from the narrow topic of their PhD thesis was 362, with a citation number of 1534 and an average number of citations of 2.83. It should be borne in mind that some doctoral candidates had only just their PhD thesis proposals accepted. For those who completed the programme during this period and received the title Doctor of Science ($n=174$), data shows that they, on average, published 231 papers in the narrower topic of the thesis, on average 1.33, with the number of citations 1234 and the average number of citations 5.3.

A.4.1.4. Statistical indicators of study duration

The median of the duration of studies from enrolment to drafting and defending a PhD thesis for students who have completed their doctoral studies and received their PhD in 2009/2010 was 7.0 years and in 2017/2018 it was 7.74 years. Compared to the developed EU member states, which have a full-time PhD duration of 3 - 4 years, this is still a rather long period. This is understandable, however, since our PhD candidates are largely part-time clinicians and therefore study duration is longer than in developed EU member states. Specifically, a number of part-time PhD candidates take study leave because of other obligations (specialization, scholarships, maternity leave, etc.), which negatively affect the statistical indicators of the duration of studies.

A.4.1.5. Statistical indicators of the annual number of new PhDs in relation to the number of PhD candidates

According to the indicators of the last analysis for the academic year 2017/2018, there were a total of 210 students enrolled in all academic years, not counting PhD candidates who had taken classes

and were in the process of writing their PhD thesis. Most students (almost 95%) enrolled in part-time study, and only 5% of students studied full-time. 64 students enrolled in the first year of study, and in the same year 65 PhD candidates defended their PhD thesis. So, in 2017/2018, more doctoral students defended their PhD thesis than were enrolled in the same academic year.

A.4.1.6. International collaboration

The international collaboration of the School of Medicine reflects the dynamic process of internationalization in the field of higher education. Internationalization of the School is one of the proactive strategies of change and improvement of academic life and work in the specific conditions of educational and professional scientific work in the field of biomedicine and health sciences.

The School is active in the following areas of its strategic orientation and level of development of international collaboration and international relations:

- development of PhD programmes in accordance with the Bologna Process, and in particular in accordance with international documents in the field;
- affirmation of ECTS credit system as a unique form of quantification and evaluation of teaching and student workload;
- increasing the number of exchange students and strengthening the intercultural and educational component through European mobility programs, bilateral inter-faculty and inter-university agreements and the organization of thematic summer schools;
- increasing the number of teachers in exchange and as well as their more active participation in longer study visits, scientific and professional fellowships;
- increasing the competitiveness of scientists from the medical field in the area of project applications for the European Union (Seventh Framework Program and Horizon 2020) and maintaining the continuity of international scientific, infrastructural and organizational projects initiated;
- stronger participation, especially by junior researchers, in Marie Curie fellowship programs that encourage the mobility of scientists and researchers at foreign Incoming/Outgoing International Fellowships;
- defining areas of scientific excellence with the aim to integrate Croatian biomedical orientation institutions more effectively into the European Research Area (ERA);
- expansion of the Office for International Relations as a place of coordination and systematic monitoring of all forms of international action and a centre that generates monitoring mechanisms within the quality improvement system in the field of internationalization;
- maintaining the current level and enhancing ongoing cooperation with the central Office for International Relations at the University of Zagreb, with even greater coordination in the exchange of information on international programs and initiatives.

At the international level, the School as an institution, its organizational units, departments and individuals, foster collaboration with domestic and international institutions in the field of biomedicine and health sciences. This kind of cooperation takes place through bilateral inter-faculty and inter-university agreements, participation in the work of academic networks and organizations, and participation in scientific meetings and their organization.

Table 4.2. Review of the International Collaboration of the School of Medicine

Bilateral university agreements	University of Vienna, the Medical University of Graz, Bratislava University, the University of Hamburg, the University of Toronto, the University of Thessalonica, the University of Padua
Bilateral faculty agreements	Schools of Medicine: Graz, Pecs, Timisoara, the Russian State Medical University, Moscow, Hamburg, Ljubljana, Mostar, Skopje, Tetovo, Tuzla, Podgorica, Prishtina, Tirana, Ecole Nationale de la Santé Publique - Rennes, South Carelia Polytechnic Finland, Kent, McGill, University of Michigan Medical School, University of California San Francisco, University of Northern Colorado, University of Georgia College of Medicine, Medical College of South Carolina, Medical College of Wisconsin, Penn State University
Regional initiatives	Cooperation on harmonisation of medical curricula in South-East Europe organized by the German Rectors' Conference and coordination of the School of Medicine in Hamburg; the Medical Competence Network of SEE Medical Schools (coordinator: The Medical University in Graz) Multilateral agreements: ETC-PHHP (European Training Consortium in Public Health and Health Promotion – cooperation with 10 universities in the European Union) and PH-SEE (Public Health in South Eastern Europe – cooperation with 16 universities in South and South-East Europe); South East Europe Workplace Academy (SEEWA)
TEMPUS programmes	Universities in Ghent, Pécs, Vienna, Hamburg, Maribor, Osijek, Split and Prishtina
Participation in international and regional associations and programmes	Association of Medical Schools of Europe (AMSE), International Association for Medical Education (AMEE), The European Training Consortium in Public Health & Health Promotion, Association of Schools of Public Health in the European Region (ASPHER), European Public Health Association (EUPHA), Forum for Public Health in South-East Europe, Organization for PhD Education for Biomedicine & Health in European System (ORPHEUS), European University Association (EUA)
Joint BA/MA or PhD programmes	PhD programme in the field of biomedicine and health sciences with the University of Ljubljana, Master programme Leadership and Management in Health Sciences, postgraduate programme in ultrasound diagnostics in gynaecology with Hamad Medical Corporation Qatar
Summer schools	Federation of European Neuroscience Societies Summer School, Motovun International Summer School of Public Health, European Medical Students Association (EMSA) Summer School in Emergency Medicine Dubrovnik
Professional courses	International courses in cardiology, diabetology, neurology, ENT, occupational medicine and other areas of medicine, and courses run by the European Molecular Biology Organization (EMBO), courses within the longitudinal studies Basic Medical Skills organized according to the European Resuscitation Council
Scholarships for mobility of students and teaching staff	Lions Club Austria: Medical Students Beyond Frontiers, Katolische Kliniken in Kleve Kreis scholarships, Josip Matovinovic Clinical Fellowship, University of Michigan Medical School, Ann Arbor, Michigan
FP6 programmes	<i>Diagnosis of acute HCV infection</i> <i>Genome-based therapeutic drugs for depression</i> <i>Eating-out habits</i>

	<i>European Leukemianet</i> <i>Congenital disorders of glycosylation</i>
FP7 programmes	<i>See Annex: International Projects</i>
COST action	<i>See Annex: International Projects</i>
Other international research programmes	National Institute of Health: Fogarty International Research Collaboration Award: Endemic Nephropathy (State University of New York), DAAD collaborative project: <i>Experimental models of Alzheimer's disease and cerebral diabetes related disorders</i> DAAD PhD scholarship: <i>Brian insulin system alterations in probable experimental models of sporadic Alzheimer's disease</i>

In the context of international educational and scientific projects and programs, the Office for International Relations plays an important role. The Office exchanges information and coordinates affairs with the School's Centre for Translational and Clinical Research, which is primarily responsible for disseminating information on international projects and reporting them. The Office for International Relations also systematically provides information on opportunities, encourages and facilitates mobility of PhD candidates.

The School is in agreement with the European Charter and the Code for Researchers and implements its principles and charters. Understanding of the Charter and the Code is a compulsory part of curriculum for PhD candidates.

Institutional support for PhD candidates to participate in international scientific conferences is described in Chapter 3. Each year, the best PhD candidates at PhD Day participate in the International Doctoral Competition in Prague.

All PhD theses in the PhD programme in English are written in English. PhD candidates in the PhD programme in Croatian also have this opportunity, if they have a foreign co-mentor.

PhD candidates can write their PhD theses using the Scandinavian model, in accordance with the provisions of the Regulations on PhD Programmes of the University and the School.

The School has a number of international collaboration agreements which include joint scientific-research and exchange of teachers and PhD candidates. Examples of selected international agreements are:

- Collaboration Agreement between the School of Medicine and the University of Ljubljana, Slovenia,
- Collaboration Agreement between the School of Medicine and the University of Pecs, Hungary,
- Collaboration Agreement between the School of Medicine and the Medical College of Wisconsin, Milwaukee, USA,
- Collaboration Agreement between the School of Medicine and the University of California, San Francisco, USA,
- Collaboration Agreement between the School of Medicine and the University of Georgia College of Public Health, USA.

A.4.1.7. Employability of Doctors of Science

The contextual framework, primarily the economic situation in the Republic of Croatia, affects the low funding of approved projects of scientifically productive leading researchers, which in turn makes it difficult to recruit an adequate number of young researchers on top-rated projects. This also affects the lack of funds to procure equipment and conduct research. There are also insufficient initiatives to send postdoctoral fellows to compulsory residency at internationally respected institutions.

The described situation also affects the employment of young scientists at the School. The School of Medicine, as a responsible scientific institution, is committed to recruitment of young scientists, stimulating interest in research and stay in Croatia, and the return of Croatian scientists from abroad. This is a prerequisite for improving scientific work in biomedicine, which can influence the better position of science and universities in society and contribute to improving Croatia's competitiveness.

Most PhD candidates are employed in healthcare full-time, which prevents them from studying full-time. This challenge can only be resolved by common agreement between the governing ministries responsible for science, higher education and health and subsequent changes in legislation. This would strengthen the high level of research collaboration between basic biomedical sciences and clinical research departments.

PhD candidates find employment in the healthcare system, in the scientific and academic sphere, at the University and the School of Medicine, in the pharmaceutical and biotechnology industry, in government agencies and bodies whose activities are in the field of health, biomedicine, science and technology.

A.4.2. DESCRIPTION OF THE METHOD OF PARTICIPATION BY DOCTORAL STUDENTS IN PROCEDURES OF EVALUATION OF THE PROGRAMME OF THE DOCTORAL STUDY

The mechanisms for quality control and monitoring of the PhD programme and mentoring are at the level of the University of Zagreb and at the School level. At the University level, PhD students are required to submit an Annual Doctoral Progress Report (university form DR.SC-04) each academic year, in which the PhD student evaluates not only the programme and teachers in the previous year but also the mentor. At the School level, an additional form of PhD programme evaluation has been established, consisting of exit surveys for completed PhDs. This survey is being conducted from the academic year 2018/2019.

A.4.3. PROCEDURES FOR MONITORING AND IMPROVING THE QUALITY OF THE DOCTORAL STUDY PROGRAMME, AS WELL AS FOR MONITORING OF SUCCESS IN IMPLEMENTATION OF THE DOCTORAL STUDY (PROCEDURES OF EVALUATION AND SELF-EVALUATION – ANNUAL SELF-EVALUATION OF THE STUDY PROGRAMME, ANNUAL SELF-EVALUATION OF DOCTORAL STUDENTS, REVISION AND IMPROVEMENT OF THE DOCTORAL STUDY IN ACCORDANCE WITH QUALITY MONITORING RESULTS AND RESULTS OF SELF-EVALUATION OF THE PARTICIPANTS IN THE DOCTORAL PROGRAMME)

PROCEDURES FOR EVALUATION AND SELF-EVALUATION

In order to establish and implement a quality system, the Faculty has selected a model based on the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).

The bodies responsible for ensuring the quality system at the leadership and decision-making levels are the Dean, the Dean's Council and the Faculty Council. The bodies responsible for ensuring the quality system at the advisory level are the Boards and Committees of the School. Management and responsibility for quality assurance at the executive and performance levels is put on the heads of departments, course councils, programme coordinators and heads of the School's administrative and professional services. The Quality Promotion Committee is a special body of the School and its members

are representatives of internal and external stakeholders. The responsibilities and tasks of the Committee include an advisory role and coordination in promoting the quality culture and quality assurance of the School, in collaboration with the Higher Education Agency, the Board and the Office of Quality of the University of Zagreb and international partners.

Several international and external evaluation processes have been carried out at the School of Medicine in recent years, which have included the evaluation of the PhD programme “Biomedicine and Health Sciences” as well:

- The "Peer" mission of the European Commission visited the School in 2007 as part of the negotiations for Croatia's accession to the European Union and in 2012 as part of monitoring Croatia before joining. Both missions evaluated all levels of education: graduate, postgraduate and specialist training.
- The National Council for Higher Education had initiated the School's external evaluation process at the end of 2008 and, on the basis of the Final Report, the School received a work permit in early 2009. The Final Report states the following (citation): “The evaluation of the School of Medicine at the University of Zagreb has shown that this higher education institution meets all the requirements and standards in the educational, scientific and professional field. The School of Medicine is a well-organized institution that is constantly improving its teaching activity, raising the quality of its programmes and investing in its scientific recognition. ”
- Following the decision of the Agency for Science and Higher Education from 2011, the School of Medicine was selected as one of the three faculties of the University of Zagreb, where an internal and external evaluation of the quality assurance system was carried out according to the ESG guidelines. Based on the final report, in 2013, the School received the Agency's certificate for an efficient, developed and functionally organized quality assurance system.
- The re-accreditation process of the School of Medicine was conducted in 2015. The Final Report states: “Each study program is defined in accordance with clearly defined learning outcomes and international standards. The institution of higher education has established mechanisms for approving, monitoring and improving its programs and qualifications. Rating: Fully implemented.”

According to the Regulations on PhD Programmes of the School of Medicine, the Council for Postgraduate Programmes, and its Board for Evaluation of Postgraduate Programmes are responsible for coordinating and harmonizing benchmarks in the postgraduate programme design and evaluation process. The Council and its boards keep records and oversee the PhD research activities and other study responsibilities of PhD candidates, assisted by the Board for PhD Theses and Scientific Degrees. In addition, the Council, with the assistance and support of the Board for PhD Theses and Scientific Degrees, monitors the mentors' workload and performance. The monitoring criteria include the scientific production of teachers and PhD candidates, the relevance and quality of PhD programmes, indicators of study duration, the annual number of new PhDs in relation to the number of PhD candidates and the achieved international collaboration.

The Faculty has several mechanisms for continuous and periodic quality monitoring and assessment of the PhD programme.

Annual report of mentors and PhD candidates

In accordance to the decision of the Faculty Council of the School of Medicine of 24 September, 2013, and the Regulations on PhD Programmes, University of Zagreb, submission of annual reports on the work of mentors and PhD candidates is a condition for enrolment in the subsequent year of the PhD programme.

The PhD candidates submit the report on the work through the online database of PhD candidates - OBAD to the University of Zagreb, at: <http://doktorski.unizg.hr/obad> via the form DR.SC.-04.

The mentors submit their work report via the form DR.SC.-05, but not through OBAD. The mentor submits the signed report in writing to the Department for Postgraduate Programmes prior to enrolment in the next year.

Assessment of the PhD candidate's scientific activity

During the programme, candidates are required to accumulate a certain number of ECTS points related to their scientific activity. From the academic year 2016/2017 a new on-line scoring system was introduced in which students input their publications and track their scientific activities, and PhD Programme Coordination Committee oversees and evaluates their scientific activity through this system. Between October 2017 and February 2019, the scientific activity of 94 PhD candidates was evaluated, 9 of which were evaluated negatively.

School survey on teaching quality

After each course, the quality evaluation is conducted electronically through the survey available at <https://tinyurl.com/y7agh69x>. This internal anonymous and voluntary survey is conducted sporadically, and the results show that PhD candidates rate teachers' quality and teaching performance very highly (described previously). At the end of the academic year, the results are communicated to the leaders of each individual course as well as to the members of the PhD Programme Coordination Committee.

Exit Survey

Evaluation of the entire programme based on an exit survey (attachment 2.3) is being conducted electronically for the purpose of the PhD programme evaluation from the academic year 2018/2019.

PhD Day

Since 2012, the School of Medicine in Zagreb has been organizing a PhD Day every year as a compulsory part of the PhD Programme Biomedicine and Health Sciences. The aim of this event is to adapt the programme to European standards as much as possible. The purpose of holding a day like this is to improve the accessibility of the public to PhD programmes, facilitate and encourage the exchange of research experiences of PhD candidates and mentors, and insight into the quality of work of PhD candidates for all interested parties. The gathering is attended by representatives of the University of Zagreb Rectorate, guests from other faculties and universities, and sometimes by distinguished representatives of the Croatian Academy of Sciences and Arts and the Ministry of Science and Education.

It is a one-day public presentation of preliminary research results within PhD theses of the second and third year of study in the form of displayed poster presentations and abstracts published in a special publication. In addition, the programme coordinators select some of the best abstracts for oral presentation. Preparation and participation in the PhD Day grants 4 ECTS credits to each active participant. It is also an excellent opportunity to evaluate research activity of the programme and an occasion to evaluate the quality of the programme itself. At the same time, it is also a transferable skills workshop: poster design, presentation and public defence of work in front of colleagues, teachers and guests as well as overview and analysis of peer research.

A.5. LIST OF COURSES/MODULES

ORDINAL NUMBER: 1

TITLE OF COURSE/MODULE: Medical image analysis

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Assist. Prof. Stanko Težak

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Margareta Dobrenić

Darko Grošev

Maja Hrabak Paar

Sanja Kusačić Kuna

Mario Medvedec

Andrea Mutvar

Ratimir Petrović

Frano Poljak

Stanko Težak

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 30

OUTLINE OF COURSE/MODULE CONTENT

Technical and clinical aspects of use of computers in medical diagnosis. Fields in which computers contributed to the extraction of quantitative and qualitative data from the imaging patient studies and enabled extraction of information about physiological and metabolic processes. Pathophysiological and pharmacological foundation, instrumentation, i.e. systems for acquisition of image and other relevant data and quality control. Presentation of acquisition protocols and image and data analysis. Algorithms for reconstruction, analysis and data enhancement, i.e. images, as well as clinical results obtained by these procedures. Criteria that differentiate normal from pathological findings, possible problems and mistakes during image and data interpretation. Fields of use: 2d static and dynamic scintigraphy of various organs of human body. ECG synchronized cardiac studies. Digital image filtration methods. Functional and parametric images. Computerized transmission (CT) tomography and emission tomography (SPECT). Principles and methods of nuclear magnetic resonance imaging. Measurement of whole body radioactivity as well as analysis of these data as pertained to internal dosimetry and radiation protection. Computer techniques in medical and accidental dosimetry. Computer analysis of complex energy spectra – gamma spectroscopy. Methods for radionuclide blood flow measurement. Radiology data analysis. Computers in radiotherapy. Osteodensitometry. Computer analysis in cytology. Digital analysis of echograms. Quality control of instrumentation, of diagnostic procedures and software packages. Inter-laboratory quality control.

READING LIST (MANDATORY AND RECOMMENDED)

- Cherry SR, Sorenson JA, Phelps ME. Physics in Nuclear Medicine, Saunders, Philadelphia 2003
- Bushberg JT, Seibert JA, Leidholdt EM, Boone JM. The Essential Physics of Medical Imaging. Williams & Wilkins, Philadelphia 2001

DESCRIPTION OF INSTRUCTION METHODS: lectures

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written and oral exam



DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 4,5

ORDINAL NUMBER: 2

TITLE OF COURSE/MODULE: Biochemical methods in biomedical research

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Jasna Lovrić, PhD; Associate Professor Dunja Rogić, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Drago Batinić
Tamara Božina
Danijela Cvijanović
Vladimir Damjanović
Sanja Davidović Mrić
Ivančica Delaš
Ksenija Fumić
Marija Gamulin
Lovorka Grgurević
Ivana Karmelić
Ana Kozmar
Vesna Kušec
Jasna Lovrić
Mila Lovrić
Daria Pašalić
Slavica Potočki
Dunja Rogić
Jadranka Sertić
Dragana Šegulja
Željka Vogrinc

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 35

OUTLINE OF COURSE/MODULE CONTENT

The goal of the course is to teach student about the application and possibilities of analytical methods used in biomedical research (methods of chromatography, mass spectrometry, electrophoretic methods, enzyme immunoassay, protein and lipoprotein phenotyping, immunoblot, cancer cytogenetics, application of proteomics in biomedicine) as well as the ways of scientific evaluation in biochemical and molecular research. Knowledge gained on the course will help students in the selection of appropriate methods for doctoral thesis as well as to critically follow the literature in biochemistry and clinical chemistry. The aim is to introduce to students the possibilities of contemporary medical biochemistry laboratory - from the blood test to molecular diagnostics as well as its application in translational research.

READING LIST (MANDATORY AND RECOMMENDED)

- Biochemical methods in biomedical research, manual, 2015 Medicinska naklada, *in press*
- Medical biochemistry diagnosis in clinical practise, Topić E, Primorac D, Janković S; Medicinska naklada 2004.
- Harper's Illustrated Biochemistry, 29 th edition, 2012, McGraw Hill

DESCRIPTION OF INSTRUCTION METHODS: Lecture, seminar, practical

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Final written exam



DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 5

ORDINAL NUMBER: 3

TITLE OF COURSE/MODULE: Disorders of adrenal gland

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Associate Professor Darko Kaštelan, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Tina Dušek

Darko Kaštelan

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 15

OUTLINE OF COURSE/MODULE CONTENT

The course covers basic knowledge about hormonal tests for diagnosing adrenal gland disorders, adrenal tumors including adrenocortical carcinoma, hypertension caused by oversecretion of adrenal gland hormones, congenital adrenal hyperplasia and adrenal insufficiency. Furthermore, special attention will be paid on adrenal incidentalomas as improvements in imaging techniques and advances in their availability increased detection of these tumors in the population making their management an extremely important aspect of health care. Within the practical work sessions students will be encouraged to discuss diagnostic and treatment plan for selected patients with adrenal gland disorders.

READING LIST (MANDATORY AND RECOMMENDED)

- D. G. Gardner, D. Shoback. Greenspan's Basic & Clinical Endocrinology
- D. Longo, A. Fauci, D. Kasper, S. Hauser, J. Jameson, J. Loscalzo, Harrison's Principles of Internal Medicine
- Morelli V, Reimondo G, Giordano R, Della Casa S, Policola C, Palmieri S, Salcuni AS, Dolci A, Mendola M, Arosio M, Ambrosi B, Scillitani A, Ghigo E, Beck-Peccoz P, Terzolo M & Chiodini I. Long-term follow-up in adrenal incidentalomas: an Italian multicenter study. J Clin Endocrinol Metab 2014;99: 827-834.
- Kastelan D, Kraljevic I, Dusek T, Knezevic N, Solak M, Gardijan B, Kralik M, Poljicanin T, Skoric-Polovina T, Kastelan Z. The clinical course of patients with adrenal incidentaloma: is it time to reconsider the current recommendations? Eur J Endocrinol 2015; 173:275-282.
- Kastelan D, Dusek T, Aganovic I, Stern-Padovan R, Kuzmanic D, Kastelan Z, Knezevic N, Crncevic-Orlic Z, Kraljevic I, Dzubur F, Pavlic-Renar I, Giljevic Z, Jelcic J, Baretic M, Skoric T, Korsic M. Management of adrenal incidentaloma: the position statement of the Croatian referral center for adrenal gland disorders. Lijec Vjesn 2010; 132:71-75.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Oral exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2

ORDINAL NUMBER: 4

TITLE OF COURSE/MODULE: Gene targeting in mammals

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Srećko Gajović, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Marija Ćurlin
Srećko Gajović
Dinko Mitrečić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 10

OUTLINE OF COURSE/MODULE CONTENT

Introduction in analysis of gene function by gene targeting in mouse. Knock-out, gene trap and embryonic stem cell culture methodologies. Their application in human genetics and medicine. Genetically modified mouse. Gene analysis in mammals. What is transgenic mouse and what is knock-out. Analysis of mouse mutants: phenotype changes correspond to gene function. Mouse mutants as a model for human disease. Embryonic stem (ES) cells. A survey of early embryogenesis. Isolation of ES cells. ES cell culture. Genetical modifications of ES cells. From ES cells to mutated mouse. Blastocyst injection. Morula aggregation. Analysis of mouse chimeras. Organization of mouse colonies. Mouse breeding. Isolation of mouse blastocysts. Knock-out and its variants: exon-specific knock-out, conditional knock-out. Experimental strategy of knock-out. DNA vector construction. Selection of ES cell clones carrying the desired genetical modification. Gene trap – a search for new genes. Experimental strategy of gene trap. Isolation and staining of 11.5-day mouse embryos or isolation of malformed mouse embryos.

READING LIST (MANDATORY AND RECOMMENDED)

- Bohacek I, Cordeau P, Lalancette-Hébert M, Gorup D, Weng YC, Gajović S, Kriz J. Toll-like receptor 2 deficiency leads to delayed exacerbation of ischemic injury. *J Neuroinflammation*. 2012 Aug 8;9:191.
- **Gajović S**, Mitrečić D, Augustinčić L, Iaconcig A, Muro, AF (2006) Unexpected rescue of alpha-synuclein and multimerin1 deletion in C57BL/6J OlaHsd mice by beta-adducin knockout. *Transgenic Res*, 15, 255-259
- Mitrečić D, Nicaise C, Klimaschewski L, Gajović S, Bohl D, Pochet R. (2012) Genetically modified stem cells for the treatment of neurological diseases. *Frontiers in Bioscience*, 4:1170-81.
- Scott JN, Kupinski AP, Boyes J. Targeted genome regulation and modification using transcription activator-like effectors. *FEBS J*. 2014; 281(20):4583-97.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars and practicals

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 1,5

ORDINAL NUMBER: 5

TITLE OF COURSE/MODULE: Diabetes and pregnancy

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Josip Đelmiš, MD, PhD, Prof. Marina Ivanišević, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Josip Đelmiš
Mislav Herman
Marina Horvatiček
Marina Ivanišević
Josip Juras
Emilja Juretić
Ivana Pavlić Renar
Vito Starčević

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 19

OUTLINE OF COURSE/MODULE CONTENT

Classification of diabetes in pregnancy, Metabolic changes in normal and diabetic pregnancy, Fetal growth and development, Complications in diabetic pregnancy, Gestational diabetes, Maternal and fetal surveillance in diabetic pregnancy, Complications in diabetic pregnancy, Ultrasound diagnostics in diabetic pregnancy, Labor management of diabetic pregnancy, Newborn of diabetic mother, Postpartal care of diabetic mother, Diabetic diet and preservation β -cells in type-1 diabetic pregnant patient.

READING LIST (MANDATORY AND RECOMMENDED)

- Diabetology of Pregnancy. Djelmiš J. Desoye G. Ivanišević M (ed). Basel: Karger, Current Content Book 2005
- Diabetes in women. ed. Reece EA, Coustan DR, Gabbe SG. Lippincot Williams Wilkins Philadelphia-Baltimor-New York.London 2004.
- Managing preexisting diabetes and pregnancy. ed Kitzmiller JL, Jovanovic L, Brown F, Coustan D, Reader DM American Diabetes Association, 2013

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars and practicals

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Oral and writing exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

ORDINAL NUMBER: 6

TITLE OF COURSE/MODULE: Diagnostic and treatment of female urinary incontinence

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Slavko Orešković, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Držislav Kalafatić

Slavko Orešković

Marina Šprem Goldštajn

Tomislav Župić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 15

OUTLINE OF COURSE/MODULE CONTENT

Lectures: Functional anatomy of pelvic floor. Physiology of micturition. Urinary incontinence: etiology and classification of pelvic floor disorders. New insight in etiology of stress urinary incontinence. Basic diagnostic tools in women with urinary incontinence. Surgical versus conservative treatment approach in patients with urinary incontinence. Urogenital atrophy- new insight into old problem. Discussion with experts on case report basis. During practical work participants will be informed about routine urodynamics, presenting on classical and modern operative techniques for stress urinary incontinence treatment.

READING LIST (MANDATORY AND RECOMMENDED)

- Orešković S. Uroginekologija. U: Kurjak A i sur. Ginekologija i perinatologija. Znanstvene biblioteka Tonimir, Varaždinske toplice 2003; 435-76.
- Orešković S i sur. Suvremeni pristup u dijagnostici i liječenju žena s inkontinencijom mokraće. Medicinska naklada, Zagreb 2003.
- Orešković S i sur. Vaginalna kirurgija – suvremeni pristup klasičnoj kirurškoj tehnici. Medicinska naklada, Zagreb, 2004.
- Walters M, Karam M. Urogynecology and reconstructive pelvic surgery, treće izdanje, Mosby –Year book 2006.
- Cardozo L. Textbook of female urology and urogynecology. Taylor and Francis, 2006.
- Delancey JO. The hidden epidemic of pelvic floor dysfunction: achievable goals for improved prevention and treatment. Am J Obstet Gynecol 2005; 192:1488-95.
- DeLancey JO, Ashton < Miller JA. Pathophysiology of adult urinary incontinence. Gastroenterology 2004; 126:23-32.
- Ostergard DR, Geoffrey W, Cundiff MD. Ostergards Urogynecology and Pelvic Floor dysfunction. Lippincott Williams and Wilkins, 2002.
- Orešković S, Kalafatić D, Gršić HL et al. Operative complications and results of the SPARC procedure for SUI. Coll Antropol 2009; 33:201-4.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

ORDINAL NUMBER: 7

TITLE OF COURSE/MODULE: Experimental oncology: malignant diseases as persistent oxidative stress

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Neven Zarkovic, PhD, research advisor

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER: Neven Žarković

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

Basic research in oncology, relevance and applicability. Experimental carcinogenesis - basic terms and principles of in vitro and in vivo models. The role of iron in cell growth control and carcinogenesis. UV-irradiation. Molecular basis of malignant transformation, the roles of (proto)oncogenes, suppressor genes and regulatory cytokines - similarities and differences of signal transduction between normal and malignant cells. Oxidative stress in carcinogenesis, diagnostics and therapy of cancer - growth modulation by the lipid peroxidation products with special attention given to the role of "second messengers of free radicals" such as 4-hydroxynonenal (HNE). Malignant diseases as systemic disorders, metabolic changes caused by cancer. Inflammation and cancer, possible roles of granulocytes in carcinogenesis and defense against cancer. Interactions between regenerating tissue and tumors, induction of tumor cells differentiation, phenomenon of reversion and spontaneous regression of cancer. Yeast as a model for the animal cell growth regulation under stress. Alternative and complementary approaches to cancer therapy. New diagnostic and therapeutic possibilities in oncology. Preparation of active form of 4-hydroxynonenal (HNE), mediator of oxidative stress and its' toxic effects in vitro.

READING LIST (MANDATORY AND RECOMMENDED)

- Žarković N., Borović S., Stipančić I., Poljak Blaži M., Lončarić I., Čipak A., Jurić G., Vuković T., Wonisch W., Waeg G., Žarković K. FIZIOLOŠKE I PATOLOŠKE ZNAČAJKE LIPIDNE PEROKSIDACIJE U: Oksidativni stres i djelotvornost antioksidansa. (Bradamante V., Lacković Z., ur.), Medicinska naklada, Zagreb, 2002, pp. 10-29
- Zarkovic N. MECHANISMUS DER TUMORENTSTEHUNG. Pharmazeutische Zeitung, 2000: 145: 239-245 (engl.)
- Zarkovic N. 4-HYDROXYNONENAL AS A BIOACTIVE MARKER OF PATHOPHYSIOLOGICAL PROCESSES. Mol. Asp Med., 2003: 24:281-291
- Suzana Borović Šunjić, et al. (2008) LIPID PEROXIDATION END PRODUCT AS A MODULATOR OF CELL GROWTH. In: Cell Growth Processes: New Research. Nova Science Publishers, Inc. F. Columbus, New York, (Takumi Hayashi Ed.) New York, 187-208
- Anne Negre-Salvayre et al. PATHOLOGICAL ASPECTS OF LIPID PEROXIDATION. Free Radical Research, 2010, 44:1125-1171
- Ana Cipak Gasparovic, et al. (2013) ASSAYS FOR THE MEASUREMENT OF LIPID PEROXIDATION. In: (Galuzzi L, Vitale I, Kepp O, Kroemer G. eds.) Cell Senescence, Methods and Protocols, Springer methods, Methods in Molecular Biology, Springer Science+Business Media, LLC, Humana Press, New York, pp.283-296
- Milkovic, L., Siems, W., Siems, R, Zarkovic, N. OXIDATIVE STRESS AND ANTIOXIDANTS IN CARCINOGENESIS AND INTEGRATIVE THERAPY OF CANCER. Current Pharmaceutical Design. 2014, 20: 6529-6542
- Lidija Milkovic, Ana Cipak Gasparovic, Neven Zarkovic OVERVIEW ON MAJOR LIPID PEROXIDATION BIOACTIVE FACTOR 4-HYDROXYNONENAL AS PLURIPOTENT GROWTH REGULATING FACTOR. Free Radical Research, 2015, 49: 850-860



- Višnja Stepanić, Ana Čipak Gašparović, Koraljka Gall Trošelj, Dragan Amić,
- Neven Žarković SELECTED ATTRIBUTES OF POLYPHENOLS IN TARGETING OXIDATIVE STRESS IN CANCER. Current Topics in Medicinal Chemistry, 2015,15: 496-509
- Bauer, G., Zarkovic, N. REVEALING MECHANISMS OF SELECTIVE, CONCENTRATION-DEPENDENT POTENTIALS OF 4-HYDROXY-2-NONENAL TO INDUCE APOPTOSIS IN CANCER CELLS THROUGH INACTIVATION OF MEMBRANE-ASSOCIATED CATALASE. Free Radical Biology and Medicine, 2015, 81:128-144

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical courses

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Activities during the course, short written seminar

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 8

TITLE OF COURSE/MODULE: Electrophysiological techniques in medical research

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Assoc. Prof. Diana Delić-Brkljačić, MD, PhD, Assoc. Prof. Aleksandra Dugandžić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Jakov Ajduk
Vanja Bašić Kes
Vladimir Bedeković
Mario Cifrek
Krsto Dawidowsky
Diana Delić Brkljačić
Aleksandra Dugandžić
Božidar Ferek Petrić
Ana Branka Jerbić
Magdalena Krbot-Skorić
Šime Manola
Davor Puljević
Mihael Ries

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 28

OUTLINE OF COURSE/MODULE CONTENT

Basic principles of neuroscience and introduction in physiology and electrophysiology, clinical electromyography, surface electromyography, evoked potentials, brain computer interface, otoneurophysiology of evoked potentials of cochlea, electrophysiological mechanism of hearing, electrophysiological examination of the heart, invasive electrophysiology of the heart.

READING LIST (MANDATORY AND RECOMMENDED)

- Bilić E, Žagar M i sur. Novosti u dijagnostici i liječenju polineuropatija. Zagreb: Medicinska naklada, 2013.
- Vrhovac B. i sur: Interna medicina, Ljevak, Zagreb, 2008.
- Braunwald's Heart Disease: A textbook of Cardiovascular Medicine, Ninth Edition, Saunders Philadelphia, 2011.
- Merletti R, Parker P. Electromyography. Physiology, engineering and non invasive applications. IEEE Press & John Wiley & Sons, HOBOKEN, NJ. ISBN 0471675806, 2004
- Cifrek M, Medved V, Tonković S, Ostojić S. Surface EMG based muscle fatigue evaluation in biomechanics. Clinical biomechanics (Bristol, Avon) 06/2009; 24(4):327-40.
- Luck SJ. An introduction to the event-related potential technique. Cambridge, MA: The MIT Press, 2005, ISBN-10: 0262621967
- Horch KW and Dhillon GS. Neuroprosthetics, Theory and Practice, Series on Bioengineering and Biomedical Engineering: Volume 2, World Scientific, 2004, ISBN: 978-981-238-022-7
- Chiappa KH. Evoked Potentials in Clinical Medicine, Lippincott-Raven, 1997, ISBN-10: 0397516592
- Polich J. Updating P300: An integrative theory of P3a and P3b, Clinical Neurophysiology, Volume 118, Issue 10, October 2007, Pages 2128–2148
- Graimann B, Pfurtscheller G, and Allison B. Brain-Computer Interfaces: Revolutionizing Human–Computer Interaction Eds. Springer Berlin Heidelberg, 2010.



- Wolpaw JR, Birbaumer N, McFarland DJ, Pfurtscheller G, Vaughan TM. Brain-computer interfaces for communication and control, *Clinical neurophysiology*, vol. 113, no. 6, pp. 767–91, Jun. 2002.
- Judaš M, Kostović I: Temelji neuroznanosti, Udžbenici Sveučilišta u Zagrebu, MD, Zagreb 1997.
- Maurer K: Topographic Brain Mapping of EEG and Evoked Potentials, Springer Verlag Berlin, ISBN 3-540-17802-3.
- Išgum V i sur: Elektrofiziološke metode u medicinskim istraživanjima, Medicinska naklada Zagreb, 2003. - priručnik ISBN 953-176-135-3
- Šoštarko M: Neurophysiology and Electrodiagnosis of Compression Syndromes. U: Tunnel Syndromes: Peripheral Nerve Compression Syndromes, ur. MM Pećina, J Krmpotić-Nemanić, AD Markiewitz, CRC Press, p. 13-25

DESCRIPTION OF INSTRUCTION METHODS: Lectures, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 4

ORDINAL NUMBER: 9

TITLE OF COURSE/MODULE: Endocrine tumors of gastrointestinal tract and pancreas

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Assist. Prof. Maja Cigrovski Berković, MD, PhD; Prof. Vanja Zjačić-Rotkvić, MD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Nikola Bulj
Maja Cigrovski Berković
Sanja Kapitanović
Božo Krušlin
Vanja Zjačić-Rotkvić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 12

OUTLINE OF COURSE/MODULE CONTENT

Lectures: Neuroendocrine tumors of the digestive system and pancreas (GEP-NET). Differential diagnosis of hypoglycemic conditions and diarrhea. Biology GEP-NETs. Genetics of neuroendocrine tumors of the gastrointestinal tract and pancreas-personalized medicine in oncology. Classification of GEP-NETs. Diagnostic methods in GEP-NETs- application of radionuclides in the diagnosis of neuroendocrine tumors. Treatment options for symptomatic GEP-NETs. Treatment options for non-functional GEP-NETs. In the two sessions working in a small group discussed will be cases from clinical practice. Suggested topics will change over time, and it will be possible, with respect to group's special interest to include a topic of choice. Participants will be given a specific literature when discussing the cases. The course will end with journal club reflecting the controversies in the diagnosis and treatment of GEP-NETs.

READING LIST (MANDATORY AND RECOMMENDED)

- Rindi G, Bordi C. Highlights of the biology of endocrine tumours of the gut and pancreas. *Endocr Relat Cancer* 2003;10:427-36.
- Wiedenmann B, ur. Gastroenteropancreatic neuroendocrine tumor disease : molecular and cell biological aspects New York, N.Y.: New York Academy of Sciences; 2004.
- Wiedenmann B, Pape UF. From basic to clinical research in gastroenteropancreatic neuroendocrine tumor disease -- the clinician-scientist perspective. *Neuroendocrinology* 2004;80 Suppl 1:94-8.
- de Herder WW, Hofland LJ, van der Lely AJ, Lamberts SW. Somatostatin receptors in gastroenteropancreatic neuroendocrine tumours. *Endocr Relat Cancer* 2003;10:451-8.
- Sundin A, Garske U, Orlefors H. Nuclear imaging of neuroendocrine tumours. *Best Pract Res Clin Endocrinol Metab* 2007;21:69-85.
- Oberg K. Carcinoid tumors: molecular genetics, tumor biology, and update of diagnosis and treatment. *Curr Opin Oncol* 2002;14:38-45.
- Solcia E, Klöppel G, Sobin LH. Histological typing of endocrine tumours. 2. ed. Berlin: Springer; 2000.
- Plockinger U, Rindi G, Arnold R, i sur. Guidelines for the diagnosis and treatment of neuroendocrine gastrointestinal tumours. A consensus statement on behalf of the European Neuroendocrine Tumour Society (ENETS). *Neuroendocrinology* 2004;80:394-424.
- Ramage JK, Davies AH, Ardill J, i sur. Guidelines for the management of gastroenteropancreatic neuroendocrine (including carcinoid) tumours. *Gut* 2005;54 Suppl 4:iv1-16.
- Eriksson B, Klöppel G, Krenning E, i sur. Consensus guidelines for the management of patients with digestive neuroendocrine tumors--well-differentiated jejunal-ileal tumor/carcinoma. *Neuroendocrinology* 2008;87:8-19.



- Öberg K, Åkerström G, Rindi G, Jelic S On behalf of the ESMO Guidelines Working Group*. Neuroendocrine gastroenteropancreatic tumours: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Ann Oncol (suppl 5) 2010;21: v223-v227.
- Strosberg JR, Cheema A, Kvols LK. A review of systemic and liver-directed therapies for metastatic neuroendocrine tumors of the gastroenteropancreatic tract. Cancer Control 2011;18(2):127-37.
- Fitzgerald TL, Dennis SO, Kachare SD, Vohra NA, Zervos EE. Increasing incidence of duodenal neuroendocrine tumors: Incidental discovery of indolent disease?
- Surgery. 2015 doi: 10.1016/j.surg.2015.03.042.

DESCRIPTION OF INSTRUCTION METHODS: Recent reviews and scientific publications from the field selected by lecturers

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Lectures, seminars and Journal club (practical work)

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 1,5

ORDINAL NUMBER: 10

TITLE OF COURSE/MODULE: Epidemiologic methods in research

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): ELECTIVE

NAME OF COURSE/MODULE TEACHER: Assoc. Prof. Nataša Antoljak, MD, PhD, Prof. Zvonko Šošić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Nataša Antoljak
Marijan Erceg
Mario Šekerija
Zvonko Šošić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 32

OUTLINE OF COURSE/MODULE CONTENT

Introduction to epidemiology and its application in public health, clinical work, pharmacological research, as well as the understanding of evidence-based medicine. The general epidemiological principles. Epidemiology and natural history of disease. Epidemiological concept in medicine. Epidemiological variables. Scientific epidemiological terminology. The incidence and prevalence of the disease. Measures of the frequency and extent-general, specific, standardized. Meaning, value and accuracy of incidence and prevalence measures. Using the incidence and prevalence measures. Related behavior and statistical, causal, connection criteria, measures of connectivity. The concept of risk and causation. The absolute, relative and attributable risk, the OR-odds ratio. Descriptive and analytical epidemiological methods: a description of the case, the description of the series (lower) cases, the incidence and prevalence studies, prospective and retrospective studies, transversal and longitudinal studies, "case-control" and cohort studies. Experimental methods-randomized controlled clinical trial, controlled field experiments. A systematic literature review and meta-analysis. Selecting an appropriate study design. Errors, sources of error (random, systematic bias, confounding). Survey of epidemiological studies and methods for improving security response. Sources of public health data for epidemiological research and work in public health institutions. The use of registries and other sources of epidemiological, public health data bases, and other data related to health. Analysis and explanation of study results and decision making. Strategies to solve complex problems. Diagnostic tests and timely diagnosis. The early diagnosis. Interpretation of diagnostic data. Early treatment and compliance of patients. Methods of ensuring the population responds to a mass screening procedure or research. Ethical issues in research and the use of public health and personal medical information, informed consent, ways of informing.

READING LIST (MANDATORY AND RECOMMENDED)

- Merryl RM. Introduction to epidemiology, 6. izd, Jones Bartlett, 2013.
- Babuš V. Epidemiološke metode. Priručnik. Medicinska naklada. Zagreb, 2000.
- Gordis L. Epidemiology, Saunders Elsevier, Philadelphia 2009.
- Bonita R, Beaglehole R, Kjellström. WHO, 2nd edition-dostupno u pdf na: whqlibdoc.who.int/publications/2006/9241547073_eng.pdf
- Rothman KJ and Greenland S [Eds.]: "Modern Epidemiology, 2nd Ed." Lippincott Williams & Wilkins, 1998
- Kramer MS. Clinical epidemiology and biostatistics: a primer for clinical investigators and decision-makers. Springer-Verlag, Berlin, 1988.
- Knapp RG, Miller MC. Clinical epidemiology and biostatistics. Williams & Wilkins, Baltimore, 1992.



- Schultze PA, Perera FP. Molecular epidemiology. Principles and practice. Academic Press, Inc. San Diego, 1993.
- Norell SE. Workbook of epidemiology. Oxford University Press. New York, Oxford, 1995.
- Kelsey JL, Whittemore AS, Evans AS, Thompson Wd. Methods in observational epidemiology, 2nd ed. Oxford University Press. New York, Oxford, 1996.
- selectes paper from relevant literature : American Journal of Epidemiology, Bulletin Epidemiologique Hebdomadaire, Epidemiologic Reviews (zajedno s Am J Epid), Epidemiology, Epidemiology and Infection, Epidemiološki Vjesnik, European Journal of Epidemiology, Genetic Epidemiology, International Journal of Epidemiology, Journal of Clinical Epidemiology, Journal of Epidemiology and Community Health, Pediatric and Perinatal Epidemiology, Revue d'Epidemiologie et de Sante Publique, Weekly Epidemiological Record

DESCRIPTION OF INSTRUCTION METHODS: lectures, seminars, practical work, group work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written presentation of one research study (epidemiologic or clinical), oral presentation and defence of work.

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 4

ORDINAL NUMBER: 11

TITLE OF COURSE/MODULE: Epigenetics

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Maja Vlahović, MD, PhD, Assist. Prof. Nino Sinčić

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Floriana Bulić Jakuš
Ana Katušić Bojanac
Tamara Nikuševa Martić
Frane Paić
Nino Sinčić
Maja Vlahović

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 17

OUTLINE OF COURSE/MODULE CONTENT

Molecular biology and information flow in the cell, organization of the eucaryotic genome. Organization and importance of the heterochromatin and euchromatin. Chromatin and transcription. Coding and noncoding sequences of the human genome. Regulation of gene expression in procaryotes and eucaryotes. Epigenetics - epigenome. Epigenetic mechanisms (DNA methylation, histone modifications, mi RNA), environmental influences, nutritional and environmental effects in early life. Methylome, DNA methylation in genomic imprinting, embryonic growth control by imprinted genes, disorders of genomic imprinting, Prader-Willi and Angelman syndrom. DNA methylation and X inactivation, aging, cancer. Germ cell epigenetics, influence of epigenetics on assisted reproduction. Epigenetics of stem cells, IPS cells. Gene expression regulation at the level of RNA, mechanisms of posttranscriptional editing of RNA, miRNA, RNAi. The role of epigenetics in tumorigenesis and the overview of the future epigenetics in oncology. DNA methylation in normal and cancer cells, hypermethylation and hypomethylation in cancer, interaction of genetic and epigenetic mechanisms in cancer. Nutritional and environmental effects upon epigenome during development and in adult organism. Epigenetics of cardiovascular and other system diseases. Neurodegenerative diseases and epigenetics, epigenetic role of the diet in neurodegenerative diseases. Epigenetic biomarkers in neurodegenerative diseases. Demethylating agents in treatment of malignancies. Methylation identification methods of the specific genes, overview of pyrosequencing method, finding primers, bisulfite conversion, performing MS PCR.

READING LIST (MANDATORY AND RECOMMENDED)

- Vlahović, M i Sinčić, N. : Epigenetika, skripta, 2012, str.1-35
- Mahmood Rasool et al.: The role of epigenetics in personalized medicine: challenges and opportunities. BMC Medical Genomics 2015, 8(Suppl 1):S5
- Riya R. et al.: Epigenetics across the human lifespan. frontiers in cell and developmental biology, september 2014, doi: 10.3389/fcell.2014.00049
- Sinčić N, Herceg Z.: DNA methylation and cancer: ghosts and angels above the genes. Curr Opin Oncol. 2011 Jan;23(1):69-76.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical, journal club

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam (essay), Oral exam (discussion)

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>



APPOINTED ECTS: 2,5

ORDINAL NUMBER: 12

TITLE OF COURSE/MODULE: Pharmacogenomics

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Associate Professor Nada Božina, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Ana Alfirević
Nada Božina
Tamara Božina
Silvija Čuković Čavka
Mila Lovrić
Nikica Mirošević Skvrce
Martina Rojnić Kuzman

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

Pharmacogenetics - pharmacogenomics; Polymorphism of metabolic enzymes phase I. - cytochrome P450 (CYP) and their role in the variability of pharmacokinetic parameters, the effectiveness and side effects: drugs with a narrow therapeutic window (CYP2C9, CYP2C19 , CYP2D6) . The metabolic phenotype and therapeutic drug monitoring - optimization of therapy: efficacy and toxicity of the drug. The individualization of therapy according to genotype: choosing the right drug and dose; Estimation of drug-drug interactions according to pharmacogenetic polymorphisms; The activation of prodrug: CYP2D6 and side effects of codeine / morphine, CYP2C19 and clopidogrel, interaction with proton pump inhibitors. Polymorphism of metabolic enzymes of phase II. (NAT2, TPMT, UGT, SULT); Pharmacogenomics in oncology: CYP2D6 and tamoxifen, DPYD and toxicity of 5-FU, irinotecan and UGT1A1; TPMT and thiopurine drugs, inhibitors of tyrosine kinase, the B-RAF, K-ras as predictors of efficiency. The role of the genetic variability of the ABC and SLC transporter proteins in the pathogenesis and the effectiveness of pharmacotherapies: ABC transporters and variability of pharmacokinetic / efficacy / side effect (e.g., methotrexate, tyrosine kinase inhibitor). The polymorphism of the serotonin transporter and efficacy / side-effects of serotonin reuptake inhibitors. Polymorphisms of dopamine and serotonin receptors and variability of therapy with psychotropic medication; The pharmacogenetics of coumarin anticoagulants: the importance of polymorphism of CYP2C9 and VKORC1; The pharmacogenetics of statins: polymorphisms of SLCO1A1, ABCG2 and side effects (myotoxicity-rhabdomyolysis/ hepatotoxicity); Pharmacogenetics of antihypertensives: polymorphism of the renin-angiotensin system (ACE, AT1R); Hypersensitivity reactions and HLA system. Pharmacogenetics and interactions: examples of interactions with immunosuppressive agents, psychotropic drugs, antiepileptics; Pharmacogenetics and pharmacovigilance; Pharmacogenetics as a molecular autopsy; Interpretation of pharmacogenetic analyses; Critical analysis of scientific articles in the field of pharmacogenetics, and adverse drug reactions (journal club).

READING LIST (MANDATORY AND RECOMMENDED)

- Božina N, Bradamante V, Lovrić M. Genetic polymorphism of metabolic enzymes P450 (CYP) as a susceptibility factor for drug response, toxicity, and cancer risk. Arh Hig Rada Toksikol 2009;60(2):217-42.
- Swen JJ, Nijenhuis M, de Boer A, Grandia L, Maitland-van der Zee AH, Mulder H, Rongen GA, van Schaik RH, Schalekamp T, Touw DJ, van der Weide J, Wilffert B, Deneer VH, Guchelaar HJ.

Pharmacogenetics: from bench to byte--an update of guidelines. Clin Pharmacol Ther 2011;89(5):662-73.

- Caudle, K.E., Klein, T.E., Hoffman, J.M., Müller, D.J., Whirl-Carrillo, M., Gong, L., et al. (2014). Incorporation of Pharmacogenomics into routine clinical practice: the Clinical Pharmacogenetics Implementation Consortium (CPIC) guideline development process. Curr. Drug Metab 2014;15, 209–217.
- Bruhn O, Cascorbi I. Polymorphisms of the drug transporters ABCB1, ABCG2, ABCC2 and ABCC3 and their impact on drug bioavailability and clinical relevance. Expert Opin Drug Metab Toxicol 2014;1-18.
- Langman L.J. and Dasgupta A. (eds). Pharmacogenomics in Clinical Therapeutics. Wiley-Blackwell; 2012
- Agúndez JA, Esguevillas G, Amo G, García-Martín E. Clinical practice guidelines for translating pharmacogenomic knowledge to bedside. Focus on anticancer drugs. Front Pharmacol 2014;5:188.

DESCRIPTION OF INSTRUCTION METHODS: lectures, seminars and practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 13

TITLE OF COURSE/MODULE: Physiology and biochemistry of the uterus in pregnancy and labor

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Marina Ivanišević, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Josip Đelmiš

Marina Horvatiček

Marina Ivanišević

Josip Juras

Saša Kralik

Vito Starčević

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 19

OUTLINE OF COURSE/MODULE CONTENT

Receptor of pregnant uterus, regulation of uterine circulation, laboratory methods of hormone level determination during pregnancy and labor, biochemistry of cervical ripening, endocrine regulation of the cervical functions during pregnancy and delivery, pharmacological aspects of inhibition and stimulation of uterine contractions, premature rupture of membrane, Biological samples collection

READING LIST (MANDATORY AND RECOMMENDED)

- McCowan LM, Figueras F, Anderson NH. Evidence-based national guidelines for the management of suspected fetal growth restriction: comparison, consensus, and controversy. *Am J Obstet Gynecol.* 2018;218:S855-S868.
- Li J, Dagleish R, Vujovic S, Dragojevic-Dikic S, Ivanisevic M, Ivovic M, Tancic M, Thompson J, Al-Azzawi F. Microsatellite variation of ESR1, ESR2, and AR in Serbian women with primary ovarian insufficiency. *Collegium Anthropol. Climacteric.* 2018;21:472-477.
- Fetalna medicina i opstetricija. Đelmiš J, Orešković S. Medicinska naklada 2014. (Sveučilišni udžbenik).
- Physiology of Reproduction. Knobil and Neill's, Raven Press, 2006.
- Ivanišević M, Đelmiš J, Buković D, Majerović M. Oxytocin and vasopressin receptors in human ovaries. *Collegium Anthropol.* 1995; 19:525-529

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practicals

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Oral, written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 14

TITLE OF COURSE/MODULE: Genomic approaches in biomedical and translational research

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Associate Professor Fran Borovečki, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Ana Borovečki
Fran Borovečki
Tomislav Domazet Lošo
Koraljka Gall Trošelj
Kristina Gotovac Jerčić
Silva Katušić Hećimović
Rajko Kušec
Nela Pivac
Jadranka Sertić
Kristian Vlahoviček

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 25

OUTLINE OF COURSE/MODULE CONTENT

Significant advances in the genomic field, achieved since the end of the Human Genome Project and complete decoding of the human genome, provided unprecedented insight into intricate mechanisms involved in genome regulation. Achievement and widespread use of advanced genomic technologies, such as sequencing of the new generation, which has led to increased use of new discoveries in the clinical environment. The advancement of new methods for fast sequencing of the long genome will facilitate the spread of genomic research and will introduce a new spectrum of affordable and fast genomic aberration analysis to a wide range of scientists. During the basic concepts relating to the human genome, the application of modern genomic methodology, as well as basic concepts of bioinformatics will be covered. Special emphasis will be given to the use of various genomic tools ranging from SNP analysis, profiling expression, epigenetics, copying variance number analysis, next generation sequencing, and new DNA sequencing methods. Practical work will include demonstrations and limited individual laboratory work in genomic contents, with emphasis on microarray and sequencing of the new generation, as well as clarification of basic bioinformatics methods in genomic research.

READING LIST (MANDATORY AND RECOMMENDED)

- Borovečki F, Lovrečić L, Zhou J, Jeong H, Then F, Rosas HD, Hersch SM, Hogarth P, Bouzou B, Jensen RV, Krainc D. Genome-wide expression profiling of human blood reveals biomarkers for Huntington's disease. *Proc Natl Acad Sci USA*. 2005;102:11023-8.
- Cui L, Jeong H, Borovečki F, Parkhurst CN, Tanese N, Krainc D. Transcriptional repression of PGC-1alpha by mutant huntingtin leads to mitochondrial dysfunction and neurodegeneration. *Cell*. 2006;127:59-69.
- Borovecki F, Habek M. Development of novel genomic blood biomarkers for neurodegenerative diseases. *CNS Neurol Disord Drug Targets*. 2010;9:669-78.
- Borovecki F, Klepac N, Muck-Seler D, Hajnsek S, Mubrin Z, Pivac N. Unraveling the biological mechanisms in Alzheimer's disease--lessons from genomics. *Prog Neuropsychopharmacol Biol Psychiatry*. 2011;35:340-7.
- Gotovac K, Hajnšek S, Pašić MB, Pivac N, Borovečki F. Personalized medicine in neurodegenerative diseases: how far away? *Mol Diagn Ther*. 2014;18:17-24.



DESCRIPTION OF INSTRUCTION METHODS: Lectures, Seminars, Practicals

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written, oral exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 4

ORDINAL NUMBER: 15

TITLE OF COURSE/MODULE: Genotoxicological research of exposure to physical and chemical mutagens in working and living environment

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Aleksandra Fučić, MD, PhD, research advisor

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER: Aleksandra Fučić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 12

OUTLINE OF COURSE/MODULE CONTENT

Basic knowledge of effects of ionizing and non-ionizing radiation on mammalian genome. Definition of chemical mutagens according to their chemical composition and effect on the genome. Clastogens and aneugens. Methods in genotoxicology: chromosomal aberrations and in situ hybridization, in vivo and in vitro micronucleus assay, comet assay. Biodosimetry. Genotoxicological methods in assessing of the cancer risk. Application of genotoxicology in case of nuclear or chemical accidents. The interaction of physical and chemical mutagens. The phenomenon of synergism. The influence of age and sex on genome damage caused by living environment (radon, indoor emissions from building materials) and living style. Exposure to physical and chemical mutagens in the workplace. Examples of the results of biomonitoring of workers exposed to chemical mutagens such as a vinyl chloride monomer, radioisotopes and antineoplastic drugs. The interindividual difference in response to the action of mutagens. Genomic instability as a result of ionizing radiation. Developmental genotoxicology. The impact of xenoestrogens on genome damage. Genotoxicological research in future. Closing seminar: critical analysis of a scientific paper related to the course content ("journal club").

READING LIST (MANDATORY AND RECOMMENDED)

- Hoffman GR, Sayer AM, Joiner EE, McFee AF, Littlefield LG, Analyses by FISH of the spectrum of chromosome aberrations induced by X rays in G0 human lymphocytes and their fate through mitotic divisions in culture, Environ Mol Mutagen, 1999, 33, 94-110
- Kirsch-Volders M, Vanhauwaert A, Eichenlaub-Ritter U, Decordier I. Indirect mechanisms of genotoxicity. Toxicology Letters , 2003, 141, 63-74
- Rodriguez P, Montoro A, Barquinero JF, Cabalin MR, Villaescusa I, Barrios L, Analyses of translocations in stable cells and their implications in retrospective biological dosimetry, Rad Res 2004, 162, 31-38
- Fenech M. The Genome Health Clinic and Genome Health Nutrigenomics concepts: diagnosis and nutritional treatment of genome and epigenome damage on an individual basis Mutagenesis 2005, 20 (4), 255-269
- Brunborg G, Jackson P, Shaposhnikov S, Dahl H, Azqueta A, Collins AR, Gutzkow KB. High throughput sample processing and automated scoring. Front Genet. 2014;5:373
- Suto Y, Gotoh T, Noda T, Akiyama M, Owaki M, Darroudi F, Hirai M. Assessing the applicability of FISH-based prematurely condensed dicentric chromosome assay in triage biodosimetry. Health Phys. 2015;108(3):371-376
- Biomarkers and human biomonitoring, Ed Knudsen LE., Merlo DF., RSC Publishing, 2012

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Oral exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>



APPOINTED ECTS: 1,5

ORDINAL NUMBER: 16

TITLE OF COURSE/MODULE: Human reproduction

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Dinka Pavičić Baldani, MD, PhD; Prof. Davor Ježek, MD, PhD;

Tarek El-Toukhy, MBBCh, MSc, MD, MRCOG

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Maja Banović

Tarek El-Toukhy

Dusko Ilic

Davor Ježek

Yakoub Khalaf

Dinka Pavičić Baldani

Lana Škrgatić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 16

OUTLINE OF COURSE/MODULE CONTENT

Understanding of the physiology of reproduction; fertilisation, implantation and early embryonic development; the underlying causes of infertility; and the indications for assisted conception; their range of use, current limitations and future potential. Practical and clinical aspects of assisted conception: embryo selection and freezing; complications of assisted conception; success of assisted conception: predictors, quality management and regulation and the evidence-based approach to assisted conception. Principles of pre-implantation genetic diagnosis (PGD); conditions tested for; limitations and factors affecting the success rate and the evolving human embryonic stem cell technologies. Ethical and regulatory framework relating to Assisted Conception (AC) and PGD. Critical analysis of a recently published scientific paper in the field of human reproduction (JOURNAL CLUB).

READING LIST (MANDATORY AND RECOMMENDED)

- Fertility problems: assessment and treatment - nice.org.uk
www.nice.org.uk/guidance/cg156?unlid=7513599262015620175213
- European Society for Human Reproduction and Embryology (ESHRE) Guideline Group on POI. ESHRE Guideline: management of women with premature ovarian insufficiency. Hum Reprod. 2016;31(5):926-37.
- Balen AH, Morley LC, Misso M, Franks S, Legro RS, Wijeyaratne CN, Stener-Victorin E, Fauser BC, Norman RJ, Teede H. The management of anovulatory infertility in women with polycystic ovary syndrome: an analysis of the evidence to support the development of global WHO guidance. Hum Reprod Update. 2016 Aug 10.
- Lambertini M, Del Mastro L, Pescio MC, Andersen CY, Azim HA Jr, Peccatori FA et al. Cancer and fertility preservation: international recommendations from an expert meeting. BMC Med. 2016 Jan 4;14:1. doi: 10.1186/s12916-015-0545-7.
- Harton GL, Magli MC, Lundin K, Montag M, Lemmen J, Harper JC. ESHRE PGD Consortium/Embryology Special Interest Group-best practice guidelines for polar body and embryo biopsy for preimplantation genetic diagnosis/screening (PGD/PGS). Hum Reprod, 2010; DOI: [10.1093/humrep/deq265](https://doi.org/10.1093/humrep/deq265)
- Šimunić V. i sur. Reprodukcijska endokrinologija i neplodnost. Školska knjiga, Zagreb, 2012.
- Homburg R. Ovulation Induction and Controlled Ovarian Stimulation. A practical Guide. 2nd ed., Springer, 2014.
- Balen A. Infertility in Practice, 4th edition, CRC Press, 2014.



- Jezek D. Atlas on the Human Testis, Springer, 2013.
- An Atlas of PGD: Verlinsky and Kuliev, 2000 Parthenon
- Johnson & Everitt. Essential Reproduction. Johnson MH. 6th edition. 2007
- Gynaecology by Ten Teachers. Monga A. 18th Edition. Hodder Education 2006
- Kehoe, Chitty and Homfray. Reproductive Genetics, RCOG Press. 1st edition, 2009
- Guidelines on Male Infertility. Dohle, Jungwirth, Kopa, Giwercman, Diemer, Hargreave. European Association of urology. 2007
- PGD in Clinical Practice. El-Toukhy and Braude, (Eds). Springer. 1st edition 2014

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical work in the IVF laboratory

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

ORDINAL NUMBER: 17

TITLE OF COURSE/MODULE: Immunocytokines

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Assist. Prof. Alenka Gagro, MD, PhD, research advisor; Assist. Prof. Tomislav Kelava, MD, PhD, research associate

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Alenka Gagro
Tomislav Kelava
Alan Šućur

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 16

OUTLINE OF COURSE/MODULE CONTENT

Definition, general properties and mechanisms of action of cytokines and chemokines. Division and biological effects of immunocytokines. Receptors for cytokines and intracellular transmission of signals. Control of cytokines' secretion by transcription factors. The methods of determination of concentration of cytokines in cells and body fluids. Basic structure and function of chemokines. The synthesis, secretion and biological effects of inflammatory cytokines (IL-1, TNF-alpha, IL-6) and chemokines. The synthesis, secretion and biological effects of immunostimulatory cytokines (IL-2, IL-4, IL-12, IFN-gamma). The synthesis, secretion and biological effects of immunoregulatory (suppressive) cytokines (TGF-beta, IL-10). Subsets of Th cells (Th1, Th2, Th3, Tr1, Th9, Th17, Th22) and transcription factors important for Th-differentiation and polarization. Inhibitors of function of cytokines (anti-immunocytokines). Role of immunocytokines in pathogenic mechanisms and potential use of cytokines or their antagonists of treatment of sepsis, autoimmune, autoinflammatory and other diseases. Practicals: students will acquire the necessary knowledge of methods we use to measure cytokines (ELISA, flow cytometry, PCR, cytokine bead array), including their advantages and disadvantages. Journal club/seminar: analysis of cutting edge scientific paper published in high-ranked biomedical journal describing significant advances in an area of immunocytokines.

READING LIST (MANDATORY AND RECOMMENDED)

- Handbook „Immunocytokines“ (ed. F. Čulo, A. Gagro) (updated each year)
- K. Murphy, P. Travers P, M. Walport (ed.): Janeway's Immunobiology, Garland Science, London, 8th edition, 2012.
- A.K. Abbas, A.H.H. Lichtman, S.Pillai (ed.). Cellular and molecular immunology, Elsevier Saunders, 8th edition, 2014.
- The most relevant review articles in the field of immunocytokines published in Current Opinion in Immunology, Immunity, Trends in Immunology, Immunological Reviews, Nature Reviews Immunology, Annual Reviews of Immunology, etc.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, practicals, seminar/journal club

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

ORDINAL NUMBER: 18

TITLE OF COURSE/MODULE: Immunological recognition

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Drago Batinić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Mariastefania Antica

Drago Batinić

Danka Grčević

Zorana Grubić

Dora Višnjić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 18

OUTLINE OF COURSE/MODULE CONTENT

Basics knowledge in immunology enabling critical judgment of the role of immune system, especially understanding the complex interactions within the components of the immune system. General organization of the immune system. The principles of immunological recognition and immune response. The HLA system and immunogenetics. Development of lymphocytes and lymphocyte repertoire. Cytokines and chemokines. Processing and presentation of antigens. Lymphocyte activation and signalling. Effector mechanisms of immune response: humoral and cellular immunity, immunological memory. Artificial antigen receptors. Critical evaluation of scientific literature in immunology and critical application of immunological expertise to specific problems in basic and clinical immunology (journal club).

READING LIST (MANDATORY AND RECOMMENDED)

- Andreis I, Batinić D, Čulo F, Grčević D, Lukinović Škudar V, Marušić M, Taradi M, Višnjić D. Imunologija, 7. izdanje. Zagreb: Medicinska naklada, 2010.
- Abbas AK, Lichtman AH, Pillai S. Cellular and molecular immunology, 8th edition. Philadelphia – London – Toronto: Saunders Elsevier; 2014.
- Recent scientific articles related to specific topics in immunology will be used in seminars („journal club“). Students will be requested to select the article and present it during journal club;
- <http://www.immunologylink.com/>
- <http://www.nature.com/nri/index.html>

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars and „journal club“

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Article presentation during „journal club“ (50%) and participation in final discussion (50%).

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

ORDINAL NUMBER: 19

TITLE OF COURSE/MODULE: Biomaterial infections

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Jasmina Vranes, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Ana Budimir
Rok Čivljak
Ozren Gamulin
Smilja Kalenić
Alemka Markotić
Snježana Škrablin Kučić
Jasmina Vraneš

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 18

OUTLINE OF COURSE/MODULE CONTENT

Epidemiological and other characteristics of biomaterial infections. Etiology and pathogenesis of biofilm infections. Formation and maturation of a bacterial biofilm. Biofilm ultrastructure. Genes involved in biofilm development. The involvement of cell-to-cell signals in the development of a bacterial biofilm. Quorum sensing in Gram-positive and Gram-negative bacteria. Interspecies bacterial interactions in biofilms. Resistance to the host immune system. Biofilm resistance to antimicrobial agents. Physical antiadhesive properties of biomaterials. Biocompatible biomaterials: current status and future perspectives. Biofilm infections: ventilator-associated pneumonia, urinary and peritoneal dialysis catheter infections, bacterial keratitis, otitis media, burn and wound infections, osteomyelitis. Biofilm on medical devices: prosthetic heart valves, central venous catheters, urinary catheters, contact lenses, intrauterine devices, endoprostheses, wound closure biomaterials and devices, etc. Diagnostic methods in detection of biomaterial infections. Prevention of biomaterial infections. Therapeutic challenges and new approaches. New technology for rapid determination of antibiotic susceptibilities of bacterial biofilms. Infections associated with intravascular catheters with special emphasis on sepsis. Guidelines for the management of catheter-related infections. Fungemia in immunocompromised patients associated with intravenous prosthetic devices. Preventing central venous catheter-related infections in intensive-care units. Biomaterial infections in surgery. Infections of artificial organs. Critical analysis of selected paper from scientific literature related to the course subject.

READING LIST (MANDATORY AND RECOMMENDED)

- Vraneš J, ed. Zbornik predavanja poslijediplomskog tečaja «Infekcije biomaterijala». Zagreb: Sveučilište u Zagrebu, Medicinski fakultet, 2004.
- Costerton JW, Stewart PS, Greenberg EP. Bacterial biofilms: a common cause of persistent infection. Science 1999; 284:318-22. (<http://www.erc.montana.edu>)
- O'Grady NP, Alexander M, Dellinger EP, et al. Guidelines for the prevention of intravascular catheter-related infections. Centers for Disease Control and Prevention. MMWR 2002; 51:1-29. (<http://www.cdc.gov/mmwr>)
- Ghannoum M, O'Toole GA. Microbial Biofilms. Washington: ASM Press, 2004.
- Marić S, Vranes J. Characteristics and significance of microbial biofilm formation. Periodicum Biologorum 2007; 109:115-121.
- Vraneš J, Leskova V. Značenje nastanka mikrobnog biofilma u patogenezi i liječenju kroničnih infekcija. Med Glas 2009; 6:147-165.



- Hoiby N, Jensen PO, Moser C, Hoiby N, ed. Biofilm infections. Springer Inc. 2011.
- Percival S, Williams D, Cooper T, Randle J, ed. Biofilms in Infections Prevention and Control. AP, Elsevier Inc. 2014.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars and Journal Club.

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

ORDINAL NUMBER: 20

TITLE OF COURSE/MODULE: Isotransplantation of mammalian organ primordia

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Gordana Jurić-Lekić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Floriana Bulić Jakuš

Gordana Jurić Lekić

Maja Vlahović

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 17

OUTLINE OF COURSE/MODULE CONTENT

Specific isotransplantation models used in the mammalian developmental biology will be presented and such experimental approaches will be discussed in respect to their benefit for the development of regenerative medicine, tissue engineering or long-term strategy of organ bank establishment. Students will acquire basic theoretical and practical knowledge necessary for the experimentation with various mammalian organ primordia.

New experimental models such as isotransplants of the fetal epiglottis or mandible together with old models such as isotransplants of mouse and rat eyes or isolated neural retina will be presented in the practical. Stability of differentiation in these models at the light microscopy (classical histology, immunohistochemistry) and electron microscopy level will be analyzed. In a concluding seminar (journal club) a recent scientific article dealing with this topic will be critically analyzed.

READING LIST (MANDATORY AND RECOMMENDED)

- Jurić-Lekić G., Bulić-Jakuš F., Kablar B., Švajger A.: The ability of the epithelium of diencephalic origin to differentiate into cells of the ocular lens. *Int J Dev Biol*, 1991, 35:231-237.
- Bulić-Jakuš F., Jurić-Lekić G., Vlahović M., Katušić A., Marinović-Kulišić .,
- Šerman LJ., Ježek D.: Survival of rat embryonic parts after ectopic transplantation. *Acta Clin Croat*, 2005, 44(Suppl 1):23-27.
- Katušić A., Jurić-Lekić G., Jovanov-Milošević N., Vlahović M., Ježek D., Šerman LJ., Sinčić N., Veljanovska B., Bulić-Jakuš F.: Development of the Fetal Neural Retina *in Vitro* and in Ectopic Transplants *in Vivo*. *Coll. Antropol*, 2008, 32 (1):315-319.
- Marinović Kulišić S., Jurić-Lekić G., Vikić-Topić M., Lokošek V., Radujković V., Bulić-Jakuš F., Katušić A., Vlahović M., Šerman Lj., Sinčić N.: 5-Azacytidine enhances proliferation in transplanted rat fetal epiglottis. *Frontiers in Bioscience*, 2011, E3. 581-590.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical demonstration, journal club

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written and oral exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

ORDINAL NUMBER: 21

TITLE OF COURSE/MODULE: How to become a neuron?

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Srećko Gajović, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Marija Ćurlin
Srećko Gajović
Marija Heffer
Dinko Mitrečić
Marina Radmilović

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 21

OUTLINE OF COURSE/MODULE CONTENT

The aim of the subject is understanding mechanisms of nervous system development, and the basis of birth defects. Importance of neural stem cells in developing and adult brain would be clarified. The mechanisms of spatial patterning and cell identity determination during nervous system development will be introduced. Students would get insight in experimental applications used for investigating the genetical basis and morphogenic mechanisms of nervous system development. Specific emphasis will be given to the therapeutic potentials of neural stem cells.

READING LIST (MANDATORY AND RECOMMENDED)

- Scott Lipnick, Melissa Carpenter, Mohan C. Vemuri. Neural Development and Stem Cells (Stem Cell Biology and Regenerative Medicine) 3rd ed. 2012, Springer.
- Kosi N, Alić I, Kolačević M, Vrsaljko N, Milošević NJ, Sobol M, Philimonenko A, Hozák P, Gajović S, Pochet R, Mitrečić D. Nop2 is expressed during proliferation of neural stem cells and in adult mouse and human brain. Brain Res. 2015;1597:65-76.
- Mitrečić D, Nicaise C, Klimaschewski L, Gajović S, Bohl D, Pochet R. (2012) Genetically modified stem cells for the treatment of neurological diseases. Frontiers in Bioscience, 4:1170-81.
- Monni E, Cusulin C, Cavallaro M, Lindvall O, Kokaia Z. Human fetal striatum-derived neural stem (NS) cells differentiate to mature neurons in vitro and in vivo. Curr Stem Cell Res Ther. 2014;9(4):338-46

DESCRIPTION OF INSTRUCTION METHODS: seminars and practicals

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 22

TITLE OF COURSE/MODULE: Hand surgery

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Assoc. Prof. Rado Žic, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Stjepan Barišin
Dubravka Bobek
Boris Brkljačić
Srećko Budi
Krešimir Bulić
Gordana Ivanac
Krešimir Martić
Franjo Rudman
Zlatko Vlajčić
Rado Žic

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 25

OUTLINE OF COURSE/MODULE CONTENT

Participants will be informed through lectures, seminars and practical work about hand surgery historical overview, clinical anatomy and biomechanics, diagnostic methods, regional and general anesthesia in hand surgery, hand surgery of congenital malformations, tumors and infections of the hand, tendon injuries, fractures and dislocations of the carpus bones and phalanges, complex hand injuries, reconstruction and replantation, compressive neuropathies, Dupuytren's contracture, osteoarthritis, rheumatoid arthritis, vascular changes, systemic diseases affecting the hand, regional pain syndromes and reflex sympathetic dystrophy (RSD), hand therapy and rehabilitation.

READING LIST (MANDATORY AND RECOMMENDED)

- Smith P. Lister's The Hand Diagnosis and Indications-fourth edition.London-Toronto: Churchill Livingstone 2002
- Achauer BM:Plastic Surgery-Indications, Operations and Outcomes, Volume IV, St. Louis-Toronto: Mosby, 2000
- Green DP, Hotchkiss R., Pederson WC. Green's Operative Hand Surgery: London-Toronto: Churchill Livingstone 2011 6th Edition
- Conolly WB., Atlas of Hand Surgery. New York-Tokyo: Churchill Livingstone 1997
- Journal of Hand Surgery , official publication of the American Society for Surgery of the Hand
- Journal of "Plastic and Reconstructive Surgery":October 2003 - Volume 112 - Issue 5 - pp 1475-1476
- Stanec Z. i suradnici. Handouts Hand Surgery I and II, University Hospital «Dubrava» Zagreb, 1997 revised in 2003

DESCRIPTION OF INSTRUCTION METHODS: lectures, seminars, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Oral (journal club), Written (30 MCQs)

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3,5

ORDINAL NUMBER: 23

TITLE OF COURSE/MODULE: Surgical therapy of pituitary tumors

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Darko Kaštelan, MD, PhD; Tomislav Sajko, MD, PhD, senior research associate

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Tina Dušek
Darko Kaštelan
Hrvoje Ivan Pečina
Tomislav Sajko

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 15

OUTLINE OF COURSE/MODULE CONTENT

Current methods of diagnosis, research and treatment of pituitary tumors. Pathogenesis of the pituitary adenoma and other tumors of the sellar region and classification of the pituitary tumors according to the WHO. Biological markers of pituitary tumors. Neuroradiological (CT and MR) evaluation of the tumor and surrounding anatomical structures. Overview of the current therapeutical options and trends: surgical minimally invasive concept, irradiation especially “gamma knife” therapy, drug therapy, gene therapy. Development and current trends in surgical treatment with the accent on “minimally invasive” concept. Transsphenoidal microsurgical approach to sellar region tumors as a method of choice. Role and position of endoscope in surgery of the sellar region tumors. Intraoperative visual, radiological, biochemical, and pathohistological monitoring. Clinical and molecular indicators of the pituitary tumors invasiveness. Postoperative clinical, biochemical, and neuroradiological follow-up of patients with surgically removed pituitary tumors. Choice of therapy in case of proven residue or recurrent pituitary tumor. Final seminar for which students are to find international literature on their own, titled: “Latest international consensus on therapy method of choice and standardization of therapy results. Planned practical work will be held in the operating room, and the seminars will be accompanied with video presentations and other audio-visual aids.

READING LIST (MANDATORY AND RECOMMENDED)

- Destrieux C, Kakou M, Velut S, Lefranco T, Jan M; Microanatomy of the hypophyseal fossa boundaries J Neurosurg 1998. 88: 743-752
- Asa S, Ezzat S: The cytogenesis and pathogenesis of pituitary adenomas Endocrine reviews 1998, 19 (6): 798- 827
- Sanno N, Teramoto A, Osamura RY, Horvath E, Kovacs K, Lloyd RV, Scheithauer BW: Patology of pituitary tumors Neurosurg Clin N Am 2003. 14: 25-39
- Sav A, Rotondo F, Syro LV, Scheithauer BW, Kovacs K. Biomarkers of pituitary neoplasms. Anticancer Res. 2012 Nov;32(11):4639-54.
- Korbonits M, Carlsen E; Recent clinical and pathophysiological advances in non-functioning pituitary adenomas. Horm Res. 2009 Suppl 2:123-30.
- Hornyak M, Couldwell W; Multimodality Treatment for Invasive Pituitary Adenomas. Postgrad Med. 2009. 121(2): 168-76.
- Kremer P, Forsting M, Ranaei G, Wuster C, Hamer J, Sartor K, Kunze S: Magnetic resonance imaging after transsphenoidal surgery of clinically non-functional pituitary macroadenomas and its impact on detecting residual adenoma Acta Neurochir (Wien) 2002, 144: 433-43

- Couldwell W; Transsphenoidal and Transcranial Surgery for Pituitary Adenomas. J. neuroonkol. 2004. 69: 237-56
- Loyo-Varela M, Herrada-Pineda T, Revilla-Pacheco F, Manrique-Guzman S. Pituitary Tumor Surgery: A Review of 3004 Patients. World Neurosurg. 2012 Jun 23.
- Patil C, Hayden M, Katznelson L, Chang S; Non-surgical management of hormone-secreting pituitary tumors. J Clin Neurosc. 2009. 16: 985-993
- Villwock JA, Villwock MR, Goyal P, Deshaies EM. Current trends in surgical approach and outcomes following pituitary tumor resection. Laryngoscope. 2015 Jan 13. doi: 10.1002/lary.25120.
- Villwock JA, Villwock M, Deshaies E, Goyal P. Significant increases of pituitary tumors and resections from 1993 to 2011. Int Forum Allergy Rhinol. 2014 Sep;4(9):767-70.
- Juraschka K, Khan OH, Godoy BL, Monsalves E, Kilian A, Krischek B, Ghare A, Vescan A, Gentili F, Zadeh G. Endoscopic endonasal transsphenoidal approach to large and giant pituitary adenomas: institutional experience and predictors of extent of resection. J Neurosurg. 2014 Jul;121(1):75-83.
- Gnjidić Ž ed. Suvremeno kirurško liječenje tumora hipofize. Medicinska naklada, Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2004. ISBN broj: 953-176-255-4, UDK 616.43-006-089 (063)
- Gnjidić Ž ed. Prolaktinomi medikamentozno ili kirurško liječenje. Nakladnik: Hrvatska akademija znanosti i umjetnosti, Zagreb 2010. ISBN broj: 978-953-154-934-9, CIP 745309
- Gnjidić Živko et al. Suvremeno kirurško liječenje tumora hipofize. Medicinska naklada, Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2004. ISBN broj: 953-176-255-4, UDK 616.43-006-089 (063)
- Gnjidić Ž ed. Prolaktinomi medikamentozno ili kirurško liječenje. Nakladnik: Hrvatska akademija znanosti i umjetnosti, Zagreb 2010. ISBN broj: 978-953-154-934-9, CIP 745309.
- Gnjidić Ž. et al. Tumori lubanjske osnove - sadašnjost i budućnost. Nakladnik: Hrvatska akademija znanosti i umjetnosti i Medicinska naklada Zagreb 2010. ISBN broj: 978-953-154-150-3, (HAZU) CIP 745309., ISBN 978-953-176-578-7 (MN) CIP zapis 814552.
- Gnjidić Ž, Kaštelan D. ed. Cushingov sindrom. Nakladnik: Hrvatska akademija znanosti i umjetnosti i Medicinska naklada, Zagreb 2013.
- Gnjidić Ž, Kaštelan D. ed. Akromegalija i gigantizam Hrvatska akademija znanosti i umjetnosti Zagreb 2014.
- Sajko T, Gnjidić Ž, Talan Hranilović J; Važnost sveukupnog dijagnostičkog pristupa u klasifikaciji adenoma hipofize: Upute svjetske zdravstvene organizacije. Liječ Vjesn 2005;127: 134-139.
- Talan-Hranilović J, Gnjidić Ž, Sajko T, Vizner B, Vrkljan M; Comparative immunohistochemical analysis of estrogen receptor and chromogranin-A reactivity in plurihormonal human prolactinomas. Acta Med. Croatica, 1999. 53: 59 - 63

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, "journal club", practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2

ORDINAL NUMBER: 24

TITLE OF COURSE/MODULE: Clinical neuropharmacology

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Maja Relja, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Fran Borovečki
Ivana Jurjević
Nataša Klepac
Zdravko Lacković
Alma Mihaljević Peleš
Vladimir Miletić
Maja Relja
Melita Šalković Petrišić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 30

OUTLINE OF COURSE/MODULE CONTENT

Introduction to clinical neuropharmacology, pharmacodynamics, neurotransmitters and receptors, good clinical practice, movement disorders: specific therapy, neuropharmacology in pregnancy, quantification of neurological symptoms: rating scales, therapy of neurodegenerative disorders: cognition and movement disorders, vascular dementia, MCI, neuromuscular disorders - motoneuron disease, *Botulinum toxin* in neurology: current therapy, pain and headache-new therapeutic approach, *Botulinum toxin* in clinical therapy, metabolic disorders, hepatolenticular degeneration, sleep disorders/RLS, hypo and hyperkinesia (Parkinson's disease, ET, HC, dystonia). New approach to therapy of neurodegenerative disorders: Duodopa pump, Apomorphine pump, DBS, 'stem cells'

READING LIST (MANDATORY AND RECOMMENDED)

- Laković Z Neurotransmitori u zdravlju i bolesti Medicinski fakultet 1997
- Noseworthy JH (ed) Neurological Therapeutics Principle and Practice, Martin Duniz London NY 2013
- Albanese A, Abbruzzese G, Dressler D, Khathova S, Marti MJ, Montecucco C, Moro E, Relja M, Roze E et al. Practical Guidance for cervical dystonia management involving botulinum toxin: a consensus statement. *J Neurol* 2015;pp1-13, 10.1007
- Relja M, Jacinto Jorge, Jankovic J, Albanese A. Botulinum Neurotoxin Revisited-An Individualised, Patient-centric Approach for the Treatment of Dystonia and Spasticity. *Eu Neurol Review* 2015;10
- Scientific Journals: Clinical Neuropharmacology, Neurology, Lancet

DESCRIPTION OF INSTRUCTION METHODS: Lecture, seminar, video seminars, workshop, discussion group, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 4,5

ORDINAL NUMBER: 25

TITLE OF COURSE/MODULE: Clinical nutrition

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Sanja Kolaček, MD, PhD, Iva Hojsak, MD, PhD, senior research associate

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Iva Hojsak
Oleg Jadrešin
Sanja Kolaček
Željko Krznarić
Zrinjka Mišak
Tena Niseteo
Darija Vranešić Bender

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 32

OUTLINE OF COURSE/MODULE CONTENT

Macro- and micronutrients. Assessment of nutritional status. Assessment of caloric intake and diet composition. A healthy diet of infants and young children and its role in disease prevention. Healthy diet in adulthood. Nutritional therapy and prevention of chronic diseases in adults. The role of nutrition in inflammatory bowel disease. Nutritional allergies. Nutrition in chronically ill child. Enteral nutrition. Enteral nutrition - a practical approach. Parenteral nutrition. Parenteral nutrition - a practical approach. Feeding a child with a chronic neurological disease - a case report. Nutrition for children and adults with burns - a case report. Preoperative nutrition - a case report. Nutritional support in children with chronic gastrointestinal diseases – multiple allergies, cystic fibrosis, severe malnutrition.

READING LIST (MANDATORY AND RECOMMENDED)

- Kolaček S, Krznarić Ž. Parenteralna i enteralna prehrana u kliničkoj praksi. Znanje, Zagreb, 2000.
- Sobotka L. Basics in Clinical Nutrition, 4th Edition. Galen, Prague, 2011.
- Braegger C, Decsi T, Dias JA, Hartman C, Kolacek S, Koletzko B, Koletzko S, Mihatsch W, Moreno L, Puntis J, Shamir R, Szajewska H, Turck D, van Goudoever J. Practical approach to paediatric enteral nutrition: a comment by the ESPGHAN committee on nutrition. J Pediatr Gastroenterol Nutr. 2010;51(1):110-22.
- ESPEN/ESPGHAN Guidelines on paediatric parenteral nutrition. Journal of Pediatric Gastroenterology and Nutrition 2005;41:S1-S87
- ESPEN Guidelines for adult parenteral nutrition. Clinical Nutrition 2009; 28:359-479.
- Heuschkel RB et al. ESPGHAN position paper on management of percutaneous endoscopic gastrostomy in children and adolescents. J Pediatr Gastroenterol Nutr. 2015 Jan;60(1):131-41.
- Hojsak I, Kolacek S. Enteralna prehrana u kroničnom zatajenju crijeva. Lijec Vjesn. 2013;135:264-8.
- Kolaček S. Enteral nutrition. World Rev Nutr Diet. 2013;108:86-90.
- Krause's Food, Nutrition and Diet Therapy (2000), Mahan LK, Escott- Stump S., ured., 10 izd. Saunders Company, Philadelphia.



- Alpers DH, Stenson WF, Bier DM. (2002) Manual of Nutritional Therapeutics. 4.izd Lippincott WW, Philadelphia.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical work, critical analysis of selected scientific paper related to the subject ("journal club").

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written exam - with different types of questions (3 questions from every subject presented)

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 5

ORDINAL NUMBER: 26

TITLE OF COURSE/MODULE: Clinical psychopharmacology

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Miro Jakovljević MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Dražen Begić
Igor Filipčić
Miro Jakovljević
Zdravko Lacković
Darko Marčinko
Vesna Medved
Alma Mihaljević Peleš
Marina Šagud

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 25

OUTLINE OF COURSE/MODULE CONTENT

Scientific way to psychopharmacological investigations. Objective evaluation of psychiatric disorders and efficacy of psychopharmacological treatment: rating scales, biological markers, "neuro-imaging" methods (SPECT, PET, functional MR). Psychopharmacology as a way to investigate aetiology of psychiatric disorders. New data about psychotic, affective, anxiety disorders, personality disorders dementia. Classification of psychotropic drugs: antipsychotics, antidepressants, and anxiolytics. Molecular mechanisms of acting, clinical implications. Principles of rational pharmacotherapy side effects and patient's compliance. Ethical aspects of controlled clinical trials.

READING LIST (MANDATORY AND RECOMMENDED)

- Kaplan&Sadock 's: Comprehensive textbook of psychiatry, ninth ed., 2009
- Stahl's Essential psychopharmacology. Neuroscientific Basis and Practical Applications. third ed. Cambridge University Press 2008
- Jakovljević M: Selektivni inhibitori ponovne pohrane serotonina u suvremenoj psihijatriji – Dva desetljeća iskustva u kliničkoj primjeni. Pro mente d.o.o., Zagreb 2006
- Jakovljević M. Schizophrenia in theory and practice Pro mente 2011
- Jakovljević M. Serotonin and depression, myths and facts. Pro mente 2013

DESCRIPTION OF INSTRUCTION METHODS: lectures, seminars, practical work, journal club

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: seminar work and written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3,5

ORDINAL NUMBER: 27

TITLE OF COURSE/MODULE: Clinical laboratory diagnostics of malignant melanoma with special reference to molecular-biological diagnosis assesment

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Mirna Šitum, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Nikola Đaković
Sonja Levanat
Liborija Lugović Mihić
Ivan Šamija
Mirna Šitum

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 12

OUTLINE OF COURSE/MODULE CONTENT

Basic characteristics of malignant melanoma (MM): risk factors for MM development (sun exposure and skin reaction, phenotype, familial melanoma, melanocytic nevi, occupation and social status, gender and hormonal factors) and measures of prevention. Tumorigenesis, tumor progression, apoptosis and pathogenesis, genetics – signal pathways in family melanoma (our researches). Precursor lesions and types of MM (superficial spreading melanoma, acral melanoma, lentigo maligna melanoma, nodular melanoma). Clinical detection of melanoma (ABCDE rule). The role of dermatoscopy in diagnostics. Molecular diagnostics of early dissemination of melanoma. Value of PET – CT method in metastasis detection. Follow-up and evaluation in MM patients according to the most recent protocols (experience of the Referral Centre for Melanoma MZS - RH). Review of current knowledge and articles with critical analysis

READING LIST (MANDATORY AND RECOMMENDED)

- Fitzpatrick TB, Freedberg JM, Eisen AZ, Wolff K, Frak-Austen K, Austen KF, Goldsmith LA, Katz SI. Dermatology in General Medicine. 6th ed. New York: McGraw-Hill; 2003.
- Burgdorf WHC, Plewig G, Wolff HH, Landthaler M, eds. Braun-Falco's Dermatology. 3rd edition. Heidelberg: Springer, 2009.
- van der Leest RJ, de Vries E, Bulliard JL, Paoli J, Peris K, Stratigos AJ, Trakatelli M, Maselis TJ, Šitum M, Pallouras AC, Hercogova J, Zafirovik Z, Reusch M, Olah J, Bylaite M, Dittmar HC, Scerri L, Correia O, Medenica L, Bartenjev I, Guillen C, Cozzio A, Bogomolets OV, Del Marmol V. The Euromelanoma skin cancer prevention campaign in Europe: characteristics and results of 2009 and 2010. JEADV 2011; 25 (12):1455-65.
- Eggermont AM, Keilholtz U, Autier P, Ruiter DJ, Lehmann F, Lienard D. The EORTC Melanoma Group, a comprehensive melanoma research programme by clinicians and scientists. Eur J Cancer 2002; 38 (4) 114-9.
- WHO International Agency for Research on Cancer Monograph Working Group. "A review of human carcinogens - Part D: Radiation". Lancet Oncol 2009; 10 (8): 751– 2.
- Ellerhorst JA, Prieto VG, Ekmekcioglu S, Broemeling L, Yekell S, Chada S, Grimm EA. Loss of MDA-7 expression with progression of melanoma. J Clin Oncol 2002; 15;20(4):1069-74.
- Sekulic A, Hauska P, Miller AJ, De Lamo JG, Ejadi S, Pulido JS, Salomao DR. et al. Malignant melanoma in the 21st century: The emerging molecular landscape. Mayo Clinic Proceedings 2008;83(7):825-846.



- Erb P, Ji J, Kump E, Mielgo A, Wernli M. Apoptosis and pathogenesis of melanoma and nonmelanoma skin cancer. *Adv Exp Med Biol* 2008;624:283-95.
- Homolak D, Vučetić B, Puljiz Z, Blajić I, Vurnek Živković M, Šitum M: Our experiences of melanoma thickness as a predictor of outcome of sentinel node biopsy. *Coll Antropol* 2008; 32 (2): 57-60.
- Cretnik M, Poje G, Musani V, Krušlin B, Ozretić P, Tomas D, Šitum M, Levanat S: Involvement of p16 and PTCH in pathogenesis of melanoma and basal cell carcinoma *Int J Oncol* 2009; 34: 1045-50.

DESCRIPTION OF INSTRUCTION METHODS: lectures

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: oral exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2

ORDINAL NUMBER: 28

TITLE OF COURSE/MODULE: Bone morphogenetic proteins in regeneration of bone and cartilage

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Slobodan Vukičević, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Dragan Đurđević
Igor Erjavec
Mislav Jelić
Snježana Martinović
Ruđer Novak
Martina Pauk
Mihaela Perić
Slobodan Vukičević

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 14

OUTLINE OF COURSE/MODULE CONTENT

Biochemical composition of bone. Synthesis and resorption of components of extracellular matrix. Enzymes involved in regulation of calcified tissue metabolism. Hormonal regulation of bone metabolism. Calcium homeostasis. Growth factors and cytokines. Influence of bone marrow on bone metabolism. Clinical and analytical aspects of bone marker measurements. Procollagen-peptides, osteocalcin, telopeptides, piridinolin, deokspiridinolin. Effects of bone matrix and demineralized bone matrix on osteogenesis. Bone morphogenetic proteins and cartilage derived morphogenetic proteins – discovery and classification. Bone morphogenetic proteins as regulators of morphogenetic events during embryogenesis. Effects of bone morphogenetic proteins on the process of enchondral ossification, skeleton regeneration and articular cartilage regeneration. Bone morphogenetic proteins and their role in etiology, diagnostics and possible treatment of metabolic bone diseases. Experimental and clinical experiences in application of bone morphogenetic proteins in skeleton regeneration (bone, cartilage) and in metabolic bone diseases. Diagnostic and prognostic biochemical markers of osteoporosis and metabolic bone diseases. Clinical application of bone morphogenetic proteins in orthopaedic surgery – present and future.

READING LIST (MANDATORY AND RECOMMENDED)

- Jelic M, Pecina M, Haspl M, Kos J, Taylor K, Maticic D, McCartney J, Yin S, Rueger D, Vukicevic S. Regeneration of articular cartilage chondral defects by osteogenic protein-1 (bone morphogenetic protein-7) in sheep. *Growth Factors* 19:101-113, 2001.
- Pecina M, Vukicevic S (editors). Biological regeneration of bone, cartilage and tendon [special issue]. *Int Orthop* 31(6), 2007.
- Andriopoulos B Jr, Corradini E, Xia Y, Faasse SA, Chen S, Grgurevic L, Knutson MD, Pietrangelo A, Vukicevic S, Lin HY, Babitt JL. BMP6 is a key endogenous regulator of hepcidin expression and iron metabolism. *Nat Genet* 41:482-487, 2009.
- Vukicevic S, Grgurevic L. BMP- 6 and mesenchymal stem cell differentiation. *Cytokine Growth Factor Rev* 20:441-8, 2009.
- Grgurevic L, Macek B, Healy DR, Brault AL, Erjavec I, Cipic A, Grgurevic I, Rogic D, Galesic K, Brkljacic J, Stern-Padovan R, Paralkar VM, Vukicevic S. Circulating bone morphogenetic protein 1-3 isoform increases renal fibrosis. *J Am Soc Nephrol* 22:681-9, 2011.



- Grgurevic L, Macek B, Mercep M, Jelic M, Smoljanovic T, Erjavec I, Dumic-Cule I, Prgomet S, Durdevic D, Vnuk D, Lipar M, Stejskal M, Kufner V, Brkljacic J, Maticic D, Vukicevic S. Bone morphogenetic protein (BMP)1-3 enhances bone repair. *Biochemical and Biophysical Research Communications* 408:25-31, 2011.
- Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, Pauk M, Erjavec I, Francetic I, Dumic-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikic-Topic S, Peric M, Pecina M, Grgurevic L. The clinical use of bone morphogenetic proteins (BMPs) revisited: A novel BMP6 biocompatible carrier device OSTEOGROW for bone healing. *Int Orthop* 38:635-47, 2014.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Oral exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2

ORDINAL NUMBER: 29

TITLE OF COURSE/MODULE: Laboratory animals in biomedical research

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Ranko Stojković, DVM, PhD, research advisor

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Srećko Gajović

Siniša Ivanković

Darko Marković

Ranko Stojković

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

Lectures: Introduction to Laboratory Animal Science; Importance of Animal Models in Biomedical Research and Ethic of Use of Laboratory Animals; Commonly Used Laboratory Animals and Their Biological Characteristics; Genetically Defined, Microbiologically Defined and Physiologically Deficient Laboratory Animals and Their Use in Biomedical Research; Transgenic Laboratory Animals and Their Use in Biomedical Research; Look up throughout positive law regulations of RH and EU linked to breeding, housing and use of laboratory animals in biomedical research; Laboratory animals in Biomedical Research - in Pharmaceutical Industry; Pharmacodynamics, Pharmacokinetics and Toxicological Preclinical Studies in the Process of R&D of the New Drugs. Seminars/JC: The Design and analysis of *in vivo* experimental protocol; Alternatives to Use of Laboratory Animals throughout critical analysis of scientific article in the field of LAS (Journal club). Practical work: Guided Tour to Ruđer Bošković Laboratory Animal Unit and practical work with laboratory animals (tagging of animals, sex recognition, application of drugs (ip, sc.ig, iv) overview of different techniques of blood sampling in laboratory animals, analgesia, anesthesia and euthanasia of laboratory animals)

READING LIST (MANDATORY AND RECOMMENDED)

- NIH (2011) Guide for the care and use of laboratory animals, National Academy Press, (USA).
- Fox JG, Anderson LC, Loew FM, Quimby FW (2002) Laboratory Animal Medicine 2nd ed. Academic Press, Elsevier Science (USA).
- Collection of positive law regulations of RH and EU linked to breeding, housing and use of laboratory animals in biomedical research
- Radačić M, Bašić I, Eljuga D. (2000) Pokusni modeli u biomedicini : Medicinska naklada, Zagreb
- Jukes N, Chiuia M. (2003) From guinea pig to computer mouse : InterNiche (GB)
- Liggitt HD. Laboratory Animals: Alternatives To Traditional Use, Laboratory Animal Medicine and Sciences - Series 11 (2000).
- Patton EE, Zon LI, The Art and Design of Genetic Screens: Zebrafish, Nature 2001,2,956-966.
- Hau J, Schapiro SJ. Non-human Primates in Biomedical Research, Scand. J. Lab. Anim. Sci. 2006 Vol. 33 No. 1
- Paul Goldsmith Zebrafish as a pharmacological tool: the how, why and when, Current Opinion in Pharmacology 2004, 4:504–512.
- Harkness JE, Vagner JE, 1995. The Biology and Medicine of Rabbits and Rodents (1995) Williams and Wilkins (USA).
- Working with the laboratory dog, AALAS 2005

DESCRIPTION OF INSTRUCTION METHODS: lectures, seminars, exercises



DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 30

TITLE OF COURSE/MODULE: Laboratory approach to transplantation of haematopoietic stem cells

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Drago Batinić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Drago Batinić
Nataša Beader
Ines Bojanić
Sanja Davidović Mrić
Branka Golubić Čepulić
Mila Lovrić
Ivana Mareković
Dragana Šegulja
Renata Zadro

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 24

OUTLINE OF COURSE/MODULE CONTENT

I. Biochemical aspects of solid organ and tissue transplantation. Pretransplant assessment of the recipient and the donor. Assessment of graft function. Laboratory monitoring of graft function. Immunosuppressive drugs monitoring.

II. Microbiological aspects of organ and tissue transplantation. Infection status and donor acceptability. Infections in transplant patients. Microbiological methods in the diagnosis of viral infections and monitoring of transplant patients. New microbiological methods for diagnosis of infections in transplant patients.

III. Laboratory aspects of haematopoietic stem cells transplantation. Immunohematological aspects of tissue and organ transplantation. Haematopoietic stem cells. Mobilisation and collection of peripheral blood stem cell by leukapheresis. Ex vivo graft manipulation (depletion vs. selection). Cryopreservation and quality control of the hematopoietic stem cell transplant. Cell and tissue Banking. Laboratory monitoring of patients after transplantation of hematopoietic stem cells: hematopoietic recovery and molecular diagnostics, immune recovery and biomarkers of transplantation reaction (GVHD), cytogenetic aspects of transplantation.

READING LIST (MANDATORY AND RECOMMENDED)

- Apperley J, Carreras E, Gluckman E, Gratwohl A, Masszi T. Haematopoietic Stem Cell Transplantation. The EBMT Handbook, 6th Edition. ESH, Paris, 2012.
 - <http://www.esh.org/online-training/handbook/>
- Recent scientific articles related to specific topics (selected by professors)
- Clatworthy M, Watson C, Allison M. Transplantation at a Glance. Wiley-Blackwell, 2012. ISBN 0470658428
 - Wilkis DS, Burlingham WJ. Immunobiology of Organ Transplantation. Springer, 2012. ISBN-13 9781461347545
 - Treleaven J, Barrett AJ (eds.). Hematopoietic Stem Cell Transplantation in Clinical Practice. Churchill Livingstone Elsevier 2009. ISBN: 978-0-443-10147-2



- Halberstadt CR, Emerich DF. Cellular Transplantation: From Laboratory to Clinic. Academic Press, Elsevier, Ltd., 2007.
- Recent scientific articles related to specific topics in clinical transplantation; students will be requested to select the articles and present them in seminar (“journal club”);

related links:

- <https://www.tts.org/>
- <http://www.asbmt.org/>

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars/„journal club“ and practicals

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Article presentation during „journal club“ (50%) and participation in final discussion (50%).

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3,5

ORDINAL NUMBER: 31

TITLE OF COURSE/MODULE: Medical anthropology

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Academician Pavao Rudan MD, PhD, Assist. Prof. Natalija Novokmet, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Natalija Novokmet
Pavao Rudan

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

The Course consists of the following themes: Historical development of the field and its theoretical perspectives. Population structure. Molecular-biological analysis of human migrations. Examples from genetic epidemiology. Interactive processes of genetical and/or ecological in the formation of complex characteristics, with examples from different populations and different levels of analysis. Possibilities of contemporary anthropological scientific research of the population level, based upon up-to-date knowledge of population genetics, demography, human epidemiology and ecology, as well as based on individual analyses. Estimations of inter-population distances as well as presentation of analyses (in both manifested and latent space) of poly- and mono-genetically determined characteristics (both continued and discontinued). Application of holistic approach in analysis of diseases, health care systems and in theories of disease and treatment. The influence of adaptation and selection upon the physiological and pathological characteristics of humans. The influences of environmental changes and ecosystems on health and sickness. Theoretical directions of medical anthropology and its applicability in solving global health problems. On the path of reconstructing the Stamparian model. Between the population and individual/a new paradigm of anthropological-epidemiological investigations. Final seminar: Critic analysis of the science article (themed) (journal club).

READING LIST (MANDATORY AND RECOMMENDED)

- Alland A Adaptation in cultural evolution: An approach to medical anthropology. New York, London: Columbia University Press; 1970.
- Little MA, Haas JD Human population biology: A transdisciplinary approach. Zagreb: Croatian Anthropological Society; 1989.
- Thomas MJ, Caolyn FS. Medical anthropology. Contemporary theory and method. New York: Praeger; 1990.
- Roberts DF, Rudan P, Škarić-Jurić T. Growth and Development in the Changing World. Zagreb: Croatian Anthropological Society, 1997; pp. 1-250.
- Rudan P, Heyden G, Carić D, Čolić S, Gilliland MK, Martić-Biočina S, Rudan V, Sujoldžić A, Šantić J, Špoljar-Vržina SM. The Study and Care of Displaced Persons and Refugee Families-A Pilot Study of Anthropological and Psychodynamic Aspects. Zagreb: Croatian Anthropological Society, 1997; pp. 1-90.
- Bennett BC, Rudan P. Regions in Transition – Applied Anthropology and Demographic Perspectives. Zagreb: Croatian Anthropological Society, 1998; pp. 1-140.
- Lévi-Strauss C. Antropologija i moderni svijet, Zagreb: TIM press; 2013.
- Šarac J; Šarić T et. al, Rudan P Maternal genetic heritage of Southeastern Europe reveals a new Croatian isolate and a novel, local subbranching in X2 haplogroup Annals of human genetics 2014; 78-178-194.



- Haviland W. Kulturna antropologija. Zagreb: Naklada Slap; 2004.
- Geertz C Lokalno znanje. Eseji iz interpretativne antropologije Zagreb: AGM; 2010.
- Mihanović M, Babić G, Kezić S, Lončar Č. Anthropology and psychiatry. Coll. Antropol. 2005; 29-747-751.
- Mihanović M. Pregled razvoja biologijske antropologije u Hrvatskoj. U: Hrvatska i Europa, XX. stoljeće. Zagreb: Hrvatska akademija znanosti i umjetnosti (u tisku).

DESCRIPTION OF INSTRUCTION METHODS: lectures and seminars

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 32

TITLE OF COURSE/MODULE: Evidence based medicine

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Ratko Matijevic, MD, PhD, Prof. Zarko Alfirovic, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Željko Alfirović
Ana Borovečki
Mirjana Huić
Robert Likić
Lovela Machala Poplašen
Ratko Matijević
Dunja Rogić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

Basic explanation of the concept "Evidence based medicine" including basic terms. History and methods of EBM. Relationship between theory and practical implementation. Benefits in clinical practice. Meta analysis. Database and access to information. Data search, analysis and assessment together with implementation of the research data in clinical practice. The adjustments of clinical practice based on EBM on the concept Management of change. Clinical governance based and assessed on the benefits of EBM. EBM in quality control process and assessment of medical technologies. Cochrane collaboration mission, Presentation of basic principles of its work and understanding of the basic terms. Data analysis and access to relevant information. Practical preparation of clinical EBM project and preparation of the changes based on the results obtained from EBM process. Practical presentation. Practical work with Cochrane databases and other bases available on the internet.

READING LIST (MANDATORY AND RECOMMENDED)

- Sacket DL, Straus SE, Richardson WS, Rosenberg W, Haynes RB. Evidence based medicine. How to practice and teach EBM 2nd ed. Edinburgh, Churchill Livingstone, 2000
- The Cochrane Library. update software. (www.update-software.com), 2015.
- Greenhalgh T, Donald A. Evidence based healthcare workbook. London: BMJ; 1999.
- Li AWP. Dictionary of evidence-based medicine. Abingdon, Oxon: Radcliffe Medical Press; 1998.
- Woodcock JD, Greenely S, Barton S. Doctors knowledge about evidence based medicine terminology. BMJ 2002;324:929-30
- Essential Drugs and Other Medicines. Theme paper for Discussion: Effective Drug Regulation, What Can Countries Do?; WHO, Geneva 16-19 March 1999
- Quality Assurance of Pharmaceuticals: A compendium of Guidelines and Related Materials. Volume 1; WHO, Geneva 1997.
- Harrison S, Keen S. Public health practitioners in NHS hospital trusts: the impact of "medical care epidemiologists" J Public Health Med 2002;24:15-20.
- Ridsdale L, editor. Evidence based medicine in primary care. Edinburgh: Churchill Livingstone; 1998.
- Drummond et al. Key principles for the improved conduct of health technology assessments for resource allocation decisions. International Journal of Technology Assessment in Health Care. 2008;24: 244–58.

DESCRIPTION OF INSTRUCTION METHODS: Lectures seminars and practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam



DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 33

TITLE OF COURSE/MODULE: Medical statistics 2.1: statistical tools for medical data analysis in planned experimental study design

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): required

NAME OF COURSE/MODULE TEACHER: Professor Mirjana Kujundžić Tiljak, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Davor Ivanković
Anamarija Jazbec
Mirjana Kujundžić Tiljak
Zdenko Sonicki
Slavica Sović
Diana Šimić
Vladimir Trkulja

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 16

OUTLINE OF COURSE/MODULE CONTENT

Checking the selected analytical procedures given the planned experimental study design. Depending on the characteristic of the resulting variable, or whether it is a numerical outcome, a binary outcome, rate or survival time, it is necessary to choose an appropriate analytical method for data presentation, estimation of the intervention effect and the appropriate adjustment to the experimental conditions. Review and selection of available appropriate computer statistical tools to perform the selected analytical procedures. Practical work with the selected computer tools.

READING LIST (MANDATORY AND RECOMMENDED)

- Petrie A, Sabin C. Medical Statistics at a Glance (2nd Ed). Oxford: Blackwell Science Ltd, 2005.
- Kirkwood BR, Sterne JAC. Essential Medical Statistics (2nd ed). Oxford: Blackwell Science Ltd, 2003.
- 2. Altman DG. Practical statistics for medical research. London. Chapman & Hall, 1991.
- Online manuals for R, <http://www.r-project.org/>
- New information about SAS, <http://www.sas.com/>

Electronic statistics textbook and other information. <http://www.statsoft.com/>

DESCRIPTION OF INSTRUCTION METHODS: Seminars and Practicals.

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Insight into practical work.

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2

ORDINAL NUMBER: 34

TITLE OF COURSE/MODULE: Medical statistics 2.2: statistical tools for medical data analysis in quasi-experimental study design

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): required

NAME OF COURSE/MODULE TEACHER: Professor Mirjana Kujundžić Tiljak, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Davor Ivanković
Anamarija Jazbec
Mirjana Kujundžić Tiljak
Zdenko Sonicki
Slavica Sović
Diana Šimić
Vladimir Trkulja

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 16

OUTLINE OF COURSE/MODULE CONTENT

Checking the selected analytical procedures given quasi-experimental design of the study as well as studies for the evaluation of interventions. Depending on the characteristics of the resulting variable, or whether it is a numerical outcome, a binary outcome, rate or survival time, it is necessary to choose an appropriate method for presenting data, estimating the intervention effect, and possibly adjusting to the initial conditions of the study. Particular attention will be given to the assessment of specific experimental design conditions that make it quasi-experimental, such as the effects of changes in time, and consequently the adjustment of analytical procedures (the disproportion of hazards, etc.), different therapies of different subgroups (interaction analysis, etc.) and other deviations from the experimental study design. In the case of quasi-experimental study design as well as in the studies for evaluation of interventions that evaluate the relationship between post-intervention, control-intervention, acceptance-non-acceptance of interventions, comparing with the classical study design, appropriate data analysis procedures will be selected and an appropriate computer statistical tool available. Practical work with the selected computer tools.

READING LIST (MANDATORY AND RECOMMENDED)

- Petrie A, Sabin C. Medical Statistics at a Glance (2nd Ed). Oxford: Blackwell Science Ltd, 2005.
- Kirkwood BR, Sterne JAC. Essential Medical Statistics (2nd ed). Oxford: Blackwell Science Ltd, 2003.
- 2. Altman DG. Practical statistics for medical research. London. Chapman & Hall, 1991.
- Online manuals for R, <http://www.r-project.org/>
- New information about SAS, <http://www.sas.com/>
- Electronic statistics textbook and other information. <http://www.statsoft.com/>

DESCRIPTION OF INSTRUCTION METHODS: Seminars and Practicals

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Insight into the practical work.

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2

ORDINAL NUMBER: 35

TITLE OF COURSE/MODULE: Medical statistics 2.3: statistical tools for medical data analysis in observational study design with large samples

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): required

NAME OF COURSE/MODULE TEACHER: Associate professor Zdenko Sonicki, MD, PhD

Professor Davor Ivanković, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Davor Ivanković
Anamarija Jazbec
Mirjana Kujundžić Tiljak
Zdenko Sonicki
Slavica Sović
Diana Šimić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 16

OUTLINE OF COURSE/MODULE CONTENT

Checking the selected analytical procedures given the observational study design with epidemiological and clinical-epidemiological characteristics. Depending on the characteristics of the resulting variable, or whether it is a numerical outcome, a binary outcome, rate, or survival time, and the type of exposure that can be binary, categorical, ordinal or numerical, it is necessary to choose an appropriate analytical method that matches the design of the study. Choosing an appropriate procedure regarding to the confounding and modifying variables. Choosing an appropriate procedure due to the sampling of the control group (random selection, frequency matching, individual matching, individual multi-matching). Review and selection of available appropriate computer statistical tools to perform the selected analytical procedures. Practical work with the selected computer tools.

READING LIST (MANDATORY AND RECOMMENDED)

- Kirkwood BR, Sterne JAC. Essential Medical Statistics (2nd ed). Oxford: Blackwell Science Ltd, 2003.
- Online manuals for R, <http://www.r-project.org/>
- New information about SAS, <http://www.sas.com/>
- Electronic statistics textbook and other information, <http://www.statsoft.com/>

DESCRIPTION OF INSTRUCTION METHODS: Seminars and practicals.

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Insight into the practical work.

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2

ORDINAL NUMBER: 36

TITLE OF COURSE/MODULE: Medical statistics 2.4: Statistical tools for medical data analysis in observational study design with small samples

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): required

NAME OF COURSE/MODULE TEACHER: Associate professor Zdenko Sonicki, MD, PhD, Professor Davor Ivanković, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Davor Ivanković
Anamarija Jazbec
Mirjana Kujundžić Tiljak
Zdenko Sonicki
Slavica Sović
Diana Šimić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 16

OUTLINE OF COURSE/MODULE CONTENT

Checking the selected analytical procedures given the observational study design with clinical and epidemiological-clinical characteristics of small samples. Depending on the characteristics of the resulting variable, or whether it is a numerical outcome, a binary outcome, rate, or survival time, and the type of exposure that can be binary, categorical, ordinal or numerical, it is necessary to choose an appropriate analytical method that matches the design of the study. Choosing an appropriate procedure regarding to the confounding and modifying variables. Choosing an appropriate procedure due to the sampling of the control group (random selection, frequency matching, individual matching, individual multi-matching). Special attention is focused on the problems of small sample analysis of unknown distribution (robust statistics, and compute intensive methods - resampling methods). Review and selection of available appropriate computer statistical tools to perform the selected analytical procedures. Practical work with the selected computer statistical tools.

READING LIST (MANDATORY AND RECOMMENDED)

- Kirkwood BR, Sterne JAC. Essential Medical Statistics (2nd ed). Oxford: Blackwell Science Ltd, 2003.
- Online manuals for R, <http://www.r-project.org/>
- New information about SAS, <http://www.sas.com/>
- Electronic statistics textbook and other information, <http://www.statsoft.com/>

DESCRIPTION OF INSTRUCTION METHODS: Seminars and practicals.

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Insight into the practical work.

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2

ORDINAL NUMBER: 37

TITLE OF COURSE/MODULE: Methods of medical informatics

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Assist. Prof. Kristina Fišter, MD, PhD, Prof. Jadranka Božikov, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Jadranka Božikov

Kristina Fišter

Magdalena Krbot-Skorić

Zdenko Sonicki

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

Designing an electronic medical / health record (with respect to parsimonious principles, examples of practice records and research). Database formatting (use database management software on personal computers). Using publicly available databases, downloading data from them, potential and limitations of "big data" (with practical work with such data eg with HCUP databases). Predictability and classification support systems (inductive generation of rules and creation of "medical knowledge", application of decision theory, artificial neural network, examples from medicine, work on a personal computer). Evaluation of the prediction and classification support system. The role of model in understanding problem and communication, model types, methods and techniques of simulation modeling, model validation, application, potential and limitations, and examples of use in medicine and healthcare. Work with programs for designing simulation models on a personal computer (Stella and MedModel graphical user interface software). Biomedical signals and images (detection, registration, processing and screening of biomedical signals and images).

READING LIST (MANDATORY AND RECOMMENDED)

- Kern J (ur.). Medicinskoinformatičke metode. Handbook. Zagreb: Medicinska naklada 2008.
- Kern J, Petrovečki M. Medicinsko odlučivanje. U: Kern J, Petrovečki M. (urednici). Medicinska informatika. Zagreb : Medicinska naklada, 2009. Str. 179-197.
- Božikov J, Petrovečki M, Deželić G. Modeliranje i simulacija. U: Kern J, Petrovečki M. (urednici). Medicinska informatika. Zagreb: Medicinska naklada 2009: 340-9.
- Gamberger D. i sur. Osnovna stranica DMS projekta, Dostupno na: <http://dms.irb.hr>
- Gamberger D i sur. Tehnike modeliranja. Dostupno na: http://dms.irb.hr/tutorial/hr_tut_mod_tech.php.
- Shortliffe EH, Cimino JJ (Eds). Biomedical Informatics. Computer Applications in Health Care and Biomedicine. Second Edition. Berlin: Springer 2008.
- Kloesgen W, Zytrow JM (Eds.). Handbook of Data Mining and Knowledge Discovery. Oxford: Oxford University Press, 2002.
- Klepac G. Primjena inteligentnih računalnih metoda u managementu. Zagreb: Sinergija 2001.
- Čerić V. Simulacijsko modeliranje. Zagreb: Školska knjiga, 1992.
- Šantić A. Biomedicinska elektronika. Zagreb: Školska knjiga, 1996.
- Bronzino JD (ur). The Biomedical Engineering. Handbook. Boca Raton: CRC Press, IEEE Press, 1995.

Publications from selected scientific journals:

- Artificial Intelligence in Medicine, Computer Methods and Programs in Biomedicine, Computer and Biomedical Research, International Journal of Medical Informatics, Journal of Medical



Systems, Medical Decision Making, Medical Informatics and Internet in Medicine, Journal of the American Medical Informatics Association, Methods of Information in Medicine, Simulation Modeling Practice and Theory, EUROSIM News - Simulation News Europe, Simulation, System Dynamics Review i drugih, te zbornici radova s medicinsko-informatičkih skupova

- Manuals and instructions for using different programs and databases, such as the database of HCUP projects (Healthcare Cost and Utilization Project), available at <https://www.hcup-us.ahrq.gov/nisoverview.jsp>

DESCRIPTION OF INSTRUCTION METHODS: lectures and practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: test, practice and oral exam; each student must develop an example from the area of his or her scientific interest or practice in which the learned knowledge and skills are applied and presented in the form of seminar work, and preferably published thereafter.

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 38

TITLE OF COURSE/MODULE: Mechanisms of allergic reactions

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Assist. Prof. Alenka Gagro, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Krešo Bendelja
Alenka Gagro
Alenka Markotić
Nives Pustišek
Asja Stipić Marković

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 18

OUTLINE OF COURSE/MODULE CONTENT

Historical background, Coombs and Gell's classification of allergic reactions, characteristics of immunologic diseases. Type I reactions: Anaphylaxis: active, passive, generalised, local, in vitro. Allergens. Antibodies: 1. IgE: structure and biological properties, control of synthesis, IgE receptors (FcεR1, CD23), total IgE levels in health and disease; 2. other cytotoxic antibodies: IgG4. Mast cells of mucosa and connective tissue, characteristics of different types; basophils, platelets and eosinophils; mediators of type I reactions and control of mediators release. Atopy: mechanisms, immunodiagnosis and immunotherapy. Type II reactions: Mechanisms, antigens, antibodies (IgG, IgM, IgA), Fc receptors, complement, effector cells (neutrophils, monocytes/macrophages, platelets). alloimmunoreactions (post-transfusion, haemolytic disease of the newborn, transplantation); autoimmune reactions (haemolytic anaemia, organ-specific); reactions to heterologous antigens (drug hypersensitivity, cross-reactivity to pathogens); detection; immunotherapy. Type III reactions: antigens, characteristics of immune complexes (IC); physiologic role of IC, activation of effector mechanisms; experimental models and diseases (Arthus reaction, serum sickness), methods for detection of IC; immunotherapy. Type IV reactions: antigens, antigen presenting cells, effector cells (CD4, CD8, macrophages); regulation of Th1/Th2 reactions, Th17 (cytokines, neuroendocrine mediators); manifestation (contact, tuberculin, granulomatous hypersensitivity reactions); detection of delayed hypersensitivity: in vivo and in vitro; immunotherapy.

READING LIST (MANDATORY AND RECOMMENDED)

- Sabioncello A, Gagro A. Imunološki mehanizmi nastanka alergijskih bolesti, 2012. (skripta)
- Gagro A, Dekaris D. Temeljni mehanizmi alergijskih i imunoloških reakcija. U: Lipozenčić J., ur., Alergijske i imunosne bolesti, Zagreb, Medicinska naklada, 2011. str. 3-11.
- Gagro A. Astma u dječjoj dobi. U: Lipozenčić J., ur., Alergijske i imunosne bolesti, Zagreb, Medicinska naklada, 2011. str. 163-73.
- A.K. Abbas, A.H.H. Lichtman, S.Pillai (ed.). Cellular and molecular immunology, Elsevier Saunders, 8th edition, 2014.
- The most relevant review articles in the field of immunocytokines published in Current Opinion in Immunology, Immunity, Trends in Immunology, Immunological Reviews, Nature Reviews Immunology, Nature Medicine, Journal of Allergy and Clinical Immunology, Annual Reviews of Immunology, etc.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, practicals, seminar/journal club

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam



DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

ORDINAL NUMBER: 39

TITLE OF COURSE/MODULE: Metabolic syndrome

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Lea Smirčić Duvnjak, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Miro Šimun Alebić
Tomislav Bulum
Marko Duvnjak
Martina Lovrić Benčić
Lea Smirčić Duvnjak
Dragica Soldo Jureša

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 13

OUTLINE OF COURSE/MODULE CONTENT

The class format will include lectures and seminars (with final session-journal club type discussion)
Lectures will provide a basic introduction to the field-summarize current knowledge about the prevalence, pathophysiology, diagnosis and definitions of the metabolic syndrome
For seminars, participants will be encouraged to discuss their opinion on various topics and provide a critical review of assigned reading material. Topics include, but are not limited to: metabolic syndrome and type 1 and type 2 diabetes, lipid disorders, cardiovascular disease, NASH and PCO syndrome, therapeutic approach.

READING LIST (MANDATORY AND RECOMMENDED)

- Kaur J. A Comprehensive Review on Metabolic Syndrome. Cardiology Research and Practice, vol. 2014, Article ID 943162, 21 pages, 2014. doi:10.1155/2014/943162
- O'Neill S, O'Driscoll L. Metabolic syndrome: a closer look at the growing epidemic and its associated pathologies. Obesity Reviews, 2014.
- Murphy R, Carroll RW, Krebs JD. Pathogenesis of the Metabolic Syndrome: Insights from Monogenic Disorders. Mediators of Inflammation, vol. 2013, Article ID 920214, 15 pages, 2013. doi:10.1155/2013/920214
- Thaman RG, Arora GP. Metabolic Syndrome: Definition and Pathophysiology – the discussion goes on!. J. Phys. Pharm. Adv.2013; 3(3): 48-56.
- Bayturan O, Tuzcu ME, Lavoie A et al. The Metabolic Syndrome, Its Component Risk Factors, and Progression of Coronary Atherosclerosis Arch Intern Med. 2010;170(5):478-484. Arch Intern Med. 2010;170(5):478-484.
- Simmons RK, Alberti KG, Gale EA et al. The Metabolic Syndrome: Useful Concept Or Clinical Tool? Report of a WHO Expert Consultation. F1000: "Exceptional" and "Changes Clinical Practice". Diabetologia 2010;53(4):600-605.
- Festi D, Schiumerini R, Eusebi LH, Marasco G, Taddia M, Colecchia A. Gut microbiota and metabolic syndrome. World Journal Of Gastroenterology, 2014;20: 16079–16094.
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- Shah D, Rasool S. PCOS and Metabolic Syndrome: The Worrisome Twosome? Endocrinol Metab Syndr 2015, 4:2-7.
- Francis W. B. Sanders, and Julian L. Griffin, “ De novo lipogenesis in the liver in health and disease: more than just a shunting yard for glucose ,” Biological Reviews, 2015



- Reaven GM. Insulin resistance and its consequences. In diabetes Mellitus: A fundamental and clinical text. 3rd ed. LeRoith D, Taylor SI, Olefsky JM, Eds. Philadelphia, Lippincott, Williams and Wilkins, 2004, p.899-915
- Kahn R, Ferrannini E, Buse J, Stern M. The metabolic syndrome: time for a critical appraisal. Diabetes Care 2005;28;2289-304
- Alberti KGMM, Zimmet PZ. Should we dump the metabolic syndrome? No. BMJ 2008;336:641-646.
- Mente A, Yusuf S, Islam S et al. Metabolic Syndrome and Risk of Acute Myocardial Infarction A Case-Control Study of 26,903 Subjects From 52 Countries. J Am Coll Cardiol, 2010; 55:2390-2398.
- Ye Liu, Rui Wei, Tian-Pei Hong. Potential roles of glucagon-like peptide-1-based therapies in treating non-alcoholic fatty liver disease. World J Gastroenterol 2014 July 21; 20(27): 9090-909

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars and workshop

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: oral and written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2

ORDINAL NUMBER: 40

TITLE OF COURSE/MODULE: Research methods of psychological functions and behavior

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Rudolf Gregurek, MD, PhD, Professor Alma Mihaljević-Peješ, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Fran Borovečki
Nada Božina
Darko Chudy
Rudolf Gregurek
Mario Habek
Alma Mihaljević Peješ
Ljiljana Pačić Turk
Maja Relja
Marina Šagud

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 16

OUTLINE OF COURSE/MODULE CONTENT

Particularities of neuro-psychological scientific methods. Getting informed consent for psychological functioning research. Cognitive functions research. Personality research methods. Problems of classification and diagnostic of mental disorders. Round table. Biological markers and rating scales. Pharmacogenetics in psychological functioning research. Autonomic nervous system testing. Brain activity and behavior. Brain function imaging (PET, SPECT, MR, CT). Quantification of neurological deficit. Neurostimulating and neuroinhibiting methods in neurosurgery.

READING LIST (MANDATORY AND RECOMMENDED)

- Course manual
- Alliance of Psychoanalytic Organizations. Psychodynamic Diagnostic Manual (PDM), Interdisciplinary Council: Silver Spring, 2006.
- Shenton ME (Editor), Turetsky BI (Editor) Understanding Neuropsychiatric Disorders: Insights from Neuroimaging, Cambridge University Press, Cambridge, 2011
- Panskepp J. Affective Neuroscience: The Foundations of Human and Animal Emotions, Oxford University Press, Oxford, New York, 1998
- Boranić M I sur. Psihoneuroimunologija: povezanost imunosustava sa živčanim i endokrinim sustavom. Zagreb: Školska knjiga, 2008.
- Gerber AJ, Kocsis JH, Milrod B, Roose SP. Assessing the quality of randomized controlled trials of psychodynamic psychotherapy. J Am Psychoanal Assoc. 2006;54:1307-1313.
- Huhprich SK. Psychodynamic Therapy: Conceptual and Empirical Foundations. New York & London: Routledge, 2008.
- Luborsky L, Luborsky E. Research and psychotherapy; the vital link. New York: Jason Aronson, 2006.
- Fonagy P, Roth A, Higgitt A. The outcome of psychodynamic psychotherapy for psychological disorders. Clin Neurosci Res. 2005;4:367-377.
- Najavits LM, Ghinassi F, van Horn A, Weiss RD, Siqueland L, Thase ME, Luborsky L. Therapist Satisfaction with four Manual-based Treatments on a National Multisite Trial: An Exploratory Study. Psychotherapy: Theory, Research, Practice, Training, 2004; 41: (1), 26–37.
- Gregurek, R. Psihološka medicina, Medicinska naklada, Zagreb, 2011.
- Mihaljević-Peješ A. I Šagud M. Antidepresivi u kliničkoj praksi, Medicinska naklada, Zagreb, 2011.



- Mihaljević-Peleš A. I Šagud M. Antipsihotici u kliničkoj praksi, Medicinska naklada, Zagreb, 2012
- Hersen M. Psychological Assessment in Clinical Practice: A Pragmatic Guide. New York: Routledge, 2004.
- Roffman JL, Marci CD, Glick DM, et al. Neuroimaging and the functional neuroanatomy of psychotherapy. Psychol Med. 2005;35:1385-1398.

DESCRIPTION OF INSTRUCTION METHODS: lectures and practicals

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2

ORDINAL NUMBER: 41

TITLE OF COURSE/MODULE: Research and evaluation methods of health interventions

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Stjepan Orešković, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Stjepan Orešković

George Rutherford

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

Theories: Human capital theory. Determinants of health. Determinants of health outcomes. Three historical periods: Health structures measurement methods. Health processes management and follow up. Methods and indicators for measurement of health outcomes. Health Status Research: Methods of social impact measurements, self-perceived health status. Health condition and Health expectations. Health targets: indicators, instruments and methods. Methodological harmonisation. Health process and outcomes research: Methods for measurement efficiency of health interventions. Comparative methods use and benchmarking: internal, external and process comparison Theoretical model relations between costs and outcomes. Measurements of processes, status, risks, unexpected effects and effects/standard of health interventions. Methods for measurement of health status and outcomes of population interventions: indicators, instruments and methods. Instruments for measurement health status and practical application: Social indicators for health intervention efficiency measurement (SAS); WHO/HFA; indicators, instruments and methods General Health Questionnaire-GHK; SF 36; EuroQol McMaster Health Utility Index; Socio Economic Classification (SEC); Examples of how systems work in practice: CDC/Healthy People 2010; Methods and instruments for measurement efficiency and effects of health interventions: Determination priorities methods. Methods of measurement effect connections, outcomes, efficiency and intervention costs: Unites and methods of measurement efficiency and usefulness, practises and calculations and computer simulations: Disability-Free Life Expectancy, Quality Adjusted Life Years, Disability Adjusted Life Years, Number Needed to Treat, Sickness Impact Profile. Costs and efficiency analysis methods: Method of cost identification; Direct and Indirect costs; Cost-benefit analysis, Cost-effectiveness analysis; Cost-usefulness relation analysis; Cost-minimalization method. Modules, simulations and data basis for measurement efficiency and health outcome prices: NICE Care, Cochrane Collaboration, York Health Economics Centre.

READING LIST (MANDATORY AND RECOMMENDED)

- National Institute for Health and Clinical Excellence. Centre for Public Health Excellence. Centre for Health Technology Evaluation. Centre for Clinical Practice. Clinical and Public Health Directorate. <http://www.nice.org.uk/Guidance>. 26 May 2015.
- National Institute for Public Health and Environment Ministry of Health, Welfare and Sport of the Netherlands. Dutch HealthCare Performance Report 2014. <http://www.rivm.nl/dsresource?objectid=rivmp:277134&type=org&disposition=inline>
- National Institute for Public Health and Environment Ministry of Health, Welfare and Sport of the Netherlands. Dutch HealthCare Performance Report 2014. <http://www.rivm.nl/dsresource?objectid=rivmp:277134&type=org&disposition=inline>

- Hrvatski zavod za javno zdravstvo. Hrvatski zdravstveno-statistički ljetopis za 2014 godinu. Zagreb, 2015. http://hzjz.hr/wp-content/uploads/2015/05/ljetopis_2014.pdf
- Michael J van den Berg, Dionne S Kringos, Lisanne K Marks and Niek S Klazinga: The Dutch health care performance report: seven years of health care performance assessment in the Netherlands. *Health Research Policy and Systems* 2014, **12**:1 doi:10.1186/1478-4505-12-1. <http://www.health-policy-systems.com/content/12/1/1>
- The Outcome of Outcomes Research at AHCPR: Final Report. US Department of Health and Human Services. Agency for HealthCare Research and Quality. 2009. <http://www.ahrq.gov/clinic/outcosum.htm>
- Carley M. Social measurement and social indicators. London: Allen&Unwin; 1991.
- Donabedian A. The definition of quality and approaches to its assessment. Ann Arbor: Health Administration Press; 1980.
- de Bruin A, Picavet HSJ, Nossikov A, editors. Health interview surveys. Towards international harmonization of methods and instruments. Copenhagen: World Health Organization, Regional Office for Europe; 1996. (WHO Regional Publications. European Series; n.o 58)
- Božičević I, Orešković S, Stevanović R, Rodin U, Nolte E, McKee M. What is happening to the health of the Croatian population. *Croat Med J* 2001;42:601-6.
- Orešković S. New priorities for health sector reform in Central and Eastern Europe. *Croat Med J* 1998;39:225-33.
- Orešković S, Strnad M, Majdak P, Babic S. Opinions of patients on the quality of hospital care. *Natl Med J India* 2001;14:246-7.
- Report of the Malawi Triangulation Project: Synthesis of Data on Trends in the National and Local HIV Epidemics and The Reach and Intensity of Prevention Efforts. WHO, UNAIDS, UCSF, CDC http://www.igh.org/triangulation/Malawi_triangulation.pdf

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, autonomous and team research, discussion practical

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: oral exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 42

TITLE OF COURSE/MODULE: Methods of investigation *in vivo* and *in vitro*

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Drago Batinić, MD, PhD; Prof. Dora Višnjić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Drago Batinić
Floriana Bulić Jakuš
Srećko Gajović
Nataša Jovanov Milošević
Gordana Jurić Lekić
Svjetlana Kalanj Bogнар
Vedran Katavić
Ana Katušić Bojanac
Marijan Klarica
Ana Knezović
Rajko Kušec
Ivana Mareković
Ivica Matak
Jelena Osmanović Barilar
Nino Sinčić
Patrik Stanić
Melita Šalković Petrišić
Dora Višnjić
Maja Vlahović
Željka Vukelić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

Principles of work *in vivo* and *in vitro*. Good laboratory practice. Apprehension of ethical issues of work with experimental animals and human material. Care and handling of laboratory animals. Selected surgical procedures on small and large laboratory animals. Principles of investigations of organs, tissues and cells *in vitro*. Embryonic stem cells. Transgenic mice. Investigation of embryogenesis, tissue interactions and transdifferentiation *in vitro*. Primary cell cultures - *in vitro* cultivation of human fibroblasts and short term haematopoietic progenitor cell culture (clonogenic assay). Continuous cell lines. Basic principles of cell separation and immunological analysis of cells *in vitro*, flow cytometry. Culture of preimplantation human embryos - methods of assisted reproduction. DNA-chip technology. The induction of bacterial resistance to antibiotics *in vitro*.

READING LIST (MANDATORY AND RECOMMENDED)

- Radačić M, Bašić I, Eljuga D (eds). Pokusni modeli u biomedicini [Experimental models in biomedicine]. Zagreb: Medicinska naklada, 2000.
- Hultman I, Björk L, Blomberg E, Sandstedt B, Ahrlund-Richter L. Experimental teratoma: at the crossroad of fetal- and onco-development. Semin Cancer Biol. 2014;29:75-9.

- Efthymiou AG, Chen G, Rao M, Chen G, Boehm M. Self-renewal and cell lineage differentiation strategies in human embryonic stem cells and induced pluripotent stem cells. *Expert Opin Biol Ther.* 2014;14(9):1333-44.
- Doyle A, McGarry MP, Lee NA, Lee JJ. The construction of transgenic and gene knockout/knockin mouse models of human disease. *Transgenic Res.* 2012;21(2):327-49.
- Trevino V, Falciani F, Barrera-Saldana HA. DNA microarrays: a powerful genomic tool for biomedical and clinical research. *Mol Med.* 2007;13(9-10):527-41.

Useful web-pages:

- animal care: <http://dels.nas.edu/ilar>
- flow cytometry: <http://www.cyto.purdue.edu/>
- bioinformatics & in vitro protocols: <http://archive.is/www.molecularstation.com>
- cell culture: http://www.protocol-online.org/prot/Cell_Biology/Cell_Culture/

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars and practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 43

TITLE OF COURSE/MODULE: Methods in molecular oncology

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Sonja Levanat, PhD; Assist. Prof. Vesna Musani, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Sonja Levanat
Vesna Musani
Petar Ozretić
Maja Sabol
Diana Trnski

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 26

OUTLINE OF COURSE/MODULE CONTENT

Lectures: The central dogma of molecular biology, a summary of the laboratory methods used to study RNA, DNA and proteins. Experimental laboratory work is most part of the course: in several terms is working in small groups, students will become familiar with the basic experimental laboratory methods used in molecular oncology. From the isolation of nucleic acids and proteins, to the methods of studying changes in nucleic acids (polymerase chain reaction - PCR, single-strand DNA sequence analysis - SSCP, melting curve analysis, nucleotide sequencing, fragmentary analysis - "gene scan"), the use of computer base database (search sequences, gene maps, databases SNPs, database specialized for particular genes, primer design, computer processing data obtained by sequencing and fragmentation analysis), quantitative real-time PCR, immunohistochemistry methods, the cell cycle analysis by flow cytometry – FACS and basic brief overview of biostatistical methods.

READING LIST (MANDATORY AND RECOMMENDED)

- A Ambriović-Ristov i sur. Metode u molekularnoj biologiji, Institut Ruđer Bošković, Zagreb, 2007.
- N Pečina-Šlaus. Odabrane metode molekularne biologije. Medicinska naklada, Zagreb, 2009.
- Alberts B et al. Molecular Biology of the Cell, 6th Ed., Garland Science, NY, 2014
- Glavač D, Dean M. Applications of heteroduplex analysis for mutation detection in disease genes. Hum Mutat. 1995;6(4):281-7.
- Cvok ML, Čretnik M, Musani V, Ozretić P, Levanat S. New sequence variants in BRCA1 and BRCA2 genes detected by high-resolution melting analysis in an elderly healthy female population in Croatia. Clin Chem Lab Med. 2008;46(10):1376-83.
- Abd-Elsalam KA. Bioinformatic tools and guideline for PCR primer design. African Journal of Biotechnology. 2003;2(5):91-95.
- Yuan JS, Reed A, Chen F, Stewart CN Jr. Statistical analysis of real-time PCR data. BMC Bioinformatics. 2006;7:85.
- Greenblatt MS, Brody LC, Foulkes WD, Genuardi M, Hofstra RM, Olivier M, Plon SE, Sijmons RH, Sinilnikova O, Spurdle AB; IARC Unclassified Genetic Variants Working Group. Locus-specific databases and recommendations to strengthen their contribution to the classification of variants in cancer susceptibility genes. Hum Mutat. 2008;29(11):1273-81.
- Students are expected to supplement sources, the selection of scientific work by self-interest

DESCRIPTION OF INSTRUCTION METHODS: Lectures, practical work, seminars



DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Closing seminar: critical analysis of a selected scientific paper related to the course content ("journal club").

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 4

ORDINAL NUMBER: 44

TITLE OF COURSE/MODULE: Methods of molecular biology in medicine

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Floriana Bulić-Jakuš MD, PhD, Professor Jadranka Sertić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Drago Batinić
Fran Borovečki
Zrinka Bošnjak
Nada Božina
Tamara Božina
Ana Budimir
Floriana Bulić Jakuš
Nina Canki Klain
Sanja Davidović Mrsić
Klara Dubravčić
Aleksandra Fučić
Ksenija Fumić
Ivana Furač
Mirna Golemović
Lovorka Grgurević
Alan Ivković
Davor Ježek
Ana Katušić Bojanac
Jasna Lovrić
Hana Ljubić
Sanja Mazić
Ana Merkler
Dinko Mitrečić
Tamara Nikuševa Martić
Frane Paić
Margareta Radić Antolić
Jadranka Sertić
Nino Sinčić
Feodora Stipoljev
Ljiljana Šerman
Mirjana Šimić
Maja Vlahović
Renata Zadro

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 38

OUTLINE OF COURSE/MODULE CONTENT

Lectures: Molecular biology at the beginning of the 21st century: organization of the genome. Epigenetics, regulation of gene expression. Stem cells, gene therapy. Creating mouse with a desired genetic change. Mutagenesis; steroid receptors. Oxidative stress. Forensic medicine, paternity testing, y chromosome. Molecular genetics of cancer. Farmacogenomics. Genomics and laboratory medicine. Genomics: the basis of prospective medicine. Strategy of reverse genetics (positional cloning).

Seminars: Functional genomics. Proteomics. Regenerative orthopedics, cell and gene therapy. Molecular biology procedures in diagnosis of hematologic diseases. Human endothelial cells from umbilical cord blood for diagnostic purpose.

Practical work: Genome databases. RNA isolation and analysis. Immunohistochemistry and electron microscopy in molecular biology (infertile testis). Molecular genetics of cancer (DNA methylation, bisulphite conversion, Western blotting, immunohistochemical markers of apoptosis). DNA analysis in forensic medicine, DNA polymorphisms, mitochondrial DNA. Comet electrophoresis. Cell therapy (cell banks). DNA sequencing - inherited diseases. Real-time PCR application in genetic disorders, oncology and pharmacogenomics. Analysis of cellular DNA using flow cytometry. Molecular detection and identification of microorganisms. Enzyme analyses and metabolomics. FISH cytogenetics.

READING LIST (MANDATORY AND RECOMMENDED)

- Šerman D, Stavljenić-Rukavina A, Sertić J, Bulić-Jakuš F (Ed.): Metode molekularne biologije u medicini. Priručnik. Znanstveni poslijediplomski studij u području biomedicine i zdravstva. Medicinska naklada, Zagreb, 2015. (in Croatian)
- Sertić J. i sur. Klinička kemija i molekularna dijagnostika u kliničkoj praksi. Zagreb: Medicinska naklada, 2015. (In Croatian)
- Turnpenny P, Ellard S: Emeryjeve osnove medicinske genetike, 14. izdanje, ur. hrv.izdanja: F. Bulić-Jakuš i I. Barišić, Medicinska naklada, Zagreb, 2012. (in Croatian)
- P. Turnpenny, S. Eliard: Emery's Elements of Medical Genetics, 14th Edition, Churchill Livingstone, Edinburgh, London, New York, 2012.
- Scientific articles

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars and exercises

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Test examination

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 5

ORDINAL NUMBER: 45

TITLE OF COURSE/MODULE: Microvascular tissue transfer

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Associate Professor Rado Žic MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Srećko Budi
Krešimir Martić
Igor Rudež
Franjo Rudman
Rado Žic

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 25

OUTLINE OF COURSE/MODULE CONTENT

Participants will be informed through lectures, seminars and practical work about experimental research on free tissue transfer, the anatomy and use of flaps in clinical practice. Complex and functional reconstruction with composite flaps, haemodynamics of the microvascular anastomosis, and prevention of thrombosis is important part of programme. On the end complications of free flap transfer and donor area morbidity, postoperational free flap monitoring, and insight into experimental use of new techniques for microvascular anastomosis.

READING LIST (MANDATORY AND RECOMMENDED)

- Thorne CH, Chung KC, Gosain AK, et al. Grabb and Smith's plastic surgery. 7th ed. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins; 2013
- Wei FC, Mardini S, et al. Flaps and reconstructive surgery, Saunders, 2009.
- Khouri RK, Upton J, Shaw WW. Principles of flap prefabrication.
- Clin Plast Surg. 1992 Oct;19(4):763-71.
- Heller L1, Levin LS. Lower extremity microsurgical reconstruction.
- Plast Reconstr Surg. 2001 Sep 15;108(4)
- Levin LS, Erdmann D. Primary and secondary microvascular reconstruction of the upper extremity. Hand Clin. 2001 Aug;17(3):447-55, ix. Review
- Taghinia AH, Pribaz JJ. Complex nasal reconstruction. Plast Reconstr Surg. 2008 Feb;121(2)
- Hurvitz KA1, Kobayashi M, Evans GR. Current options in head and neck reconstruction. Plast Reconstr Surg. 2006 Oct;118(5):122e-133e.
- Terzis JK, Kostopoulos VK The surgical treatment of brachial plexus injuries in adults. Plast Reconstr Surg. 2007 Apr 1;119(4):73e-92e. Review.
- New articles associated to Course curriculum

DESCRIPTION OF INSTRUCTION METHODS: lectures, seminars, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Oral (journal club), Written (30 MCQs)

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3,5



ORDINAL NUMBER: 46

TITLE OF COURSE/MODULE: Molecular genetics of aging and carcinogenesis

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Associate professor Ivica Rubelj, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER: Ivica Rubelj

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

The aim of the course is to introduce students to the latest knowledge in the field of biology of aging. Course is about molecular mechanisms that control cell growth, which normally ends with cellular aging, but also the phenomenon of carcinogenesis resulting from the changes of the same molecular structures. Students will get an overview of modern approaches and techniques to this research from the cellular level to the organism and population level. Special attention will be paid to molecular mechanisms of tissue aging and mechanisms of aging in transgenic model organisms, the beginning and development of diseases associated with the aging process etc.

Topics include: introduction to Molecular biology of aging. Definitions, origins of research on molecular mechanisms of cellular aging, overview of modern ideas and techniques of aging research from cell to organism. Cellular aging. Hayflick experiment, a model of human and mouse fibroblasts, endothelial and epithelial cells, the morphological and physiological changes in senescent cells. Molecular basis of (patho)physiology of cellular aging, mechanisms of genetic control of cellular aging: the role of telomeres, structure and mechanisms of their shortening, the role of cell cycle control in aging and telomere shortening. Subtelomeric sequences, their structure and impact on telomeres, types of subtelomeric sequences in several model organism (mammals, yeast, *Drosophila*, nematodes). Telomeric proteins and their interactions with telomeres; shelterin, recombinant proteins at telomeres, mutations of telomeric proteins associated with genetic diseases. Telomerase; structure of their genes and nucleoprotein, 3D structure, mechanisms of action, interactions with telomeres. Molecular basis of (patho)physiology of aging of tissues and organs, genetic and epigenetic mechanisms of aging control in mice (knock out experiments, histological analysis), the skin as a model: aging of fibroblasts, melanocytes, keratinocytes, endothelial cells, microvasculature. Aging at the organismal level, accumulation of senescent cells, their effect on the surrounding tissue, changes in extracellular matrix and signal molecules - physiological profile of inflammation. Population studies of aging, survival, morbidity and mortality, telomeres as a predictive factor for the individual and population aging, population dynamics of aging in Croatia. Free radicals, their formation, propagation and neutralization, the cell damage theory and energy metabolism, oxidative stress in cell senescence: hyper or hypoxia, telomeres and oxidative stress, the role of mitochondria in cell damage and cellular aging, the role of antioxidants and stress - response mechanisms in cell aging. Tissue damage related to aging, protein modifications, antioxidant mechanisms and protection from damage (enzymes, small molecules - vitamins, minerals). Caloric restriction, model organisms (mouse, rat, monkey, *Drosophila*), a longitudinal study of calorie restriction in monkeys (*Macaca mulatta*) for > 25 years, the impact of diet on aging and mortality. Carcinogenesis, M1/M2 mechanism, cell crisis and immortalization, effect of SV40 large T antigen (Tg), the role of p53 and pRb; ALT - alternatively lengthening of

telomeres in carcinogenesis and metabolism of unicellular organisms, impact on the stability of telomeres.

Evolutionary theories of aging and relationship of aging with carcinogenesis. Comparative biology of aging describe specifics of some groups of organisms (higher mammals, primates, birds, reptiles, insects, aquatic organisms), the role of telomeres and telomerase in aging of various organisms, absence or neglected aging in some organisms. Aging of non-regenerative organs and tissues (brain and nervous system, myocardium) and their resistance to stress, the molecular mechanisms of some degenerative diseases associated with aging; Alzheimer's, Werner's syndrome, Hutchinson -Gilford syndrome progeria).

READING LIST (MANDATORY AND RECOMMENDED)

- Nanić L, Vidaček NŠ, Ravlić S, Šatović E, Huzak M, Rubelj I. utual interactions between telomere heterogeneity and cell culture growth dynamics shape stochasticity of cell aging. *Biogerontology*. 2018;19:23-31.
- Cukusic Kalajzic A, Vidacek NS, Huzak M, Ivankovic M, Rubelj I. Telomere Q-PNA-FISH--reliable results from stochastic signals. *PLoS One*. 2014;9:e92559.
- Kim, S., Jiang, J. C., Kirchman, P. A., Rubelj, I., Helm, E. G. and Jazwinski, S. M.: Cellular and molecular aging. in *Comprehensive Geriatric Oncology*, second edition, (L. Balducci, W. B. Ershler, G. H. Lyman, eds.) Harwood Academic Publishers, Amsterdam, 1998. pp. 123-155.
- Blasco M. A. mouse models to study the role of telomeres in cancer, aging and dna repair [Review]. *European Journal of Cancer*. 38(17): 2222-2228, 2002 Nov.
- Rubelj, I., Brdar, B. and Pereira-Smith, O. M.: Replicative senescence in vitro and in vivo, *Croatian Med. J.* 1997; 38: 190-198.
- Rubelj, I. and Vondraček, Z.: Stochastic mechanism of cellular aging – abrupt telomere shortening as a model for stochastic nature of cellular aging, *J. theor. Biol.* 1999; 197: 425 -438.
- Rubelj, I., Huzak, M., Brdar, B. and Pereira-Smith, O. M.: A single-stage mechanism controls replicative senescence through sudden senescence syndrome, *Biogerontology* 2002; 3 (4): 213 - 222.
- *Nature*, vol. 408, No. 9 (2000), 233-269. selection of review articles
- *Oncogene*, vol. 21, No. 4 (2002), 493-697. selection of review articles

DESCRIPTION OF INSTRUCTION METHODS: Lectures with PP presentation

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Final seminar: Critical analysis of a scientific article related to the course.

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 47

TITLE OF COURSE/MODULE: Molecular hematology

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Associate Professor Rajko Kušec MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Rajko Kušec

Marko Lucijanić

Tajana Štoos Veić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 26

OUTLINE OF COURSE/MODULE CONTENT

Students will be introduced to the topics of a) molecular and genetic basis of hematopoietic stem cell damage and molecular leukemo- and lymphomagenesis, they will be presented with the b) basic principles of molecular techniques and logics of selecting the appropriate molecular tests in hematology and hemostaseology. Further, (c) molecular aspects of minimal residual disease will be presented, d) molecular redefinition of leukemia and lymphoma categories by gene expression profiling and use of SNP array analysis will be discussed. e) Principles of molecular hematopathology and recent achievements in the field, f) collecting biological samples, isolation of nucleic acids and planning of molecular tests g) mechanisms of actions of new, molecularly targeted therapeutics in hematology, h) and molecular cytogenetics in hematology will also be the topics. Closing seminar: critical analysis of a selected scientific paper relevant to the course. Principles of aggressive chemotherapy and radiotherapy. Scientific facts and controversy in success evaluation regarding chemoradiotherapy and targeted therapy for hematopoietic neoplasms.

READING LIST (MANDATORY AND RECOMMENDED)

- Molecular biology in medicine (book). Cox T et al. (Croatian edition by Jonjić, S.) Medicinska Naklada, Zagreb, 2000.
- Primer on Medical Genomics in: Mayo Clinics Proceedings vol 77;2002. - vol 79: 2004.
- Genetic Test Indications and Interpretations. Mayo Clinics Proceedings, siječanj 2005; vol 80. – 2007; vol 82.
- Kušec R. Molecular and genetic mechanisms of lymphomagenesis. Croat Med J 2002; 43(5): 519-525
- Williams Hematology, 6th Edition, McGraw-Hill Comp. 2007.
- Lijfering WM, Brouwer J-LP, Veeger N. et al. Selective testing for thrombophilia in patients with first venous thrombosis. Blood 2009;113: 5314-5322
- Godley LA. Profiles in leukemia. NEJM 2012; 366:1152-1153
- Steensma D. The Beginning of the End of the Beginning in Cancer Genomics. NEJM 2013; DOI: 10.1056/NEJMe1303816
- Manolio TA, Chisholm RL, Ozenberger B. et al. Implementing genomic medicine in the clinic: the future is here. Genet Med 2013;15:258–267
- Bauer K. Targeted Anti-Anticoagulants.NEJM 2015;373: 569-570
- Lander ES. Brave New Genome.NEJM 2015;373:5-8
- Lander ES. Cutting the Gordian Helix — Regulating Genomic Testing in the Era of Precision Medicine. NEJM 2015; 373: 1185-1186

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical molecular laboratory work



DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam, oral

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3,5

ORDINAL NUMBER: 48

TITLE OF COURSE/MODULE: Molecular oncology – insight into new technologies

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Assoc. Prof. Koraljka Gall Trošelj, MD, PhD, Research Advisor

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Koraljka Gall - Trošelj

Renata Novak Kujundžić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 17

OUTLINE OF COURSE/MODULE CONTENT

Cancer genetics and epigenetics; DNA methylation; genomic imprinting and multilevel roles of the CTCF protein; promoter polymorphism in relation to gene activity; histone modifications; chromatin immunoprecipitation; malignant cell transcriptome and application of the -omics methods in molecular oncology; micro-RNA and their modeling; tools for searching the Gene Bank and other databases; cellular metabolism and carcinogenesis; seminars: analyses of research articles dealing with aspects of oncology (clinical and molecular) relevant for students. Written exam – test.

READING LIST (MANDATORY AND RECOMMENDED)

- Montezuma D, Henrique RM, Jeronimo C. Altered expression of histone deacetylases in cancer. *Crit Rev Oncog* 2015;20(1-2):19-34.
- Vahid F, Zand H, Nosrat-Mirshekarlou E, Najafi R, Hekmatdoost A. The role dietary of bioactive compounds on the regulation of histone acetylases and deacetylases: A review. *Gene* 2015; 562(1):8-15.
- McGuire A, Brown JA, Kerin MJ. Metastatic breast cancer: the potential of miRNA for diagnosis and treatment monitoring. *Cancer Metastasis Rev* 2015;34(1):145-55.
- Hamm CA, Costa FF. Epigenomes as therapeutic targets. *Pharmacol Ther* 2015; doi: 10.1016/j.pharmthera.2015.03.003.
- Ma X, Wang YW, Zhang MQ, Gazdar AF. DNA methylation data analysis and its application to cancer research. *Epigenomics* 2013;5(3):301-16.
- Yang Y, Dong X, Xie B, Ding N, Chen J, Li Y, Zhang Q, Qu H, Fang X. Databases and Web Tools for Cancer Genomics Study. *Genomics Proteomics Bioinformatics* 2015;13(1):46-50.
- Ong CT, Corces VG. CTCF: an architectural protein bridging genome topology and function. *Nat Rev Genet* 2014;15(4):234-46.
- Augoff K, Hryniewicz-Jankowska A, Tabola R. Lactate dehydrogenase 5: an old friend and a new hope in the war on cancer. *Cancer Lett* 2015;358(1):1-7.
- Cooks T, Harris CC, Oren M. Caught in the cross fire: p53 in inflammation. *Carcinogenesis* 2014;35(8):1680-90.
- Joosse SA, Gorges TM, Pantel K. Biology, detection, and clinical implications of circulating tumor cells. *EMBO Mol Med* 2014;7(1):1-11.
- Madhamshettiwar Piyush B, Maetschke SR, Davis MJ, Reverter A, and Ragan MA INsPeCT: INtegrative Platform for Cancer Transcriptomics. *Cancer Informatics* 2014;13 59-66.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam - test

DESCRIPTION OF MONITORING OF TEACHING QUALITY



Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS (IF ANY): 2,5

ORDINAL NUMBER: 49

TITLE OF COURSE/MODULE: Molecular aspect of lymphocyte development

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Mariastefania Antica, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER: Mariastefania Antica

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 21

OUTLINE OF COURSE/MODULE CONTENT

The topic Molecular aspects of lymphocyte differentiation will provide skills for a critical interpretation of published literature in the field of molecular biology of lymphocyte development. Also a practical approach and the laboratory skills will include knowledge of methods like DNA and RNA isolation from lymphatic tissues, reverse transcription and polymerase chain reaction, (PCR), electrophoresis of DNA fragments, gene expression by protein detection, apoptosis by flow cytometry.

READING LIST (MANDATORY AND RECOMMENDED)

- Immunobiology. The immune system in health and disease, Janeway Travers
- Molecular Cell Biology, by Lodish Berk, Matsudaira, Kaiser, Krieger, Scott, Zipursky, Darnell,

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written/oral test

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 50

TITLE OF COURSE/MODULE: Molecular and biochemical approach to genetic disorders

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Jadranka Sertić, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Tamara Božina
Jasna Lovrić
Hana Ljubić
Ana Merkle
Maja Relja
Jadranka Sertić
Feodora Stipoljev
Željka Vogrinc

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 15

OUTLINE OF COURSE/MODULE CONTENT

Lectures: Genetics, genomics and proteomics of monogenic (triplets disease, cystic fibrosis, muscular dystrophy, spinal muscular atrophy, gene therapy) and multifactorial diseases (atherosclerosis, cerebrovascular insult). Huntington's disease. Chromatography in analysis of biomolecules. Seminars and exercises: Biochemical and genetic markers in the diagnosis and treatment of malignant diseases and external assessment. Polymorphism of metabolic enzymes P450 (CYP). Molecular analysis of nucleic acids. Gene sequencing.

READING LIST (MANDATORY AND RECOMMENDED)

- Sertić J. i sur. Klinička kemija i molekularna dijagnostika u kliničkoj praksi. Zagreb: Medicinska naklada, 2015.
- Burtis CA, Brunz DE. Fundamentals of Clinical Chemistry and Molecular Diagnostics. Philadelphia; Elsevier: 2014.
- Božina T, Sertić J, Lovrić J, Jelaković B, Šimić I, Reiner Ž. Interaction of genetic risk factors confers increased risk for metabolic syndrome: the role of peroxisome proliferator-activated receptor γ . Genet Test Mol Biomarkers. 2014 Jan;18(1):32-40.
- Kao AC, Rojnic Kuzman M, Tiwari AK, Zivkovic MV, Chowdhury NI, Medved V, Kekić I, Zai CC, Lieberman JA, Meltzer HY, Božina T, Božina N, Kennedy JL, Sertić J, Müller DJ. Methylenetetrahydrofolate reductase gene variants and antipsychotic-induced weight gain and metabolic disturbances. J Psychiatr Res. 2014 Jul;54:36-42.
- Bazina A, Sertić J, Mišmaš A, Lovrić T, Poljaković Z, Miličić D. PPAR γ and IL-6 - 174G>C gene variants in Croatian patients with ischemic stroke. Gene. 2015;560(2):200-4.
- Willard HF, Ginsburg GS. Genomic and personalized medicine. Vol.1. Principles, methodology and translational approaches. San Diego, SAD: Elsevier Inc., 2009.
- Willard HF, Ginsburg GS. Genomic and personalized medicine. Vol.2. Genome discoveries and clinical applications. San Diego, SAD: Elsevier Inc., 2009.
- www.personalgenomes.ca
- www.eurogentest.org
- www.ptc.bio.com/ataluren

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars and exercises; closing seminar: critical analysis of selected scientific papers



DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Test, oral examination

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

ORDINAL NUMBER: 51

TITLE OF COURSE/MODULE: Molecular genetics and pharmacogenetics of gastrointestinal tumors

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Sanja Kapitanović, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Maja Cigrovski Berković

Tamara Čačev

Sanja Kapitanović

Marijana Popović Hadžija

Maja Sirotković Skerlev

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

Introduction to the principles involved in cancer development and progression, based on the model of gastrointestinal tumors. Review of molecular changings in oncogenes, tumor supressor genes and mismatch repair genes relating to illnesses of the gastrointestinal tract will be given. The role of microbiome and chronic inflammation in the colon cancer tumorigenesis. Course topics include the genetics of hereditary and sporadic colon cancer, familial adenomatous polyposis (FAP) and human nonpolyposis colon cancer (HNPCC, Lynch syndrome) as well as the genetics of family cancer. The gastric carcinoma is second most freequent gastrointestinal tumor in patients with HNPCC and the lectures will include the genetics of hereditary and sporadic gastric cancer. Course topics will be also the most recent findings in: molecular genetics of esophageal cancer, molecular genetics of inflammatory bowel disease (IBD) (ulcerative colitis, Crohn's disease), molecular genetics of pancreatitis and pancreatic adenocarcinoma as well as molecular genetics of GEP-NET tumors. Chemoprevention is another approach to decrease the incidence of colorectal cancer in the general population. One of the topics of this course will be the role of COX-2 in the tumorigenesis and as a new molecular target in chemoprevention and treatment of gastrointestinal tumors. Pharmacogenomics and pharmacogenetics of gastrointestinal tumors, importance of SNPs and mutations in genes for drug metabolism, response to therapy, toxicity and resistance to therapy. Seminar topics will include: molecular diagnostics of hereditary gastrointestinal tumors, presymptomatic diagnostics, pharmacogenetics, interpretation of the results of molecular-genetics analysis (mutation detection and "linkage" analysis).

READING LIST (MANDATORY AND RECOMMENDED)

- Recent reviews and scientific publications from the field selected by lecturers

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: oral exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 52

TITLE OF COURSE/MODULE: Morphological research methods in biomedical sciences

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Srećko Gajović, MD, PhD, Prof. Boris Brkljačić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Boris Brkljačić
Srećko Gajović
Gordana Ivanac
Nataša Jovanov Milošević
Dinko Mitrečić
Sven Seiwert
Siniša Škokić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 23

OUTLINE OF COURSE/MODULE CONTENT

The course gives an overview of various morphological methods which enable the imaging of molecules, cells, tissues, organs and organ systems of human. Basic and clinical approaches are interconnected in microscopy and radiology. The students would get knowledge of different ways of microscopy, in particular in the principles of light and electron microscopy. Theory and practice of methods to image major macromolecules of the living organism, gene activity and protein localization would be provided. Students would get insight in the practical knowledge of the applications of light (fluorescent and confocal) and transmission electron microscopy. The attendees would acquire an overview of knowledge regarding applications of modern imaging methods in depicting morphology of various organs and organ systems. Physical basis will be presented of conventional X-ray methods, ultrasound, computerized tomography, digital subtraction angiography and magnetic resonance imaging, as well as application of these methods in imaging of normal morphology of all organs and organ-systems. The significance of application of various contrast media will be emphasized. Critical analysis will be presented of various imaging methods in biomedical research, their advantages and shortcomings will be discussed, as well as algorithms of their utilization of different methods aimed to visualize from molecule to specific organ systems.

READING LIST (MANDATORY AND RECOMMENDED)

- Alberts B et al. Molecular Biology of the Cell, 6th edition, GS Garland Science, Taylor & Francis Group, 2014.
- L.C. Junqueira, J. Carnerio, R.O. Kelley: Osnove histologije, Školska knjiga, Zagreb 2005. X. izdanje
- Coleman WB, Tsongalis GJ (eds.) Molecular Pathology: The Molecular Basis of Human Disease. Academic Press 2009.
- Brkljačić B. Ultrazvuk. U: Vrhovac B i sur. Interna medicina. Naklada Ljevak, Zagreb, 2008; pp. 183-191.
- Bauman D, Gajović S. Elektronska mikroskopija u Hrvatskoj. Hrvatsko mikroskopijsko društvo, 2009.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars and practicals

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written test

DESCRIPTION OF MONITORING OF TEACHING QUALITY



Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 53

TITLE OF COURSE/MODULE: Multiresistant bacteria associated with nosocomial infections

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Branka Bedenić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Nataša Beader
Branka Bedenić
Karmen Godić - Torkar
Ines Jajić
Sanda Sardelić
Jasmina Vraneš

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 25

OUTLINE OF COURSE/MODULE CONTENT

Enterobacteriaceae producing extended-spectrum β -lactamases

Since plasmid-mediated extended-spectrum β -lactamases (ESBLs) were first detected in *Klebsiella oxytoca* isolate in 1983 in Germany, they have been increasingly reported worldwide. Production of ESBLs is the major mechanism of resistance to oxymino-cephalosporins and aztreonam in Gram-negative bacteria. ESBLs are predominantly derivatives of plasmid-mediated TEM or SHV β -lactamases and arise through mutations that alter the configuration of the active site, thereby expanding the hydrolytic spectrum of the enzyme. The CTX-M family of β -lactamases groups evolutionary related ESBLs with a much higher level of activity against cefotaxime than ceftazidime; and their similarity to some species-specific β -lactamases, like those of *Klebsiella oxytoca* and *Citrobacter diversus*, has been known for years. The recent finding of 99% homology between the CTX-M-2 enzyme and the β -lactamase of *Kluyvera ascorbata* has indicated the origins of at least a fraction of the CTM-variants. In contrast to TEM and SHV ESBLs which rely on point mutations in blaTEM and blaSHV genes to expand their substrate profiles, CTX-Ms have an intrinsic extended-spectrum profile. Whereas only three enzymes of this family (CTX-M-1, MEN-1, CTX-M-2, and Toho-1) were described between 1990 and 1995, in recent years the list has been increasing very quickly. In some countries CTX-M β -lactamases are the most prevalent types of ESBLs, for instance in Switzerland, Russia, Greece, Spain, Japan, Taiwan, China and Argentina. Production of CTX-M β -lactamases can be associated with plasmid-mediated resistance to fluoroquinolones due to qnr genes which encode proteins protecting bacterial topoisomerase. In contrast to SHV and TEM ESBLs they are usually associated with community isolates. Non-fermentative bacteria such as *Pseudomonas* and *Acinetobacter* can also harbour ESBLs but they are less frequent than in Enterobacteriaceae and predominantly belong to rare families like PER, VEB and IBC. Laboratory detection is based on double disk synergy test or combined disk test with clavulanic acid. Detection of ESBL in non-fermentative bacteria or the species of Enterobacteriaceae which possess chromosomal AmpC β -lactamases pose a challenge because chromosomal ampC β -lactamase can antagonize the synergism with clavulanic acid and lead to false negative results. Addition of cloxacillin which inhibits ampC β -lactamases in the medium is recommended. Carbapenems are the antibiotics of choice for the treatment of infections caused by ESBL positive Enterobacteriaceae. Urinary tract infections caused by ESBL producing Enterobacteriaceae can be treated with fluoroquinolones or β -lactam combinations with inhibitors if in vitro testing shows susceptibility.

AmpC beta-lactamases

Plasmid-mediated Ampc beta-lactamases are derived from the chromosomal beta-lactamases of the bacteria belonging to the genus *Enterobacter*, *Citrobacter*, *Serratia*, *Pseudomonas* and *Acinetobacter* by escape of the chromosomal gene to the plasmid. Plasmid mediated AmpC beta-lactamases are found in the species of Enterobacteriaceae without chromosomal ampC gene such as *Klebsiella* spp, *Proteus mirabilis* or *Salmonella* or with low level expression of chromosomal ampC gene such as *E. coli*. Plasmid-mediated AmpC beta-lactamases confer resistance to third generation cephalosporins and cephamycins and unlike ESBLs are not inhibited by clavulanic acid, sulbactam or tazobactam. Fourth generation cephalosporins are spared. They belong to CMY, DHA, FOX, MOX, LAT, BIL, ATC and other families. Laboratory detection is based on combined disk test with phenylboronic acid as inhibitor of AmpC beta-lactamases.

Carbapenemases in Enterobacteriaceae

Acquired resistance to carbapenems is uncommon in Enterobacteriaceae although extended-spectrum β -lactamase resistance in these organisms is well established. However, β -lactamase mediated resistance to carbapenems has been reported in *Klebsiella pneumoniae* and other Enterobacteriaceae mostly due to the expression of class A KPC β -lactamases susceptible to the inhibition by clavulanic acid, class B metallo- β -lactamases (IMP, VIM or NDM) or OXA-48 β -lactamase belonging to the class D β -lactamases. Furthermore, carbapenem resistance can be mediated by hyperproduction of ESBLs or plasmid-mediated AmpC β -lactamases combined with porin loss. Modification of outer membrane (ompK35 and ompK36) proteins usually develops during therapy with carbapenems. Enterobacteriaceae isolates with reduced susceptibility to carbapenems were recently reported in USA, France, Greece, Turkey, Israel, Austria, Sweden, UK, Spain, Switzerland, Germany, Belgium, Italy, China, and Taiwan, and many other countries of the world. In Croatia, the first carbapenemase described in Enterobacteriaceae was NDM-1. The first group A carbapenemase reported in our country was KPC-2 found in *K. pneumoniae* isolate. Simultaneous production of KPC and MBLs has also been reported in Germany and China. The laboratory detection of carbapenemases in the laboratory is based on modified Hodge test. Inhibitor based tests with EDTA and phenylboronic acid are used to detect metallo-beta-lactamases (MBLs) and KPC beta-lactamases, respectively.

Non-fermentative bacteria producing carbapenemases

The Gram-negative *Acinetobacter baumannii* is one of the most relevant nosocomial pathogen occurring in intensive care (ICU) as well as burn therapy units. The most frequent health-care-associated infections are urinary tract infections, bacteraemia, surgical site infections and ventilator associated pneumonia. One of the reasons of the success of *A. baumannii* within the hospitals is related to the impressive ability of this bacterium to express innate and acquired antibiotic resistance determinants, making last resort antibiotics for the treatment of multidrug-resistant (MDR) strain, like broad-spectrum cephalosporins, carbapenems, and to a lesser extent colistin, frequently ineffective. Carbapenems have a potent activity against *Acinetobacter* and *Pseudomonas* and are often used as last resort for the treatment of infections due to multiresistant *Acinetobacter baumannii* isolates. However, *Acinetobacter*s may develop resistance to carbapenems through various combined mechanisms including decreased permeability, altered penicillin binding proteins (PBPs) and, rarely, efflux pump overexpression. However, the most frequent mechanism of resistance is through the production of carbapenemases such as class B IMP type and VIM type metallo β -lactamases (MBLs) and class D OXA type carbapenemases.

Carbapenemases may be defined as β -lactamases that significantly hydrolyse at least imipenem or/and meropenem. The most clinically significant carbapenemases belong to class B. They are the acquired or transferable metallo- enzymes which require zinc as a cofactor and include the following most common families: IMP, VIM, SPM, GIM, NDM and SIM. The VIM-type enzymes appear to be the most prevalent in Europe and Far East, and at least 34 different variants have been identified (<http://www.lahey.org/Studies>). The worldwide spread of acquired metallo- β -lactamases (MBLs) in gram-negative bacilli has become a great concern. MBLs possess a broad hydrolysis profile that includes carbapenems and almost all extended-spectrum β -lactams except of aztreonam. Genes encoding MBLs are usually located in integrons which contain gene cassettes encoding resistance to aminoglycosides and fluoroquinolones. MBLs have zinc in their active site and are inhibited by metal chelators such as EDTA, mercaptopropionic and mercaptosulphuric acid. Group D includes carbapenem-hydrolyzing oxacillinases which are usually produced by *A. baumannii*. OXA-51 family are intrinsic chromosomally encoded beta-lactamases of the species *A. baumannii*. They cause carbapenem-resistance only if they are associated with ISAba1 insertion sequence upstream of the blaOXA-51 gene. OXA-23-like, OXA-24/40-like, OXA-58-like and OXA-143-like are acquired oxacillinases associated with high level of resistance to carbapenems. They are usually plasmid-mediated and thus transferable. Isolates producing acquired oxacillinases are frequently multidrug resistant. OXA-23 is the most widespread family of CHDL and is reported all over the world. OXA-24/40 was found in North America, Spain, Portugal, Brasil, China and recently in Croatia. OXA-58 was reported in Germany, France, UK, Turkey and Greece. It is often preceded by ISAba3 insertion sequence which is important for the mobilization of the blaOXA-58 gene and increased the expression of the gene and the level of carbapenem-resistance. OXA-143 was identified only in Germany. Changes of outer membrane proteins (CarO) or upregulation of efflux pumps can contribute to carbapenem-resistance. Multiresistant *A.baumannii* isolates belong usually to three main International clonal lineages (formerly EU clones). Recently new clonal lineages have been reported. Strains possessing acquired oxacillinases usually belong to ICL II. OXA-23, OXA-58 and OXA-72 beta-lactamases were reported in the multicenter study in Croatia conducted in 2009-2010. The majority of the strains belonged to ICLII and ST2.

Pseudomonas aeruginosa belongs to bacteria with a variety of intrinsic and acquired resistance mechanisms including the production of antibiotic modifying enzymes like beta-lactamases and aminoglycoside modifying enzymes, impermeability of the cell wall, mutation of receptor molecules or upregulated efflux pumps. *Pseudomonas aeruginosa* develops resistance to carbapenems due to production of metallo-beta-lactamases belonging to class B, KPC beta-lactamases belonging to class A, loss of OprD protein or upregulation of efflux pumps. In Croatia, VIM-2 metallo-beta-lactamase was reported in University Hospital Split and Zagreb. It was encoded in a class1 integron which contained resistance genes for aminoglycosides and blaOXA-1 gene. Resistance to expanded-spectrum cephalosporins in *Acinetobacter* spp and *Pseudomonas* spp can be due to overexpression of class C chromosomal beta-lactamases or acquisition of extended-spectrum beta-lactamases, mostly of VEB, PER and IBC family, but rarely TEM-116, SHV-12, and CTX-M-2 were reported. Resistance to ampicillin/sulbactam in *Acinetobacter* spp is mediated by hyperproduction of TEM-1 beta-lactamase.

Resistance to fluoroquinolones in Enterobacteriaceae is mediated by mutations of chromosomal *gyrA* and *parC* genes or plasmid-mediated *qnr* genes which encode *qnr* proteins to protect topoisomerase. *Qnr* genes are often encoded on the same plasmids which contain blaESBL or blaCARB genes

Resistance to fluoroquinolones in non-fermentative bacteria is gyrase or topoisomerase subunit. Aminoglycoside modifying enzymes such as adenylases, phosphorilases or acetylases are the major resistance mechanisms to aminoglycosides in *Pseudomonas* spp and *Acinetobacter* spp. Recently, resistance to colistin was reported in *A. baumannii* due to the modification of lipid A component of the lipopolysaccharide of the bacterial cell wall.

Meticillin-resistant *Staphylococcus aureus* (MRSA) emerged very soon after introduction of meticillin in the treatment of staphylococcal infections in the early 60-ies of XX century.

Currently 30 to 50% of *S. aureus* and more than 50% of coagulase negative staphylococci are resistant to semisynthetic penicillins. Resistance occurs as the results of acquisition of *mecA* gene, that encodes a novel penicillin binding protein PBP2', as well as *mecA* new variant recently reported in France. Expression of PBP2' renders the bacteria resistant to all β -lactam antibiotics (including cephalosporins and carbapenems). Until recently, the one antibiotic that has remained uniformly active against staphylococci has been vancomycin, the current antibiotic of choice for treating staphylococci resistant to oxacillin. However, it is less efficient than isoxazolil penicillins. Other therapies are available nowadays such as linezolid, daptomycin and ceftaroline. Furthermore, it is more toxic than β -lactam antibiotics. MRSA has all properties of staphylococci: it is easily spread from ill/colonized patient to other patients via hands of staff or fomites and causes infections like MSSA (wound infections, sepsis, endocarditis, pneumoniae and osteomyelitis). Prevalence of MRSA in Croatia is 3 to 50%. There are reports of MRSA as community acquired pathogen.

Enterococci are part of the normal flora in digestive and urogenital tract of humans and animals. They cause opportunistic urinary tract infections, wound infections, intraabdominal abscess and sepsis. Enterococci have intrinsic naturally occurring resistance to many antibiotics such as cephalosporins and clindamycin. In order to achieve bactericidal effect, it is necessary to combine penicillins or glycopeptides with aminoglycosides. The most important problem is development of high level resistance to aminoglycosides, penicillins and lately also to vancomycin. The first VRE was described in Europe in 1988 and in USA in 1989. The prevalence of vancomycin resistance in Europe is 2% whereas in USA it is much higher (10%). Infections due to VRE are difficult to treat. Furthermore, genes responsible for vancomycin resistance could be transferred to other Gram-positive bacteria such as staphylococci resulting in vancomycin-intermediate or vancomycin-resistance *S. aureus* (VISA or VRSA, respectively) as well as to other Gram-positive bacteria such as streptococci and listeria.

Recently, nursing homes have been reported to be important reservoir of multiresistant bacteria particularly MRSA or *Acinetobacter baumannii*. The residents of long-term care facilities are usually chronically ill and debilitated and often have prolonged stays in the hospitals where they can get colonized with multiresistant strains.

The practices will enable the students to learn the methods for antimicrobial susceptibility testing, phenotypic tests for detection of extended-spectrum and plasmid-mediated ampC beta-lactamases and carbapenemases and molecular methods for detection of resistance genes. Moreover, they will be able to practice methods for genotyping of multiresistant bacteria such as PFGE and MLST. Extraction of plasmids will be done with commercial kit according to the manufacturer's instruction. The plasmid-based replicon typing will be done according to Caratolli et al.

JOURNAL CLUB. The topics related to MRSA, VRE and ESBL and carbapenemase positive bacteria will be discussed at the journal club.

READING LIST (MANDATORY AND RECOMMENDED)

- Bradford PA. Extended-spectrum β -lactamases in the 21st Century: Characterization, Epidemiology, and Detection of This Important Resistance Threat. *Clin Microbiol Rev* 2001;14(4):933-951.
- Bradford PA: What's new in β -lactamases? *Curr Infect Dis Resp* 2001; 3(1):13-19.
- Nordmann P, Poirel L. Emerginig carbapenemases in Gram-negative aerobes. *Clin Microbiol Infect* 2002;8:321-331.
- Marshall WF, Blair JE. The cephalosporins, *Maxo Clin Proc* 1999;74:187.
- Reese RE, Betts RF. Cephalosporins. U: Reese RE, Betts RF, Gumustop B, eds. *Handbook of antibiotics*, 3rd ed. Philadelphia: Lippincott Williams&Wilkins, 2000;365-400.
- Asbel LE, Levison ME. Cephalosporins, carbapenems and monobactams. *Infect Dis Clin North Am* 2000;14:1435.
- Medical Letter. The choice of antibacterial drugs. *Med Lett Drugs Ther* 2001;43:69.
- Rossolini, G.M., M. M. D'Andrea, and C. Mugnaioli. 2008. The spread of CTX-M-type extended-spectrum β -lactamases. *Clin. Microbiol. Infect.* 14(Suppl. 1):33-41.
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- Nordmann, P., L. Poirel, and L. Dortet. 2012. Rapid detection of carbapenemase-producing Enterobacteriaceae. *Emerg. Infect. Dis.* 18:1503-1507.
- Nordmann, P., M. Gniadkowski, C.G. Giske, L. Poirel, N. Woodford, V. Miriagou, and the European Network on Carbapenemases. 2012. Identification and screening of carbapenemase-producing Enterobacteriaceae. *Clin. Microbiol. Infect.* 18:432-438.
- Nordmann, P., T. Naas, and L. Poirel. 2011. Global Spread of carbapenemase-producing Enterobacteriaceae. *Emerg. Infect. Dis.* 17:1791-1798.
- Cattoir, V. , and P. Nordmann. 2009. Plasmid-mediated quinolone resistance in gram-negative bacterial species: an update. *Curr. Med. Chem.* 16:1028-1046.
- Lauren, F., H. Chardon, M. Haenni, M. Bes, M.-E. Reverdy, J.-Y. Madec, E. Lagier, F. Vandenesch, and A. Tristan. 2012. MRSA harboring mecA variant gene mecC, France. *Emerg. Infect. Dis.* 18:1465-1467.
- Appelbaum, P.C. 2006. The emergence of vancomycin-intermediate and vancomycin-resistant *Staphylococcus aureus*. *Clin. Microbiol. Infect.* 12 (Suppl. 1):16-23.
- Howden, B.P., J.K. Davies, P.D.R. Johnson, T.P. Stinear, and M.L. Grayson. 2010. Reduced vancomycin susceptibility in *Staphylococcus aureus*, including vancomycin-intermediate and heterogeneous vancomycin-intermediate strains: resistance mechanisms, laboratory detection, and clinical implications. *Clin. Microbiol. Rev.* 23:99-139.
- Philippon A, Arlet G, Lagrange H: Origin and impact of plasmid-mediated extended-spectrum β -lactamases. *Eur J Clin Microbiol Infect Dis* 1994;13(Suppl 1):17-29.
- Tan TJ, Yong NG LS, Koh TK, Hsu LY. Evaluation of screening methods to detect plasmid-mediated AmpC in *Escherichia coli*, *Klebsiella pneumoniae* and *Proteus mirabilis*. *Antimicrob Agents Chemother* 2009;53(1):146-149.
- Canton R, Akova M, Carmely Y, Giske CG, Glupczynski Y, Gniadkowski M, Livermore DM, Miriagou V, Naas T, Rossolini GM, Seifert H, Woodford N, Nordmann P. Rapid evolution and spread of carbapenemases among Enterobacteriaceae in Europe. *Clin Microbiol Infect* 2012;18:413-431.
- Sengstock DM, Thyagrajan R, Apalara J, Mira A, Chopra T, Kaye KS. Multidrug-resistant *Acinetobacter baumannii*: an emerging pathogen among older adults in community hospitals and nursing homes. *Clin Infect Dis* 2010;50(12):1611-1616.
- Medina T, Carmeli Y. The pivotal role of long-term care facilities in the epidemiology of *Acinetobacter baumannii*: another brick in the wall. *Clin Infect Dis* 2010;50(12):1617-1618.
- Strateva T, Yordanov D. *Pseudomonas aeruginosa* - a phenomenon of bacterial resistance. *J Med Microbiol* 2009;58:1133-48.
- Poole K. *Pseudomonas aeruginosa*: resistance to the max. *Front Microbiol* 2011;2:1-13.
- Nordmann P, Poirel L. Strategies for identification of carbapenemase producing Enterobacteriaceae. *J Antimicrob Chemother* 2013;68:487-9.



- Levy-Hara G, Gould I, Endimiani A i sur. Detection, treatment and prevention of carbapenemase-producing Enterobacteriaceae: recommendations from an International Working Group. J Chemother 2013;25:129-40.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practicals

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written examination

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3,5

ORDINAL NUMBER: 54

TITLE OF COURSE/MODULE: Advanced ultrasonography in gastroenterology and hepatology

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): ELECTIVE

NAME OF COURSE/MODULE TEACHER: Associate Professor Ivica Grgurević, MD, PhD, Professor Boris Brkljačić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Tomislav Bokun
Boris Brkljačić
Ivica Grgurević
Gordana Ivanac
Nadan Rustemović
Tajana Štoos Veić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

Use of doppler ultrasound in gastroenterology and hepatology: Physical principles and basics of the examination. Doppler of the aortomesenteric system. Doppler of the hepatoportal system. Contrast enhanced ultrasound in gastroenterology and hepatology: physical principals of basics of the examination. Contrast enhanced ultrasound in liver diseases and extrahepatic diseases. Ultrasonic elastography in gastroenterology and hepatology: physical principles and basics of the examination. Ultrasonic elastography in liver, pancreatic, biliary and intestinal diseases. Endoscopic ultrasound: physical principles and basics of the examination. Endoscopic ultrasound in intestinal, pancreatic and biliary diseases. Intervention ultrasound in gastroenterology and hepatology. Liver, other organ and structure biopsy. Tissue diagnostics of the specimen provided by ultrasound guided fine-needle aspiration. Therapeutic ultrasound use. Practice with models (doppler and elastography). Journal club: doppler, contrast ultrasound, elastography, endoscopic ultrasound, intervention ultrasound in gastroenterology and hepatology.

READING LIST (MANDATORY AND RECOMMENDED)

- Duvnjak Marko (ur): Ultrazvuk abdomena, Medicinska naklada, Zagreb, 2015.
- Brkljačić Boris. VASKULARNI ULTRAZVUK. Medicinska naklada, Zagreb 2010.
- Grgurević Ivica, Kujundžić Milan (ur.): Kvaliteta i standardi u gastroenterološkom ultrazvuku. Hrvatsko gastroenterološko društvo, Zagreb, 2015.
- Claudon M, Dietrich CF, Choi BI, Cosgrove DO, Kudo M, Nolsøe CP, et al. Guidelines and Good Clinical Practice Recommendations for Contrast Enhanced Ultrasound (CEUS) in the Liver – Update 2012. Ultrasound Med Biol 2013;39(2):187–210.
- Piscaglia F, Nolsøe C, Dietrich CF et al. The EFSUMB Guidelines and Recommendations on the Clinical Practice of Contrast Enhanced Ultrasound (CEUS): Update 2011 on non-hepatic applications. Ultraschall in Med 2012; 33: 33–59
- Bamber J, Cosgrove D, Dietrich CF et al. EFSUMB guidelines and recommendations on the clinical use of ultrasound elastography. Part 1: Basic principles and technology. Ultraschall in der Medizin-European Journal of Ultrasound. 2013;34:169-84.

- Dietrich CF, Bamber J, Berzigotti A, et al. EFSUMB guidelines and recommendations on the clinical use of liver ultrasound elastography, update 2017 (long version). *Ultraschall in der Medizin-European Journal of Ultrasound*. 2017;38:e16-e47.
- Serrani M, Calvanese C, Lisotti A et al. Basics in Endoscopic Ultrasound Part 1: Diagnostic Indications and Tissue Sampling. *Rev Recent Clin Trials*. 2018 Jan 31;13(1):27-36.
- Lorentzen T, Nolsøe CP, Ewertsen C et al. EFSUMB Guidelines on Interventional Ultrasound (INVUS), Part I. General Aspects (long Version). *Ultraschall Med* 2015 Oct;36(5):E1-14.
- Brkljačić B. *DOPLER KRVNIH ŽILA*. Medicinska naklada, Zagreb 2000; 238 str.(udžbenik Sveučilišta u Zagrebu)
- Grgurevic I, Tjesic Drinkovic I, Pinzani M. Multiparametric ultrasound in liver diseases: an overview for the practising clinician. *Postgrad Med J* 2019;0:1–8. doi:10.1136/postgradmedj-2018-136111
- McNaughton DA, Abu-Yousef MM. Doppler US of the Liver Made Simple. *RadioGraphics* 2011; 31:161–188.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

ORDINAL NUMBER: 55

TITLE OF COURSE/MODULE: Genomic instability

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): ELECTIVE

NAME OF COURSE/MODULE TEACHER: Professor Nives Pećina-Šlaus, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Anja Bukovac

Anja Kafka

Nives Pećina Šlaus

Tomislav Vladušić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 15

OUTLINE OF COURSE/MODULE CONTENT

The course deals with the genetic basis tumorigenesis. Genomic changes that are the basis of malignant transformation and progression are described. The emphasis of the course is given on the genomic instability of tumor cells caused by defective DNA repair mechanisms. Therefore, scientific topics of mutations and DNA repair are also represented. Specific type of DNA postreplication repair the so called mismatch repair is extensively covered. Moreover, genetic organization, basic mechanisms of gene regulation and function as well as signal transduction pathways involved in tumor formation and progression are also included in the course. The genomic characteristics of brain tumors is introduced to the students too, since it represents the main scientific research in the Laboratory for neuro-oncology. The emphasis is on Wnt signaling and gene mutations responsible for specific histopathological brain tumor initiation and development. New research in this scientific field is brought to students' attention.

Practical work enables students to discover genetic changes in human tumors. Specific topics of the course include: Genomic instability in tumor cells; Mechanisms of mutation and DNA repair; Control of gene expression; Genes and signal transduction pathways involved in tumorigenesis; Wnt signaling in brain tumors. Seminars focus on novel scientific papers on genomic instability and tumors genome landscapes. Journal club discussion on selected scientific papers and essays are also part of seminars. Practical work includes following: Screening for microsatellite instability in cancer, the analysis of microsatellite gene markers; Loss of heterozygosity detection; Electrophoresis; Mutation detection method Heteroduplex; Immunohistochemistry and novel techniques of mutation search through High resolution melting on Light Cycler PCR instrument are also included.

READING LIST (MANDATORY AND RECOMMENDED)

- Thompson BA, Spurdle AB. Microsatellite instability use in mismatch repair gene sequence variant classification. *Genes (Basel)*. 2015;6(2):150-62. doi: 10.3390/genes6020150.
- Yamamoto H, Imai K. Microsatellite instability: an update. *Arch Toxicol*. 2015. DOI 10.1007/s00204-015-1474-0 [Epub ahead of print]
- Bieganski KT, Mello SS, Attardi LD. Unravelling mechanisms of p53-mediated tumour suppression. *Nat Rev Cancer*. 2014;14(5):359-70. doi: 10.1038/nrc3711.
- Sturm D, Bender S, Jones DT, Lichter P, Grill J, Becher O, Hawkins C, Majewski J, Jones C, Costello JF, Iavarone A, Aldape K, Brennan CW, Jabado N, Pfister SM. Paediatric and adult glioblastoma: multifactorial (epi)genomic culprits emerge. *Nat Rev Cancer*. 2014;14(2):92-107. doi: 10.1038/nrc3655.

- Kafka A, Bašić-Kinda S, Pećina-Šlaus N. The cellular story of dishevelleds. *Croat Med J.* 2014;55(5):459-67.
- Vogelstein B, Papadopoulos N, Velculescu VE, Zhou S, Luis A. Diaz Jr., Kinzler KW. Cancer Genome Landscapes. *Science.* 2013; 339(6127): 1546–1558. doi:10.1126/science.1235122.
- Pecina-Slaus N. Meningiomas: role of genetic instabilities of the E-cadherin gene. *Tumors of the central nervous system*, Ed. M.A. Hayat, Springer, 2012.
- Pećina-Šlaus i suradnici: Odabrane metode molekularne biologije, Medicinska naklada, Zagreb, 2009.
- The Cancer Genome Atlas (TCGA) Research Network. Comprehensive genomic characterization defines human glioblastoma genes and core pathways. *Nature.* 2008; 455(7216): 1061–8. doi:10.1038/nature07385.
- Williams Parsons D, Jones S, Zhang X, Cheng-Ho Lin J, Leary RJ, Angenendt P, Mankoo P, Carter H, Siu IM, Gallia GL, Olivi A, McLendon R, Ahmed Rasheed B, Keir S, Nikolskaya T, Nikolsky Y, Busam DA, Tekleab H, Diaz LA Jr, Hartigan J, Smith DR, Strausberg RL, Nagahashi Marie SK, Mieko Oba Shinjo S, Yan H, Riggins GJ, Bigner DD, Karchin R, Papadopoulos N, Parmigiani G, Vogelstein B, Velculescu VE, Kinzler KW. An Integrated Genomic Analysis of Human Glioblastoma Multiforme. *Science.* 2008; 321(5897):1807. doi:10.1126/science.1164382.
- Wang H, Xu T, Jiang Y, Xu H, Yan Y, Fu D, Chen J. The Challenges and the Promise of Molecular Targeted Therapy in Malignant Gliomas. *Neoplasia.* 2015;17(3):239-255. doi: 10.1016/j.neo.2015.02.002.
- Paw I, Carpenter RC, Watabe K, Debinski W, Lo HW. Mechanisms regulating glioma invasion. *Cancer Lett.* 2015. pii: S0304-3835(15)00195-0. doi: 10.1016/j.canlet.2015.03.015.
- Kafka A, Tomas D, Beroš V, Pećina HI, Zeljko M, Pećina-Šlaus N. Brain metastases from lung cancer show increased expression of DVL1, DVL3 and beta-catenin and down regulation of E-cadherin. *Int J Mol Sci.* 2014; 15(6):10635-51. doi:10.3390/ijms150610635
- Pećina-Šlaus N, Kafka A, Tomas D, Marković L, Okštajner PK, Sukser V, Krušlin B. Wnt signaling transcription factors TCF-1 and LEF-1 are upregulated in malignant astrocytic brain tumors. *Histol Histopathol.* 2014; 29:1557-64.
- Pećina-Šlaus N, Gotovac K, Kafka A, Tomas D, Borovečki F. Genetic changes observed in a case of adult pilocytic astrocytoma revealed by array CGH analysis. *Mol Cytogenet.* 2014;7(1):95. doi: 10.1186/s13039-014-0095-2. eCollection 2014.
- Watson JD, Baker TA, Bell SP, Gann A, Levine M, Richard Losick R. *Molecular Biology of the Gene.* Benjamin Cummings Cloth, 912 pp. 2013. (selected chapters)
- Pećina-Šlaus N. Merlin the NF2 gene product. *Pathol Oncol Res.* 2013; 19(3):365-73. doi. 10.1007/s12253-013-9644-y
- Pećina-Šlaus N, Cicvara-Pecina T, Kafka A. Epithelial-to-mesenchymal transition: possible role in meningiomas. *Front Biosci.* 2012;E4:889-96.
- van Wolfswinkel JC and Ketting RF. The role of small non-coding RNAs in genome stability and chromatin organization. *J Cell Science.* 2010;123: 1825-39. doi:10.1242/jcs.061713
- Sambrook J, Russell DW. *Molecular cloning. A laboratory manual.* 3rd ed. Cold Spring Harbor, CSH Laboratory Press; 2001.(selected chapters).

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Essay from novel scientific literature and written exam.

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

ORDINAL NUMBER: 56

TITLE OF COURSE/MODULE: Neurobiology of aging

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Goran Šimić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Mirjana Babić Leko

Nataša Jovanov Milošević

Željka Krsnik

Goran Šimić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

The goal of this course is to present neuropathological, molecular and genetic features of brain diseases related to aging, features of aging of neuronal cells, as well as experimental models for studying cellular aging. The course is divided into following topics: Experimental models of aging (in *Saccharomyces cerevisiae*, *Caenorhabditis elegans*, *Drosophila melanogaster* and *Mus musculus*); Evolutionary theories and theoretical models of aging; Neurobiological basis of human progeroid syndromes: Werner syndrome, Hutchinson-Gilford syndrome, Down and Cockayne syndrome, and ataxia teleangiectasia; Neuropathology of Alzheimer's disease; Sporadic and familial Alzheimer's disease; Biomarkers of Alzheimer's disease; Genetic and molecular features of primary tauopathies, including PART (primary age-related tauopathy); Neurobiological basis of the vascular dementia spectrum; Neurobiological basis of frontotemporal dementia (primarily due to frontotemporal lobar degeneration FTLD-Tau and FTLD-TDP); Neurobiological basis of Lewy body disease (the group of synucleinopathies that include Parkinson's disease and Lewy body disease); Molecular-biological diagnostics and neuropathological picture of Creutzfeldt-Jacobs disease and human spongiform encephalopathy; Neurobiological basis of age-related diseases of the motor system with special emphasis on amyotrophic lateral sclerosis and C9ORF72 mutation; Shortening of telomeres, proteins interacting with telomeres and mechanisms of cell-cycle control associated with telomeres; Morphological, physiological and genetic changes of cells and tissues during aging and relationship between individual aging of cells and tissue aging; Neurodifferentiation and therapeutical use of neural stem cells for degenerative brain diseases; Methods for detection of different modes of neuronal cell death. Practical demonstrations include histochemistry, immunocytochemistry and immunofluorescence of beta-amyloid, alpha-synuclein, tau and other proteins implicated in pathogenesis of brain diseases related to aging; electrophoresis and Western blot of tau proteins; ISEL and TUNEL methods for detection of oligonucleosomal DNA fragments, and electron-microscopical analysis of neuronal cell death.

READING LIST (MANDATORY AND RECOMMENDED)

- Albert MS, DeKosky ST, Dickson D, Dubois B, Feldman HH, Fox NC, Gamst A, Holtzman DM, Jagust WJ, Petersen RC, Snyder PJ, Carrillo MC, Thies B, Phelps CH. The diagnosis of mild cognitive impairment due to Alzheimer's disease: recommendations from the National Institute on Aging – Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. *Alzheimers Dement.* 2011; 7: 270-279.

- Braak, H., Thal, D.R., Ghebremedhin, E., and Del Tredici, K. Stages of the pathologic process in Alzheimer disease: age categories from 1 to 100 years. *J Neuropathol Exp Neurol*. 2011; 70: 960–969.
- Crary JF, Trojanowski JQ, Schneider JA, Abisambra JF, Abner EL, Alafuzoff I, Arnold SE, Attems J, Beach TG, Bigio EH, Cairns NJ, Dickson DW, Gearing M, Grinberg LT, Hof PR, Hyman BT, Jellinger K, Jicha GA, Kovacs GG, Knopman DS, Kofler J, Kukull WA, Mackenzie IR, Masliah E, McKee A, Montine TJ, Murray ME, Neltner JH, Santa-Maria I, Seeley WW, Serrano-Pozo A, Shelanski ML, Stein T, Takao M, Thal DR, Toledo JB, Troncoso JC, Vonsattel JP, White CL 3rd, Wisniewski T, Woltjer RL, Yamada M, Nelson PT. Primary age-related tauopathy (PART): a common pathology associated with human aging. *Acta Neuropathol* 2014; 128: 755-766.
- Grinberg LT, Rüb U, Ferreti REL, Nitrini R, Farfel JM, Polichiso L, Gierga K, Jacob-Filho W, Heinsen H. The dorsal raphe nucleus shows phospho-tau neurofibrillary changes before the transentorhinal region in AD. A precocious onset? *Neuropathol Appl Neurobiol* 2009; 35: 406-416.
- Hyman BT, Phelps CH, Beach TG, Bigio EH, Cairns NJ, Carillo MC, Dickson DW, Duyckaerts C, Frosch MP, Masliah E, Mirra SS, Nelson PT, Schneider JA, Thal DR, Thies B, Trojanowski JQ, Vinters HV, Montine TJ. National Institute on Aging - Alzheimer's Association guidelines for the neuropathological assessment of Alzheimer's disease. *Alzheimers Dement*. 2012; 8: 1-13.
- Iba M, Guo JL, McBride JD, Zhang B, Trojanowski JQ, Lee VM. Synthetic tau fibrils mediate transmission of neurofibrillary tangles in a transgenic mouse model of Alzheimer's-like tauopathy. *J. Neurosci* 2013; 33: 1024-1037.
- Jellinger KA, Alafuzoff I, Attems J, Beach TG, Cairns NJ, Crary JF, Dickson DW, Hof PR, Hyman BT, Jack CR Jr., Jicha GA, Knopman DS, Kovacs GG, Mackenzie IR, Masliah E, Montine TJ, Nelson PT, Schmitt F, Schneider JA, Serrano-Pozo A, Thal DR, Toledo JB, Trojanowski JQ, Troncoso JC, Vonsattel JP, Wisniewski T. PART, a distinct tauopathy, different from classical sporadic Alzheimer disease. *Acta Neuropathol* 2015; 129: 757-762.
- Kopeikina K., Hyman B., Spires-Jones T., Soluble forms of tau are toxic in Alzheimer's disease, *Transl. Neurosci*. 2012; 3: 223-233.
- Kovacs GG (Ed.) *Neuropathology of Neurodegenerative Diseases Book and Online: A Practical Guide*, Cambridge University Press: Cambridge, 2014.
- Love S, Perry A, Ironside J, Budka H, (eds.) *Greenfield's neuropathology*, 9th ed., CRC Press: London, 2015.
- Mackenzie, I.R., Neumann, M., Bigio, E.H., Cairns, N.J., Alafuzoff, I., Kril, J., Kovacs GG, Ghetti B, Halliday G, Holm IE, Ince PG, Kamphorst W, Revesz T, Rozenmuller AJ, Kumar-Singh S, Akiyama H, Baborie A, Spina S, Dickson DW, Trojanowski JQ, Mann DM. Nomenclature and nosology for neuropathologic subtypes of frontotemporal lobar degeneration: an update. *Acta Neuropathol*. 2010; 119: 1-4.
- McKhann GM, Knopman DS, Chertkow H, Hyman BT, Jack CR Jr, Kawas CH, Klunk WE, Koroshetz WJ, Manly JJ, Mayeux R, Mohs RS, Morris JC, Rossor MN, Scheltens P, Carrillo MC, Thies B, Weintraub S, Phelps CH. The diagnosis of dementia due to Alzheimer's disease: recommendations from the National Institute on Aging – Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. *Alzheimers Dement*. 2011; 7: 263-269.
- Montine TJ, Phelps CH, Beach TG, Bigio EH, Cairns NJ, Dickson DW, Duyckaerts C, Frosch MP, Masliah E, Mirra SS, Nelson PT, Schneider JA, Thal DR, Trojanowski JQ, Vinters HV, Hyman BT (2012) National Institute on Aging - Alzheimer's Association guidelines for the neuropathologic assessment of Alzheimer's disease: a practical approach. *Acta Neuropathol*. 123: 1-11.
- Nelson PT, Alafuzoff I, Bigio EH, Bouras C, Braak H, Cairns NJ, Castellani RJ, Crain BJ, Davies P, Del Tredici K, Duyckaerts C, Frosch MP, Haroutunian V, Hof PR, Hulette CM, Hyman BT, Iwatsubo T, Jellinger KA, Jicha GA, Kövari E, Kukull WA, Leverenz JB, Love S, Mackenzie IR, Mann DM, Masliah E, McKee AC, Montine TJ, Morris JC, Schneider JA, Sonnen JA, Thal DR, Trojanowski JQ, Troncoso JC, Wisniewski T, Woltjer RL, Beach TG. Correlation of Alzheimer's disease neuropathologic



changes with cognitive status: a review of the literature. J Neuropathol Exp Neurol 2012; 71: 362-381.

- Additional new publications related to the course themes; publications for the work in the small groups (seminars and journal clubs) will be updated before every lecture. Attendees are expected to add publications and change themes according to self-interest.

DESCRIPTION OF INSTRUCTION METHODS: Closing seminar: critical analysis of a selected scientific paper related to the course content ("journal club").

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Completion of group work – a written report/essay/presentation.

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 57

TITLE OF COURSE/MODULE: Fetal and neonatal neurophysiology, fetal behavior

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Aida Salihagić Kadić, MD, PhD, Professor Vlatka Mejaški Bošnjak, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Dubravko Habek
Ivica Kostović
Vlatka Mejaški Bošnjak
Berivoj Mišković
Zdravko Petanjek
Aida Salihagić Kadić
Milan Stanojević

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 23

OUTLINE OF COURSE/MODULE CONTENT

Fetal and neonatal physiology. Structural and functional development of central nervous system. Morphogenesis and histogenesis telencephalon in the light of new knowledge about human specific developmental mechanisms. Recent findings in fetal neurophysiology and behaviour. Adaptation of fetus to stress. Ultrasound patterns of fetal behavior in the first and second trimester of pregnancy. New method, four-dimensional (4D) ultrasound in assessment of fetal behavior and new optimality scoring system for fetal neurobehavior. Clinical application of 4D ultrasound. Hemodynamic parameters, followed by cerebro-umbilical ratio and motor parameters, followed by 4D ultrasound, in prevention of perinatal brain damage of hypoxic fetuses. Intrauterine origin of adult diseases. Behavioral pattern continuity from prenatal to postnatal life. Early neurological development of the child. Primitive reflexes and posture reactions. Spontaneous movements in «fidgety» period. Intracranial ultrasound in neonatal period. Final seminar: critical analysis of article chosen from scientific literature related to course content («journal club»).

READING LIST (MANDATORY AND RECOMMENDED)

- Salihagić-Kadić A, Mejaški-Bošnjak V and colabor. Fetal and neonatal neurophysiology, fetal behavior. Editors of manual: Salihagić Kadić A, Mejaški-Bošnjak V. Zagreb, Medicinska naklada 2013.
- Salihagić Kadić A, Predojević M. Fetal neurophysiology according to gestational age. Semin Fetal Neonatal Med 2012;17(5):256-60.
- Salihagić Kadić A. Fetal Neurology: The Role of Fetal Stress. Donald School Journal of Ultrasound in Obstetrics and Gynecology 2015; 9(1):30-39.
- Stanojevic M. Neonatal aspects: Is there continuity? Donald School J Ultrasound Obstet Gynecol 2012;6 (2):189-96.
- Mejaški Bošnjak V. Rani neurološki razvoj djeteta. Pediatr Croat 2008; 52:36-42.
- Mejaški Bošnjak V. Đuranović V. Ultrazvuk u dijagnostici ranog oštećenja mozga, skripta uz tečaj SMU Medicinskog fakulteta u Zagrebu, 2015.
- Predojević M, Talić A, Stanojević M, Kurjak A, Salihagić Kadić A. Assessment of motoric and hemodynamic parameters in growth restricted fetuses – case study. J Matern Fetal Neonatal Med 2014; 27 (3): 247-251.

- Salihagić Kadić A, Predojević M. What We have Learned from Fetal Neurophysiology? Donald School Journal of Ultrasound in Obstetrics & Gynecology 2012; 6(2) :179-188.
- Stanojevic M, Talic A, Miskovic B, Vasilj O, Naim Shaddad A, Ahmed B, Salihagic Kadic A, Predojevic M, Vladareanu R, Lebit D, Abu-Yaqoub S, Al-Noobi M, Pooh RK. An attempt to standardize Kurjak's Antenatal Neurodevelopmental Test: Osaka Consensus Statement. Donald School Journal of Ultrasound in Obstetrics and Gynecology 2011;5:317-29.
- Pooh RK, Kurjak A (ur.). Fetal Neurology. Jaypee Brothers: New Delhi, 2009.
- Habek D, Salihagić A, Jugović D, Herman R. Doppler cerebro-umbilical ratio and fetal biophysical profile in the assessment of peripartal cardiotocography in growth-retarded fetuses. Fetal Diagn Ther 2007;22(6):452-6.
- Heineman KR, Middelburg KJ, Bos et al. Reliability and concurrent validity of the Infant Motor Profile. Devel Med Res Child Neurol 2013, 55:539-545.
- Mejaški Bošnjak V. Dijagnostički priptup ranom otkrivanju neurorazvojnih odstupanja. Pediatr Croat 2007, 51: 105- 110.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam (essay) and oral exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 58

TITLE OF COURSE/MODULE: Movement disorders

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Maja Relja MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Fran Borovečki
Ivana Jurjević
Nataša Klepac
Zdravko Lacković
Vladimir Miletić
Maja Relja
Jadranka Sertić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 25

OUTLINE OF COURSE/MODULE CONTENT

Pathophysiology and pathogenesis of movement disorders, clinical presentation and differential diagnosis of movement disorders with video seminars, new diagnostic tools and therapy in movement disorders.

READING LIST (MANDATORY AND RECOMMENDED)

- Lacković Z Neurotransmitori u zdravlju i bolesti Medicinski fakultet 1997
- Watts R Koller WC (eds) Movement Disorders: Neurological Principle and Practice The Mac Graw Hill 2014
- Donaldson I, Marsden CD, Schneider S, Bhatia K (eds) Marsdens Book on Movement Disorders. Oxford Un Press 2014
- Scientific Journals (Movement Disorders, Parkinsonis anf Related Disorders)
- Berrardelli A, Wenning G, Antonini A, Berg D, ...Relja M, et al., EFNS/MDS-ES recommendations for the diagnosis of Parkinson's disease. European Journal of Neurology. 2013;20:34-46
- Albanese A, Abbruzzese G, Dressler D, Khathova S, Marti MJ, Montecucco C, Moro E, Relja M, Roze E ez al. Practical Guidance for cervical dystonia management involving botulinum toxin: a consensus statement. J Neurol 2015;pp1-13, 10.1007

DESCRIPTION OF INSTRUCTION METHODS: Lecture, seminar, video seminars, workshop,discussion group, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written test (essay)

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3,5

ORDINAL NUMBER: 59

TITLE OF COURSE/MODULE: Selected chapters of epileptology of developmental age

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Nina Barišić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Ivo Barić
Nina Barišić
Fran Borovečki
Nada Božina
Romana Gjergja Juraški
Goran Pavliša
Zdravko Petanjek
Jadranka Sertić
Goran Šimić
Goran Tešović
Vladimir Trkulja

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 32

OUTLINE OF COURSE/MODULE CONTENT

The subject consists of the following topics: .Epileptogenesis: Migration disorders, cerebral circulation and immunologic response in epileptogenesis in humans and in experimental animals. Pharmacogenomics and pharmacoproteinomics. Pathomechanism of oligodendroglial injury and hypoxic ischemic encephalopathy in neonates. Role of apoptosis, calcium and ion channels in neurogenesis and epileptogenesis. Medial temporal lobe development and its role in epileptogenesis. Neurogenetics in epileptogenesis. Comparative genomic hybridization, gene sequencing , next generation sequencing, whole exome and whole genome sequencing in epileptic syndromes Chromosomopathies. Prenatal diagnosis (STR, microsatelits). Inherited metabolic disorders associated with epilepsy. Neurocutaneous syndromes in epileptogenesis. Epileptic syndromes. EEG: maturation and abnormalities. CNS inflammation: experimental models, molecular diagnostic, inflammatory mediators, intrathecal complements role. Morphologic and functional diagnostics of epileptogenesis: Magnetic resonance imaging: morphological abnormalities in hypoxic-ischemic encephalopathy in premature babies. Migration disorders and brain tumours. Stroke, hemoraghes and inflammation dynamic in functional sequencing. Mechanisms of antiepileptic drugs action. Pharmacogenetics. Pharmacogenomics and pharmacoproteinomics of antiepileptics. Polysomnography in epileptogenesis of epileptic encephalopathies and epileptic syndromes.

Practical work includes independent analysis of electroencephalographic graphoelements in EEG dependent on maturation and age related in specific epileptic syndromes and epileptic encephalopathies, analysis of semiology of specific epileptic syndromes and encephalopathies based on different seizure types video recordings, analysis of REM and non REM phase in specific epileptic syndromes. Practical training include also analysis of structural MRI brain abnormalities including focal cortical dysplasias, strokes, inflammatory and autoimmune brain disorders causing epileptic seizures.

In Journal club the participants individually prepare their presentations based on scientific literature relevant to the course and critically analyse the methodology, discussion and conclusions with other attendees.

READING LIST (MANDATORY AND RECOMMENDED)

- Handout: Selected chapters of epileptology of developmental age, ED. Barišić N.
- Barišić N.: Pedijatrijska neurologija, Medicinska naklada, Zagreb 2009
- Niedermeyer's Electroencephalography: Basic Principles, Clinical Applications, and Related Fields, Donald L. Schomer MD (Editor), Fernando Lopes da Silva MD PhD (Editor) Wolters Kluwer /Lippincott William&Wilkins,2012; free download (app) at www.amazon
- Helbig I. New technologies in molecular genetics: the impact on epilepsy research. Prog Brain Res. 2014;213:253-78. Doi
- Kobow K, Blümcke I. Epigenetic mechanisms in epilepsy. Prog Brain Res. 2014;213:279-316.
- Hani AJ, Mikati HM, Mikati MA. Genetics of pediatric epilepsy. Pediatr Clin North Am. 2015 Jun;62(3):703-22.
- Abdijadid S1, Mathern GW, Levine MS, Cepeda C. Basic mechanisms of epileptogenesis in pediatric cortical dysplasia. CNS Neurosci Ther. 2015 Feb;21(2):92-103.
- Wong M. Mammalian target of rapamycin (mTOR) pathways in neurological diseases. Biomed J. 2013 Mar-Apr;36(2):40-50.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical, journal club

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written and oral, and ppt presentation of the article related to subject

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 4,5

ORDINAL NUMBER: 60

TITLE OF COURSE/MODULE: Selected topics in transplantation immunology

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Danka Grčević, MD, PhD, Assoc. Prof. Nataša Kovačić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Danka Grčević
Tomislav Kelava
Nataša Kovačić
Alan Šućur

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 19

OUTLINE OF COURSE/MODULE CONTENT

Course will include 2 lectures, 2 seminars with paper discussion („journal club“), 2 practicals, and final (round table) discussion.

Lectures (2x90 minutes) will introduce students to basic concepts of molecular and cellular immunology related to experimental and clinical tissue- and organ-transplantation, topics (total 2): 1. Regulation of the immune response and immunological tolerance, 2. Transplantation rejection and graft versus host reaction.

Seminars (2x90 minutes) will include small student groups in the form of “journal club”. Students will present relevant and recent publications related to selected fields of transplantation immunology including discussion of methods, results and conclusions, topics (total 2): 1. Transplantation of solid non-lymphoid organs, and 2. Transplantation of lymphoid tissues. Students' presentation will be evaluated to present 50% percent of total score.

Practicals (2x135 minutes) will consist of individual lab work to introduce students to practical procedures related to methods commonly used in the field of transplantation immunology, topics (total 2): 1. Lymphocyte proliferation after polyclonal stimulation – a) preparation of cell suspensions and plating, b) cell labeling and colorimetric measurement of proliferation; 2. Surface phenotyping of murine hematopoietic stem cells and mature hematopoietic lineages – a) preparation of cell suspensions and antibody labeling, b) multicolor flow cytometry analysis (FACS). At the end of the practicals, students need to describe used methods in a form of laboratory protocol, which will be evaluated to present 25% percent of total score.

Subject will conclude with the final critical discussion (“round table”) regarding the acquired knowledge and skills, and their possible implementation in research and clinical work in accord to the principles of evidence based medicine. Student participation will be evaluated to present 25% percent of total score.

READING LIST (MANDATORY AND RECOMMENDED)

- Murphy K. Janeway's Immunobiology, 8th edition. New York: Garland Science, Taylor & Francis Group; 2011.
- Abbas AK, Lichtman AH, Pillai S. Cellular and molecular immunology, 8th edition. Philadelphia – London – Toronto: Saunders Elsevier; 2014.



- Andreis I, Batinić D, Čulo F, Grčević D, Marušić M, Taradi M, Višnjić D. Imunologija, 7. izdanje. Taradi M (ur.). Zagreb: Medicinska naklada, 2010.
- Labar B, Hauptmann E, urednici. Hematologija, 4. izdanje. Zagreb: Školska knjiga; 2007.
- Geha R, Notarangelo L. Case studies in immunology: A clinical companion, 6th edition. New York: Garland Science, Taylor & Francis Group; 2011.
- Recent scientific articles related to the chosen topics in transplantation immunology will be used in seminars („journal club“). Students will be requested to select the article and present it during journal club, after consultation and approval of lecturers.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars („journal club“and „round table discussion“), practicals.

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Article presentation „journal club“ (50%), drafting of research protocol (25%), participation in final discussion (25%).

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 61

TITLE OF COURSE/MODULE: Selected animal models of psychiatric disorders

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Nela Pivac, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Gordana Nedić Erjavec

Matea Nikolac Perković

Nela Pivac

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 12

OUTLINE OF COURSE/MODULE CONTENT

Introductory lecture about animal models; animal models of anxiety, fear and depression; Animal models of schizophrenia and mania; Animal models of PTSD and ADHD; Practical work; Forced swimming test; rotarot test; Animal models of alcoholism and neurodegeneration; Presentation of biochemical and genetic methods used to determine markers from biological materials; statistical analysis of the results; Presentation of the scientific articles from the field of animal models of neuropsychiatric disorders

READING LIST (MANDATORY AND RECOMMENDED)

- Belzung C, Lemoine M. Criteria of validity for animal models of psychiatric disorders: focus on anxiety disorders and depression. *Biol Mood Anxiety Disord.* 2011; 1:9 doi:10.1186/2045-5380-1-9.
- Davis BA, Isles AR. Modelling the genetic contribution to mental illness: a timely end for the psychiatric rodent? *Eur J Neurosci.* 2014; 39: 1933–1942.
- Donaldson ZR, Hen R. From psychiatric disorders to animal models: a bidirectional and dimensional approach. *Biol Psychiatry.* 2015; 77:15-21
- Edwards S, Koob GK. Experimental Psychiatric Illness and Drug Abuse Models: From Human to Animal, an Overview. *Methods Mol Biol.* 2012; 829: 31–48.
- Mitchell KJ, Huang ZJ, Moghaddam B, Sawa A. Following the genes: a framework for animal modeling of psychiatric disorders. *BMC Biology.* 2011; 9:76 doi:10.1186/1741-7007-9-76.
- Molet J, Maras PM, Avishai-Eliner S, Baram TZ. Naturalistic rodent models of chronic early-life stress. *Dev Psychobiol.* 2014; 56:1675-88.
- Nestler EJ, Hyman SE. Animal models of neuropsychiatric disorders. *Nat Neurosci.* 2010; 13:1161-1169.
- Salgado JV, Sandner G. A critical overview of animal models of psychiatric disorders: challenges and perspectives. *Rev Brasileira Psiquiatr.* 2013;35:S77–S81.
- Schmidt U, Keck ME, Buell DR. miRNAs and other non-coding RNAs in posttraumatic stress disorder: A systematic review of clinical and animal studies. *J Psychiatr Res* 2015; 65:1-8.
- Wang HN, Bai YH, Chen YC, Zhang RG, Wang HH, Zhang YH, Gan JL, Peng ZW, Tan QR. Repetitive transcranial magnetic stimulation ameliorates anxiety-like behavior and impaired sensorimotor gating in a rat model of post-traumatic stress disorder. *PLoS One.* 2015; 6;10(2):e0117189.
- Yadid G, Nakash R, Deri i, Tamar G, Kinor N, Gispan I, Zangen A. Elucidation of the neurobiology of depression. Insights from a novel genetic model. *Progress Neurobiol.* 2000;62:353-378.
- Norman TR, McGrath C. Stress induced animal models of depression. *Stress Med.* 2000; 16:195-197.
- Willner P. Stress and depression: insights from animal models. *Stress Med.* 1997;13:229-233.

- Nestler EJ, Gould E, Manji H, Bucan M, Duman RS, Gershenfeld HK, Hen R, Koester S, Lederhendler i, Meany MJ, Robbins T, Winsky L, Zaloman S. Preclinical models: status of basic research in depression. *Biol Psychiatry*. 2002; 52:503-528.
- Russo-Neustadt A, Ha T, Ramirez R, Kessler P. Physical activity-antidepressant treatment combination. Impact on brain-derived neurotrophic factor and behavior in an animal model. *Behav Brain Res*. 2001; 120: 87-95
- Pardon MC, Gould GG, Garcia A, Phillips L, Cook C, Miller SA, Mason PA, Morilak DA. Stress reactivity of the brain noradrenergic system in three rat strains differing in their neuroendocrine and behavioral response to stress. Implications for susceptibility to stress-related neuropsychiatric disorders. *Neuroscience*. 2002; 115: 229-242.
- Cryan JF, Markau A, Irwin Lucki. Assessing antidepressant activity in rodents. Recent developments and future needs. *Trends Pharmacol Sci*. 2002;23: 238-245.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, practical work, seminars

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written test

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 1,5

ORDINAL NUMBER: 62

TITLE OF COURSE/MODULE: Characteristics of clinical medical research

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Associate Professor Robert Likić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Ana Borovečki
Viktorija Erdeljić Turk
Robert Likić
Ksenija Makar Aušperger
Ingrid Prkačin
Matea Radačić Aumiler

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

By its content, the course includes important parts of the characteristics of clinical medical research in the form of lectures, seminars and exercises. It is attempted to illustrate these topics to attendants through concrete examples of clinical trials and the experiences of clinical pharmacologists. The course consists of the following topics: Controlled clinical trials as the only scientific evidence of the value of therapy, Ethics of clinical trials, Trials of comparative efficacy in medicine, The choice of diagnostic procedure in the example of kidney tumor, Statistics in clinical trials: friend or foe, Clinical medical trials in clinical pharmacology, Difference between interventional and non-interventional trials, Examples of randomized clinical trials, International scientific collaboration, writing of projects and securing grants, Phase IV clinical trials, Comparisons of cost-efficacy: examples of pharmacoeconomic analyses. The course ends by written exam.

READING LIST (MANDATORY AND RECOMMENDED)

- Dr. Stephen B Hulley, Steven R Cummings, Warren S Browner, Deborah G Grady, Thomas B Newman. Designing Clinical Research. Fourth Edition. 2013 by Lippincott Williams and Wilkins, ISBN 978-1-60831-804-9
- Jeremy Howick. The Philosophy of Evidence-based Medicine. 2011 by Wiley-Blackwell, ISBN: 978-1-4051-9667-3
- Khalid Khan, Regina Kunz, Jos Kleijnen and Gerd Antes. Systematic Reviews to Support Evidence-based Medicine. Second Edition. 2011 by Taylor and Francis Group. ISBN: 978-1-85315-794-3
- Aviva Petrie and Caroline Sabin: Medical Statistics at a Glance, July 2009, Wiley-Blackwell, ISBN: 978-1-4051-8051-1
- Statistics at Square One (Paperback) by Michael J. Campbell WileyBlackwell; 11th Edition edition (21 Aug 2009), ISBN-13: 978-1405191005
- Newest scientific reviews related to the content of the course.
- Kenneth W. Goodman. Ethics in Evidence-based medicine. Cambridge University Press 2003. ISBN-13: 978-0-511-05521-8 eBook
- Tom Brody. Clinical Trials: Study Design, Endpoints and Biomarkers, Drug Safety, and FDA and ICH Guidelines. 2012 Elsevier Inc. ISBN: 978-0-12-391911-3

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars and practical work.

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam with 45 questions.



DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2

ORDINAL NUMBER: 63

TITLE OF COURSE/MODULE: Knowledge discovery in medical domains

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Dragan Gamberger, MD, PhD, research advisor; Prof. Zdenko Sonicki, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Dragan Gamberger
Zdenko Sonicki

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 30

OUTLINE OF COURSE/MODULE CONTENT

Data mining and its relation to statistics. Intelligent data analysis based on machine learning techniques for knowledge discovery tasks. Data collection and specification of data analysis goals. Machine learning tools appropriate for knowledge discovery. Illustrative example. Data preparation and attribute types. Handling unknown values and data enumeration. Data mining server, its properties and application. Definition of classification tasks and data formalization. Web interface for user communication. Parameters of the induction process. Understanding of constructed models and list of outliers. Mistakes in data preparation. Interpretation of the results, knowledge formulation, statistical evaluation. Interpretation of attribute relevance and non-obvious connections among attributes. Interpretation of contradictions, sets of rules, and boundary values in rules. Decision tree algorithm and market basket analysis algorithm. Weka and Rapid Miner suites and their applications. Exercises: Practical work on real research tasks in medical domains, aimed at data selection and data transformation, induction of models, and model interpretation. Application of various knowledge discovery tools and comparative analysis of the results. Report – research paper: Students themselves identify data related to their current research interests, with the help of the course leaders they prepare it for the analysis, execute appropriate procedures, and interpret result in the context of the current medical knowledge. Paper selected for the journal club: „Gamberger, D., Lavrač, N. Expert-guided subgroup discovery: Methodology and Application. Journal of Artificial Intelligence Research 2002; 17:501-527”. The paper illustrates the process of interpretation of the results obtained by rule learning aimed at acquiring novel knowledge.

READING LIST (MANDATORY AND RECOMMENDED)

- Gamberger D. Data Mining for Knowledge Discovery. Handbook for researchers and students (in Croatian)
- <http://lis.irb.hr/Prirucnik/prirucnik-otkrivanje-znanja.pdf>
- Data mining and knowledge discovery. Springer (journal).
- Journal of biomedical informatics. Elsevier.
- Intelligent data analysis. IOS Press (journal).
- Witten IH, Frank E, Hall MA. Data Mining: Practical Machine Learning Tools and Techniques. Amsterdam: Elsevier, Third Edition; 2011.
- Liu H, Motoda H. Computational methods of feature selection. Boca Raton, USA: CRC Press; 2007.
- Fuernkranz J, Gamberger D, Lavrac N. Foundations of Rule Learning. Heidelberg: Springer Verlag; 2012.



- Rokach L, Maimon O. Data Mining with decision trees. Singapore: World Scientific Publishing. 2008.
- Berhold MR, Hand DJ. Intelligent data analysis. Heidelberg: Springer Verlag; 2007.
- Berhold MR, Borgelt C, Hoepfner F, Klawonn F. Guide to intelligent data analysis. Heidelberg: Springer Verlag; 2010.

DESCRIPTION OF INSTRUCTION METHODS

Lectures and seminars teaching all relevant parts of the data preparation process, data analysis, and interpretation of the obtained results. For illustration real medical data are used. In the practical part the lectures help students to repeat relevant data analysis steps. It is recommended that student use data that they have collected themselves during their PhD study.

DESCRIPTION OF COURSE/MODULE REQUIREMENTS

Preparation of a report (research paper) in which the student demonstrates how he solved all parts of the data analysis process on a real medical domain. It is recommended that data are related to topic of the student's PhD thesis. In the oral part of the examination the results of the report are analysed and general understanding of basic knowledge discovery concepts is evaluated.

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 4,5

ORDINAL NUMBER: 64

TITLE OF COURSE/MODULE: Pathophysiology of the brain and the CSF

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Marijan Klarica, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Silvio Bašić
Ivana Jurjević
Marijan Klarica
Jurica Maraković
Darko Orešković
Milan Radoš
Anton Vladić
Miroslav Vukić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

Brain barrier system, regulation of the brain blood circulation, measurement of the brain blood flow, regulation of the CSF volume- classical and new hypothesis, biochemical dynamics and diagnostic significance of the CSF, increased intracranial pressure, clinical approach to the intracranial hypertension, hydrocephalus, brain, ischemia, infarction, oedema, practice in regulation of the intracranial pressure, diagnostic imaging of the brain and CSF, discussion about the pathophysiology of the brain and CSF

READING LIST (MANDATORY AND RECOMMENDED)

- Davson H, Welch K, Segal M: Physiology and pathophysiology of the cerebrospinal fluid. Churchill Livingstone, Edinburgh, 1987;
- Manley GT et al. (eds): Intracranial pressure and Brain Monitoring XIII Springer, Wien-New York, 2008.
- Schuhmann UM, Czosnyka M (eds.): Intracranial pressure and brain monitoring XIV, Springer, Wien-New York, 2012.
- Irani DN: Cerebrospinal fluid in clinical practice, Saunders Elsevier, Philadelphia, 2009.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practice, final seminar: critical analysis of the chosen scientific papers from the field

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written examination (test)

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 65

TITLE OF COURSE/MODULE: Pathogenesis of infective diseases

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Jasmina Vraneš, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Nataša Beader
Branka Bedenić
Rok Čiviljak
Alenka Gagro
Smilja Kalenić
Sunčanica Ljubin Sternak
Alemka Markotić
Jasmina Vraneš

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 30

OUTLINE OF COURSE/MODULE CONTENT

General principles: microbial pathogenicity, virulence factors, pathogenicity islands, vertical and horizontal transmission of infection, exogenous infections, endogenous infections, normal microbial flora of the human host, probiotics, nonimmunologic host defenses. Adherence: ubiquitous receptors, bacterial adhesions, viral adhesion and invasion, parasitic attachment, tissue tropism, species specificity. Invasion: invasive and noninvasive microorganisms, enteroinvasive pathogens and the membranous cell gateway. Intracellular motility of microbial pathogens: passive and active actin modification. Subepithelial invasion and spread through the body: infection of distant target organs, serum resistance. Cell and tissue damage induced by bacteria, viruses and parasites and their products: exotoxins, endotoxin, membrane-disrupting toxins, superantigens, enzymes, apoptosis, virus-induced cytopathic effects. The immune response to infection. How microorganisms escape host defense: surviving the phagocyte and complement attack, surviving within phagocytes, antigenic and phase variations, tolerance, immunosuppression induced by microbial infection, microbial presence in bodily sites inaccessible to the immune response. Recovery from infection. Failure to eliminate microbe: latency, persistent infections. Effect of antibiotics on bacterial virulence factors. Methods: determination and quantification of bacterial adhesins, determination of the adherence to polystyrene measured by spectrophotometric assay, measurement of hemolytic activity by use of the microtiter hemolysin assay, detection of bacterial enzymes, serum sensitivity testing and genetic methods of bacterial virulence factors detection. Detection of virus-induced cytopathic effects and cytoplasmic and intranuclear inclusion bodies in different cell lines. Serology: specific and nonspecific serologic methods, determination and/or titration of IgM, IgG and IgA antibodies, determination of specific IgG avidity by use of the adapted enzyme-linked immunosorbent assay. Critical analysis of selected paper from scientific literature related to the course subject.

READING LIST (MANDATORY AND RECOMMENDED)

- Mims C i sur. Mims' Pathogenesis of Infectious Diseases. 6th ed. London: Academic Press, 2015. http://www.ebook3000.com/Mims--Pathogenesis-of-Infectious-Disease_21762.html

- Relman DA, Falkow S. A molecular perspective of microbial pathogenicity. In: Mandel GL, Benett JE, Dolin R. principles and Practice of Infectious Diseases. 8. ed. Philadelphia: Elsevier Inc., 2015:3-14.
- Hewlett EL, Hughes MA. Toxins. In: Mandel GL, Benett JE, Dolin R. principles and Practice of Infectious Diseases. 8th ed. Philadelphia: Elsevier Inc., 2015:27-35.
- Petri WA, Mann BJ, Huston CD. Microbial adherence. In: Mandel GL, Benett JE, Dolin R. Principles and Practice of Infectious Diseases. 8th ed. Philadelphia: Elsevier Inc., 2015:15-26.
- Janeway CA, Travers P. Immunobiology. The Immune System in Health and Diseases. 7th ed, New York: Garland Science Publishing, 2008.
- Nolte FS, Caliendo AM. Molecular microbiology. In: manual of clinical microbiology. 10th ed. Washington DC: ASM Press, 2011:27-59.
- Murray PR, Rosenthal KS, Pfaller MA. Medical microbiology. 7th ed. Philadelphia: Elsevier Saunders, 2013.
- Levinson W. Pathogenesis. In: Lewinson W. Review of medical microbiology and immunology. 12th ed. New York: McGraw-Hill Companies Lange, 2012:31-51.
- Carroll KC. Pathogenesis of bacterial infection. In: Brooks GF, Carroll KC, Butel JS, Morse SA, Mietzner T. Jawetz, Melnick & Adelberg's medical microbiology. 26th ed. New York: McGraw-Hill Companies Lange, 2013:149-164.
- Vranes J. Patogeneza bakterijskih infekcija. In: Kalenić S i sur. Medicinska mikrobiologija. Zagreb: Medicinska naklada, 2013:86-96.
- Selected scientific papers.

DESCRIPTION OF INSTRUCTION METHODS: Four sessions: lectures, seminars (group work), practices and journal club.

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Questionnaire (single choice and multiple choices)

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 4,5

ORDINAL NUMBER: 66

TITLE OF COURSE/MODULE: Use of doppler ultrasound in research and diagnosis of diseases of blood vessels

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Boris Brkljačić, MD, PhD, Assist. Prof. Gordana Ivanac, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Boris Brkljačić
Diana Delić Brkljačić
Renata Huzjan Korunić
Gordana Ivanac

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

Physical basis of Doppler, 2 h lectures; Basic hemodynamics and interpretation of Doppler spectra, 2 h L; Areas of application of Doppler in modern medicine, 3h L; 8 h seminars in practical aspects of Doppler of peripheral arteries, veins, carotid, vertebral and cerebral arteries and visceral vessels. 5h of practicals in which different results will be analyzed in scientific research related to Doppler, using examples of diagnosis of ovarian cancer, liver and kidney tumors, diagnosis of rheumatoid arthritis, in echocardiography, and in other areas.

READING LIST (MANDATORY AND RECOMMENDED)

- Brkljačić B. Vascular Ultrasound (in Croatian). Medicinska naklada, Zagreb 2010; textbook of University of Zagreb.
- Brkljačić B. Angiological imaging methods (in Croatian). In: Vrhovac B et al. Internal medicine. Naklada Ljevak, Zagreb, 2008, pp. 456-459.
- Brkljačić B, Castellani S, Deane C, Dietrich CF. Doppler ultrasound of the aorta, inferior vena cava and visceral arteries. EFSUMB – European Course Book, Dietrich CF (Ed); 2012, pp. 693-714.
- Brkljačić B, Castellani S, Deane C, Dietrich CF. Doppler ultrasound of renal vessels. EFSUMB – European Course Book, Dietrich CF (Ed); 2012, pp. 715-736.
- Brkljačić B, Castellani S, Deane C, Dietrich CF. Ultrasound of peripheral veins. EFSUMB – European Course Book, Dietrich CF (Ed); 2012, pp. 737-758.
- Deane C, Brkljačić B, Castellani S. Ultrasound in vascular disease, Introduction. EFSUMB – European Course Book, Dietrich CF (Ed); 2012, pp. 675-692.
- Brkljačić B, Castellani S, Brkljačić B, Deane C, Lucente EAM, Dietrich CF. Ultrasound evaluation of cerebrovascular obstructive diseases. EFSUMB – European Course Book, Dietrich CF (Ed); 2012, pp. 759-91.
- Sidhu PS, Brkljačić B, Derchi LE. Ultrasound of the scrotum. EFSUMB – European Course Book, Dietrich CF (Ed); 2012, pp. 409-454.
- Ivanac G, Morović-Vergles J, Brkljačić B. Gray scale and color duplex Doppler ultrasound of hand joints in the evaluation of disease activity and treatment in rheumatoid arthritis. Croatian Medical Journal 2015;56(3):280-289.
- Jenssen C, Brkljačić B, Hocke M, Ignee A, Piscaglia F, Radjina M, Sidhu P, Dietrich CF. Ultrasound-guided vascular interventions- EFSUMB guidelines on interventional ultrasound, part VI. Ultraschall in Med 2015; in press
- The latest scientific reviews related to the content of the course



DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written examination: critical analysis of one published scientific paper in the area of the course (as determined during the „journal club“)

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 67

TITLE OF COURSE/MODULE: Proteomics in biomedical research

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Lovorka Grgurević, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Darko Božić
Igor Erjavec
Ivica Grgurević
Lovorka Grgurević
Dinko Mitrečić
Ruđer Novak
Vladimir Trkulja

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

Proteomics represents one of the key and fast-growing branches of molecular biology and medicine with capability to provide quantitative and qualitative analysis of proteins in cells, tissues and organism. Aim of this subject is general introduction to basic principles and methods of proteomics, specifically those based on mass spectrometry. Lectures will shortly describe history of proteomics and its basic strategies (protein electrophoresis, immunohistochemistry and Western-blot); mass spectrometry in global protein identification and quantification processes, as well as specific application in basic biomedical research. Participants will learn how to prepare the sample for analysis and will have opportunity to work with sophisticated proteomic machines (mass spectrometry, HPLC) and learn processing of results utilizing bioinformatics.

READING LIST (MANDATORY AND RECOMMENDED)

- Ang MY, Low TY, Lee PY, Wan Mohamad Nazarie WF, Guryev V, Jamal R. roteogenomics: From next-generation sequencing (NGS) and mass spectrometry-based proteomics to precision medicine. *lin Chim Acta*. 2019;498:38-46.
- Grgurevic L, Erjavec I, Grgurevic I, Dumic-Cule I, Brkljacic J, Verbanac D, Matijasic M, Paljetak HC, Novak R, Plecko M, Bubic-Spoljar J, Rogic D, Kufner V, Pauk M, Bordukalo-Niksic T, Vukicevic S. Systemic inhibition of BMP1-3 decreases progression of CCl4-induced liver fibrosis in rats. *Growth Factors*. 2017;35:201-215.
- Aebersold R, Mann M. 2003. Mass spectrometry-based proteomics. *Nature*. 422:198-207.
- Macek, B., Mann, M., Olsen, J.V. 2009. Global and site-specific quantitative phosphoproteomics: principles and applications. *Ann Rev Pharmacol* 49: 199-221
- Lipton, M.S., Pasa-Tolic, Lj. 2009. *Mass Spectrometry of Proteins and Peptides*. Springer, Berlin, ISBN: 9781934115480
- van Eyk, J.E., Dunn, J.M. (Editors). 2007. *Clinical Proteomics: From Diagnosis to Therapy*. Wiley-Vch, ISBN-13: 9783527316373
- Hotchkiss, J.L., Simpson, R.J. 2003. *Proteins and Proteomics: A Laboratory Manual*. Cold Spring Harbor Laboratory Press, ISBN: 9780879695545
- Alberts, B., Johnson, A., Lewis, J., Raff, M., Roberts, K., Walter, P. 2002. *Molecular Biology of the Cell*. 4. Edition, Garland Science, ISBN: 0815340729

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, practical work



DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 68

TITLE OF COURSE/MODULE: Understanding bone metabolism –basic science in clinical practice

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Vesna Kušec, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Darko Antičević
Danka Grčević
Vedran Katavić
Dalibor Krpan
Rajko Kušec
Vesna Kušec
Slobodanka Ostojić Kolonić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 17

OUTLINE OF COURSE/MODULE CONTENT

Current knowledge on the structure and function of skeletal tissues (bone cells and their origin, intercellular matrix, basic bone tissue functions); bone remodeling (systemic hormone, growth factors and other determinants); regulation of bone mass; potentials and limits of specific diagnostic methods in the assessment of bone status with regard to basic knowledge on the topic of bone cell actions (densitometry, histology, histomorphometry, biochemical parameters and bone markers, molecular biology, x-ray, computerised tomography, scintigraphy); explanation of etiology of most frequent disorders of bone metabolism (e.g. osteoporosis, renal osteodystrophy, bone involvement in malignant diseases, osteogenesis imperfecta, Mb. Paget), clarification of the results of diagnostic and monitoring methods, understanding treatment effects; the significance of research for comprehending bone metabolism, mechanisms of diseases and discovery of new treatment options (cell culture, experimental models, knock-out and overexpression of genes, comparison of phenotypes between experimental animals and human disorders). The course includes discussion on new osteoporosis therapy modalities and the role of bone system in energy metabolism. Seminars and practice – problem and case oriented teaching, discussions of clinical and laboratory results on typical examples of skeletal disorders, evidence based medicine on the topic of metabolic bone disorders (critical analysis of clinically relevant literature, recommendations, reviews, meta-analyses).

READING LIST (MANDATORY AND RECOMMENDED)

- recommended during the course
- current reviews on regulation of bone remodeling, vitamin D metabolism, etiology of osteoporosis and therapy modalities
- reading for journal club discussions is provided during the course
- current literature recommended by other lecturers of the course

DESCRIPTION OF INSTRUCTION METHODS: lectures, seminars, journal club

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written test (discussion of a research project in bone metabolism)

DESCRIPTION OF MONITORING OF TEACHING QUALITY



Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

ORDINAL NUMBER: 69

TITLE OF COURSE/MODULE: Human developmental neurobiology

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Ivica Kostović, MD, PhD, Prof. Miloš Judaš, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Sanja Darmopil
Nataša Jovanov Milošević
Miloš Judaš
Ivica Kostović
Željka Krsnik
Zdravko Petanjek

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 18

OUTLINE OF COURSE/MODULE CONTENT

Determination of basic spacio temporal parameters of neurogenesis in human, understanding of developmental lesions and plasticity, periods of genetic interactions and interactions with environment. Corelation of laminar development visible on histological material and MRI mages and neurogenetic events.

READING LIST (MANDATORY AND RECOMMENDED)

- Sedmak G, Judaš M. The total number of white matter interstitial neurons in the human brain. *J Anat.* 2019;235:626-636.
- Sedmak G, Jovanov-Milošević N, Puskarjov M, Ulamec M, Krušlin B, Kaila K, Judaš M. Developmental Expression Patterns of KCC2 and Functionally Associated Molecules in the Human Brain. *Cereb Cortex.* 2016 Dec;26(12):4574-4589.
- Abdel-Mannan, O., Cheung, A.F., and Molnar, Z. (2008). Evolution of cortical neurogenesis. *Brain Res Bull* 75, 398-404.
- Ayoub, A.E., and Kostović, I. (2009). New Horizons for the Subplate Zone and Its Pioneering Neurons. *Cereb Cortex.*
- Bystron, I., Blakemore, C., and Rakic, P. (2008). Development of the human cerebral cortex: Boulder Committee revisited. *Nat Rev Neurosci* 9, 110-122.
- Dehay, C., and Kennedy, H. (2007). Cell-cycle control and cortical development. *Nat Rev Neurosci* 8, 438-450.
- Fish, J.L., Dehay, C., Kennedy, H., and Huttner, W.B. (2008). Making bigger brains-the evolution of neural-progenitor-cell division. *J Cell Sci* 121, 2783-2793.
- Guillemot, F. (2007). Cell fate specification in the mammalian telencephalon. *Prog Neurobiol* 83, 37-52.
- Howard, B.M., Zhicheng, M., Filipovic, R., Moore, A.R., Antic, S.D., and Zecevic, N. (2008). Radial glia cells in the developing human brain. *Neuroscientist* 14, 459-473.
- Huang, Z.J., Di Cristo, G., and Ango, F. (2007). Development of GABA innervation in the cerebral and cerebellar cortices. *Nat Rev Neurosci* 8, 673-686.
- Jones, E.G. (2009). The Origins of Cortical Interneurons: Mouse versus Monkey and Human. *Cereb Cortex* 19, 1953-1956.
- Kostović, I., and Jovanov-Milosevic, N. (2006). The development of cerebral connections during the first 20-45 weeks' gestation. *Semin Fetal Neonatal Med* 11, 415-422.
- Kostović, I., and Vasung, L. (2009). Insights from in vitro fetal magnetic resonance imaging of cerebral development. *Semin Perinatol* 33, 220-233.

- Kostović, I., Jovanov-Milošević, N., and Petanjek, Z. (2007). Neuronal migration and cortical migratory disorders. *Paediatr Croat* 51, 179-190.
- Kostović, I., Judaš, M., and Petanjek, Z. (2008). Structural development of the human prefrontal cortex. In *Handbook of developmental cognitive neuroscience*, Nelson, C.A., and Luciana, M., eds. (Cambridge: MIT Press), pp. 213-235.
- Kostović, I., and Petanjek, Z. (2007). Developmental reorganization of the human cerebral cortex. *Paediatr Croat* 51 (Supl 1), 93-98.
- Kriegstein, A., Noctor, S., and Martinez-Cerdeno, V. (2006). Patterns of neural stem and progenitor cell division may underlie evolutionary cortical expansion. *Nat Rev Neurosci* 7, 883-890.
- Metin, C., Vallee, R.B., Rakic, P., and Bhide, P.G. (2008). Modes and mishaps of neuronal migration in the mammalian brain. *J Neurosci* 28, 11746-11752. 17. Meyer, G. (2007).
- Genetic control of neuronal migrations in human cortical development. *Adv Anat Embryol Cell Biol* 189, 1-111. 18. Molyneaux, B.J., Arlotta, P., Menezes, J.R., and Macklis, J.D. (2007).
- Neuronal subtype specification in the cerebral cortex. *Nat Rev Neurosci* 8, 427-437. 19. Petanjek, Z., Kostović, I., Esclapez, M. (2009).
- Primate-specific origins and migration of cortical GABAergic neurons. *Fron Neuroanat*. 20. Pierani, A., and Wassef, M. (2009).
- Cerebral cortex development: From progenitors patterning to neocortical size during evolution. *Dev Growth Differ* 51, 325-342.
- Rakic, P. (2006). A century of progress in corticogenesis: from silver impregnation to genetic engineering. *Cereb Cortex* 16 Suppl 1, i3-i17.
- Rakic, P., Ayoub, A.E., Breunig, J.J., and Dominguez, M.H. (2009). Decision by division: making cortical maps. *Trends Neurosci* 32, 291-301.
- Sarkisian, M.R., Bartley, C.M., and Rakic, P. (2008). Trouble making the first move: interpreting arrested neuronal migration in the cerebral cortex. *Trends Neurosci* 31, 54-61.
- Thompson, B.L., Levitt, P., and Stanwood, G.D. (2009). Prenatal exposure to drugs: effects on brain development and implications for policy and education. *Nat Rev Neurosci* 10, 303-312.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, Seminars, Practicals

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Journal Club, Essay

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

ORDINAL NUMBER: 70

TITLE OF COURSE/MODULE: Reproduction and workplace

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Assistant professor Milan Milošević, MD, PhD, Professor Jadranka Mustajbegović, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Jagoda Doko Jelinić
Davor Ježek
Milan Milošević
Jadranka Mustajbegović
Oliver Vasilj
Mirza Žižak

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 14

OUTLINE OF COURSE/MODULE CONTENT

Contents: Population under risk. Assessment of environmental pollutants exposure and their effects on reproduction and development: scientific methods and results. The importance of determining the levels of pollutants in the professional exposure in order to maintain the same biologically acceptable level to protect the workers' health. Recent knowledge on genetic monitoring, on the importance of recognition and identification of reproductive toxins. Recent knowledge on endocrine disruptors in human environment with emphasis on the potential of toxic metals (primarily cadmium) as endocrine disrupting chemicals. Own experience from research work in the field of reproductive toxicology of metals with examples of research protocols, interpretation of results and setting up conclusions. Physiology of reproduction. Vulnerable periods of organ and reproductive cells' development, vulnerable periods of embryonal and fetal development, neonatal and lactation period. Methods used in diagnostics of occupational diseases, with the special emphasis on their reproductive impact. Final session: journal-club type discussion on the article related to the course subjects.

READING LIST (MANDATORY AND RECOMMENDED)

- Mustajbegović J, Parazajder J. Reprodukcijska medicina. U: Medicina rada i okoliša (ur. Šarić i Žuškin). Medicinska naklada, Zagreb 2002; 525-29.
- WHO/EHC Publication 225. Principles for evaluating health risks to reproduction associated with exposure to chemicals. World Health Organization, Environmental Health Criteria series. Geneva: WHO Regional Office Europe. 2001.
- Barr DB, Bishop A, Needham LL. Concentrations of xenobiotic chemicals in the maternal-fetal unit. Reprod Toxicol 2007;23: 260-6.
- Crews D, McLachlan JA. Epigenetics, evolution, endocrine disruption, health, and disease. Endocrinology 2006;147(Suppl.): S4-S10.
- Aitken, R.J., N.E. Skakkebaek, and S.D. Roman, Male reproductive health and the environment. Med J Aust, 2006. 185(8): p. 414-5.
- Barazani, Y., et al., Lifestyle, environment, and male reproductive health. Urol Clin North Am, 2014. 41(1): p. 55-66.
- Caserta, D., et al., Environment and women's reproductive health. Hum Reprod Update, 2011. 17(3): p. 418-33.
- Merrick, J., The environment and reproductive health. Rev Environ Health, 2010. 25(4): p. 335-6.



- Chau, Y.M., S. West, and V. Mapedzahama, Night work and the reproductive health of women: an integrated literature review. J Midwifery Womens Health, 2014. 59(2): p. 113-26.
- Gonzalez, C., Occupational reproductive health and pregnancy hazards confronting health care workers. AAOHN J, 2011. 59(9): p. 373-6.
- Handouts from lectures

DESCRIPTION OF INSTRUCTION METHODS: Lectures and seminars

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Competition of group work – a written report, Questionnaire

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2

ORDINAL NUMBER: 71

TITLE OF COURSE/MODULE: Synaptic plasticity and mind disorders

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Ivica Kostović, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Miloš Judaš
Ivica Kostović
Zdravko Petanjek
Milan Radoš
Mario Vukšić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 14

OUTLINE OF COURSE/MODULE CONTENT

Morphology and histology of the limbic system and hippocampal formation. Brain recovery following injury (entorhinal cortex lesion as an experimental model system). Systems of acetylcholine, monoamine and glutamate-containing neurons in human brain, different hypothesis for the aetiology of schizophrenia. Mechanisms of synaptic plasticity in the developing and adult brain: retrograde messengers, volume transmission, Hebbian synapses, LTP and LTD. Continuous reorganization of dendritic spines in the adult brain. Structural and functional plasticity of the cerebral cortex across the life-span. Closing seminar: critical analysis of a selected scientific paper relevant to the course (Journal club).

READING LIST (MANDATORY AND RECOMMENDED)

- Sedmak G, Judaš M. The total number of white matter interstitial neurons in the human brain. *J Anat.* 2019;235:626-636.
- Sedmak G, Jovanov-Milošević N, Puskarjov M, Ulamec M, Krušlin B, Kaila K, Judaš M. Developmental Expression Patterns of KCC2 and Functionally Associated Molecules in the Human Brain. *Cereb Cortex.* 2016 Dec;26(12):4574-4589.
- Judaš M, Kostović I (1997) Temelji neuroznanosti - poglavlja 3, 5, 9,10,11,17, 38, 43 i 44, Zagreb: MD.
- Petanjek Z, Judaš M, Kostović I, Uylings HB (2008) Lifespan alterations of basal dendritic trees of pyramidal neurons in the human prefrontal cortex: a layer-specific pattern. *Cereb Cortex* 18(4):915-29.
- Kostović I, Judaš M (2006) The prolonged coexistence of transient and permanent circuitry elements in the developing cerebral cortex of fetuses and preterm infants. *Develop Med Child Neurol* 48:388-393.
- Sur M, Leamey CA (2001) Development and plasticity of cortical areas and networks. *Nature Rev Neurosci* 2:251-262.
- Buonomano DV, Merzenich MM (1998) Cortical plasticity: from synapses to maps. *Annu Rev Neurosci* 21:149-186.
- Levitt P, Eagleson KL, Powell EM (2004) Regulation of neocortical interneuron development and the implications for neurodevelopmental disorders. *Trends Neurosci* 27:400-406.
- Lewis DA, Levitt P (2002) Schizophrenia as a disorder of neurodevelopment. *Annu Rev Neurosci* 25:409-432.
- Winterer G, Weinberger DR (2004) Genes, dopamine and cortical signal-to-noise ration in schizophrenia. *Trends Neurosci* 27:683-690.



- Rolls ET, Loh M, Deco G, Winterer G (2008) Computational models of schizophrenia and dopamine modulation in the prefrontal cortex. *Nat Rev Neurosci* 9(9):696-709.
- Stephan KE, Friston KJ, Frith CD (2009) Dysconnection in schizophrenia: from abnormal synaptic plasticity to failures of self-monitoring *Schizophr Bull* 35(3):509-27.
- Kostovic I, Vasung L. (2009) Insights from in vitro fetal magnetic resonance imaging of cerebral development, *Semin Perinatol*. 33:220-33
- Kostović I, Judas M.(2007) Transient patterns of cortical lamination during prenatal life: do they have implications for treatment? *Neurosci Biobehav Rev*. 31(8):1157-68. Review.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, Seminars, Practicals

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written and Oral exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2

ORDINAL NUMBER: 72

TITLE OF COURSE/MODULE: Statistical analysis of medical data 1

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): required

NAME OF COURSE/MODULE TEACHER: Associate professor Zdenko Sonicki, MD, PhD, Professor Davor Ivanković, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Davor Ivanković
Anamarija Jazbec
Mirjana Kujundžić Tiljak
Zdenko Sonicki
Slavica Sović
Diana Šimić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 38

OUTLINE OF COURSE/MODULE CONTENT

Lectures: Peculiarities of statistical methods in different research approaches in medicine (observational, experimental, clinical trial). Statistical inference and probability. Hypothesis testing, confidence intervals, estimations and likelihood. Statistical modeling and predictions (GLM, logistic regression analysis, Cox regression analysis) and association, interactions interpretation. Factor analysis. Meta-analysis.

Practicals: Working with statistical software. Descriptive statistics, data visualization, parameter estimation. Statistical tests (for quantitative and qualitative variables; dependent and independent samples). Power analysis. Logistic regression. Survival analysis (Kaplan-Meier, log-rank, Cox).

Seminars: Logistic regression. Survival analysis (Kaplan-Meier, log-rank, Cox). Factor analysis. Linking analysis to the study design. Meta-analysis.

Journal Club: Critical appraisal of applied statistical procedures in selected publications.

READING LIST (MANDATORY AND RECOMMENDED)

- Kirkwood BR, Sterne JAC. Essential Medical Statistics (2nd ed). Oxford: Blackwell Science Ltd, 2003.
- Petrie A, Sabin C. Medical Statistics at a Glance (3rd ed). Oxford: Blackwell Science Ltd, 2009.
- Available sources on Internet
- Sullivan LM. Essentials of Biostatistics in Public Health. Sudbury: Jones and Bartlett Publishers, 2008.
- Gerstman BB. Basic Biostatistics: Statistics for Public Health Practice. Sudbury: Jones and Bartlett Publishers, 2008.
- Ivanković D, Sonicki Z (editors). Statistička analiza podataka u medicini. Zagreb: Sveučilište u Zagrebu, Medicinski fakultet. Priručnik aktualne akademske godine.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, Seminars, Practical, and Journal Club

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written and oral presentation (Critical appraisal of applied statistical methods in selected publications)

DESCRIPTION OF MONITORING OF TEACHING QUALITY



Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 5

ORDINAL NUMBER: 73

TITLE OF COURSE/MODULE: Structure, methodology and functioning of scientific work 1

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): required

NAME OF COURSE/MODULE TEACHER: Professor Zdravko Lacković MD, PhD, Professor Jelka Petrak, PhD, Associate Professor Ana Borovečki, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Ana Borovečki
Jadranka Božikov
Boris Brkljačić
Vladiana Crljen
Zdravko Lacković
Helena Markulin
Jelka Petrak
Marijan Šember
Lea Škorić
Vladimir Trkulja
Dina Vrkić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 28

OUTLINE OF COURSE/MODULE CONTENT

The study of science and peculiarities of medical science. Organization of scientific work in the Republic of Croatia. Scientific career in medicine. Complexities of the medical information system in science and ways of finding scientific data. How to save and process scientific data.

Module: Responsible conduct of research (Assoc. Prof. Ana Borovečki) Basic ethical problems in scientific research and publication of research results. Overview of national and international laws and regulations. Problem solving.

Module: Scientific publications - searching and evaluating (Prof. Jelka Petrak) Scientific publications in general. Scientific medical journals: characteristics, access to full texts, representation in databases, assessment of significance impact (abstracting&indexationindexing services, impact factor and Eigenfactormetrics); Bibliographic databases: Medline, SCOPUS, Current Contents; Citation databases: Science Citation Index, SCOPUS, Google Scholar; EBM databases; Bibliometric indicators, open access, social networks and altmetrics in assessment of scientific contribution.

READING LIST (MANDATORY AND RECOMMENDED)

- Lacković Z (ed.): Structure, methodology and functioning of scientific work, Handbook, Medicinska naklada, Zagreb 2015.
- Borovečki A, Lacković Z (eds.): Responsible conduct of research, selected international and Croatian documents, Medicinska naklada, Zagreb 2015.
- D. de Sola Price: Science Since Babilon, New Haven and London Yale University Press 1962.
- R. Merton: Sociology of Science, University of Chicago Press 1973
- collection of national and international normative regulatory documents for scientific advancement, patents, ethics



DESCRIPTION OF INSTRUCTION METHODS: lectures, seminars, practical work, round table discussions, journal club

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 4

ORDINAL NUMBER: 74

TITLE OF COURSE/MODULE: Structure, methodology and functioning of scientific work 2

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): required

NAME OF COURSE/MODULE TEACHER:

Jadranka Božikov
Sanja Brangan
Božidar Ferek Petrić
Igor Gliha
Mario Habek
Zdravko Lacković
Lovela Machala Poplašen
Vladimir Trkulja
Gordana Turkalj
Donatella Verbanac
Smiljka Vikić-Topić

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 38

OUTLINE OF COURSE/MODULE CONTENT

The course consists of two modules, the aim of which is to introduce students to the process of intellectual property protection and ways of realizing the rights derived from intellectual property, and to enable them to independently search and solve basic issues related to the protection of the invention in the field of biomedicine. The second module elaborates in more detail the issue of evaluation of the value of scientific work that started in the subject "Structure, Methodology and Functioning of Scientific Work 1" and a hierarchy of evidence of the practical value of diagnostic, prognostic and therapeutic procedures in medicine. In accordance with this, it endeavors to instruct students to understand the appropriate procedures for analyzing and interpreting their own results, as well as their presentation in the form of text or oral presentations.

READING LIST (MANDATORY AND RECOMMENDED)

- State Intellectual Property Office of the Republic of Croatia – educational material available at: <http://www.dziv.hr/hr/intelektualno-vlasnistvo/>
- Protect your ideas - An introduction to patents for students of natural sciences, engineering, medicine and business administration; educational material available at: www.epo.org/patents/learning/e-learning.html
- Dan Mayer. Essential evidence-based medicine. 2nd ed., Cambridge University Press 2010.
- Finding Technology Using Patents; WIPO Publication No. L434/2(E) ISBN 978-92-805-1721-7; educational material available at: <http://www.wipo.int/patentscope>
- Guidelines for Examination in the EPO, published by EPO, status 20 June 2012.; educational material available at: <http://www.epo.org/law-practice/legal-texts/guidelines.html>

DESCRIPTION OF INSTRUCTION METHODS: lectures, seminars, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written test exam



DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 5

ORDINAL NUMBER: 75

TITLE OF COURSE/MODULE: Structure, methodology and functioning of scientific work 3: research projects

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): required

NAME OF COURSE/MODULE TEACHER: Associate Professor Fran Borovečki, MD, PhD, Professor Srećko Gajović, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Fran Borovečki
Srećko Gajović
Donatella Verbanac
Smiljka Vikić-Topić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 12

OUTLINE OF COURSE/MODULE CONTENT

Introduction to the research funding sources in Croatia, EU and USA. Common characteristics and specificities of their calls for proposals. Structure of project proposals, goals, time and financial activity planning logical framework matrix, outcomes and results, impact, exploitation of results. Fellowships. Project management, importance of good planning, risks and their mitigation. Structure of reports - scientific and financial.

READING LIST (MANDATORY AND RECOMMENDED)

- Blaženka Divjak (ed.): Projects in research and development, European programs, FOI, UniZg, Varaždin, 2009.
- <http://ec.europa.eu/research/participants/portal/page/funding>
- http://ec.europa.eu/research/horizon2020/index_en.cfm
- Various Calls for proposals, guidelines for proposals writing
- Peter A. Lawrence: Real Lives and White Lies in the Funding of Scientific Research. PLoS Biology, September 2009, Volume 7, 1-4,
- Donatella Verbanac: Postanite evaluator projekata u sklopu FP7 programa, mef.hr, prosinac 2012 (o evaluaciji EU projekata)

DESCRIPTION OF INSTRUCTION METHODS: Lectures, Seminars, Practical work, Round table discussion, work in small groups at project proposal's writing and evaluations, preparation of project application, discussion and evaluation of the project proposals in groups

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Preparation and evaluation of project proposal

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2

ORDINAL NUMBER: 76

TITLE OF COURSE/MODULE: Liaison and consultative psychiatry

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Rudolf Gregurek, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER: Vedran Bilić; Rudolf Gregurek

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 30

OUTLINE OF COURSE/MODULE CONTENT

Historical facts of liaison and consultative psychiatry. Role of psychiatrist in neuropsychiatric wards. Correlation of physical and psychical in the occurrence of illness. Particularities of psychopathological phenomena in organic wards. Patient with cardio disease. Dying patient. Patient with AIDS. Particularities of transplantation treatment. Experience of body and plastic and reconstructive surgery. In-patient clinics and terminal patient care. Sick child. Psychiatric and psychotherapeutic interventions in somatic medicine. Closing seminar: critical analysis of a selected scientific paper related to the course content ("journal club").

READING LIST (MANDATORY AND RECOMMENDED)

- Gregurek R., i sur. Suradna I konzultativna psihijatrija, Školska knjiga, Zagreb, 2010.
- Blackman JS. Psychodynamic techniques during urgent consultation interviews. J Psychother Practice Research 1994; 3: 194-203.
- Freyberger H. Consultation - Liaison in a renal transplant unit. U: Levy NB: Psychological factors in hemodialysis and transplantation. New York: Plenum Medical Book Comp. 1981.
- Gregurek R. Liaison psihijatrijski pristup u rehabilitaciji invalida domovinskog rata. Reumatizam 1994; supl. 2: 95-97.
- Gregurek R, Ladika I. Transferni i kontratransferni problemi u liječenju bolesnika transplantacijom koštane srži. Liječ Vjesn 1995; 117: 2- 8.
- Gregurek R, Ladika I, Klain E. Psychological regression in patients undergoing bone marrow transplantation. Croatian Med J 1995; 36(3): 174- 180.
- Gregurek R, Jokić-Begić N. Psihodinamski aspekti transplantacije koštane srži. Soc Psihijatrija 1996; 24:75-82.
- Gregurek R, Ladika I, Klain E. Denial in the patients treated with bone marrow transplantation. Coll Antropol 1996; 20: 345-351.
- Hodes M, Moorey S. Psychological treatment in disease and illness. London: Gaskell and the Society for Psychosomatic Research, 1993.
- Gregurek, R. Kronični bolesnik. U: Psihološka medicina. Ur. E. Klain. Golden Marketing. Zagreb. 146-152. 1999.
- Gregurek R, Braš M. Povijest psihosomatske medicine i suvremene klasifikacije. Medix. 2009; 83:92-958.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, practical, seminars

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written exam (multiple choice questions)

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 4,5

ORDINAL NUMBER: 77

TITLE OF COURSE/MODULE: Telemedicine

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Davor Miličić, MD, PhD, Assistant Professor Mirza Žižak, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Igor Filipčić
Miroslav Hanževački
Ivica Klapan
Ljerka Luić
Davor Miličić
Jelka Petrak
Sanja Poduje
Mario Ravić
Mario Starešinić
Krešimir Štambuk
Zoran Zorica
Mirza Žižak

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 20

OUTLINE OF COURSE/MODULE CONTENT

Health care service represents one of the pillars of every civilized society. It is implemented through the existing network of medical institutions on primary, secondary and third level. The quality of entire health system, among other things, depends on availability and timeliness of health care in rural areas where distance separates the patients from modern medical centers and therefore jeopardizes those patients additionally. By usage of modern telemedicine systems doctors on geographically dispersed locations, or within the same location, are able to communicate directly with patient and to consult mutually which enables them to share important medical information in any form.

We would like to demonstrate all basic characteristics important for developing as well as for understanding of modern telemedicine, such as: a) EU-CPME-Standing Committee of European Doctors) guidance for developing and application of telemedicine. b) application of a methodological approach to evaluate telemedicine programs and its effectiveness c) the problem of standardization and evaluation of telemedicine applications, d) the use of telemedicine technologies in online databases e) the creation of web sites for e-education in medicine, f) telemedicine education: a national interactive center of medical education, g) role of telemedicine in public health, h) guidelines for strategic planning of eHealth development, i) examples of business intelligence in telemedicine using IT simulation scenarios (demonstrations / exercises), j) the evidence-based effectiveness and efficiency of telemedicine implementation and examples economic justifiability and cost-effectiveness of telemedicine investments, k) business and scientific aspects of ICT in medicine and telemedicine, as well as the l) application of modern telemedicine in Croatian and world clinical practice of the 21st century: Telecardiology, Teledermatology, Teleorthopedics-computer assisted preoperative planning, Telesurgery with 3D-CAS support (preoperative planning, intraoperative guidance and postoperative analysis, tele-3D-virtual-

endoscopy and tele-virtual-surgery), m) presentation of teleneurology-application software-Neuronet, n) Telemedicine as a diagnostic tool in the primary health care, o) Telemedicine project University Clinical Hospital Osijek: Tele-3D-Computer Assisted Surgery.

During practical exercises, each student will work independently on the computer (all computers are networked and connected to the Internet).

READING LIST (MANDATORY AND RECOMMENDED)

- Book, "Telemedicina u Hrvatskoj" (ed. Klapan Ivica, Čikeš Ivo). Zagreb, ISBN 953-98509-2-4: Medika, 2001.
- Book, "Telemedicine" (English language; ed. Klapan I, Čikeš I), ISBN 978-953-95168-0-0: Telemedicine Association Zagreb, 2005.
- Book, "Remote Cardiology Consultations Using Advanced Medical Technology – Applications For NATO Operations", (ed. Klapan Ivica, Poropatich Ronald), Zagreb, NATO Science Series, ISSN: 1566-7693, ISBN 1-58603-657-2, Amsterdam*Berlin*Oxford*Tokyo*Washington, DC, 2006
- Kern J, Petroveckí M (ed.). Medicinska informatika. Medicinska naklada: Zagreb; 2009.
- Book „Atlas of the Telemedicine History“. (ed. Dumanskyy Yu.V., Vladzimirskyy A., Lobas V.M., Lievens F.), 63-64, 2013. Publishing house „Knowledge“, 2013.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, seminars, discussion groups, tele-video-conferences, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Test

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 78

TITLE OF COURSE/MODULE: Translational medicine – from disease to gene

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Oliver Vugrek, PhD, senior research advisor

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Jelena Knežević

Oliver Vugrek

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 10

OUTLINE OF COURSE/MODULE CONTENT

Lecture: S-Adenosylhomocysteine hydrolase (AHCY) deficiency – example for Translational Medicine; Introduction to methods and techniques relying on the use of genetic information to determine the function of molecules encoded by the genome, a approach defined as «functional genomics». For a better understanding of the use of molecular methods in scientific research, S-Adenosylhomocysteine hydrolase deficiency (KBC Rebro, Zagreb) will be presented to demonstrate the effectiveness of Translational Medicine. Next-generation sequencing (NGS) technology, with its high-throughput capacity and low cost, has developed rapidly in recent years and become an important analytical tool for many genomics researchers. NGS continues to be deployed in clinical laboratories, and recently at Ruđer Boskovic Institute, enabling rapid transformations in genomic medicine. These technologies have reduced the cost of large-scale sequencing by several orders of magnitude, and continuous advances are being made. It is now feasible to analyze an individual's near-complete exome or genome to assist in the diagnosis of a wide array of clinical scenarios. Next-generation sequencing technologies are also facilitating further advances in therapeutic decision making and disease prediction for at-risk patients. During our course we will allow valuable insights into these new technologies.

Lecture: Molecular methods in the 'omic's' era: Introduction to omic's methods such as Genomics, Proteomics, Cellomics, Metabolomics etc

Practice: NGS technology for DNA and RNA analysis – sample preparation from different sources (parafin, blood biopsies etc).

Practice: Recombinant proteins, Benefits of recombinant DNA technology, heterologous gene expression, purification of recombinant proteins and their functional analysis.

Seminar- round table: NGS - Next generation sequencing in diagnostics; DNA chips, Application of chip technology in disease diagnosis

Journal Club: Discussion of most recent achievements in the field of NGS technology in oncology.

READING LIST (MANDATORY AND RECOMMENDED)

- Barić I, Fumić K, Glenn B, Ćuk M, Schulze A, Finkelstein J D, Jill James S, Mejaški-Bošnjak V, Pažanin L, Pogribny I P, Radoš M, Sarnavka V, Šćukanec-Špoljar M, Allen R H, Stabler S, Uzelac L, Vugrek O, Wagner C, Zeisel S, Mudd H (2004). S-adenosylhomocysteine hydrolase deficiency in a human: A genetic disorder of methionine metabolism. PNAS USA 101(12): 4234-4239.

- Belužić R, Čuk M, Pavkov T, Fumić K, Barić I, Mudd SH, Jurak I, Vugrek O: A single mutation at tyrosine 143 of human S-adenosylhomocysteine hydrolase renders the enzyme thermosensitive and effects the oxidation state of bound co-factor NAD. *Biochemical J* 2006; 400: 245-253.
- Fumić K, Belužić R, Čuk M, Pavkov T, Kloor D, Barić I, Mijić I, Vugrek O: Functional analysis of human S-adenosylhomocysteine hydrolase isoforms SAHH-2 and SAHH-3. *Eur J Hum Gen* 2007; 15, 347-351.
- Vugrek O., Belužić R, Nakić N, Mudd SH: S-Adenosylhomocysteine hydrolase (AHCY) deficiency: Two novel mutations with lethal outcome. *Human Mut.*, 2009; 30, (4), E555-E565.
- Honzik T; Magner M; Krijt J; Sokolova J; Vugrek O; Beluzic R; Baric I; Hansikova H; Elleder M; Vesela K; Bauerova L; Ondruskova N; Jesina P; Zeman J; Kozich V: Clinical picture of S-adenosylhomocysteine hydrolase deficiency resembles phosphomannomutase 2 deficiency. *Molecular Genetics and Metabolism* (2012); 107 (3), 611–613.
- Kevin A. Strauss, Carlos Ferreira, Teodoro Bottiglieri, Xueqing Zhao, Erland Arning, Shucha Zhang, Steven H. Zeisel, Maria L. Escolar, Nancy Presnick, Erik G. Puffenberger, Oliver Vugrek, Lucija Kovacevic, Conrad Wagner, George V. Mazariegos, S. Harvey Mudd, Kyle Soltys. Liver transplantation for treatment of severe S-adenosylhomocysteine hydrolase deficiency. *Mol Gen and Metabolism* 116 (2015) 44-52.
- van Dijk EL, Auger H, Jaszczyszyn Y, Thermes C. Ten years of next-generation sequencing technology. *Trends Genet* 2014;30:418–26.
- Y. Yang, B. Xie, J. Yan. Application of Next-generation Sequencing Technology in Forensic Science. *Genomics Proteomics Bioinformatics* 12 (2014) 190–197.
- Weber-Lehmann J, Schilling E, Gradl G, Richter DC, Wiehler J, Rolf B. Finding the needle in the haystack: differentiating “identical” twins in paternity testing and forensics by ultra-deep next generation sequencing. *Forensic Sci Int Genet* 2014;9:42–6.
- McCarthy JJ, McLeod HL, Ginsburg GS. Genomic medicine: a decade of successes, challenges, and opportunities. *Sci Transl Med* 2013;5:189sr4.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, practice, seminar-group work; Journal Club

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written exam with 10 questions

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 1,5

ORDINAL NUMBER: 79

TITLE OF COURSE/MODULE: Kidney transplantation

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Ivica Mokos, MD, PhD, senior scientist

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Nikolina Bašić Jukić

Marijana Ćorić

Tvrtko Hudolin

Petar Kes

Ivica Mokos

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 30

OUTLINE OF COURSE/MODULE CONTENT

The subject consists of the following themes: Legal, organizational and ethical problems of renal transplantation, The role of Eurotransplant, Updates in pathophysiology and treatment of acute kidney injury, Updates in dialysis: emerging risk factors and markers, Peritoneal transport characteristics, peritoneal dialysis and perspectives, Risk factors for nonimmunological complications of transplantation, Variables during care of donors that can influence outcome of kidney transplantation, Immunological aspects of transplantation, Predictive factors for graft survival during evaluation of patient on waiting list, Pretransplant operative procedures - possible impact on graft function, Outcomes following renal transplantation after multiorgan retrieval versus kidney-only retrieval in donation, The role of perfusion solutions and pulsatile machine vs.cold organ storage, Characteristics of kidney transplantation and retransplantation, Risk factors for surgical complications and their management, Percutaneous and endoscopic procedures in transplanted patients - impact on graft survival, Comparison of immunosuppressive protocols, complement-inhibitors, proteasome inhibitors, Future challenges to promote growth in children with renal failure, Specificity of "Senior program" in kidney transplantation, Updates in infections evaluation and management after kidney transplantation, Cellular mechanisms of immunosuppressive action and strategies for prevention of complications of immunosuppressive therapy, Updates in immunology of kidney rejection, New markers and meaning of graft biopsy result, Oncogenesis after kidney transplantation, The transplant initiative, preemptive transplantation, ABO incompatible transplantations, transplantation in children, A critical analysis of scientific papers, Final discussion.

READING LIST (MANDATORY AND RECOMMENDED)

- Bašić-Jukić N, Kaštelan Ž. Transplantacija bubrega. Zagreb: Medicinska naklada;2015(in press).
- Danovitch GM. Handbook of Kidney Transplantation.Fifth ed. Philadelphia, Lippincott Williams & Wilkins 2009.
- Karam G, Kälble T, Alcaraz A, Aki FT, Budde K, Humke U et al. Guidelines on renal transplantation. Arnhem: European Association of Urology; 2014.
- New scientific papers about kidney transplantation
- McKay DB and Steinberg SM. Kidney transplantation. A guide to the care of kidney transplant recipients. New York, Dordrecht, Heidelberg, London, Springer 2010.



DESCRIPTION OF INSTRUCTION METHODS: lectures, seminars, practicals, journal club

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: test with 90 multiple choice questions

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 4,5

ORDINAL NUMBER: 80

TITLE OF COURSE/MODULE: Liver transplantation

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Assistant Professor Tajana Filipec Kanižaj, MD, PHD, Professor Leonardo Patrlj, MD, PHD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Tajana Filipec Kanižaj
Slavko Gašparov
Leonardo Patrlj
Nikola Sobočan

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 22

OUTLINE OF COURSE/MODULE CONTENT

The Republic of Croatia for many years is the country with largest number of liver transplants per million population. Exceptional results of the transplant program are comparable with most developed countries. The signing of the cooperation with Eurotransplant in 2006 created the preconditions for cooperation and exchange of knowledge with the respectable scientists and clinicians from leading clinics in the European Union. After the course the participants will be able to critically follow literature in this field focusing on problems of organ donation, indications and contraindications for liver transplantation, surgical techniques, specific diseases treatment (viral, autoimmune, cholestatic and malignant diseases, alcoholic liver cirrhosis, acute liver failure, nonalcoholic statohepatitis and rare liver diseases), immunosuppressive therapy, patohistological analysis of transplanted liver as well as peri- and post-operative complications.

The most current research in the filed of liver transplantation is directed towards the treatment of malignant diseases, discovery of new immunosuppressive protocols and prevention of viral hepatitis recurrence. The postgraduate course will introduce students with the knowledge on the latest developments in the filed of these topics. Problems related to organ shortage and the risk of malignant disease recurrence after transplantation accentuate the importance of the proper patient selection. Evaluation for neoadjuvant therapy eligibility, risk factors related to the disease recurrence after transplantation and molecular markers associated with the prediction of therapeutic response are the most active fields of research. Last five years hepatitis B and C therapy is an extremely active research area. In light of the discovery of new drugs, the application of a complete oral therapy in pre- and post-transplant period fundamentally changed the approach and the outcome of the transplant patients infected with these viruses. Calcineurin inhibitors in 80s revolutionized the survival outcome in the filed of liver transplantation. The use of these drugs on the other hand is associated with many detrimental side effects. Therefore, the current research is directed towards the discovery of new immunosuppressive drugs, the optimal immunosuppressive protocols based on individual patient characteristics, and the development of immune tolerance.

The curriculum is chronically divided into following subjects: Indications and contraindication for orthotopic liver transplantation (OLT); Indications for urgent liver transplantation; Artificial liver support for liver insufficiency; Advantages and disadvantages of Model of End Stage Liver Disease (MELD) score; Cadaveric and living donor liver transplantations, split liver transplantations; Surgical techniques and complications; Specific problems regarding underlying liver disease: cholestatic liver

disease: primary biliary cirrhosis, primary sclerosing cholangitis; viral diseases: chronic hepatitis C, chronic hepatitis B, hepatitis B and C co-infection and HIV infection, liver tumors: hepatocellular carcinoma and cholangiocellular carcinoma, alcoholic liver disease and non alcoholic steatohepatitis; Immunosuppressive therapy: standard, specific protocols, mechanisms of action and side effects as well as new research in this field; Immunological and non-immunological complications after OLT. Pathohistological aspects of liver transplantation. This course should enable transplantation to progress further, while at the same time attracts young doctors and researchers resulting in multidisciplinary and intriguing research.

READING LIST (MANDATORY AND RECOMMENDED)

- Berenguer M. Systematic review of the treatment of established recurrent hepatitis C with pegylated interferon in combination with ribavirin. *J Hepatol.* 2008; 49: 274-87.
- Roche B, Samuel D. Prevention of hepatitis B virus reinfection in liver transplant recipients. *Intervirol.* 2014;57(3-4):196-201
- Gambato M, Lens S, Fernández-Carrillo C, Alfaro I, Forns X. Viral hepatitis and liver transplantation: pathogenesis, prevention and therapy of recurrent disease. *Dig Dis.* 2014;32(5):538-44.
- Fagioli S, Ravasio R, Lucà MG, Baldan A, Pecere S, Vitale A, Pasulo L. Management of hepatitis C infection before and after liver transplant. *World J Gastroenterol.* 2015 Apr 21;21(15):4447-4456.
- Lens S, Gambato M, Londoño MC, Forns X. Interferon-free regimens in the liver-transplant setting. *Semin Liver Dis.* 2014 Feb;34(1):58-71.
- Purohit T, Cappell MS. Primary biliary cirrhosis: Pathophysiology, clinical presentation and therapy. *World J Hepatol.* 2015 May 8;7(7):926-41.
- Manns MP, Lohse AW, Vergani D. Autoimmune hepatitis - Update 2015. *J Hepatol.* 2015 Apr;62(1S):S100-S111.
- Berlakovich GA. Challenges in transplantation for alcoholic liver disease. *World J Gastroenterol.* 2014 Jul 7;20(25):8033-9.
- Parikh ND, Waljee AK, Singal AG. Downstaging hepatocellular carcinoma: A systematic review and pooled analysis. *Liver Transpl.* 2015 May
- Zhu AX. Future directions in the treatment of cholangiocarcinoma. *Best Pract Res Clin Gastroenterol.* 2015 Apr;29(2):355-361.
- Ghouri YA, Mian I, Blechacz B. Cancer review: Cholangiocarcinoma. *J Carcinog.* 2015 Feb 23;14:1.
- Lin S, Hoffmann K, Schemmer P. Treatment of hepatocellular carcinoma: a systematic review. *Liver Cancer.* 2012 Nov;1(3-4):144-58.
- Pedersen M, Seetharam A. Infections after orthotopic liver transplantation. *J Clin Exp Hepatol.* 2014 Dec;4(4):347-60.
- Dutkowski P, Linecker M, DeOliveira ML, Müllhaupt B, Clavien PA. Challenges to liver transplantation and strategies to improve outcomes. *Gastroenterology.* 2015 Feb;148(2):307-23.
- Graziadei IW. Recurrence of nonviral liver diseases after liver transplantation. *Clin Liver Dis.* 2014 Aug;18(3):675-85.
- Busuttil RW, Kintmalm GK. *Transplantation of the Liver*, Second Edition,
- Fung J at al *Surgery of the liver and Biliary tract* Saunders 2003.

DESCRIPTION OF INSTRUCTION METHODS: lectures, seminars, practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: written examination with multiple choices

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>



APPOINTED ECTS: 3

ORDINAL NUMBER: 81

TITLE OF COURSE/MODULE: Liver transplantation in children

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Jurica Vuković, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Mirna Natalija Aničić
Marijana Ćorić
Tomislav Luetić
Vesna Medved
Lana Omerza
Ivica Sjekavica
Jurica Vuković

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 18

OUTLINE OF COURSE/MODULE CONTENT

Development of specific skills and critical analysis in pediatric liver transplantation. Following topics in pediatric liver transplantation will be covered – indications, surgical techniques and problems, cadaveric or living donor, rejection, immunosuppression, quality of life, ethics, coordination.

READING LIST (MANDATORY AND RECOMMENDED)

- Successful separation of xypho-omphalopagus conjoined twins with extrauterine twin-twin transfusion syndrome: a case report. Grizelj R, Sindičić Dessardo N, Bulić K, Luetić T, Mikulić D, Antabak A, Sjekavica I, Alduk AM, Konosić S, Režek Tomašić K, Čaleta T, Pleško S, Šarić D, Vuković J. Croat Med J. 2019 Aug 31;60(4):301-308.
- Illig D, Navratil M, Kelečić J, Conca R, Hojsak I, Jadrešin O, Ćorić M, Vuković J, Rohlf M, Hollizeck S, Bohne J, Klein C, Kotlarz D. Alternative Splicing Rescues Loss of Common Gamma Chain Function and Results in IL-21R-like Deficiency. J Clin Immunol. 2019 Feb;39(2):207-215.
- Jay L. Grosfeld, MD, FACS, FAAP, James A. O'Neill, MD, FRCS, MRCP(Irel), FRCOphth, Arnold G. Coran, MD and Eric W. Fonkalsrud, MD. Liver transplantation in Pediatric Surgery, 6th Edition, 2006.
- Kelly DA. Current results and evolving indications for liver transplantation in children. J Pediatr Gastroenterol Nutr, 1998; 27(2): 214-21.
- Mazariegos GV, Reyes J. Pediatric Transplantation. In: Liver Transplantation: Current Management. Surg Clin North Am 1999; 79(1): 163-199.
- Sundaram SS, Alonso EM, Whittington PF. Liver Transplantation in Neonates. Liver Transplantation 2003; 9(8): 783-8.
- Vuković J. Transplantacija jetre. Paediatr Croat, 1999; 43 (Supl 1): 195-8.
- Brown K.A, Moonka D. Liver Transplantation. Curr Opin Gastroenterol 2003; 19(3): 259-63
www.medscapeplantation.com

DESCRIPTION OF INSTRUCTION METHODS: lectures, seminar, practical lessons

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: practical assignment, oral

DESCRIPTION OF MONITORING OF TEACHING QUALITY

Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3



ORDINAL NUMBER: 82

TITLE OF COURSE/MODULE: The role of immunogenetics in transplantation

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Assistant Professor Renata Žunec, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Katarina Štingl Janković

Renata Žunec

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 22

OUTLINE OF COURSE/MODULE CONTENT

Historical discovery of MHC, evolution, animal model. Major Histocompatibility Complex in man - HLA (historical overview of discovery, experimental studies and nomenclature; localization, organization). Biological role of HLA (trimolecular complex; antigen processing and presentation). Structure of HLA Class I and Class II genes and molecules. Update on HLA Nomenclature.

Main characteristics of HLA (polymorphism, phenotype, haplotype, linkage disequilibrium, crossing-over, genotype). Laboratory techniques for detection of HLA antigens, genes and antibodies (serology; molecular typing: PCR-SSP, PCR-SSO; PRA; cross-match). Accreditation, external proficiency testing, EFI standards. Eurotransplant, organ allocation procedures (kidney, heart, liver, pancreas, lung). Croatian bone marrow donor registry CBMDR, Bone marrow donors worldwide BMDW – algorithms for donor selection in unrelated haematopoietic stem cell transplantation. HLA matching in organ transplantation (kidney, heart, liver, pancreas, cornea).

The role of HLA antibodies in organ transplantation (pre- and post- transplantation monitoring of donor specific antibodies DSA; cross-match, virtual cross match; % PRA, vPRA; highly sensitised patients). Posttransplantational monitoring of organ survival (hyperacute, acute and chronic rejection; chimerism follow-up; international project: «Collaborative Transplant Study»).

READING LIST (MANDATORY AND RECOMMENDED)

- Transplantation Immunology: Methods and Protocols (ur. AA Zachary , MS Leffell), Humana Press 2013, drugo izdanje
- Immunogenetics: Methods and Applications in Clinical Practice (ur FT Christiansen, BD. Tait), Humana Press, 2012
- The HLA Complex in Biology and Medicine: A Resource Book (ur. N.K. Mehra, G.Kaur, J McCluskey, FT. Christiansen), FHJ Claas Jaypee Brothers Medical Publishers, New Delhi 2010
- Scientific papers: Clinical Transplantation, American Journal of Transplantation, Bone Marrow Transplantation, Tissue Antigens, Human Immunology, Immunogenetics, Genes & Immunity
- The HLA Facts Book SGE Marsh, P. Parham, LD Barber, Academic Press, San Diego, 2000
- Histocompatibility Testing (ur. J.L Bidwell & C. Navarette) Imperial College Press, London, 2000.
- HLA in Health and Disease (ur. R. Lechler & A. Warrens) Academic Press, New York, 2000
- web pages www.ctstransplant.org, www.eurotransplant.org, www.bmdw.org, www.cordblood.med.ucla.edu

DESCRIPTION OF INSTRUCTION METHODS: Lecture, Seminar, Practical work, journal club

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: oral exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY



Anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3

ORDINAL NUMBER: 83

TITLE OF COURSE/MODULE: Mental health service management

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Rudolf Gregurek, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Rudolf Gregurek
Neven Henigsberg

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 16

OUTLINE OF COURSE/MODULE CONTENT

Peculiarities of managing mental health. Psychiatry in society. Organization of outpatient services, day care and partial hospitalization. Organizing care for the mentally ill in general hospitals. Peculiarities of managing large institutions for mental health. Reorganization of Mental Health. Current issues of legal protection of human rights and freedoms of mental patients. Compulsory hospitalization. The organization of mental health of children and youth. Epidemiology and prevalence of mental disorders. Closing seminar: critical analysis of a scientific paper related to the course content ("journal club").

READING LIST (MANDATORY AND RECOMMENDED)

- Lamb HR, Weinberger LE. Understanding and Treating Offenders with Serious Mental Illness in Public Sector Mental Health. Behav Sci Law. 2017 Jul;35(4):303-318.
- Athié K, Menezes AL, da Silva AM, Campos M, Delgado PG, Fortes S, Dowrick C. Perceptions of health managers and professionals about mental health and primary care integration in Rio de Janeiro: a mixed methods study. BMC Health Serv Res. 2016 Sep 30;16(1):532.
- Eurohealth: Health and Environment; Vol. 6 No 5, 2000/2001
- Health Care Systems in Transition. European Observatory on Health Care Systems. Croatia, 1999.
- McKee M, Berman P. Health targets in Europe: learning from experience. Eur J Publ Health 2000; 10
- McKee M, Healy J. The changing role of the hospital in Europe: causes and consequences. Clinical Medicine 2001;1: 299-304
- McKee M. An agenda for public health research in Europe. Eur J Publ Health 1998;8: 3-7
- O'Donahue W, Fisher JE. Management and administration skills for the mental health professional. Washington DC: Academic Press; 1999.
- Rene I.Jahiel. Toward Health Status Insurance: International Health policy Research; Croatian Medical Journal 1999;40: 129-142
- Sartorius N. The economic and social burden of depression. J Clin Psychiatry 2001;62(Suppl 15): 8-11
- Sartorius N. The use of public health approach in mental health programmes. Int J Psychopharmacol 1999; 14(Suppl 3): S1-5
- Gregurek, R. Internal and External Boundaries of Supervision. Group Analysis 2007; 40: 167-177.
- Gregurek, R., Braš, M. (Ur.) Psihoonkologija. Grafika, Osijek, 2008
- Gregurek R, Brajković L, Kalenić B, Braš M, Peršić-Brida M. Five years study on impact of anxiety on quality of life in patients treated with bone marrow transplantation. Psychiatria Danubina 2009; 21 (1): 49-55



- Bras M, Gregurek R, Milunović V, Busić I, Brajković L. Relationship between combat related posttraumatic stress disorder (PTSD) and multiple sclerosis (MS). *Psychiatria Danubina* 2008; 20 (1): 80-84
- Bras, M., Gregurek, R., Erceg, I. et al. Clinical experiences in the treatment of women with breast cancer and comorbid psychiatric disorders. *Psycho-oncology* 2008; 17: 181-181
- Kocijan Lovko S, Gregurek R, Karlovic D. Stress and ego-defense mechanisms in medical staff at oncology and physical medicine departments. *The European Journal of Psychiatry* 2007; 12(4):279-286

DESCRIPTION OF INSTRUCTION METHODS: Lectures, Seminars, Practical work

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written exam (multiple choice questions)

DESCRIPTION OF MONITORING OF TEACHING QUALITY

anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

ORDINAL NUMBER: 84

TITLE OF COURSE/MODULE: Health and public health risks management in crisis situations

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Associate Prof. Iskra Alexandra Nola, Prof. Stjepan Orešković

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Ana Borovečki
Iskra Alexandra Nola
Stjepan Orešković
Ksenija Vitale

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 25

OUTLINE OF COURSE/MODULE CONTENT

Through this course, students will acquire basic and advanced knowledge on the concept of health/public health risks in emergency situations. It will be understood basic concepts such as crisis situations, accidents, disasters, alternative standards of care, responsibility, related to the different systems in Europe. Students will gain insight into the types of risks that are associated with different categories of emergencies, and will be able to apply the acquired knowledge to the depictions of specific cases (3 case studies - earthquake, terrorism, epidemics). The definition of risk in a crisis situation, the risk of treatment in a crisis situation, the responsibility of the involved persons and the services, ethics in health care and public health terms, the complexity of the concepts of utilitarianism and deontology applied in crisis action. The concept and definition of security of the personnel, the individual patient and the population. Sociological understanding of importance for preparedness and awareness for the prevention of health and public health risks in crisis situations. Rapid assessment of risks, availability of information and information management in crisis situations. Overview of international organizations, experiences and standards of the EU.

READING LIST (MANDATORY AND RECOMMENDED)

- Donal O'Mathuna, Bert Gordijn, Mike Clarke (eds.): Disaster Bioethics: Normative Issues When Nothing is Normal (selected chapters), Springer, 2014. ISBN: 978-94-007-3863-8 (Print) 978-94-007-3864-5 (Online)
- WHO. Ethics in epidemics, emergencies and disasters: research, surveillance and patient care. Training manual.
- WHO. Environmental Health in Emergencies and Disasters. Wisner B, Adams J. (eds)
- International Journal of Mass Emergencies and Disasters. <http://www.ijmed.org/issues/>
- Latest scientific reviews related to the course content
- The material prepared for the case studies.

DESCRIPTION OF INSTRUCTION METHODS: Lectures, Seminars, Practical work, Workshops

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Essay – Case study problem solving

DESCRIPTION OF MONITORING OF TEACHING QUALITY

anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 4

ORDINAL NUMBER: 85

TITLE OF COURSE/MODULE: Viral hepatitis

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Professor Marko Duvnjak, MD, PhD; Professor Adriana Vince, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Neven Baršić
Alma Demirović
Davorka Dušek
Marko Duvnjak
Tajana Filipec Kanižaj
Ivana Kurelac
Neven Papić
Tajana Pavić
Adriana Vince
Lucija Virović Jukić
Snježana Židovec Lepej

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 25

OUTLINE OF COURSE/MODULE CONTENT

Viral hepatitis from A to E – epidemiology, clinical and laboratory characteristics. Natural course of hepatitis C, prognostic factors of progression. Therapy of chronic hepatitis C in naive patients. Therapy of chronic hepatitis C in experienced patients. Therapy of chronic hepatitis C with direct acting antiviral drugs. Extrahepatic manifestations of chronic hepatitis. Chronic hepatitis C with normal AST and ALT. Natural course of hepatitis B, prognostic factors of progression. Therapy of hepatitis B. Side-effects of antiviral therapy and management. Liver biopsy – a golden standard? Morphological changes in viral hepatitis. Laboratory diagnostics of viral hepatitis. Use of elastography in follow up of patients with chronic hepatitis. Pathogenesis of hepatic encephalopathy in acute liver failure. Natural history of HCV-related decompensated liver cirrhosis. The impact of overweight, obesity and hepatic stasis on progression and treatment of chronic hepatitis. Pathogenesis and treatment of HCV- or HBV- HIV coinfecting patients. Clinical and treatment aspects of viral hepatitis in patients with hematological, psychiatric and renal diseases. Experimental approach to viral hepatitis. Alternative therapies in the treatment of chronic hepatitis. Liver transplantation in patients with HBV infection. Liver transplantation in patients with HCV infection. Management of patients with hepatocellular carcinoma. Critical analysis of selected course related scientific paper («journal club»).

READING LIST (MANDATORY AND RECOMMENDED)

- Chopra A, Klein PL, Drinnan T, Lee SS. How to optimize HCV therapy in genotype 1 patients: management of side-effects. Liver Int. 2013;33 Suppl 1:30-4.
- Barbara Zanini, Federica Benini, Marie Graciella Pigozzi, Patrizia Furba, Ernesto Giacò, Antonia Cinquegrana, Mariagrazia Fasoli, and Alberto Lanzini. Addicts with chronic hepatitis C: Difficult to reach, manage or treat? World J Gastroenterol 2013; 19(44): 8011–8019.



- Cacoub P, Bourlière M, Lübke J, Dupin N, Buggisch P, Dusheiko G, Hézode C, Picard O, Pujol R, Segalier S, Thio B, Roujeau JC. Dermatological side effects of hepatitis C and its treatment: patient management in the era of direct-acting antivirals. J Hepatol 2012;56(2):455-63.
- Schaefer M, Sarkar R, Diez-Quevedo C. Management of mental health problems prior to and during treatment of hepatitis C virus infection in patients with drug addiction. Clin Infect Dis 2013;57 Suppl 2:S111-7.
- European Association for the Study of the Liver. EASL Recommendations on Treatment of Hepatitis C 2015. Journal of Hepatology 2015; 63: 199-236.
- Selected scientific papers relevant to the topics.

DESCRIPTION OF INSTRUCTION METHODS: Lectures and seminars

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Written and oral

DESCRIPTION OF MONITORING OF TEACHING QUALITY

anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 3,5

ORDINAL NUMBER: 86

TITLE OF COURSE/MODULE: Scientific approach to transfusion treatment

STATUS OF COURSE/MODULE (REQUIRED/ELECTIVE): elective

NAME OF COURSE/MODULE TEACHER: Prof. Jasna Mesarić, MD, PhD

NAMES OF COURSE/MODULE TEACHER/ASSOCIATE TEACHER:

Jasna Mesarić

Slobodanka Ostojić Kolonić

LANGUAGE OF INSTRUCTION IN COURSE/MODULE: Croatian or English, as required

NUMBER OF INSTRUCTION HOURS: 16

OUTLINE OF COURSE/MODULE CONTENT

The role of scientific evidence in transfusion treatment. Researches that have changed therapeutic viewpoints: model of acceptable transfusion threshold; and model of hemodilution. Clinical decision on transfusion therapy and volume replacement based on scientific evidence, with special reference to specific entities in surgery, internal medicine, paediatrics, oncology and gynaecology. Methodology of assessing transfusion therapy efficacy and justifiability as a scientific task in the process of improvement of transfusion treatment quality and safety. Transfusion treatment side effects (vein-to-vein haemovigilance). Alternative modalities of transfusion treatment.

The topics proposed will be adjusted to the group of students; an additional topic can also be introduced, depending on the specific interests of the students.

Final seminar: critical analysis of a scientific article on the topic (journal club).

READING LIST (MANDATORY AND RECOMMENDED)

- Anthes E. Evidence-based medicine: Save blood, save lives. *Nature*. 2015; 520: 24-26.
- Kaufman RM, Djulbegovic B, Gernsheimer T, et al. Platelet Transfusion: A Clinical Practice guideline From the AABB Platelet Transfusion: A Clinical Practice Guideline From the AABB *Ann Intern Med*. 2015;162(3):205-213.
- Lozano M, Cid J. Transfusion medicine as of 2014. *F1000Prime Rep* 2014; 6:105-110.
- Szczepiorkowski ZM, Dunbar NM. Transfusion guidelines: when to transfuse. *Hematology* 2013; 2013:638-644
- Roback JD. Evidence-Based Guidelines for Blood Transfusion. *Infusion Nurses Society*, 2012; 35: 187-190.2
- Roback JD, Caldwell S, Carson J, et al. Evidence-based practice guidelines for plasma transfusion, *Transfusion* 2010; 50: 12278-1239_
- Skodlar J, Majerić-Kogler V, et al. Klinička transfuzijska praksa: priručnik za liječnike, Ministarstvo zdravstva RH, Zagreb 2002.
- Databases (Ovid): EBM Reviews – ACP Journal Club and Cochrane bases: Controlled Trials Register, Database of Systematic Reviews, Database of Abstracts of Reviews of Effectiveness
- Practical Transfusion Medicine, Fourth Edition. Murphy MF, Derwood H, Pamphilon DH, Hedde NM, editors. Wiley Online Library 2013.
- Blood Banking and Transfusion Medicine: Basic Principles and Practice Second Edition. Hillyer CD, Silberstein LE, Ness PM, Anderson KC, Roback JD, editors. Elsevier, 2007.



DESCRIPTION OF INSTRUCTION METHODS: Lectures and seminars

DESCRIPTION OF COURSE/MODULE REQUIREMENTS: Oral exam

DESCRIPTION OF MONITORING OF TEACHING QUALITY

anonymous online questionnaire available at: <https://tinyurl.com/y7agh69x>

APPOINTED ECTS: 2,5

A.6. TEACHING AND RESEARCH CONDITIONS FOR IMPLEMENTATION OF THE DOCTORAL STUDY

A.6.1. LIST OF TEACHERS AND POTENTIAL SUPERVISORS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist. Prof. Jakov Ajduk

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University hospital center Sestre milosrdnice, University of Medicine, Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Elektrofiziološke metode u medicinskim istraživanjima

BIOGRAPHY

ENT specialist, earsurgeon and subspecialist of audiology, Department of ENT Head and Neck Surgery, University Hospital Center "Sestre Milosrdnice", Zagreb, Croatia.

- 2017. ass. prof. at the School of Medicine, University of Zagreb.

Vice chairman of the Croatian Society of otology and neurotology.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Hyperbaric Oxygen Therapy as Salvage Therapy for Sudden Sensorineural Hearing Loss.

Ajduk J, Ries M, Trotic R, Marinac I, Vlatka K, Bedekovic V.

J Int Adv Otol. 2017 Apr;13(1):61-64. doi: 10.5152/iao.2017.3185.

2. Significance of intraoperative findings in revision tympanomastoidectomy.

Košec A, Kelava I, Ajduk J, Ries M, Trotić R, Bedeković V.

Am J Otolaryngol. 2017 Jul - Aug;38(4):462-465. doi: 10.1016/j.amjoto.2017.04.006. Epub 2017 Apr 12.

3. Primary Ameloblastoma of the Temporal Bone. Košec A, Ajduk J, Ries M, Trotić R.

J Oral Maxillofac Surg. 2017 Jun;75(6):1300.e1-1300.e4. doi: 10.1016/j.joms.2017.01.014. Epub 2017 Jan 24.

4. A case of bilateral congenital middle ear cholesteatoma. Ries M, Kostić M, Ajduk J, Trotić R, Bedeković V.

Braz J Otorhinolaryngol. 2017 Nov - Dec;83(6):723-725. doi: 10.1016/j.bjorl.2015.09.003. Epub 2015 Dec 17.

5. Nasopharyngeal bacterial flora in healthy preschool children during winter-spring months.

Ries M, Kostić M, Zdravec D, Drvis P, Ajduk J, Trotić R.

Coll Antropol. 2013 Jun;37(2):415-22.

6. Hidradenoma of the external auditory canal: clinical presentation and surgical treatment.

Drvis P, Ries M, Zurak K, Trotić R, Ajduk J, Stevanović S. Coll Antropol. 2012 Nov;36 Suppl 2:159-61.

7. Regulatory T cells in children undergoing rush venom immunotherapy. Ajduk J, Turkalj M, Gagro A.

Allergy Asthma Proc. 2012 Nov-Dec;33(6):525-30. doi: 10.2500/aap.2012.33.3608.

8. Long-term functional outcomes after 10 years of bilateral cochlear implant use.

Trotić R, Kostić M, Ries M, Drvis P, Ajduk J, Petrović I. Coll Antropol. 2012 Mar;36(1):161-5.

9. Temporomandibular joint fistula into the external ear canal. Ajduk J, Ries M, Vagic D, Batos-Tripalo A. J Laryngol Otol. 2012 Aug;126(8):837-9. doi: 10.1017/S0022215112001144.

10. Clinical and pathophysiological patterns of otitis externa and overview of problematic cases.

Dzepina D, Ajduk J, Zurak K. Lijec Vjesn. 2011 May-Jun;133(5-6):204-8.

11. Etiology of deafness in children cochlear implant candidates in Croatia. Drvis P, Ajduk J, Trotić R, Ries M, Kosović V, Hat J.

Coll Antropol. 2008 Dec;32(4):1111-3.

12. Effect of house dust mite immunotherapy on transforming growth factor beta1-producing T cells in asthmatic children. Ajduk J, Marinic I, Aberle N, Rabatic S, Gagro A.

Ann Allergy Asthma Immunol. 2008 Apr;100(4):314-22. doi: 10.1016/S1081-1206(10)60592-3.

13. Effect of cysteinyl leukotriene receptor antagonist on CD11b and CD23 expression in asthmatic children.

Gagro A, Aberle N, Rabatić S, Ajduk J, Jelacić J, Dekaris D.

Clin Exp Allergy. 2004 Jun;34(6):939-44.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Hyperbaric Oxygen Therapy as Salvage Therapy for Sudden Sensorineural Hearing Loss.

Ajduk J, Ries M, Trotić R, Marinac I, Vlatka K, Bedeković V.

J Int Adv Otol. 2017 Apr;13(1):61-64. doi: 10.5152/iao.2017.3185.

2. Significance of intraoperative findings in revision tympanomastoidectomy.

Košec A, Kelava I, Ajduk J, Ries M, Trotić R, Bedeković V.

Am J Otolaryngol. 2017 Jul - Aug;38(4):462-465. doi: 10.1016/j.amjoto.2017.04.006. Epub 2017 Apr 12.

3. Primary Ameloblastoma of the Temporal Bone. Košec A, Ajduk J, Ries M, Trotić R.

J Oral Maxillofac Surg. 2017 Jun;75(6):1300.e1-1300.e4. doi: 10.1016/j.joms.2017.01.014. Epub 2017 Jan 24.

4. A case of bilateral congenital middle ear cholesteatoma. Ries M, Kostić M, Ajduk J, Trotić R, Bedeković V.

Braz J Otorhinolaryngol. 2017 Nov - Dec;83(6):723-725. doi: 10.1016/j.bjorl.2015.09.003. Epub 2015 Dec 17.

5. Nasopharyngeal bacterial flora in healthy preschool children during winter-spring months.

Ries M, Kostić M, Zdravec D, Drvis P, Ajduk J, Trotić R.

Coll Antropol. 2013 Jun;37(2):415-22.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Cochlear implantation prognostic factors in very young children

Prognostic value of proteomic profile head and neck melanoma tissue grade I and II



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Prognostic value of proteomic profile head and neck melanoma tissue grade i and II

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Miro Šimun Alebić, M.D., Ph.D.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Maternity hospital and outpatient clinic Podobnik

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Metabolic Syndrome

BIOGRAPHY

EDUCATION:

- 1990-1996. Medical school, University of Zagreb
- 1998-1999. Medical internship, University Hospital Merkur, Zagreb
- 2000-2004. Obstetrics and gynecology specialisation, KB Merkur, Zagreb
- 2007-2009. Gynecological endocrinology and human reproduction subspecialisation, University hospital Vuk Vrhovac, Zagreb; Gynecology and Obstetrics Clinic, Zagreb
2014. Thesis defended „The associations between intermenstrual range and the metabolic characteristics in non-hyperandrogenic women with polycystic ovarian morphology“ at Medical school, University of Osijek

WORKING EXPERIENCE:

- 2004-2006. Polyclinic Nemetova, Zagreb
- 2007-2010. University hospital Vuk Vrhovac, Zagreb
- 2010-2014. University hospital Merkur, Zagreb
- 2015- Maternity hospital and outpatient clinic Podobnik

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: /

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Alebić MŠ, Bulum T, Stojanović N, Duvnjak L. Definition of insulin resistance using the homeostasis model assessment (HOMA-IR) in IVF patients diagnosed with polycystic ovary syndrome (PCOS) according to the Rotterdam criteria. *Endocrine*. 2014 Nov;47(2):625-30. doi: 10.1007/s12020-014-0182-5. Epub 2014 Feb 13.

Alebić MŠ, Stojanović N, Baldani DP, Duvnjak LS. Metabolic implications of menstrual cycle length in non-hyperandrogenic women with polycystic ovarian morphology. *Endocrine*. 2016 Dec;54(3):798-807. doi: 10.1007/s12020-016-1062-y. Epub 2016 Aug 3

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Alebić, MŠ, Stojanović, N. Dehydroepiandrosterone sulphate and prediction of live birth after IVF in young women with low anti-Müllerian hormone concentration. *Reprod Biomed Online*. 2014 Feb;28(2):191-7. doi: 10.1016/j.rbmo.2013.09.023. Epub 2013 Oct 5.

Alebić MŠ, Bulum T, Stojanović N, Duvnjak L. Definition of insulin resistance using the homeostasis model assessment (HOMA-IR) in IVF patients diagnosed with polycystic ovary syndrome (PCOS) according to the Rotterdam criteria. *Endocrine*. 2014 Nov;47(2):625-30. doi: 10.1007/s12020-014-0182-5. Epub 2014 Feb 13.

Dewailly D, Alebić MŠ, Duhamel A, Stojanović N. Using cluster analysis to identify a homogeneous subpopulation of women with polycystic ovarian morphology in a population of non-hyperandrogenic



women with regular menstrual cycles. Hum Reprod. 2014 Nov;29(11):2536-43. doi: 10.1093/humrep/deu242. Epub 2014 Sep 29.

Alebić MŠ, Stojanović N, Duhamel A, Dewailly D. The phenotypic diversity in per-follicle anti-Müllerian hormone (AMH) production in polycystic ovary syndrome (PCOS). Hum Reprod. 2015 Aug;30(8):1927-33. doi: 10.1093/humrep/dev131. Epub 2015 Jun 4

Alebić MŠ, Stojanović N, Baldani DP, Duvnjak LS. Metabolic implications of menstrual cycle length in non-hyperandrogenic women with polycystic ovarian morphology. Endocrine. 2016 Dec;54(3):798-807. doi: 10.1007/s12020-016-1062-y. Epub 2016 Aug 3

Alebić MŠ, Stojanović N, Dewailly D. Discordance between serum anti-Müllerian hormone concentrations and antral follicle counts: not only technical issues. Hum Reprod. 2018 Jun 1;33(6):1141-1148. doi: 10.1093/humrep/dey098.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

/

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

/

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ana Alfirević, MD, PhD, Senior Lecturer

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: The Wolfson Centre for Personalised Medicine, Department of Molecular and Clinical Pharmacology, The Institute of Translational Medicine, Liverpool, UK

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pharmacogenomics

BIOGRAPHY

Born in Zagreb, Education: 2015 Postgraduate Certificate (PG Cert) in Teaching and Learning in Higher Education (Merit), 2005 PhD in Pharmacogenetics, 1997, MSc in Pharmacology, 1986 Dr Med (University of Zagreb, Croatia); Employment record: 2016- Current Reader in Pharmacogenomics, 2012-2016 Senior Lecturer in Pharmacogenomics, University of Liverpool, 2008-2012 Lecturer in Pharmacogenomics, University of Liverpool, 1998-2008 Research Associate at the University of Liverpool, 1991-1997, Career break following maternity leave, 1990-1991 Visiting Doctor, Nuclear Medicine Department, Royal Liverpool University Hospital, UK, 1986-1990 Specialist trainee in Oncology and Nuclear Medicine, Zagreb, Croatia; Leadership, professional and collegial experiences: British Pharmacological Society Australasian visitor 2015 award, Chair of the Steering Committee of the European Pharmacogenomics Research and Implementation Network (since 2014), Member of the International Society for the Study of Xenobiotics (ISSX), Editorial Board Journal of Personalised Medicine, MRCG/HRB Joint Funding Scheme, Joint Selection Committee member 2016, Dublin, Ireland, European Commission Health, Demographic Change and Wellbeing' challenge under Horizon 2020 'Personalised Medicine' (H2020-SC1-2016-2017) committee member 2016 Invited Expert on good pharmacogenomic practice and ICH E18 guideline (London, 2016),

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Siddiqui MK, Veluchamy A, Maroteau C, Tavendale R, Carr F, Pearson E, Colhoun H, Morris AD, George J, Doney A, Pirmohamed M, Alfirevic A, Wadelius M, Maitland van der Zee AH, Ridker PM, Chasman DI, Palmer CNA; PREDICTION-ADR Consortium. CKM Glu83Gly Is Associated With Blunted Creatine Kinase Variation, but Not With Myalgia. *Circ Cardiovasc Genet*. 2017;10(4).
2. Zhang JE, Klein K, Jorgensen AL, Francis B, Alfirevic A, Bourgeois S, Deloukas P, Zanger UM, Pirmohamed M. Effect of Genetic Variability in the CYP4F2, CYP4F11, and CYP4F12 Genes on Liver mRNA Levels and Warfarin Response. *Front Pharmacol*. 2017;8:323.
3. Alfirevic A, Pirmohamed M. Genomics of Adverse Drug Reactions. *Trends Pharmacol Sci*. 2017;38(1):100-109.
4. Alfirevic A, Durocher J, Elati A, León W, Dickens D, Rädisch S, Box H, Siccardi M, Curley P, Xinarianos G, Ardeshtana A, Owen A, Zhang JE, Pirmohamed M, Alfirevic Z, Weeks A, Winikoff B. Misoprostol-induced fever and genetic polymorphisms in drug transporters SLCO1B1 and ABCC4 in women of Latin American and European ancestry. *Pharmacogenomics*. 2015;16(9):919-28.
5. Alfirevic A, Park BK, Pirmohamed M, Naisbitt DJ. Explanation for HLA-B*57:01-linked immune-mediated abacavir-induced hypersensitivity. *Pharmacogenomics*. 2012;13(14):1567-9.
6. Alfirevic A, Pirmohamed M. Adverse drug reactions and pharmacogenomics: recent advances. *Per Med*. 2008;5(1):11-23.

7. Alfirevic A, Jorgensen AL, Williamson PR, Chadwick DW, Park BK, Pirmohamed M. HLA-B locus in Caucasian patients with carbamazepine hypersensitivity. *Pharmacogenomics*. 2006;7(6):813-8.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Martin AP, Downing J, Cochrane M, Collins B, Francis B, Haycox A, Alfirevic A, Pirmohamed M. Trastuzumab uptake in HER2-positive breast cancer patients: a systematic review and meta-analysis of observational studies. *Crit Rev Oncol Hematol*. 2018 Oct;130:92-107.
2. Gibson A, Faulkner L, Lichtenfels M, Ogeese M, Al-Attar Z, Alfirevic A, Esser PR, Martin SF, Pirmohamed M, Park BK, Naisbitt DJ. Correction: The Effect of Inhibitory Signals on the Priming of Drug Hapten-Specific T Cells That Express Distinct V β Receptors. *J Immunol*. 2018 Mar 1;200(5):1951.
3. Navaratnam K, Alfirevic A, Jorgensen A, Alfirevic Z. Aspirin non-responsiveness in pregnant women at high-risk of pre-eclampsia. *Eur J Obstet Gynecol Reprod Biol*. 2018;221:144-150.
4. Martin A, Downing J, Maden M, Fleeman N, Alfirevic A, Haycox A, Pirmohamed M. An assessment of the impact of pharmacogenomics on health disparities: a systematic literature review. *Pharmacogenomics*. 2017;18(16):1541-1550.
5. Navaratnam K, Alfirevic Z, Pirmohamed M, Alfirevic A. How important is aspirin adherence when evaluating effectiveness of low-dose aspirin? *Eur J Obstet Gynecol Reprod Biol*. 2017;219:1-9.
6. K Siddiqui M, Maroteau C, Veluchamy A, Tornio A, Tavendale R, Carr F, Abelega NU, Carr D, Bloch K, Hallberg P, Yue QY, Pearson ER, Colhoun HM, Morris AD, Dow E, George J, Pirmohamed M, Ridker PM, Doney ASF, Alfirevic A, Wadelius M, Maitland-van der Zee AH, Chasman DI, Palmer CNA; PREDICTION-ADR Consortium. A common missense variant of LILRB5 is associated with statin intolerance and myalgia. *Eur Heart J*. 2017;38(48):3569-3575.
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8. Plumpton CO, Alfirevic A, Pirmohamed M, Hughes DA. Cost effectiveness analysis of HLA-B*58:01 genotyping prior to initiation of allopurinol for gout. *Rheumatology (Oxford)*. 2017;56(10):1729-1739.
9. Bluett J, Owen SA, Massey J, Alfirevic A, Pirmohamed M, Plant D, Verstappen SMM, Barton A; Pneumonitis Study Consortium. HLA-A 31:01 is not associated with the development of methotrexate pneumonitis in the UK population: results from a genome-wide association study. *Ann Rheum Dis*. 2017;76(12):e51
10. Faulkner L, Gibson A, Sullivan A, Taylor A, Usui T, Alfirevic A, Pirmohamed M, Naisbitt DJ, Kevin Park B. Detection of Primary T Cell Responses to Drugs and Chemicals in HLA-Typed Volunteers: Implications for the Prediction of Drug Immunogenicity. *Toxicol Sci*. 2016;154(2):416-429.
11. Legge SE, Hamshire ML, Ripke S, Pardinas AF, Goldstein JL, Rees E, Richards AL, Leonenko G, Jorskog LF; Clozapine-Induced Agranulocytosis Consortium, Chambert KD, Collier DA, Genovese G, Giegling I, Holmans P, Jonasdottir A, Kirov G, McCarroll SA, MacCabe JH, Mantripragada K, Moran JL, Neale BM, Stefansson H, Rujescu D, Daly MJ, Sullivan PF, Owen MJ, O'Donovan MC, Walters JTR. Genome-wide common and rare variant analysis provides novel insights into clozapine-associated neutropenia. *Mol Psychiatry*. 2017;22(10):1502-1508.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. *2013-2016 £636k, EU FP7 PREDICTION-ADR (Euro 3 mil), Personalisation of treatment in cardiovascular disease through next generation sequencing in adverse drug reactions (PI workpackage).



2. 2012-2017 £2.35 mil. IMI, MIP-DILI (Euro 37mil) Improving the early prediction of drug induced liver injury in man.
3. 2013-2015 £354k i4i NIHR, A biomarker panel to predict, diagnose and prevent HLA-mediated serious adverse drug reactions;.
4. *2011-2013 £98k ERUK, Genetic markers for carbamazepine-induced hypersensitivity syndrome (PI);.
5. 2010-2013 £350k EU FP7 Marie Curie Initial Training Network, Fighting Drug Failure.
6. *2012-13 \$27k Gynuity Health Projects, Misoprostol induced hyperpyrexia (PI);.
7. 2008-12 £399k EU FP7 framework, EURIPIDES - European Research initiative to develop Imaging Probes for early In-vivo Diagnosis and Evaluation of response to therapeutic Substances

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. *2015-2020, £1 mil, Harris Foundation, Wellbeing of Women, Harris Centre for Preterm Birth, (PI for workpackage).
2. *2013-2016 £636k, EU FP7 PREDICTION-ADR (Euro 3 mil), Personalisation of treatment in cardiovascular disease through next generation sequencing in adverse drug reactions (PI workpackage);.
3. 2012-2017 £2.35 mil. IMI, MIP-DILI (Euro 37mil) Improving the early prediction of drug induced liver injury in man.
4. 2013-2015 £354k i4i NIHR, A biomarker panel to predict, diagnose and prevent HLA-mediated serious adverse drug reactions.
5. *2011-2013 £98k ERUK, Genetic markers for carbamazepine-induced hypersensitivity syndrome (PI)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Profesor Zarko Alfirovic

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Liverpool

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Evidence-based medicine

BIOGRAPHY

Specialist gynecologist and obstetrician, born 1959. in Zagreb.

Graduated at Zagreb University, school of Medicine 1989.

Since 1989 work as gynecologist in UK. From 2003 Professor at Liverpool University, School of Medicine
2010. head of University department of obstetrics and gynecology and pediatrics, Liverpool University,
2014 i Director Harris-Wellbeing Centre.

Author of more than 200 scientific papers, principal investigator in many scientific projects and well as
randomized controlled trials. Editor Cochrane Pregnancy Childbirth Group, 2013 president of Academic
board Royal College of Obstetricians and Gynecologists.

Special interest highrisk pregnancy, fetal medicine, translation medicine and Evidence Based Medicine.

PROFESSOR OF FETAL AND MATERNAL MEDICINE/ HONORARY CONSULTANT OBSTETRICIAN, University of
Liverpool and Liverpool Women's Hospital

Head of Women's and Children's Health, Institute of Translational Medicine, University of Liverpool.

Director of Fetal Medicine Unit, Liverpool Women's Hospital

Director of Harris Wellbeing Preterm Birth Research Centre

Research

My research interest is in fetal medicine, high risk obstetrics, methodology of randomised controlled
trials, meta-analysis and Cochrane systematic reviews.

Membership of International and National Committees and Boards

- Royal College of Obstetricians and Gynaecologists – Chair of Academic Committee and Council Member (2013-2017)
- Cochrane Pregnancy and Childbirth Group – Joint Co-ordinating Editor (2007-date)
- NIHR HTA Commissioning Board Member (2013-2017)
- Cheshire and Merseyside NIHR Comprehensive Research Network – Clinical Lead for Reproductive Medicine, Children and Genetics (2014 -2018)

Keynote and plenary lectures

I gave more than 60 plenary lectures at international conferences including RCOG World Congress, World Congress in Fetal Medicine, European Congress in Perinatal Medicine and ISUOG.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2003

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- : Medley N, Vogel JP, Care A, Alfirevic Z. Interventions during pregnancy to prevent preterm birth: an overview of Cochrane systematic reviews. *Cochrane Database Syst Rev*. 2018 Nov 14;11:CD012505. doi: 10.1002/14651858.CD012505.pub2. Review. PubMed PMID: 30480756.
- 3: Care A, Ingleby L, Alfirevic Z, Sharp A. The influence of the introduction of national guidelines on preterm birth prevention practice: UK experience. *BJOG*. 2018 Nov 20. doi: 10.1111/1471-0528.15549. [Epub ahead of print] PubMed PMID: 30461172.
- 5: Jauniaux E, Alfirevic Z, Bhide AG, Belfort MA, Burton GJ, Collins SL, Dornan S, Jurkovic D, Kayem G, Kingdom J, Silver R, Sentilhes L; Royal College of Obstetricians and Gynaecologists. Placenta Praevia and Placenta Accreta: Diagnosis and Management: Green-top Guideline No. 27a. *BJOG*. 2019 Jan;126(1):e1-e48. doi: 10.1111/1471-0528.15306. Epub 2018 Sep 27. PubMed PMID: 30260097.
- 6: Jauniaux E, Alfirevic Z, Bhide AG, Burton GJ, Collins SL, Silver R; Royal College of Obstetricians and Gynaecologists. Vasa Praevia: Diagnosis and Management: Green-top Guideline No. 27b. *BJOG*. 2019 Jan;126(1):e49-e61. doi: 10.1111/1471-0528.15307. Epub 2018 Sep 27. PubMed PMID: 30260094.
- 12: Meher S, Cuthbert A, Kirkham JJ, Williamson P, Abalos E, Aflaifel N, Bhutta ZA, Bishop A, Blum J, Collins P, Devane D, Ducloy-Bouthors AS, Fawole B, Gülmezoglu AM, Gutteridge K, Gyte G, Homer C, Mallaiah S, Smith JM, Weeks AD, Alfirevic Z. Core outcome sets for prevention and treatment of postpartum haemorrhage: an international Delphi consensus study. *BJOG*. 2019 Jan;126(1):83-93. doi: 10.1111/1471-0528.15335. Epub 2018 Jul 29. PubMed PMID:29920912.
- 18: Medley N, Poljak B, Mammarella S, Alfirevic Z. Clinical guidelines for prevention and management of preterm birth: a systematic review. *BJOG*. 2018 Oct;125(11):1361-1369. doi: 10.1111/1471-0528.15173. Epub 2018 Mar 25. Review. PubMed PMID: 29460323.
- 21: Buljan I, Malički M, Wager E, Puljak L, Hren D, Kellie F, West H, Alfirević Ž, Marušić A. No difference in knowledge obtained from infographic or plain language summary of a Cochrane systematic review: three randomized controlled trials. *J Clin Epidemiol*. 2018 May;97:86-94. doi: 10.1016/j.jclinepi.2017.12.003. Epub 2017 Dec 18. PubMed PMID: 29269021.
- 24: van 't Hooft J, Alfirevic Z, Asztalos EV, Biggio JR, Dugoff L, Hoffman M, Lee G, Mol BW, Pacagnella RC, Pajkrt E, Saade GR, Shennan AH, Vayssière C, Khan KS. CROWN initiative and preterm birth prevention: researchers and editors commit to implement core outcome sets. *BJOG*. 2018 Jan;125(1):8-11.
- 28: Alfirevic Z, Navaratnam K, Mujezinovic F. Amniocentesis and chorionic villus sampling for prenatal diagnosis. *Cochrane Database Syst Rev*. 2017 Sep 4;9:CD003252. doi: 10.1002/14651858.CD003252.pub2. Review. PubMed PMID: 28869276.
- 31: Alfirevic Z, Stampalija T, Dowswell T. Fetal and umbilical Doppler ultrasound in high-risk pregnancies. *Cochrane Database Syst Rev*. 2017 Jun 13;6:CD007529. doi: 10.1002/14651858.CD007529.pub4. Review. PubMed PMID: 28613398.
- 33: Alfirevic Z, Stampalija T, Medley N. Cervical stitch (cerclage) for preventing preterm birth in singleton pregnancy. *Cochrane Database Syst Rev*. 2017 Jun 6;6:CD008991. doi:10.1002/14651858.CD008991.pub3. Review. PubMed PMID:28586127.
- 34: Salomon LJ, Alfirevic Z, Audibert F, Kagan KO, Paladini D, Yeo G, Raine-Fenning N; ISUOG Clinical Standards Committee. ISUOG updated consensus statement on the impact of cfDNA aneuploidy testing on screening policies and prenatal ultrasound practice. *Ultrasound Obstet Gynecol*. 2017 Jun;49(6):815-816. doi: 10.1002/uog.17483. PubMed PMID: 28573775.

- 37: Smith V, Daly D, Lundgren I, Eri T, Begley C, Gross MM, Downe S, Alfirovic Z, Devane D. Protocol for the development of a salutogenic intrapartum core outcome set (SIPCOS). *BMC Med Res Methodol*. 2017 Apr 19;17(1):61. doi: 10.1186/s12874-017-0341-5. PubMed PMID: 28420339; PubMed Central PMCID: PMC5395745.
- 38: Alldred SK, Takwoingi Y, Guo B, Pennant M, Deeks JJ, Neilson JP, Alfirovic Z. First and second trimester serum tests with and without first trimester ultrasound tests for Down's syndrome screening. *Cochrane Database Syst Rev*. 2017 Mar 15;3:CD012599. doi: 10.1002/14651858.CD012599. Review. PubMed PMID: 28295159.
- 39: Alldred SK, Takwoingi Y, Guo B, Pennant M, Deeks JJ, Neilson JP, Alfirovic Z. First trimester ultrasound tests alone or in combination with first trimester serum tests for Down's syndrome screening. *Cochrane Database Syst Rev*. 2017 Mar 15;3:CD012600. doi: 10.1002/14651858.CD012600. Review. PubMed PMID: 28295158.
- 43: Alfirovic Z, Devane D, Gyte GM, Cuthbert A. Continuous cardiotocography (CTG) as a form of electronic fetal monitoring (EFM) for fetal assessment during labour. *Cochrane Database Syst Rev*. 2017 Feb 3;2:CD006066. doi: 10.1002/14651858.CD006066.pub3. Review. PubMed PMID: 28157275.
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- 46: Paladini D, Alfirovic Z, Carvalho JS, Khalil A, Malinger G, Martinez JM, Rychik J, Ville Y, Gardiner H; ISUOG Clinical Standards Committee. ISUOG consensus statement on current understanding of the association of neurodevelopmental delay and congenital heart disease: impact on prenatal counseling. *Ultrasound Obstet Gynecol*. 2017 Feb;49(2):287-288. doi: 10.1002/uog.17324. Epub 2016 Nov 27. PubMed PMID: 27891680.
- 48: Sharp AN, Stock SJ, Alfirovic Z. Outpatient induction of labour in the UK: a survey of practice. *Eur J Obstet Gynecol Reprod Biol*. 2016 Sep;204:21-3. doi: 10.1016/j.ejogrb.2016.06.023. Epub 2016 Jul 30. PubMed PMID: 27513897.
- 50: Ghi T, Sotiriadis A, Calda P, Da Silva Costa F, Raine-Fenning N, Alfirovic Z, McGillivray G; International Society of Ultrasound in Obstetrics and Gynecology (ISUOG). ISUOG Practice Guidelines: invasive procedures for prenatal diagnosis. *Ultrasound Obstet Gynecol*. 2016 Aug;48(2):256-68. doi: 10.1002/uog.15945. PubMed PMID: 27485589.
- 52: Alfirovic Z, Keeney E, Dowswell T, Welton NJ, Medley N, Dias S, Jones LV, Caldwell DM. Methods to induce labour: a systematic review, network meta-analysis and cost-effectiveness analysis. *BJOG*. 2016 Aug;123(9):1462-70. doi: 10.1111/1471-0528.13981. Epub 2016 Mar 22. Review. PubMed PMID: 27001034; PubMed Central PMCID: PMC5021158.
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- 57: van 't Hooft J, Duffy JM, Daly M, Williamson PR, Meher S, Thom E, Saade GR, Alfirovic Z, Mol BW, Khan KS; Global Obstetrics Network (GONet). A Core Outcome Set for Evaluation of Interventions to Prevent

Preterm Birth. *Obstet Gynecol.* 2016 Jan;127(1):49-58. doi: 10.1097/AOG.0000000000001195. PubMed PMID: 26646133.

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70: Salomon LJ, Alfirevic Z, Audibert F, Kagan KO, Paladini D, Yeo G, Raine-Fenning N; ISUOG Clinical Standards Committee. ISUOG consensus statement on the impact of non-invasive prenatal testing (NIPT) on prenatal ultrasound practice. *Z Geburtshilfe Neonatol.* 2014 Dec;218(6):242-3. doi: 10.1055/s-0034-1395670. Epub 2014 Dec 17. PubMed PMID: 25518828. 25407948.

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83: Meher S, Alfirevic Z. Choice of primary outcomes in randomised trials and systematic reviews evaluating interventions for preterm birth prevention: a systematic review. *BJOG.* 2014 Sep;121(10):1188-94; discussion 1195-6.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

: Medley N, Vogel JP, Care A, Alfirevic Z. Interventions during pregnancy to prevent preterm birth: an overview of Cochrane systematic reviews. *Cochrane Database Syst Rev.* 2018 Nov 14;11:CD012505. doi: 10.1002/14651858.CD012505.pub2. Review. PubMed PMID: 30480756.

2: Kenny LC, Alfirevic Z, Baker PN, Ganzevoort W, Glud C, Groom KM, Jakobsen JC, Lim K, Magee LA, Papageorgiou AT, von Dadelszen P. Viagra for fetal growth restriction: STRIDER Consortium replies to letter by Symonds and Budge. *BMJ.* 2018 Nov 22;363:k4872. doi: 10.1136/bmj.k4872. PubMed PMID: 30467195.

3: Care A, Ingleby L, Alfirevic Z, Sharp A. The influence of the introduction of national guidelines on preterm birth prevention practice: UK experience. *BJOG.* 2018 Nov 20. doi: 10.1111/1471-0528.15549. [Epub ahead of print] PubMed PMID: 30461172.

4: Sharp A, Duong C, Agarwal U, Alfirevic Z. Screening and management of the small for gestational age fetus in the UK: A survey of practice. *Eur J Obstet Gynecol Reprod Biol.* 2018 Dec;231:220-224. doi: 10.1016/j.ejogrb.2018.10.039. Epub 2018 Oct 25. PubMed PMID: 30415129.

5: Jauniaux E, Alfirevic Z, Bhide AG, Belfort MA, Burton GJ, Collins SL, Dornan S, Jurkovic D, Kayem G, Kingdom J, Silver R, Sentilhes L; Royal College of Obstetricians and Gynaecologists. Placenta Praevia and Placenta Accreta: Diagnosis and Management: Green-top Guideline No. 27a. *BJOG.* 2019 Jan;126(1):e1-e48. doi: 10.1111/1471-0528.15306. Epub 2018 Sep 27. PubMed PMID: 30260097.

6: Jauniaux E, Alfirevic Z, Bhide AG, Burton GJ, Collins SL, Silver R; Royal College of Obstetricians and Gynaecologists. Vasa Praevia: Diagnosis and Management: Green-top Guideline No. 27b. *BJOG.* 2019 Jan;126(1):e49-e61. doi: 10.1111/1471-0528.15307. Epub 2018 Sep 27. PubMed PMID: 30260094.

7: Ivandic J, Care A, Goodfellow L, Poljak B, Sharp A, Roberts D, Alfirevic Z. Cervical pessary for short cervix in high risk pregnant women: 5 years experience in a single centre. *J Matern Fetal Neonatal Med.* 2018 Sep 25;1-7. doi: 10.1080/14767058.2018.1519018. [Epub ahead of print] PubMed PMID: 30173599.

8: Sharp A, Cornforth C, Jackson R, Harrold J, Turner MA, Kenny LC, Baker PN, Johnstone ED, Khalil A, von Dadelszen P, Papageorgiou AT, Alfirevic Z; STRIDER group. Maternal sildenafil for severe fetal growth

- restriction (STRIDER): a multicentre, randomised, placebo-controlled, double-blind trial. *Lancet Child Adolesc Health*. 2018 Feb;2(2):93-102. doi: 10.1016/S2352-4642(17)30173-6. Epub 2017 Dec 7. Erratum in: *Lancet Child Adolesc Health*. 2018 Feb;2(2):e2. PubMed PMID: 30169244.
- 9: Carter J, Tribe RM, Sandall J, Shennan AH; UK Preterm Clinical Network. The Preterm Clinical Network (PCN) Database: a web-based systematic method of collecting data on the care of women at risk of preterm birth. *BMC Pregnancy Childbirth*. 2018 Aug 17;18(1):335. doi: 10.1186/s12884-018-1967-y. PubMed PMID: 30119660; PubMed Central PMCID: PMC6098573.
- 10: Groom KM, Ganzevoort W, Alfirevic Z, Lim K, Papageorgiou AT; STRIDER Consortium. Clinicians should stop prescribing sildenafil for fetal growth restriction (FGR): comment from the STRIDER Consortium. *Ultrasound Obstet Gynecol*. 2018 Sep;52(3):295-296. doi: 10.1002/uog.19186. Epub 2018 Aug 6. PubMed PMID: 30079989.
- 11: Mone F, Mulcahy C, McParland P, Breathnach F, Downey P, McCormack D, Culliton M, Stanton A, Cody F, Morrison JJ, Daly S, Higgins J, Cotter A, Hunter A, Tully EC, Dicker P, Alfirevic Z, Malone FD, McAuliffe FM. Trial of feasibility and acceptability of routine low-dose aspirin versus Early Screening Test indicated aspirin for pre-eclampsia prevention (TEST study): a multicentre randomised controlled trial. *BMJ Open*. 2018 Jul 28;8(7):e022056. doi: 10.1136/bmjopen-2018-022056. PubMed PMID: 30056389; PubMed Central PMCID: PMC6067363.
- 12: Meher S, Cuthbert A, Kirkham JJ, Williamson P, Abalos E, Aflaifel N, Bhutta ZA, Bishop A, Blum J, Collins P, Devane D, Ducloy-Bouthors AS, Fawole B, Gülmezoglu AM, Gutteridge K, Gyte G, Homer C, Mallaiah S, Smith JM, Weeks AD, Alfirevic Z. Core outcome sets for prevention and treatment of postpartum haemorrhage: an international Delphi consensus study. *BJOG*. 2019 Jan;126(1):83-93. doi: 10.1111/1471-0528.15335. Epub 2018 Jul 29. PubMed PMID: 29920912.
- 13: Care A, Muller-Myhsok B, Olearo E, Todros T, Caradeux J, Goya M, Palacio M, Carreras E, Alfirevic Z. Can previous preterm birth classification influence treatment of short cervix in a subsequent pregnancy? Comparison of vaginal progesterone and Arabin pessary. *Ultrasound Obstet Gynecol*. 2018 Jun 19. doi: 10.1002/uog.19118. [Epub ahead of print] PubMed PMID: 29920812.
- 14: Houghton G, Kingdon C, Dower M, Shakur-Still H, Alfirevic Z. What women think about consent to research at the time of an obstetric emergency: a qualitative study of the views of a cohort of World Maternal Antifibrinolytic Trial participants. *BJOG*. 2018 Dec;125(13):1744-1753. doi: 10.1111/1471-0528.15333. Epub 2018 Jul 31. PubMed PMID: 29911309; PubMed Central PMCID: PMC6283048.
- 15: Leigh S, Granby P, Haycox A, Mundle S, Bracken H, Khedikar V, Mulik J, Faragher B, Easterling T, Turner MA, Alfirevic Z, Winikoff B, Weeks AD. Foley catheter vs. oral misoprostol to induce labour among hypertensive women in India: a cost-consequence analysis alongside a clinical trial. *BJOG*. 2018 Dec;125(13):1734-1742. doi: 10.1111/1471-0528.15285. Epub 2018 Jun 22. PubMed PMID: 29782065; PubMed Central PMCID: PMC6282740.
- 16: Sharp A, Chappell LC, Dekker G, Pelletier S, Garnier Y, Zeren O, Hillerker KM, Fischer T, Seed PT, Turner M, Shennan AH, Alfirevic Z. Placental Growth Factor informed management of suspected pre-eclampsia or fetal growth restriction: The MAPPLE cohort study. *Pregnancy Hypertens*. 2018 Oct;14:228-233. doi: 10.1016/j.preghy.2018.03.013. Epub 2018 Mar 26. PubMed PMID: 29627351.
- 17: Buljan I, Malički M, Wager E, Puljak L, Hren D, Kellie F, West H, Alfirević Ž, Marušić A. Response to letter to the editor by Mc Sween-Cadieus et al. (2017). *J Clin Epidemiol*. 2018 Aug;100:133-134. doi: 10.1016/j.jclinepi.2018.02.021. Epub 2018 Mar 5. PubMed PMID: 29518477.

- 18: Medley N, Poljak B, Mammarella S, Alfirovic Z. Clinical guidelines for prevention and management of preterm birth: a systematic review. *BJOG*. 2018 Oct;125(11):1361-1369. doi: 10.1111/1471-0528.15173. Epub 2018 Mar 25. Review. PubMed PMID: 29460323.
- 19: Navaratnam K, Alfirovic A, Jorgensen A, Alfirovic Z. Aspirin non-responsiveness in pregnant women at high-risk of pre-eclampsia. *Eur J Obstet Gynecol Reprod Biol*. 2018 Feb;221:144-150. doi: 10.1016/j.ejogrb.2017.12.052. Epub 2018 Jan 1. PubMed PMID: 29304392.
- 20: Pels A, Kenny LC, Alfirovic Z, Baker PN, von Dadelszen P, Gluud C, Kariya CT, Mol BW, Papageorgiou AT, van Wassenae-Leemhuis AG, Ganzevoort W, Groom KM; international STRIDER Consortium. STRIDER (Sildenafil TheRapy in dismal prognosis early onset fetal growth restriction): an international consortium of randomised placebo-controlled trials. *BMC Pregnancy Childbirth*. 2017 Dec 28;17(1):440. doi: 10.1186/s12884-017-1594-z. PubMed PMID: 29282009; PubMed Central PMCID: PMC5745923.
- 21: Buljan I, Malički M, Wager E, Puljak L, Hren D, Kellie F, West H, Alfirović Ž, Marušić A. No difference in knowledge obtained from infographic or plain language summary of a Cochrane systematic review: three randomized controlled trials. *J Clin Epidemiol*. 2018 May;97:86-94. doi: 10.1016/j.jclinepi.2017.12.003. Epub 2017 Dec 18. PubMed PMID: 29269021.
- 22: Wald NJ, Huttly WJ, Bestwick JP, Old R, Morris JK, Cheng R, Aquilina J, Peregrine E, Roberts D, Alfirovic Z. Prenatal reflex DNA screening for trisomies 21, 18, and 13. *Genet Med*. 2018 Aug;20(8):825-830. doi: 10.1038/gim.2017.188. Epub 2017 Nov 9. PubMed PMID: 29120460
- 23: Shanmuganathan M, Sival DA, Eastwood KA, Morris K, Cartmill J, Heep A, Bohosiewicz J, Pastuszka A, Hunter A, Ali A, McConnell R, Crimmins D, Malone F, Bailie C, Deprest J, McKillop C, Alfirovic Z, McAuliffe F, Ong S. Prenatal surgery for spina bifida: a therapeutic dilemma. Proceedings of the SHINE conference, Belfast. *Ir J Med Sci*. 2018 Aug;187(3):713-718. doi: 10.1007/s11845-017-1709-6. Epub 2017 Nov 3. Review. PubMed PMID: 29101642.
- 24: van 't Hooft J, Alfirovic Z, Asztalos EV, Biggio JR, Dugoff L, Hoffman M, Lee G, Mol BW, Pacagnella RC, Pajkrt E, Saade GR, Shennan AH, Vayssière C, Khan KS. CROWN initiative and preterm birth prevention: researchers and editors commit to implement core outcome sets. *BJOG*. 2018 Jan;125(1):8-11. doi: 10.1111/1471-0528.14987. PubMed PMID: 29055092
- 25: Navaratnam K, Alfirovic Z, Pirmohamed M, Alfirovic A. How important is aspirin adherence when evaluating effectiveness of low-dose aspirin? *Eur J Obstet Gynecol Reprod Biol*. 2017 Dec;219:1-9. doi: 10.1016/j.ejogrb.2017.10.004. Epub 2017 Oct 3. Review. PubMed PMID: 29024912.
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LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Core support for UK based Cochrane Collaborative Review Groups: Pregnancy and Childbirth. DEPARTMENT OF HEALTH (UK); 01-APR-15 - 31-MAR-20 £1,015 310 (Principal Investigator)
- Harris Wow Centre for Preterm Birth Research WELLBEING OF WOMEN 01-APR-15 - 31-MAR-20 £993,820 (Principal Investigator)
- A Randomized Controlled Trial Of Sildenafil Therapy In Dismal Prognosis Early-Onset Intrauterine Growth Restriction (STRIDER) DEPARTMENT OF HEALTH (UK) 104937 01-MAR-14 28-FEB-19 £1,082,898 (Principal Investigator)
- Personalised medicine for pregnant women: novel metabolomic and proteomic biomarkers to detect pre-eclampsia and improve outcome. (IMproved Pregnancy Outcomes by Early Detection) IMPROVED EUROPEAN COMMISSION 104157 01-NOV-12 31-OCT-18 £213,560 (Co-applicant)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- Core support for UK based Cochrane Collaborative Review Groups: Pregnancy and Childbirth. DEPARTMENT OF HEALTH (UK); 01-APR-15 - 31-MAR-20 £1,015 310 (Principal Investigator)
- Harris Wow Centre for Preterm Birth Research WELLBEING OF WOMEN 01-APR-15 - 31-MAR-20 £993,820 (Principal Investigator)
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NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mirna Natalija Aničić, MD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine,
University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Liver transplantation in children

BIOGRAPHY

Born 22.08.1984. in Zagreb. She finished Classical Grammar School.

2002 enrolled at the Faculty of Medicine in Zagreb

2005- 2007 demonstrator at the Department of Pathology

2007th to 2008th a demonstrator at the Pediatrics Department

Graduated in 2008, average rating: 4.42

2008th to 2009th internship (KBC Zagreb)

2009th to 2016th Postgraduate Doctoral Program "Biomedicine and Health",
ongoing PhD dissertation, "Liver complications of type 1 diabetes mellitus"

2010.-2014.- pediatric specialist at Pediatric Clinic KBC Zagreb

2014-2018- a pediatric specialist at the Pediatric Clinic of KBC Zagreb

2018-Today, subspecialist of pediatric gastroenterology, hepatology and diet

Since September, he participated as an associate in teaching in the undergraduate teaching of the English study "Pediatrics" since February 2016. in the implementation of the postgraduate specialist study "Emergency medicine", from September 2016. is a teacher of the undergraduate course "Foundations of Medical Aptitude", and since 2017 participated in conducting postgraduate studies "Anesthesiology and Reanimation".

From December 2016 is an Assistant to the Department of Pediatrics.

Member of the Croatian Medical Association, Croatian Pediatric Society, Croatian Society for Pediatric Gastroenterology, Hepatology and Nutrition and ESPGHAN (European Society for Pediatric Gastroenterology, Hepatology and Nutrition).

Knowledge of foreign languages: English active, German passive.

Working on a Computer: Microsoft Office

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Vuković, Jurica; Aničić, Mirna; Omerza, Lana; Senečić-Čala, Irena, Tješić-Drinković, Duška. Kronični hepatitis C-tražiti, opservirati ili liječiti. (Pedijatrija Danas: Novosti i perspektive)/ Tješić-Drinković, Duška ; Vuković, Jurica ; Barišić, Nina (ur.). Zagreb : Medicinska naklada, 2015.

Senečić-Čala, Irena; Tješić-Drinković, Duška; Vuković, Jurica; Omerza, Lana; Aničić Mirna. Biološka terapija i bioslični lijekovi u pedijatriji. (Pedijatrija Danas: Novosti i perspektive)/Tješić-Drinković, Duška ; Vuković, Jurica ; Barišić, Nina (ur.). Zagreb : Medicinska naklada, 2015.

Omerza, Lana; Tješić Drinković, Duška, Senečić-Čala Irena, Aničić Mirna, Vuković Jurica. Dijete je progutalo nešto nejestivo. (Pedijatrija Danas: Novosti i perspektive)/ Tješić-Drinković, Duška ; Vuković, Jurica ; Barišić, Nina (ur.). Zagreb : Medicinska naklada, 2015.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Kljaić K, Omerza L, Aničić MA, Senečić-Čala I, Vuković J, Tješić-Drinković D, Tješić-Drinković Du. Mineralna gustoća kostiju djece sa cističnom fibrozom homozigota za mutaciju F508del. Paediatr Croat. 2018;62 (Suppl 2):144-5.

Milošić K, Aničić MN, Omerza L, Senečić-Čala I, Vuković J, Tješić-Drinković D. Učestalost funkcijskih poremećaja probavnog sustava u ambulanti pedijatrijskog gastroenterologa. Paediatr Croat. 2018;62 (Suppl 2):146-7.

Vučemilo M, Aničić MN, Omerza L, Tješić-Drinković D, Vuković J, Senečić-Čala I. Ishod gastroenterološke obrade i praćenja djece s tjelesnim nenapredovanjem u tercijarnom centru. Paediatr Croat. 2018;62 (Suppl 2):152-3.

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Todorić I, Aničić MN, Omerza L, Senečić-Čala I, Tješić-Drinković D, Kelečić J, Tješić-Drinković D, Vuković J. Enteropatija s gubitkom proteina, jedan simptom mnogih bolesti. Paediatr Croat. 2018;62 (Suppl 2):154.

Brezovec E, Aničić MN, Omerza L, Tješić-Drinković D, Vuković J, Senečić-Čala I. Učestalost i karakteristike ekstraintestinalnih manifestacija kronične upalne bolesti crijeva u djece – iskustvo Kliničkog bolničkog centra. Paediatr Croat. 2018;62 (Suppl 2):155.

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Čaleta T, Brkić F, Todorić I, Aničić MN, Omerza L, Senečić I, Tješić-Drinković D, Papeš D, Pasini M, Sabolić Pipinić I, Čavar S, Bogović M, Antabak A, Ninković D, Dasović. Buljević A, Filipović-Grčić B, Benjak V, Luetić T, Vuković J, Grizelj R. Kratkoročni ishod bolesnika s gastroshizom liječenih u Kliničkom bolničkom centru Zagreb. Paediatr Croat. 2018;62 (Suppl 2):161.

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Anić MN, Omerza L, Tješić-Drinković Du, Senecić-Cala I, Krnić N, Spehar Uroic A, Rojnić Putarek N, Vuković J. Prevalence of liver disease in children with diabetes mellitus type 1 and correlation with metabolic control. JPGN, 2017; 64 (Suppl 1)

Kovačević D, Kotromanović S, Omerza L, Aničić M, Filipović Grčić B, Petrovečki M, Tješić Drinković Du, Vuković J, Senečić-Čala I. Bolovi u trbuhu kao razlog dolaska u hitnu pedijatrijsku ambulantu– iskustvo Kliničkog bolničkog centra Zagreb. Paediatr Croat.2016;60 (Suppl 3):127

Vuković J, Aničić M, Omerza L, Senečić-Čala I, Tješić-Drinković Du. Gastrointestinalni poremećaj s eozinofilnom infiltracijom u bolesnika na imunosupresivnoj terapiji nakon transplantacije jetre – pregled i prikaz bolesnika. Paediatr Croat.2016;60 (Suppl 3):132

Aničić M, Omerza L, Bogović M, Pasini M, Filipović-Grčić I, Zah-Bogović T, Matić T, Čuk M, Duspara V, Senečić-Čala I, Tješić Drinković Du, Gojević A, Luetić T, Galić S, Cvitković M, Rupčić M, Sjekavica I, Škegro M, Novak M, Vuković J. Retransplantacija jetre u djece - opravdan modalitet liječenja. Paediatr Croat.2016;60 (Suppl 3):132

Aničić M, Omerza L, Tješić-Drinković Du, Senečić-Čala I, Barić I, Vuković J. Akutno jetreno zatajenje – nova karakteristika Helsmoortel-Van der AA sindroma.Paediatr Croat.2016;60 (Suppl 3):135

Omerza L, Aničić M, Tješić-Drinković Du, Senečić-Čala I, Tomić T, Vuković J. Carolijeva bolest – prikaz pacijenta.Paediatr Croat.2016;60 (Suppl 3):137

Omerza L, Šeremet J, Tješić-Drinković Du, Senečić-Čala I, Aničić M, Vuković J. Intestinalna limfocitna nodularna hiperplazija – prikaz pacijenta. Paediatr Croat.2016;60 (Suppl 3):137

Anić M, Omerza L, Tješić-Drinković D, Senecić Čala I, Grizelj R, Krnić N, Špehar A, Rojnić Putarek N, Corić M, Vuković J. Glycogenic hepatopathy in type 1 diabetes: an acute complication?, ESPGHAN abstract book 2015

Anićić M, Omerza L, Senečić-Čala I, Tješić-Drinković Du , Krnić N, Špehar Uroić A, Rojnić Putarek N, Ille J, Grizelj R, Čorić M, Dumić M, Vuković J Glikogenska hepatopatija- komplikacija dijabetesa melitusa tipa 1. Paediatr Croat.2014;58 (Suppl 2):126.

Vuković, J; Grizelj, R; Aničić, M; Omerza, L; Senečić-Čala, I; Tješić-Drinković, Du. Kako nahraniti jetru? Paediatr Croat. 2014; 58 Suppl 1: 243-247.

Vuković, J; Bunić, M; Ille, V; Aničić, M; Omerza, L; Batinica S. Program transplantacije jetre u djece u Republici Hrvatskoj. Paediatr Croat. 2014;58 (Suppl 2): 8-12

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Mariastefania Antica, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute, Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY:

Molecular features of lymphocyte development, Immunological recognition

BIOGRAPHY

Professional background relevance: M. Antica has a long standing interest in stem cells, lymphocyte development and differentiation, leukemia and cancer research. She was involved in the basic and clinical studies on stem cells for lymphocytes: the time and place of commitment of precursors for the lymphocyte lineage (L. Wu and M. Antica, et al., 1991 Developmental potential of the earliest precursor cells from the adult mouse thymus. *J. Exp. Med* 174, 1617). Her work resulted in a finding of a new population of stem cells in the fetal thymus: (Antica et al 1993. *J. Immunol.* 151, 1-9) and a new population of stem cells in the bone marrow (Antica, et al 1994. *Blood* 84, 111; and a book chapter: R. Scollay, and M. Antica, 1995. Stem cells for lymphocytes: comments on the time and place of commitment of precursors for the T lineage. *Bone Marrow Transplantation, Basic and Clinical Studies*, S. Ikehara, F. Takaku, R. A. Good (Eds) Springer - Verlag, pp. 20-28). With her collaborators she cloned the murine U2 snRNP-A' gene differentially expressed during lymphocyte development (M. Antica, et al 2002. *Immunol letters* 82, 217-223). She returned to the Rudjer Boskovic Institute as a Senior Scientist and was appointed Associate Professor in year 2000 and Professor in 2005. Her publications are highly relevant to the proposed subject of the book, relating to adult stem cells and the reconstitution of cellular immunity and leukemia development. Further work proved T lymphocyte development at extrathymic sites *in vivo* (M. Antica and R. Scollay, 1999. *J. Immunol.*, 163 206-211.)

M. Antica's current work concerns transcription factors that regulate lymphocyte development and their impairment in leukemia (M. Antica, et al 2008. *Blood* 111 3296 – 3297) and research on stem cells from the adult human thymus (partner on the FP7 Health project: Thymistem).

Research experience M. Antica has been working in the area of cellular and molecular biology, adult stem cells, transcription factors in lymphocyte and leukemia development and cancer medicine.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 5th June 2018.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. L. Horvat, J. Skelin, B. Jelić Puškarić, Isidoro Feliciello, Darko Heckel, Josip Madunić, Ika Kardum-Skelin, Maja Matulić, Delfa Radić-Krišto and M. Antica (2018) Translational Medicine Communications 3:8
2. L. Horvat, M. Antica and M. Matulić (2018) Effect of Notch and PARP Pathways' Inhibition in Leukemic Cells. *Cells*, 7(6), 58;
3. J. Madunić, L. Horvat, I. Majstorović, I. Jodłowska, M. Antica, M. Matulić (2017) Sodium Salicylate Inhibits Urokinase Activity in MDA MB-231 Breast Cancer Cells. *Clinical breast cancer*. 17, (8): 629-637

4. J. Madunić, M. Antica, P. Cvjetko, L. Požgaj, M. Matulić (2016) Modulation of urokinase plasminogen activator system by poly(ADP-ribose)polymerase-1 inhibition Cytotechnology; 68(4):783-94
5. M. Matulić, J. Skelin, D. Radic-Krišto, I. Kardum-Skelin, D. Grčević, M. Antica (2015) Notch affects the prodifferentiating effect of retinoic acid and PMA on leukemic cells. Cytometry A. 87 129-136.
6. M. Antica (2015) Notched player in myeloid leukemia - new insights exposed, In this issue. Cytometry, 87.
7. A. J. Martić, S. Ivanković, M. Antica, N. Hiršl, T. Jukić, M. Jurin (2015) Transplanted tumor growth and the incidence of T-lymphocyte populations in the spleen of newcastle virus-treated mice. Cancer Biother Radiopharm. 30(4):182-186.
8. M. Paradžik, S. Novak, G. Mokrović, T. Bordukalo Nikšić, D. Heckel, J. Stipić, D. Pavičić Baldani, L. Čičin-Šain, M. Antica (2012) Ikaros family transcription factors expression in rat thymus: detection of impaired development. Int J Immunopathol Pharmacol. 25 893-900.
9. M. Antica, M. Paradžik, S. Novak, S. Džebro, M. Dominis (2010) Gene expression in formalin-fixed paraffin-embedded lymph nodes J Immunol Met. 359 42-46.
10. M. Matulic, M. Paradzik, B. Jelic-Puskaric, J. Stipic, M. Antica (2010) Analysis of Ikaros Family Splicing Variants in Human Hematopoietic Lineages. Collegium Antropol. 34, 59-63.
11. Matulic, M., Paradzik, M., Cicin-Sain, L., Kapitanovic, S., Dubravcic, K., Batinic, D., Antica, M. (2009) Ikaros family transcription factors in chronic and acute leukemia. Am J Hematol. 84, 375-377
12. Gavella, M., Vrhovac-Garaj, V., Lipovac, V., Antica, M., Gajski, G., Car, N.. (2009) Ganglioside GT1b protects human spermatozoa from hydrogen peroxide-induced DNA and membrane damage. Int J Androl Epub 2009 March 25.
13. M. Antica, L. Cicin-Sain, S. Kapitanovic, M. Matulić, S. Dzebro and M. Dominis (2008) Aberrant Ikaros, Aiolos and Helios expression in Hodgkin and non-Hodgkin lymphoma. Blood 111 3296 - 3297.
14. Antica, M., Dubravcic, K., Rajic, LJ., Labar, B., Batinic, D. (2007) A search for a mutation of the Aiolos phosphorylation domain in lymphocytes from leukemia patients. Haematologica Haematologica. 92 260-261
15. Kapitanovic, S., Cacev, T., Antica, M. Kralj, M., Cavric, G., Pavelic, K., Spaventi, R. (2006). Mechanism of indomethacin antitumor activity in HT-29 colon cancer cells. Exp. Mol. Pathol. 80 90-96
16. B. Kusic, M. Dominis, Dz. Sonja, M. Antica. (2003) Molecular insight into the diagnosis of lymphoma. Int. J. Mol. Med. 12 667-671
17. T. Korbler, M. Grskovic, M. Dominis, M. Antica (2003) A simple method for RNA isolation from formalin-fixed and paraffin-embedded lymphatic tissues. Exp. Mol. Pathol., 74 (3) 336-340
18. B. Kusic, S. Gasparov, M. Katicic, M. Dominis, M. Antica (2003) Monoclonality in Helicobacter pylori-positive gastric biopsies: An early detection of mucosa-associated lymphoid tissue lymphoma, Exp. Mol. Pathol., 74 (1) 61-67
19. B. Vitale, M. Martinis, M. Antica, B. Kusic, S. Rabatic, A. Gagro, R. Kusec, B. Jaksic. (2003) Prolegomena for chronic lymphocytic leukemia. Scan J Immunol. 58(6) 588-600

20. M. Antica, B. Kusic, D. Hranilovic, A.B. Dietz, and S. Vuk-Pavlovic (2002) Cloning the cDNA for murine U2 snRNP-A' gene and its differential expression in lymphocyte development. *Immunol. Letters*, 82 (3) 217-223
21. M. Antica, R. Scollay (1999) Development of T lymphocytes at extrathymic sites. *J. Immunol.*, 163 206-211.
22. M. Dominis, S. Dzebro, B. Kusic, M. Antica (1998) "Inflammatory pseudotumor" of the spleen. *Acta Cytologica*, 42 1053-1056.
23. M. Antica L. Wu, K. Shortman and R. Scollay (1997) Stem cell antigen 2 (Sca-2) expression in adult and developing mice. *Immunol. Letters* 55 47-51.
24. J. Ismaili, M. Antica and L. Wu (1996) CD4 and CD8 expression and T cell antigen receptor gene rearrangement in early intrathymic precursor cells. *Eur. J. Immunol.* 26 731-737.
25. B. Vitale, B. Kusic, M. Antica Lj. Poljak, A. Gagro, S. Rabatic, and B. Jaksic (1995) Chronic Lymphocytic leukemia (CLL): a paradigm for developmental imbalance in B-cell and T-cell communication. *Period biol* 97 273-281
26. M. Antica (1995) Lymphopoiesis and the gene products of the W and Steel loci. *Period biol* 97 87-92
27. C. L. Li, L.Wu, M. Antica K. Shortman, and G. R. Johnson (1994) Purified murine long-term in vivo hemopoietic repopulating cells are not pro-thymocytes. *Exp. Haematol* 23, 21-25
28. M. Antica L. Wu, K. Shortman and R. Scollay (1994) Thymic stem cells in the mouse bone marrow. *Blood* 84, 111-117
29. M. Antica L. Wu, K. Shortman and R. Scollay (1993) Intrathymic lymphoid precursor cells during fetal thymus development. *J. Immunol.* 151, 1-9
30. M. Antica B. Kusic, R. Spaventi, B. Jaksic and B. Vitale (1993) Functional differences of T cells in B Chronic Lymphocytic Leukemia. *Leukemia and Lymphoma* 9, 133-140
31. J. Gabrilovac, M. Antica and M. Osmak (1991) In vivo bidirectional regulation of mouse natural killer (NK) cell cytotoxic activities by Leu-enkephalin: reversibility by naloxone. *Life Sciences*, 50, 29 – 37
32. L. Wu, M. Antica G. R. Johnson, R. Scollay and K. Shortman (1991) Developmental potential of the earliest precursor cells from the adult mouse thymus. *J. Exp. Med* 174, 1617 – 1627
33. R. Spaventi, M. Antica and K. Pavelic (1990) Insulin and insulin-like growth factor I (IGFI) in early mouse embryogenesis. *Development* 108, 491-495.
34. M. Antica, G. Hoffmann-Fezer and S. Thierfelder (1989) Antilymphocytic Antibodies and Marrow Transplantation. X. T cell depletion in marrow donors with C1q high and low affine antibodies for suppression of GVHD in Fully mismatched mice. *Exp. Hematol.* 17, 942-947.
35. G. Hoffmann-Fezer, M. Antica, R. Schuh and S. Thierfelder (1989) Distribution of injected anti-Thy-1 monoclonal antibodies in mouse lymphatic organs: Evidence for penetration of the cortical blood-thymus barrier, and for intravascular antibody-binding onto lymphocytes. *Hybridoma* 8, 517 - 527.
36. M. Antica, B. Jaksic and B. Vitale (1986) T-Lymphocyte Colonies from Patients with Chronic Lymphocytic Leukemia (CLL). *Period. Biol.* 88, 503 - 504.

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38. B. Vitale, M. Antica, B. Benkovic, B. Burek and B. Jaksic (1985) The Relationship Between Membrane Characteristics, Functional Reactivity of T-Lymphocytes, and the Progression Rate of B-Cell Chronic Lymphocytic Leukemia. *Cancer* 56, 1075 - 1081.
39. M. Antica and B. Vitale (1983) Clonal Proliferation of Human T lymphocytes. *Period. Biol.* 85, 221 - 222.
40. *Acute Leukemia - The Scientist's Perspective and Challenge*, M. Antica (Ed.), ISBN: 978-953-307-553-2, InTech, 2011.
41. Book translation: *Your amazing immune system*, (Ed. Masayuki Miyasaka) 2011 *Tvoj čudesni imunosni sustav*, ISBN: 978-953-7941-09-3, M. Antica (Ed.)
42. M. Antica (2011). *Lymphocyte Commitment and Ikaros Transcription Factors*, *Acute Leukemia - The Scientist's Perspective and Challenge*, Mariastefania Antica (Ed.), ISBN: 978-953-307-553-2, InTech, <http://www.intechopen.com/articles/show/title/lymphocyte-commitment-and-ikaros-transcription-factors>
43. M. Antica (2007) Utvrđivanje i mjerenje apoptoze protočnim citometrom (Flow cytometry for detection of apoptosis) and Određivanje ekspresije proteina protočnim citometrom (Measurements of marker expression by means of flow cytometry). In: *Metode u molekularnoj biologiji (Methods in molecular biology)/ Ambriović Ristov, A et al (Ed). Zagreb: Rudjer Boskovic Institute*, pp 792-793. and pp 796-798.
44. M. Antica (1997) Razvoj limfocita u kulturama fetalnih timusa (Lymphocyte development in fetal organ thymic cultures) in: *Protočna citometrija u kliničkolaboratorijskoj praksi (Flow cytometry in clinical applications)*, A. Stavljenić Rukavina, D. Batinić, L. Bilić-Zulle (Eds) Medical university of Zagreb, Zagreb, Croatia
45. R. Scollay, and M. Antica (1995) Stem cells for lymphocytes: comments on the time and place of commitment of precursors for the T lineage. *Bone Marrow Transplantation, Basic and Clinical Studies*, S. Ikehara, F. Takaku, R. A. Good (Eds) Springer - Verlag, pp. 20-28
46. M. Antica (1989) Biological and Clinical Implications of Membrane Antigens on Leukaemic Cells. In: *Tumori i faktori rasta ("Tumors and Growth Factors") Pavelić (Ed)*,
47. M. Antica and R. Spaventi (1989) C-myc Oncogene in Normal and Malignant Cells. In: *Onkogeni i faktori rasta ("Oncogenes and growth factors")*, D. Ikić, K. Pavelić, R. Spaventi (Eds)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. L. Horvat, J. Skelin, B. Jelić Puškarić, Isidoro Feliciello, Darko Heckel, Josip Madunić, Ika Kardum-Skelin, Maja Matulić, Delfa Radić-Krišto and M. Antica (2018) *Translational Medicine Communications* 3:8
2. L. Horvat, M. Antica and M. Matulić (2018) Effect of Notch and PARP Pathways' Inhibition in Leukemic Cells. *Cells*, 7(6), 58;

3. J. Madunić, L. Horvat, I. Majstorović, I. Jodłowska, M. Antica, M. Matulić (2017) Sodium Salicylate Inhibits Urokinase Activity in MDA MB-231 Breast Cancer Cells. *Clinical breast cancer*. 17, (8): 629-637
4. J. Madunić, M. Antica, P. Cvjetko, L. Požgaj, M. Matulić (2016) Modulation of urokinase plasminogen activator system by poly(ADP-ribose)polymerase-1 inhibition *Cytotechnology*; 68(4):783-94
5. M. Matulić, J. Skelin, D. Radic-Krišto, I. Kardum-Skelin, D. Grčević, M. Antica (2015) Notch affects the prodifferentiating effect of retinoic acid and PMA on leukemic cells. *Cytometry A*. 87 129-136.
6. M. Antica (2015) Notched player in myeloid leukemia - new insights exposed, In this issue. *Cytometry*, 87.
7. A. J. Martić, S. Ivanković, M. Antica, N. Hiršl, T. Jukić, M. Jurin (2015) Transplanted tumor growth and the incidence of T-lymphocyte populations in the spleen of newcastle virus-treated mice. *Cancer Biother Radiopharm*. 30(4):182-186.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH SHE PARTICIPATED IN THE LAST FIVE YEARS

2013-2017. EU FP7- Health Innovation 2013.1.4-1 Funded from the European Union's Seventh Programme for research, technological development and demonstration, „Development of Stem Cell Based Therapy for Thymic Regeneration, Thymistem“

2014-2016. Bilateral internacional project with Tsinghua University School of Medicine Kina Antica, M.i Wu L: “The function of transcription factors in the development of lymphocytes and dendritic cells”

2014 – 2018 Croatian Science Foundation *IP-11-2013* „ Notch in hematopoietic stem cell differentiation and leukaemia development, NOBLE”

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Darko Antičević, professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Josip Juraj Strossmayer Osijek, School of dental medicine and health

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Understanding bone metabolism – basic science in clinical practice

BIOGRAPHY

Affiliation: Physician, Specialist-Consultant in Orthopaedics, Clinical Hospital Centre Zagreb, School of Medicine University of Zagreb

Education: 1973 Medical School, University of Zagreb

1979 Fellowship in Orthopaedics

1992-3 education Hospital for Joint Diseases, New York

Academic Degrees: 1978 M.D., 1981 M.S., 2000 Ph.D.

Internal Clinic Zagreb,

Collaborator in 4 scientific projects, principal investigator “Genomic and proteomic analysis of biomarkers in rare skeletal disorders”

Teaching experience in undergraduate and postgraduate subjects.

Member of Editorial board Liječnički vjesnik, reviewer for Croatian Medical Journal, Pediatrca Croatica.

Member of Pediatric Orthopedic Society of North America (POSNA) and European Pediatric Orthopaedic Society (EPOS)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 11 September 2018

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Kubat O, Antičević D. Ortopedsko liječenje djece s rijetkim bolestima – koštanim displazijama. Pediatr Croat 2013;57:21-6.

2. Grazio S, Razdorov G, Erjavec I, Grubišić F, Kusić Z, Punda M, Antičević D, Vukičević S, Grgurević L. Differential expression of proteins with heparin affinity in patients with rheumatoid and psoriatic arthritis: a preliminary study. Clin. Exp Rheumatol 2013;31:665-71.

3. Skolan V, Šmigovec I, Đapić T, Antičević D. Long-term follow-up of congenital distal tibiofibular diastasis: a report of two female patients. J Pediatr Orthop B. 2013;22:464-9.

4. Tripković B, Antičević D, Buljan M, Jakovina-Blažeković, S, Orešković Z, Kubat O. Osobitosti anestezije kod ortopedskih zahvata u bolesnika s ostegenesis imperfecta. Liječ Vjesn 2014;136(9/10):291-5.

5. Antičević D. Lamot Lovro, Lamot Leonard. Hundred years of Freiberg's disease. Liječ Vjesn 2014;136(11/12) 351-4.

6. Yilmaz G, Oto M, Thabet AM, Rogers K, Anticevic D, Thacker MM, Mackenzie WG. Correction of lower extremity angular deformities in skeletal dysplasia with hemiepiphyseodesis: a preliminary report. J Pediatr Orthop 2014;34(3):336-45.

7. Primorac D, Antičević D, Ingeborg Barišić, Hudetz D, Ivković A.. Osteogenesis Imperfecta – Multi-Systemic and Life-Long Disease that Affects Whole Family. *Coll Anthropol* 2014;38 (2):676-72.
8. Miličić G, Šimić M, Bojić D, Vlaić J, Ribičić T, Vrdoljak O, Antičević D, et al. Obostrana prirođena dislokacija koljena udružena s obostranim razvojnim poremećajem kuka – prikaz bolesnika. *Pediatr Croat* 2017;61(1):33-6.
9. Antičević D, Jeleč Ž. Osteogenesis imperfecta: surgical treatment options with emphasis on today's orthopedic approach – review. *Paediatr Croat.* 2017;61:129-33. doi.org/10.13112/PC.2017.188.
10. Kubat O, Antičević D. Does timing of surgery influence the long-term results of foot polydactyly treatment? *Foot and Ankle Surgery (European)* 2018;24:353-8.
11. Vlaić J, Bojić D, Rutz E, Antičević D. Longitudinal Epiphyseal Bracket of the first metatarsal bone: Three case reports and a review of the literature. *J Foot and Ankle Surgery (American)* 2018;57:1246-52.
12. Terjesen T, Antičević D. Blount's disease treated with intraepiphyseal osteotomy with elevation of the medial plateau of the tibia: a case report with 65 years follow-up. *Acta Orthopaedica* 2018;89(6):699-701. DOI 10.1080/17453674.2018.1516179
13. Jeleč Ž, Primorac D, Antičević D. A Personalized Medicine/Surgery Approach in Diagnosing and Treating a Patient with Osteogenesis Imperfecta Type III. *J Pediatr Orthop B* 2019 (accepted for publication, in press)

POPIS IZABRANIH OBJAVLJENIH RADOVA U POSLJEDNJIH PET GODINA

1. Kubat O, Antičević D. Ortopedsko liječenje djece s rijetkim bolestima – koštanim displazijama. *Pediatr Croat* 2013;57:21-6.
2. Grazio S, Razdorov G, Erjavec I, Grubišić F, Kusić Z, Punda M, Antičević D, Vukičević S, Grgurević L. Differential expression of proteins with heparin affinity in patients with rheumatoid and psoriatic arthritis: a preliminary study. *Clin. Exp Rheumatol* 2013;31:665-71.
3. Skolan V, Šmigovec I, Đapić T, Antičević D. Long-term follow-up of congenital distal tibiofibular diastasis: a report of two female patients. *J Pediatr Orthop B.* 2013;22:464-9.
4. Tripković B, Antičević D, Buljan M, Jakovina-Blažeković, S, Orešković Z, Kubat O. Osobitosti anestezije kod ortopedskih zahvata u bolesnika s osteogenesis imperfecta. *Liječ Vjesn* 2014;136(9/10):291-5.
5. Antičević D. Lamot Lovro, Lamot Leonard. Hundred years of Freiberg's disease. *Liječ Vjesn* 2014;136(11/12) 351-4.
6. Yilmaz G, Oto M, Thabet AM, Rogers K, Anticevic D, Thacker MM, Mackenzie WG. Correction of lower extremity angular deformities in skeletal dysplasia with hemiepiphyseodesis: a preliminary report. *J Pediatr Orthop* 2014;34(3):336-45.
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9. Antičević D, Jeleč Ž. Osteogenesis imperfecta: surgical treatment options with emphasis on today's orthopedic approach – review. *Paediatr Croat.* 2017;61:129-33. doi.org/10.13112/PC.2017.188.
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13. Jeleč Ž, Primorac D, Antičević D. A Personalized Medicine/Surgery Approach in Diagnosing and Treating a Patient with Osteogenesis Imperfecta Type III. *J Pediatr Orthop B* 2019 (accepted for publication, in press)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- Kubat O, Antičević D. Ortopedsko liječenje djece s rijetkim bolestima – koštanim displazijama. *Pediatr Croat* 2013;57:21-6.
2. Grazio S, Razdorov G, Erjavec I, Grubišić F, Kusić Z, Punda M, Antičević D, Vukičević S, Grgurević L. Differential expression of proteins with heparin affinity in patients with rheumatoid and psoriatic arthritis: a preliminary study. *Clin. Exp Rheumatol* 2013;31:665-71.
 3. Skolan V, Šmigovec I, Đapić T, Antičević D. Long-term follow-up of congenital distal tibiofibular diastasis: a report of two female patients. *J Pediatr Orthop B.* 2013;22:464-9.
 4. Tripković B, Antičević D, Buljan M, Jakovina-Blažeković, S, Orešković Z, Kubat O. Osobitosti anestezije kod ortopedskih zahvata u bolesnika s osteogenesis imperfecta. *Liječ Vjesn* 2014;136(9/10):291-5.
 5. Antičević D, Lamot Lovro, Lamot Leonard. Hundred years of Freiberg's disease. *Liječ Vjesn* 2014;136(11/12) 351-4.
 6. Yilmaz G, Oto M, Thabet AM, Rogers K, Anticevic D, Thacker MM, Mackenzie WG. Correction of lower extremity angular deformities in skeletal dysplasia with hemiepiphyseodesis: a preliminary report. *J Pediatr Orthop* 2014;34(3):336-45.
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12. Terjesen T, Antičević D. Blount's disease treated with intraepiphyseal osteotomy with elevation of the medial plateau of the tibia: a case report with 65 years follow-up. *Acta Orthopaedica* 2018;89(6):699-701. DOI 10.1080/17453674.2018.1516179
13. Jeleč Ž, Primorac D, Antičević D. A Personalized Medicine/Surgery Approach in Diagnosing and Treating a Patient with Osteogenesis Imperfecta Type III. *J Pediatr Orthop B* 2019 (accepted for publication, in press)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Associate in research projects of the Department of Orthopaedic Surgery:

1980. Frequency aseptically femoral head necrosis in a population with special emphasis on alcoholism;
1984. 1988. Early detection of spinal deformity in childhood and adolescence
1991.-1995. The study of deformations of the spine (scoliosis and kyphosis)
1991.-1995. Research of hip deformity and disease by ultrasound
2007.-2009. Genomic and proteomic analysis of biomarkers in the blood in the rare bone disease (leader)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Nataša Antoljak, MD, PhD, associated professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Croatian Institute of Public Health and cumulatively at the Medical School, University of Zagreb.

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Epidemiological research methods

BIOGRAPHY

Working in the Department of Epidemiology of chronic mass diseases in the Croatian Institute of Public Health and cumulatively at the Medical School University of Zagreb. She graduated from the School of Medicine, University of Zagreb in 1987. and parallel at the Music Academy on the subject of professional piano on 1985. She also completed postgraduate studies at the Music Academy of the art training, followed by postgraduate study in Allergology and Clinical Immunology at the Medical School, University of Zagreb. After the defense master thesis on theme "Specific growth factor of liver and immune status in patients with liver disease," she successfully defended Ph.D. dissertation with theme: "Hepatocyte growth factor, endothelin, and antioxidant status in patients with alcoholic liver disease." She passed medical specialistic exam in Epidemiology in 2007. She participates in the teaching of epidemiology at the undergraduate study (Croatian and English), postgraduate studies, doctoral studies, a co-leader a subject Clinical Toxicology With The Epidemiologic Methods at Pharmacy and Biochemistry Faculty, University of Zagreb. She was mentor for one student graduate thesis, and a member of the committee to review the work of two graduate and two choices for the scientific title. Professional activities is related to the area of epidemiology of chronic mass diseases, particularly the implementation of programs for early diagnosis of colorectal cancer, accidents, diabetes and cardiovascular disease, and the second part of the research application of new biochemical parameters in hepatology and gastroenterology, and other diseases (osteoporosis, diabetes, acute renal failure). She was author of 17 original scientific and expert papers, 78 conference reports, and two chapters in the manual for post-graduate studies, School of Medicine in Zagreb. She was a collaborator and co-author of the European guidelines for quality assurance in the screening for colorectal cancer, coauthor of the translation of medical English-Croatian dictionaries and proofreader of English-Croatian part of the dental bilingual dictionaries. She is an associate in several publications of the Croatian Institute of Public Health, and author and editor of several articles intended for the public at the website www.zdravlje.hr. She is a member of the team on project: "Glutathione S-transferase and superoxide dismutase in the etiopathogenesis of the disease" and "Risks of multiple accidents among the injured being treated in hospitals." She is a President of Commission for the implementation of the Croatian national program for early diagnose of colorectal cancer at the Ministry of Health and Welfare and a member of the expert committee for the same program.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: associate professor and higher scientific degree 2013.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Antoljak N, Topić E, Duvnjak M, Vrkić N, Žuntar I. Hepatocyte growth factor levels in Croatian healthy and liver cirrosis patients. Coll Antropol 2001; 25:341-8.
2. Žuntar I, Topić E, Vukosavić Đ, Vuković V, Demarin V, Begonja A, Antoljak N, Šimundić AM. Croatian population data for the C677T polymorphism in methylenetetrahydrofolate reductase (MTHFR): frequencies in healthy and atherosclerotic study groups. Clin Chim Acta 2003; 335:95-100.

3. Mazul-Sunko B, Žarković N, Vrkić N, Antoljak N, Bekavac Bešlin M, Nikolić Heitzler V, Širanović M, Krizmanić-Dekanić A, Klinger R. Proatrial Natriuretic Peptide (1–98), but Not Cystatin C, Is Predictive for Occurrence of Acute Renal Insufficiency in Critically Ill Septic Patients. *Nephron Clin Pract* 97(3): 103-7, 2004.
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5. Gopčević A, Mazul-Sunko B, Marout J, Sekulić A, Antoljak N, Širanović M, Ivanec Ž, Margaritoni M, Bekavac-Bešlin M, Žarković N. Plasma Interleukin-8 as a potential predictor of mortality in adult patients with severe traumatic brain injury. *Tohoku J Exp Med* 2007; 211: 387-93.
6. Katičić M, Antoljak N, Kujundžić M, Stamenić V, Skoko Poljak D, Kramarić D, Štimac D, Strnad Pešikan M, Šamija M, Ebling Z. Results of National Colorectal Cancer Screening Program in Croatia (2007-2011). *World J Gastroenterol* 2012; 18(32): 4300-7. (Published online 2012 August 28. doi: 10.3748/wjg.v18.i32.4300) IF 2.471, citiranost: 1
7. Benson VS, Atkin WS, Green J, Nadel MR, Patnick J, Smith RA, Villain P. Toward standardizing and reporting colorectal cancer screening indicators on an international level: The International Colorectal Cancer Screening Network Collaborators: Patnick J, Atkin WS, Altenhofen L, Ancelle-Park R, Atkin WS, Benson VS, Green J, Levin TR, Moss SM, Nadel M, Patnick J, Ransohoff D, Segnan N, Smith RA, Villain P, Weller D, Koukari A, Young G, López-Kostner F, Antoljak N, Suchánek S, Zaval M, Holten I, Malila N, Ancelle-Park R, Salines E, Altenhofen L, Brenner G, Herszényi L, Tulassay Z, Rennert G, Segnan N, Senore C, Zappa M, Zorzi M, Saito H, Leja M, Dekker E, Jansen J, Hol L, Kuipers E, Kaminski MF, Regula J, Sfarti C, Trifan A, Tang CL, Hrcka R, Binefa G, Espinàs JA, Peris M, Chen TH, Patnick J, Steele R, Pou G, Bisges D, Dwyer D, Groves C, Courteau S, Levin TR, Kramer R, Siegenthaler K, Lane D, Herrera C, Rogers J, Rojewski M, Wolf H, Sung JJ, Ling K, Bryant H, Rabeneck L, Dale J, Sware L, Yang H, Viguier J, Von Karsa L, Kupcinskis L, Deutekom M, Törnberg S, Austoker J, Beral V, Monk C, Valori R, Watson J, Kobrin S, Pignone. *Int J Cancer*. 2012; 130(12):2961-73. IF 5.444, citiranost: 1
8. von Karsa L, Patnick J, Segnan N., Atkin W, Halloran S, Malila N, Minozzi S, P. Quirke P, Steele RJ, Vieth M, Aabakken L, Altenhofen L, Ancelle-Park R, N. Antoljak N, et.al. European guidelines for quality assurance in colorectal cancer screening and diagnosis: Overview and introduction to the full Supplement publication. *Endoscopy*. 2013; 45(1):51-59. (Epub 2012 Dec 4) IF 5.5
9. Kirac I, Matošević P, Augustin G, Šimunović I, Hostić V, Župančić S, Hayward C, Antoljak N, Rudan I, Campbell H, Dunlop MG, Velimir Vrdoljak D, Kovačević D, Zgaga L. SMAD7 variant rs4939827 is associated with colorectal cancer risk in Croatian population. *PLoS One*. 2013 Sep 16;8(9):e74042.
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11. A S. Deandrea, Molina-Barceló A, Uluturk A, Moreno J, Neamtii L, Peiró-Pérez R, Saz-Parkinson Z, Lopez-Alcalde J, Lerda D, Salas D. Contributing author Antoljak N. Presence, characteristics and equity of access to breast cancer screening programmes in 27 European countries in 2010 and 2014. Results from an international survey. *Prev Med* 2016, 250–63.
12. Topić E, Zadro R, Paripović R, Gluhak J, Antoljak-Barilar N, Bjelinski D, Popović J, Slijepčević M, Ruhenstroth-Bauer G, Vogl S. Liver-Specific growth factor- Hepatopoietin. *Il friuli medico Alpe Adria J Med* 1993; 48: 215-29. BIOSIS, izvorni znanstveni rad

13. Antoljak T, Hančević J, Žagar Z, Haiman M, Nikolić V, Hudec M, Turčić J, Davila S, Barilar-Antoljak N. Influence of the bone properties in originating the proximal humeral fractures. *Period Biolog* 1993; 3: 35-42. EMBASE, BIOSIS extended abstract
14. Barilar-Antoljak N, Koršić M, Dekanić D, Jelčić J, Kušec V, Cvijetić S, Kožić-Rukavina B, Antoljak T, Topić E, Aganović I. Influence of menopause and age on mineral bone density of women in urban environment in the north Croatia. *Liječnič Vjes* 1994; 116:10-4. SCOPUS, INDEX MEDICUS izvorni znanstveni rad
15. Barilar-Antoljak N, Topić E, Cvijetić S, Koršić M, Aganović I. Effect of non-insulin dependent diabetes mellitus on bone mineral density. *Diab Croat* 1995; 24(3):121-8. BIOSIS, znanstveni rad
16. Barilar-Antoljak N, Koršić M, Cvijetić S, Topić E, Aganović I. Impact of age and menopause on bone mineral density. *Clinica E Laboratorio* 1995; 19(4): 176-9. INDEX MEDICUS, EMBASE, izvorni znanstveni rad
17. Antoljak N, Topić E, Duvnjak M, Kaštelan M, Vrkić N, Žuntar I. Mitogen-stimulated lymphocyte transformation and hepatocyte growth factor in alcoholic cirrhosis patient. *Acta Clin Croat* 1997; 36: 63-70. EMBASE, izvorni znanstveni rad
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19. Antoljak N, Vukadinović MV, Zubčić A, Topić E. Monitoring of *Helicobacter pylori* eradication by anti-HP IgG measuring. *Acta Clin Croat* 1999; 38:203-7. EMBASE, stručni rad
20. Antoljak N, Šekerija M. Epidemiology and screening of colorectal cancer. *Libri Oncol* 2013; 41 (1-3): 3-8.
21. Marčec M, Antoljak N, Benjak T. Celijakija—nedovoljno prepoznat javnozdravstveni problem. *Liječ Vjesn* 2018; 140: 261-266.
22. Kušec V, Barilar-Antoljak N, Jelčić J, Koršić M, Kožić B, Aganović I, Cvijetić S, Dekanić D. Determinants of Bone Mass in Postmenopausal Women. *Osteologie* 1994; 3(1): 33-7.
23. Žuntar I, Topić E, Antoljak N. Restriksijski polimorfizam eksona 4 hepatocitnog činitelja rasta, *Biochem Med* 1997; 7:107-18.
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25. Antoljak N. Utjecaj majčinog pušenja i izloženosti duhanskom dimu iz okoliša tijekom trudnoće na tjelesnu težinu novorođenčeta i na kakvoću mlijeka u laktaciji (rezultati dvaju istraživanja) *HCJZ* 2007; 11. www.hcjz.hr/old/clanak.php?id=13457
26. Antoljak N. Nacionalni program ranog otkrivanja raka debelog crijeva u Hrvatskoj-per aspera ad astra, www.hcjz.hr 2009; 5: 17
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29. Antoljak N. Nacionalni program rane dijagnostike raka debelog crijeva u Republici Hrvatskoj 2008-2011. *HCJZ* 2011; 28. www.hcjz.hr/old/clanak.php?id=14525
30. Antoljak N. Kronična opstruktivna plućna bolest i astma. *HCJZ* 2011; 28. www.hcjz.hr/old/clanak.php?id=14520

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32. Antoljak N, Benjak T, Brkić Biloš I, Dečković Vukres V, Erceg M, Ivičević Uhernik A et.al. Europska zdravstvena anketa u Hrvatskoj 2014-2015. Urednik Capak K. Hrvatski zavod za javno zdravstvo, Zagreb 2016.
33. Antoljak N, Benjak T, Brkić Biloš I, Dečković Vukres V, Erceg M, Ivičević Uhernik A et.al. Europska zdravstvena anketa u Hrvatskoj 2014.-2015. Korištenje zdravstvene zaštite. Urednik Capak K. Hrvatski zavod za javno zdravstvo, Zagreb 2016.
34. Čukelj P, Antoljak N, Nakić D, Šupe Parun A, Šekerija M, Erceg M. Pregled europskih istraživanja o razlozima neodaziva ciljne populacije u preventivnim programima ranog otkrivanja raka. Hrvatski časopis za javno zdravstvo 2016; 45: 113-125.
35. Erceg M, Antoljak N, Nakić D, Šupe Parun A. Utjecaj demografskih promjena stanovništva Hrvatske na nacionalne preventivne programe ranog otkrivanja raka. 2017; 13 (51): 17-20.
36. Antoljak N, Benjak T, Biloš IB, Dečković-Vukres V, Erceg M, Uhernik AI, et.al. European Health Interview Survey (EHIS) Croatia 2014.-2015.-USING OF HEALTH CARE., urednik Capak K., Hrvatski zavod za javno zdravstvo, 2017, Zagreb.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. von Karsa L, Patnick J, Segnan N., Atkin W, Halloran S, Malila N, Minozzi S, P. Quirke P, Steele RJ, Vieth M, Aabakken L, Altenhofen L, Ancelle-Park R, N. Antoljak N, et.al. European guidelines for quality assurance in colorectal cancer screening and diagnosis: Overview and introduction to the full Supplement publication. Endoscopy. 2013; 45(1):51-59. (Epub 2012 Dec 4) IF 5.5
2. Kirac I, Matošević P, Augustin G, Šimunović I, Hostić V, Župančić S, Hayward C, Antoljak N, Rudan I, Campbell H, Dunlop MG, Velimir Vrdoljak D, Kovačević D, Zgaga L. SMAD7 variant rs4939827 is associated with colorectal cancer risk in Croatian population. PLoS One. 2013 Sep 16;8(9):e74042.
3. Jović F, Vorko Jović A, Antoljak N, Slavek N. A model of road traffic as a resource risk loss in the elderly population of Croatia. Period Biolog 2013; 115 (4): 549–552.
4. A S. Deandrea, Molina-Barceló A, Uluturk A, Moreno J, Neamtiiu L, Peiró-Pérez R, Saz-Parkinson Z, Lopez-Alcalde J, Lerda D, Salas D. Contributing author Antoljak N. Presence, characteristics and equity of access to breast cancer screening programmes in 27 European countries in 2010 and 2014. Results from an international survey. Prev Med 2016, 250–63. Antoljak N. Organizirani probir za rak debelog crijeva–stepenica na putu smanjenja smrtnosti. 2013; Medix 19 (107/108)
5. Antoljak N, Benjak T, Brkić Biloš I, Dečković Vukres V, Erceg M, Ivičević Uhernik A et.al. Europska zdravstvena anketa u Hrvatskoj 2014-2015. Urednik Capak K. Hrvatski zavod za javno zdravstvo, Zagreb 2016.
6. Antoljak N, Benjak T, Brkić Biloš I, Dečković Vukres V, Erceg M, Ivičević Uhernik A et.al. Europska zdravstvena anketa u Hrvatskoj 2014.-2015. Korištenje zdravstvene zaštite. Urednik Capak K. Hrvatski zavod za javno zdravstvo, Zagreb 2016.
7. Čukelj P, Antoljak N, Nakić D, Šupe Parun A, Šekerija M, Erceg M. Pregled europskih istraživanja o razlozima neodaziva ciljne populacije u preventivnim programima ranog otkrivanja raka. Hrvatski časopis za javno zdravstvo 2016; 45: 113-125.
8. Erceg M, Antoljak N, Nakić D, Šupe Parun A. Utjecaj demografskih promjena stanovništva Hrvatske na nacionalne preventivne programe ranog otkrivanja raka. 2017; 13 (51): 17-20.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Molecular pathobiochemistry of hepatocyte proliferation (code: 3-01-253), principal investigator: prof. dr. sc. Elizabeta Topić, on the project from 1991-1994 as a beginner scientist
2. Pathobiokemic processes in the liver and influence on other organs (code 134003), principal investigator: prof. dr. sc. Elizabeta Topić, on the project from 1994 to 1999 as a PhD
3. The holder of the incentive subproject funded by the Ministry of Science and Technology of the Republic of Croatia: "Endothelin, liver growth factor, and antioxidative status in patients with alcoholic liver disease"
4. Molecular Biochemical Disorders in Acute, Chronic and Degenerative Diseases (code: 134019) Principal Investigator: Prof. dr. sc. Elizabeta Topić, on the project from 1999-2003 as a PhD and postdoctoral research assistant
5. Glutathione S-transferase and superoxide dismutase in etiopathogenesis of the disease, project associate, Faculty of Pharmacy and Biochemistry (Principal Investigator, Prof. Irena Žuntar, No. 006-0061245-0010), as a member of team
6. Risks for multiple accidents among hospital injured patients, project associate (Principal Investigator Prof. A. Vorko-Jović, No. 108-1080315-0255), as a member of team

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. Risks for multiple accidents among hospital injured patients, project associate (Principal Investigator Prof. A. Vorko-Jović, No. 108-1080315-0255), as a member of team

(IF THE TEACHER IS AT THE SAME TIME A POTENTIAL SUPERVISOR)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

in process

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mirjana Babić Leko, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb Medical School

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Neurobiology of aging

BIOGRAPHY

Mirjana Babić Leko studied on Faculty of Science, University of Zagreb (molecular biology). She attended PhD study Molecular Biosciences, Josip Juraj Strossmayer University of Osijek from 2012.-2017. She worked on Croatian Institute for Brain Research, University of Zagreb Medical School since 2012. as project collaborator and since 2015. as assistant at the Department of Neuroscience. She was collaborator of 6 scientific projects. She was trained at Wolfson Centre for Inherited Neuromuscular Disease Oswestry, UK (2014.), Laboratory of Neurogenesis and Neuropoiesis, Monserrato (Cagliari), Italy (2013.), Hannover Biomedical Research School, Hannover, Germany (2011.). She published 17 scientific papers (9 cited in Current Contents), two book chapters and 29 conference abstracts. She was awarded with ADRIS scholarship for PhD students (2016.), award for best poster in basic sciences - Croatian Congress on Alzheimer's Disease CROCAD-16, Tučepi 2016. and CROCAD-14, Brela 2014., scholarship of University of Zagreb for PhD students and assistants in 2015., HEP donation in 2014., FEBS Short-term fellowship – Oswestry, UK 2014., scholarship of Italian Government (2013.) and scholarship of COST CM1103 action (2013.).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2015.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Boban, M., Babić Leko, M., Miškić, T., Hof, P.R., Šimić, G. Human neuroblastoma SH-SY5Y cells treated with okadaic acid express phosphorylated high molecular weight tau-immunoreactive protein species (2018) Journal of Neuroscience Methods doi: 10.1016/j.jneumeth.2018.09.030. [Epub ahead of print]
2. Babić Leko, M., Župunski, V., Kirincich, J., Smilović, D., Hortobágy, T., Hof, P.R., Šimić, G. Molecular mechanisms of neurodegeneration related to C9ORF72 hexanucleotide repeat expansion (2018) Behavioral Neurology, in press.
3. Babić Leko, M., Willumsen, N., Nikolac Perković, M., Klepac, N., Borovečki, F., Hof, P.R., Sonicki, Z., Pivac, N., de Silva, R., Šimić, G. Association of MAPT haplotype-tagging polymorphisms with cerebrospinal fluid biomarkers of Alzheimer's disease: a preliminary study in a Croatian cohort (2018) Brain and Behavior, e01128.
4. Babić Leko, M., Krbot Skorić, M., Klepac, N., Borovečki, F., Langer Horvat, L., Vogrinc, Ž., Sonicki, Z., Hof, P.R., Šimić, G. Event-related potentials improve the efficiency of cerebrospinal fluid biomarkers for differential diagnosis of Alzheimer's disease (2018) Current Alzheimer Research 15: 1244-1260.
5. Kiđemet-Piskač S., Babić Leko M., Blažeković A., Langer Horvat L., Klepac N., Sonicki Z., Kolenc D., Hof P.R., Boban M., Mimica N., Borovečki F., Šimić G. Evaluation of cerebrospinal fluid phosphorylated tau231 as a biomarker in the differential diagnosis of Alzheimer's disease and vascular dementia (2018) CNS Neuroscience & Therapeutics 23 (8): 734-740.
6. Mihelčić M., Šimić G., Babić Leko M., Lavrač N., Džeroski S., Šmuc T., Alzheimer's Disease Neuroimaging Initiative. Using redescription mining to relate clinical and biological characteristics of cognitively impaired and Alzheimer's disease patients (2017) PLoS One 12(10): e0187364.

7. Charvet C.J., Šimić G., Kostović I., Kovačević V., Vukšić M., Babić Leko M., Takahashi E., Sherwood C.C., Wolfe M.D., Finlay B.L. Co-evolution in the timing of GABAergic and pyramidal neuron maturation in primates (2017) *Proceedings of the Royal Society of London B: Biological Sciences* 284 (1861): 20171169.
8. Šimić, G., Babić Leko, M., Wray, S., Harrington, C., Delalle, I., Jovanov-Milošević, N., Bažadona, D., Buée, L., de Silva, R., Di Giovanni, G., Wischik, C., Hof, P.R. Monoaminergic neuropathology in Alzheimer's disease (2017) *Progress in Neurobiology*, 151: 101-138.
9. Mladinov, M., Sedmak G., Fuller H.R., Babić Leko, M., Mayer, D., Kirincich, J., Štajduhar, A., Borovečki, F., Hof, P.R., Šimić, G. Gene expression profiling of the dorsolateral and medial orbitofrontal cortex in schizophrenia (2016) *Translational Neuroscience*, 7: 139-150.
10. Babić Leko, M., Borovečki, F., Dejanović, N., Hof, P.R., Šimić, G. Predictive value of cerebrospinal fluid visinin-like protein-1 levels for Alzheimer's disease early detection and differential diagnosis in patients with mild cognitive impairment (2016) *Journal of Alzheimer's Disease*, 50: 765-778.
11. Šimić, G., Babić Leko, M., Wray, S., Harrington, C., Delalle, I., Jovanov-Milošević, N., Bažadona, D., Buée, L., de Silva, R., Di Giovanni, G., Wischik, C., Hof, P.R. Tau protein hyperphosphorylation and aggregation in Alzheimer's disease and other tauopathies, and possible neuroprotective strategies (2016) *Biomolecules*, 6(1), E6.
12. Fuller, H.R., Slade, R., Jovanov-Milošević, N., Babić, M., Sedmak, G., Šimić, G., Fuszard, M.A., Shirran, S.L., Botting, C.H., Gates, M.A. Stathmin is enriched in the developing corticospinal tract (2015) *Molecular and Cellular Neuroscience*, 69: 12-21.
13. Babić, M., Švob Štrac, D., Mück-Šeler, D., Pivac, N., Stanić, G., Hof, P.R., Šimić, G. Update on the core and developing cerebrospinal fluid biomarkers for Alzheimer's disease (2014) *Croatian Medical Journal*, 55 (4), 347-365.
14. Šimić, G., Babić, M., Borovečki, F., Hof, P.R. Early failure of the default-mode network and the pathogenesis of Alzheimer's disease (2014) *CNS Neuroscience and Therapeutics*, 20 (7), pp. 692-698.
15. Jazvinščak Jembrek, M., Babić, M., Pivac, N., Hof, P.R., Šimić, G. Hyperphosphorylation of tau by GSK-3 β in Alzheimer's disease: the interaction of A β and sphingolipid mediators as a therapeutic target (2013) *Translational Neuroscience*, 4 (4), pp. 466-476.
16. Babić, M., Vogrinc, Z., Diana, A., Klepac, N., Borovečki, F., Hof, P.R., Šimić, G. Comparison of two commercial enzyme-linked immunosorbent assays for cerebrospinal fluid measurement of amyloid β 1-42 and total tau (2013) *Translational Neuroscience*, 4 (2), pp. 234-240.
17. Babić, M., Nedić, G., Muck-Šeler, D., Borovečki, F., Pivac, N. Lack of association between dopamine receptor D4 variable numbers of tandem repeats gene polymorphism and smoking (2012) *Neuroscience Letters*, 520 (1), pp. 67-70.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Boban, M., Babić Leko, M., Miškić, T., Hof, P.R., Šimić, G. Human neuroblastoma SH-SY5Y cells treated with okadaic acid express phosphorylated high molecular weight tau-immunoreactive protein species (2018) *Journal of Neuroscience Methods* doi: 10.1016/j.jneumeth.2018.09.030. [Epub ahead of print]
2. Babić Leko, M., Župunski, V., Kirincich, J., Smilović, D., Hortobágy, T., Hof, P.R., Šimić, G. Molecular mechanisms of neurodegeneration related to C9ORF72 hexanucleotide repeat expansion (2018) *Behavioral Neurology*, in press.

3. Babić Leko, M., Willumsen, N., Nikolac Perković, M., Klepac, N., Borovečki, F., Hof, P.R., Sonicki, Z., Pivac, N., de Silva, R., Šimić, G. Association of MAPT haplotype-tagging polymorphisms with cerebrospinal fluid biomarkers of Alzheimer's disease: a preliminary study in a Croatian cohort (2018) *Brain and Behavior*, e01128.
4. Babić Leko, M., Krbot Skorić, M., Klepac, N., Borovečki, F., Langer Horvat, L., Vogrinc, Ž., Sonicki, Z., Hof, P.R., Šimić, G. Event-related potentials improve the efficiency of cerebrospinal fluid biomarkers for differential diagnosis of Alzheimer's disease (2018) *Current Alzheimer Research* 15: 1244-1260.
5. Kiđemet-Piskač S., Babić Leko M., Blažeković A., Langer Horvat L., Klepac N., Sonicki Z., Kolenc D., Hof P.R., Boban M., Mimica N., Borovečki F., Šimić G. Evaluation of cerebrospinal fluid phosphorylated tau231 as a biomarker in the differential diagnosis of Alzheimer's disease and vascular dementia (2018) *CNS Neuroscience & Therapeutics* 23 (8): 734-740.
6. Mihelčić M., Šimić G., Babić Leko M., Lavrač N., Džeroski S., Šmuc T., Alzheimer's Disease Neuroimaging Initiative. Using redescription mining to relate clinical and biological characteristics of cognitively impaired and Alzheimer's disease patients (2017) *PLoS One* 12(10): e0187364.
7. Charvet C.J., Šimić G., Kostović I., Kovačević V., Vukšić M., Babić Leko M., Takahashi E., Sherwood C.C., Wolfe M.D., Finlay B.L. Co-evolution in the timing of GABAergic and pyramidal neuron maturation in primates (2017) *Proceedings of the Royal Society of London B: Biological Sciences* 284 (1861): 20171169.
8. Šimić, G., Babić Leko, M., Wray, S., Harrington, C., Delalle, I., Jovanov-Milošević, N., Bažadona, D., Buée, L., de Silva, R., Di Giovanni, G., Wischik, C., Hof, P.R. Monoaminergic neuropathology in Alzheimer's disease (2017) *Progress in Neurobiology*, 151: 101-138.
9. Mladinov, M., Sedmak G., Fuller H.R., Babić Leko, M., Mayer, D., Kirincich, J., Štajduhar, A., Borovečki, F., Hof, P.R., Šimić, G. Gene expression profiling of the dorsolateral and medial orbitofrontal cortex in schizophrenia (2016) *Translational Neuroscience*, 7: 139-150.
10. Babić Leko, M., Borovečki, F., Dejanović, N., Hof, P.R., Šimić, G. Predictive value of cerebrospinal fluid visinin-like protein-1 levels for Alzheimer's disease early detection and differential diagnosis in patients with mild cognitive impairment (2016) *Journal of Alzheimer's Disease*, 50: 765-778.
11. Šimić, G., Babić Leko, M., Wray, S., Harrington, C., Delalle, I., Jovanov-Milošević, N., Bažadona, D., Buée, L., de Silva, R., Di Giovanni, G., Wischik, C., Hof, P.R. Tau protein hyperphosphorylation and aggregation in Alzheimer's disease and other tauopathies, and possible neuroprotective strategies (2016) *Biomolecules*, 6(1), E6.
12. Fuller, H.R., Slade, R., Jovanov-Milošević, N., Babić, M., Sedmak, G., Šimić, G., Fuszard, M.A., Shirran, S.L., Botting, C.H., Gates, M.A. Stathmin is enriched in the developing corticospinal tract (2015) *Molecular and Cellular Neuroscience*, 69: 12-21.
13. Babić, M., Švob Štrac, D., Mück-Šeler, D., Pivac, N., Stanić, G., Hof, P.R., Šimić, G. Update on the core and developing cerebrospinal fluid biomarkers for Alzheimer's disease (2014) *Croatian Medical Journal*, 55 (4), 347-365.
14. Šimić, G., Babić, M., Borovečki, F., Hof, P.R. Early failure of the default-mode network and the pathogenesis of Alzheimer's disease (2014) *CNS Neuroscience and Therapeutics*, 20 (7), pp. 692-698.
15. Jazvinščak Jembrek, M., Babić, M., Pivac, N., Hof, P.R., Šimić, G. Hyperphosphorylation of tau by GSK-3 β in Alzheimer's disease: the interaction of A β and sphingolipid mediators as a therapeutic target (2013) *Translational Neuroscience*, 4 (4), pp. 466-476.

16. Babić, M., Vogrinc, Z., Diana, A., Klepac, N., Borovečki, F., Hof, P.R., Šimić, G. Comparison of two commercial enzyme-linked immunosorbent assays for cerebrospinal fluid measurement of amyloid β 1-42 and total tau (2013) *Translational Neuroscience*, 4 (2), pp. 234-240.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2015-2019: HRZZ IP-2014-09-9730 Hrvatska zaklada za znanost: "Hiperfosforilacija, agregacija i transsinaptički prijenos tau proteina u Alzheimerovoj bolesti: analiza cerebrospinalne tekućine i ispitivanje potencijalnih neuroprotektivnih spojeva" (project collaborator) <http://alztauprotect.hiim.hr/>

2016-2018: HAMAG-BICRO (Hrvatska agencija za malo gospodarstvo, inovacije i investicije) UTT projekt: Test prostornog snalaženja za rano otkrivanje Alzheimerove bolesti SPOT-ALZ / ALZENTIA (project collaborator) www.alzentia.eu www.alzentia.com

2017: Potpora Sveučilišta u Zagrebu BM82/2017 „Određivanje propusnosti krvno-moždane barijere u Alzheimerovoj bolesti“ (project collaborator)

2016: Potpora Sveučilišta u Zagrebu BM112/2016 „Mehanizmi neurofibrilarne degeneracije in vitro i in vivo“ (project collaborator)

2015: Potpora Sveučilišta u Zagrebu BM112/2015 „Biološki biljezi Alzheimerove bolesti u cerebrospinalnoj tekućini“ (project collaborator)

2012-2014: Hrvatska zaklada za znanost: „Otkrivanje i praćenje bioloških biljega radi rane terapijske intervencije u sporadičnoj Alzheimerovoj bolesti“ (project collaborator) <http://alzbiotrack.hiim.hr/>

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

<http://alztauprotect.hiim.hr/>

<http://alzbiotrack.hiim.hr/>

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Maja Banović, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Human Reproduction

BIOGRAPHY

Education

2018. Human reproduction specialist, Clinical Hospital Centre Zagreb

2016 Ph.D. in Medical Sciences, School of Medicine, University of Zagreb

2010. Obstetrics and Gynaecology specialist, Clinical Hospital Centre Zagreb

2004. M. D. degree, School of Medicine, University of Zagreb

Position

Since 2016. Senior Assistant, University of Zagreb, School of Medicine, Zagreb, Croatia

Since 2010. Clinical Hospital Centre Zagreb

Scholarships

2018. Erasmus scholarship for University of Zagreb teaching staff – training at St Thomas' and Guy's Hospital NHS Foundation Trust – Assisted Conception Unit, London, UK.

Mentorships and teaching

Integrated Undergraduate and Graduate Program School of Medicine at University of Zagreb curriculums obstetrics and gynaecology (Croatian and English).

Specialist postgraduate studies of School medicine and Obstetrics and Gynaecology at the Medical School of the University of Zagreb

Mentorship of 2 students graduate thesis.

Administrative activities

Secretary of the Croatian Society of Human reproduction and Gynaecological endocrinology, Croatian Medical Chamber.

Awards

Rector's Award University of Zagreb School of Medicine for best student paper 1999/2000.

Memberships in Professional Associations

Croatian Society of Human reproduction and Gynaecological endocrinology, Croatian Medical Chamber.

Member of the Croatian Society of Gynaecologists and Obstetricians, Croatian Medical Chamber

Member of the Croatian Menopausal Society, Croatian Medical Chamber

Publications

Original scientific papers in WoS-indexed and other scientific journals

Total citations excluding self-citations:

Congress communications (abstracts) in SCI/CC-indexed journals (2)

Book chapters and textbook chapters (1)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: July 2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- **Banović M**, Mahovlić V, Salopek KM, Banović V, Babić I, Orešković S, Babić D. The Value of HPV-HR DNA Testing During the Follow-Up After Treatment of CIN3/AIS. *Pathol Oncol Res.* 2014 Nov 29.
- Coric M, Barisic D, Pavicic D, Karadza M, **Banovic M**. Electrocoagulation versus suture after laparoscopic stripping of ovarian endometriomas assessed by antral follicle count: preliminary results of randomized clinical trial. *Arch Gynecol Obstet.* 2011 Feb;283(2):373-8. doi: 10.1007/s00404-010-1676-x. Epub 2010 Sep 16.
- Zekan J, Petrovic D, El-Safadi S, **Banovic M**, Hulina D, Hrgovic Z. A surgical approach to giant condyloma (Buschke-Löwenstein tumour) with underlying superficial vulvar carcinoma: A case report. *Oncol Lett.* 2013 Feb;5(2):541-543. Epub 2012 Nov 14.
- Oresković S, But I, **Banović M**, Goldstajn MS. The efficacy and safety of solifenacin in patients with overactive bladder syndrome. *Coll Antropol.* 2012 Mar;36(1):243-8.
- Banović V, Škrablin S, **Banović M**, Radoš M, Gverić-Ahmetašević S, Babić I. Fetal brain magnetic resonance imaging and long-term neurodevelopmental impairment. *Int J Gynaecol Obstet.* 2014 Jun;125(3):237-40. doi: 10.1016/j.ijgo.2013.12.007. Epub 2014 Mar 5

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- **Banović M**, Mahovlić V, Salopek KM, Banović V, Babić I, Orešković S, Babić D. The Value of HPV-HR DNA Testing During the Follow-Up After Treatment of CIN3/AIS. *Pathol Oncol Res.* 2014 Nov 29.
- Banović V, Škrablin S, **Banović M**, Radoš M, Gverić-Ahmetašević S, Babić I. Fetal brain magnetic resonance imaging and long-term neurodevelopmental impairment. *Int J Gynaecol Obstet.* 2014 Jun;125(3):237-40. doi: 10.1016/j.ijgo.2013.12.007. Epub 2014 Mar

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018. MELAdetect: Early Detection of Skin, Mucosal and Ocular Melanoma: Interreg-IPA CBC Croatia-Bosnia and Herzegovina-Montenegro – međunarodni projekt o prevencije i liječenju

2018. Spolni dimorfizam suzne žlijezde – nastavak istraživanja.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018. MELAdetect: Early Detection of Skin, Mucosal and Ocular Melanoma: Interreg-IPA CBC Croatia-Bosnia and Herzegovina-Montenegro – međunarodni projekt o prevencije i liječenju

2018. Spolni dimorfizam suzne žlijezde – nastavak istraživanja.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Ivo Barić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb, School of Medicine & University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Selected chapters in epileptology in developmental age

BIOGRAPHY

DATE OF BIRTH : August 22, 1959

POSITION TITLE

1. Full Professor of Pediatrics, School of Medicine Zagreb, Croatia
2. Head of the Division for Medical Genetics and Metabolic Diseases, Department of Pediatrics, University Hospital Center Zagreb, Croatia (Referral Center for Medical Genetics and Metabolic Disease of Children of the Ministry of Health, Republic of Croatia)

TRAINING (Start with University degree)

1983- graduated at School of Medicine in Zagreb

1984-1985 Internship in the University Hospital “Mercy Sisters”, Zagreb (prolonged due to 1 year compulsory army service)

1986-1988 research fellow at the Department of Paediatrics, University Hospital “Mercy Sisters”, Zagreb (during fellowship completed four semesters postgraduate studies “Allergology and Clinical Immunology”).

1988-1992 residency in paediatrics at the University Hospital Center Zagreb, ended with achieving status-specialist in paediatrics (during residency completed two semesters postgraduate studies “Clinical Paediatrics”)

1991 Fellowship lasting 10 months in Heidelberg, Germany; dealing with molecular genetics of phenylketonuria as a member of the Research group of the University Childrens’ Hospital Heidelberg

1996-1997- Fellowship in University Children’s Hospital in Marburg, lasting 10 months, supported by Alexander von Humboldt Foundation; dealing with organic acidurias and selective screening for inherited metabolic diseases

After that, numerous international symposiums, congresses and courses in the field of genetics and inherited metabolic diseases

2003- gained status of “subspecialist in medical genetics”

2012- completed „Good Clinical Practice Guideline Course“

INSTITUTION AND LOCATION DEGREE (if applicable) YEAR(s) FIELD OF STUDY

School of Medicine Zagreb Medical doctor 1983, Medicine

School of Medicine Zagreb Ph.D.1992, Medicine, thesis related to molecular genetics of phenylketonuria

Ministry of Health, Republic of Croatia Specialist in pediatrics 1992 Pediatrics

Ministry of Health, Republic of Croatia Subspecialist in medical genetics 2003 Medical genetics

Ministry of Health, Republic of Croatia Primarius 2004 Medicine, pediatrics, genetics

A. Positions and Honors (Chronological order)

Positions and Employment

1984-1985 Internship in the University Hospital “Mercy Sisters”, Zagreb (prolonged due to 1 year compulsory army service)

1986 General practitioner

1986-1988 Research fellow at the Department of Paediatrics, University Hospital “Mercy Sisters”, Zagreb

1988-1992 Resident in paediatrics at the University Hospital Center Zagreb

1992-2009 Specialist in paediatrics at Division of Genetics and Metabolism, Department of Paediatrics, University Hospital Center Zagreb. The division is Referral Center for Medical Genetics and Metabolic Diseases in Children of Republic of Croatia.

2009- Head of the Division of Metabolic Diseases, Department of Paediatrics, University Hospital Center Zagreb.

2017- Head of the Division of Medical Genetics and Metabolic Diseases, Department of Paediatrics, University Hospital Center Zagreb (Referral Center for Medical Genetics and Metabolic Diseases in Children of Republic of Croatia, member of the European reference network for metabolic diseases “MetabERN”).

Since 1995 teaching paediatrics at Zagreb School of Medicine, from year 2008 as full professor of paediatrics.

Member of the Society for Study of Inborn Errors of Metabolism (Council member since 2013)

Member of the European Union Committee of Experts for Rare Diseases (EUCERD), after that member of the European Commission Expert Group on Rare Diseases

Member of the Advisory Board of the European Metabolic Group

Member of the Advisory Board of the Recordati Rare Diseases Foundation

Head of the Committee for Specialist Education in Pediatrics of the National Committee for Specialist Education of Medical Doctors of the Ministry of Health, Republic of Croatia

Head of the Committee for Newborn Screening of the Ministry of Health, Republic of Croatia

Honors and Awards

2005-2009 President of the Croatian Society of Human Genetics

Since 2009 Member of the Academy of Medical Sciences of Croatia

2005- “Award Ante Šerčer” given by Academy of Medical Sciences of Croatia for the best article of Croatian authors in the field of medicine in year 2004 (Baric I, et al. S-adenosylhomocysteine hydrolase

deficiency in a human: a genetic disorder of methionine metabolism. Proc Natl Acad Sci U S A. 2004;101:4234-9)

2005- “Horst Bickel Award” for the discovery and further work on previously unknown inherited disorder of methionine metabolism- the S-adenosylhomocysteine hydrolase deficiency.

2010- Award of the Croatian Paediatric Society for the best paper in the previous two years period (Barić I. Inherited disorders in the conversion of methionine to homocysteine. J Inherit Metab Dis 2009;32:459-71)

2012- Award for best scientists at Zagreb School of Medicine for the last five year research period (2007-2011; was best ranked among paediatricians)

2016- Member of the Court of Honour of the Croatian Medical Chamber

2018- Award of the Croatian Paediatric Society for the best paper in the previous two years period (Barić I, Staufner C, Augoustides-Savvopoulou P, Chien YH, Dobbelaere D, Grünert SC, Opladen T, Petković Ramadža D, Rakić B, Wedell A, Blom HJ. Consensus recommendations for the diagnosis, treatment and follow-up of inherited methylation disorders. J Inherit Metab Dis 2017;40:5-20.

B. Selected peer-reviewed publications (see below in a separate part of this form)

Until April 2018, there were 80 publications in CC-journals, 84 in WoS Core Collection (SCI-EXP/SSCI), with in total 1683 citations and h-index 23. There are 150 publications in extenso, 20 chapters in textbooks and professional books and several dozen educational texts.

C. Editorial and other review activities

Communicating editor and now member of the Advisory Board in the Journal of Inherited Metabolic Disease.

Editor of the web-pages of the Croatian Paediatric Society.

Reviewer for international journals cited in Current Contents (“Journal of Inherited Metabolic Disease”, “Wiener klinische Wochenschrift”, “Clinica Chimica Acta”, “Molecular Genetics and Metabolism”, “American Journal of Human Genetics”, “Orphanet Journal of Rare Diseases”).

Reviewer on two occasions of scientific projects for the agency of the Czech government and on few occasions for the Ministry of Science of the Republic of Croatia. Evaluator of a candidate for professor position at the University of Colorado, Denver, Colorado, USA.

D. Professional activities

Head of the Division of Medical genetics and Metabolic Diseases, Department of Paediatrics, University Hospital Center Zagreb.

Full professor of paediatrics at the University of Zagreb, School of Medicine.

Board member of the Croatian Pediatric Society.

President of the Section for Metabolic Diseases of the Croatian Pediatric Society.

Research activities: During entire carrier special research interest was for inborn errors of metabolism, since 2000 as principal investigator of the research project “Inherited metabolic and other monogenic

disorders of children”. The focus of interest is genotype-phenotype correlation in inborn errors of metabolism. In the last decade particular interest and efforts are directed to the S-adenosylhomocysteine hydrolase deficiency, a previously unknown inherited disorder of methionine metabolism, first reported by our group. This disease is a unique natural model for studying how disorders of methylation affect health and at the same time a poorly understood inherited muscle disease. We were involved in diagnostic work-up of most patients described so far worldwide, all having congenital muscle disease, and try to clarify the pathogenesis of this disease, with belief that this mechanism is important not only for this disease but also for other more common pathological muscle conditions.

So far, co-ordinator for Croatia in four international research projects funded by EU: “European network focused on Congenital Disorders of Glycosylation”(program FP6), “European Registry and Network for Intoxication Type Metabolic Diseases“ (program DG Sanco), „Inherited neurometabolic diseases information network“(program DG Sanco) and “ The network and registry for homocystinurias and methylation defects”(program DG Sanco).

Principal investigator in two interventional clinical trials.

Organizer and co-organizer of numerous national and international professional meetings (among them-main organizer of “Orphan Europe Academy”- “4th Inborn Errors in Neonatology Course” in 2010 in Dubrovnik, « Southeastern Europe Inherited Neurometabolic Disease Networking Meeting in 2015 in Zagreb, « 49th European Metabolic Group Conference » in 2017 in Zagreb).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 14APR 2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Haberlova J, Mitrović Z, Zarković K, Lovrić D, Barić V, Berlingi L, Bilić K, Fumić K, Kranz K, Huebner A, von der Hagen M, Barresi R, Bushby K, Straub V, Barić I, Lochmüller H. Psycho-organic symptoms as early manifestation of adult onset POMT1-related limb girdle muscular dystrophy. *Neuromuscul Disord* 2014 Jul 3. pii: S0960-8966(14)00606-3. doi: 10.1016/j.nmd.2014.06.440. [Epub ahead of print]

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Mendes Campistol J, de Boer L, Kariminejad A, Kayserili H, Roubertie A, Verbruggen KT, Vianey-Saban C, Williams MI, Smith DE, Pop A, Lennertz P, Fernandez Ojeda MR, Kanhai WA, van Dooren SJ, Anikster Y, Barić I, Boelen C, M, Salomons GS. Clinically Distinct Phenotypes of Canavan Disease Correlate with Residual Aspartoacylase Enzyme Activity. *Hum Mutat.* 2017 May;38(5):524-531. doi: 10.1002/humu.23181. Epub 2017 Feb 14.

Giannuzzi V, Devlieger H, Margari L, Odland VL, Ragab L, Bellettato CM, D'Avanzo F, Lampe C, Cassis L, Cortès-Saladelafont E, Cazorla ÁG, Barić I, Cvitanović-Šojat L, Fumić K, Dali CI, Bartoloni F, Bonifazi F, Scarpa M, Ceci A. The ethical framework for performing research with rare inherited neurometabolic disease patients. *Eur J Pediatr.* 2017 Mar;176(3):395-405. doi: 10.1007/s00431-017-2852-9. Epub 2017 Jan 16

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Wedatilake Y, Wolff T, Prokisch H, Morava E, Pronicka E, Wevers RA, de Brouwer AP, Wortmann SB. Progressive deafness-dystonia due to SERAC1 mutations: A study of 67 cases. *Ann Neurol*. 2017 Dec;82(6):1004-1015. doi: 10.1002/ana.25110.

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Keller R, Chrastina P, Pavlíková M, Gouveia S, Ribes A, Kölker S, Blom HJ, Baumgartner MR, Bártl J, Dionisi Vici C, Gleich F, Morris AA, Kožich V, Huemer M; and individual contributors of the European Network and Registry for Homocystinurias and Methylation Defects (E-HOD), Barić I, Ben-Omran T, Blasco-Alonso J, Bueno Delgado MA, Carducci C, Cassanello M, Cerone R, Couce ML, Crushell E, Delgado Pecellin C, Dulin E, Espada M, Ferino G, Fingerhut R, Garcia Jimenez I, Gonzalez Gallego I, González-Irazabal Y, Gramer G, Juan Fita MJ, Karg E, Klein J, Konstantopoulou V, la Marca G, Leão Teles E, Leuzzi V, Lilliu F, Lopez RM, Lund AM, Mayne P, Meavilla S, Moat SJ, Okun JG, Pasquini E, Pedron-Giner C, Racz GZ, Ruiz Gomez MA, Vilarinho L, Yahyaoui R, Zerjav Tansek M, Zetterström RH, Zeyda M. Newborn screening for homocystinurias: recent recommendations versus current practice. *J Inherit Metab Dis*. 2018 Jun 15. doi: 10.1007/s10545-018-0213-0. [Epub ahead of print]

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Žigman T, Petković Ramadža D, Lušić M, Zekušić M, Ninković D, Gardijan D, Potočki K, Omerza L, Beljan L, Žarković K, Kerkhof J, Ljubojević M, de Sain-van der Velden M, Vuković J, Fumić K, Sadiković B, Barić I. Hypogammaglobulinemia and imaging features in a patient with infantile free sialic acid storage disease (ISSD) and novel mutation in the SLC17A5 gene. *J Pediatr Endocrinol Metab* 2018;31:1155-1159

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

"Inherited metabolic and other monogenic inherited diseases in children", "European network focused on Congenital Disorders of Glycosylation"(program FP6), "European Registry and Network for Intoxication Type Metabolic Diseases" (program DG Sanco), „Inherited neurometabolic diseases information network“(program DG Sanco) and “ The network and registry for homocystinurias and methylation defects”(program DG Sanco).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS



"Inherited metabolic and other monogenic inherited diseases in children", "European network focused on Congenital Disorders of Glycosylation"(program FP6), "European Registry and Network for Intoxication Type Metabolic Diseases" (program DG Sanco), „Inherited neurometabolic diseases information network“(program DG Sanco) and “ The network and registry for homocystinurias and methylation defects”(program DG Sanco).

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: prof. Nina Barišić, MD PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of Pediatrics University of Medical School

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Selected chapters in epileptology in developmental age

BIOGRAPHY

prof Barišić Nina is full time tenured professor since 2016 in cumulative employment at the Faculty of Medicine University of Zagreb . Head of Division of Child Neurology since 2003. Head of the Pediatrics at University of Zagreb Medical School in 2 mandates (from 2009-2015) and acting director executive (2016 – 2017).Leader for Neurology at the postgraduate study (PS) ‘Pediatrics’ at the Medical School (Faculty of Medicine), University of Zagreb

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Hardies K, de Kovel CG, Weckhuysen S, Asselbergh B, Geuens T, Deconinck T, Azmi A, May P, Brilstra E, Becker F, Barisic N, Craiu D, Braun KP, Lal D, Thiele H, Schubert J, Weber Y, van 't Slot R, Nürnberg P, Balling R, Timmerman V, Lerche H, Maudsley S, Helbig I, Suls A, Koeleman BP, De Jonghe P; autosomal recessive working group of the EuroEPINOMICS RES Consortium. Recessive mutations in SLC13A5 result in a loss of citrate transport and cause neonatal epilepsy, developmental delay and teeth hypoplasia. *Brain*. 2015;138:3238-50.

Larsen J, Carvill GL, Gardella E, Kluger G, Schmiedel G, Barisic N, Depienne C, Brilstra E, Mang Y, Nielsen JE, Kirkpatrick M, Goudie D, Goldman R, Jähn JA, Jepsen B, Gill D, Döcker M, Biskup S, McMahon JM, Koeleman B, Harris M, Braun K, de Kovel CG, Marini C, Specchio N, Djémié T, Weckhuysen S, Tommerup N, Troncoso M, Troncoso L, Bevoit A, Wolff M, Hjalgrim H, Guerrini R, Scheffer IE, Mefford HC, Møller RS; EuroEPINOMICS RES Consortium CRP. The phenotypic spectrum of SCN8A encephalopathy. *Neurology*. 2015;84:480-9.

Nava C, Dalle C, Rastetter A, Striano P, de Kovel CG, Nabbout R, Cancès C, Ville D, Brilstra EH, Gobbi G, Raffo E, Bouteiller D, Marie Y, Trouillard O, Robbiano A, Keren B, Agher D, Roze E, Lesage S, Nicolas A, Brice A, Baulac M, Vogt C, El Hajj N, Schneider E, Suls A, Weckhuysen S, Gormley P, Lehesjoki AE, De Jonghe P, Helbig I, Baulac S, Zara F, Koeleman BP; EuroEPINOMICS RES Consortium, Haaf T, LeGuern E, Depienne C. De novo mutations in HCN1 cause early infantile epileptic encephalopathy. *Nat Genet*. 2014;46:640-5.

EuroEPINOMICS-RES Consortium; Epilepsy Phenome/Genome Project; Epi4K Consortium. De novo mutations in synaptic transmission genes including DNM1 cause epileptic encephalopathies. *Am J Hum Genet*. 2014 2;95:360-70.

Syrbe S, Hedrich UB, Riesch E, Djémié T, Müller S, Møller RS, Maher B, Hernandez-Hernandez L, Synofzik M, Caglayan HS, Arslan M, Serratosa JM, Nothnagel M, May P, Krause R, Löffler H, Detert K, Dorn T, Vogt H, Krämer G, Schöls L, Mullis PE, Linnankivi T, Lehesjoki AE, Sterbova K, Craiu DC, Hoffman-Zacharska D, Korff CM, Weber YG, Steinlin M, Gallati S, Bertsche A, Bernhard MK, Merkschlager A, Kiess W; EuroEPINOMICS RES, Gonzalez M, Züchner S, Palotie A, Suls A, De Jonghe P, Helbig I, Biskup S, Wolff M,

Maljevic S, Schüle R, Sisodiya SM, Weckhuysen S, Lerche H, Lemke JR. De novo loss- or gain-of-function mutations in KCNA2 cause epileptic encephalopathy. *Nat Genet.* 2015;47:393-9.

Hardies K, May P, Djémié T, Tarta-Arsene O, Deconinck T, Craiu D; AR working group of the EuroEPINOMICS RES Consortium, Helbig I, Suls A, Balling R, Weckhuysen S, De Jonghe P, Hirst J. Recessive loss-of-function mutations in AP4S1 cause mild fever-sensitive seizures, developmental delay and spastic paraplegia through loss of AP-4 complex assembly. *Hum Mol Genet.* 2015;24:2218-27.

Larsen J, Johannesen KM, Ek J, Tang S, Marini C, Blichfeldt S, Kibaek M, von Spiczak S, Weckhuysen S, Frangu M, Neubauer BA, Uldall P, Striano P, Zara F; MAE working group of the EuroEPINOMICS RES Consortium, Kleiss R, Simpson M, Muhle H, Nikanorova M, Jepsen B, Tommerup N, Stephani U, Guerrini R, Duno M, Hjalgrim H, Pal D, Helbig I, Møller RS. The role of SLC2A1 mutations in myoclonic astatic epilepsy and absence epilepsy, and the estimated frequency of GLUT1 deficiency syndrome. *Epilepsia.* 2015;56:e203-8.

Epi4K Consortium; EuroEPINOMICS-RES Consortium; Epilepsy Phenome Genome Project. Application of rare variant transmission disequilibrium tests to epileptic encephalopathy trio sequence data. *Eur J Hum Genet.* 2017 ;25(7):894-899.

Nenadic-Baranasic N, Gjergja-Juraski R, Lehman I, Turkalj M, Nogalo B, Barisic N. Overnight Video-Polysomnographic Studies in Children with Intractable Epileptic Encephalopathies. *Med Sci Monit.* 2018 Aug 4;24:5405-5411. PMID: 30076286 Free PMC

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Bladen CL, Salgado D, Monges S, Foncuberta ME, Kekou K, Kosma K, Dawkins H, Lamont L, Roy AJ, Chamova T, Guergueltcheva V, Chan S, Korngut L, Campbell C, Dai Y, Wang J, Barišić N, Brabec P, Lahdetie J, Walter MC, Schreiber-Katz O, Karcagi V, Garami M, Viswanathan V, Bayat F, Buccella F, Kimura E, Koeks Z, van den Bergen JC, Rodrigues M, Roxburgh R, Lusakowska A, Kostera-Pruszczyk A, Zimowski J, Santos R, Neagu E, Artemieva S, Rasic VM, Vojinovic D, Posada M, Bloetzer C, Jeannet PY, Joncourt F, Díaz-Manera J, Gallardo E, Karaduman AA, Topaloglu H, El Sherif R, Stringer A, Shatillo AV, Martin AS, Peay HL, Bellgard MI, Kirschner J, Flanigan KM, Straub V, Bushby K, Verschuuren J, Aartsma-Rus A, Bérout C, Lochmüller H. The TREAT-NMD DMD Global Database: analysis of more than 7,000 Duchenne muscular dystrophy mutations. *Hum Mutat.* 2015;36:395-402.

Dumic M, Putarek NR, Kusec V, Barisic N, Koehler K, Huebner A. Low bone mineral density for age/osteoporosis in triple A syndrome-an overlooked symptom of unexplained etiology. *Osteoporosis Int.* 2016;27:521-6.

Batinić D, Milošević D, Filipović-Grčić B, Topalović-Grković M, Barišić N, Turudić D. Neurotoxicity of cyclosporine A in children with steroid-resistant nephrotic syndrome: is cytotoxic edema really an unfavorable predictor of permanent neurological damage? *Wien Klin Wochenschr.* 2017 Jun 9. doi: 10.1007/s00508-017-1221-z.

Maric LS, Lepej SZ, Gorenec L, Grgic I, Trkulja V, Rode OD, Roglic S, Grmoja T, Barisic N, Tesovic G. Chemokines CXCL10, CXCL11, and CXCL13 in acute disseminated encephalomyelitis, non-polio enterovirus aseptic meningitis, and neuroborreliosis: CXCL10 as initial discriminator in diagnostic algorithm? *Neurol Sci.* 2017 Dec 29. doi: 10.1007/s10072-017-3227-8

Koeks Z, Bladen CL, Salgado D, van Zwet E, Pogoryelova O, McMacken G, Monges S, Foncuberta ME, Kekou K, Kosma K, Dawkins H, Lamont L, Bellgard MI, Roy AJ, Chamova T, Guergueltcheva V, Chan S, Korngut L, Campbell C, Dai Y, Wang J, Barišić N, Brabec P, Lahdetie J, Walter MC, Schreiber-Katz O, Karcagi V, Garami M, Herczegfalvi A, Viswanathan V, Bayat F, Buccella F, Ferlini A, Kimura E, van den Bergen JC,

Rodrigues M, Roxburgh R, Lusakowska A, Kostera-Pruszczyk A, Santos R, Neagu E, Artemieva S, Rasic VM, Vojinovic D, Posada M, Bloetzer C, Klein A, Díaz-Manera J, Gallardo E, Karaduman AA, Oznur T, Topaloğlu H, El Sherif R, Stringer A, Shatillo AV, Martin AS, Peay HL, Kirschner J, Flanigan KM, Straub V, Bushby K, Bérout C, Verschuuren JJ, Lochmüller H. Clinical Outcomes in Duchenne Muscular Dystrophy: A Study of 5345 Patients from the TREAT-NMD DMD Global Database. J Neuromuscul Dis. 2017;4(4):293-306. doi: 10.3233/JND-170280.

Rudnik-Schöneborn S, Barisić N, Eggermann K, Ortiz Brüchle N, Grđan P, Zerres K. Distally pronounced infantile spinal muscular atrophy with severe axonal and demyelinating neuropathy associated with the S230L mutation of SMN1. Neuromuscul Disord. 2016 Feb;26(2):132-5. doi: 10.1016/j.nmd.2015.12.003. Epub 2015 Dec

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2006 to 2011 "The role of subcortical structures in epileptogenesis", Ministry of Science and Technology of the Republic of Croatia, no. 108-1081870-1886 within the program of Academician Ivica Kostović "The Developmental Neurological Basis of Cognitive, Mental and Neurological Diseases"

2006 to 2011 "Changing the wall of telencephalon in the hydrocephalus" of the Ministry of Science and Technology of the Republic of Croatia, no. 3-01-267,

Since 2014, investigator and collaborator of the Euro-Epinomics International Consortium for Molecular Genetic Research of Epileptic Syndromes

since 2016. main investigator collaborator for Croatia for Epi 25 international project for molecular genetic sequencing in epileptic syndromes , Broad Institute MAssachusetts USA

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Since 2014, investigator and collaborator of the Euro-Epinomics International Consortium for Molecular Genetic Research of Epileptic Syndromes

since 2016. main investigator collaborator for Croatia for Epi 25 international project for molecular genetic sequencing in epileptic syndromes , Broad Institute MAssachusetts USA

Since 2014, a partner in the project "Application of Next Generation Sequencing Technologies to a Large Group of Patients Affected by Unexplained Limb-Girdle Muscular Weakness: MYO-SEQ Project" (New Castle, UK, Prof. V.Straub) and Head of Croatia

Since 2014, partner on InnerMed project (Italy)

Since 2015, Member of the International Consortium and Scientific Advisory Board for the "Development of Best Practice Guidelines for Pediatric Charcot-Marie-Tooth Disease"

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist Prof. Stjepan Barišin, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Clinic for Anesthesiology, Reanimatology and Intensive Medicine, UH Dubrava, Av. G.Šuška 6, Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Hand surgery

BIOGRAPHY

Education

1993 finished Medical School, University of Zagreb - MD

1997 attended the biennial postgraduate study (first year - Clinical pharmacology with toxicology; second year - Biomedical sciences)

2004 finished postgraduated study with topic "Preoperative beta-blockade of heart and hemodynamic response during inotropic support" and received scientific degree MSc

2007 defended thesis "Prolonged hemodynamic effect, safety and cardioprotective effect of levosimendan on myocardial function during and after off-pump coronary artery bypass grafting" and received scientific degree PhD

1997 teacher on University of Applied Health Sciences, Zagreb

2010 promoted by the Ministry of Health to the position - Primarius

2010 elected to the scientific position – Research associate for the field of Biomedicine and health, the field of clinical medical sciences, Faculty of Medicine, University JJ Strossmayer of Osijek

2012 elected to the position - College professor on University of Applied Health Sciences, Zagreb

2012 elected to the title - Senior assistant for the scientific field of Biomedicine and health sciences, scientific field of Clinical medical sciences, scientific branch of Anesthesiology and

Reanimation in the Department of Anesthesiology, Resuscitation and Intensive Care Medicine, Faculty of Medicine, University JJ Strossmayer of Osijek

2013 elected to the position of Acting Head of the Department of Anesthesiology, Resuscitation and Intensive Care on University of Applied Health Sciences, Zagreb

2014 elected to the title – Assistant Professor on Faculty of Medicine, University JJ Strossmayer of Osijek

2017 elected to the scientific position – Senior research associate for the field of Biomedicine and health, the field of Clinical medical sciences, Faculty of Medicine, University JJ Strossmayer of Osijek

Work experience

1995 internship in University hospital Merkur, Zagreb

1996 - 2000 worked as a resident of Anesthesiology, Reanimatology and Intensive care medicine on Dpt of Cardiac anesthesiology and intensive care in UH Dubrava

2000 - 2016 worked as a specialist on Clinic of Anesthesiology, Reanimatology and Intensive Care Medicine, UH Dubrava

2017 founder of Referral Centre of the Ministry of Health for Hemodynamic Monitoring in Intensive Care of Surgical Patients, the first referral centre in Croatia from the field of anesthesiology and intensive medicine

2016 – 2018 Head of Clinic of Anesthesiology, Reanimatology and Intensive Care Medicine, UH Dubrava, Zagreb

Research activities

2003 - 2006 scientific project “Modulation of systemic inflammatory response in heart surgery”, No 0198019 (Ministry of Science)

2006 - 2012 scientific project “Predictive Models in Health Care” No 108-0982560-0257 (Ministry of Science)

2013 - 2014 scientific project “Evaluation of potential tumor markers in the diagnosis and prognosis of hepatocellular cancer” (University of Zagreb)

2018 - National Coordinator and Researcher at the multicenter study - "MET-REPAIR study" under the European Society of Anesthesiology (ESA)

Publications

As autor and coauthor, published about 50 papers (11 in CC) and abstracts

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: October 27, 2014
Assistant Professor on Faculty of Medicine, University JJ Strossmayer, Osijek

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Župčić M, Graf Župčić S, Duzel V, Šimurina T, Šakić L, Fudurić J, Peršec J, Milošević M, Stanec Z, Korušić A, Barišin S. A combination of levobupivacaine and lidocaine for paravertebral block in breast cancer patients undergoing quadrantectomy causes greater hemodynamic oscillations than levobupivacaine alone. *Croat Med J* 2017;58:270-80. (DOI: 10.3325/cmj.2017.58.270)
2. Barisin S, Duzel V, Sakic L. Ultrasound-guided transversus abdominis plane block in combination with ilioinguinal-iliohypogastric block in a high risk cardiac patient for inguinal hernia repair: a case report. *Period Biol* 2015;117:89-91.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Barisin S, Djuzel V, Barisin A, Rudez I. Levosimendan reverses right-heart failure in a 51-year-old patient after heart transplantation. *Wien Klin Wochenschr* 2014; 126: 495-9. DOI:10.1007/s00508-014-0528-2
2. Barisin A, Sonicki Z, Vincelj J, Sutlic Z, Barisin S. Does diabetes have an influence on regional deformation parameters in patients with normal systolic function during off-pump coronary artery bypass grafting? *Cardiology* 2015; 132: 34-44. DOI: 10.1159/000380811
3. Barisin S. Real-time 3-dimensional transesophageal echocardiography assessment of left ventricular shape and function after surgical remodeling. *Signa Vitae* 2017;13(Suppl 1): 20-3. (ISSN 1334-5605)
4. Mirat J, Alfirevic I, Barisin S, Bernart R, Biocina B, Coric V, Medved I, Sego K, Unic D, Vojkovic J. Aortic valve disease in Croatia in 2014 and their treatment. *Cardiol Croat* 2015;10:126-8.



5. Župčić M, Graf Župčić S, Duzel V, Šimurina T, Šakić L, Fudurić J, Peršec J, Milošević M, Stanec Z, Korušić A, Barišin S. A combination of levobupivacaine and lidocaine for paravertebral block in breast cancer patients undergoing quadrantectomy causes greater hemodynamic oscillations than levobupivacaine alone. *Croat Med J* 2017;58:270-80. DOI: 10.3325/cmj.2017.58.270
6. Sojčić N, Barisin S. Intensive care management of patients with left ventricular assist devices. *Signa Vitae* 2018;14(Suppl 1):14-17.
7. Barisin S, Ostovic H, Prazetina M, Sojčić N, Gospic I, Bradic N. Electrical impedance tomography as ventilation monitoring in ICU patients. *Signae Vitae* 2018;14(Suppl 1):21-3.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2013 - 2014 scientific project "Evaluation of potential tumor markers in the diagnosis and prognosis of hepatocellular cancer" (University of Zagreb)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Neven Baršić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Viral hepatitis

BIOGRAPHY

Working experience and positions

- 2017 – assistant professor at University of Zagreb School of medicine
- 2015 – 2017 fellowship in gastroenterology and hepatology
- 2012 – specialist at Department of gastroenterology and hepatology, 'Sestre milosrdnice' University hospital, Zagreb
- 2008 – 2012 residency in internal medicine at 'Sestre milosrdnice' University hospital, Zagreb
- 2005 – scientific novice / teaching assistant at Zagreb School of Medicine, Internal medicine department and 'Sestre milosrdnice' University hospital, Department of gastroenterology and hepatology
- 2004 – 2005 internship at Clinical hospital for infectious diseases 'dr. Fran Mihaljević', Zagreb

Education

- 2013 PhD degree
- 2006 - 2012 Postgraduate PhD programme 'Biomedicine and health sciences' at University of Zagreb School of Medicine
- 1998 - 2004 University of Zagreb School of Medicine, MD degree

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Baršić N, Lerotić I, Smirčić-Duvnjak L, Tomašić V, Duvnjak M. Overview and developments in noninvasive diagnosis of nonalcoholic fatty liver disease. *World J Gastroenterol.* 2012 Aug 14;18(30):3945-54.
2. Duvnjak M, Tomasic V, Gomercic M, Smircic Duvnjak L, Barsic N, Lerotic I. Therapy of nonalcoholic fatty liver disease: current status. *J Physiol Pharmacol.* 2009 Dec;60 Suppl 7:57-66.
3. Duvnjak M, Baršić N, Tomašić V, Lerotić I. Genetic polymorphisms in non-alcoholic fatty liver disease: clues to pathogenesis and disease progression. *World J Gastroenterol.* 2009 Dec 28;15(48):6023-7.
4. Duvnjak M, Lerotić I, Baršić N, Tomašić V, Virović Jukić L, Velagić V. Pathogenesis and management issues for non-alcoholic fatty liver disease. *World J Gastroenterol.* 2007 Sep 14;13(34):4539-50.
5. Duvnjak M, Baršić N, Tomašić V, Jukić LV, Lerotić I, Pavić T. Adjusted blood requirement index as indicator of failure to control acute variceal bleeding. *Croat Med J.* 2006 Jun;47(3):398-403.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Barsic N, Rivory J, Monneuse O, Saurin JC, Ponchon T, Pioche M. Successful closure of a refractory rectal anastomotic fistula using endoscopic submucosal dissection combined with an over-the-scope clip. *Endoscopy.* 2018 Apr;50(4):E99-E101.
2. Budimir I, Stojavljević S, Baršić N, Biščanin A, Mirošević G, Bohnec S, Kirigin LS, Pavić T, Ljubičić N. Scoring systems for peptic ulcer bleeding: Which one to use? *World J Gastroenterol.* 2017 Nov 7;23(41):7450-7458.
3. Budimir I, Gradišer M, Nikolić M, Baršić N, Ljubičić N, Kralj D, Budimir I Jr. Glasgow Blatchford, pre-endoscopic Rockall and AIMS65 scores show no difference in predicting rebleeding rate and mortality in variceal bleeding. *Scand J Gastroenterol.* 2016 Nov;51(11):1375-9.
4. Weigt J, Barsic N, Malferttheiner P. A novel approach to esophageal stent removal in the setting of proximal stenosis and failure of the primary retrieval mechanism. *Endoscopy.* 2015;47 Suppl 1 UCTN:E129-30.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



Project of the Croatian Ministry of science and sport 'Research of non-alcoholic fatty liver disease as a part of metabolic syndrome' (2006-2012)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

/

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

/

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Silvio Bašić, MD, PhD, research associate

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University hospital Dubrava

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pathophysiology of the brain and CSF

BIOGRAPHY

Silvio Basic was born in 1968 in Zagreb, Croatia. His current post is Head of the Department of Neurology at the University Hospital Dubrava in Zagreb, Head of the Referral Centre of Croatian Ministry of Health for preoperative assessment of patients with pharmacoresistant epilepsy, Professor of neurology at the University of Applied Health Sciences in Zagreb, Assistant Professor of neurology at the University of Osijek and at the University of Mostar (Bosnia and Herzegovina). He studied medicine at the University of Zagreb School of Medicine and trained in Neurology at the University Hospital Zagreb, followed by several training courses in epileptology and invasive EEG monitoring. He was awarded a PhD in 2008 for his thesis on the role of PGP in epilepsy pharmacoresistance. During his professional career, his primary mission was improvement of epilepsy management, not only in Croatia but also in the whole region. In 2001 his team, first in the region, started using vagus nerve stimulation. In the following years, his enthusiasm and constant wish for improvement resulted in the implementation of stereoelectroencephalography (SEEG) as a standard procedure in preoperative assessment of patients with pharmacoresistant epilepsy in Croatia in 2012. Since then, his Centre is the only centre which has been performing this procedure in Croatia and neighbouring countries, including SEEG-guided RF-thermocoagulation as a treatment technique in a selected population of patients from 2015. He is very active in education, and from the beginning of his teaching experience he has been trying to emphasize the importance of epilepsy to medical students, neurology residents, neurologists and other medical specialists, mainly psychiatrists, internal medicine specialists and general practitioners. He introduced the epileptology course at the Medical School in Osijek (Croatia), and at the Medical School in Mostar (Bosnia and Herzegovina), and has been continuously organizing numerous teaching courses on epilepsy. Likewise, he regularly contributes to teaching courses, conferences and lectures around Europe. He chairs the Master's course in Neurology at the University of Osijek. He has been a board member of the Croatian League Against Epilepsy since 2002, and a board member of the Croatian Neurology Society since 2013. In 2016, he was elected the President of the Croatian League Against Epilepsy. He is also a member of the NATO STO Human Factors and Medicine Panel. He was the president of the Organizing committee of thirteen national and international neurology conferences, and the president of the Organizing committee of the 8th ILAE Migrating Course on epilepsy held in Dubrovnik in 2014. His main research interest is pathophysiology and management of pharmacoresistant epilepsy. He has supervised 8 PhD students and is currently the mentor of 6 neurology residents. He has published over 40 peer-reviewed articles, 6 book chapters and 1 book. Silvio Basic is married, and has three children.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2010

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1: Markovic I, Saric Sucic J, Juric S, Titlic M, Basic S. A fatal back pain: report of two cases of diffuse large B cell/Burkitt-like nervous system lymphoma. *Neurol Sci*. 2019 Mar;40(3):645-647. doi: 10.1007/s10072-018-3631-8. Epub 2018 Nov 1. PubMed PMID: 30386932.

- 2: Zelano J, Klecki J, Christensen J, Tomson T, Malmgren K; ESBACE consortium Collaborators. The provision of epilepsy care across Europe 2017: A 17-year follow-up survey. *Epilepsia Open*. 2019 Feb 15;4(1):144-152. doi: 10.1002/epi4.12306. eCollection 2019 Mar. PubMed PMID: 30868124; PubMed Central PMCID: PMC6398096.
- 3: Graf Zupcic S, Zupcic M, Duzel V, Šimurina T, Milošević M, Basic S, Vuletic V, Kapural L. Effect of clonidine on the cutaneous silent period during spinal anesthesia. *World J Clin Cases*. 2018 Dec 26;6(16):1136-1145. doi: 10.12998/wjcc.v6.i16.1136. PubMed PMID: 30613672; PubMed Central PMCID: PMC6306629.
- 4: Sporiš D, Bašić S, Sertić J, Mahović Lakušić D, Babić T. Is Apolipoprotein E ε2 Associated with Delayed Onset of Non-Lesional Temporal Lobe Epilepsy? *Acta Clin Croat*. 2017 Mar;56(1):10-14. doi: 10.20471/acc.2017.56.01.02. PubMed PMID: 29120117.
- 5: Basic S, Markovic I, Sporis D, Sporis IS, Filipčić I. Psychogenic non epileptic seizure status - diagnostic and treatment challenge. *Psychiatr Danub*. 2017 Mar;29(1):87-89. PubMed PMID: 28291980.
- 6: Hauser SL, Bar-Or A, Comi G, Giovannoni G, Hartung HP, Hemmer B, Lublin F, Montalban X, Rammohan KW, Selmaj K, Traboulsee A, Wolinsky JS, Arnold DL, Klingenschmitt G, Masterman D, Fontoura P, Belachew S, Chin P, Mairon N, Garren H, Kappos L; OPERA I and OPERA II Clinical Investigators. Ocrelizumab versus Interferon Beta-1a in Relapsing Multiple Sclerosis. *N Engl J Med*. 2017 Jan 19;376(3):221-234. doi: 10.1056/NEJMoa1601277. Epub 2016 Dec 21. PubMed PMID: 28002679.
- 7: Miškov S, Gjergja Juraški R, Mikula I, Bašić S, Bošnjak Pašić M, Košec V, Sabol Z, Fučić A, Sajko T, Bašić Kes V. The Croatian Model of Integrative Prospective Management of Epilepsy and Pregnancy. *Acta Clin Croat*. 2016 Dec;55(4):535-548. doi: 10.20471/acc.2016.55.04.02. PubMed PMID: 29116720.
- 8: Calabresi PA, Kieseier BC, Arnold DL, Balcer LJ, Boyko A, Pelletier J, Liu S, Zhu Y, Seddighzadeh A, Hung S, Deykin A; ADVANCE Study Investigators. Pegylated interferon β-1a for relapsing-remitting multiple sclerosis (ADVANCE): a randomised, phase 3, double-blind study. *Lancet Neurol*. 2014 Jul;13(7):657-65. doi: 10.1016/S1474-4422(14)70068-7. Epub 2014 Apr 30. PubMed PMID: 24794721.
- 9: Kes VB, Cesarik M, Zavoreo I, Butković SS, Kes P, Bašić-Jukić N, Rački S, Jakić M, Delić-Brkljačić D, Jukić Z, Trkanjec Z, Šerić V, Solter VV, Bielen I, Bašić S, Demarin V; Croatian Society for Neurovascular Disorders of Croatian Medical Association; Croatian Society of Neuroimmunology and Neurogenetics of Croatian Medical Association; Croatian Society of Neurology of Croatian Medical Association; Croatian Society of Nephrology, Dialysis and Transplantation of Croatian Medical Association. [Guidelines for diagnosis, therapy and follow up of Anderson-Fabry disease]. *Acta Med Croatica*. 2014 Apr;68(2):223-32. Croatian. PubMed PMID: 26012164.
- 10: Solter VV, Breitenfeld T, Roje-Bedeković M, Supanc V, Lovrenčić-Huzjan A, Sertić V, Antončić I, Basić S, Beros V, Bielen I, Soldo SB, Kadojić D, Lusić I, Maldini B, Marović A, Paladino J, Poljaković Z, Radanović B, Rados M, Rotim K, Vukić M, Zdravec D, Kes VB. General recommendations for the management of aneurysmal subarachnoid hemorrhage. *Acta Clin Croat*. 2014 Mar;53(1):139-52. PubMed PMID: 24974676.
- 11: Solter VV, Roje-Bedeković M, Breitenfeld T, Supanc V, Lovrenčić-Huzjan A, Sertić V, Antončić I, Basić S, Beros V, Bielen I, Soldo SB, Kadojić D, Lusić I, Maldini B, Marović A, Paladino J, Poljaković Z, Radanović B, Rados M, Rotim K, Vukić M, Zdravec D, Kes VB. Recommendations for the management of medical complications in patients following aneurysmal subarachnoid hemorrhage. *Acta Clin Croat*. 2014 Mar;53(1):113-38. PubMed PMID: 24974675.
- 12: French JA, Baroldi P, Brittain ST, Johnson JK; PROSPER Investigators Study Group. Efficacy and safety of extended-release oxcarbazepine (Oxtellar XR™) as adjunctive therapy in patients with refractory partial-

onset seizures: a randomized controlled trial. *Acta Neurol Scand.* 2014 Mar;129(3):143-53. doi: 10.1111/ane.12207. Epub 2013 Dec 21. PubMed PMID: 24359313; PubMed Central PMCID: PMC4033571.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1: Markovic I, Saric Sucic J, Juric S, Titlic M, Basic S. A fatal back pain: report of two cases of diffuse large B cell/Burkitt-like nervous system lymphoma. *Neurol Sci.* 2019 Mar;40(3):645-647. doi: 10.1007/s10072-018-3631-8. Epub 2018 Nov 1. PubMed PMID: 30386932.
- 2: Zelano J, Klecki J, Christensen J, Tomson T, Malmgren K; ESBACE consortium Collaborators. The provision of epilepsy care across Europe 2017: A 17-year follow-up survey. *Epilepsia Open.* 2019 Feb 15;4(1):144-152. doi: 10.1002/epi4.12306. eCollection 2019 Mar. PubMed PMID: 30868124; PubMed Central PMCID: PMC6398096.
- 3: Graf Zupcic S, Zupcic M, Duzel V, Šimurina T, Milošević M, Basic S, Vuletic V, Kapural L. Effect of clonidine on the cutaneous silent period during spinal anesthesia. *World J Clin Cases.* 2018 Dec 26;6(16):1136-1145. doi: 10.12998/wjcc.v6.i16.1136. PubMed PMID: 30613672; PubMed Central PMCID: PMC6306629.
- 4: Sporiš D, Bašić S, Sertić J, Mahović Lakušić D, Babić T. Is Apolipoprotein E ε2 Associated with Delayed Onset of Non-Lesional Temporal Lobe Epilepsy? *Acta Clin Croat.* 2017 Mar;56(1):10-14. doi: 10.20471/acc.2017.56.01.02. PubMed PMID: 29120117.
- 5: Basic S, Markovic I, Sporis D, Sporis IS, Filipčić I. Psychogenic non epileptic seizure status - diagnostic and treatment challenge. *Psychiatr Danub.* 2017 Mar;29(1):87-89. PubMed PMID: 28291980.
- 6: Hauser SL, Bar-Or A, Comi G, Giovannoni G, Hartung HP, Hemmer B, Lublin F, Montalban X, Rammohan KW, Selma J, Traboulsee A, Wolinsky JS, Arnold DL, Klingelschmitt G, Masterman D, Fontoura P, Belachew S, Chin P, Mairon N, Garren H, Kappos L; OPERA I and OPERA II Clinical Investigators. Ocrelizumab versus Interferon Beta-1a in Relapsing Multiple Sclerosis. *N Engl J Med.* 2017 Jan 19;376(3):221-234. doi: 10.1056/NEJMoa1601277. Epub 2016 Dec 21. PubMed PMID: 28002679.
- 7: Miškov S, Gjergja Juraški R, Mikula I, Bašić S, Bošnjak Pašić M, Košec V, Sabol Z, Fučić A, Sajko T, Bašić Kes V. The Croatian Model of Integrative Prospective Management of Epilepsy and Pregnancy. *Acta Clin Croat.* 2016 Dec;55(4):535-548. doi: 10.20471/acc.2016.55.04.02. PubMed PMID: 29116720.
- 8: Calabresi PA, Kieseier BC, Arnold DL, Balcer LJ, Boyko A, Pelletier J, Liu S, Zhu Y, Seddighzadeh A, Hung S, Deykin A; ADVANCE Study Investigators. Pegylated interferon β-1a for relapsing-remitting multiple sclerosis (ADVANCE): a randomised, phase 3, double-blind study. *Lancet Neurol.* 2014 Jul;13(7):657-65. doi: 10.1016/S1474-4422(14)70068-7. Epub 2014 Apr 30. PubMed PMID: 24794721.
- 9: Kes VB, Cesarik M, Zavoreo I, Butković SS, Kes P, Bašić-Jukić N, Rački S, Jakić M, Delić-Brkljačić D, Jukić Z, Trkanjec Z, Šerić V, Solter VV, Bielen I, Bašić S, Demarin V; Croatian Society for Neurovascular Disorders of Croatian Medical Association; Croatian Society of Neuroimmunology and Neurogenetics of Croatian Medical Association; Croatian Society of Neurology of Croatian Medical Association; Croatian Society of Nephrology, Dialysis and Transplantation of Croatian Medical Association. [Guidelines for diagnosis, therapy and follow up of Anderson-Fabry disease]. *Acta Med Croatica.* 2014 Apr;68(2):223-32. Croatian. PubMed PMID: 26012164.
- 10: Solter VV, Breitenfeld T, Roje-Bedeković M, Supanc V, Lovrenčić-Huzjan A, Serić V, Antončić I, Bašić S, Beros V, Bielen I, Soldo SB, Kadojić D, Lusić I, Maldini B, Marović A, Paladino J, Poljaković Z, Radanović B, Rados M, Rotim K, Vukić M, Zdravec D, Kes VB. General recommendations for the management of aneurysmal subarachnoid hemorrhage. *Acta Clin Croat.* 2014 Mar;53(1):139-52. PubMed PMID: 24974676.

11: Solter VV, Roje-Bedeković M, Breitenfeld T, Supanc V, Lovrenčić-Huzjan A, Serić V, Antončić I, Basić S, Beros V, Bielen I, Soldo SB, Kadojić D, Lusić I, Maldini B, Marović A, Paladino J, Poljaković Z, Radanović B, Rados M, Rotim K, Vukić M, Zadravec D, Kes VB. Recommendations for the management of medical complications in patients following aneurysmal subarachnoid hemorrhage. *Acta Clin Croat.* 2014 Mar;53(1):113-38. PubMed PMID: 24974675.

12: French JA, Baroldi P, Brittain ST, Johnson JK; PROSPER Investigators Study Group. Efficacy and safety of extended-release oxcarbazepine (Oxtellar XR™) as adjunctive therapy in patients with refractory partial-onset seizures: a randomized controlled trial. *Acta Neurol Scand.* 2014 Mar;129(3):143-53. doi: 10.1111/ane.12207. Epub 2013 Dec 21. PubMed PMID: 24359313; PubMed Central PMCID: PMC4033571.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

The role of genetic markers in the development of cerebral atherosclerotic disease

Functional Diagnostics of Brain Circulation

Phosphorylation of Protein in Development and Alzheimer's Disease

Research of efficiency of functional neurosurgical procedures

The role of vascular risk factors in the pathogenesis of Alzheimer's disease

Influenza and the share of pharmacogenetics in the development and outcome of acute and chronic diseases

1H-MRS changes in prediction of therapeutic response, relapse and depression recovery

Determinants and early diagnosis of motor neuronal diseases in the Croatian population

Pathophysiology of Severe Brain Injury and Craniospinal Volumetry

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

The role of genetic markers in the development of cerebral atherosclerotic disease

Functional Diagnostics of Brain Circulation

Phosphorylation of Protein in Development and Alzheimer's Disease

Research of efficiency of functional neurosurgical procedures

The role of vascular risk factors in the pathogenesis of Alzheimer's disease

Influenza and the share of pharmacogenetics in the development and outcome of acute and chronic diseases

1H-MRS changes in prediction of therapeutic response, relapse and depression recovery

Determinants and early diagnosis of motor neuronal diseases in the Croatian population

Pathophysiology of Severe Brain Injury and Craniospinal Volumetry

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Nikolina Bašić-Jukić, Prof, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Faculty of medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Kidney transplantation

BIOGRAPHY

Date of birth: July 15, 1971

1989-1994. School of Medicine, University of Zagreb
1994-1998. Assistant at Department of Anatomy, School of Medicine, University of Zagreb
1998-2002. Internship in Internal medicine, University Hospital Centre Zagreb
2002- Working at Department of Nephrology, Arterial hypertension, Dialysis and Transplantation, University Hospital Centre Zagreb

1997. Bachelor of science “Expression of transforming growth factor beta 1 in mice kidney”

1998. Masters thesis “Expression of mRNA for bone morphogenetic proteins in developing and adult kidney, eye and brain”

Current working position: specialist in internal medicine –nephrologist -Department of Nephrology, arterial hypertension, dialysis and transplantation, University Hospital Zagreb, Head of Dept for renal transplantation

Married, mother of two children

AWARDS:

1994. Award “Drago Perovic” for the best student of School of Medicine in academic year 93/94

1995. Award for participation in the most successful project of the year (Creative BioMolecules, Hopkinton, MA, USA)

1998. Award “Borislav Nakic” from Croatian Academy of Medical Sciences for the best paper published by the young author

1999. Award Zonta International for the achievements in genetics

2000. Award for the best paper published in Acta Orthopaedica Scandinavica in 2000.

2006. Award “Almae Matris Alumni Croaticae”- United Kingdom Association of Alumni and Friends of Croatian Universities for achievements in scientific work

2013. Award of City of Podgorica, Montenegro, for establishment of the renal transplant program in Montenegro

SCIENTIFIC EXPERIENCE:

1994-1998. Laboratory for mineralized tissues at Dept. of Anatomy, familiar with most of the methods in molecular biology that employ DNA and RNA, cell culture work

Experienced in work with laboratory animals (mice, rats)

From 1998. Epidemiological investigations – nephrology, dialysis and transplantation

2002- Investigations in the field of nephrology – molecular biology of kidney diseases

Scientific projects

participated in numerous scientific projects from the beginning of career,

leader of a project « Risk factors for development of atherosclerosis after kidney transplantation »
financed by Ministry of science and sports.

Participation in editorial boards

She is Deputy editor of Bantao Journal, member of Editorial board of Acta Medica Croatica, and editor of thematic issues on nephrology of Acta Medica Croatica.

Reviewer

Prof. Basic Jukic is an active reviewer for: Therapeutic Apheresis and Dialysis, Croatian Medical Journal, Acta Medica Croatica, International Journal of Osteoporosis, Peritoneal Dialysis International, BANTAO Journal, Transplant Infective Diseases, Case reports in Nephrology and Urology, Asian Journal of Andrology, Renal failure and International Nephrology and Urology.

She was also invited reviewer of the Chilean and Slovenian government – evaluation of scientific projects.

Invited lectures:

More than 100 invited lectures in Croatia and abroad.

Professional work:

Head of department of peritoneal dialysis

Clinical coordinator for renal transplantation

Consultant nephrologist of University hospital Montenegro, Podgorica

Academic profession:

1994. to 1998. Assistant at Department of Anatomy, School of Medicine, University of Zagreb

2004. Assistant at Department of internal medicine, School of medicine, Zagreb

2008. Assistant professor at Department of internal medicine, School of medicine, University of Osijek

2009. Assistant professor at Department of internal medicine, School of medicine, Zagreb

2013. Professor at Department of internal medicine, School of medicine, University of Osijek

Professional and scientific interests:

Renal transplantation – immunology, complications of immunosuppressive therapy, cardiovascular risk factors in patients with end-stage renal disease, infections, malignancies

Peritoneal dialysis, hemodialysis, chronic kidney disease stages 3 to 5

Complications of chronic kidney disease (anemia, secondary hyperparathyroidism)

Bone morphogenetic proteins

Renal nutrition

Membership in societies

- a. Croatian medical association
- b. Croatian society for nephrology, dialysis and transplantation – vice- president
- c. Croatian society for mineralized tissues
- d. European renal association (ERA-EDTA)
- e. European society for transplantation (ESOT)
- f. International society of nephrology (ISN)

Publications: 250 scientific and professional papers, 75 abstracts at international congresses

Citations: 1400

H-index: 18

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

133. Katalinić L, Blaslov K, Đanić-Hadžibegović A, Gellineo L, Kes P, Jelaković B, Basić-Jukić N. METABOLIC ACIDOSIS--AN UNDERESTIMATED PROBLEM AFTER KIDNEY TRANSPLANTATION?. Acta Clin Croat. 2015 Dec;54(4):486-91.

134. Brunetta Gavranic B, Bašić-Jukić N, Kes P. Therapeutic Plasma Exchange-Does Age Matter? A Single-Center Study. Artif Organs. 2016 Jan 27.

135. Ratkovic M, Basic-Jukic N, Radunovic D. Possible Sirolimus-Induced Acute

Pancreatitis in a Renal Transplant Recipient. *Ther Apher Dial.* 2016 Apr;20(2):208-9.

136. Sakan S, Bašić-Jukić N, Kes P, Jelaković B, Pavlović DB, Perić M. SIGNIFICANCE OF FIBROBLAST GROWTH FACTOR 23 IN ACUTE KIDNEY INJURY. *Acta Clin Croat.* 2015 Sep;54(3):279-84. PubMed PMID: 26666096.

137. Ivanac-Janković R, Ćorić M, Furić-Čunko V, Lovčić V, Bašić-Jukić N, Kes P. BMP-7 PROTEIN EXPRESSION IS DOWNREGULATED IN HUMAN DIABETIC NEPHROPATHY. *Acta Clin Croat.* 2015 Jun;54(2):164-8.

138. Basic-Jukic N, Ivanac-Jankovic R, Biocina B, Kes P. Cardiovascular surgery after renal transplantation--indications, complications and outcome. *Ren Fail.* 2015 Jul;37(6):1020-1.

139. Mesar I, Bašić-Jukić N. [Proteomics in nephrology]. *Acta Med Croatica.* 2014 Apr;68(2):233-7.

140. Kes VB, Cesarik M, Zavoreo I, Butković SS, Kes P, Bašić-Jukić N, Rački S, Jakić M, Delić-Brkljačić D, Jukić Z, Trkanjec Z, Šerić V, Solter VV, Bielen I, Bašić S, Demarin V; Croatian Society for Neurovascular Disorders of Croatian Medical Association; Croatian Society of Neuroimmunology and Neurogenetics of Croatian Medical Association; Croatian Society of Neurology of Croatian Medical Association; Croatian Society of Nephrology, Dialysis and Transplantation of Croatian Medical Association. [Guidelines for diagnosis, therapy and follow up of Anderson-Fabry disease]. *Acta Med Croatica.* 2014 Apr;68(2):223-32.

141. Rački S, Bašić-Jukić N, Kes P, Ljutić D, Lovčić V, Prkačin I, Radić J, Vujičić B, Bubić I, Jakić M, Belavić Ž, Sefer S, Pehai M, Klarić D, Gulinić M; Croatian Society for Nephrology, Dialysis and Transplantation. [Treatment of anemia in chronic kidney disease--position statement of the Croatian Society for Nephrology, Dialysis and Transplantation and review of the KDIGO and ERBPB guidelines]. *Acta Med Croatica.* 2014 Apr;68(2):215-21.

142. Bašić-Jukić N, Rački S, Knotek M, Bubić-Filipi L, Bubić I, Zibar L, Kes P;

Croatian Society for Nephrology, Dialysis and Transplantation. [Consensus statement of the Croatian Society for Nephrology, Dialysis and Transplantation regarding the use of generic immunosuppressive drugs]. *Acta Med Croatica*. 2014 Apr;68(2):211-4.

143. Kes P, Mesar I, Bašić-Jukić N, Rački S. [What doctors need to know about biosimilar medicinal products?]. *Acta Med Croatica*. 2014 Apr;68(2):201-5. Review. Croatian. PubMed PMID: 26012160.

144. Bašić-Jukić N, Rački S, Kes P, Ljutić D, Vujičić B, Lovčić V, Orlić L, Prkačin I, Radić J, Jakić M, Klarić D, Gulin M; Croatian Society of Nephrology, Dialysis and Transplantation. [How to prevent protein-energy wasting in patients with chronic kidney disease--position statement of the Croatian Society of Nephrology, Dialysis and Transplantation]. *Acta Med Croatica*. 2014 Apr;68(2):191-9.

145. Ratković M, Bašić-Jukić N, Gledović B, Radunović D. [Disseminated intravascular coagulation and acute kidney injury requiring renal replacement therapy after diagnostic amniocentesis]. *Acta Med Croatica*. 2014 Apr;68(2):179-82.

146. Ivandić E, Bašić-Jukić N. [Liver damage caused by atorvastatin and cyclosporine in patients with renal transplant]. *Acta Med Croatica*. 2014 Apr;68(2):175-8.

147. Premužić V, Tomašević B, Eržen G, Makar K, Brunetta-Gavranić B, Francetić I, Bašić-Jukić N, Kes P, Jelaković B. [Temporary and permanent central venous catheters for hemodialysis]. *Acta Med Croatica*. 2014 Apr;68(2):167-74.

148. Novosel D, Bašić-Jukić N, Makarović Z, Makarović S. [Cardiorenal syndrome type 2--literature review]. *Acta Med Croatica*. 2014 Apr;68(2):161-5.

149. Kes P, Bašić-Kes V, Furic-Cunko V, Mesar I, Bašić-Jukić N. [Dyslipidemia and stroke in patients with chronic kidney disease]. *Acta Med Croatica*. 2014

Apr;68(2):141-9.

150. Katalinić L, Blaslov K, Pasini E, Kes P, Bašić-Jukić N. [Acid-base status in patients treated with peritoneal dialysis]. *Acta Med Croatica*. 2014

Apr;68(2):85-90.

151. Furic-Cunko V, Kes P, Coric M, Hudolin T, Kastelan Z, Basic-Jukic N.

Expression of bone morphogenetic proteins 4, 6 and 7 is downregulated in kidney allografts with interstitial fibrosis and tubular atrophy. *Int Urol Nephrol*. 2015

Jul;47(7):1219-29.

152. Bašić-Jukić N, Radić J, Klarić D, Jakić M, Vujičić B, Gulin M, Krznarić Z,

Pavić E, Kes P, Jelaković B, Rački S. [Croatian guidelines for screening, prevention and treatment of protein-energy wasting in chronic kidney disease patients]. *Lijec Vjesn*. 2015 Jan-Feb;137(1-2):1-8.

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LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

HERIC project, TRANSFORM study

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

HERIC project, TRANSFORM study

(IF THE TEACHER IS AT THE SAME TIME A POTENTIAL SUPERVISOR)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

4

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Vanja Bašić Kes, prof.dr.sc.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Electrophysiological methods in medical research

BIOGRAPHY

Professor Vanja Bašić Kes, MD, PhD obtained her M.D. with thesis honours at the School of Medicine, University of Zagreb (Croatia). She specialized in Neurology and subsequently obtained a Masters and a Doctorate degree in Clinical Neurology (Ph.D.). Her professional training included Fellowship in Neurology at the King's College Hospital in London, United Kingdom and at the Weill Cornell in Salzburg, Austria. Professor Bašić Kes holds her professional appointments at the University of Zagreb (School of Dental Sciences), and University of Osijek (School of Medicine), Croatia, where she has been engaged as Professor and Assistant Professor of Neurology, respectively. She carries out clinical work and research, and teaches at graduate and postgraduate levels, and serves as regular Member of the National Croatian Scientific Advisory Board. She is the principal investigator of several major international studies on multiple sclerosis, rare diseases in neurology and on safe implementation of stroke treatments in Eastern Europe. She is also a Senior Associate of the Faculty of the School of Medicine, University of Zagreb. Professor Bašić Kes has been appointed Head of University Department of Neurology and Lead of Neuroimmunology and Neurogenetics Unit, at the Sestre milosrdnice University Hospital Centre. Her professional highlight is the establishment of the Referent Centre for the Management of Acute and Chronic Pain, and the Referent Centre for Neuroimmunology and Neurogenetics, at the University Department of Neurology, both acknowledged by the Croatian Ministry of Health. Prof. Bašić Kes is the leading expert in the field of neuroimmunology and neurogenetics. Her current research interest focuses on the remyelination, recovery and novel treatment options in multiple sclerosis. She implemented the Croatian Guidelines for the Treatment of Multiple Sclerosis and launched the first international biannual Neuroimmunology and Neuroimmunology congress. Professor Bašić Kes serves as the President of the Croatian Society for Neurovascular Disorders, the President of the Croatian Neuroimmunology and Neurogenetics Society, the President of the Croatian Society for Pain and the President of the Croatian Society for Stroke. She is also an Honorary Member of numerous professional associations and advisory boards, both national and international. Prof. Bašić Kes has published more than 300 articles in scientific journals, authored or co-authored several books and edited a number of others. She is also a member of editorial and advisory board and deputy editor of the Acta Clinica Croatica journal.

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LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

CURRENT CONTENTS CONNECT (CC-RADOVI)

1. Knezovic M, Pintaric S, Jelavic MM, Kes VB, Nesek V, Bogovic S, et al. The role of weather conditions and normal level of air pollution in appearance of stroke in the region of Southeast Europe. Acta Neurologica Belgica. 2018;118(2):267-75.

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CORE COLLECTION- INDEKSI SCIE I SSCI (SCIE RADOVI)

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18. Turina ISB, Brkljacic M, Cengic T, Ratz A, Rotim A, Kes VB. CLINICAL ETHICS IN CROATIA: AN OVERVIEW OF EDUCATION, SERVICES AND RESEARCH (AN APPEAL FOR CHANGE). *Acta Clinica Croatica*. 2014;53(2):166-75.
19. Supanc V, Sonicki Z, Vukasovic I, Solter VV, Zavoreo I, Kes VB. The Role of Classic Risk Factors and Prothrombotic Factor Gene Mutations in Ischemic Stroke Risk Development in Young and Middle-Aged Individuals. *Journal of Stroke & Cerebrovascular Diseases*.

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20. Solter VV, Roje-Bedekovic M, Breitenfeld T, Supanc V, Lovrencic-Huzjan A, Seric V, et al. RECOMMENDATIONS FOR THE MANAGEMENT OF MEDICAL COMPLICATIONS IN PATIENTS FOLLOWING ANEURYSMAL SUBARACHNOID HEMORRHAGE. *Acta Clinica Croatica*. 2014;53(1):113-38.

21. Solter VV, Breitenfeld T, Roje-Bedekovic M, Supanc V, Lovrencic-Huzjan A, Seric V, et al. GENERAL RECOMMENDATIONS FOR THE MANAGEMENT OF ANEURYSMAL SUBARACHNOID HEMORRHAGE. *Acta Clinica Croatica*. 2014;53(1):139-52.

22. Lisak M, Demarin V, Trkanjec Z, Zavoreo I, Kes VB. PERSON-ORIENTED PERSPECTIVES IN NEUROLOGY. *Acta Clinica Croatica*. 2014;53(4):423-9.

23. Harsany M, Kadlecova P, Svigelj V, Korv J, Kes VB, Vilionskis A, et al. Factors Influencing Door-to-Imaging Time: Analysis of the Safe Implementation of Treatments in Stroke-EAST Registry. *Journal of Stroke & Cerebrovascular Diseases*. 2014;23(8):2122-9.

24. Badel T, Cimic S, Munitic M, Zadavec D, Kes VB, Simunkovic SK. CLINICAL VIEW OF THE TEMPOROMANDIBULAR JOINT DISORDER. *Acta Clinica Croatica*. 2014;53(4):462-70.

INDEX MEDICUS

1. Begcevic I, Brinc D, Dukic L, Simundic AM, Zavoreo I, Basic Kes V, et al. Targeted Mass Spectrometry-Based Assays for Relative Quantification of 30 Brain-Related Proteins and Their Clinical Applications. *J Proteome Res*. 2018 Jun6.DOI:10.1021/acs.jproteome.7b00768. (epub ahead of print)

2. Djelilovic-Vranic J, Basic-Kes V, Tiric-Campara M, Djozic E, Kulenovic J. Follow-up of Vasospasm by Transcranial Doppler Sonography (TCD) in Subarachnoid Hemorrhage (SAH). *Acta Inform Med*. 2017 Mar;25(1):14-18. doi:10.5455/aim.2017.25.14-18. PubMed PMID: 28484291; PubMed Central PMCID: PMC5402374.

3. Cesarik M, Zavoreo I, Zadro-Matovina L, Papic M, Basic Kes V. Effects of trigeminal nerve dysfunction in various types of headaches. *Coll Antropol*. 2016;55(1):183-8.

4. Kes, P., Bašić-Kes, V., Furić-Čunko, V., Mesar, I., Bašić-Jukić, N. Dyslipidemia and stroke in patients with chronic kidney disease [Dislipidemija i moždani udar u kroničnih bubrežnih bolesnika](2014) *Acta Medica Croatica*, 68 (2), pp. 141-149.

5. Kes VB, Cesarik M, Zavoreo I, Butković SS, Kes P, Bašić-Jukić N, Rački S, Jakić M, Delić-Brkljačić D, Jukić Z, Trkanjec Z, Šerić V, Solter VV, Bielen I, Bašić S, Demarin V; Croatian Society for Neurovascular Disorders of Croatian Medical Association; Croatian Society of Neuroimmunology and Neurogenetics of Croatian Medical Association; Croatian Society of Neurology of Croatian Medical Association; Croatian Society of Nephrology, Dialysis and Transplantation of Croatian Medical Association. [Guidelines for diagnosis, therapy and follow up of Anderson-Fabry disease]. *Acta Med Croatica*. 2014 Apr;68(2):223-32. Croatian. PubMed PMID: 26012164.

(Web of Science/Current Contents Connect (1998-2018.), Web of Science/Core Collection (1955-2018.) i Pub Med (Indeks medicus) (1946-2018.) ili Scopus (1960.-2018.): 122.

Web of Science Core Collection (SCI-Exp, SSCI): 54.

PubMed (Indeks Medicus)/Scopus : 37 (22+15).

Web of Science All databases (Author Search)=857; h-indeks=14.

Scopus =893; h-indeks=14.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Badel, Tomislav; Zdravec, Dijana; Krapac, Ladislav; Kern, Josipa; Bašić Kes, Vanja. The bone of the temporomandibular joint from the aspect of public health // *Acta Stomatologica Croatica* / Badel T, Carek A (ur.). Zagreb: Hrvatsko stomatološko društvo, Stomatološki fakultet Sveučilišta u Zagrebu, 2018. str. 72-72 (poster, domestic peer-review, abstract, scientific).

2. Badel, Tomislav; Bašić Kes, Vanja; Zavoreo, Iris; Lukić, Nenad; Mikula, Ivan; Zdravec, Dijana. The contribution of the blink reflex on diagnostic value in patients with trigeminal neuralgia and/or temporomandibular joint disorder // *Clinical and Translational Neuroscience* / Bassetti, Claudio (ur.). Bern: SAGE Publishing, 2017. str. 20S-20S (poster, international peer-review, abstract, scientific).

3. Zavoreo, Iris; Bašić Kes, Vanja; Sikora, Miroslav; Vučićević Boras, Vanja; Gabrić, Dragana; Andabak Rogulj, Ana Effectiveness of Acupuncture and Vitamin C in the Treatment of Pure Mouth Syndrome - Pilot Study // *Acta Stomatologica Croatica* / Brkic, Hrvoje (ur.). Zagreb: Stomatološki fakultet, 2017 p. 81-82 (poster, international peer-review, abstract, scientific)

4. Badel, Tomislav; Bašić Kes, Vanja; Savić Pavičin, Ivana; Zdravec, Dijana. Temporomandibular joint disorder in comorbidity with trigeminal neuralgia or persistent idiopathic facial pain // *Swiss Medical Weekly* / Aguzzi, A (ur.). Muttentz: EMH Swiss Medical Publishers Ltd., 2016. (poster, international peer-review, abstract, other).

5. Zavoreo, Iris; Vučićević Boras, Vanja; Bašić Kes, Vanja; Ciliga, Dubravka; Musić, Larisa; Badel, Tomislav. Temporomandibular disorders in patients with swollen mouth syndrome // *Acta Stomatologica Croatica* / Brkic, Hrvoje (ur.). Zagreb, School of Dental Medicine, University of Zagreb, 2016. (poster, international peer-review, abstract, expert).

6. Badel, Tomislav; Klarić, Iva; Bašić Kes, Vanja; Čimić, Samir; Zdravec, Dijana. Headache in the patients with temporomandibular joint disorders. // *Swiss archives neurology and phsychiatry* / Du Pasquier, R (ur.).

Muttentz: EMH Schweizerischer Ärzteverlag AG, 2015. (poster, international peer-review, abstract, scientific).

7. Vukasović, Ines; Tešija Kuna, Andrea; Bašić Kes, Vanja; Čaržavec, Dubravka; Vrkic, Nada. Monoclonal gammopathies detected when searching for oligoclonal IgG diagnostic treatment of multiple sclerosis // *Biochemia Medica* / Šimundić, Ana-Maria (ed.). Zagreb: HDMBLM of Medicine Press, 2015, p. S146-S147 (poster, domestic peer-review, abstract, scientific)

8. Šklebar, Ivan; Šklebar, Duška; Bašić Kes, Vanja. Chronic Neuropathic Nonodontogenic Orofacial Pain and Depression- impact on the Quality of Life // *Abstract Book of the 15th World Congress on Pain (IASP)*, Buenos Aires, Argentina

Buenos Aires, Argentina: IASP, 2014. (poster, international peer-review, abstract, scientific)

9.Vukasović, Ines; Tešija Kuna, Andrea; Bašić Kes, Vanja; Lisak, Marijana; Vrkić, Nada. Intrathecal immunoglobulin g and MRZ reaction in demyelinating diseases of central nervous system // Clinical chemistry and laboratory medicine / Plebani, Mario (ur.). Berlin: Walter de Gruyter GmbH, 2014. str. S1358-S1358 (poster, international peer-review, abstract, scientific)

10.Badel, Tomislav; Savić Pavičin, Ivana; Bašić Kes, Vanja; Zavoreo, Iris; Zdravec, Dijana; Kern, Josipa. Comparison of patients with orofacial pain caused by trigeminal neuralgia and/or temporomandibular joint disorder // Swiss archives neurology and psychiatry / Annoni J-M (ur.). Muttentz: EMH Swiss Medical Publishers Ltd, 2013. (poster, international peer-review, abstract, scientific)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

SCIENTIFIC PROJECTS

I. Croatian Science Foundation: New oral anticoagulants: correlation between drug and anticoagulant effect (code 8208; Noac acronym LAB), scientific field: Medicine and Health.
<http://www.hrzz.hr/default.aspx?id=78&pid=8208&rok=2016-06>

II. Ministry of Scientific and Technological Development of Republic of Serbia number 175031 (certificate attached)

III. Ministry of Science, Education and Sports: 3D Ultrasound and functional TCD in the assessment of brain circulation (code 0134015), scientific field: Biomedical sciences.
<http://zprojekti.mzos.hr/page.aspx?pid=6&lid=1>

IV. National Coordinator of the International Register for the Treatment of Stroke in Croatia SITS-Safe Implementation of Treatments in Stroke. <http://www.sitsinternational.org/>

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Scientific meetings:

- I. 2nd Multiple Sclerosis Academy, International Postgraduate Course Program, Dubrovnik (18-22, lipnja, 2018.)
- II. Third Croatian Neuroimmunological Congress with International Participation from 16 to 17 March 2017 at the Multimedia Hall of KBC Sestre milosrdnice Vinogradska c. 29, Zagreb
- III. 1st Multiple Sclerosis Academy, International Postgraduate Course Program, Dubrovnik (26.-30. lipnja, 2017.)
- IV. VIII. Congress of the Croatian Society for Neurovascular Disorders of the Croatian Medical Association with international participation, at the Multimedia Hall of KBC Sestre milosrdnice Vinogradska c. 29, Zagreb (May 19-20, 2016)
- V. II. Croatian Neuroimmunological Congress with International Participation, at the Multimedia Hall of KBC Sestre milosrdnice Vinogradska c. 29, Zagreb (7-8 May 2015)
- VI. VII. Congress of the Croatian Society for Neurovascular Disorders of the Croatian Medical Association with international participation, at the Multimedia Hall of KBC Sestre milosrdnice Vinogradska c. 29, Zagreb (May 22-24, 2014)

EDUCATION OF SCIENTIFIC OR PROFESSIONAL MASTERS:

Member of the editorial board of the ACTA CLINICA CROATICA (Indexed in the Web of Science / Index, Medicus / MEDLINE, Scopus, Excerpta Medica / EMBASE); <http://actaclinica.eu/about-acc/editorial-board/>

MEMBERSHIP AND FUNCTIONS IN SCIENTIFIC AND PROFESSIONAL SOCIETIES:

President of the Croatian Society for Neurovascular Disorders, Croatian Medical Association (2011-2018)

President of the Croatian Society for Neuroimmunology and Neurogenetics (2011-2018)

President of the Croatian Society for Pain Prevention (2011-2018)

President of the Croatian Society for Stroke (2011-2018)

President of the Expert Committee on Medical Issues of the Association of Multiple Sclerosis Societies of Croatia (2011-2018)

Member of the Croatian Acupuncture Society (2011-2018)

Member of the Croatian Society for Prevention of Cardiovascular Diseases in Patients with Atrial Fibrillation (2011-2018)

Scientific lectures were held at international and domestic scientific conferences (from 2013 to 2018):

VII. Vanja Bašić Kes. Vascular comorbidities in multiple sclerosis; Multiple sclerosis in focus: early diagnosis and treatment in southeast European countries, Beograd, Srbija (18.-19. svibanj, 2018.)

VIII. Vanja Bašić Kes. Diagnostic and differential diagnostic dilemmas in MS. ANF 2018, Monopoli (Puglia, Italy), 23.-27. svibnja, 2018.)

IX. Vanja Bašić Kes. Neuromyelitis optica; 2nd Multiple Sclerosis Academy, International Postgraduate Course Program, Dubrovnik (18-22. lipnja, 2018.)

X. Vanja Bašić Kes. MS therapy 2018; 2nd Multiple Sclerosis Academy, International Postgraduate Course Program, Dubrovnik (18.-22. lipnja, 2018.)

XI. Vanja Bašić Kes. Brain atrophy and cognitive impairment in MS patients; 1st Multiple Sclerosis Academy, International Postgraduate Course Program, Dubrovnik (26.-30. lipnja, 2017.)

XII. Vanja Bašić Kes. Mavenclad; treating highly active multiple sclerosis relapses MIND & BRAIN - 58th International Neuropsychiatric Congress (25.-27. svibnja, 2018.)

XIII. Vanja Bašić Kes. New trends in the treatment of multiple sclerosis; 57th International Neu XIV. Vanja Bašić Kes. Significance of brain atrophy in patients with multiple sclerosis; III. Croatian Neuroimmunological Congress with International Participation, Zagreb (16-17 March, 2017)

XV. Vanja Bašić Kes. Fabric disease. VIII. Congress of the Croatian Society for Neurovascular Disorders of the Croatian Medical Association with International Participation, Zagreb (19th-20th May, 2016)

XVI. Vanja Bašić Kes. Tecfidera-novel in treating MS; II. Croatian Neuroimmunological Congress with International Participation, Zagreb (May 7-8, 2015)

XVII. Vanja Bašić Kes. Cryptogenic stroke; VII. Congress of the Croatian Society for Neurovascular Disorders of the Croatian Medical Association with International Participation, Zagreb (22-24 May, 2014) ropsychiatric Congress (24.-27. svibnja, 2017.)

A REVIEWER OF THE INDEXED JOURNAL ACTA CLINICA CROATICA, INDEXED IN THE WEB OF SCIENCE / SCIENCE CITATION INDEX, INDEX MEDICUS / MEDLINE, SCOPUS, EXCERPTA MEDICA / EMBASE) FOR THE FOLLOWING PAPERS:

ACC-2016-118: Localizing pain with Direct Question or Schematic Evaluation;

ACC-2016-010: Manuscript: 2016-010: Complete atrioventricular block and asystole during epileptic seizure: a case report;

ACC-2015-055: Combined Treatment Multiple Aneurysm Rupture;

ACC-2015-114: Regression of asymmetric upper extremities tremor after liver transplantation in a patient with hepatic encephalopathy: case report;

ACC-2014-102: Trigeminal neuralgia: assessment of neurovascular conflict by CISS and 2D-TOF MRI sequences;

ACC-2014-111: Correlation between Expanded Disability Status Scale, Depression, Quality of Life and Age in Patients with Multiple Sclerosis;

ACC-2014-133: BMP-7 protein expression is downregulated in human diabetic nephropathy;

ACC-2013-099: Association between dental and skeletal maturation stages in Croatian subjects;

ACC-2013-068: Stress, coping strategies and quality of life in individuals with gastrointestinal cancer;

NC-0008-2014: Complementary and Alternative Medicine in Multiple Sclerosis: Is that evidence based medicine?

Author or coauthor of university textbooks:

I. Vanja Bašić Kes et al. Pain. in issue; On June 12, 2018, the approved university textbook at the Faculty of Dental Medicine, University of Zagreb; 328 pages - graduate / postgraduate / elective courses.

II. Vanja Bašić Kes et al. Neuroimmunology. Zagreb. Medical Publishing, 2015; 442 pages; university textbook at the Faculty of Dentistry of the University of Zagreb - graduate / postgraduate studies / elective courses.

III. Vida Demarin, Vanja Bašić Kes and associates. Headaches and other painful conditions. Zagreb. Medical Publishing, 2011; 400 pages and (university textbook at the Faculty of Medicine of the University of Mostar) - graduate / postgraduate / elective courses.

(IF THE TEACHER IS AT THE SAME TIME A POTENTIAL SUPERVISOR)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Drago Batinić, MD, PhD, tenured professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Medical School University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY:

1. Research methods in vitro and in vivo; 2. Immunological recognition; 3. Laboratory approach to transplantation; 4. Biochemical methods in biomedical research. 5. Methods of molecular biology in medicine

BIOGRAPHY

Prof. dr. sc. Drago Batinić, Department of Physiology and Immunology, University of Zagreb School of Medicine, Šalata 3, and University Clinical Center Zagreb, Department of Laboratory Immunology, Kišpatićeva 12, HR-10 000 Zagreb, Croatia (dbatin@@mef.hr)

Place and year of birth: Zagreb, 1957. Education: University of Zagreb School of Medicine (UZSM) (1976-1981), postgraduate study in Medical Cytology, UZSM, Zagreb (1983-1985), postdoctoral training at National Institutes of Health, Immunochemistry Unit, NIDR, Bethesda, USA (Fogarty Fellow 1989-1990, visiting associate 1990-1992). Academic and Scientific Degrees: Doctor of Science, UZSM, Zagreb (1986), Assistant (1997-2002) and adjunct associate professor (2002) UZSM, Zagreb, clinically appointed associate professor of Immunology (UZSM, Zagreb and University Hospital Center Zagreb (UHCZ) (2007), clinically appointed full professor of Immunology (UZSM and UHCZ) (2011), clinically appointed tenured professor of Immunology (UZSM and UHCZ) (2017). Employment and Work Experience: Medical Practice, UHCZ and Community Health Center Trnje, Zagreb (1982-1983), postgraduate assistant, Department of Experimental Biology and Medicine, Rudjer Boskovic Institute, Zagreb (1983-1988), head of Laboratory for Serology, UHCZ, Zagreb (1988-1992), visiting associate, NIH, Bethesda, USA (1990-1992), head of the Laboratory of Cellular Biology, UHC Zagreb (1992-1996), head of the Division for Laboratory Immunology, UHCZ, Zagreb (1997-2011), head of the Clinical Unit for Cellular Immunodiagnostics and Procedures In Vitro, UHCZ, Zagreb (2011), recognized as a Specialist in Laboratory Immunology (Ministry of Health of the Republic of Croatia, 2013), head of the Department of Laboratory Immunology, UHCZ, Zagreb (2015). Mentor to three trainee medical doctors in Laboratory Immunology, UHC Zagreb (2012-present). Lecturer (2000-2011) and Head of Department of Immunology (2004-2011), University of Mostar School of Medicine, BIH. Scientific activity: principal investigator of three projects funded by Croatian Ministry of Science and Technology (CMST) (1998-2014) and Zagreb University grants (2015-2018), associate of three CMST projects (1998-2014), one UKF project (2013-15) and two projects funded by Croatian Foundation for Science (from 2017). Mentor of 5 master theses and 8 dissertations (5 completed). Teaching, Faculty and University Activities: Lecturer in Immunology, Physiology and Clinical Chemistry, course leader of Introduction to Science and elective course Transplantation Reaction (undergraduate medical study), head of three courses and a teacher at the three courses of the doctoral study (UZSM, Zagreb), head of the postgraduate specialist study in Laboratory Immunology (UZSM, 2017) and lecturer in immunology at postgraduate specialist studies at UZSM (since 2016), actual UZSM vice-dean for postgraduate studies in the fourth mandate (since 2009), president of the UZSM Postgraduate Study Council, member of the Biomedical Council of the University of Zagreb (since 2009), member of the Commission for Doctoral Studies of the UZSM (since 2009) and University of Zagreb (since 2011). Other professional and scientific activities: Head of the Reference Center for Immunodiagnostics of Immune and Hematological Diseases of the Croatian Ministry of Health (since 1997), member of the FLOW-MRD Working Group of the ALL-IC BFM International Group (since 2002), Member of the EORTC Leukemia Working Group (2005-2010), Member of the Expert Committee for the Proposal of Criteria of Scientific Degrees (2014-2016), member

of the Croatian Ministry of Health Commission for Specialist Training of Medical Doctors (since 2016). Publications: 188 total, 59 papers in CC, 6 in SCI/EXP, 17 in PubMed/ Medline, 17 in SCOPUS; editor and co-author of one professional book and author of 12 chapters, co-author of two textbooks, author of 20 chapters in textbooks, author and co-author of a doctoral study manuals. Number of citations: total 714, h-index 13. Scientific interest: immunology, hematology, immunodiagnostics, immunofenotyping, flow cytometry.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 14-03-2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Batinić D, Tindle R, Boban D, Labar B, Tiefenbach A, Rajić Lj. Expression of hematopoietic progenitor cell-associated antigen BI-3C5/CD34 in leukemia. *Leukem Res* 1989;13(2):83-5.
2. Batinić D, Pavletić Ž, Kolevska T, Bogdanić V, Žalud I, Nemet D, Marušić M, Labar B. Lymphocyte subsets in normal human bone marrow harvested for routine clinical transplantation. *Bone Marrow Transplant* 1989;4(3):229-32.
3. Batinić D, Robey F. The V3 region of the envelope glycoprotein of human immunodeficiency virus type 1 binds sulfated polysaccharides and CD4-derived synthetic peptides. *J Biol Chem* 1992;267(10):6664-71.
4. Boban D, Sučić M, Marković-Glamočak M, Užarević B, Batinić D, et al. Correlation of morphological FAB-classification and immuno-phenotyping: value in recognition of morphological, cytochemical and immunological characteristics of mixed leukaemia. *Eur J Cancer* 1993;29A:1167-72.
5. Višnjić D, Batinić D, Lasić Z, Knotek M, Marušić M, Banfić H. Phorbol 12-myristate 13-acetate-mediated signalling in murine bone marrow cells. *Biochem J* 1995;310:163-70.
6. Batinić D, Božićević M, Krstulović A, Bosnić D, Sentić M, Markeljević J, Malenica B, Čikeš N, Marušić M. Binding of anti double stranded (ds) DNA positive sera to denatured (d) and synthetic poly (dAdT) x poly(dAdT) double stranded copolymer in an ELISA format. *Eur J Clin Chem Clin Biochem* 1996;34:343-7.
7. Robey FA, Harris-Kelson T, Robert-Guroff M, Batinić D, Ivanov B, Lewis MS, Roller PP. A synthetic conformational epitope from the C4 domain of HIV gp120 that binds CD4. *J Biol Chem* 1996;271:17990-5.
8. Gregurek R, Labar B, Mrsić M, Batinić D, Ladika I, Bogdanić V, Nemet D, Skerlev M, Jakić-Razumović J, Klain E. Anxiety as a possible predictor of acute GVHD. *Bone Marrow Transpl* 1996;18:585-9.
9. Višnjić D, Batinić D, Banfić H. Arachidonic acid mediates interferon-γ-induced sphingomyelin hydrolysis and monocytic marker expression in HL-60 cell line. *Blood* 1997;89:81-91.
10. Marušić M, Turkalj-Kljajić M, Petrovečki M, Užarević B, Rudolf M, Batinić D, Ugljen R, Anić D, Čavar, Jelić I, Malenica B. Indirect demonstration of the lifetime function of human thymus. *Clin Exp Immunol* 1998;111(2):450- 6.
11. Grčević D, Batinić D, Ascensao JL, Marušić M. Pre-treatment of transplant bone marrow cells with hydrocortisone and cyclosporin A alleviates graft-versus-host reaction in a murine allogeneic host-donor combination. *Bone Marrow Transpl* 1999;23:1145-52.
12. Martinovic S, Mazic S, Kisic V, Basic N, Jakic-Razumovic J, Borovecki F, Batinic D, Simic P, Grgurevic L, Labar B, Vukicevic S. Expression of bone morphogenetic proteins in stromal cells from human bone marrow long-term culture. *J Histochem Cytochem* 2004;52:1159-67.

13. Golemovic M, Sucic M, Zadro R, Mrsic S, Mikulic M, Labar B, Rajic LJ, Batinic D. IgH and TCRgamma gene rearrangements, cyclin A1 and HOXA9 gene expression in biphenotypic acute leukemias. *Leuk Res* 2006;30(2):211-21.
14. Antica M, Dubravcic K, Weber I, Raic L, Labar B, Batinic D. A search for a mutation of the Aiolos phosphorylation domain in lymphocytes from patients with leukemia. *Haematologica*. 2007;92(2):260-1.
15. Jelusić M, Lukić IK, Tambić-Bukovac L, Dubravčić K, Malčić I, Rudan I, Batinić D. Interleukin-18 as a mediator of systemic juvenile idiopathic arthritis. *Clin Rheumatol*. 2007;26(8):1332-4.
16. Matulic M, Paradzik M, Cicin-Sain L, Kapitanovic S, Dubravcic K, Batinic D, Antica M. Ikaros family transcription factors in chronic and acute leukemia. *Am J Hematol*. 2009 Jun;84(6):375-7.
17. Mejstrikova E, Fronkova E, Kalina T, Omelka M, Batinic D, Dubravcic K, et al. Detection of residual B precursor lymphoblastic leukemia by uniform gating flow cytometry. *Pediatr Blood Cancer* 2010;54(1):62-70.
18. Soljić V, Perak RB, Vukojević K, Saraga-Babić M, Bubalo P, Karan D, Todorović J, Batinić D. ZAP-70 expression and proliferative activity in chronic lymphocytic leukemia. *Leuk Lymphoma*. 2013; 54(6):1171-6.
19. Perković S, Bašić-Kinda S, Aurer I, Ugrina I, Duletić-Načinović A, Lozić D, Batinić D. Multiparameter flow cytometry is necessary for detection, characterization and diagnostics of composite mature B-cell lymphoproliferative neoplasms. *Int J Hematol*. 2013 Nov;98(5):589-96.
20. Prijić S, Ugrina I, Labar B, Nemet D, Batinić J, Zadro R, Ries S, Gjadrov-Kuvedžić K, Davidović S, Batinić D. Prognostic significance of constitutive phosphatidylinositol 3-kinase/Akt and mitogen-activated protein kinase phosphorylation in acute myeloid leukemia. *Leuk Lymphoma*. 2015;56(8):2281-8

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Soljić V, Perak RB, Vukojević K, Saraga-Babić M, Bubalo P, Karan D, Todorović J, Batinić D. ZAP-70 expression and proliferative activity in chronic lymphocytic leukemia. *Leuk Lymphoma*. 2013;54(6):1171-6.
2. Bojanic I, Serventi Seiwert R, Golubic Cepulic B, Mazic S, Lukic M, Raos M, Plenkovic F, Golemovic M, Dubravcic K, Perkovic S, Batinic D, Labar B. Treatment of chronic GVHD with extracorporeal photochemotherapy. *Transfus Apher Sci*. 2013;48(2):193-4.
3. Perković S, Bašić-Kinda S, Aurer I, Ugrina I, Duletić-Načinović A, Lozić D, Batinić D. Multiparameter flow cytometry is necessary for detection, characterization and diagnostics of composite mature B-cell lymphoproliferative neoplasms. *Int J Hematol*. 2013 Nov;98(5):589-96.
4. Fucic A, Katic J, Fthenou E, Kogevinas M, Plavec D, Koppe J, Batinic D, Chalkiadaki G, Chatzi L, Lasan R, Kleinjans J, Kirsch-Volders M. Increased frequency of micronuclei in mononucleated lymphocytes and cytome analysis in healthy newborns as an early warning biomarkers of possible future health risks. *Reprod Toxicol*. 2013 Dec;42:110-5.
5. Prijić S, Ugrina I, Labar B, Nemet D, Batinić J, Zadro R, Ries S, Gjadrov-Kuvedžić K, Davidović S, Batinić D. Prognostic significance of constitutive phosphatidylinositol 3-kinase/Akt and mitogen-activated protein kinase phosphorylation in acute myeloid leukemia. *Leuk Lymphoma*. 2015;56(8):2281-8.
6. Batinić J, Perić Z, Šegulja D, Last J, Prijić S, Dubravčić K, Volarić L, Sertić D, Radman I, Bašić-Kinda S, Matišić D, Batinić D, Labar B, Nemet D. Immunoglobulin heavy/light chain analysis enhances the detection of residual disease and monitoring of multiple myeloma patients. *Croat Med J*. 2015 Jun;56(3):263-71.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1) Experimental and clinical bone marrow transplantation (1983-1986), Rudjer Boskovic Institute, Zagreb, project leader Boranić M.
2. The role of immune system in new bone formation (1995-1998), US-Croatian Science/Technology Programme, project leaders Marušić A i Lorenzo JA.
3. Biological parameters of acute mixed leukemia cell growth in vitro. Croatian Ministry of Science and Technology - CMST/MZOŠ (1998-2002), project leader Batinić D.
4. Allogeneic bone marrow transplantation, CMST/MZOŠ (2002-2006), project leader Labar B.
5. Effect of bone marrow stromal cells on leukemic blast cell differentiation in acute leukemia. CMST/MZOŠ (2003-2005), project leader Batinić D.
6. Leukemia and hematopoietic stem cell transplantation. CMST/MZOŠ (2007-2012), project leader Labar B.
7. The role of PI3K/Akt and MAPK in regulation of leukemic cell chemoresistance. CMST/MZOŠ (2007-2012), project leader Batinić D.
8. Factors determining severity and activity of GVHD after allogeneic stem cell transplantation, UKF (2013-2015), project leaders Nemet D and Pavletic SZ.
9. Expression profile of leukemic cells and early response to therapy in children with acute lymphoblastic leukemia. Zagreb University Support Programme (2015-2018), leader Batinić D.
10. Signaling mechanisms and metabolic changes in the differentiation of acute myelogenous leukemia cells. Croatian Science Foundation /HRZZ (2017-2021), project leader Višnjić D.
11. New biomarkers of chronic graft versus host disease. Croatian Science Foundation/HRZZ (2017-2021), project leader Pulanić D.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. Factors determining severity and activity of GVHD after allogeneic stem cell transplantation, UKF (2013-2015), project leaders Nemet D and Pavletic SZ.
2. Expression profile of leukemic cells and early response to therapy in children with acute lymphoblastic leukemia. Zagreb University Support Programme (2015-2018), leader Batinić D.
3. Signaling mechanisms and metabolic changes in the differentiation of acute myelogenous leukemia cells. Croatian Foundation for Science/HRZZ (2017-2021), project leader Višnjić D.
4. New biomarkers of chronic graft versus host disease. Croatian Foundation for Science/HRZZ (2017-2021), project leader Pulanić D.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 6

1. Bedalov G. Comparison of effects of TURP and ELAP on postoperative immune status of patients with prostate adenoma. University of Zagreb School of Medicine, Zagreb, 2003.
2. Forempoher G. The clinical relevance of proliferative and antiproliferative parameters in human meningioma. University of Zagreb School of Medicine, Zagreb, 2005.
3. Golemović M. In vitro mechanisms of anti leukemic activity of new arsenic derivatives. Zagreb University Faculty of Natural Sciences and Mathematics, Zagreb, 2006.



4. Bojanić I. Peripheral blood stem collection by large volume leukapheresis procedure. University of Zagreb School of Medicine, Zagreb, 2009.
5. Kuči Z. Phenotypic and Functional Characterization of Mesenchymal Stromal Cells Generated from Human Bone Marrow CD271+ Mononuclear Cells. Zagreb University School of Medicine, Zagreb, 2011.
6. Prijić S. P-glycoprotein and activated signaling pathways PI3K/Akt and MAPK in acute myeloid leukemia blasts. University of Zagreb School of Medicine, Zagreb, 2014.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assoc. Prof. Natasa Belder, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb; Clinical Medical Center Zagreb, Croatia

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pathogenesis of infectious diseases

BIOGRAPHY

Born in 1960. Graduated at School of Medicine, University of Zagreb, Croatia (1983). Master degree, Faculty of Natural Sciences, University of Zagreb, 1987. Specialist exam of Medical Microbiology and Parasitology, 1992. Ph.D. degree, Medical School, University of Zagreb. Worked as assistant at the Department of medical microbiology at medical School and at Dental School, University of Zagreb, 1990-2012. Employee of Clinical department for clinical and molecular microbiology, at Clinical Center Zagreb, Croatia. Positions at Medical School: 1990-assistant, 2008-senior assistant, 2012-assistant professor and 2018-associate professor.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 09.04.2018., associate professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Vilibić-Čavlek T, Kolarić B, Bogdanić M, Tabain I, Belder N. Herpes group viruses: a seroprevalence study in hemodialysis patients. *Acta Clin Croat*. 2017;56:255-261. doi: 10.20471/acc.2017.56.02.08. PubMed PMID: 29485792.

Vilibić-Čavlek T, Kolarić B, Belder N, Vrtar I, Tabain I, Mlinarić-Galinović G. Seroepidemiology of cytomegalovirus infections in Croatia. *Wien Klin Wochenschr* 2016;129(3-4):129-35. DOI 10.1007/s00508-016-1069-7

Belder N, Ivić-Kardum M. The role of cytomegalovirus infection in the pathogenesis of periodontal diseases. *Acta Clin Croat* 2011; 50:59-64.

Belder N, Kalenić S, Labar B. Dijagnostički pristup, praćenje i liječenje citomegalovirusne (CMV) infekcije nakon alogene transplantacije krvotvornih matičnih stanica. *Liječ Vjesn* 2011;133:389-396.

Belder N, Kolarić B, Slaćanac , Tabain I, Vilibić-Čavlek T. Seroepidemiological study of Epstein-Barr virus in different population groups in Croatia. *Isr Med Assoc J*.2018;20:86-90.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Savić I, Bošnjak A, Belder N, Lovrić Ž, Salihagić A, Gašparac I. Anaerobic Bacteria in Implants and Homologous Teeth 2-14 Years after Implantation. *Acta Stomatol Croat*. 2018 Sep;52(3):193-202. doi: 10.15644/asc52/3/3. PubMed PMID:30510295; PubMed Central PMCID: PMC6238878.
2. Franić I, Bedenić B, Belder N, Lukić-Grlić A, Mihaljević S, Bielen L, Zarfel G, Meštrović T. NDM-1-producing *Enterobacter aerogenes* isolated from a patient with a JJ ureteric stent in situ. *CEN Case Rep*. 2018 Aug 23. doi:10.1007/s13730-018-0360-z. [Epub ahead of print] PubMed PMID: 30141138.
3. Bedenić B, Car H, Slaćanac D, Sviben M, Čačić M, Lukić-Grlić A, Benčić A, Šijak D, Tripković M, Belder N. In vitro synergy and postantibiotic effect of colistin combinations with meropenem and vancomycin against Enterobacteriaceae with multiple carbapenem resistance mechanisms. *J Infect Chemother*. 2018 Dec;24(12):1016-1019. doi: 10.1016/j.jiac.2018.06.001. Epub 2018 Jul 11. PubMed PMID: 30006247.



4. Vilibić-Čavlek T, Kolarić B, Bogdanić M, Tabain I, Bader N. Herpes Group Viruses: a Seroprevalence Study in Hemodialysis Patients. *Acta Clin Croat.* 2017Jun;56(2):255-261. doi: 10.20471/acc.2017.56.02.08. PubMed PMID: 29485792.
5. Bader N, Kolarić B, Slaćanac, Tabain I, Vilibić-Čavlek T. Seroepidemiological Study of Epstein-Barr Virus in Different Population Groups in Croatia. *Isr Med Assoc J.*2018;20:86-90.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. “Genotypes and virulence factors of the bacteria causative agents of hospital infections”,Croatian Ministry of Science, Education and Sport, no. 108-1080114-0017,

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

University of Zagreb short-term research grants-COLLABORATOR

2014: “Postexposure effect of metal chelators on carbapenemase producing Gram-negative bacteria”

2015: “Multiresistant Gram-negative bacteria in long term care facilities”

2016: “Carbapenemases in hospitals, nursing homes and environment”

2017: “Mechanisms of spread of OXA-48 carbapenemase”

2018: “Mechanisms of colistin resistance in Gram-negative bacteria”

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: VLADIMIR BEDEKOVIĆ, MD, PhD, PROFESSOR

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: SCHOOL OF MEDICINE, UNIVERSITY OF ZAGREB

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: ELECTROPHYSIOLOGICAL
METHODS IN MEDICAL RESEARCH

BIOGRAPHY

Name: VLADIMIR BEDEKOVIĆ

Permanent address: Department of ENT, Head and Neck Surgery
Sestre milosrdnice University Hospital Center
Vinogradska cesta 29, HR-10000 Zagreb

Telephone/Fax: 01 37 87 360; 01 37 68 293

E-mail: vladimir.bedekovic@kbcsn.hr

Date and place of birth: October 23, 1956, Vrbovec

Title and present position: MD, PhD, Professor, Senior Research Scientist

Head of ENT Department, Sestre milosrdnice University Hospital Center, School of Medicine

Subspecialist in plastic and reconstructive head and neck surgery

Education, Professional Training, Professional Appointments:

1981 Graduated from the Zagreb School of Medicine, University of Zagreb

1986 Residency training in Otorhinolaryngology and Head and Neck Surgery, ENT Department, Sisters of
Mercy University Medical Center, Zagreb

1990 Specialist exam in Otorhinolaryngology and Head and Neck Surgery, ENT Department, Sisters of
Mercy University Medical Center, Zagreb

1989 M. S. Thesis, „Hormonal Treatment of Endemic Goiter in Adolescents“, Zagreb Medical School

1989 Registered as a scientific researcher under the number 161420

1990 Assistant, School of Dental Medicine, University of Zagreb

1992 Assistant, School of Medicine, University of Zagreb

1997 Ph. D. Thesis, „Elektronystagmographic follow-up of functional modifications in vestibular nuclei and
reticular formation“, Zagreb School of Medicine

2001 Senior instructor, School of Medicine, University of Zagreb

2003 Subspecialist exam in plastic and reconstructive head and neck surgery

2004 Assistant Professor

2005 Member of the Board for Doctoral Dissertations and Scientific Appointments, School of Medicine,
University of Zagreb

2006 Senior Research Scientist

2009 Associate Professor

2009 Head, Chair of Otorhinolaryngology with Audiology and Phoniatriy, School of Medicine, University of Zagreb

2011 Head, Department of Otorhinolaryngology and Head and Neck Surgery, Sisters of Mercy University Hospital, Zagreb

2016 Full-time Professor

Teaching Experience:

Undergraduate Teaching, School of Medicine, University of Zagreb

1990 Assistant in Otorhinolaryngology, School of Dental Medicine, Zagreb

1992 Assistant in Otorhinolaryngology, School of Medicine, Zagreb

2001 Senior Instructor in Otorhinolaryngology, School of Medicine, Zagreb

2004 Assistant Professor, School of Medicine, Zagreb

2009 Associate Professor, School of Medicine, Zagreb

2016 Full-time Professor, School of Medicine, Zagreb

Postgraduate Teaching, School of Medicine, University of Zagreb

1992 - present Postgraduate Study „Otorhinolaryngology and Head and neck Surgery“ – head, lecturer

Postgraduate Study „Clinical Oncology – Tumors of the Head and Neck“ – lecturer

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: DECEMBER 13th, 2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Stevanović S, Radić R, Kačarević ŽP, Bedeković V, Aras I, Baudoin T. Proton pump (H⁺/K⁺-ATPase) expression in human larynx. *Auris Nasus Larynx*. 2015 Dec;42(6):458-62.
2. Pegan A, Rašić I, Bedeković V, Ivkić M. Cheek reconstruction following facial malignant melanoma surgery with the platys, myocutaneous flap. *Int J Oral Maxillofac Surg*. 2015;44:1236-9.
3. Rašić I, Pegan A, Košec A, Ivkić B, Bedeković V. Use of Intranasal Flaring Suture for Dysfunctional Nasal Valve Repair. *Research Letter. JAMA Fac Plast Surg*. 2015 Nov-Dec;17(6):462-63. doi: 10.1001/jamafacial.2015.1116.
4. Babić I, Baudoin T, Trotić R, Bedeković V. Therapeutic efficacy of azithromycin and acetylcysteine in chronic otitis media with effusion. *Eur Arch Otorhinolaryngol*. 2017 Mar;274(3):1351-56. doi: 10.1007/s00405-016-4389-3.
5. Košec A, Kelava I, Ajduk J, Ries M, Trotić R, Bedeković V. Significance of intraoperative findings in revision tympanomastoidectomy. *Am J Otolaryngol*. 2017;38(4):462-65. Apr 12. pii: S0196-0709(17)30118-7. doi:10.1016/j.amjoto.2017.04.006.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Stevanović S, Radić R, Kačarević ŽP, Bedeković V, Aras I, Baudoin T. Proton pump (H⁺/K⁺-ATPase) expression in human larynx. *Auris Nasus Larynx*. 2015 Dec;42(6):458-62.
2. Pegan A, Rašić I, Bedeković V, Ivkić M. Cheek reconstruction following facial malignant melanoma surgery with the platys, myocutaneous flap. *Int J Oral Maxillofac Surg*. 2015;44:1236-9.
3. Rašić I, Pegan A, Košec A, Ivkić B, Bedeković V. Use of Intranasal Flaring Suture for Dysfunctional Nasal Valve Repair. *Research Letter. JAMA Fac Plast Surg*. 2015 Nov-Dec;17(6):462-63. doi: 10.1001/jamafacial.2015.1116.
4. Babić I, Baudoin T, Trotić R, Bedeković V. Therapeutic efficacy of azithromycin and acetylcysteine in chronic otitis media with effusion. *Eur Arch Otorhinolaryngol*. 2017 Mar;274(3):1351-56. doi: 10.1007/s00405-016-4389-3.
5. Košec A, Kelava I, Ajduk J, Ries M, Trotić R, Bedeković V. Significance of intraoperative findings in revision tympanomastoidectomy. *Am J Otolaryngol*. 2017;38(4):462-65. Apr 12. pii: S0196-0709(17)30118-7. doi:10.1016/j.amjoto.2017.04.006.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Prognostic factors of cochlear implantation in very small children

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- Investigation of the malignant larynx and hypopharynx tumors spread
- Tumor diseases – promotion of the prevention of the tumor diagnostic and curing
- Pentadecapeptide BPC 157 – further investigations
- Prognostic factors of cochlear implantation in very small children
- Prognostic value of the proteomic profile of the head and neck skin melanoma tissue, stage I and II (leader of the project in process)

(IF THE TEACHER IS AT THE SAME TIME A POTENTIAL SUPERVISOR)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 5

Darko Solter: Osjetljivost osi hipofiza – hormoni štitnjače u hipotireoidnih i atireoidnih bolesnika, Zagreb, 2014.

Mihael Ries: Prognostička vrijednost intraoperativne telemetrije umjetne pužnice, Zagreb, 2013.

Davor Džepina: Kliničko-patološke osobitosti papilarnog mikrokarcinoma štitnjače, Zagreb, 2010.

Vedran Hostić: Utjecaj zakrivljenosti usnog nastavka na intubaciju tijekom videolaringoskopije, Zagreb, 2017. (komentor)

Andro Košec: Prognostička vrijednost proteomskog profila tkiva melanoma kože glave i vrata u stadijima I i II Zagreb, 2017. (komentor)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Branka Bedenić, full professor tenure, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb,
University Hospital Center Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Multiresistant bacteria-causative agents of hospital infections

BIOGRAPHY

PERSONAL INFORMATION

Branka Bedenić, full professor tenure, Department of Microbiology, School of Medicine, University Hospital Center Zagreb, tel. 01 23 67 304, fax: 01 23 67 393, e-mail: branka.bedenic@kbc-zagreb.hr, Personal scientific number: 178 926, CROSB link: http://bib.irb.hr/lista_radova_autor=178926,

EDUCATION

1988- graduated from Medical School, University of Zagreb

1993- master's degree- basic experimental pharmacology, Medical School, University of Zagreb,

1998-PhD degree, Medical School, University of Zagreb.

Employment

since 2017 full professor tenure (School of Medicine, University of Zagreb),

Previous employments

2007-Associate professor

2002-Assistant professor,

1999-senior assistant

Since 2001-clinical microbiologist at University Hospital Center Zagreb,

1995-assistant,

1989-intern

Education abroad: 1993- Department of experimental pharmacology, «Max von Pettenkofer» Institute, Munich, Germany, 1994- Institute of Pharmaceutical Microbiology, University of Bonn, Germany, 1996- United Medical and Dental School, St Thomas's Hospital London, United Kingdom, 1998- University Hospital Maastricht, the Netherlands, 1999- Institute for Medical Microbiology, University of Zurich, 2000- University of Athens, Greece, 2001- Arndt & Keeser, Hamburg, Germany, 2002-Department of Biochemistry, University of Aquila, Italy, Institute of Microbiology and Hygiene, Technical University of Dresden, Germany, 2005-Department of Pathology, Section for Microbiology, School of Medicine, University of Verona, Italy, 2006--Asklepios University Clinic, Gauting, Germany, 2009-Institute for Microbiology and Hygiene, School of Medicine, University of Cologne, Germany, 2011-University Roma Tre, Rome, Italy, 2012-School of Medicine, University of Verona, 2014- Institute for Hygiene, Microbiology and Environmental Medicine, University of Graz, Austria, 2015- Institute for Hygiene, Microbiology and Environmental Medicine, University of Graz, Austria

FELLOWSHIPS AND AWARDS

1. 1996 Scholarship from British Society for Antimicrobial Chemotherapy (BSAC)
2. 1998. Fellowship from International Society for Infectious Diseases (ISID)

3. 1997. ESCMID travel award for young European scientists (ESCMID)
4. 1999. Fellowship from Federation of European microbiological Societies (FEMS)
5. 1999. Fellowship from Greek State Scholarship Foundation
6. 2002. Fellowship for postdoctoral research from Italian Government
7. 2003. Fellowship from DAAD (German Academic Exchange Service)
8. 2012-award for successful scientific project from Medical School, University of Zagreb

SUPERVISION OF GRADUATE/ DOCTORAL STUDENTS AND POSTDOCTORAL RESEARCHERS

1. Marija Tonkić: Molecular characterization of Escherichia coli strains producing extended-spectrum β -lactamases in children and adult population. School of Medicine, University of Split, 2006.
2. Ines Jajić-Benčić: Analysis of extended-spectrum β -lactamases in clinical isolates of Enterobacteriaceae causing nosocomial infections. Prirodoslovno-matematički fakultet u Zagrebu, 2008.
3. Ivana Goić-Barišić: Mechanisms of reduced susceptibility to carbapenems in clinical isolates of Acinetobacter baumannii. School of Medicine, University of Split, 2009.
4. Sanda Sardelić: Metallo- β -lactamases in clinical isolates of Pseudomonas aeruginosa, resistant to carbapenems. School of Medicine, University of Zagreb. 2010.
5. Mirna Vranić-Ladavac: Molecular characterization of carbapenemases in invasive and non-invasive isolates of Acinetobacter baumannii. School of Medicine, University of Zagreb.
6. Ljiljana Mihaljević: Effect of S(+) ketamine of antibacterial activity of bupivacaine, levobupivacaine and ropivacaine. School of Medicine, University of Zagreb. 2012.
7. Vlasta Zujić-Atalić: Comparison of molecular characteristics of carbapenemases in clinical isolates of Enterobacteriaceae collected in multicenter study. School of Medicine, University of Osijek, 2013.
8. Amir Ibrahimagić: Epidemiology of infections caused by Gram-negative bacteria producing extended-spectrum and plasmid-mediated AmpC β -lactamases and carbapenemases in hospitalized and community patients. Integrated doctoral study, University of Osijek. 2014.

Hosting of postdoctoral students: Karmen Godić-Torkar; fellowship from Croatian Ministry of Science, Education and Sport for study on carbapenemases in Bacillus cereus

TEACHING ACTIVITIES

Lectures, practices and seminars in basic microbiology and parasitology and clinical microbiology,

Since 2012 leader of the postgraduate study course in medical microbiology

Since 2012 Leader of the subject "Multiresistant bacteria-causative agents of hospital infections" at the PhD programme "Biomedicine and health"

2017-2017 leader of the subject "Clinical Microbiology"

2010-2015-leader of the subject "Methods for characterization of antimicrobial agents" at the Faculty for Health Sciences.

2009-2015-leader of the small elective subject: Multiresistant bacteria

Since 2016-coordinator of the mentorship programme of ESCMID (European society for clinical microbiology and infectious diseases)

Since 2016-mentor of the foreign students in CROMSIC programme

ORGANISATION OF SCIENTIFIC MEETINGS

Educational course: Septicemia:

Educational course “Multiresistant non-fermentative bacteria, School of Medicine, University of Zagreb, 10th March, 2017, number of participants: 30

Educational course " Causative agents of infections in long-term care facilities, School of Medicine, University of Zagreb, number of participants: 40

ORGANISATIONAL RESPONSIBILITIES

1990-2001- member of the University board for classification examinations

since 2012-member of the postgraduate education board

MEMBERSHIPS

Croatian Medical Association, ISID (International Society for Infectious Diseases) ,ESCMID (European Society for Clinical Microbiology and Infectious Diseases) since 2015 member of ESGAR

MAJOR SCIENTIFIC COLLABORATIONS Dr. Annarita Mazzariol, Department for Pathology, Section of Microbiology, University of Verona, Italy; collaboration on characterization of carbapenemases in Enterobacteriaceae, Prof. Andrea Grisold, Institute for Hygiene, Microbiology and Environmental Medicine, University of Graz, Austria; Collaboration on characterization of extended-spectrum β -lactamases, Prof. Paolo Visca, Department for Biology, University Rome 3, Rome, Italy; characterization of carbapenemases in *Acinetobacter baumannii*, Ass Prof. Karmen Godič-Torkar, Department for Sanitary Engineering, Faculty of Health Science, University of Ljubljana, Slovenija, characterization of carbapenemases in *B. cereus*, Dr. Ivan Barišić, Austrian Institute for Technology –collaboration in development of new diagnostic method (H

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: February 14th, 2017: full professor tenure

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

PAPERS INDEXED IN CC

1. Bedenić B, Žagar Ž. Increased β -lactamase activity in *Branhamella catarrhalis* after exposure to amoxycillin and clavulanic acid. *Journal of Chemotherapy* 1994; 6(6): 383-387. IF:0.09, cit:3
2. Bedenić B, Žagar Ž. Extended-spectrum β -lactamases in clinical isolates of *Klebsiella pneumoniae* from Zagreb, Croatia. *Journal of Chemotherapy* 1998* 10(6):449-459. IF:0.67, cit:16
3. Bedenić B, Randegger C, Boras A, Haechler H. Comparison of five different methods for detection of SHV extended-spectrum β -lactamases. *Journal of Chemotherapy* 2001; 13(1): 24-33. IF:1.25, cit:6
4. Bedenić B, Randegger C, Stobberingh E, Haechler H. Molecular epidemiology of extended-spectrum β -lactamases from *Klebsiella pneumoniae* strains, isolated in Zagreb, Croatia. *European Journal of Clinical Microbiology and Infectious Diseases* 2001; 20:505-508, IF:1.38, cit 25
5. Bedenić B, Beader N, Žagar Ž. Effect of inoculum size on the antibacterial activity of cefpirome and cefepime against *Klebsiella pneumoniae* strains producing SHV extended-spectrum β -lactamases. *Clinical Microbiology and Infection* 2001;7:626-635. IF:1.19, cit:18

6. Bedenić B. Selection of *Klebsiella pneumoniae* mutants with high level cefotaxime resistance during growth in serum, containing therapeutic concentrations of cefotaxime. *Chemotherapy* 2002; 48:10-14, IF:0.96, cit 4
7. Bedenić B, Vraneš J. Postexposure effects of ceftazidime and ceftazidime on isogenic *Escherichia coli* hosts producing SHV extended-spectrum β -lactamases. *Journal of Chemotherapy* 2003; 15(4):342-349. IF: 1.088
8. Gangue-Pieboji J, Bedenić B, Koulla-Shiro S, Randegger C, Ndumbe P, Adiogo D, Ngasami P, Haechlaer H. Extended spectrum- β -lactamase- producing Enterobacteriaceae in Yaounde, Cameroon. *J Clin Microbiol* 2005;43(7):3273-3277. IF:3.53, cit:23
9. Bedenić B, Vraneš J, Šuto S, Žagar Ž. Bactericidal activity of oral β -lactam antibiotics in plasma and urine versus isogenic *Escherichia coli* strains producing broad and extended-spectrum β -lactamases. *International Journal of Antimicrobial Agents* 2005;25(6): 479-487. IF:2.42, cit:5
10. Bedenić B, Schmidt H, Herold S, Monaco M, Plečko V, Kalenić S, Katić S. Spread of *Klebsiella pneumoniae* producing SHV-5 β -lactamase in Dubrava University Hospital, Zagreb. *Journal of Chemotherapy* 2005;17(4):367-375. IF:1.14, cit:12
11. Bedenić B, Topić M, Bubonja M, Budimir A. Urinary bactericidal activity of oral antibiotics in ex-vivo model. *Chemotherapy* 2006; 52(6):293-297. IF: 1.51, cit 2
12. Tonkić M, Bedenić B, Goić-Barišić I, Katić S, Kalenić S, Kaufmann ME, Woodford N, Punda-Polić V. First report of CTX-M producing isolates from Croatia. *J Chemother* 2007; 19(1):97-100. CC, IF:0.92, cit:6
13. Bedenić B, Vraneš J, Mihaljević Lj, Tonkić M, Sviben M, Plečko V, Kalenić S. Sensitivity and specificity of various β -lactam antibiotics and phenotypic methods in detection of TEM, SHV and CTX-M β -lactamases. *J Chemother* 2007;19(2):110-122. IF:0.92, cit:3
14. Marijan T, Vraneš J, Bedenić B, Mlinarić-Džepina A, Plečko V, Kalenić S. Emergence of uropathogenic extended-spectrum β lactamases-producing *Escherichia coli* strains in the community. *Coll Antropol* 2006; 31(1):227-233. IF:0.32, cit:3
15. Drenjančević D, Vraneš J, Bedenić B, Šakić-Zdravčević K. In vitro effect of subinhibitory concentrations of ceftazidime and meropenem on the serum sensitivity of *Pseudomonas aeruginosa* strains. *Coll Antropol* 2006; 31(1):221-225. IF:0.32, cit:1
16. Uzunović-Kamberović S, Bedenić B, Vraneš J. Predominance of SHV-5 β -lactamase in community acquired urinary tract infections. *Clin Microbiol Infect* 2007;13(8):820-823, IF.2.98, cit 5
17. Goić-Barišić I, Bedenić B, Tonkić M, Katić S, Kalenić S, Punda-Polić V. Molecular characterisation of carbapenem resistant *Acinetobacter baumannii* in different Intensive Care Units in University Hospital Split, Croatia. *J Chemother* 2007;19(4):462-464. IF: 0.92, cit:5
18. Mihaljević Lj, Bedenić B, Mihaljević S, Majerović M, Petrović P, Vasilj I. Microbiological guidelines of the surgical intensive care units in Zagreb- a pivot for guideline-based therapy of sepsis. *Coll Antropol* 2007;31(4):1093-7. IF:0.3, cit 1
19. Vraneš J, Marijan T, Bedenić B, Mlinarić-Džepina A, Katić S, Kalenić S. Clonal dissemination of highly virulent extended-spectrum producing *Escherichia coli* strains isolated from the urine of non-hospitalised patients in Zagreb region. *Int J Antimicrob Agents* 2008; 31S: S19-24. IF:3.06, cit:5

20. Bedenić B, Vraneš J, Sviben M, Beader N, Kalenić S. Postantibiotic and Post- β -lactamase inhibitor effect of carbapenems combined with EDTA against *P. aeruginosa* strains producing VIM metallo- β -lactamases. *Chemotherapy* 2008;54(3):188-193.IF:1.5, cit 3
21. Literacka E, Bedenic B, Baraniak A, Fielt J, Tonkic M, Jajic-Bencic I, Gniadkowski M. blaCTX-M genes in *Escherichia coli* from Croatian hospitals are located in new (blaCTX-M-3) and widely spread (blaCTX-M-3a, blaCTX-M-15) genetic structures. *Antimicrob Agents Chemother* 2009;53(4):1630-1635. IF:4.8, cit: 33
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21. Bedenić B, Slade M, Žele- Starčević L, Sardelić S, Vranić-Ladavac M, Benčić A, Zujic- Atalić V, Bogdan M, Bubonja-Šonje M, Tomić-Paradžik M, Tot T, Lukić-Grlić A, Drenjančević D, Varda-Brkić D, Bandić-Pavlović D, Mihaljević S, Zarfel G, Gužvinac M, Conzemius R, Barišić I, Tambić-Andrašević A. Epidemic spread of OXA-48 β -lactamase in Croatia. *J Med Microbiol* 2018;67(8):1031-1034.
22. Bedenić B, Car H, Slaćanac D, Sviben M, Čačić M, Lukić-Grlić A, Benčić A, Šijak D, Tripković M, Bader N. In vitro synergy and postantibiotic effect of colistin combinations with meropenem and vancomycin against *Enterobacteriaceae* with multiple carbapenem resistance mechanisms. *J Infect Chemother* 2018.
23. Bielen L, Likić R, Erdeljić V, Mareković I, Firis N, Grgić-Medić M, Godan A, Tomić I, Hunjak B, Markotić A, Bejuk D, Tičić V, Balzar S, Bedenić B. Activity of fosfomycin against nosocomial multiresistant bacterial pathogens from Croatia: a multicenter study. *Croat Med J* 2018;59(2):56-64.
24. Bedenić B, Slade M, Žele- Starčević L, Sardelić S, Vranić-Ladavac M, Benčić A, Zujic- Atalić V, Bogdan M, Bubonja-Šonje M, Tomić-Paradžik M, Tot T, Lukić-Grlić A, Drenjančević D, Varda-Brkić D, Bandić-Pavlović D, Mihaljević S, Zarfel G, Gužvinac M, Conzemius R, Barišić I, Tambić-Andrašević A. Epidemic spread of OXA-48 β -lactamase in Croatia. *J Med Microbiol* 2018;67(8):1031-1034.
25. Bedenić B, Car H, Slaćanac D, Sviben M, Čačić M, Lukić-Grlić A, Benčić A, Šijak D, Tripković M, Bader N. In vitro synergy and postantibiotic effect of colistin combinations with meropenem and vancomycin against *Enterobacteriaceae* with multiple carbapenem resistance mechanisms. *J Infect Chemother*. 2018;24(12):1016-1019.
26. Centonze AR, Bertonecelli A, Savio C, Orza P, Bedenić B, Mazzariol A. Evaluation of rapid KPC carbapenemase detection method based on MALDI-TOF VITEK MS spectra analysis. *J Med Microbiol*. 2018; 67(10):1474-1479
27. Bedenić B, Plečko V, Sardelić S, Uzunović S, Godić Torkar K: Carbapenemases in gram-negative bacteria: laboratory detection and clinical significance. *Biomed Res Int*. 2014;2014:841951. doi: 10.1155/2014/841951. Epub 2014 Jun 15.
28. Varda-Brkić D, Katičić M, Bedenić B, Presečnik-Stanko A, Plečko V. Detection of virulence gene belonging to *cag* pathogenicity island in *Helicobacter pylori* isolates after multiple unsuccessful eradication therapy in Northwest Croatia. *Periodicum Biologorum* 2016;118(1)45-52.
29. Petrosillo N, Vranić-Ladavac M, Feudi C, Villa L, Fortini D, Barišić N, Bedenić B, Ladavac R, D'Arezzo S, Tambić-Andrašević A, Capone A. Spread of *Enterobacter cloacae* carrying blaNDM-1, blaCTX-M-15, blaSHV-12 and plasmid-mediated quinolone resistance genes in a surgical intensive care unit in Croatia. *J Glob Antimicrob Res*, 2016; 4:44-48..

30. Ladavac R, Bedenić B, Vranić-Ladavac M, Barišić N, Karčić N, Pompe K, Ferenčić A, Stojanović A, Seifert H, Katić S, Higgins PG. Emergence of different *Acinetobacter baumannii* clones in a Croatian hospital and correlation with antibiotic susceptibility. *J Glob Antimicrob Resist* 2017; 10:213-218. doi: 10.1016/

31. Jajić I, Benčić A, Siroglavić M, Zarfel G, Ružić B, Pezelj I, Bedenić B. *Klebsiella pneumoniae* OXA-48 in a urology patient: a case report. *Acta Clinica Croatica* 2017;56(1):166-71.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. 2007-2013 leader of the project “ Mechanisms of resistance to antibiotics in Gram-negative bacteria financed by Croatian Ministry for Science and Education

2. 2007-2013-collaborator of the project financed by Croatian Ministry for Science and Education, leader Prof. dr. sc. Jasmina Vraneš „Effect of antibiotics on biofilm infections“

3. 2008-2013 collaborator of the project financed by Bosnian Ministry of Science and Education „Meticillin-rezistentni *Staphylococcus aureus* (MRSA) and Gram-negative bacteria producing extended-spectrum β -lactamases (ESBL) as causative agents of surgical infections“ leader: Prof.dr.sc.Selma Uzunović-Kamberović (Zenica,BiH).

4. Since 2015 partner in FAPIC project financed by Horizon program

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Since 2015 partner in FAPIC project financed by Horizon program

University of Zagreb research grants:

2014: Postexposure effect of metal chelators on carbapenemase producing Gram-negative bacteria

2015: Multiresistant Gram-negative bacteria in long term care facilities

2016: Carbapenemases in hospitals, nursing homes and environment

2017: Mechanisms of spread of OXA-48 carbapenemase

2018: Mechanisms of colistin resistance in Gram-negative bacteria

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 8

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: associate professor Ivan Begovac, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine Zagreb and University Hospital Centre zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Liaison and consultative psychiatry

BIOGRAPHY

He graduated from the Faculty of Medicine in Zagreb in 1990. In 1996 he specializes in psychiatry. Since 2011, he has been head of the Pediatric and Adolescent Psychiatric Institute and Psychotherapy Clinic for Psychological Medicine. In 2000 he obtained his MA degree and in 2004 he received his doctorate in the field of pediatric and adolescent psychiatry at the Faculty of Medicine of the University of Zagreb. In 2001 he became a subspecialist in pediatric and adolescent psychiatry. In 1993 he was on a three-month scholarship entitled: Diagnostic and therapeutic understanding of anxiety disorders, Grace, Austria, under the mentorship of Prof. H. Zapotoczky. In 1996/1997 he was a one-year DAAD scholarship entitled: Investigating Protective Factors - Therapeutic Work with Refugee Children and Adolescents and Their Families, Hamburg, Germany, under the mentorship of Prof. Peter Riedesser. He graduated from a scientific seminar in Camposampier, Italy, in 2002. He has active knowledge of computer work, actively uses English and German. Has participated so far in a number of scientific projects. He is currently head of the scientific project title: personality traits and family of patients with eating disorders after recovery. In 2010 and 2011 he was awarded the Erasmus scholarship for the study room at the Psychoanalytical Institute in Ulm (responsible: Dr. Christine Schwilk), Germany and at the Clinic for Psychotherapy and Psychosomatics in Ulm, Germany (responsible: Prof. Dr. Harald Guendel and Prof. Dr. Joern von Wietersheim).

Participates in graduate (Psychological Medicine, Psychiatry) and Postgraduate Teaching (subjects: Psychiatric Psychiatry, Psychotherapy) at the Faculty of Medicine. He is the head of the subject and is Assistant to the postgraduate study program from Pediatric and Adolescent Psychiatry at the Faculty of Medicine. The head is two elective undergraduate courses: Horvat goes to the doctor; and Child in Crisis Diagnostic Methods in Child and Adolescent Psychiatry. He co-operates with a number of eminent experts from abroad (Prof. Achenbach from USA, Prof. von Wietersheim from Germany).

He has published more than eighty papers, presenting works at several domestic and foreign professional conferences. Since 2006 he has been admitted to the associate professorship of Senior Assistant at the Department of Psychiatry and Psychological Medicine, University of Zagreb Medical School. Since 2007, she holds the title of Primary. Currently President of HD for Pediatric and Adolescent Psychiatry and Psychotherapy at HLZ. Since 2010, she has been a docent at the Faculty of Medicine. In 2010 he became a group analyst at the Institute for Group Analysis in Zagreb. Since the year 2010, psychoanalysis education has started in the psychoanalytic study group in Zagreb.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2018 – associate professor.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

-Santric, L.^a Richter, D.^b **Begovac, I.** [Klinička slika konverzivnog poremećaja u hitnoj pedijatrijskoj službi: Prikaz triju bolesnika] Clinical presentation of conversion disorder in pediatric emergency service: Three case reports. Paediatrica Croatica Volume 60, Issue 3, July-September 2016, Pages 117-120.

- Rescorla LA, Ivanova MY, Achenbach TM, **Begovac I**, Chahed M, Drugli MB. et al. International epidemiology of child and adolescent psychopathology: 2. Integration and applications of dimensional findings from 44 societies. *Journal of the American academy of child and adolescent psychiatry* 2012; 51(12): 1273-1283.
- Rescorla LA, Ginzburg S, Achenbach TM, Ivanova MY, Almqvist F, **Begovac I**. et al., Cross-informant agreement between parent-reported and adolescent self-reported problems in 25 societies. *Journal of clinical child & adolescent psychology* 2012 (online version).
- Majić G, **Begovac I**, Begovac B, Klobučar S, Vidović V, Škrinjaric J. Utjecaj attachment-a na psihopatologiju u dječjoj dobi. *Soc psihijat* 2008; 36: 171-8.
- Majić G, **Begovac I**, Klobučar S, Begovac B, Vidović V, Škrinjaric J. Attachment (privrženost, vezivanje)-teorijske postavke. *Soc psihijat* 2008; 36: 125-30.
- Rudan V, **Begovac I**, Szivovicza L, Filipović O, Skočić M. The Child Behavior Checklist, Teacher Report Form and Youth Self Report Problem Scales in a Normative Sample of Croatian Children and Adolescents 7-18 Years Old. *Coll Antropol* 2005; 29(1): 17-26.
- Vidović V, Jureša V, **Begovac I**, Mahnik M, Tocilj G. Perceived family cohesion, adaptability and communication in eating disorders. *European Eating Disorders Review* 2005; 13(1): 19-28.
- **Begovac I**, Rudan V, Begovac B, Vidović V, Majić G. Self-image, war psychotrauma and refugee status in adolescents. *European Child & Adolescent Psychiatry* 2004; 13(6): 381-388.
- **Begovac I**, Rudan V, Skočić M, Filipović O, Szivovicza L. Comparison of Self-Reported and Parent-Reported Emotional and Behavioral Problems in Adolescents from Croatia. *Coll Antropol* 2004; 28(1): 393-401.
- **Begovac I**, Votava-Raić A. Opća psihosomatika u dječjoj i adolescentnoj dobi. *Liječnički Vjesnik* 2004; 126: 32-8.
- **Begovac I**, Begovac B. Psihička traumatizacija djece i adolescenata. *Soc psihijat* 2002; 30: 85-92

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- Jakovina T1, Crnković Batista M, Ražić Pavičić A, Žurić Jakovina I, Begovac I. Emotional dysregulation and attachment dimensions in female patients with bulimia nervosa. *Psychiatr Danub*. 2018 Mar;30(1):72-78. doi: 10.24869/psyd.2018.72.
- Ivanova MY1, Achenbach TM1, Rescorla LA2, Guo J3, Althoff RR1, Kan KJ4, Almqvist F5, Begovac I6, Broberg AG7, Chahed M8, da Rocha MM9, Dobrea A10, Döpfner M11, Erol N12, Fombonne E13, Fonseca AC14, Forns M15, Frigerio A16, Grietens H17, Hewitt-Ramirez N18, Juarez F19, Kajokienė I20, Kanbayashi Y21, Kim YA22, Larsson B23, Leung P24, Liu X25, Maggolini A26, Minaei A27, Moreira PAS28, Oh KJ29, Petot D30, Pisa C31, Pomalima R32, Roussos A33, Rudan V6, Sawyer M34, Shahini M35, Ferreira de Mattos Silveira E36, Simsek Z37, Steinhausen HC38, Szivovicza L39, Valverde J32, Viola L40, Weintraub S5, Metzke CW38, Wolanczyk T41, Woo B42, Zhang EY43, Zilber N44, Žukauskienė R20, Verhulst FC45. Testing Syndromes of Psychopathology in Parent and Youth Ratings Across Societies. *J Clin Child Adolesc Psychol*. 2018 Jan 24:1-14. doi: 10.1080/15374416.2017.1405352. [Epub ahead of print]
- Burt, SA (Burt, S. Alexandra)[1] ; Rescorla, LA (Rescorla, Leslie A.)[2] ; Achenbach, TM (Achenbach, Thomas M.)[3] ; Ivanova, MY (Ivanova, Masha Y.)[3] ; Almqvist, F (Almqvist, Fredrik)[4] ; Begovac, I (Begovac, Ivan)[5] ; Bilenberg, N (Bilenberg, Niels)[6] ; Bird, H (Bird, Hector)[7] ; Chahed, M (Chahed,

Myriam)[8] ; Dobrean, A (Dobrean, Anca)[9] ; Dopfner, M (Doepfner, Manfred)[10] ; Erol, N (Erol, Nese)[11] ; Hannesdottir, H (Hannesdottir, Helga)[12] ; Kanbayashi, Y (Kanbayashi, Yasuko)[13] ; Lambert, MC (Lambert, Michael C.)[14] ; Leung, PWL (Leung, Patrick W. L.)[15] ; Minaei, A (Minaei, Asghar)[16] ; Novik, TS (Novik, Torunn S.)[17] ; Oh, KJ (Oh, Kyung-Ja)[18] ; Petot, D (Petot, Djaouida)[8] ; Petot, JM (Petot, Jean-Michel)[8] ; Pomalima, R (Pomalima, Rolando)[19] ; Rudan, V (Rudan, Vlasta)[5] ; Sawyer, M (Sawyer, Michael)[20] ; Simsek, Z (Simsek, Zeynep)[21] ; Steinhausen, HC (Steinhausen, Hans-Christoph)[22,23,24] ; Valverde, J (Valverde, Jose)[19] ; van der Ende, J (van der Ende, Jan)[25] ; Weintraub, S (Weintraub, Sheila)[4] ; Metzke, CW (Metzke, Christa Winkler)[22] ; Wolanczyk, T (Wolanczyk, Tomasz)[26] ; Zhang, EY (Zhang, Eugene Yuqing)[27] ; Zukauskienė, R (Zukauskienė, Rita)[28] ; Verhulst, FC (Verhulst, Frank C.)[25] . (2015) The association between aggressive and non-aggressive antisocial problems as measured with the Achenbach System of Empirically Based Assessment: A study of 27,861 parent-adolescent dyads from 25 societies. PERSONALITY AND INDIVIDUAL DIFFERENCES. Volume: 85 . Pages: 86-92. DOI: 10.1016/j.paid.2015.04.036.

-Batista M, Mestrović A, Vekić AM, Malenical M, Kukuruzović M, **Begovac I**. COPING SKILLS IN CHILDREN WITH EPILEPSY--EVALUATION OF COGNITIVE BEHAVIORAL THERAPY INTERVENTION. Acta Clin Croat. 2015 Dec;54(4):467-74.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- **International, bilateral German Croatian project:** A cross-cultural comparison between Germany and Croatia patients with bulimia nervosa: the role of childhood trauma, attachment style, emotional regulation and family functioning; Leaders: Prof. dr. sc. Joern von Wietersheim and doc. dr. sc. Ivan Begovac; 1.1.2013.- 31.12.2020.; Published article: Jakovina T1, Crnković Batista M, Ražić Pavičić A, Žurić Jakovina I, Begovac I. Emotional dysregulation and attachment dimensions in female patients with bulimia nervosa. Psychiatr Danub. 2018 Mar;30(1):72-78. doi: 10.24869/psyd.2018.72.

- *Project from University Zagreb: Therapeutic alliance as predictor of psychotherapeutic therapy in adolescents with anxiety disorders. Academic year 2014/2015; Leader: Doc. dr. sc. Zorana Kušević; slvan Begovac- collaborator.*

- *Project from University Zagreb: Predictive research of therapeutic alliance and emotional regulation during therapy of adolescents with emotional problems. Academic year: 2013/2014; Leader: Doc. dr. sc. Ivan Begovac;*

- *Project of Ministry of science: Characteristics of personality and families of patients with eating disorders after recovery. (108-0000000-3625); leader: Doc. dr. sc. Ivan Begovac (former leader prof. Vesna Vidović). Duration until 1.1. 2015.;*

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- Project from University Zagreb: Concept of adequacy for therapy and emotional regulation during inpatient therapy in adolescents with psychic disturbances. Academic year: 2018/2019; Leader: Prof. dr. sc. Ivan Begovac;

- *Project from University Zagreb: Predictive research of therapeutic alliance and emotional regulation during inpatient therapy of adolescents with mental disorders. Academic year: 2016/2017; Leader: Prof. dr. sc. Ivan Begovac;*



- Project from University Zagreb: Therapeutic alliance as a predictor of psychotherapeutic therapy in adolescents with eating disorders. Academic year: 2015/2016; Leader: Prof. dr. sc. Ivan Begovac;

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 2 (Trpimir Jakovina and Maja Batista).

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Krešo Bendelja, PhD, senior scientific associate

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Center for Research and Knowledge Transfer in Biotechnology, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Mechanisms of allergic reactions

BIOGRAPHY

Born 15 Aug 1971. in Zagreb. PhD: Faculty of Natural Sciences, 2009. Zagreb. Senior research associate: 2010. Medical School Zagreb. Current employment: head of Lab. of Immunology, CRKTB University of Zagreb. Teaching responsibility: undergraduate program (Experimental Immunology at Faculty of Natural Sciences and Immunology at Faculty of Biotechnology, University of Zagreb) and graduate program (Mechanisms of Innate Immunity at School of Medicine, Innate Immunology and Immunobiology of vaccines at Faculty of Natural Sciences, University of Zagreb). Mentorships: 7 M.Sc. and 7 Ph.D. Scientific interests: innate and adaptive immune mechanisms in viral and chronic diseases. Memberships: International Clinical Cytometry Society, International Society for Advancement of Cytometry, European Federation of Immunological Societies, European Society of Clinical Microbiology and Infectious Diseases, Croatian Immunological Society. Publications: 34 (21 in CC), number of citations: 411.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2010

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Knezevic J, Pavlinic D, Rose WA 2nd, Leifer CA, Bendelja K, Gabrilovac J, Parcina M, Lauc G, Kubarenko AV, Petricevic B, Vrbanc D, Bulat-Kardum L, Bekeredjian-Ding I, Pavelic J, Dembic Z, Weber AN. Heterozygous Carriage of a Dysfunctional Toll-like Receptor 9 Allele Affects CpG Oligonucleotide Responses in B Cells. *J Biol Chem* 2012;287:24544-53.
2. Vojvoda V, Savic Mlakar A, Jergovic M, Kukuruzovic M, Markovinovic L, Aberle N, Rabatic S, Bendelja K. The Increased Type-1 and Type-2 Chemokine Levels in Children with Acute RSV Infection alter the Development of Adaptive Immune Responses. *Biomed Res Intl* 2014: doi:10.1155/2014/750521
3. Jergovic M, Bendelja K, Vidovic A, Savic A, Vojvoda V, Aberle N, Rabatic S, Jovanovic T, Sabioncello A. Patients with posttraumatic stress disorder exhibit an altered phenotype of regulatory T cells. *Allergy, Asthma & Clin Immunol* 2014;10:43, doi:10.1186/1710-1492-10-43
4. Wawrzyniak P, Wawrzyniak M, Wanke K, Sokolowska M, Bendelja K, Rückert B, Globinska A, Jakiela B, Kast JJ, Idzko M, Akdis M, Sanak M, Akdis CA. Regulation of bronchial epithelial barrier integrity by type 2 cytokines and histone deacetylases in asthma. *J Allergy Clin Immunol* 2017;139:93-103.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Galán A, Mayer I, Rafaj RB, Bendelja K, Sušić V, Cerón JJ, Mrljak V. MCP-1, KC-like and IL-8 as critical mediators of pathogenesis caused by *Babesia canis*. *PLoS One*. 2018 Jan 5;13(1):e0190474. doi: 10.1371/journal.pone.0190474.
2. Savić Mlakar A, Hojsak I, Bendelja K. Combining Histologic and Molecular Techniques to Distinguish Inflamed From Uninflamed Tissue. *Gastroenterology*. 2018 Jul;155(1):229-230. doi: 10.1053/j.gastro.2018.02.041. Epub 2018 Jun 8.

3. Štimac A, Bendelja K, Dutour Sikirić M, Frkanec L, Frkanec R. Mannosylated Liposomes with Built-in Peptidoglycan Based Immunomodulators for Subunit Vaccine Formulations. *Croat Chem Acta* 2017;90: 645–56.
3. Savić Mlakar A, Hojsak I, Jergović M, Čimić S, Bendelja K. Pediatric Crohn disease is characterized by Th1 in the terminal ileum and Th1/Th17 immune response in the colon. *Eur J Pediatr* 2018;177:611-16.
4. Jergović M, Nedeljković G, Cvetić Ž, Gottstein Ž, Bendelja K. Combined dextran and ficoll separation yields pure populations of chicken peripheral blood mononuclear cells - short communication. *Veterinarski arhiv* 2017;87:623-30.
5. Savić Mlakar, Hojsak I, Jergović M, Vojvoda Parčina V, Babić Ž, Troškot B, Mihaljević Ž, Bendelj K. J *Pediatr Gastroenterol Nutr* 2017;64:943-8.
6. Wawrzyniak P, Wawrzyniak M, Wanke K, Sokolowska M, Bendelja K, Rückert B, Globinska A, Jakiela B, Kast JJ, Idzko M, Akdis M, Sanak M, Akdis CA. Regulation of bronchial epithelial barrier integrity by type 2 cytokines and histone deacetylases in asthma. *J Allergy Clin Immunol* 2017;139:93-103.
7. Jagušić M, Forčić D, Brgles M, Kutle L, Šantak M, Jergović M, Kotarski L, Bendelja K, Halassy B. Stability of Minimum Essential Media functionality despite L-glutamine decomposition. *Cytotechnology* 2016;68:1171-83.
8. Savić Mlakar A, Babić Ž, Troškot B, Jergović M, Vojvoda Parčina V, Mihaljević Ž, Bendelja K, Reduction of MDR1, MRP1 and BCRP expression in Crohn's disease: a role in disease pathogenesis?. *Period biol* 2015; 117:347-55.
9. Jergović M, Bendelja K, Savić Mlakar A, Vojvoda V, Aberle N, Jovanovic T, Rabatić S, Sabioncello A, Vidović A. Circulating levels of hormones, lipids, and immune mediators in post-traumatic stress disorder : a 3-month follow-up study. *Front Psychiatry* 2015 Apr 14;6:49. doi: 10.3389/fpsy.2015.00049.
10. Mayer I, Bendelja K, Brkljačić M, Crnogaj M, Šmit I, Torti, M, Sušić V, Barić Rafaj R, Mrljak V, Serum levels of chemokines KC and IL-8 in dogs natural infected with *Babesia canis canis*. *Veterinarski arhiv* 2015;85: 369-83.
11. Jergović M, Bendelja K, Vidović A, Savić A, Vojvoda V, Aberle N, Rabatić S, Jovanovic T, Sabioncello A. Patients with posttraumatic stress disorder exhibit an altered phenotype of regulatory T cells. *Allergy Asthma Clin Immunol* 2014;10:43. doi: 10.1186/1710-1492-10-43.
12. Vojvoda V, Savić Mlakar A, Jergović M, Kukuruzović M, Markovinović L, Aberle N, Rabatić S, Bendelja K. The Increased Type-1 and Type-2 Chemokine Levels in Children with Acute RSV Infection Alter the Development of Adaptive Immune Responses. *Biomed Res Int.* 2014;2014:750521. doi: 10.1155/2014/750521.
13. Jergović M, Tomičević M, Vidović A, Bendelja K, Savić A, Vojvoda V, Rac D, Lovrić-Čavar D, Rabatić S, Jovanovic T, Sabioncello A. Telomere shortening and immune activity in war veterans with posttraumatic stress disorder. *Prog Neuropsychopharmacol Biol Psychiatry* 2014;54:275-83.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

01/2007-01/2013; 021-0212432-2439, Croatian Ministry of Science, Education and Sports “Mechanisms of innate immunity in RSV infections”



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

06/2017-06/2018 Croatian Academy of Sciences and Arts Resource Grant

Role of mesenchymal stem cells in modulation of a RSV infection

06/2016-09/2017 PoC6-160, HAMAG BICRO

Bacterial polysaccharide vaccines using lipid immunogens

2014, Fulbright Postdoctoral Award

Role for IL-17-LTB4-BLT1 axis in acute respiratory syncytial virus infection

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

4

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Vedran Bilić, MD, PhD.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Clinic for Psychological Medicine, KBC Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Liaison and consultative psychiatry

BIOGRAPHY

From 1991 to the end of the Homeland War organized and conducted psychiatric protection of members of MUP and ZNG for the area of Karlovac. In 1999, the Croatian Medical Association awarded him a diploma for a special contribution. The Association of Croatian Volunteers of the Homeland War – Dubrava awarded him in 2006. a Thank you note. Many years he has participated in organizing and conducting several international psychotherapy schools in the IUC Dubrovnik framework. He is a Member of several domestic professional societies in which he actively participates (Institute for group Analysis Zagreb, Croatian Society for Psychoanalyzes Psychotherapy, Croatian Society for Psychosomatic Medicine, Croatian Psychiatric Society, Croatian Medical Association, Croatian Society of Balint groups). He was a lecturer at national and International congresses. Participated as a researcher in several scientific projects. He was a mentor of one graduate thesis, and now he's a mentor to a doctoral thesis. Specialist psychiatrist, subspecialist from psychotherapy, for many years successfully expertly and scientifically operates in several areas of psychiatry, especially psychotherapy. He was the mentor of one defended graduate thesis, and he is the current mentor of one doctoral thesis. So far 5 papers have been published in the Current Contents database, 3 work in the database Science Citation Index Expanded which are quoted 20 times in the ISI Web of the Knowledge database. He also Published 5 papers in peer-reviewed journals indexed in other databases and eleven chapters in books, four of which are university textbooks. He Presented works at National and International Congresses. He is a Member of several professional associations and is involved in various psychotherapeutic education, as well as in working with students.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: May 2017., Collaborative title of postdoctoral School of Medicine, University of Zagreb

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Super-ego u oboljelih od koronarne bolesti. Doktorat. Medicinski fakultet Sveučilišta u Zagrebu, 2016.

a) Radovi objavljeni u bazi podataka Current Contents

1. Bilić, V., Buzov, I., Gruden, V., Begić-Jokić, N. The projection questionnaire: design, use and utility. Coll. Anthropol., 22 (1998);22(1): 277-289. 7 puta citirano u WOS IF 0,228

2. Brajković, L., Jevtović, S., Bilić, V., Braš, M., Lončar, Z. The Efficacy of a Brief Supportive Psychodynamic Therapy in Treating Anxious-Depressive Disorder in Daily Hospital. Coll .Antropol. 33 (2009;33) (1): 245-251. 2 puta citirano u WOS IF 0,503

3. Bilić, V., Marčinko, D., Miličić, D. Super-ego in Patients with Coronary Artery Disease. Coll.Antropol. Coll. Antropol. 35 (2011;35) (Suppl. 1): 127—131.

1 put citirano u WOS IF 0,611

4. Stojanović-Špehar, S., Blažeković-Milaković, S., Jokić-Begić, N., Bilić, V., Kumbrija, S. Assessing Psychosocial Factors in Depressed Patients – Accordance of Patient's and Physician's Assessment. Coll. Antropol. 35 (2011;35) (3): 643—649. IF 0,611

5. Marčinko, D., Bilić, V., Pivac, N., Tentor, B., Franić, T., Lončar, M., Marčinko, VM., Jakovljević, M. Serum Cholesterol concentration and Structured Individual Psychoanalytic Psychotherapy in Suicidal and Non-suicidal Male Patients Suffering from Borderline Personality Disorder. Coll. Antropol. 35 (2011;35()) Suppl. 1): 219–223.

8 puta citirano u WOS IF 0,614

b) radovi indeksirani u Scinece Citation Index-Expand

1. Bilić V., Nemčić-Moro I., Karšić V., Grgić V., Stojanović-Špehar S., Marčinko D. Clinical Experiences in Treating PTSD Patients by Combining Individual and Group Psychotherapy. Psychiatria Danubina, 2010;Vol.22(, No.2):, pp 173-178. IF 0,554

2. Marčinko D., Bilić V. Family Therapy as Addition to Individual Therapy and Psychopharmacotherapy in Late Adolescent Female Patients Suffering From Borderline Personality Disorder With Comorbidity and Positive Suicidal History. Psychiatria Danubina, 2010; Vol.22(, No. 2):, pp 257-260. 1 put citirano u WOS IF 0,554

3. Bilić V., Marčinko D. Comorbidity of Kidney Stones and Pychiatric Disease. Psychiatria Danubina, 2010; Vol. 22(, No.2):, pp 249-252. 1 put citirano u WOS IF 0,554

c) Radovi u časopisima refereriranim u Index Medicusu, Excerpta Medica, Biological Abstract, Chemical Abstract, Clin PCYC-PSYC

Radovi u Science Citation Index:

1. Bilić V. Manifestni sadržaj sna u psihoanalitičkoj terapiji. Psihoterapija XXIX (1999): 109-119.

2. Bek R., Buzov I, Bilić V. Anksiozne reakcije u ratu. Soc. Psihijat., 29 (2001;29): 3-8.

3. Šimunović R., Bilić V., Kumbrija S, Blažeković S. Balintova grupa pomoć u radu liječnika opće medicine. Liječn Vjesn 2004;126:311-313.

4. Bilić V., Kezić S., Šarić M., Grah M. Konfrontacija regresivnog bolesnika u psihoanalitičkoj psihoterapiji. Soc. Psihijat., 34 (2006;34:) 148-153. 2 puta citirano

5. Butković-Anđelić L. Bilić V. Tijek liječenja bolesnice granične strukture osobnosti u dnevnoj bolnici. Soc.psihijat., 38 (2010;38): 96-102.

Radovi objavljeni u drugim katalogiziranim publikacijama

1. Bilić V. Projekcija kao pokazatelj učinkovitosti psihoterapije. Magistarski rad. Medicinski fakultet Sveučilišta u Zagrebu (1996).

2. Bilić V. Projekcija kao pokazatelj učinkovitosti psihoterapije. Psihoterapija XXVI (1996): 89-104.

3. Bilić V., Buzov I., Gruden V. Projekcija i učinkovitost grupne analize. Soc. Psihijat., 26 (1998;26): 23-27.

4. Bilić V. Paranoidno-shizoidna i depresivna pozicija u grupnoj analizi. Psihoterapija XXVII (1997);: 83-96.

5. Bilić V. Organizacija rada odjela za parcijalnu hospitalizaciju KZPM. Psihoterapija XXVII (1997);: 131-139.

6. Bilić V. Oboljeli učesnik rata u obitelji. Psihoterapija XXVIII (1998;): 23-32.

7. Bilić V., Ralph R. Greenson ili psihoanalitička pedagogija (1979-1999 dvadeset godišnja obljetnica smrti). Psihoterapija XXVIII (1998;): 177-189.
8. Buzov I., Bilić V. Klinički farmakolozi i načela komunikacije. Psihoterapija XXVIII (1998;): 65-72.
9. Bilić V. Izborna skupština Hrvatskog psihoterapijskog društva. Psihoterapija XXVIII (1998;): 163-164.
10. Radovančević Lj., Bilić V. The role of family care in the course of schizophrenia. Psychiatria Danubina, 1998; Vol 10(No 2): 196-197.
11. Radovančević Lj., Bilić V. Epidemiological study of family care of schizophrenic patients in Croatia. Psychiatria Danubina, 1998; Vol 10(No 2) 1998: 197-198.
12. Radovančević Lj., Bilić V. Clinical picture of schizophrenia and family care. Psychiatria Danubina, Vol 10 No 2 1998;10(2): 198.
13. Radovančević Lj., Bilić V. Interaction of aggressiveness and family care in schizophrenia. Psychiatria Danubina, Vol 10 No 2 1998;10(2): 198.
14. Bilić V. Kako psihološki pomoći umirućima i njihovoj obitelji. Moguće reakcije bolesnika. Bilten za palijativnu medicinu/skrb 1999; (5): 14-15.
15. Bilić V. Terapijski pristup oboljelima od PTSP-a. Medix 29/30 (2000);29-30: 52-54.
16. Some Issues in Psychotherapy of Tortured Persons. In: Repatriation as a Part of Reconstructive Process in Torture Survivors (Interpersonal and Intrapersonal Processes). International Rehabilitation Centre for Torture Victims Zagreb. Zagreb, Crograf, 2003;:13-17.
17. Bilić V. Superego u oboljelih od koronarne bolesti. Doktorska dizertacija. Medicinski fakultet Sveučilišta u Zagrebu (2006).
18. Stojanović-Špehar S, Blažeković-Milaković S, Kumbrija S, Šupe S, Bilić V, Galić J, Vuković H. Anksiozni bolesnik u obiteljskoj medicini-Balintov pristup. Medix. 2007;71:111-114.
19. Bilić V, Pantić Z. WMA: Liječnici moraju dokumentirati i prijavljivati slučajeve mučenja. Liječničke novine, 2007: 65.
20. Bilić V. Burn out. Med Fam Croat Vol 16, No1, 2008;16(1):73-75.
21. Bilić V. Balintove grupe. Medix XV (2009):164-168.
22. Bilić V. Psihološki čimbenici kod kardiovaskularnih bolesti. Medix XV (2009;):100-103.
23. Bilić V. Komunikacija u grupi. Medix (XVII) 2011;: 84-86.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Bilić V. Sram kao okidač za nasilje. U: Rudan V., Marčinko D. (ur.) Od nasilja do dijaloga. Zagreb: Medicinska naklada, 2014: 60-67.
2. Bilić V. Konfrontacija. U: Kozarić-Kovačić D, Frančišković T. (ur.) Psihoterapijski pravci. Zagreb: Medicinska naklada, 2014.
3. Bilić V. Sram i žalovanje. U: Rudan V., Marčinko D. (ur.) Žalovanje. Zagreb: Medicinska naklada, 2014.
4. Bilić V. Konfrontacija. U: Psihoterapijski pravci. Frančišković T., Kozarić Kovačić D. Medicinska naklada. Zagreb, 2014.

5. Bilić V. Sram i poremećaji ličnosti. Marčinko D., Jakovljević M., Rudan V. (ur.) Poremećaji ličnosti: stvarni ljudi, stvarni problemi. Zagreb: Medicinska naklada, 2015: 88-99.
6. Bilić V. Sram u psihoterapiji bolesnika izloženom brzim vanjskim promjenama. U: Rudan V., Marčinko D. (ur.) Psihoanalitički modeli komunikacije u vremenu brzih promjena. Zagreb: Medicinska naklada, 2016.
7. Bilić V. Sram kod histerije. U: Marčinko D., Rudan V. (ur.) Histerija. Zagreb: Medicinska naklada, 2017.25. Bilić V. Osvrt na knjigu Christopfera Bollasa 'When the Sun Bursts: The enigma od Schizophrenia'. Psihoterapija. 2016 (1): 295-300.
8. Hasanović, M.,; Pajević, I.,; Avibegović, E.,; Moro, L.,; Frančičsković, T.,; Gregurek, R.,; Tocilj, G.,; Bilić, V. Training Bosnia-Herzegovina mental health workers in group analysis resulted in founding of Bosnia-Herzegovina group analysis association and continual training of new generation from local educators. Eur Psychiatry. 2016; 33(Suppl 1); 694-695.
9. Bilić V. Sram u oboljelih od konverzivne neuroze. U: Histerija. Urednici Marčinko D. Rudan V. Medicinske naklada Zagreb, 2017.
10. Bilić V. Specifičnosti grupne psihoterapije bolesnika oboljelih od PTSP-a. Medix XXIII 2017: 201-206.
11. Bilić V. Promjena srama čovjeka dvadeset prvog stoljeća. U: Nelagoda u kulturi. Urednici Marčinko D. Rudan V. Medicinska naklada Zagreb, 2018.
12. Marčinko D, Radanović Ćorić S, Šeparović Lisak M, Rudan D, Jeleč V, Bilić. The role of psychodynamic and personality assessment in psychopharmacotherapy of suicidal psychotic patients. Psychiatr Danub. 2018 Jun;30(Suppl 4):228-230.
13. Bilić V, Pisk Z, Bagarić A. Istraživanja grupnoga psihoterapijskog rada u dnevnim bolnicama. U: Grupna analiza u fokusu znanstvenih istraživanja. Ur. Špelić A. Sveučilište Jurja Dobrile u Puli. Pula, 2018.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

He was involved as a researcher in the projects of the Ministry of science, education, and Sports: "Experimental Development of the Croatian model of psychotherapy of PTSD", head of Prof. Dr. Sc. Rudolf Gregurek No. 0108092 of 2002. Until 2006. and "' Neurobiological aspects of human adaptation to stress and response to psychotherapy" ' head of prof.dr.sc. Rudolf Gregurek number 108-1083509-3517, from 2008 to 2013. As.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER: 10

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ass. Prof. Dubravka Bobek MD PhD.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital "Dubrava" Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Hand Surgery

BIOGRAPHY

Head of the Department of Physical and Rehabilitation Medicine and Rheumatology, Clinical Hospital Dubrava, Zagreb, Croatia

- implementation of a new IT program into the work process, resulting in the improvement and informatization of business processes in the work of the Department Center (eNartifying, eUputnica, eNalaz and eHZZORačun, ePrijemPacijenata - self-contained device and application module for fully independent registration of patients upon arrival at the Department)
- established ultrasound diagnostic activity of musculoskeletal diseases (since 2009 in routine practice of diagnostic UZV examination of the musculo-skeletal system).
- established Daily Hospital of the Department
- established Osteoarthritis School of the Department

-leader of the 1st class course at the Faculty of Medicine in Zagreb called "News in the Treatment of Knee Osteoarthritis". The course has gathered 25 lecturers from all over the University of Croatia and 150 participants. Writing a book on osteoarthritis is underway. The course was held 4.10.2018.

2016.Assistant Professor

Libertas International University, Zagreb, (Croatia)

2016.Scientific associates

School of Medicine, University of Zagreb, Zagreb, (Croatia)

2011 – 2014 PhD School of Medicine, University of Zagreb, Zagreb, (Croatia)

Since 2017 a lecturer at the private university "Libertas", subjects: Rheumatology, Physiotherapy, Exercises II and III Since 2016, the subject of Rheumatology for regular and extraordinary students of II year physiotherapy at the Zagreb University of Health Sciences.

Lecturer in biomedicine and health care, field of clinical medical science, rheumatology.

From 2012 until today she is a lecturer at the doctoral postgraduate study in biomedicine and health, MF Zagreb, "Surgery of the hand".

2007/2008, 2008/2009. school year. lecturer at the specialist postgraduate study in Physical Medicine and Rehabilitation, MF University of Zagreb, subject "Forefoot and Fetus Propedeutics".

2010 selection for lecturers in the field of biomedicine and health, field of clinical medical science, branch of physical medicine and rehabilitation in Zagreb University of Health.

During the study as a demonstrator participated in work with students during the microbiology exercise at MF University in Zagreb.A total of 47 scientific and professional papers were published, of which 18 were the first authors.

Author and co-author of 16 original scientific papers published in CC indexed journals, in SCI-Expanded and 12 scientific papers in extenso in journals indexed in Index Medicus / Excerpta Medica.

Published summaries in the supplements of indexed journals, as well as summaries that are published as textbooks in worksheets.

Since 2013. a member of the editorial board of the journal "Physical and Rehabilitation Medicine", a journal of the Croatian Society for Physical and Rehabilitation Medicine.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Bobek D, Lipozenčić J, Milavec-Puretić V, Jakić-Razumović J, Basta-Juzbašić A, Expression of CD30 and CD45 RO in Acute Atopic Dermatitis Skin Lesions. *Allerg Clin Immunol Int* 2004; (Supl 1): 266-268.

- Bobek D, Jelušić M. Značenje prirodne imunosti u juvenilnom idiopatskom artritisu. *Reumatizam*, 2014
- Bobek D, Žagar I, Kovač Durmiš K, Perić P, Čurković B, Babić-Naglić Đ. Ocjena aktivnosti ankilozantnog spondilitisa BASDAI/ASDAS mjernim instrumentima. *Reumatizam*, 2012;59:5-10.
- Bobek D, Babić-Naglić Đ, Potočki K, Kern J, Badovinac O, Čurković B. The cervical spine involvement in patients with psoriatic arthritis. *Reumatizam*, 2007;54:12-15.
- Bobek D, Lipozenčić J, Jakić-Razumović J, Ivanković D, Badovinac O. Pojavnost CD30 na limfocitima u upalnom infiltrate akutne faze atopijskog dermatitis. *Liječ vjesn.* 2004; 11-12:291-297.
- Bobek D, Lipozenčić J, Badovinac O, Jakić-Razumović J. Association between CD30 expression and atopic dermatitis. *Act Dermatovenerol Croat* 2004;12:118-119.
- Grazio S, Bobek D, Badovinac O. Križobolja: rizici, prognostički čimbenici, dvojbe i različiti pristupi. *Med jad.* 2003;3-4:93-102.
- Lipozenčić J, Bobek D, Jakić-Razumović J. The presence of surface CD30 on T cells atopic dermatitis. *Act Dermatovenerol Croat* 2003;11:145-151.
- Lipozenčić J, Murat-Sušić S, Golub D, Perkov D, Žilih-Ostojić C, Brezovečki-Biđin D Eosinophil cationic protein and atopic dermatitis. *Act Dermatovenerol Croat* 2000;8:77-81.
- Žilih-Ostojić C, Lipozenčić J, Gracin S, Batinac S, Golub D. Food allergy in atopic dermatitis. *Acta Dermatovenerol Croat* 1999;7:67-75.
- Jakić-Razumović J, Lipozenčić J, Bobek D. Značenje imunohistokemijske dijagnostike u atopijskog dermatitisa. *Medix*, 2003(9);48:68-69.
- Tesija Kuna A, Grazio S, Babić Naglic D, Anić B, Grubisic F, Bobek D, Cvijetic S, Vukasovic I, Vrkic N. Vitamin D status in rheumatoid arthritis and its correlation with disease activity and functional ability. 9th International Congress on Autoimmunity, Nice 2014 book of abstract.
- Grazio S, Babić Naglic Đ, Anić B, Grubišić F, Bobek D, Skala H, et al. Vitamin D and PTH serum levels and their relationship with some measures of disease activity in a group of patients with established psoriatic arthritis. 14th Mediterranean Congress of Rheumatology: Abstract Book / Minisola, Giovanni; Matucci Cerinic, Marco, editor(s). Pavia: Societa Italiana di Reumatologia, 2011. 23-23.

- Jelušić-Dražić M, Kovačić N, Grčević D, Bobek D, Vidović M, Potočki K, Malčić I, Lukić IK. The role of damage associated molecular pattern (DAMP) molecules in childhood systemic lupus erythematosus. 17th PRES, Clinic Exper Rheumatol 2011;29:450.
- Jelušić-Dražić M, Kovačić N, Grčević D, Bobek D, Vidović Potočki M, Malčić I, Lukić IK. The role of high mobility group box-1 (HMGB-1), S100A12 and receptor for advanced glycation end-products (RAGE) in systemic juvenile idiopathic arthritis, 17th European Paediatric Rheumatology Congress (PRES), Clinic and Experiment Rheumatol 2011;29:451
- Jelušić-Dražić M, Kovačić N, Grčević D, Bobek D, Potočki K, Malčić I, Lukić IK. The role of high mobility group box -1 (HMGB-1), S100A12 and receptor for advanced glycation end-products in systemic juvenile idiopathic arthritis, EULAR 2010, Ann Rheum Dis 2010;69 (Suppl 3):709.
- Jelušić-Dražić M, Kovačić N, Grčević D, Bobek D, Vidović M, Potočki K, Malčić I, Lukić I. K. The role of damage associated molecular pattern (DAMP) molecules in childhood systemic lupus erythematosus. 17th European Paediatric Rheumatology Congress (PRES), Valencia 2010, book of abstract: 270.
- Jelušić-Dražić M, Kovačić N, Grčević D, Bobek D, M. Vidović Potočki, I. Malčić, I. K. Lukić. The role of high mobility group box-1 (HMGB-1), S100A12 and receptor for advanced glycation end-products (RAGE) in systemic juvenile idiopathic arthritis, 17th European Paediatric Rheumatology Congress (PRES), Valencia 2010, book of abstract: 271.
- Jelušić-Dražić M, Kovačić N, Grčević D, Tambić-Bukovac L, Bobek D, Malčić I, Lukić IK. Damage associated molecular pattern (DAMP) molecules as mediators of systemic juvenile idiopathic arthritis. XIII Mediterranean Congress of Rheumatology, Cavtat, Clinic Experiment Rheumatol 2009;27(5):732.
- Delija A, Jelčić J, Kušter D, Kušter Ž, Badovinac O, Maltar Delija S, Bobek D. The influence of obesity on the risk of compression fractures of vertebral bodies in patients with postmenopausal osteoporosis. XIII Mediterranean Congress of Rheumatology, Cavtat, Clinic Experiment Rheumatol 2009;27(5):741.
- Lipozenčić J, Jakić-Razumović J, Ljubojević S, Bobek D. Is immunophenotyping a useful in diagnosis of Atopic dermatitis diagnosis? Abstract Book on International Symposium on Atopic Dermatitis. Giannetti, A; Ring, Johannes; Taieb, A; Thestrup-Pederson K (ur.). Rome: Medical Communications Srl, 2003. 70
- Lipozenčić J, Golub D, Milavec-Purelić V, Jakić-Razumović J, Basta-Juzbašić A. Expression of CD30+ and CD45RO+ in acute atopic dermatitis skin lesions. 24th CIA symposium: Allergy Frontiers and Futures, Bermuda, 2002. Collegium Internationale Allergologicum 48.
- Lipozenčić J, Mišetić Z, Gracin S, Golub D, Malenica R. Food allergy in atopic dermatitis. The atopy syndrome in the third millennium, Zurich, Switzerland, 1998. poster presentation.
- Lipozenčić, J, Mišetić Z, Golub D, Malenica, R. Food allergy on atopic dermatitis patients. Allergy. 54 (1999), suppl.,183-184.
- Lipozenčić J. Jakić-Razumović J. Ljubojević S. Bobek D. Immunophenotyping as useful diagnostic method for atopic dermatitis. 3. Kongres hrvatskih dermatovenerologa s međunarodnim sudjelovanjem.
- Bobek D, Jelušić-Dražić M, Kovačić N, Grčević D, Malčić I, Lukić IK. HMGB-1, S100A12, and RAGE as biomarkers of juvenile idiopathic arthritis. Simpozij s međunarodnim sudjelovanjem: Genetics in pediatric cardiology and rheumatology. Zagreb, 2013, knjiga sažetaka.

- Bobek D, Jelušić-Dražić M, Kovačić N, Grčević D, Lukić IK. The inverse relationship of soluble receptor for advanced glycation endproducts to HMGB1 in children with systemic lupus erythematosus, Genova 2012.
- Bobek D, Jelušić-Dražić M, Kovačić N, Grčević D, Lukić IK. „Damage associated molecular pattern (DAMP) molecules as mediators of systemic juvenile idiopathic arthritis“. XIII Mediterranean Congress of Rheumatology, Cavtat 2010.
- Bobek D, Žagar I, Kovač Durmiš K, Perić P, Čurković B. „Ocjena aktivnosti ankilozantnog spondilitisa BASDAI/ASDAS mjernim instrumentima“. XIII godišnji kongres hrvatskog reumatološkog društva HLZ-a, Cavtat, 2011. Reumatizam. 2011;58:138
- Bobek D, Jelušić-Dražić M, Kovačić N, Grčević D, Lukić IK. „Visoka razina alarmina HMGB1 uz nisku razinu njegova topiva receptora sRAGE u juvenilnom sistemskom eritemskom lupusu“. XIV godišnji kongres hrvatskog reumatološkog društva HLZ-a, Šibenik, 2012. Reumatizam
- Jelušić M, Bobek D, Grčević D, Kovačić N, Lukić A, Malčić I, Lukić IK. Visoka razina alarmina HMGB-1 uz nisku razinu njegova topljiva receptora sRAGE u juvenilnom sustavnom eritemskom lupusu (JSLE). X. Kongres Hrvatskog pedijatrijskog društva. Pula 2012, Paediatr Croat 2012;56 (suppl 2):14
- Lipozenčić J, Jakić-Razumović J, Ljubojević S, Bobek D. Immunophenotyping as useful diagnostic method for atopic dermatitis. 3. Kongres hrvatskih dermatovenerologa s međunarodnim sudjelovanjem. Split, Croatia 18-21 May 2006.
- Bobek D; Lipozenčić J; Milavec- Puretic V; Jakic-Razumovic J; Basta-Juzbasic A. Expression of CD30+ and CD45+ RO in Acute Atopic Dermatitis Skin Lesions // Allergy Frontiers and Futures, Proceedings of the 24th Symposium of the Collegium Internationale Allergologicum / Bienenstock JB ; Ring J ; Togias AGT, editor(s). Cambridge: Hogrefe Publishing Corp., 2004. Str. 266-268.
- Bobek D; Lipozenčić J; Milavec-Puretić V; Jakić-Razumović J; Basta-Juzbašić A. Expression of CD30+ and CD45+ RO in Acute Atopic Dermatitis Skin Lesions. // Allergy Frontiers and Futures, Proceedings of the 24th Symposium of the Collegium Internationale Allergologicum, Allergy & Clinical Immunology International - Journal of the World Allergy Organization 2004 / Bienenstock, Ring, Togias, editor(s).Njemačka: Hogrefe and Huber, 2004. Str. 266-268.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ines Bojanić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre, Department of Transfusion Medicine and Transplantation Biology

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Laboratory approach to haematopoietic stem cells transplantation

BIOGRAPHY

Date and place of birth

27.7.1964. Karlovac

Education

1988. Medical Doctor, Zagreb University School of Medicine

1990., postgraduate study in Oncology, Zagreb School of Medicine

1992 postgraduate study Mother and Child Health Care (1992), Zagreb School of Medicine

1993-1996, specialization in transfusion medicine, UHC Zagreb

Work experience

1990-1991 General practitioner, Zagreb

1993-1996 residency in transfusion medicine, UHC Zagreb

Since 1996, specialist-in transfusion medicine,

Since 2001. Head of Apheresis Unit, Department of Transfusion Medicine and Transplantation Medicine, UHC Zagreb

Academic degrees

2000. Master of Science Thesis, Longterm treatment of prolactinoma with bromokriptin, Zagreb School of Medicine

2009 PhD Thesis: Peripheral blood hematopoietic stem cell collection with large volume apheresis , Zagreb School of Medicine

Teaching

-since 2002. : College professor, University of Applied Health Studies Zagreb

-since 2006. –postgraduate studies: Biomedicine and Health Sciences; Transfusion medicine, Internal medicine, Haematology, Abdominal surgery, Anaestology, Zagreb Medical School.

Publications

-author or coauthor of 6 papers in journals indexed in Current Contents

-author or coauthor of 4 papers in journals indexed in SCI-EXP/SSCI

-author or coauthor of 16 papers in journals indexed in Index Medicus, Excerpta Medica

-author or coauthor of 11 chapters in books

-coauthor of 5 chapters in textbooks

-author or coauthor of 10 abstracts and congress presentations published in journals indexed in Current Contents

-author or coauthor of 159 congress meeting presentation

Research interest

- clinical transfusiology, transplantation medicine, tissue and cell banking, ,quality assurance in health care

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

03.10.2011. research associate

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Golubić Ćepulić B, Bojanić I. Laboratorijski aspekti transplantacije krvotvornih matičnih stanica. U: Sertić J. i sur. Klinička kemija i molekularna dijagnostika u kliničkoj praksi. Zagreb: Medicinska naklada, 2015: 553-559.
2. Golubić-Ćepulić B, Bojanić I Sustav krvnih grupa i njihova klinička važnost. U: Labar B i sur: Hematologija. 3. izd. Zagreb: Školska knjiga, 2017:635-640.
3. Golubić-Ćepulić B, Bojanić I. Osobitosti transfuzijskog liječenja. U: Labar B i sur: Hematologija. 3. izd. Zagreb: Školska knjiga, 2017:645-657.
4. Golubić-Ćepulić B, Bojanić I. Prikupljanje, obrada i pohrana krvotvornih matičnih stanica. U: Labar B i sur: Hematologija. 3. izd. Zagreb: Školska knjiga, 2017:657-663.
5. Golubić-Ćepulić B, Bojanić I. Neželjene reakcije na transfuziju. U: Labar B i sur: Hematologija. 3. izd. Zagreb: Školska knjiga, 2017:664-672.
6. Bojanic I, Cepulic BG, Mazic S, Batinic D, Nemet D, Labar B. Toxicity related to autologous peripheral blood haematopoietic progenitor cell infusion is associated with number of granulocytes in graft, gender and diagnosis of multiple myeloma. Vox Sanguinis 2008; 95:70-75. doi: 10.1111/j.1423-0410.2008.01060.x.
7. Raos M, Nemet D, Bojanić I, Sertić D, Batinić D, Dušak V, Mazić S, Golubić Ćepulić B, Labar B. Collection and composition of autologous peripheral blood stem cells graft in patients with acute myeloid leukemia: influence on hematopoietic recovery and outcome. Collegium Antropologicum 2010; 34:105-15.
8. Bojanic I, Dubravcic K, Batinic D, Golubic Cepulic B, Mazic S, Hren D, Nemet D, Labar B. Large volume leukapheresis: Efficacy and safety of processing patient's total blood volume six times. Trans Apheres Sci 2011; 44: 139-47. doi: 10.1016/j.transci.2011.01.005.
9. Bojanic I, Serventi Seiwert R, Golubic Cepulic B, Mazic S, Lukic M, Raos M, Plenkovic F, Golemovic M, Dubravcic K, Perkovic S, Batinic D, Labar B. Treatment of chronic GVHD with extracorporeal photochemotherapy. Transfus Apher Sci 2013; 48:193-4. doi: 10.1016/j.transci.2013.02.033.
10. Bojanic I, Mazic S, Rajic L, Jakovljevic G, Stepan J, Cepulic BG. Large volume leukapheresis is efficient and safe even in small children up to 15 kg body weight. Blood Transfus. 2017 doi: 10.2450/2016.0151-15.
11. Tomac G, Bojanić I, Mazić S, Vidović I, Raos M, Ćepulić BG, Seiwert RS, Kelečić J, Labar B. Haemolysis, pure red cell aplasia and red cell antibody formation associated with major and bidirectional ABO incompatible haematopoietic stem cell transplantation. Blood Transfus 2017; 19:1-8. doi: 10.2450/2017.0322-16.
12. Bojanic I, Mravak Stipetic M, Pulanic D, Desnica L, Mazic S, Golubic Cepulic B, Serventi Seiwert R, Vrhovac R, Nemet D, Pavletic SZ. Autologous blood as a source of platelet gel for the effective and safe treatment of oral chronic graft-versus-host disease. Transfusion. 2018 Jun;58(6):1494-1499. doi: 10.1111/trf.14594. Epub 2018 Mar 14.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Bojanic I, Cepulic BG, Mazic S, Batinic D, Nemet D, Labar B. Toxicity related to autologous peripheral blood haematopoietic progenitor cell infusion is associated with number of granulocytes in graft, gender and diagnosis of multiple myeloma. Vox Sanguinis 2008; 95:70-75. doi: 10.1111/j.1423-0410.2008.01060.x.

2. Raos M, Nemet D, Bojanić I, Sertić D, Batinić D, Dušak V, Mazić S, Golubić Čepulić B, Labar B. Collection and composition of autologous peripheral blood stem cells graft in patients with acute myeloid leukemia: influence on hematopoietic recovery and outcome. *Collegium Antropologicum* 2010; 34:105-15.
3. Bojanic I, Dubravcic K, Batinic D, Golubic Cepulic B, Mazic S, Hren D, Nemet D, Labar B. Large volume leukapheresis: Efficacy and safety of processing patient's total blood volume six times. *Trans Apheres Sci* 2011; 44: 139-47. doi: 10.1016/j.transci.2011.01.005.
4. Bojanic I, Serventi Seiwert R, Golubic Cepulic B, Mazic S, Lukic M, Raos M, Plenkovic F, Golemovic M, Dubravcic K, Perkovic S, Batinic D, Labar B. Treatment of chronic GVHD with extracorporeal photochemotherapy. *Transfus Apher Sci* 2013; 48:193-4. doi: 10.1016/j.transci.2013.02.033.
5. Jakovljević G; Rogošić S; Stepan Giljević J; Bonevski A, Jadrijević Cvrlje F, Bojanić I, Golubić Čepulić B, Batinić D. Specificities of Autologous Haematopoietic Stem Cell Transplantation in Children: A Single Centre Experience. *Journal of Hematology & Thromboembolic Diseases*.2(2014), 2; 1000136-1-1000136-6
6. Stegmayr B, Mörtzell Henriksson M, Newman E, Witt V, Derfler K, Leitner G, Eloit S, Dhondt A, Deeren D, Rock G, Ptak J, Blaha M, Lanska M, Gasova Z, Bhuiyan-Ludvikova Z, Hrdlickova R, Ramlow W, Prophet H, Liumbruno G, Mori E, Griskevicius A, Audzijoniene J, Vrielink H, Rombout-Sestrienkova E, Aandahl A, Sikole A, Tomaz J, Lalic K, Bojanic I, Strineholm V, Brink B, Berlin G, Dykes J, Toss F, Nilsson T, Knutson F, Ramsauer B, Wahlstrom A. Distribution of indications and procedures within the framework of centers participating in the WAA apheresis registry. *Transfus Apher Sci*. 2017 Feb;56(1):71-74. doi: 10.1016/j.transci.2016.12.023. Review.
7. Bojanic I, Mazic S, Rajic L, Jakovljevic G, Stepan J, Cepulic BG. Large volume leukapheresis is efficient and safe even in small children up to 15 kg body weight. *Blood Transfus*. 2017 Jan;15(1):85-92. doi: 10.2450/2016.0151-15.
8. Tomac G, Bojanić I, Mazić S, Vidović I, Raos M, Čepulić BG, Seiwert RS, Kelečić J, Labar B. Haemolysis, pure red cell aplasia and red cell antibody formation associated with major and bidirectional ABO incompatible haematopoietic stem cell transplantation. *Blood Transfus* 2017; 19:1-8. doi: 10.2450/2017.0322-16.
9. Bojanic I, Mravak Stipetic M, Pulanic D, Desnica L, Mazic S, Golubic Cepulic B, Serventi Seiwert R, Vrhovac R, Nemet D, Pavletic SZ. Autologous blood as a source of platelet gel for the effective and safe treatment of oral chronic graft-versus-host disease. *Transfusion*. 2018 Jun;58(6):1494-1499. doi: 10.1111/trf.14594. Epub 2018 Mar 14.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2007. project Lymphoproliferativ diseases and HSC transplantation; No.108-1081872-2061 Ministry of Health of Republic of Croatia
2007. project Molecular markers in solid tumors – predictive and prognostic characteristics ; Np. 108-1080058-0047 Ministry of Health of Republic of Croatia

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2013. project “Clinical and biological factors determining severity and activity of chronic graft- versus-host disease after allogeneic hematopoietic stem cell transplantation, Unity Through Knowledge Fund (UKF)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

/

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Tomislav Bokun, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of Gastroenterology, hepatology and clinical nutrition; University Hospital Dubrava

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Advanced ultrasonography in gastroenterology and hepatology;

BIOGRAPHY

Tomislav Bokun, MD, PhD, internal medicine specialist and gastroenterologist, born in 1982 in Zagreb. He graduated medicine and defended his thesis at the University of Zagreb School of Medicine, and for one year he worked as a research assistant at Imperial College London. He is associate faculty for university course on Pathophysiology and Pathology at University of Zagreb Faculty of Pharmacy and Biochemistry and also teaches at Gastroenterology residency program at University of Zagreb School of Medicine. His professional and research interests are ultrasound methods in hepatology and diseases of pancreato-biliary tract diseases. He authored and co-authored a dozen of scientific publications, of which 13 in Current Contents, and has more than 500 independent citations. He organizes Adriatic ERCP Workshop, and since 2013. he is the president of Youth Section of Croatian Society of Gastroenterology.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Grgurevic I, Salkic N, Bozin T, Mustapic S, Matic V, Dumic-Cule I, Tjesic Drinkovic I, Bokun T. Magnitude dependent discordance in liver stiffness measurements using elastography point quantification with transient elastography as the reference test. *Eur Radiol.* 2018 doi: 10.1007/s00330-018-5831-2.
2. Mustapic S, Ziga S, Matic V, Bokun T, Radic B, Lucijanic M, Marusic S, Babic Z, Grgurevic I. Ultrasound Grade of Liver Steatosis Is Independently Associated with the Risk of Metabolic Syndrome. *Can J Gastroenterol Hepatol.* 2018;2018:8490242. doi: 10.1155/2018/8490242. eCollection 2018.
3. Grgurevic I, Bokun T, Salkic NN, Brkljacic B, Vukelić-Markovic M, Stoos-Veic T, Aralica G, Rakic M, Filipec-Kanizaj T, Berzigotti A. Liver elastography malignancy prediction score for noninvasive characterization of focal liver lesions. *Liver Int.* 2017;38(6):1055-1063.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1: Grgurevic I, Salkic N, Bozin T, Mustapic S, Matic V, Dumic-Cule I, Tjesic Drinkovic I, Bokun T. Magnitude dependent discordance in liver stiffness measurements using elastography point quantification with transient elastography as the reference test. *Eur Radiol.* 2019 May;29(5):2448-2456. doi: 10.1007/s00330-018-5831-2. Epub 2018 Nov 28. PubMed PMID: 30488108.
- 2: Božin T, Mustapić S, Bokun T, Patrlj L, Rakić M, Aralica G, Kujundžić M, Trkulja V, Grgurević I. Albi Score as a Predictor of Survival in Patients with Compensated Cirrhosis Resected for Hepatocellular Carcinoma: Exploratory Evaluation in Relationship to Palbi and Meld Liver Function Scores. *Acta Clin Croat.* 2018 Jun;57(2):292-300. doi: 10.20471/acc.2018.57.02.09. PubMed PMID: 30431722; PubMed Central PMCID: PMC6531997.
- 3: Mustapic S, Ziga S, Matic V, Bokun T, Radic B, Lucijanic M, Marusic S, Babic Z, Grgurevic I. Ultrasound Grade of Liver Steatosis Is Independently Associated with the Risk of Metabolic Syndrome. *Can J Gastroenterol Hepatol.* 2018 Aug 23;2018:8490242. doi: 10.1155/2018/8490242. eCollection 2018. PubMed PMID: 30211140; PubMed Central PMCID: PMC6126110.
- 4: Mikolašević I, Bokun T, Filipec Kanižaj T. Gastroesophageal reflux disease, Barrett esophagus, and esophageal adenocarcinoma - where do we stand? *Croat Med J.* 2018 Jun 30;59(3):97-99. PubMed PMID: 29972731; PubMed Central PMCID: PMC6045895.

- 5: Mikolasevic I, Bokun T, Filipec-Kanizaj T. Editorial Comment to Non-invasive assessment of kidney allograft fibrosis with shear wave elastography: A radiological-pathological correlation analysis. *Int J Urol*. 2018 May;25(5):456. doi: 10.1111/iju.13573. Epub 2018 Apr 12. PubMed PMID: 29651805.
- 6: Grgurevic I, Bokun T, Salkic NN, Brkljacic B, Vukelić-Markovic M, Stoos-Veic T, Aralica G, Rakic M, Filipec-Kanizaj T, Berzigotti A. Liver elastography malignancy prediction score for noninvasive characterization of focal liver lesions. *Liver Int*. 2018 Jun;38(6):1055-1063. doi: 10.1111/liv.13611. Epub 2017 Nov 3. PubMed PMID: 29028279.
- 7: Grgurevic I, Bokun T, Bozin T, Matic V, Haberle S, Sporea I. Non-invasive diagnosis of portal hypertension in cirrhosis using ultrasound based elastography. *Med Ultrason*. 2017 May 3;19(3):310-317. doi: 10.11152/mu-1019. Review. PubMed PMID: 28845498.
- 8: Bokun T, van den Brink GR. Young GI Angle: How to apply for a grant. *United European Gastroenterol J*. 2017 Feb;5(1):142-143. doi: 10.1177/0144739417691023. Epub 2017 Jan 31. PubMed PMID: 28405335; PubMed Central PMCID: PMC5384543.
- 9: Grgurevic I, Kujundzic M, Banic M, Kusec R, Bokun T, Vukelic-Markovic M, Bogdanovic Z, Lukic A, Tsochatzis E, Brkljacic B. Subtypes and clinical significance of common bile duct varices in portal vein thrombosis: diagnosis and follow-up by Doppler US and EUS. *Abdom Radiol (NY)*. 2016 Mar;41(3):476-84. doi: 10.1007/s00261-015-0596-4. PubMed PMID: 27039318.
- 10: Grgurević I, Bokun T, Mustapić S, Trkulja V, Heinzl R, Banić M, Puljiz Ž, Lukšić B, Kujundžić M. Real-time two-dimensional shear wave ultrasound elastography of the liver is a reliable predictor of clinical outcomes and the presence of esophageal varices in patients with compensated liver cirrhosis. *Croat Med J*. 2015 Oct;56(5):470-81. PubMed PMID: 26526884; PubMed Central PMCID: PMC4655932.
- 11: Grgurevic I, Puljiz Z, Brnic D, Bokun T, Heinzl R, Lukic A, Luksic B, Kujundzic M, Brkljacic B. Liver and spleen stiffness and their ratio assessed by real-time two dimensional-shear wave elastography in patients with liver fibrosis and cirrhosis due to chronic viral hepatitis. *Eur Radiol*. 2015 Nov;25(11):3214-21. doi: 10.1007/s00330-015-3728-x. Epub 2015 Apr 23. PubMed PMID: 25903706.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Associate researcher on project of the Croatian Science Foundation „The role of the Wnt signaling pathway in the epithelial-mesenchymal transition“ 2016-2018. WNT4EMT (6625);
2. European Union European Regional Development Fund, Operational Programme Competitiveness and Cohesion, grant agreement no. KK.01.1.1.01.0007, CoRE – Neuro".

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Associate Professor Ana Borovčki, MD, PhD, MPH

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine , University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Health and public health risks management in crisis situations; Evidence-based medicine; Structure, methodology and functioning of scientific work 1; Characteristics of clinical medical research; Genomic approaches in biomedical and translational research

BIOGRAPHY

Ana Borovečki, was born in Zagreb in 1973 where she has finished Classical Gimansium. In 1998 she graduated medicine from the School of Medicine, University of Zagreb. In 2000 she got bachelor degree in philosophy and comparative literature from the School of Philosophy, University of Zagreb. In 2004 she got European Master of Bioethics degree from the Catholic University of Leuven, Belgium. In 2007 she got PhD degree from Radboud University in Nijmegen, the Netherlands. The title of the thesis was Ethics Committees in Croatia“. She is specialist of clinical pharmacology and toxicology and Master of Public Health. She works at Andrija Štampar, School of Public Health, School of Medicine, University of Zagreb, as Associate Professor.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 29.2.2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Vucemilo L, Borovecki A. Informed Consent in Croatia. A Work in Progress. Cambridge quarterly of healthcare ethics 2014; 23: 356-360.
2. Luka V, Milosevic M, Babić- Bosanac S. Mustajbegovic J, Borovecki A. Is there a need to improve the informed consent procedures in Croatia- a pilot field survey on a representative sample, a food for thought? Revista Romana de Bioetica 2014; 1: 25-33.
3. Curkovic M., Milosevic M, Borovecki A, Mustajbegovic J. Physicians' interpersonal relationships and professional standing seen through the eyes of the general public in Croatia, Patient Preference and Adherence 2014;8: 1135-1142.
4. Borovecki A, Caenazzo L, Jezek D, Karija-Vlahovic Monika, Golubic B. Croatian National Centre for Biobanking- a new perspective in biobanks governance? Croatian Medical Journal 2014;55:416-22.
5. Borovecki A, Einarsdottir J, O'Mathuna D, Pospieszna P, Stern OM, Oliva Teles N. 20 years of the ICRC Code of Conduct for Disaster Relief: what do we need to improve?. Lancet 2015; 385:1391.
6. Vucemilo L, Borovecki A. Readability and Content Assessment of Informed Consent Forms for Medical Procedures in Croatia. PLOS One 2015; 10(9):e0138017.
7. Vučemilo L, Milošević M, Dodig D, Grabušić B, Đapić B, Borovečki A. The quality of informed consent in Croatia- a cross-sectional study and instrument development. Patient education and counseling 2016;3: 436-442.
8. Borovečki A, Babić-Bosanac S. Discourse, ethics, public health, abortion, and conscientious objection in Croatia. Croatian medical journal 2017;4:316-321.
9. Borovečki A, Mlinarić A, Horvat M, Supak Smolčić V. Informed consent and ethics committee approval in laboratory medicine. Biochemia Medica 2018; 3:030201.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Vucemilo L, Borovecki A. Informed Consent in Croatia. A Work in Progress. Cambridge quarterly of healthcare ethics 2014; 23: 356-360.
2. Luka V, Milosevic M, Babić- Bosanac S. Mustajbegovic J, Borovecki A. Is there a need to improve the informed consent procedures in Croatia- a pilot field survey on a representative sample, a food for thought? Revista Romana de Bioetica 2014; 1: 25-33.
3. Curkovic M., Milosevic M, Borovecki A, Mustajbegovic J. Physicians' interpersonal relationships and professional standing seen through the eyes of the general public in Croatia, Patient Preference and Adherence 2014;8: 1135-1142.
4. Borovecki A, Caenazzo L, Jezek D, Karija-Vlahovic Monika, Golubic B. Croatian National Centre for Biobanking- a new perspective in biobanks governance? Croatian Medical Journal 2014;55:416-22.
5. Borovecki A, Einarsdottir J, O'Mathuna D, Pospieszna P, Stern OM, Oliva Teles N. 20 years of the ICRC Code of Conduct for Disaster Relief: what do we need to improve?. Lancet 2015; 385:1391.
6. Vucemilo L, Borovecki A. Readability and Content Assessment of Informed Consent Forms for Medical Procedures in Croatia. PLOS One 2015; 10(9):e0138017.
7. Vučemilo L, Milošević M, Dodig D, Grabušić B, Đapić B, Borovečki A. The quality of informed consent in Croatia-a cross-sectional study and instrument development. Patient education and counseling 2016;3: 436-442.
8. Borovečki A, Babić-Bosanac S. Discourse, ethics, public health, abortion, and conscientious objection in Croatia. Croatian medical journal 2017;4:316-321.
9. Borovečki A, Mlinarić A, Horvat M, Supak Smolčić V. Informed consent and ethics committee approval in laboratory medicine. Biochemia Medica 2018; 3:030201.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Allinace for Life, Horizont 2020 projekt
Osteoprospline, Horizont 2020 projekt
VAL-DE-END HRZZ projekt IP-06-2016
COST Action Disaster Bioethics

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Allinace for Life, Horizont 2020 projekt
Osteoprospline, Horizont 2020 projekt
VAL-DE-END HRZZ projekt IP-06-2016
COST Action Disaster Bioethics

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

3

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assoc. Professor Fran Borovečki, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY:

Structure, methodology and functioning of scientific work 3: Research Projects;

Genomic approaches in biomedical and translational research;

Clinical neuropharmacology;

Research methods of psychological functions and behaviour;

Movement disorders;

Selected chapters of epileptology of developmental age;

Methods of molecular biology in medicine;

BIOGRAPHY

Professor Fran Borovecki was born in 1975 in Zagreb, Croatia. He graduated from Zagreb Medical School in 1999 and attained his PhD from Zagreb Medical School in 2004. He was a visiting research scientist at Harvard Medical School on several occasions from 2003 to 2007 and was also a visiting research scientists at New York University. Since 2007 he has headed the Department for Functional Genomics at the Center for Translational and Clinical Research, University of Zagreb School of Medicine. Since 2012 he has been employed as a board certified neurologist at the Department of Neurology, University Hospital Center Zagreb. Prof. Borovecki was appointed the acting Director of the Center for Translation and Clinical Research, University of Zagreb School of Medicine and University Hospital Center Zagreb in 2015. Since 2017 he serves as the Head of the Division for Movement Disorders, at the Department of Neurology, University Hospital Center Zagreb. Prof. Borovecki's area of scientific and clinical interest is genetics of neurological diseases. He has published 59 scientific papers indexed in CC and WoS databases which have been cited 1961 times according to the Scopus database, published 12 book chapters and has held more than 40 invited lectures at national and international scientific conferences. Prof. Borovecki is the recipient of the Award for Best PhD Thesis defended at Zagreb Medical School for year 2003/2004 and was awarded the National Science Foundation of Croatia Scholarship and the Fulbright Scholarship, as well as Michael J. Fox Foundation Rapid Response Innovation Award.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 18.06.2012.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Borovečki F, Lovrečić L, Zhou J, Jeong H, Then F, Rosas HD, Hersch SM, Hogarth P, Bouzou B, Jensen RV, Krainc D. Genome-wide expression profiling of human blood reveals biomarkers for Huntington's disease. *Proc Natl Acad Sci U S A*, 2005;102:11023-8.

Cui L, Jeong H, Borovečki F, Parkhurst CN, Tanese N, Krainc D. Transcriptional repression of PGC-1alpha by mutant huntingtin leads to mitochondrial dysfunction and neurodegeneration. *Cell*, 2006;127:59-69.

Nedic G, Nikolac M, Nenadic KS, Muck-Seler D, Borovecki F, Pivac N. Association study of a functional catechol-O-methyltransferase (COMT) Val108/158Met polymorphism and suicide attempts in patients with alcohol dependence. *Int J Neuropsychopharmacol*. 2010;22:1-12.

Pivac N, Knezević A, Gornik O, Pucić M, Igl W, Peeters H, Crepel A, Steyaert J, Novokmet M, Redzić I, Nikolac M, Hercigonja VN, Curković KD, Curković M, Nedić G, Muck-Seler D, Borovecki F, Rudan I, Lauc G.. Human plasma glycome in attention-deficit hyperactivity disorder and autism spectrum disorders. *Mol Cell Proteomics*. 2011;10:M110.004200.

Gotovac K, Hajnsek S, Bosnjak Pasic M, Pivac N, Borovecki F. Personalized Medicine in Neurodegenerative Diseases: How Far Away? *Mol Diagn Ther*. 2014;18:17-24.

Jakovljevic M, Borovecki F. Epigenetics, Resilience, Comorbidity and Treatment Outcome. *Psychiatr Danub*. 2018;30:242-253.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Strac DS, Erjavec GN, Perkovic MN, Sviglin KN, Borovecki F, Pivac N. Association of GABAA receptor $\alpha 2$ subunit gene (GABRA2) with alcohol dependence-related aggressive behavior. *Prog Neuropsychopharmacol Biol Psychiatry*. 2015;63:119-25.

Babić Leko M, Borovečki F, Dejanović N, Hof PR, Šimić G. Predictive Value of Cerebrospinal Fluid Visinin-Like Protein-1 Levels for Alzheimer's Disease Early Detection and Differential Diagnosis in Patients with Mild Cognitive Impairment. *J Alzheimers Dis*. 2016;50:765-78.

Gotovac K, Nikolac Perković M, Pivac N, Borovečki F. Biomarkers of aggression in dementia. *Prog Neuropsychopharmacol Biol Psychiatry*. 2016;69:125-30.

Kiđemet-Piskač S, Babić Leko M, Blažeković A, Langer Horvat L, Klepac N, Sonicki Z, Kolenc D, Hof PR, Boban M, Mimica N, Borovečki F, Šimić G. Evaluation of cerebrospinal fluid phosphorylated tau231 as a biomarker in the differential diagnosis of Alzheimer's disease and vascular dementia. *CNS Neurosci Ther*. 2018;24:734-740.

Blažeković A, Ozretić D, Habek M, Bilić E, Borovečki F. Neurosyphilis: The shape of a rising threat. *Int J Infect Dis*. 2018;76:1-3.

Paiva I, Jain G, Lázaro DF, Jerčić KG, Hentrich T, Kerimoglu C, Pinho R, Szegő ĘM, Burkhardt S, Capece V, Halder R, Islam R, Xylaki M, Caldi Gomes LA, Roser AE, Lingor P, Schulze-Hentrich JM, Borovečki F, Fischer A, Outeiro TF. Alpha-synuclein deregulates the expression of COL4A2 and impairs ER-Golgi function. *Neurobiol Dis*. 2018;119:121-135.

Pinho R, Paiva I, Jercic KG, Fonseca-Ornelas L, Gerhardt E, Fahlbusch C, Garcia-Esparcia P, Kerimoglu C, Pavlou MA, Villar-Piqué A, Szego É, Fonseca TL, Odoardi F, Soeroes S, Rego AC, Fischle W, Schwamborn JC, Meyer T, Kügler S, Ferrer I, Attems J, Fischer A, Becker S, Zweckstetter M, Borovecki F, Outeiro TF. Nuclear localization and phosphorylation modulate pathological effects of Alpha-Synuclein. *Hum Mol Genet*. 2018 Sep 13.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

EU FP7 - „Integrating and Strengthening Genomic Research in South-Eastern Europe – INTEGERS“ (01. 05. 2008. – 30. 04. 2010.) - Koordinator

Unity through Knowledge Fund (UKF) - „Location analysis of alpha-synuclein promoter binding in Parkinson's disease“ (01. 09. 2008 – 31. 08. 2010.) - Voditelj

Michael J. Fox Foundation – Rapid Response Innovation Award „Deciphering the molecular effects of alpha-synuclein in the nucleus: DNA binding and transcriptional dyseregulation“ (2010.-2011.) - Voditelj

Sveučilište u Zagrebu Fond za razvoj – program Svijet – „Internacionalni okvir za unapređenje genomskih kapaciteta u biomedicinskim istraživanjima“ (2011.-2012.) – Voditelj

MZOŠ RH - „Genomska analiza transkriptoma i interaktoma u bolesnika s kompleksnim bolestima“ (2007.-2013.) - Voditelj

HIT Tehnologijski projekt – “Ciljani aCGH čipovi za dijagnostiku neurorazvojnih bolesti” (2011.-2014.) – Voditelj

Parkinson’s UK – “The role of glycosylation in Parkinson’s disease” – Voditelj (2012.-2013.)

HRZZ – Istraživački projekt – „Otkrivanje i praćenje bioloških biljega radi rane terapijske intervencije u Alzheimerovoj bolesti” (2011.-2014.) – Suradnik

HRZZ – Istraživački project – „Molekulska profiliranje i proteomika karcinoma urotela” (2011. – 2014.) – Suradnik

EU – COST Action – „Structure-based drug design for diagnosis and treatment of neurological diseases: dissecting and modulating complex function in the monoaminergic systems of the brain” – Suradnik (2011.-2015.)

EU – COST Action – „Arterial spin labeling in dementia” – Suradnik (2012.-2015.)

DAAD - „Post-translational modifications of proteins in pathophysiology of Parkinson’s disease” – Voditelj (2014.-2015.)

DAAD - „The role of nuclear alpha-synuclein on transcriptional modulation in mouse models of Parkinson’s disease ” – Voditelj (2015.-2017.)

Adris zaklada – „NGS tests for neurodevelopmental disorders” – Voditelj (2016.-2017.)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

HRZZ – Istraživački projekt – „Genetski mehanizmi lizosomalne disfunkcije u Parkinsonovoj bolesti” (2014.-2018.) – Voditelj

BICRO/HAMAG potpora za transfer tehnologije – „Genomski testovi za dijagostiku neurorazvojnih bolesti” – Voditelj (2016.-2018.)

DAAD - „The role of lysosomal dysfunction on protein accumulation in Parkinson's disease” – Voditelj (2018.-2019.)

HRZZ – Istraživački projekt – „Hyperphosphorylation, aggregation and transsynaptic transmission of tau protein in Alzheimer’s disease: CSF analysis and testing of putative neuroprotective compounds” – Suradnik (2016.-2020.)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

4

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist.prof.dr.med. Zrinka Bošnjak

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: MEF Zagreb, UHC Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of molecular biology in medicine

BIOGRAPHY

Zrinka Bošnjak was born on September 18, 1972 in Split, Croatia. Graduated from the Faculty of Medicine of the University of Zagreb in 1997. and obligated to practice at the Clinical Hospital "Sestre Milosrdnice" and in 1999 passed a state examination at the Ministry of Health. Since 2004 she has been working at the Clinical Hospital Center in Zagreb where she has been granted specialization in clinical microbiology. Specialist exam in 2008. In 2007, she spent a month at the Masstricht Educational School at the University Clinic. A month of education is being conducted in 2009 at the University Clinic in Muenster. In 2009 she was appointed as Assistant Professor of Medical Microbiology Department of Parasitology.

Degree younger assistant achieved in 2010. Scientific associate since 2010. Senior research associate since 2012. The Doctor of Medical Sciences at the Faculty of Medicine of the University of Zagreb became 2009 defending her dissertation under the title "Mechanisms of Resistance to Betalactamic Antibiotics in Clinical Isolate of *Klebsiella pneumoniae*", Faculty of Medicine, University of Zagreb.

She is a collaborator on a scientific project approved by the Ministry of Science, Education and Sports of the Republic of Croatia. Areas of active interest: hospital infections, molecular typing of microorganisms, clinical microbiology, bacterial resistance to antibiotics. Other areas of interest: education in medicine, circulation of multi-resistant pathogens from the chronic sector to acute (hospital). She has participated as a lecturer at several domestic and international congresses. It is active in English speaking language and script. Sovereign uses MS Office applications and the Internet. Participated in international courses and workshops.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 30.06.2014.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Carbapenem resistance and acquired class D beta-lactamases in *Acinetobacter baumannii* from Croatia 2009-2010. Vranić-Ladavac M, Bedenić B, Minandri F, Ištók M, Bošnjak Z, Frančula-Zaninović S, Ladavac R, Visca P. Eur J Clin Microbiol Infect Dis. 2013 Nov 6.
2. Surveillance of Surgical Site Infection after Cholecystectomy Using the Hospital in Europe Link for Infection Control through Surveillance Protocol. Bogdanic B, Bosnjak Z, Budimir A, Augustin G, Milosevic M, Plecko V, Kalenic S, Fiolic Z, Vanek M. Surg Infect (Larchmt). 2013 Apr 16.
3. NDM-1-producing *Klebsiella pneumoniae*, Croatia. Mazzariol A, Bošnjak Z, Ballarini P, Budimir A, Bedenić B, Kalenić S, Cornaglia G. Emerg Infect Dis. 2012 Mar;18(3):532-4.
4. The screening of methicillin-resistant staphylococcus aureus in vascular surgery patients: a comparison of molecular testing and broth-enriched culture. Fiolic Z, Bosnjak Z, Snajdar I, Gregorek AC, Kalenic S, Budimir A. Chemotherapy. 2012;58(4):330-6.
5. The European Centre for Disease Prevention and Control (ECDC) pilot point prevalence survey of healthcare-associated infections and antimicrobial use. Zarb P, Coignard B, Giskeviciene J, Muller A, Vankerckhoven V, Weist K, Goossens M, Vaerenberg S, Hopkins S, Catry B, Monnet D, Goossens H,

Suetens C; National Contact Points for the ECDC pilot point prevalence survey; Hospital Contact Points for the ECDC pilot point prevalence survey. *Euro Surveill.* 2012 Nov 15;17(46). pii: 20316.

6. First report of KPC-producing *Klebsiella pneumoniae* in Croatia. Bedenić B, Mazzariol A, Plečko V, Bošnjak Z, Barl P, Vraneš J, Cornaglia G. *J Chemother.* 2012 Aug;24(4):237-9.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Carbapenem resistance and acquired class D beta-lactamases in *Acinetobacter baumannii* from Croatia 2009-2010. Vranić-Ladavac M, Bedenić B, Minandri F, Ištók M, Bošnjak Z, Frančula-Zaninović S, Ladavac R, Visca P. *Eur J Clin Microbiol Infect Dis.* 2013 Nov 6.

2. Surveillance of Surgical Site Infection after Cholecystectomy Using the Hospital in Europe Link for Infection Control through Surveillance Protocol. Bogdanic B, Bosnjak Z, Budimir A, Augustin G, Milosevic M, Plecko V, Kalenic S, Fiolic Z, Vanek M. *Surg Infect (Larchmt).* 2013 Apr 16.

3. NDM-1-producing *Klebsiella pneumoniae*, Croatia. Mazzariol A, Bošnjak Z, Ballarini P, Budimir A, Bedenić B, Kalenić S, Cornaglia G. *Emerg Infect Dis.* 2012 Mar;18(3):532-4.

4. The screening of methicillin-resistant staphylococcus aureus in vascular surgery patients: a comparison of molecular testing and broth-enriched culture. Fiolic Z, Bosnjak Z, Snajdar I, Gregorek AC, Kalenic S, Budimir A. *Chemotherapy.* 2012;58(4):330-6.

5. The European Centre for Disease Prevention and Control (ECDC) pilot point prevalence survey of healthcare-associated infections and antimicrobial use. Zarb P, Coignard B, Griskeviciene J, Muller A, Vankerckhoven V, Weist K, Goossens M, Vaerenberg S, Hopkins S, Catry B, Monnet D, Goossens H, Suetens C; National Contact Points for the ECDC pilot point prevalence survey; Hospital Contact Points for the ECDC pilot point prevalence survey. *Euro Surveill.* 2012 Nov 15;17(46). pii: 20316.

6. First report of KPC-producing *Klebsiella pneumoniae* in Croatia. Bedenić B, Mazzariol A, Plečko V, Bošnjak Z, Barl P, Vraneš J, Cornaglia G. *J Chemother.* 2012 Aug;24(4):237-9.

7. Value of rapid aetiological diagnosis in optimization of antimicrobial treatment in bacterial community acquired pneumonia. Mareković I, Plecko V, Boras Z, Pavlović L, Budimir A, Bosnjak Z, Puretić H, Zele-Starcević L, Kalenić S. *Coll Antropol.* 2012 Jun;36(2):401-8.

8. Infrequent finding of metallo- β -lactamase VIM-2 in carbapenem-resistant *Pseudomonas aeruginosa* strains from Croatia. Sardelic S, Bedenic B, Colinon-Dupuich C, Orhanovic S, Bosnjak Z, Plecko V, Cournoyer B, Rossolini GM. *Antimicrob Agents Chemother.* 2012 May;56(5):2746-9. Epub 2012 Feb 27.

9. Meticilin-rezistentni *Staphylococcus aureus* (MRSA) u Hrvatskoj. Budimir A, Bošnjak Z, Kalenić S. *Infektološki glasnik.* 2012 travanj-lipanj 32(2): 59-66.

10. Guidelines on hand hygiene in health care institutions. Kalenić S, Budimir A, Bosnjak Z, Acketa L, Belina D, Benko I, Bosnjak D, Culo M, Jajić I, Kis M, Kos K, Koscák D, Kuzman I, Lekić D, Prugovecki D, Juraga AT. *Lijec Vjesn.* 2011 May-Jun;133(5-6):155-70

11. Distributed lags time series analysis versus linear correlation analysis (Pearson's r) in identifying the relationship between antipseudomonal antibiotic consumption and the susceptibility of *Pseudomonas aeruginosa* isolates in a single Intensive Care Unit of a tertiary hospital. Erdeljić V, Francetić I, Bošnjak Z, Budimir A, Kalenić S, Bielen L, Makar-Aušperger K, Likić R. *Int J Antimicrob Agents.* 2011 May;37(5):467-71. Epub 2011 Jan 31.

12. Clonal spread of CTX-M-15-producing *Klebsiella pneumoniae* in a Croatian hospital. Vranic-Ladavac M, Bosnjak Z, Beader N, Barisic N, Kalenic S, Bedenic B. *J Med Microbiol.* 2010 Sep;59(Pt 9):1069-78. Epub 2010 Jun 24.



13. Molecular epidemiology of *Acinetobacter baumannii* in central intensive care unit in Kosova Teaching Hospital. Raka L, Kalenć S, Bosnjak Z, Budimir A, Katić S, Sijak D, Mulliqi-Osmani G, Zoutman D, Jaka A.

Braz J Infect Dis. 2009 Dec;13(6):408-13.

14. Emergence of CTX-M group 1 extended-spectrum beta-lactamase-producing *Klebsiella pneumoniae* strains in the community. Bedenić B, Vranes J, Bosnjak Z, Marijan T, Mlinarić-Dzepina A, Kukovec T, Knezević J, Anusić M, Beader N, Barl P, Leskova V, Kalenić S. Med Glas Ljek komore Zenicko-dobojskog kantona. 2010 Feb;7(1):32-9.

15. VIM-2 beta-lactamase in *Pseudomonas aeruginosa* isolates from Zagreb, Croatia. Bosnjak Z, Bedenić B, Mazzariol A, Jarza-Davila N, Suto S, Kalenić S. Scand J Infect Dis. 2010 Mar;42(3):193-7.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

University Support "Molecular Detection of Resistance Gene to the Carbapenem Group of Antimicrobial Agents in Enterobacteria and *Acinetobacter* Isolates in Surgical Patients"

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

Supervisor

dr. Branka Bogdanića - «Analiza uporabe antimikrobnih lijekova i mikrobioloških nalaza kao metoda praćenja prevalencije bolničkih infekcija u kliničkoj bolnici»

K Krešimir Bašić, dr.med.dent. «Utjecaj pušenja na mikrobiološki sastav subgingivnog prostora mladih ljudi»

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Jadranka Božikov, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: retired

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Medical Informatics Methods; Structure, methodology and functioning of scientific work 1; Structure, methodology and functioning of scientific work 2

BIOGRAPHY

Born in Zagreb where she was educated. Graduated in mathematics from University of Zagreb Faculty of Science in 1977. At the School of Medicine University of Zagreb she completed postgraduate studies in Public Health (Management and Planning in Health Sciences track) and received both, Master in Medical Science (1988) and PhD degree (1997). In 1978 she has joined the Department of Medical Statistics, Epidemiology and Medical Informatics of the Andrija Štampar School of Public Health, School of Medicine, University of Zagreb, firstly as a professional associate and assistant, then advancing in the scientific-teaching professorships from an assistant professor (1998), associate professor (2004) and full professor (2010) to the permanent tenure full professor (2015).

She participated in several internationally supported projects intended for capacity building in public health and medical education, the first one was joint project of the Andrija Štampar School of Public Health and JICA - Japan International Cooperation Agency that already in mid-1980-ties established a Croatian network for continuing education for primary health care by the use of digital and video technology. Within the frame of this project Jadranka payed three-month study visit to Japan in 1985 and participated in the development of e-learning course wares. She served as Director of the Andrija Štampar School of Public Health from 2007 to 2016. She participated in public health projects in South East Europe, contributed to several European associations like ASPHER (Association of Schools of Public Health in the European Region), serves as a member of the editorial board of several scientific journals and reviewer of project proposals for national research funding agencies. Simulation modeling and its application in public health and biomedicine has been in focus of her scientific interest from the very beginning of her career.

For more than a decade she served as an assistant to the director of PhD program in Biomedicine and Health Sciences contributing to the establishemnt and development of this PhD program based on the Bologna process principles in 2003, including the organization of two European conferences on harmonization of PhD programs in biomedicine and health sciences held in Zagreb in 2004 and 2005 that led to the adoption of the Zagreb Declaration on PhD programs in Biomedicine and Health Sciences and the Standards for PhD Education in Biomedicine and Health Sciences in Europe. As a result of these conferences, the organization named ORPHEUS (Organization for PhD Education in Biomedicine and Health Sciences in the European System) was established.

Jadranka published several textbooks in the field of medical informatics and the use of information and communication technology in biomedicine, medical education, public health and health care, and she is participating reglrly at domestic and international scientific and professional meetings in the field of medical informatics and public health. She published some 200 scientific and professional papers in international and domestic medical journals, of which over 50 are indexed in the Web of Science Core Collection database with more than 400 citations (h-index = 12).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 14 April 2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Božikov J, Relic D, Dezelic G. Use of system dynamics modeling in medical education and research projects. *Stud Health Technol Inform.* 2018;247:830-4.

Hercigonja-Szekeres M, Šimić D, Božikov J, Vondra P. New study program: Interdisciplinary Postgraduate Specialist Study in Medical Informatics. *Stud Health Technol Inform.* 2014;197:115-9.

Mlinaric-Galinović G, Tabain I, Kukovec T, Vojnović G, Božikov J, Bogović-Cepin J, Ivković-Jureković I, Knezović I, Tešović G, Welliver RC. Analysis of biennial outbreak pattern of respiratory syncytial virus according to subtype (A and B) in the Zagreb region. *Pediatr Int.* 2012 Jun;54(3):331-5.

Zaletel-Kragelj L, Kovacic L, Bjegovic V, Božikov J, Burazeri G, Donev D, Galan A, Georgieva L, Pavlekovic G, Scintee SG, Bardehle D, Laaser U. Use and exchange of the teaching modules published in the series of handbooks prepared within the frame of the "Forum for Public Health in South-Eastern Europe" Network. *Zdrav Var.* 2012;51:237–50.

Vadla D, Božikov J, Akerström B, Cheung WY, Kovačić L, Mašanović M, Merilainen S, Mihel S, Nummelin-Niemi H, Stefanaki IN, Stencrantz B. Differences in healthcare service utilisation in elderly, registered in eight districts of five European countries. *Scand J Public Health.* 2011;39(3):272-9.

Book editor:

Bartlett W, Božikov J, Rechel B, editors. *Health Reforms in South East Europe.* Basingstoke (UK): Palgrave Macmillan, 2012. ISBN 978-0-230-30003-3.

Zaletel-Kragelj L, Božikov J, editors. *Methods and Tools in Public Health. A Handbook for Teachers, Researchers and Health Professionals.* Lage: Hans Jacobs, 2010. ISBN 978-3-89918-176-0

Book chapters:

Rainaud CM, Božikov J. E-learning for education. In: Bjegovic-Mikanovic V & al, editors. *Modern Teaching – Distance Learning. A guide to online and blended learning with case studies from public health.* Brussels: ASPHER, 2013, pp. 33-44.

Bartlett W, Božikov J, Rechel B. Health Reforms in South East Europe: An Introduction. In: Bartlett W, Božikov J. Rechel B, editors. *Health Reforms in South East Europe.* Basingstoke (UK): Palgrave Macmillan, 2012, pp. 3-28.

Rechel B, Božikov J, Bartlett W. Lessons from two Decades of Health Reforms in South East Europe. In: Bartlett W, Božikov J. Rechel B, editors. *Health Reforms in South East Europe.* Basingstoke (UK): Palgrave Macmillan, 2012, pp. 229-39.

Božikov J. Probability – Basic Concepts. In: Zaletel-Kragelj L, Božikov J. editors. *Methods and Tools in Public Health. A Handbook for Teachers, Researchers and Health Professionals.* Lage: Hans Jacobs, 2010, pp. 13-22.

Božikov J, Zaletel-Kragelj L, Bardehle D. Age Standardization Procedure: Direct Method. In: Zaletel-Kragelj L, Božikov J. editors. *Methods and Tools in Public Health. A Handbook for Teachers, Researchers and Health Professionals.* Lage: Hans Jacobs, 2010. pp. 93-114.

Zaletel-Kragelj L, Božikov J. Frequency Measures: Estimating Risk. In: Zaletel-Kragelj L, Božikov J. editors. *Methods and Tools in Public Health. A Handbook for Teachers, Researchers and Health Professionals.* Lage: Hans Jacobs, 2010. pp. 161-78.

Božikov J, Zaletel-Kragelj L. Test Validity Measures and Receiver Operating Characteristic (ROC) Analysis. In: Zaletel-Kragelj L, Božikov J. editors. *Methods and Tools in Public Health. A Handbook for Teachers, Researchers and Health Professionals.* Lage: Hans Jacobs, 2010. pp. 749-70.

Božikov J, Petrovečki M, Deželić G. Modeliranje i simulacija [Modelling and simulation]. In: Kern J, Petrovečki M. editors. Medicinska informatika [Medical Informatics]. Zagreb: Medicinska naklada 2009: 340-9.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Božikov J, Relić D, Deželić G. Use of system dynamics modeling in medical education and research projects. Stud Health Technol Inform. 2018;247:830-4.

Božikov J. Razvoj i postignuća u području javnog zdravstva i zdravstvene zaštite [Development and achievements in the field of public health and healthcare]. In: Pečina M, Klarica M, editors. Medicinski fakultet - Sveučilište u Zagrebu 1917-2017. Zagreb: Sveučilište u Zagrebu – Medicinski fakultet, 2017, pp. 353-62.

Hercigonja-Szekeres M, Šimić D, Božikov J, Vondra P. New study program: Interdisciplinary Postgraduate Specialist Study in Medical Informatics. Stud Health Technol Inform. 2014;197:115-9.

Belev B, Brčić I, Prejac J, Golubić ZA, Vrbanc D, Božikov J, Alerić I, Boban M, Jakić-Razumović J. Role of Ki-67 as a prognostic factor in gastrointestinal stromal tumors. World J Gastroenterol. 2013;19:523-7

Vadla D, Božikov J, Blažeković-Milaković S, Kovačić L. Anksioznost i depresivnost u starijih osoba – pojavnost i povezanost s korištenjem zdravstvene zaštite. Lijec Vjesn. 2013;135(5-6):134-8.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

MEDINFO – Curriculum Development for Interdisciplinary Postgraduate Specialist Study in Medical Informatics. Project financed by EC IPA4 Europeaid/131254/M/ACT/HR within the call „Further development and implementation of the Croatian Qualifications Framework“. Project run by two constituent units of the University of Zagreb - Faculty of Organization and Informatics and School of Medicine - ANDrija Štampar School of Public Health 2013-2015.

Impact of formal education on quality of work in out-hospital care (in Croatian: Utjecaj organizirane edukacije na kvalitetu rada u izvanbolničkoj zaštiti). Project financed by the Ministry of Science, Education and Sports of the Republic of Croatia 2007-2012.

Interaction between PhD programme and scientific productivity in biomedicine” (in Croatian: Međudjelovanje doktorskog studija i znanstvene produktivnosti u medicini). Project financed by the Ministry of Science, Education and Sports of the Republic of Croatia, principal investigator, 2007-2010.

Genetic, social and behavioral determinants of health and disease (in Croatian: Genetske, socijalne i bihevioralne determinante zdravlja i bolesti). Project financed by the Ministry of Science and Technology of the Republic of Croatia 2002-2006.

Electronic Health Center - web site for GPs and their associates - eHC (in Croatian: Elektronički dom zdravlja - web mjesto za liječnike obiteljske medicine i njihove suradnike -eDZ). Project financed by the Croatian Ministry of Science and Technology within the frame-work of Information Technology (IT) implementation, coordinator, 2001-2002.

PH-SEE - Programmes for Training and Research in Public Health in South Eastern Europe, project financed by the Stability Pact for South Eastern Europe since 2001 and later by DAAD 2001-2010.

Information technology and medical decision making (in Croatian: Informacijske tehnologije i odlučivanje u medicini). Project financed by the Ministry of Science and Technology of the Republic of Croatia 1996-1999.



Heuristic support decision systems in health care (In Croatian: Heuristički sustavi podrške odlučivanju u zdravstvu). Project financed by the Ministry of Science and Technology of the Republic of Croatia 1991-1996.

Modelling and simulation of dynamic systems by computer (in Croatian: Modeliranje i simulacija dinamičkih sustava pomoću računala). Project financed by the Ministry of Science and Technology of the Republic of Croatia 1991-1996.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

(IF THE TEACHER IS AT THE SAME TIME A POTENTIAL SUPERVISOR)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Nada Božina, assoc.prof.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb, University Hospital Center Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pharmacogenomics, Research Methods of Psychological Functions and Behavior, Selected chapters in epileptology in developmental age ; Methods of molecular biology in medicine

BIOGRAPHY

Born in 1953. Education: 1977 dr med, University of Zagreb, School of Medicine (MEF). 1980 MSc- MEF Zagreb, 2005.-PhD- MEF Zagreb. Work experience: 2011-Head of Clinical Unit for Pharmacogenomics and Individualization of Therapy, Department of Laboratory Diagnostics (KZLD), University Hospital Centre (KBC), 1997-2011 Head of the Laboratory for pharmacogenetics KZLD, KBC Zagreb, 1987-1997 Head of the Laboratory of Cell Culture, Centre for Biomedical Research Zagreb (CBI), 1983-1987 Laboratory of cell culture CBI, 1979-1983 Specialization in internal medicine KBC Zagreb, 1977-1979 Internship, KBC Zagreb. The main scientific area of interest is pharmacogenetics / pharmacogenomics, genetic predisposition testing efficacy / side effects of drugs; the study of polymorphisms of metabolic enzymes, transporter proteins and receptors and their role in the variability of pharmacotherapy. Published more than 90 scientific papers, of which 48 in CC, have more than 1000 CC and SCI citations. Won several awards at international congresses. Mentor of 9 doctoral dissertations .Croatian delegate et the European Medicines Agency (EMA), the working group IPN ENCePP (European Network of Centre for Pharmacoepidemiology and Pharmacovigilance), and in the Working group for pharmacogenomics (EMA Pharmacogenomics working party) London, United Kingdom.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 20.04.2015.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1.Klarica Domjanović I, Lovrić M, Trkulja V, Petelin-Gadže Ž, Ganoci L, Čajić I, Božina N (2018). Interaction between ABCG2 421C>A polymorphism and valproate in their effects on steady-state disposition of lamotrigine in adults with epilepsy. Br J Clin Pharmacol. 2018;84(9):2106-2119.
- 2.Lovrić M, Čajić I, Petelin Gadže Ž, Klarica Domjanović I, Božina N. Effect of antiepileptic drug comedication on lamotrigine concentrations. Croat Med J. 2018; 28;59(1):13-19.
- 3.Ziegler C, 3. Wolf C, Schiele MA, Feric Bojic E...Bozina N,et al . Monoamine oxidase A gene methylation and its role in Posttraumatic Stress Disorder - First evidence from the South Eastern Europe (SEE)-PTSD study. Int J Neuropsychopharmacol. 2018 ;21(5):423-432.
- 4.Kudlek Mikulic S, Mihaljevic-Peles A, Sagud M, Bajs Janovic M, Ganoci L, Grubisin J, Kuzman Rojnic M, Vuksan Cusa B, Bradaš Z, Božina N. Brain-derived neurotrophic factor serum and plasma levels in the treatment of acute schizophrenia with olanzapine or risperidone: 6-week prospective study. Nord J Psychiatry. 2017;71(7):513-520
5. Knezovic A, Loncar A, Homolak J, Smailovic U, Osmanovic Barilar J, Ganoci L, Bozina N, Riederer P, Salkovic-Petrusic M. Rat brain glucose transporter-2, insulin receptor and glial expression are acute targets of intracerebroventricular streptozotocin: risk factors for sporadic Alzheimer's disease? J Neural Transm (Vienna) 2017;124(6):695-708.

6. Šagud M, Vuksan-Ćusa B, Božina N, Lovrić M, Mihaljević-Peleš A, Kramarić M. Olanzapine Long-Acting Injections After Neuroleptic Malignant Syndrome: Two Case Reports. *J Clin Psychopharmacol* 2016;36(6):733-735.
7. Šimić I, Potočnjak I, Kraljičković I, Stanić Benić M, Čegec I, Juričić Nahal D, Ganoci L, Božina N. CYP2D6 *6/*6 genotype and drug interactions as cause of haloperidol-induced extrapyramidal symptoms. *Pharmacogenomics*. 2016;17(13):1385-9.
8. Bilic P, Jukic V, Vilibic M, Savic A, Bozina N. Treatment-resistant schizophrenia and DAT and SERT polymorphisms. *Gene* 2014;543(1):125-32.
9. Kao AC, Rojnic Kuzman M, Tiwari AK, Zivkovic MV, Chowdhury NI, Medved V, Kekin I, Zai CC, Lieberman JA, Meltzer HY, Bozina T, Bozina N, Kennedy JL, Sertic J, Müller DJ. Methylenetetrahydrofolate reductase gene variants and antipsychotic-induced weight gain and metabolic disturbances. *J Psychiatr Res* 2014;54:36-42.
10. Zivković M, Mihaljević-Peles A, Bozina N, Sagud M, Nikolac-Perkovic M, Vuksan-Cusa B, Muck-Seler D. The association study of polymorphisms in DAT, DRD2, and COMT genes and acute extrapyramidal adverse effects in male schizophrenic patients treated with haloperidol. *J Clin Psychopharmacol*. 2013;33(5):593-9.
11. Lovrić M, Božina N, Hajnšek S, Kuzman MR, Sporiš D, Lalić Z, Božina T, Granić P. Association between lamotrigine concentrations and ABCB1 polymorphisms in patients with epilepsy. *Ther Drug Monit*. 2012;34(5):518-25.
12. Božina N, Jovanović N, Podlesek A, Rojnić Kuzman M, Kudumija Slijepčević M, Roguljić A, Dimitrović A, Božina T, Lovrić J, Ljubić H, Medved V. Suicide ideators and attempters with schizophrenia--the role of 5-HTTLPR, rs25531, and 5-HTT VNTR Intron 2 variants. *J Psychiatr Res*. 2012;46(6):767-73.
13. Kuzman MR, Medved V, Bozina N, Grubišin J, Jovanovic N, Sertic J. Association study of MDR1 and 5-HT2C genetic polymorphisms and antipsychotic-induced metabolic disturbances in female patients with schizophrenia. *Pharmacogenomics J*. 2011;11(1):35-44.
14. Bozina N, Kuzman MR, Medved V, Jovanovic N, Sertic J, Hotujac L. Associations between MDR1 gene polymorphisms and schizophrenia and therapeutic response to olanzapine in female schizophrenic patients. *J Psychiatr Res*. 2008;42(2):89-97.
15. Bozina N, Peles AM, Sagud M, Bilusic H, Jakovljevic M. Association study of paroxetine therapeutic response with SERT gene polymorphisms in patients with major depressive disorder. *World J Biol Psychiatry*. 2008;9(3):190-7.
16. Bozina N, Medved V, Kuzman MR, Sain I, Sertic J. Association study of olanzapine-induced weight gain and therapeutic response with SERT gene polymorphisms in female schizophrenic patients. *J Psychopharmacol*. 2007;21(7):728-34.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Vrkić Kirhmajer M, Macolić Šarinić V, Šimičević L, Ladić I, Putarek K, Banfić L, Božina N. Rosuvastatin-Induced Rhabdomyolysis - Possible Role of Ticagrelor and Patients' Pharmacogenetic Profile. *Basic Clin Pharmacol Toxicol*. 2018;123(4):509-518.
2. Grubelić Ravić K, Paić F, Vucelić B, Brinar M, Čuković-Čavka S, Božina N, Krznarić Ž, Kalauz M, Bešić D, Nikuševa Martić T. Association of polymorphic variants in serotonin re-uptake transporter gene with Crohn's disease: a retrospective case-control study. *Croat Med J*. 2018;59(5):232-243.

3. Bielen L, Kralj I, Ćurčić E, Vodanović M, Boban A, Božina N. Acute kidney injury, agranulocytosis, drug-induced liver injury, and posterior reversible encephalopathy syndrome caused by high-dose methotrexate-possible role of low activity ABC and SLC drug transporters. *Eur J Clin Pharmacol*. 2018;74(9):1191-1192.
4. Makar-Aušperger K, Krželj K, Lovrić Benčić M, Radačić Aumiler M, Erdeljić Turk V, Božina N. Warfarin Dosing According to the Genotype-guided Algorithm is Most Beneficial in Patients With Atrial Fibrillation: A Randomized Parallel Group Trial. *Ther Drug Monit*. 2018;40(3):362-368.
5. Božina N, Lalić Z, Nađ-Škegro S, Borić-Bilušić A, Božina T, Kaštelan Ž, Trkulja V. Steady-state pharmacokinetics of mycophenolic acid in renal transplant patients: exploratory analysis of the effects of cyclosporine, recipients' and donors' ABCC2 gene variants, and their interactions. *Eur J Clin Pharmacol*. 2017;73(9):1129-1140.
6. Ganoci L, Božina T, Mirošević Skvrce N, Lovrić M, Mas P, Božina N. Genetic polymorphisms of cytochrome P450 enzymes: CYP2C9, CYP2C19, CYP2D6, CYP3A4, and CYP3A5 in the Croatian population. *Drug Metab Pers Ther*. 2017;32(1):11-21. 2017- voditelj, „Uloga farmakogenetike u interakcijama i nuspojavama opioidnih lijekova“. Potpora Sveučilišta u Zagrebu
7. Mirošević Skvrce N, Macolić Šarinić V, Šimić I, Ganoci L, Muačević Katanec D, Božina N. ABCG2 polymorphism as risk factor for developing adverse drug reactions in patients taking atorvastatin: a case-control study. *Pharmacogenomics* 2015;16(9):959-70.
8. Supe S, Božina N, Matijević V, Bazina A, Mišmaš A, Ljevak J, Alvir D, Habek M, Poljaković Z. Prevalence of genetic polymorphisms of CYP2C9 and VKORC1 -implications for warfarin management and outcome in Croatian patients with acute stroke. *J Neurol Sci* 2014;343(1-2):30-5.
9. Bilic P, Jukic V, Vilibic M, Savic A, Bozina N. Treatment-resistant schizophrenia and DAT and SERT polymorphisms. *Gene* 2014;543(1):125-32.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 2017- project leader, "The role of pharmacogenetics in interactions and side effects of opioid drugs". Support from the University of Zagreb
- 2014- University of Würzburg "Molecular Basis of Neuropsychiatric Disorders": Molecular Mechanisms of Posttraumatic Stress Disorder“ financiran od Deutscher Akademischer Austauschdienst (DAAD), Stability Pact for South Eastern Europe.
- 2012- project leader "Pharmacogenomics and Pharmacovigilance - Prevention of Side Effects in Individualization of Therapy", Collaborative Project of Clinical Hospital Center Zagreb, School of Medicine, University of Zagreb, and Agency for Medicinal Product and Medical Devices.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2018. The role of genomic polymorphism of cytochrome P450 metabolic enzymes (CYP) as a hepatotoxicity factor, supported by the University of Zagreb (leader, T. Božina)
- 2009- 2013 "Pharmacogenetic Variability in Psychiatric Patients" (MZOS Croatia / leader A. Mihaljević Peleš).
- 2009-2013 "Inflammatory bowel disease" (MZOS Croatia, leader B. Vucelić).
- 2009-2013 "Functional Genomics and Proteomics of Risk Factors of Atherosclerosis" (MZOS Croatia, leader Sertić).



2011- Golden Helix Foundation: "Establishing a European Pharmacogenomics Map: Towards Rationalization of Medical Treatment".

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

9

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Tamara Božina, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pharmacogenomics; Biochemical methods in biomedical research; Molecular and biochemical approach to genetic disorders; Methods of molecular biology in medicine

BIOGRAPHY

Born in Rijeka, 1980. Education: Faculty of Food Technology and Biotechnology (2009), Doctor of Medical Science (2014), Postgraduate Specialist Study Public Health at the University of Zagreb (2016). Employment: a research assistant at the School of Medicine, Department of Medical Chemistry, Biochemistry and Clinical Chemistry since 2009. She participates in under- and postgraduate teaching at the University of Zagreb. She has published 16 scientific papers. She participated in the realization of several domestic scientific projects. For scientific work she has won two first prizes at international conferences. The main scientific interests of Tamara Božina relate to genetic predisposition of individuals for the development of phenotypic traits related to obesity, dyslipidemia, metabolic syndrome and related cerebrovascular disorders and genetic factors in the form of variability of metabolic enzymes and drug carriers associated with pharmacokinetic modulation, pharmacodynamics and overall efficacy/toxicity of pharmacotherapy.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Božina T, Lovrić J, Šimičević L, Merkler A, Božina M, Jelaković B, Sertić J. Can the choice of diet undermine the potential genetic risk of AT1R 1166A>C gene polymorphism. *Gene* 2018;679:291-296.

Božina N, Lalić Z, Nađ-Škegro S, Borić-Bilušić A, Božina T, Kaštelan Ž, et al. Steady-state pharmacokinetics of mycophenolic acid in renal transplant patients: exploratory analysis of the effects of cyclosporine, recipients' and donors' ABCC2 gene variants, and their interactions. *Eur J Clin Pharmacol* 2017;73:1129–1140.

Ganoci L, Božina T, Mirošević Skvrce N, Lovrić M, Mas P, Božina N. Genetic polymorphisms of cytochrome P450 enzymes: CYP2C9, CYP2C19, CYP2D6, CYP3A4, and CYP3A5 in the Croatian population. *Drug Metab Pers Ther* 2017;32:11–21.

Karmelić I, Lovrić J, Božina T, Merkler A, Božina N, Sertić J. Is there any association of apolipoprotein E gene polymorphisms with metabolic syndrome in a young population of Croatian origin? *Ann Hum Biol* 2017;44:287–294.

Šupe S, Poljaković Z, Božina T, Ljevak J, Macolić Šarinić V, Božina N. Clinical Application of Genotype-guided Dosing of Warfarin in Patients with Acute Stroke. *Arch Med Res* 2015;46:265–273.

Mitropoulou C, Fragoulakis V, Božina N, Vozikis A, Šupe S, Božina T, et al. Economic evaluation of pharmacogenomic-guided warfarin treatment for elderly Croatian atrial fibrillation patients with ischemic stroke. *Pharmacogenomics* 2015;16:137–148.

Kao ACC, Rojnić Kuzman M, Tiwari A, Živković MV, Chowdhury NI, Medved V, Kekić I, Zai CC, Lieberman JA, Meltzer HY, Božina T, et al. Methylenetetrahydrofolate reductase gene variants and antipsychotic-induced weight gain and metabolic disturbances. *J Psychiatr Res* 2014;54:36–42.

Božina T, Sertić J, Lovrić J, Jelaković B, Šimić I, Reiner Ž. Interaction of genetic risk factors confers increased risk for metabolic syndrome: the role of peroxisome proliferator-activated receptor gamma. *Genet Test Mol Biomarkers* 2014;18:32–40.

Božina T, Šimić I, Lovrić J, Pećin I, Jelaković B, Sertić J, et al. Effects of lipoprotein lipase and peroxisome proliferator-activated receptor-gamma gene variants on metabolic syndrome traits. *Coll Antropol* 2013;37:801–808.

Božina N, Jovanović N, Podlesek A, Rojnić Kuzman M, Kudumija Slijepčević M, Roguljić A, Dimitrović A, Božina T, et al. Suicide ideators and attempters with schizophrenia – The role of 5-HTTLPR, rs25531, and 5-HTT VNTR Intron 2 variants. *J Psychiatr Res* 2012;46:767–773.

Lovrić M, Božina N, Hajnšek S, Kuzman MR, Sporiš D, Lalić Z, Božina T, et al. Association between lamotrigine concentrations and ABCB1 polymorphisms in patients with epilepsy. *Ther Drug Monit* 2012;34:518–525.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Božina T, Lovrić J, Šimičević L, Merkler A, Božina M, Jelaković B, Sertić J. Can the choice of diet undermine the potential genetic risk of AT1R 1166A>C gene polymorphism. *Gene* 2018;679:291-296.

Božina N, Lalić Z, Nađ-Škegro S, Borić-Bilušić A, Božina T, Kaštelan Ž, et al. Steady-state pharmacokinetics of mycophenolic acid in renal transplant patients: exploratory analysis of the effects of cyclosporine, recipients' and donors' ABCC2 gene variants, and their interactions. *Eur J Clin Pharmacol* 2017;73:1129–1140.

Ganoci L, Božina T, Mirošević Skvrce N, Lovrić M, Mas P, Božina N. Genetic polymorphisms of cytochrome P450 enzymes: CYP2C9, CYP2C19, CYP2D6, CYP3A4, and CYP3A5 in the Croatian population. *Drug Metab Pers Ther* 2017;32:11–21.

Karmelić I, Lovrić J, Božina T, Merkler A, Božina N, Sertić J. Is there any association of apolipoprotein E gene polymorphisms with metabolic syndrome in a young population of Croatian origin? *Ann Hum Biol* 2017;44:287–294.

Šupe S, Poljaković Z, Božina T, Ljevak J, Macolić Šarinić V, Božina N. Clinical Application of Genotype-guided Dosing of Warfarin in Patients with Acute Stroke. *Arch Med Res* 2015;46:265–273.

Mitropoulou C, Fragoulakis V, Božina N, Vozikis A, Šupe S, Božina T, et al. Economic evaluation of pharmacogenomic-guided warfarin treatment for elderly Croatian atrial fibrillation patients with ischemic stroke. *Pharmacogenomics* 2015;16:137–148.

Kao ACC, Rojnić Kuzman M, Tiwari A, Živković MV, Chowdhury NI, Medved V, Kekić I, Zai CC, Lieberman JA, Meltzer HY, Božina T, et al. Methylenetetrahydrofolate reductase gene variants and antipsychotic-induced weight gain and metabolic disturbances. *J Psychiatr Res* 2014;54:36–42.

Božina T, Sertić J, Lovrić J, Jelaković B, Šimić I, Reiner Ž. Interaction of genetic risk factors confers increased risk for metabolic syndrome: the role of peroxisome proliferator-activated receptor gamma. *Genet Test Mol Biomarkers* 2014;18:32–40.

Ivković V, Jelaković M, Laganović M, Pećin I, Vrdoljak A, Karanović S, Fuček M, Božina T, et al. Adiponectin is not associated with blood pressure in normotensives and untreated hypertensives with normal kidney function. *Medicine (Baltimore)* 2014;93:e250.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2009. - „Functional genomics and proteomics of risk factors of atherosclerosis“, MZOS 108-1080134-0136, project leader Jadranka Sertić

2012. - „Lipoprotein-associated phospholipase A2 (Lp-PLA2), a risk factor and a possible therapeutic goal in cardiovascular diseases“, project leader Jasna Lovrić

2013. - „Genomics and Proteomics of Risk Factors of Atherosclerosis“, supported by the University of Zagreb, project leader Jadranka Sertić

2014. - „The role of genetic and biochemical markers in the development of early stroke“, supported by the University of Zagreb, project leader Jadranka Sertić

2015. - „The role of genetic and biochemical markers in the development of early stroke“, supported by the University of Zagreb, project leader Jadranka Sertić

2015. - „Biomarkers in Schizophrenia - Integration of complementary presence in the monitoring of persons with the first psychotic episode“, HRZZ, project leader Martina Rojnić Kuzman

2016. - „Interaction of Hp, CYP2C9, CYP2C19, and PPAR γ in the development of cerebrovascular ischemic stroke“, supported by the University of Zagreb, project leader Jadranka Sertić

2018. - „The role of genetic polymorphism of metabolic enzymes P450 (CYP) as a factor for hepatotoxicity“, supported by the University of Zagreb, project leader Tamara Božina

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2014. - „The role of genetic and biochemical markers in the development of early stroke“, supported by the University of Zagreb, project leader Jadranka Sertić

2015. - „The role of genetic and biochemical markers in the development of early stroke“, supported by the University of Zagreb, project leader Jadranka Sertić

2015. - „Biomarkers in Schizophrenia - Integration of complementary presence in the monitoring of persons with the first psychotic episode“, HRZZ, project leader Martina Rojnić Kuzman

2016. - „Interaction of Hp, CYP2C9, CYP2C19, and PPAR γ in the development of cerebrovascular ischemic stroke“, supported by the University of Zagreb, project leader Jadranka Sertić

2018. - „The role of genetic polymorphism of metabolic enzymes P450 (CYP) as a factor for hepatotoxicity“, supported by the University of Zagreb, project leader Tamara Božina

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Sanja Brangan, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Structure, methodology and functioning of scientific work 2 (topic: Language and style of scientific writing)

BIOGRAPHY

Sanja Brangan is a research associate in interdisciplinary field of sciences (Biomedicine and Health Sciences - Public Health; Humanities - Philology); researcher ID: 264176 - Sanja Kušec. She graduated from the School of Humanities and Social Sciences in 1990 (English language and literature; Italian language and literature), and received her Master in Public Health degree in 2005 (thesis: Harmonization of professional and lay terminology in doctor-patient relationship) and her PhD degree in 2011 (thesis: Development of readability formulas for healthcare communication in Croatian language) from the School of Medicine, University of Zagreb. Her research focuses on linguistic aspects of healthcare communication, primarily on health literacy, readability formulas, language and style of scientific writing, and analysis of linguistic corpora in biomedicine. She has published 10 original research papers, 1 review paper, and 2 professional papers (total IF = 28.810; 99 citations), and has presented her research results at national and international conferences. Also, she has been involved in linguistic validation of patient questionnaires for over 20 years, and in translation and English language editing of scientific papers since 1993. She has been teaching Medical English to graduate medical students since 2000, and Language and Style of Scientific Writing to PhD biomedical students since 2002. Between 2004 and 2012, she was involved in teaching medical students at the School of Medicine in Zagreb with the topic on doctor-patient communication, and psychology students at the Osijek University with the topic on communication with patients and health literacy.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: N/A

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Kušec S. Jezični identitet u biomedicini i zdravstvu. /Linguistic identity in biomedicine and health care/ In: Granić J. (ed.) Jezik i identiteti. Zagreb-Split, 2014: Hrvatsko društvo za primijenjenu lingvistiku.

Kušec S. Scientific writing in English for PhD biomedical students. 15th Annual HUPE/IATEFL-TESOL Conference, Šibenik, 2007. (abstract)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Brangan S, Ivanišić M, Rafaj G, Rowlands G. Health literacy of hospital patients using a linguistically validated Croatian version of the Newest Vital Sign screening test (NVS-HR). PLoS ONE 2018;13(2):1-14.

Brangan S. Development of SMOG-Cro readability formula for healthcare communication and patient education. Coll Antropol 2015;39:11-20.

Brangan S. Kvantitativna procjena težine teksta na hrvatskom jeziku. /Quantitative assessment of text difficulty in Croatian language/ Rasprave, Časopis Instituta za hrvatski jezik i jezikoslovlje 2014;40(1):35-58.

Brangan S, Sonicki Z. Komunikacija s kirurškim pacijentima starije životne dobi putem Interneta. /Communication with surgical patients of older age on the Internet/ Liječ Vjesn 2013;135:310-15.



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

'Scientific foundations of quality in health care' (principal investigator: Stjepan Orešković, PhD, School of Medicine, University of Zagreb), 2003-2006

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

'European Network for Alcohol Health Literacy' (COST Action - international 4-year project proposal, 2018)

'Figurative language in health communication' (principal investigator: Mario Brdar, PhD, Faculty of Humanities and Social Sciences, University of Osijek), 2018-2019

'Development of model and instrument for health literacy assessment in Croatia' (principal investigator: Miroslav Mastilica, PhD, School of Medicine, University of Zagreb), 2007-2013

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: prof.dr.sc. Boris Brkljačić

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Application of Doppler in research and diagnosis of diseases of blood vessels, Hand surgery; Morphological research methods in biomedical sciences; Advanced ultrasonography in gastroenterology and hepatology

BIOGRAPHY

Board certified radiologist, subspecialist of interventional radiology and ultrasound, full permanent professor, Cathedra of Radiology, chairman, Department of diagnostic and interventional radiology MEF UH „Dubrava“. Vice-dean for science, University of Zagreb School of Medicine and Chair of Radiology Cathedra.

Board of Directors member (2017-2022), first vice-president (2018-9), European Society of Radiology, Vienna. Executive council member of ESR (2011-2017), Finance and Internal Affairs Chair (2011-4), External Affairs and Communication Chair (2014-2017). Član Executive Board International Society for Strategic Studies in Radiology (2013-19). Fellow European Society of Urogenital Radiology.

First vice president of Croatian Medical Association 2013-2021. President of Croatian Society of Ultrasound in Medicine and Biology of CMA. President of Croatian Society of Radiology 2008-2012.

Honorary member, Israel Radiological Association, Hungarian Radiology Sociate, Bulgarian Association of Radiology, Romanian Society of Imaging and Radiology, Belarus Association of Radiology, slovenian Society for Ultrasound in Medicine

Education in Thomas Jefferson University, Philadelphia and Memorial Sloan Kettering Cancer Center, Cornell University, New York City.

Invited lectures at over 260 congresses, professional meetings and institutions in Croatia, USA, Australia, China, Korea, South Africa, Colombia, Israel, Egypt, Iran, Dubai, Qatar, Georgia, Kazakhstan, and over 20 European countries. Organized 32 congresses/ professional meetings, president of joint congress of European Society of Urogenital Radiology and U.S. Society of Uroradiology in Dubrovnik 2011. Visiting profesor, Department of Radiology, Memorial Sloan Kettering Cancer Center, New York City. Vice-presidentk European Congress of Radiology 2019. President European Congress of Radiology 2020.

Author of two monographic textbooks, 59 chapters in foreign and domestic books, 110 scientific and professional papers. 1.348 citations (SCOPUS); h-index 21. Editor-in-chief Journal of Ultrasound (SIUMB). Editorial Board member „Ultraschall in der Medizin“ (EFSUMB). Principal Investigator at three completed scientific projects of Ministry of Science of Croatia, PI of active investigative project of Croatian Science Foundation (2017-21).

President of the Board for Radiology of Ministry of Health of Croatia since 2004. and Board for Professional execution of breast cancer screening programme since 2005. Ordinary member of Academy of Medical Sciences of Croatia since 2010.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2013

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Brkljačić B, Mrzljak V, Drinković I, Soldo D, Sabljar-Matovinović M, Hebrang A. RENAL VASCULAR RESISTANCE IN DIABETIC NEPHROPATHY: DUPLEX DOPPLER US EVALUATION. *Radiology* 1994;192:549-554.
2. Brkljačić B, Drinković I, Sabljar-Matovinović M, Soldo D, Morović-Vergles J, Vidjak V, Hebrang A. INTRARENAL DUPLEX DOPPLER SONOGRAPHIC EVALUATION OF UNILATERAL NATIVE KIDNEY OBSTRUCTION. *J Ultrasound Med* 1994;13:197-204.
3. Soldo D, Brkljačić B, Božikov V, Drinković I, Hauser M. DIABETIC NEPHROPATHY: COMPARISON OF CONVENTIONAL AND DUPLEX DOPPLER ULTRASONOGRAPHIC FINDINGS. *Acta Radiologica* 1997; 38: 296-302.
4. Brkljačić B, Sabljar-Matovinović M, Putarek K, Soldo D, Morović-Vergles J, Hauser M. RENAL VASCULAR RESISTANCE IN AUTOSOMAL DOMINANT POLYCYSTIC KIDNEY DISEASE. EVALUATION WITH COLOR DOPPLER ULTRASOUND. *Acta Radiologica* 1997;38:840-6.
5. Galešić K, Brkljačić B, Sabljar-Matovinović M, Morović-Vergles J, Cvitković-Kuzmić A, Božikov V. RENAL VASCULAR RESISTANCE IN ESSENTIAL HYPERTENSION: DUPLEX-DOPPLER ULTRASONOGRAPHIC EVALUATION. *Angiology* 2000; 51(8):667-675.
6. Cvitković-Kuzmić A, Brkljačić B, Ivanković D, Galešić K. DOPPLER SONOGRAPHIC RENAL RESISTANCE INDEX IN HEALTHY CHILDREN. *European Radiology* 2000; 10:1644-1648.
7. Cvitković-Kuzmić A, Brkljačić B, Radoš M, Galešić K. DOPPLER VISUALIZATION OF URETERIC JETS IN UNILATERAL HYDRONEPHROSIS IN CHILDREN AND ADOLESCENTS. *Eur J Radiol* 2001; 39(3): 209-214.
8. Brkljačić B, Sučić M, Božikov V, Hauser M, Hebrang A. TREATMENT OF AUTONOMOUS AND TOXIC THYROID ADENOMAS BY PERCUTANEOUS ULTRASOUND-GUIDED ETHANOL INJECTION. *Acta Radiologica* 2001; 42(5):477-481.
9. Grga A, Hebrang A, Brkljačić B, Hlevnjak D, Šarlija M. ASYMPTOMATIC CAROTID STENOSIS: SELECTIVE OR ROUTINE USE OF INTRALUMINAL SHUNT. *Journal of Cardiovascular Surgery* 2001; 42 (5): 657-662.
10. Cvitković Kuzmić A, Brkljačić B. COLOR DOPPLER ULTRASONOGRAPHY IN THE ASSESSMENT OF VESICoureteric REFLUX IN CHILDREN WITH BLADDER DYSFUNCTION. *Pediatric Surgery International* 2002;18(2-3):135-139.
11. Brkljačić B, Cvitković-Kuzmić A, Dmitrović R, Radoš M, Vidjak V. DOPPLER SONOGRAPHIC RENAL RESISTANCE INDEX AND RESISTANCE INDEX RATIO IN CHILDREN AND ADOLESCENTS WITH UNILATERAL HYDRONEPHROSIS. *European Radiology* 2002; 12: 2747-2751.
12. Kopljar M, Brkljačić B, Doko M, Horžić M. NATURE OF DOPPLER PERFUSION INDEX CHANGES IN PATIENTS WITH COLORECTAL CANCER LIVER METASTASES. *J Ultrasound Med* 2004;23(10):1295-1300.
13. Huzjan R, Brkljačić B, Delić-Brkljačić D, Biočina B, Sutlić Ž. B-MODE AND COLOR DOPPLER ULTRASOUND OF THE FOREARM ARTERIES IN THE PREOPERATIVE SCREENING PRIOR TO CORONARY ARTERY BYPASS GRAFTING. *Collegium Antropologicum* 2003;28:Suppl.2: 235-242.
14. Brkljačić B, Mišević T, Huzjan R, Brajčić H, Ivanac G. DUPLEX-DOPPLER ULTRASONOGRAPHY IN THE DETECTION OF LOWER EXTREMITIES DEEP VENOUS THROMBOSIS AND IN THE DETECTION OF ALTERNATIVE FINDINGS. *Collegium Antropologicum* 2004;28(2):761-767.
15. Galešić K, Sabljar-Matovinović M, Tomić M, Brkljačić B. RENAL VASCULAR RESISTANCE IN GLOMERULAR DISEASES – CORRELATION OF RESISTANCE INDEX WITH BIOPSY FINDINGS. *Coll Antropol* 2004;28(2):667-674.

16. Mišević T, Brkljačić B, Zibar L, Jakić M, Kurbel S, Radić R, Mišević S. DUPLEX SONOGRAPHY OF ARTERIOVENOUS FISTULA IN CHRONIC HEMODIALYSIS PATIENTS. *Coll Anthropol* 2006; 30(3): 535-541.
17. Rebol J, Brkljačić B, Bumber Ž, Pšeničnik S, Povalej P. 3D POWER DOPPLER ANALYSIS OF THE VASCULARISATION IN TUMOURS OF THE ORAL CAVITY. *Ultraschall Med – Eur J Ultrasound* 2007;28:40-44.
18. Ivanac G, Brkljačić B, Ivanac K, Huzjan R, Škreb F, Čikara I. VASCULARISATION OF BENIGN AND MALIGNANT THYROID NODULES: CD US EVALUATION. *Ultraschall Med – Eur J Ultrasound* 2007: 28: 502-506.
19. Ajduk M, Pavić L, Bulimbašić S, Šarlija M, Pavić P, Patrlj L, Brkljačić B. MULTIDETECTOR-ROW COMPUTED TOMOGRAPHY IN EVALUATION OF ATHEROSCLEROTIC CAROTID PLAQUES COMPLICATED WITH INTRAPLAQUE HEMORRHAGE. *Annals of Vascular Surgery* 2009;23(2):186-93.
20. Cambj-Sapunar L, Mašković J, Brkljačić B, Radonić V, Dragičević D, Ajduk M. OUTCOME OF EMERGENCY ENDOVASCULAR TREATMENT OF LARGE INTERNAL ILLIAC ARTERY ANEURYSMS WITH GUIDEWIRES. *Eur J Radiol* 2010;74:86-92.
21. Brkljačić B, Čikara I, Ivanac G, Hrkać-Pustahija A, Žic R, Stanec Z. ULTRASOUND-GUIDED BIPOLAR RADIOFREQUENCY ABLATION OF BREAST CANCER IN INOPERABLE PATIENTS: A PILOT STUDY. *Ultraschall in Med* 2010;31:156-162.
22. Grgurević I, Čikara I, Horvat J, Lukić IK, Heinzl R, Banić M, Kujundžić M, Brkljačić B. NONINVASIVE ASSESSMENT OF LIVER FIBROSIS WITH ACOUSTIC RADIATION FORCE IMPULSE IMAGING; INCREASED LIVER AND SPLENIC STIFFNESS IN PATIENTS WITH LIVER FIBROSIS AND CIRRHOSIS. *Ultraschall Med* 2011;32(2):160-166.
23. Jukić M, Pavić L, Čerkez-Habek J, Medaković P, Delić-Brkljačić D, Brkljačić B. INFLUENCE OF CORONARY CT-ANGIOGRAPHY ON THE PATIENT MANAGEMENT. *Croatian Medical Journal* 2012,15; 53(1): 4-10.
24. Kalodiki E, Stvrtinova V, Allegra C, Andreozzi G, Antignani PL, Avram R, Brkljačić B, et al. SUPERFICIAL VEIN THROMBOSIS: A CONSENSUS STATEMENT. *Int Angiol* 2012;31(3):203-16.
25. Ajduk M, Bulimbašić S, Pavić L, Šarlija M, Patrlj L, Brkljačić B, Pavić P, Čikara I, Ivanac G. COMPARISON OF MULTIDETECTOR-ROW COMPUTED TOMOGRAPHY AND DUPLEX DOPPLER ULTRASONOGRAPHY IN DETECTING ATHEROSCLEROTIC CAROTID PLAQUES COMPLICATED WITH INTRAPLAQUE HEMORRHAGE. *Coll Antropol* 2013;37(1):213-9.
26. Grgurević I, Puljiz Ž, Brnić D, Bokun T, Heinzl R, Lukić R, Lukšić B, Kujundžić M, Brkljačić B. LIVER AND SPLEEN STIFFNESS AND THEIR RATIO ASSESSED BY REAL-TIME TWO DIMENSIONAL SHEAR WAVE ELASTOGRAPHY IN PATIENTS WITH LIVER FIBROSIS AND CIRRHOSIS DUE TO CHRONIC VIRAL HEPATITIS. *European Radiology* 2015;25(11): 3214-21. (DOI) 10.1007/s00330-015-3728-x
27. Ivanac G, Morović-Vergles J, Brkljačić B. GRAY SCALE AND COLOR DUPLEX DOPPLER ULTRASOUND OF HAND JOINTS IN THE EVALUATION OF DISEASE ACTIVITY AND TREATMENT IN RHEUMATOID ARTHRITIS. *Croat Med J* 2015;56(3):280-289.
28. Džoić M, Ivanac G, Kelava T, Brkljačić B. ELASTOGRAPHIC FEATURES OF TRIPLE NEGATIVE BREAST CANCERS. *European Radiology* 2016;26(4):1090-1097.
29. Jenssen C, Brkljačić B, Hocke M, Ignee A, Piscaglia F, Radjina M, Sidhu P, Dietrich CF. ULTRASOUND-GUIDED VASCULAR INTERVENTIONS – EFSUMB GUIDELINES ON INTERVENTIONAL ULTRASOUND, Part VI. *Ultraschall in Med* 2015. Oct 9 (Epub ahead of print)

30. Lorentzen T, Nolsoe CP, Ewertsen C, Nielsen MB, Leen E, Havre R, Gritzmann N, Brkljačić B, Nurnberg D, Kabaalioglu A, Strobel D, Jenssen C, Piscaglia F, Gilja OH, Sidhu PS, Dietrich CF. EFSUMB GUIDELINES ON INTERVENTIONAL ULTRASOUND, PART I, GENERAL ASPECTS. *Ultraschall in Med* 2015; 36(5):464-72.
31. Brkljačić B, Divjak E, Tomasović-Lončarić Č, Tešić V, Ivanac G. SHEAR-WAVE SONOELASTOGRAPHIC FEATURES OF INVASIVE LOBULAR BREAST CANCERS. *Croat Med J* 2016;57(1):42-50.
32. Grgurević I, Kujundžić M, Banić M, Kušec R, Bokun T, Vukelić-Marković M, Bogdanović Z, Lukić A, Tsochatzis E, Brkljačić B. SUBTYPES AND CLINICAL SIGNIFICANCE OF COMMON BILE DUCT VARICES IN PORTAL VEIN THROMBOSIS: DIAGNOSIS AND FOLLOW-UP BY DOPPLER US AND EUS. *Abdom Radiol (NY)* 2016;41(3):476-484.
33. Grgurević I, Bokun T, Salkić NN, Brkljačić B, Vukelić-Marković M, Štoos-Veić T, Rakić M, Filipec-Kanižaj T, Berzigotti A. LIVER ELASTOGRAPHY MALIGNANCY PREDICTION SCORE FOR NONINVASIVE CHARACTERIZATION OF FOCAL LIVER LESIONS. *Liver Int* 2017 Oct 13. doi 10.1111/liv.13611. Epub ahead of publication
34. Hrkać-Pustahija A, Ivanac G, Brkljačić B. ULTRASOUND AND MAGNETIC RESONANCE IMAGING IN THE EVALUATION OF MAMMOGRAPHIC BI-RADS 4 AND 5 MICROCALCIFICATIONS. *Diagn Interv Radiol* 2018, 24:187-194.
35. Medaković P, Biloglav Z, Pajen I, Pristas I, Jukić M, Žuvela F, Ivanac G, Brkljačić B, Jukić T, Turk L. QUANTIFICATION OF CORONARY ARTERY ATHEROSCLEROTIC BURDEN WITH CTA ADAPTED LEAMAN SCORE IN CROATIAN PATIENTS. *Int J Cardiovasc Imaging* 2018; 34(10):1647-5540.
36. Citković Kuzmić A, Kolaček S, Brkljačić B, Huzjak N. RENAL ARTERY STENOSIS ASSOCIATED WITH CROHN DISEASE. *Pediatric Nephrology* 2001; 16(4):371-373.
37. Drinković I, Brkljačić B. TWO CASES OF LETHAL COMPLICATIONS FOLLOWING ULTRASOUND GUIDED PERCUTANEOUS FINE-NEEDLE BIOPSY OF THE LIVER. *Cardiovasc Intervent Radiol* 1996;19: 360-363.
38. Hebrang A, Grga A, Brkljačić B, Drinković I. SUCCESSFUL CLOSURE OF LARGE PSEUDOANEURYSM OF PERONEAL ARTERY USING TRANSLUMINAL TEMPORARY OCCLUSION OF THE NECK WITH THE CATHETER. *European Radiology* 2001;11(7):1206-1209.
39. Huzjan R, Vukelić-Marković M, Brkljačić B, Ivanac G. THE VALUE OF ULTRASOUND IN DIAGNOSIS AND FOLLOW-UP OF FIBROUS CORTICAL DEFECT. *Ultraschall in Med* 2005; 26: 420-423.
40. Grgurević I, Buljevac M, Kujundžić M, Vukelić-Marković M, Kardum D, Brkljačić B. COMMON BILE DUCT WALL THICKENING DUE TO INTRAMURAL VARICES DIAGNOSES BY COLOUR DOPPLER ULTRASOUND. *Ultraschall in Med* 2006; 27: 483-486.
41. Čikara I, Hrkać-Pustahija A, Ivanac G, Pavić P, Brkljačić B. TRUE ANEURYSM OF THE ANTECUBITAL VEIN. *Ultraschall Med* 2011;32(2): 203-5.
42. Galešić K, Brkljačić B, Božikov V, Delić BD. RENAL VASCULAR RESISTANCE IN ESSENTIAL HYPERTENSION. *Nephron* 1998;80:363-4..

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- . Grgurević I, Puljiz Ž, Brnić D, Bokun T, Heinzl R, Lukić R, Lukšić B, Kujundžić M, Brkljačić B. LIVER AND SPLEEN STIFFNESS AND THEIR RATIO ASSESSED BY REAL-TIME TWO DIMENSIONAL SHEAR WAVE ELASTOGRAPHY IN PATIENTS WITH LIVER FIBROSIS AND CIRRHOSIS DUE TO CHRONIC VIRAL HEPATITIS. *European Radiology* 2015;25(11): 3214-21. (DOI) 10.1007/s00330-015-3728-x

2. Ivanac G, Morović-Vergles J, Brkljačić B. GRAY SCALE AND COLOR DUPLEX DOPPLER ULTRASOUND OF HAND JOINTS IN THE EVALUATION OF DISEASE ACTIVITY AND TREATMENT IN RHEUMATOID ARTHRITIS. *Croat Med J* 2015;56(3):280-289.
3. Džoić M, Ivanac G, Kelava T, Brkljačić B. ELASTOGRAPHIC FEATURES OF TRIPLE NEGATIVE BREAST CANCERS. *European Radiology* 2016;26(4):1090-1097.
4. Jenssen C, Brkljačić B, Hocke M, Ignee A, Piscaglia F, Radjina M, Sidhu P, Dietrich CF. ULTRASOUND-GUIDED VASCULAR INTERVENTIONS – EFSUMB GUIDELINES ON INTERVENTIONAL ULTRASOUND, Part VI. *Ultraschall in Med* 2015. Oct 9 (Epub ahead of print)
5. Lorentzen T, Nolsoe CP, Ewertsen C, Nielsen MB, Leen E, Havre R, Gritzmann N, Brkljačić B, Nurnberg D, Kabaalioglu A, Strobel D, Jenssen C, Piscaglia F, Gilja OH, Sidhu PS, Dietrich CF. EFSUMB GUIDELINES ON INTERVENTIONAL ULTRASOUND, PART I, GENERAL ASPECTS. *Ultraschall in Med* 2015; 36(5):464-72.
6. Brkljačić B, Divjak E, Tomasović-Lončarić Č, Tešić V, Ivanac G. SHEAR-WAVE SONOELASTOGRAPHIC FEATURES OF INVASIVE LOBULAR BREAST CANCERS. *Croat Med J* 2016;57(1):42-50.
7. Grgurević I, Kujundžić M, Banić M, Kušec R, Bokun T, Vukelić-Marković M, Bogdanović Z, Lukić A, Tsochatzis E, Brkljačić B. SUBTYPES AND CLINICAL SIGNIFICANCE OF COMMON BILE DUCT VARICES IN PORTAL VEIN THROMBOSIS: DIAGNOSIS AND FOLLOW-UP BY DOPPLER US AND EUS. *Abdom Radiol (NY)* 2016;41(3):476-484.
8. Grgurević I, Bokun T, Salkić NN, Brkljačić B, Vukelić-Marković M, Štoos-Veić T, Rakić M, Filipec-Kanižaj T, Berzigotti A. LIVER ELASTOGRAPHY MALIGNANCY PREDICTION SCORE FOR NONINVASIVE CHARACTERIZATION OF FOCAL LIVER LESIONS. *Liver Int* 2017 Oct 13. doi 10.1111/liv.13611. Epub ahead of publication
9. Hrkać-Pustahija A, Ivanac G, Brkljačić B. ULTRASOUND AND MAGNETIC RESONANCE IMAGING IN THE EVALUATION OF MAMMOGRAPHIC BI-RADS 4 AND 5 MICROCALCIFICATIONS. *Diagn Interv Radiol* 2018, 24:187-194.
10. Medaković P, Biloglav Z, Pajen I, Pristas I, Jukić M, Žuvela F, Ivanac G, Brkljačić B, Jukić T, Turk L. QUANTIFICATION OF CORONARY ARTERY ATHEROSCLEROTIC BUREDEN WITH CTA ADAPTED LEAMAN SCORE IN CROATIAN PATIENTS. *Int J Cardiovasc Imaging* 2018; 34(10):1647-55

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Principal investigator:

Application of Doppler in diagnosis of Kidney Diseases in Adults and Children (044-003) 1999-2002

Application of Doppler Ultrasound in Diagnosis of Diseases of Native Kidneys in Adults and Children (0108-338) 2002.-2006; Application of Doppler and Multislice CT in Kidney and Blood Vessel Diseases (108-1080232-0141), 2007.-2013.

IP-2997-16 Croatian Science Foundation Sonoelastography and MRI in diagnosis of Breast Cancer 20.3.2017—19.3.2021.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

IP-2997-16 CSF Sonoelastography and MRI in diagnosis of breast cancer 20.3.2017—19.3.2021

Life Science Alliance: Closing Research and Innovation Divide in the EU H2020-SC1-2017-779303

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Srecko Budi, MD PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Dubrava

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Hand Surgery, Microvascular tissue transfer

BIOGRAPHY

Name: Srecko Budi, MD, PhD, Ass. Prof.

Occupation

- Specialist of Plastic, Reconstructive and Aesthetic surgery
- Specialist of General Surgery
- Address /Work/

Dept. of Plastic, Reconstructive and Aesthetic Surgery

(accredited by EBOPRAS for educational exchange programmes)

University Hospital Dubrava

Avenija Gojka Suska 6

10 000 Zagreb

Croatia,

Certificates

- Medical Doctor (MD); Ministry of Health, Zagreb, Croatia,

June 26, 1989 /BACHELOR OF MEDICINE/

(Graduation Thesis: Artificial Ligaments of the Knee)

- Medical Doctor /License/; Ministry of Health, Zagreb, Croatia, June 29, 1990
- General Surgeon; Ministry of Health, Zagreb, Croatia, June 25, 1996
- Master of Science (MSc); Postgraduate Study of Natural Sciences, Department of Biology, Division of Biomedicine, Zagreb, Croatia, July 10, 1998

(Master of Science Thesis: Experimental Model of Modified Basket-Like Plate in the Case of Patella Fractures)

- License for Independent Work, Republic of Croatia, Croatian Medical Chamber, Zagreb, December 20, 2002 (This license was issued for the period from December 20, 2002 to December 19, 2008)
- Doctor of Science (Ph. D.), University of Zagreb, Medical School, Zagreb, Croatia, September 15, 2003

(PhD Thesis: Mathematical-Anthropological Determination of NAC Position in Male)

- Plastic Surgeon; CSPRAS; Ministry of Health, Zagreb, Croatia, June 09, 2003
- License for Independent Work, Republic of Croatia, Croatian Medical Chamber, Zagreb, May 12, 2009 (This license was issued for the period from December 20, 2008 to December 19, 2014)
- Senior Research Associate in the Scientific Field of Biomedicine and Health – Field of Clinical Medical Science, Scientific Field Committee for the Field of Biomedicine and Health – Field of Basic

Medical Sciences, Clinical Medical Sciences, Public Health and Health Protection, Dental Medicine and Pharmacy, Zagreb, Croatia, September 18, 2006

- Assistant Professor, University of Zagreb, Medical School, Zagreb, Croatia, October 07, 2009
- Science Advisor in the Scientific Field of Biomedicine and Health – Field of Clinical Medical Science, Scientific Field Committee for the Field of Biomedicine and Health – Field of Basic Medical Sciences, Clinical Medical Sciences, Public Health and Health Protection, Dental Medicine and Pharmacy, Zagreb, Croatia, March 24, 2011
- License for Independent Work, Republic of Croatia, Croatian Medical Chamber, Zagreb, January 30, 2015 (This license was issued for the period from December 20, 2014 to December 20, 2020)
- Associate Professor, University of Zagreb, Medical School, ZagrebCroatia, May 02, 2016

Previous Experiences (Fellowships)

- General Surg., Univ. Hosp. Sestre Milosrdnice., Zagreb, Croatia, 1992/96
- Plastic Surg., Univ. Hosp. Dubrava, Zagreb, Croatia, 1996/1998
- Plastic Surg., Division for Plastic, Reconstructive and Hand Surgery, University of Zürich, Medical School, Zürich, Switzerland, 1998/ 2000 /fellowship/
- Plastic Surg., Behandlungszentrum Vogtareuth, Germany, 2000 /visiting fellow/
- Plastic Surg., University Clinic for Plastic and Reconstructive Surgery,

Insbruck, Austria, 2001 /visiting fellow/

- Plastic, Reconstructive and Aesthetic Surgery, University Hospital Dubrava, Zagreb, Croatia, 2000/present

Fields of Special Scientific and Clinical Interests

- Plastic and Reconstructive Surgery (in general)
- Aesthetic surgery (in general with special interest in breast, eyelid, ear and facial surgery; VASER liposuction)
- Breast Reconstruction (autologous tissue and prosthesis/expanders)
- Non-surgical facial rejuvenation (Fillers, BotulinumToxin, Mesotrax)
- Microsurgery (free tissue transfer and replantation)
- Hand Surgery
- Refinements in Plastic Surgery

Innovations

- Tie-Over Refinement: Fixclip, Croatian Authors Agency, Zagreb, Croatia, December 19, 2002 /IN: 02-2436/
- Mathematical Determination of NAC Position in Male in the Case of Burns, Transsexual Patients and Gynecomastia – Software Program, Croatian Authors Agency, Zagreb, Croatia, November 2003

Appointments

- Medical Researcher, Ministry of Technology and Science, Zagreb, 1994/2006
- Lecturer of Plastic Surgery, University of Zagreb, Medical School,

Zagreb, 2000/present (students, postdoc. . .)

- President of Wound Management Section (Croatian Society for Plastic, Reconstructive and Aesthetic Surgery) 2008/present
- Official Trainer for HA Filler in the field of facial rejuvenation , Zagreb, Croatia, 2009/present
- Examination Commission (Member) for plastic surgery residents in Croatia (official license in plastic, reconstructive and aesthetic surgery) 2010/present
- Official Trainer for Mesotrax Lifting Threads in the field of facial and body rejuvenation, Zagreb, Croatia, 2014/present

Associations

- Croatian Society of Plastic, Reconstructive and Aesthetic Surgery (CSPRAS) (www.hdprek.hlz.hr, www.kbd.hr/cspras)
- Croatian Surgical Association
- Croatian Medical Association
- Croatian Medical Chamber
- ISAPS (International Society of Aesthetic Plastic Surgery)
- ESPRAS (European Society of Plastic, Reconstructive and Aesthetic Surgery)
- EBOPRAS (European Board of Plastic, Reconstructive and Aesthetic Surgery)
- EWMA (European Wound Management Association)
- ECAMS (European College of Aesthetic Medicine and Surgery)

Postgraduate Courses: 72

Last Course attended:

Postgraduate Congresses: 77

Last Congress attended:

Published Papers: 103 (Papers, abstracts)

Chapters in Books: 8

Manuals: 22

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: • Associate Professor, University of Zagreb, Medical School, Zagreb, Croatia, May 05, 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Budi S, Jurisic D, Rados J, Stanec Z. Simultaneous dermal graft harvesting and de-fatting. J Plast Reconstr Aesth Surgery 2009;62(5):e103
2. Budi S, Rados J. Stanec Z. A sport jacket clip: a simple method of securing tie- over dressings. J Plast Reconstr Aesth Surgery 2009;62:459-496
3. Vljacic Z, Budi S, Tomasovic C, Malic M, Petroveckii M. Histological Evaluation of Human “in Vivo” Cutaneous Surgical Incisions Created by Standard Scalpel, Conventional and Colorado Needle Electrosurgery, Radiofrequency, PEAK Plasma Blade and Ultracision Harmonic Scalpel. Internationaj

Journal of Engineering and Advanced Technology (IJEAT); ISSN.2249-8958 (Online), Vol 5, Issue 5, p. 21-24, June 2016

4. Budi S, Rudman F, Žic R, et al. Guidelines for the treatment of chronic wounds. *Acta Med Croatica* 2011;65 (Supl.2):25-31
5. Budi S, Gorjanc B, Zic R, et al. Substitute and alternative forms of treatment of skin defects. *Acta Med Croatica* 2015;69 (Supl.1):99-10130.
6. Skrlin J, Budi S, Janes A, et al. Treatment of soft tissue infection and osteomyelitis with multi - drug resistant *Acinetobacter baumannii* following a tibial fracture surgery: case report. *Medicina Flumiensis* 2018,vol 54, No 3,p. 322-328

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Stanec Z, Zic R, Budi S, Held R. Surgical treatment of breast cancer – 15 year follow up. In: Vrdoljak E (ed.) Abstract book. 7th Croatian Oncological Congress, April 10-13, 2014, p. 16-18
2. Budi S, Gorjanc B, Zic R, et al. Substitute and alternative forms of treatment of skin defects. *Acta Med Croatica* 2015;69 (Supl.1):99-101
3. Zic R, Gorjanc B, Stanec Z, Budi S, et al. Surgical experiences in the treatment of ulcer complications. *Acta Med Croatica* 2016;70:19-22
4. Budi S, Zic R, Martić K, et al. Pressure ulcer treatment experience at clinical department of plastic, reconstructive and aesthetic surgery, Dubrava University Hospital: Comparison of results recorded in the 2011 -2016 and 2003-2008. *Acta Med Croat* 2016;70(Supl. 1):11-16
5. Vlajčić Z, Budi S, Tomasović C, Malić M, Petrovečki M. Histological Evaluation of Human “in Vivo” Cutaneous Surgical Incisions Created by Standard Scalpel, Conventional and Colorado Needle electrosurgery, Radiofrequency, PEAK Plasma Blade and Ultracision Harmonic Scalpel. *International Journal of Engineering and Advanced Technology (IJEAT); ISSN.2249-8958 (Online), Vol 5, Issue 5, p. 21-24, June 2016 /EM/*
6. Brajčić I, Puizina N, Bukvić Mokoš Z, Bolanca Z, Vuksić M, Zic R, Martić K, Mijatović D, Budi S. Smjernice za dijagnostiku i liječenje gnojnog hidradenitisa. *Liječ Vjesn* 2017;139:247-253
7. Skrlin J, Budi S, Janes A, et al. Treatment of soft tissue infection and osteomyelitis with multi- drug resistant *Acinetobacter baumannii* following a tibial fracture surgery: case report. *Medicina Flumiensis* 2018,vol 54, No 3,p. 322-328
8. Budi S. Rekonstrukcije tkivnim ekspanerima. U: R. Karabeg (ed.). *Osnovi plastične, rekonstruktivne i estetske hirurgije*. Grafotisak, Sarajevo 2014:69-73
9. Budi S. Terapija negativnim tlakom. U: R. Karabeg (ed.). *Osnovi plastične, rekonstruktivne i estetske hirurgije*. Grafotisak, Sarajevo 2014:74-79
10. Budi S. Kirurška tranzicija spola. *Suvremeni pristup transseksualnosti*. Priručnik stalnog medicinskog usavršavanja. Medicinska naklada, Zagreb, 2013:27-30.
11. Stanec Z, Zic R, Kozomara D, Budi S, Milanović R, Stanec S, Rudman F. Plastična, rekonstrukcijska i estetska kirurgija. U: A. Kvesić (ed.). *Kirurgija*. Medicinska naklada, Zagreb, 2016:806-878

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ana Budimir, assoc. prof. MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of molecular biology in medicine; Biomaterial infections

BIOGRAPHY

Born in Livno, B&H, on 13th of March 1973. Married, mother of three children (21, 19 and 17 years of age). Since 2015 - Head of Unit for diagnostic, typing and surveillance of hospital-acquired infections -UHC Zagreb, Dept. of clinical and molecular microbiology. 2013 -associate professor -University of Zagreb, School of medicine, Department of Medical microbiology and parasitology. Doctoral thesis: Analysis of resistance and virulence genes in MRSA strains, defended in 2006. 73 published papers: 34 cited in CC, 10 papers cited in SCI expanded, 20 papers cited in Index Medicus, 7 in Excerpta Medica and 3 in non-indexed journals, 35 congress abstracts. 1022 citations according to SCI and SSCI, H index 14. Scientific advisor since 4th June 2013. Participated in numerous international and national educational courses, in some as Faculty member. Associated in national and international projects: FP7 and HRZZ. Since 2002 - participation in different courses -School of Medicine: "Medical microbiology and parasitology", "Clinical microbiology", "Medical microbiology" - medical studies - Medical Studies in English. Since 2011-course coordinator of elective course. I was my hands from hospital infections. I teach courses at 6 different post-graduate programs in: Pulmology, Nephrology, Anaesthesiology, reanimatology and intensive medicine, Urology, Epidemiology. Participation in 3 different programs -Postgraduate studies: Biomedicine and health sciences. I was mentor to 17 graduate thesis and 4 doctoral theses, and 2 in progress. I am coordinator of multiple postgraduate and continuous education courses, active in Professional societies, and Boards of Medical School and UHC Zagreb. Member of Editorial board of ADMET & DMPK (ISSN 1848-7718) since 2012. Ad hoc reviewer for multiple journals in area of microbiology and infection control. Member of Executive committee Croatian society for Clinical Microbiology, Croatian medical association.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 23th of June 2013

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Comparison of final disinfection protocols using antimicrobial photodynamic therapy and different irrigants after single-file reciprocating instrumentation against intracanal bacterial biofilm - an in vitro study. Batinić M, Ročana M, Budimir A, Anić I, Bago I. Photodiagnosis Photodyn Ther. 2018 Oct 8. pii: S1572-1000(18)30275-8. doi: 10.1016/j.pdpdt.2018.10.006.
2. Electrochemical Synthesis, Structure Elucidation and Antibacterial Evaluation of 9a-aza-9a-chloro-9a-homoerythromycin A. By: Mandic, Z, Lazarevski, G, Weitner, Z, Novak, P, Marsic, N, Budimir, A. ADMET AND DMPK .Volume: 2 Issue: 3 Pages: 179-184 DOI: 10.5599/admet.2.3.47
3. First report of OXA-48-producing Escherichia coli in Croatia and confirmed intergenic transfer of a plasmid-carrying blaOXA-48 from Klebsiella pneumoniae. Bošnjak Z, Chlebowicz MA, Mareković I, Rezo Vranješ V, Rossen JW, Budimir A. Infect Dis (Lond). 2018 Apr;50(4):313-316. doi: 10.1080/23744235.2017.1395067. Epub 2017 Oct 26

4. Antimicrobial Efficacy of Photodynamic Therapy and Light-Activated Disinfection Against Bacterial Species on Titanium Dental Implants. Azizi B, Budimir A, Mehmeti B, Jakovljević S, Bago I, Gjorgievska E, Gabrić D. *Int J Oral Maxillofac Implants*. 2018 Jul/Aug;33(4):831-837. doi: 10.11607/jomi.6423.
5. Antimicrobial efficacy of photodynamic therapy and light-activated disinfection on contaminated zirconia implants: An in vitro study. Azizi B, Budimir A, Bago I, Mehmeti B, Jakovljević S, Kelmendi J, Stanko AP, Gabrić D. *Photodiagnosis Photodyn Ther*. 2018 Mar;21:328-333. doi: 10.1016/j.pdpdt.2018.01.017. Epub 2018 Feb 2.
6. Health-care-associated infections in neonates, children, and adolescents: an analysis of paediatric data from the European Centre for Disease Prevention and Control point-prevalence survey. Zingg W, Hopkins S, Gayet-Ageron A, Holmes A, Sharland M, Suetens C; ECDC PPS study group. *Lancet Infect Dis*. 2017 Apr;17(4):381-389. doi: 10.1016/S1473-3099(16)30517-5. Epub 2017 Jan 13.
7. MRSA in Croatia: prevalence and management. Budimir A. *Expert Rev Anti Infect Ther*. 2016;14(2):167-76. doi: 10.1586/14787210.2016.1116384. Epub 2015 Nov 26. Review.
8. Antimicrobial PLA films from environment friendly additives. Turalija, M., Bischof, S., Budimir, A., Gaan, S. *Composites Part B: Engineering*. Volume 102, 1 October 2016, Pages 94-99. DOI: 10.1016/j.compositesb.2016.07.017

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Attributable deaths and disability-adjusted life-years caused by infections with antibiotic-resistant bacteria in the EU and the European Economic Area in 2015: a population-level modelling analysis. Cassini A, Högberg LD, Plachouras D, Quattrocchi A, Hoxha A, Simonsen GS, Colomb-Cotinat M, Kretzschmar ME, Devleeschauwer B, Cecchini M, Ouakrim DA, Oliveira TC, Struelens MJ, Suetens C, Monnet DL; Burden of AMR Collaborative Group. *Lancet Infect Dis*. 2018 Nov 5. pii: S1473-3099(18)30605-4. doi: 10.1016/S1473-3099(18)30605-4. [Epub ahead of print]
2. Comparison of final disinfection protocols using antimicrobial photodynamic therapy and different irrigants after single-file reciprocating instrumentation against intracanal bacterial biofilm - an in vitro study. Batinić M, Ročana M, Budimir A, Anić I, Bago I. *Photodiagnosis Photodyn Ther*. 2018 Oct 8. pii: S1572-1000(18)30275-8. doi: 10.1016/j.pdpdt.2018.10.006. [Epub ahead of print]
3. Healthcare-associated pneumonia in acute care hospitals in European Union/European Economic Area countries: an analysis of data from a point prevalence survey, 2011 to 2012. Walter J, Haller S, Quinten C, Kärki T, Zacher B, Eckmanns T, Abu Sin M, Plachouras D, Kinross P, Suetens C; Ecdc Pps Study Group. *Euro Surveill*. 2018 Aug;23(32). doi: 10.2807/1560-7917.ES.2018.23.32.1700843.
4. *Candida auris*: epidemiological situation, laboratory capacity and preparedness in European Union and European Economic Area countries, 2013 to 2017. Kohlenberg A, Struelens MJ, Monnet DL, Plachouras D; The Candida Auris Survey Collaborative Group. *Euro Surveill*. 2018 Mar;23(13). doi: 10.2807/1560-7917.ES.2018.23.13.18-00136
5. Electrochemical Synthesis, Structure Elucidation and Antibacterial Evaluation of 9a-aza-9a-chloro-9a-homoerythromycin A. By: Mandić, Z, Lazarevski, G, Weitner, Z, Novak, P, Marsić, N, Budimir, A. *ADMET AND DMPK*. Volume: 2 Issue: 3 Pages: 179-184 DOI: 10.5599/admet.2.3.4
6. First report of OXA-48-producing *Escherichia coli* in Croatia and confirmed intergenomic transfer of a plasmid-carrying blaOXA-48 from *Klebsiella pneumoniae*. Bošnjak Z, Chlebowicz MA, Mareković I, Rezo Vranješ V, Rossen JW, Budimir A. *Infect Dis (Lond)*. 2018 Apr;50(4):313-316. doi: 10.1080/23744235.2017.1395067. Epub 2017 Oct 26

7. Antimicrobial Efficacy of Photodynamic Therapy and Light-Activated Disinfection Against Bacterial Species on Titanium Dental Implants. Azizi B, Budimir A, Mehmeti B, Jakovljević S, Bago I, Gjorgievska E, Gabrić D. *Int J Oral Maxillofac Implants*. 2018 Jul/Aug;33(4):831-837. doi: 10.11607/jomi.6423.
8. Antimicrobial efficacy of photodynamic therapy and light-activated disinfection on contaminated zirconia implants: An in vitro study. Azizi B, Budimir A, Bago I, Mehmeti B, Jakovljević S, Kelmendi J, Stanko AP, Gabrić D. *Photodiagnosis Photodyn Ther*. 2018 Mar;21:328-333. doi: 10.1016/j.pdpdt.2018.01.017. Epub 2018 Feb 2.
9. Health-care-associated infections in neonates, children, and adolescents: an analysis of paediatric data from the European Centre for Disease Prevention and Control point-prevalence survey. Zingg W, Hopkins S, Gayet-Ageron A, Holmes A, Sharland M, Suetens C; ECDC PPS study group. *Lancet Infect Dis*. 2017 Apr;17(4):381-389. doi: 10.1016/S1473-3099(16)30517-5. Epub 2017 Jan 13
10. MRSA in Croatia: prevalence and management. Budimir A. *Expert Rev Anti Infect Ther*. 2016;14(2):167-76. doi: 10.1586/14787210.2016.1116384. Epub 2015 Nov 26. Review.
11. Antimicrobial PLA films from environment friendly additives. Turalija, M., Bischof, S., Budimir, A., Gaan, S. *Composites Part B: Engineering*. Volume 102, 1 October 2016, Pages 94-99. DOI: 10.1016/j.compositesb.2016.07.017
12. First Report of NDM-1-Producing *Acinetobacter baumannii*. Bošnjak Z, Plečko V, Budimir A, Mareković I, Bedenić B. *Chemotherapy*. 2014;60(4):250-2. doi: 10.1159/000381256. Epub 2015 Apr 25.
13. Prevalence and molecular characteristics of methicillin-resistant *Staphylococcus aureus* strains isolated in a multicenter study of nursing home residents in Croatia. Budimir A, Payerl Pal M, Bošnjak Z, Mareković I, Vuković D, Roksandić Križan I, Milas J, Plečko V, Kalenić S. *Am J Infect Control*. 2014 Nov;42(11):1197-202. doi: 10.1016/j.ajic.2014.07.032. Epub 2014 Sep

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 4

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Anja Bukovac, mag. oecol. et prot. nat.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Genomic Instability

BIOGRAPHY

Anja Bukovac started working at the School of Medicine, University of Zagreb in 2016 as part of the Croatian science foundation (HRZZ) project which educates young PhD students. She is scientific novice and assistant at the Department of medical biology and Croatian institute for brain research. In 2012 she received her master degree at the Department of biology, Faculty of Science, University of Zagreb. At the same faculty she enrolled in doctoral program in biology in 2015. In 2016 she became a member of the HRZZ project called "The role of the Wnt signalling pathway in the Epithelium-Mesenchymal transition". As part of the project she attended a summer course in molecular biology which was held at the Laboratory of Support to Research in Molecular Medicine, Faculty of Medicine in Porto, Portugal. During her work at the School of Medicine, University of Zagreb, she became associate in two scientific projects (HRZZ and ZCI), co-author of six scientific publications and she actively participated in 15 scientific conferences. Her fields of research are cancer genetics, wnt signalling pathway, tumor suppressor genes, oncogenes, genetic basis of human brain tumors, genome instability and epithelium-mesenchymal transition with emphasis on primary brain tumors. She is a member of the European Association for Cancer Research (EACR), Croatian Association for Cancer Research (CACR) and Croatian Society for Neuroscience.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 1.11.2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Kafka A., Bačić M., Tomas D., Žarković K., Bukovac A., Njirić N., Mrak G., Krsnik Ž., Pećina-Šlaus N. (2019): Different behaviour of DVL1, DVL2, DVL3 in astrocytoma malignancy grades and their association to TCF1 and LEF1 upregulation. *J Cell Mol Med.* 23(1):641-655.
2. Kafka A., Karin-Kujundžić V., Šerman Lj., Bukovac A., Njirić N., Jakovčević A., Pećina-Šlaus N. (2018): Hypermethylation of Secreted Frizzled Related Protein 1 gene promoter in different astrocytoma grades. *Croat Med J.* 59: 213-23.
3. Pećina-Šlaus N., Kafka A., Bukovac A., Vladušić T., Tomas D., Hrašćan R. (2017): Genetic changes of MLH1 and MSH2 genes could explain constant findings on microsatellite instability in intracranial meningioma. *Tumour Biol.* 39(7):1010428317705791.
4. Pećina-Šlaus N., Bukovac A., Salamon I., Kafka A. (2017): Microsatellite instability as a driving force for cancer progression. *Cancer Hypotheses* 1(6): 1-16.
5. Tambić Andrašević A., Gužvinec M., Bukovac A., Lucić S., Šoprek S. (2015): The rise and fall of resistant bacteria. *Croatian Journal of Infection* 35(4):89-96. Zagreb.
6. Tambić Andrašević A., Bukovac A., Jelić M., Šoprek S., Gužvinec M. (2014): *Escherichia coli* – from commensal organism to multiple resistant uropathogen. *Croatian Journal of Infection* 34:4, str. 189-194. Zagreb.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Kafka A., Bačić M., Tomas D., Žarković K., Bukovac A., Njirić N., Mrak G., Krsnik Ž., Pećina-Šlaus N. (2019): Different behaviour of DVL1, DVL2, DVL3 in astrocytoma malignancy grades and their association to TCF1 and LEF1 upregulation. *J Cell Mol Med.* 23(1):641-655.
2. Kafka A., Karin-Kujundžić V., Šerman Lj., Bukovac A., Njirić N., Jakovčević A., Pećina-Šlaus N. (2018): Hypermethylation of Secreted Frizzled Related Protein 1 gene promoter in different astrocytoma grades. *Croat Med J.* 59: 213-23.
3. Pećina-Šlaus N., Kafka A., Bukovac A., Vladušić T., Tomas D., Hrašćan R. (2017): Genetic changes of MLH1 and MSH2 genes could explain constant findings on microsatellite instability in intracranial meningioma. *Tumour Biol.* 39(7):1010428317705791.
4. Pećina-Šlaus N., Bukovac A., Salamon I., Kafka A. (2017): Microsatellite instability as a driving force for cancer progression. *Cancer Hypotheses* 1(6): 1-16.
5. Tambić Andrašević A., Gužvinac M., Bukovac A., Lucić S., Šoprek S. (2015): The rise and fall of resistant bacteria. *Croatian Journal of Infection* 35(4):89-96. Zagreb.
6. Tambić Andrašević A., Bukovac A., Jelić M., Šoprek S., Gužvinac M. (2014): *Escherichia coli* – from commensal organism to multiple resistant uropathogen. *Croatian Journal of Infection* 34:4, str. 189-194. Zagreb.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Associate on the Croatian science foundation (HRZZ) project "The role of the Wnt signalling pathway in the Epithelium-Mesenchymal transition" from 2016-2018. WNT4EMT (6625);
2. Associate at national Centre of Excellence – “Centre for basic, clinical and translational neuroscience” , European Union European Regional Development Fund, Operational Programme Competitiveness and Cohesion, grant agreement no. KK.01.1.1.01.0007, CoRE – Neuro”.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. Associate on the Croatian science foundation (HRZZ) project "The role of the Wnt signalling pathway in the Epithelium-Mesenchymal transition" from 2016-2018. WNT4EMT (6625);
2. Associate at national Centre of Excellence – “Centre for basic, clinical and translational neuroscience” , European Union European Regional Development Fund, Operational Programme Competitiveness and Cohesion, grant agreement no. KK.01.1.1.01.0007, CoRE – Neuro”.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assistant professor Krešimir Bulić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University hospital center Zagreb, School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Hand surgery

BIOGRAPHY

Date and Place of Birth: November 10, 1969, Split, Republic of Croatia

Nationality and Citizenship: Croatian, Croatian

Family: married, father of two sons

Knowledge of foreign languages: active knowledge of English and French

Education:

1988 matured at Newton North High School, Boston, USA

1993 graduated from the Faculty of Medicine, University of Zagreb, average 4.8

2003 Specialization in General Surgery, Clinical Hospital Center Zagreb

2008 subspecialization of Plastic, Aesthetic and Reconstructive Surgery, Clinical Hospital Center Zagreb

Employment (currently):

Head of Clinical Unit for Clinical Research, Clinic for Surgery KBC Zagreb

Head of Department of Plastic Reconstructive Surgery, Department of Plastic Surgery and Breast Surgery, Clinic for Surgery KBC Zagreb

Senior Assistant, Department of Surgery, Faculty of Medicine, University of Zagreb

Graduated Academic Degrees:

2003, Master of Science, "Vertebral Diligent Circulation Doppler Examination - Ultrasound After Cranial Neck Pain Injury", Mentor Prof. dr. sc. Slavko Davila, Faculty of Medicine, University of Zagreb,

Of 2010 Ph.D., "Autostatic growth hormone, E-cadherin and catenine in breast cancer patients" mentor prof. dr. sc. Jasminka Jakić Razumović, Faculty of Natural Sciences and Mathematics, University of Zagreb

Advancement and functions in the service:

1,993th to 1,994th doctor's internship, Clinical Hospital Center Zagreb

1994th to 1995th Associate Professor, Department of Anatomy, University of Zagreb, Faculty of Medicine

1995th to 1998th acting officer of the Croatian Army

1998th to 2003rd Specialization in General Surgery, Clinical Hospital Center Zagreb

2,003th to 2,004th Subspecialization from Plastic, Aesthetic and Reconstructive Surgery, Queen Victoria Hospital, United Kingdom (12 months)

2004th to 2006th Sectional Physician at the Department of Plastic Surgery and Breast Surgery, Clinical Hospital Center Zagreb

2006th to 2008th subspecialization from plastic, aesthetic and reconstructive surgery, Clinical Hospital Center Zagreb

2007th to 2008th subspecialization from plastic, aesthetic and reconstructive surgery,

Queen Victoria Hospital, United Kingdom (12 months)

2008th to 2010th Sectional Physician at the Department of Plastic Surgery and Breast Surgery, Clinical Hospital Center Zagreb

2008th to 2011th assistant, Department of Surgery, University of Zagreb, Faculty of Medicine

2010.- Head of Department of Plastic Surgery, Department of Plastic Surgery and Breast Surgery, Clinical Hospital Center Zagreb

2011.- Senior Assistant, Department of Surgery, University of Zagreb, Faculty of Medicine

2012. - Head of Clinical Unit for Clinical Research, Surgery Clinic, Clinical Hospital Center Zagreb

Scientific and professional training

1994th to 1995th Postgraduate Study: Ultrasound in Clinical Medicine, Medical School, University of Zagreb

2000 Salzburg-Cornell Osteopathic Surgery Seminar, Salzburg, Austria

2001. Internationam Symposium for Plastic Surgeons: Aesthetic Breast Surgery - Update, Vienna, Austria

2002. HDPREK microchip course, Zagreb

2,003th to 2,004th Senior Registrar, Plastic and Reconstructive Surgery, Queen Victoria Hospital, United Kingdom (12 months)

2004. Canniesburn flap course, Glasgow, Scotland

2007th to 2008th Senior Registrar, Plastic and Reconstructive Surgery, Queen Victoria Hospital, United Kingdom (12 months)

2012. The Art of Medical Teaching, ŠNZ A. Štampar

Participation in the realization of scientific projects

Organization of professional meetings

2002 in the Organizing Committee of the 4th Croatian Congress of Plastic, Aesthetic and Reconstructive Surgery, Zagreb

2012 at the Organizing Committee of the 9th Croatian Congress of Plastic, Aesthetic and Reconstructive Surgery, Zagreb

Work in the committees and commissions of the faculty of medicine

1991-1993 a representative of students at the Medical School Council

2009 - 2013 Representative of Assistant at the Faculty Medical School

2013 - member of the Electoral Commission

Membership in scientific and professional societies

1994 Hrvatski liječnički zbor

1998 Croatian Medical Chamber

2003. General Medical Council, United Kingdom

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2013

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1) Bulić K. Long-term aesthetic outcome of fingertip reconstruction in complete syndactyly release. The Journal of Hand Surgery (European Volume); 38E(3): 281–287, 2013.
- 2) Eljuga D, Bulić K, Petrovečki M, Bali V, Ozimec E, Razumović JJ. Reduced E-cadherin expression is a predictor of lower overall survival and metastatic disease in invasive ductal breast cancer. Onkologije; 35(7-8):414-418, 2012.
- 3) Eljuga D, Razumovic JJ, Bulić K, Petrovecki M, Draca N, Bulic SO. Prognostic importance of PAI-1 in node negative breast cancer patients--results after 10 years of follow up. Pathology - Research and Practice; 207(5):290-294, 2011.
- 4) Veir Z, Smuđ S, Bogdanić B, Cvjeticanin B, Bagatin D, Dujmović A, Duduković M, Ivrlac R, Bulić K, Mijatović D. Combined vacuum-assisted closure treatment with laparoscopic mobilization of an omental flap and meshed skin grafts for reconstruction of infected sternotomy wounds: two cases. Collegium Antropologicum; 33(4):1427-1430, 2009.
- 5) Bulić K. Re: End-of-skin grafts in syndactyly release: description of a new flap for web space resurfacing and primary closure of finger defects. Hand; 7:221–222, 2012.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1: Dujmović A, Marčinko D, Bulić K, Kisić H, Duduković M, Mijatović D. Quality of Life and Depression Among Female Patients Undergoing Surgical Treatment for Breast Cancer: A Prospective Study. Psychiatr Danub. 2017 Sep;29(3):345-350. doi: 10.24869/psyd.2017.345. PubMed PMID: 28949315.
- 2: Lorencin M, Bulic K. On-Top Index Pollicization After a Partial Amputation of a Syndactylized Hypoplastic Thumb in a Patient With Townes-Brocks Syndrome. Ann Plast Surg. 2017 Sep;79(3):e7-e10. doi: 10.1097/SAP.0000000000001080. PubMed PMID: 28509696.
- 3: Bulic K, Antabak A, Dujmovic A, Kisić H, Lorencin M. Bilateral Leg Replantation in a 3-Month-Old Baby After a Knee Level Crush Amputation-A 2-Year Follow-up. Ann Plast Surg. 2017 Mar;78(3):304-306. doi: 10.1097/SAP.0000000000000965. PubMed PMID: 28099269.
- 4: Duduković M, Kisić H, Baez ML, Bulić K, Veir Z, Cvjetičanin B, Dujmović A, Stipić I, Šuman O, Mijatović D. Anatomical Prediction for Surgical Positioning of the Umbilicus in a Croatian Population. Ann Plast Surg. 2015 Aug;75(2):135-9. doi: 10.1097/SAP.0000000000000012. PubMed PMID: 25003413.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Matični broj znanstvenika: 258756

1. Stresni odgovor želuca - Novi pristup u organoprotekciji - vanjski suradnik (student)

Šifra projekta: 3-01-032

Vrsta projekta: Ministarstvo znanosti, obrazovanja i športa



Voditelj projekta: prof.dr.sc. Predrag Sikirić

2. The role of extracellular matrix in cartilage and bone morphogenesis – vanjski suradnik

Šifra projekta: 3-01-007

Vrsta projekta: Ministarstvo znanosti, obrazovanja i športa

Voditelj projekta: prof.dr.sc.Slobodan Vukičević

3. Nove mogućnosti liječenja tumora dojke - istraživač

Šifra projekta: 0098107

Vrsta projekta: Ministarstvo znanosti, obrazovanja i športa

Voditelj projekta: prof.dr.sc. Josip Unušić

4. Karcinom dojke-molekularne, genetske i kliničke karakteristike - istraživač

Šifra projekta: 108-1080058-0046

Vrsta projekta: Ministarstvo znanosti, obrazovanja i športa

Voditelj projekta: Damir Vrbaneć

5. Molecular genetic analysis of limb malformations – istraživač

University of California, San Francisco, Institute for Human Genetics

Voditelj projekta: Assistant professor Nadav Ahituv

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Floriana Bulić-Jakuš

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Epigenetics; Isotransplantation of Mammalian Organ Primordia; Methods of investigation in vivo and in vitro; Methods of molecular biology in medicine

BIOGRAPHY

Born: Floriana Bulić, Split 1955. Education: 1980. MD, School of Medicine, Zagreb; 1981. State examination General Practitioner. 1985. MSc Faculty of Natural Sciences, Zagreb. 1990. PhD School of Medicine, Zagreb. Positions: from 1983 Department of Medical Biology, School of Medicine, University of Zagreb. 2001. Deputy head, from 2002. to date Head; 1995. assistant professor, 2002. Associate professor, 2007. full professor, 2012 tenure full professor. Research education: Developmental mammalian biology at the Zagreb School of Embryology, Postdoctoral position: 1990-1992 Molecular biology laboratory, Department of Tumour Biology (George Klein, Klas Wiman), Karolinska Institute, Stockholm, Sweden; 2001 JRC, Ispra, Italy ECVAM / Estiv workshop on the validation of alternative methods for regulatory toxicity testing. 2004 Harvard Medical School, Boston / Cambridge: Harvard Macy Program for Physician Educators. Mentor: 5 BSc, 3 MSc and 6 PhD theses. Scientific interest and main achievements: epigenetics, developmental mammalian biology, differential gene activity in development and tumorigenesis, teratogenesis, teratoma, teratocarcinoma, transplantation, in vitro culture of postimplantation embryos in chemically defined media. Scopus 48 publications, 479 cit h-index 12; Reviewer: of international journals and MZOS projects. Teaching in Croatian and English: from 1985. School of Medicine, from 1995. School of Dental Medicine; from 1999. University of Applied Health studies, Zagreb; from 1996. postgraduate study first at PMF, Zagreb and from 2001. School of Medicine, Zagreb; 2002.-2008. Organization: EMBO course: Anatomy and Embryology of the Mouse, School of Medicine, Zagreb. 1996. Science in Croatia, Zagreb; 2003. Memorial Symposiums Nikola Škreb School of Medicine, Zagreb. "Experimental mammalian Embryology at the Turn of the Century", ; from 2010. Round table- Apoptosis, Croatian Academy of Medical Sciences; 2013. Memorial Symposium Nikola Škreb: Development and Stem Cells at the Beginning of New Millennium, 2018. Memorial Symposium Nikola Škreb "New platforms in developmental biology- towards the clinical application" School of Medicine, Zagreb; Awards: -2006.,2008. ARCA, Zagreb; 2007. "Ljudevit Jurak" for comparative pathology of Croatian Academy of Medical Sciences. Other: Participation in development of Croatian National Educational Standard, in curricula development and state examination for the Ministry of Science, Education and Sports. Member: HBD, ISDB, ESHG, Steering committee of the Clinical Genetics Society of Croatia. Foreign languages: English, German, Italian, Swedish.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: Professor, tenure position 2012.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Katusic Bojanac A, Rogosic S, Sincic N, Juric-Lekic G, Vlahovic M, Serman L, Jezek D, Bulic-Jakus F. Influence of hyperthermal regimes on experimental teratoma development in vitro. Int J Exp Pathol. 99:131-144, 2018.
- Buljubašić R, Buljubašić M, Bojanac AK, Ulamec M, Vlahović M, Ježek D, Bulić-Jakuš F, Sinčić N. Epigenetics and testicular germ cell tumors. Gene. 661:22-33, 2018.

- Bulic-Jakus F, Katusic Bojanac A, Juric-Lekic G, Vlahovic M, Sincic N. Teratoma: from spontaneous tumors to the pluripotency/malignancy assay. *Wiley Interdiscip Rev Dev Biol.* 5:186-209, 2016.
- Mužić V, Katušić Bojanac A, Jurić-Lekić G, Himmelreich M, Tupek K, Šerman LJ, Sinčić N, Marn N, Vlahović M, Bulić-Jakuš F. Epigenetic drug 5-azacytidine impairs proliferation of rat limb buds in an organotypic model system in vitro. *CMJ* 54:489-495, 2013.
- Bulic-Jakus, F. Epigenetika u reprodukciji i razvoju | [Epigenetics in reproduction and development]; *Paediatrica Croatica* 2013, 57: 312-317.
- Gošev I, Paić F, Durić Z, Gošev M, Ivčević S, Jakuš FB, Biočina B. Cardiac myxoma the great imitators: comprehensive histopathological and molecular approach. *Int J Cardiol* 164:7-20. 2013.
- Šerman LJ., Vlahović M., Šijan M., Bulić-Jakuš F., Šerman A., Sinčić N., Matijević R., Jurić-Lekić G., Katušić A. The Impact of 5-azacytidine on Placental Weight, Glycoprotein Pattern and Proliferating Cell Nuclear Antigen Expression in Rat Placenta. *Placenta.* 2007, 28:803-811.
- Nikuševa Martić T, Beroš V, Pečina-Šlaus N, Pečina HI, Bulić-Jakuš F. Genetic changes of CDH1, APC and CTNNB1 found in human brain tumors. *Pathol Res Practice.* 203:779-787, 2007.
- Bulić-Jakuš F, Ulamec M, Vlahović M, Sinčić N, Katušić A, Jurić-Lekić G, Šerman LJ, Krušlin B, Belicza M. Of mice and men: Teratomas and teratocarcinomas. *Coll Antropol* 2006. 30: 921-924.
- Šerman, A., Vlahović, M., Šerman, L., Bulić-Jakuš, F. DNA methylation as a regulatory mechanism for gene expression in mammals. *Coll Antropol* 2006, 30: 665-671.
- Marić S, Bulić-Jakuš F, Ježek D, Jurić-Lekić G, Kos M, Vlahović M (2004): Expression of the proliferating cell nuclear antigen and protein products of tumor suppressor genes in the human fetal testis. *Andrologia* 36:24-30.
- Passarino G, Semino O, Magri C, Al-Zahery N, Benuzzi G, Quintana-Murci L, Andelinovic S, Bulic-Jakus F, Liu A, Arslan A, Santachiara Benerecetti S (2001): The 49a,f haplotype 11 is a new marker of the EU19 lineage that traces migrations from northern regions of the Black Sea. *Human Immunology*, 62, 922-932.
- Bulić-Jakuš F, Strahinić-Belovari T, Marić S, Ježek D, Jurić-Lekić G, Vlahović M, Šerman D.(2001): Chemically defined protein-free in vitro culture of mammalian embryo does not restrict its developmental potential for differentiation of skin appendages. *Cells Tissues Organs* 169, 134-143.
- Bulić-Jakuš F, Vlahović M, Jurić-Lekić G, Crnek-Kunstelj V, Šerman, D. Gastrulating rat embryo in a serum-free culture model: Changes of development caused by teratogen 5-azacytidine. *ATLA Alternatives to Laboratory Animals*, 1999, 27: 925-933.
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- Bulic-Jakus, F. Epigenetika u reprodukciji i razvoju | [Epigenetics in reproduction and development]; *Paediatrica Croatica* 2013, 57: 312-317.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

from 1983.-2002 participation in projects: NIH, Bethesda, USA; WHO Geneva, Switzerland; Cancerfonden; UNESCO, MZOŠ

2002-2006 PI "The experimental approach to reproductive health in mammals" MZOŠ,

2006-2013 "Experimental embryonal tumors and the development of mammals in vivo and in vitro" MZOŠ;

2014. Scientific Center of Excellence for reproductive and regenerative medicine, research unit for biomedical research reproduction and development (deputy head of RU); 2017.

- 2017-2021 collaborator in the project "Epigenetic Biomarkers in Blood and Ejaculate of Patients with Testicular Seminoma". School of Medicine, University of Zagreb financed by CSF.

2013-2018 PI: UNIZG projects.

- 2017-2022 PI of project element and associate on other elements "Reproductive and Regenerative Medicine - Exploring New Platforms and Potentials" The European Union through the European Regional Development Fund, Operational Programme Competitiveness and Cohesion, under grant agreement No. KK.01.1.1.01.0008, within the Center of Excellence for Reproductive and Regenerative Medicine (CERRM). School of Medicine, University of Zagreb.

- 2018-2023 consultant in the project "Epigenetic Biomarkers in Prostate Cancer". School of Medicine, University of Zagreb financed by CSF.

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- 2018-2023 consultant in the project "Epigenetic Biomarkers in Prostate Cancer". School of Medicine, University of Zagreb financed by CSF.

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-2014- to date Scientific Center of Excellence for Reproductive and Regenerative Medicine

-2013-2018. PI: Projects UNIZG

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 6

-Svjetlana Marić, Sveučilište u Zagrebu, Ekspresija gena koji reguliraju staničnu proliferaciju i supresiju tumora tijekom razvoja zametaka sisavaca. Prirodoslovno-matematički fakultet, doktorska disertacija, 2001.

-Alan Šerman, Sveučilište u Zagrebu, Učinak 5-azacitidina na rast ektoplacentalnog stošca i proliferacijsku sposobnost decidua stanica štakora. Prirodoslovno-matematički fakultet, doktorska disertacija, 2009.

-Ana -Katušić Sveučilište u Zagrebu, Primjena 5-azacitidina tijekom gestacije štakora inducira apoptozu u fetalnom testisu. Prirodoslovno-matematički fakultet, doktorska disertacija 2010

-Nikola Sobočan, Utjecaj PBN-a (N-tert-butil- α -fenilnitron) na razvoj placente i štakorskoga zametka tretiranih 5-azacitidinom in vivo i in vitro. Prirodoslovno-matematički fakultet, doktorska disertacija 2011

-Frane Paić, Sveučilište u Zagrebu, Identification and bioinformatic analysis of differentially expressed genes in osteoblasts and osteocytes by genome-wide expression analysis of murine calvaria tissue. Komentor Ivo Kalajžić, Prirodoslovno-matematički fakultet, doktorska disertacija, 2011.

-Vedrana Mužić Utjecaj promjena temperature i epigenetskih lijekova na razvoj pupoljaka udova štakora ex vivo, Doktorska disertacija, Medicinski fakultet Sveučiliša u Zagrebu, 2015.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: TOMISLAV BULUM, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Medical School University of Zagreb, Croatia; Vuk Vrhovac Clinic for Diabetes, University Hospital Merkur, Zagreb, Croatia

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Metabolic syndrome

BIOGRAPHY

Professional positions held: Since 2005 he is employed at the Vuk Vrhovac University Clinic for Diabetes, University Hospital Merkur, where he currently holds a position of a specialist in internal medicine and subspecialist in endocrinology and diabetology in Department of diabetes. Since 2016 he is also employed as an postdoctoral researcher at the Medical School University of Zagreb.

Education: Graduated medicine at the School of Medicine, University of Split in 2002. Ph.D. degree received in 2010 at the Faculty of Science, University of Zagreb (doctoral thesis “Relationship between insulin resistance, thyroid function and serum lipid profile in euthyroid patients with type 1 diabetes”). On 1 March 2012 he passed the specialist exam in internal medicine and gained the name of a specialist in internal medicine. In November 2015 he finished subspecialist training in endocrinology and diabetology and gained the name of a subspecialist in endocrinology and diabetology.

Teaching: He is a lecturer at the undergraduate courses and also at postgraduate doctoral studies in Biomedicine and Health Sciences at Medical School University of Zagreb (courses Clinical propedeutics, Internal medicine, Based medical skills, Metabolic syndrome and Arterial hypertension and diabetes mellitus).

Scientific projects: Since 2012 he is a researcher on the scientific project «Metabolic syndrome in type 1 diabetes“, no. 045-1080230-0516, funded by the Croatian Ministry of Science, Education and Sports (CMSES), completed by the end of 2013. Since 2015 he is a researcher on the scientific project “Relationship between endothelial dysfunction driven by adipocytokines and the development and progression of microvascular complications in patients with type 1 and type 2 diabetes“, funded by the Croatian Science Foundation.

Professional and scientific activities: He is an author over 70 scientific papers published in Web of Science, Scopus and Index Medicus indexed journals (in 34 papers as a first or corresponding author), and an over 90 scientific and professional abstracts. He is a Reviewer in 17 Current Contents indexed journals (Diabetologia, Diabetes Research and Clinical Practice, Diabetes Obesity and Metabolism, Diabetes/Metabolism Research and Reviews, Endocrine, Lipids, Heart, Hormone and Metabolic Research, British Journal of Nutrition, Global Health Action, Renal Failure, Clinical Epidemiology, Canadian Journal of Physiology and Pharmacology, International Journal of Artificial Organs, European Journal of Clinical Investigations, Archives of Medical Research and World Journal of Gastroenterology). Since 2016 he is a Senior scientific associate at the Medical School University of Zagreb. He is an Editorial Board member of journals Plos One and Archives of Clinical Nephrology.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 6/2016- Senior scientific associate

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. T. Bulum, B. Kolarić, L. Duvnjak, M. Duvnjak. Nonalcoholic fatty liver disease markers are associated with insulin resistance in type 1 diabetes. Digestive Diseases and Sciences 2011; 56: 3655-3663.

2. T. Bulum, B. Kolarić, L. Duvnjak. Insulin sensitivity modifies the relationship between thyroid function and lipid profile in euthyroid type 1 diabetic patients. *Endocrine* 2012; 42: 139-45. DOI: 10.1007/s12020-012-9598-y.
3. T. Bulum, L. Duvnjak, I. Prkačin. Estimated glucose disposal rate in assessment of renal function in patients with type 1 diabetes. *Collegium Antropologicum* 2012; 36 (2): 459-65.
4. L. Duvnjak, V. Kokić, T. Bulum, S. Kokić, M. Krnić, I. S. Hozo. The metabolic syndrome is associated with high-normal urinary albumin excretion and retinopathy in normoalbuminuric type 1 diabetic patients. *Collegium Antropologicum* 2012; 36 (4): 1373-1378.
5. T. Bulum, B. Kolarić, L. Duvnjak. Lower levels of total HDL and HDL3 cholesterol are associated with albuminuria in normoalbuminuric type 1 diabetic patients. *Journal of Endocrinological Investigation* 2013; 36: 574-578. DOI: 10.3275/8850.
6. T. Bulum, B. Kolarić, I. Prkačin, L. Duvnjak. Total and LDL cholesterol are associated with glomerular filtration rate in normoalbuminuric type 1 diabetic patients. *Collegium Antropologicum* 2013; 37: 771-776.
7. K. Blaslov, T. Bulum, K. Zibar, L. Duvnjak. Relationship between adiponectin level, insulin sensitivity and metabolic syndrome in type 1 diabetic patients. *International Journal of Endocrinology* 2013; 2013: 535906. doi:10.1155/2013/535906.
8. K. Blaslov, K. Zibar, T. Bulum, L. Duvnjak. Effect of exenatide therapy on hepatic fat quantity and hepatic biomarkers in type 2 diabetic patients. *Clinics and Research in Hepatology and Gastroenterology* 2014; 38: e61-e63. DOI: 10.1016/j.clinre.2013.10.013.
9. K. Blaslov, T. Bulum, K. Zibar, L. Duvnjak. Incretin based therapies-a novel treatment approach for non-alcoholic fatty liver disease. *World Journal of Gastroenterology* 2014; 20: 7356-7365. doi: 10.3748/wjg.v20.i23.7356.
10. M.Š. Alebić, T. Bulum, N. Stojanović, L. Duvnjak. Definition of insulin resistance using the homeostasis model assessment (HOMA-IR) in IVF patients diagnosed with polycystic ovary syndrome (PCOS) according to the Rotterdam criteria. *Endocrine* 2014; 47: 625-630. DOI: 10.1007/s12020-014-0182-5.
11. K. Blaslov, T. Bulum, J. Knežević-Ćuća, L. Duvnjak. Relationship between autoantibodies combination, metabolic syndrome components and diabetic complications in autoimmune diabetes in adults. *Endocrine* 2015; 48: 551-6. doi: 10.1007/s12020-014-0331-x.
12. K. Zibar, J. Knežević-Ćuća, K. Blaslov, T. Bulum, L. Duvnjak. Difference in glucagon like peptide-1 concentrations between C-peptide negative type 1 diabetic mellitus patients and healthy controls. *Annals of Clinical Biochemistry* 2015; 52: 220-225. DOI: 10.1177/0004563214544709.
13. K. Blaslov, T. Bulum, K. Zibar, L. Duvnjak. Relationship between metabolic syndrome and meal induced glucagon like peptide-1 response in type 1 diabetic patients. *Journal of Diabetes* 2014; DOI: 10.1111/1753-0407.12194.
14. K. Zibar, K. Blaslov, T. Bulum, J. Knežević-Ćuća, L. Smirčić-Duvnjak. Basal and postprandial change in serum fibroblast growth factor-21 concentration in type 1 diabetic mellitus and in healthy controls. *Endocrine* 2015; 48: 848-55. doi: 10.1007/s12020-014-0413-9.
15. K. Blaslov, T. Bulum, L. Duvnjak. Waist-to-height ratio is independently associated with chronic kidney disease in overweight type 2 diabetic patients. *Endocrine Research* 2015; 40: 194-198.

16. K. Blaslov, T. Bulum, L. Duvnjak. Circulating dipeptidyl peptidase-4 activity is associated with diabetic retinopathy in type 1 diabetic patients. *European Journal of Ophthalmology* 2015; 25: 328-332. doi: 10.5301/ejo.5000547.
17. K. Blaslov, T. Bulum, L. Duvnjak. Circulating dipeptidyl peptidase-4 activity is associated with insulin resistance in type 1 diabetic patients. *Journal of Diabetes and its Complications* 2015; 29: 390-4. doi: 10.1016/j.jdiacomp.2014.12.019.
18. K. Blaslov, T. Bulum, L. Duvnjak. The role of endothelial dysfunction driven by adipocytokines in the development and progression of microvascular complications in patients with type 1 and type 2 diabetes. *Medical Hypotheses* 2015; 84: 593-595. doi: 10.1016/j.mehy.2015.03.007.
19. T. Bulum, M. Tomić, L. Duvnjak. Total serum cholesterol increases risk for development and progression of nonproliferative retinopathy in patients with type 1 diabetes without therapeutic intervention: prospective, observational study. *Archives of Medical Research* 2017; 48: 467-471. doi: 10.1016/j.arcmed.2017.10.003.
20. T. Bulum, L. Duvnjak. Insulin resistance in patients with type 1 diabetes: relationship with metabolic and inflammatory parameters. *Acta Clinica Croatica* 2013; 52: 43-51.
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25. T. Bulum, K. Blaslov, L. Duvnjak. The use of anthropometric measurement of obesity in prediction of microvascular complications in obese type 2 diabetic patients. *Acta Clinica Croatica* 2016; 55: 217-223.
26. L. Duvnjak, T. Bulum, Ž. Metelko. Hypertension and the metabolic syndrome. *Diabetologia Croatica* 2008; 37-4: 83-91.
27. T. Bulum, L. Duvnjak. Povezanost markera nealkoholne bolesti jetre s parametrima bubrežne funkcije u tipu 1 šećerne bolesti. *Acta Medica Croatica* 2011; 65 (Suppl. 3): 6-10.
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34. T. Bulum, M. Vučić Lovrenčić, S. Vučković Rebrina, M. Tomić, V. Roso, V. Vuksan, L. Duvnjak. Relationship between adipocytokines and endothelial function parameters in patients with type 1 and type 2 diabetes. *Diabetologia Croatica* 2016; 45: 69-78.

35. V. Roso, T. Bulum, L. Duvnjak. Glucagon-like peptide-1 receptor agonists decrease total and LDL-cholesterol in obese type 2 diabetic patients. *Diabetologia Croatica* 2016; 45:
36. T. Bulum, M. Vučić Lovrenčić, M. Tomić, S. Vučković-Rebrina, V. Roso, B. Kolarić, V. Vuksan, L. Duvnjak. Serum adipocytokines are associated with microalbuminuria in patients with type 1 diabetes and incipient chronic complications. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews* 2019; 13: 496-499. doi: 10.1016/j.dsx.2018.11.001.

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1. T. Bulum, B. Kolarić, L. Duvnjak. Lower levels of total HDL and HDL3 cholesterol are associated with albuminuria in normoalbuminuric type 1 diabetic patients. *Journal of Endocrinological Investigation* 2013; 36: 574-578. DOI: 10.3275/8850.
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27. T. Bulum, M. Vučić Lovrenčić, M. Tomić, S. Vučković-Rebrina, V. Roso, B. Kolarić, V. Vuksan, L. Duvnjak. Serum adipocytokines are associated with microalbuminuria in patients with type 1 diabetes and incipient chronic complications. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews* 2019; 13: 496-499. doi: 10.1016/j.dsx.2018.11.001.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



Since 2012 he is a researcher on the scientific project «Metabolic syndrome in type 1 diabetes“, no. 045-1080230-0516, funded by the Croatian Ministry of Science, Education and Sports (CMSSES), completed by the end of 2013. Since 2015 he is a researcher on the scientific project “Relationship between endothelial dysfunction driven by adipocitokines and the development and progression of microvascular complications in patients with type 1 and type 2 diabetes“, funded by the Croatian Science Foundation.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Since 2012 he is a researcher on the scientific project «Metabolic syndrome in type 1 diabetes“, no. 045-1080230-0516, funded by the Croatian Ministry of Science, Education and Sports (CMSSES), completed by the end of 2013. Since 2015 he is a researcher on the scientific project “Relationship between endothelial dysfunction driven by adipocitokines and the development and progression of microvascular complications in patients with type 1 and type 2 diabetes“, funded by the Croatian Science Foundation.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assistant Professor NIKOLA BULJ, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: UNIVERSITY HOSPITAL CENTRE "SISTERS OF MERCY", UNIVERSITY OF ZAGREB, ZAGREB SCHOOL OF MEDICINE

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: ENDOCRINE TUMORS OF GASTROINTESTINAL SYSTEM AND PANCREAS

BIOGRAPHY

PERSONAL INFORMATION Nikola Bulj

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WORK EXPERIENCE

2015–Present Head of Department of echocardiography and non-invasive diagnostics, Cardiovascular Center, Sisters of Charity University Hospital Centre and School of Medicine University of Zagreb, Zagreb, Croatia

2012–2015 Cardiologist at the Department of Cardiology, Sisters of Charity University Hospital Centre, Zagreb, Croatia

2008–2012 Specialist of internal medicine at the Department of Cardiology, Sisters of Charity University Hospital Centre, Zagreb, Croatia

2004–2008 Internal medicine resident, Sisters of Charity University Hospital, Zagreb, Croatia

2002–2004 Scientific associate, Zagreb School of medicine, Sisters of Charity University Hospital, Zagreb, Croatia

EDUCATION AND TRAINING

2017–Present Assistant Professor of Medicine, School of Medicine, University of Zagreb, Croatia

2016 Course in deformation imaging and 3D/4D echocardiography (Berlin, Germany)

2015 Member – Working group for echocardiography – Croatian Cardiac Society

2014 Member – Working group for valvular heart disease – Croatian Cardiac Society

2013 PhD degree, School of Medicine, University of Zagreb, Croatia

2012 Subspecialist in the field of cardiology

2010 Vascular ultrasound – professional advanced training course,

School of Medicine, University of Zagreb

2009 European Association of Echocardiography - Teaching Course in

Transesophageal Echocardiography(London, UK)

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Curriculum vitae Nikola Bulj

2008 Specialist of internal medicine

2006 European Association of Echocardiography - Teaching Course

(Vienna, Austria)

2006 Texas Heart Institute, St. Luke's Episcopal Hospital, Houston, USA,

Training in Cardiology

2001–2002 Internship, Clinica for infectious disease "Fran Mihaljević", Zagreb,

Croatia

1994–2000 School of Medicine, University of Zagreb

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 11/2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1: Zeljković I, Bulj N, Kolačević M, Čabrilo V, Brkljačić DD, Manola Š. Failure of Intracardiac Pacing After Fatal Propafenone Overdose: A Case Report. J Emerg Med. 2018 Apr;54(4):e65-e68. doi: 10.1016/j.jemermed.2017.12.021. Epub 2018 Jan 11. PubMed PMID: 29336990.

2: Selthofer-Relatić K, Radić R, Stupin A, Šišljagić V, Bošnjak I, Bulj N, Selthofer R, Delić Brkljačić D. Leptin/adiponectin ratio in overweight patients - gender differences. Diab Vasc Dis Res. 2018 May;15(3):260-262. doi: 10.1177/1479164117752491. Epub 2018 Jan 10. PubMed PMID: 29316799.

3: Kolačević M, Baudoin DV, Babacanli A, Babacanli MR, Brdar I, Zeljković I, Bulj N. Chloride validity in Emergency Department settings. Am J Emerg Med. 2018 Aug;36(8):1501-1502. doi: 10.1016/j.ajem.2017.12.002. Epub 2017 Dec 5. PubMed PMID: 29233571.

4: Manola Š, Bernat R, Pavlović N, Radeljić V, Bulj N, Trbušić M. Transcatheter patent foramen ovale closure and radiofrequency ablation of right atrial tachycardia. Acta Clin Croat. 2014 Dec;53(4):490-3. PubMed PMID: 25868319.

5: Bulj N, Potočnjak I, Sharma M, Pintarić H, Degoricija V. Timing of troponin T measurements in triage of pulmonary embolism patients. Croat Med J. 2013 Dec;54(6):561-8. PubMed PMID: 24382851; PubMed Central PMCID: PMC3893989.

6: Babić Z, Pavlov M, Bulj N, Heitzler VN, Mitrović V, Hamm C, Weber M. Metabolic syndrome and outcome in patients with acute myocardial infarction. Acta Clin Croat. 2011 Jun;50(2):193-9. PubMed PMID: 22263382.

7: Manola S, Pavlović N, Radeljić V, Delić Brkljačić D, Pintarić H, Stambuk K, Bulj N, Trbušić M, Krcmar T, Lukinac L. B-type natriuretic peptide as predictor of heart failure in patients with acute ST elevation myocardial infarction, single-vessel disease, and complete revascularization: follow-up study. Croat Med

J. 2009 Oct;50(5):449-54. PubMed PMID: 19839068; PubMed Central PMCID: PMC2765742.

8: Nikolić Heitzler V, Pavlov M, Babić Z, Bulj N. [Antithrombotic therapy in the treatment of STEMI and NSTEMI patients]. Acta Med Croatica. 2009 Feb;63(1):117-9. Croatian. PubMed PMID: 19681476.

9: Nikolic-Heitzler V, Rabuzin F, Tatzber F, Vrkic N, Bulj N, Borovic S, Wonisch W, Sunko BM, Zarkovic N. Persistent oxidative stress after myocardial infarction treated by percutaneous coronary intervention. Tohoku J Exp Med. 2006 Nov;210(3):247-55. PubMed PMID: 17077602.

10: Heitzler VN, Babić Z, Manola S, Bulj N, Mihatov S. [Cardiogenic shock in acute coronary syndrome--therapeutic approach]. Acta Med Croatica. 2004;58(2):101-6. Croatian. PubMed PMID: 15208792.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1: Zeljković I, Bulj N, Kolačević M, Čabrilo V, Brkljačić DD, Manola Š. Failure of Intracardiac Pacing After Fatal Propafenone Overdose: A Case Report. J Emerg Med. 2018 Apr;54(4):e65-e68. doi: 10.1016/j.jemermed.2017.12.021. Epub 2018 Jan 11. PubMed PMID: 29336990.

2: Selthofer-Relatić K, Radić R, Stupin A, Šišljagić V, Bošnjak I, Bulj N, Selthofer R, Delić Brkljačić D. Leptin/adiponectin ratio in overweight patients - gender differences. Diab Vasc Dis Res. 2018 May;15(3):260-262. doi: 10.1177/1479164117752491. Epub 2018 Jan 10. PubMed PMID: 29316799.

3: Kolačević M, Baudoin DV, Babacanli A, Babacanli MR, Brdar I, Zeljković I, Bulj N. Chloride validity in Emergency Department settings. Am J Emerg Med. 2018 Aug;36(8):1501-1502. doi: 10.1016/j.ajem.2017.12.002. Epub 2017 Dec 5. PubMed PMID: 29233571.

4: Manola Š, Bernat R, Pavlović N, Radeljić V, Bulj N, Trbušić M. Transcatheter patent foramen ovale closure and radiofrequency ablation of right atrial tachycardia. Acta Clin Croat. 2014 Dec;53(4):490-3. PubMed PMID: 25868319.

5: Bulj N, Potočnjak I, Sharma M, Pintaric H, Degoricija V. Timing of troponin T measurements in triage of pulmonary embolism patients. Croat Med J. 2013 Dec;54(6):561-8. PubMed PMID: 24382851; PubMed Central PMCID: PMC3893989.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Metabolic syndrome, Oxidative stress and acute myocardial infarction

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Nina Canki-Klain, Professor, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Zagreb University School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of Molecular Biology in Medicine

CV

Professor Nina Canki – Klain, M.D.Ph.D.

ZAGREB UNIVERSITY SCHOOL OF MEDICINE

Chair of Medical Biology &

Croatian Institute for Brain Research

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Pediatrician, clinical geneticist, full professor of medical genetics at Zagreb University Medical School, the founder (2000) and actual President of Clinical Genetic Society of Croatia, retired in October 2014. Since my retirement I 'm continuing to teach at Medical School of Zagreb under the contract.

My approach to any problem is holistic. In everyday practice I have been interested in clinical features of disease, its cause either at the level of chromosome or gene, in patient's family till his/her population. I do not separate routine work from research. Thanks to such approach I was lucky to be with dr. B. Dutrillaux and dr. I. Tivadar, the first to publish the location of the gene causing Duchenne muscular dystrophy (Canki N et al. Ann Génét.1979) that was the prerequisite for further gene's identification. Except involvement in genetic causes of neuromuscular disorders I was engaged in clinical cytogenetics, male and female sterility and infertility, bone's disease, rare forms of malformations and cystic fibrosis. I was a reporter from Yugoslavia of Working Committee for Genetic Counseling- European Society of Human Genetics (1978), a reporter for WHO review of some community genetics services in Europe (1986), member of Steering Committee for Central and Eastern Europe, European Community concerted action for cystic fibrosis (coordinator J. J. Cassiman) (1996-99), and European Community Concerted Action for the Coordination of Cystic Fibrosis Research and Therapy (coordinator M. Goossens) (1993-97) that has permitted me to have experience in European collaboration. As a President of Organizing Committee of 3rd Congress of Yugoslav Geneticists with International Participation (Ljubljana 1987), the organizer of International Summer School of Prenatal Medicine: "Clinical biology of the fetus" (Dubrovnik, 1991), president of Organizing and Scientific Committee of First Eastern European CF Conference "What's New in the Diagnosis, Treatment and Prevention of Cystic Fibrosis", Zagreb, 2008), I have skills of good communicator between national and international (European) scientific community in the field of medical genetics. My actual main activities include: **Teaching medical and Ph.D. students** (Genetic basis and new diagnostic approaches to monogenic, especially neuromuscular disease; Ethics in clinical genetics; Positional cloning; Cytogenetics in clinical practice and research); **Clinical work** : Examination of selected patients from whole Croatia (children, adolescents and adults (no infants) with muscular and neurological disorders presumed to be monogenic in origin; **Research work**: basic research into the origins and molecular spectrum of some monogenic disorders with emphasis on epidemiological situation in Croatia. Special emphasis is on LGMD2A and B, OPMD and AS. Clinician by vocation, performing implemented research with strong interest in education and disseminating knowledge obtained from great teachers and numerous excellent colleagues and friends I have been privileged to have, I'm happy to transmit to my students and other colleagues.

My education and work experience: MD (University of Zagreb), Certificat de cytogénétique humaine (Univ. of Paris); M.Sc. in experimental biology (Univ. of Zagreb), D.Sc (Univ. of Ljubljana), Specialist diploma in pediatrics (Univ. of Ljubljana). Postgraduate training in cytogenetics (Professor J.Lejeune) and

clinical genetics at Hôpital des Enfants Malades, Paris, genetic counseling (Professor J-J Robert, Hôtel-Dieu, Lyon), prenatal diagnosis (Professor A. and dr. J. Boué, INSERM U73 – Paris); molecular genetics (Professor J-C Kaplan, Hôpital Cochin, Paris); myology (Professor M.Fardeau, Hôpital Pitié-Salpêtrière, Paris). I have spent one year as Fulbright scholar at Columbia Univ. College of Physicians & Surgeons, Dept. of Genetics and Development (prof. D. Warburton), New York, USA. University career have started as an assistant at Institute of Anatomy, Zagreb Univ. School of Medicine; was foreign assistant (Service de génétique) at University Claude Bernard in Lyon; an assistant professor then associated professor in medical genetics field, Univ. of Ljubljana Medical School and professor of clinical genetics at University of Zagreb Medical School. I was head of Cytogenetic Laboratory at Department of Gynecology and Obstetrics University Clinical Center of Ljubljana. Under my direction this laboratory was transformed in Division of medical genetics and then to Unit of medical genetics the biggest medical genetics centre in Slovenia. Upon return to native Zagreb (1996) I founded Division of Neurogenetics at Dept. of Neurology, University Medical Centre in Zagreb and Laboratory of clinical neurogenetics and muscular disorders at Croatian Institute of Brain Research. My professional membership includes European Society of Human Genetics (ESHG), European Cytogeneticists Association (member of advisory council since 1998), World Muscle Society, member of Neuromediterranean board of Neuromediterranean, Croatian Academy of Medical Science (full member), Clinical Genetics Society of Croatia (president), Croatian Society for Neuroscience, Croatian Medical Association, Club de Conseil Génétique de Langue Française –previously named Club Européen de Conseil Génétique (member of Administrative Committee since 1978 till its end in 2005) and Slovenian Genetics Society (President 1983-88; 1994-96).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

March 10, 2006

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Canki N, Dutrillaux B, Tivadar I. Dystrophie musculaire de Duchenne chez une petite fille porteuse d'une translocation t(X; 3) (p21; q13) de novo. *Ann Genet* 1979; 22: 33-9.

Canki N, Dutrillaux B. Two cases of familial Paracentric Inversion in Man Associated with Sex Chromosome Anomaly: 47, XXY, inv (5) (q21q32) and 45, X, inv (7) (q11.3q22.3). *Hum Genet* 1979; 47: 261-8.

Warburton D, Byrne J, **Canki N**. Chromosomal Anomalies and Prenatal Development. An Atlas. Oxford Monographs on Medical Genetics No 21, New York: Oxford University Press, 1991.

Stern MH, Soulier J, Rosenzweig M, Nakahara K, **Canki-Klain N**, Auriaz A, Sigaux F, Kirsch JR. MTCP-1: a novel gene on the human chromosome Xq28 translocated to the T cell receptor alpha/omega locus in mature T cell proliferations. *Oncogene* 1993; 8: 2475-83.

Audrezet MP, **Canki-Klain N**, Mercier B, Bravar D, Verlingue C, Ferec C. Identification of three novel mutations (457TAT >G, D192G, Q685X) in the Slovenian CF patients. *Hum Genet* 1994; 93: 659-62.

Canki-Klain N, D.Recan, D.Milicic, S.Llense, F.Leturcq, N.Deburgrave, J.C.Kaplan, M.Debevec, N.Zurak: Clinical Variability and Molecular Diagnosis in a Four-generation Family with X-linked Emery-Dreifuss Muscular Dystrophy. *Croat Med J* 2000; 41: 389-395.

Hećimović S, Klepac N, Vlašić J, Vojta A, Janko D, Skarpa-Prpić I, **Canki-Klain N**, Marković D, Božikov J, Relja M, Pavelić K. Genetic background of Huntington disease in Croatia: Molecular analysis of CAG, CCG, and Delta2642 (E2642del) polymorphisms. *Hum Mutat* 2002; 20/3:233-40.

Canki-Klain N, Milic A, Kovac B, Trlaja A, Grgicevic D, Zurak N, Fardeau M, Leturcq F, Kaplan J-C, Urtizberea JA, Politano L, Feingold J. Prevalence of the 550delA mutation in calpainopathy (LGMD 2A) in Croatia. *Am J Med Genet* 2004; 125A: 152-156.

Piluso G, Politano L, Aurino S, Fanin M, Ricci E, Ventriglia VM, Belsito A, Totaro A, Saccone V, Topaloglu H, Nascimbeni AC, Fulizio L, Broceto A, **Canki-Klain N**, Comi Li, Nigro G, Angelini C, Nigro V. Extensive scanning of the calpain-3 gene broadens the spectrum of LGMD2A phenotypes. *J Med Genet* 2005; 42:686-613.

Milić A, **Canki-Klain N**. Calpainopathy (LGMD2A) in Croatia: Molecular and Haplotype Analysis. *Croat Med J* 2005; 46/4: 657-663.

Canki-Klain N, Žagar M, Alfirić –Ungar T, Milić A, Malnar M, Mitrović Z, Vranješ D, Kovač B, Cvitanović-Šojat L: Clinical, genetic and epidemiological study of prevalent autosomal recessive limb girdle muscular dystrophies in Croatia. *Neuromuscular Disorders* 2007; 17/9-10: 810.

Canki-Klain N. Etički problemi u medicinskoj genetici. (Ethical problems in medical genetics) In *Medicinska etika*, ed. Niko Zurak, Sveučilište u Zagrebu-Medicinski fakultet, Merkur A.B.D, Zagreb 2007, 105-120.

Canki-Klain N, Beroud C., Clarke NF, Kovac I, Chambert S, Guicheney, P. The adult phenotype of congenital muscular dystrophy (MDC1A) due to mutation of LAMA2. *Neuromuscular Disorders* 2009; 19: 574

Milić A, Malnar M, **Canki-Klain N**. Non-invasive protein analysis in the first dysferlinopathy Croatian families. *Translational Neuroscience*. 2011; 2/3: 241-245.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Borovečki A, Braš M., Brkljačić B, **Canki-Klain N.**, Dedić-Plavetić N., Grahovac B. et al.: Smjernice za genetičko savjetovanje i testiranje na nasljedni rak dojke i jajnika. Guidelines for genetic counselling and testing for hereditary breast and ovarian cancer. *Lijec. vjesn.* 2017; 139; 5/6:107-117.

Canki-Klain N. ed. Dani kliničke genetike: Što je novo? Days of Clinical Genetics: What's new? Medicinska naklada, Zagreb 2016.

Canki-Klain N.: Multidisciplinarni pristup osobi s nasljednom sklonošću raku dojke i jajnika. U: Canki-Klain N. ed. Dani kliničke genetike: Što je novo? Days of Clinical Genetics: What's new? Medicinska naklada, Zagreb 2016., 64-9.

Canki-Klain N. Uloga kliničkog genetičara u dijagnostici obiteljskih hematurija. *Paediatr Croat* 2015; 59/Supl 1; 85-90.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Canki-Klain N et al.: Genetika, priroda i epidemiologija značajnijih živčanih i mišićnih bolesti (ŽMB) Genetics, natural history and epidemiology of major neurological and muscular diseases (108-0000000-3435/2007)

ECO NET 2004/05: Approche multiparamétrique pour la connaissance de l'histoire naturelle des calpainopathies visant à déterminer l'efficacité de thérapies potentielles Génomique, UMR8115, CNRS, Evry, France (Dr. Isabelle Richard)

COGITO 2003/04: Correlation phénotype-génotype dans les dystrophies musculaires de l'enfant et de l'adulte. INSERM, U 582, Paris, France (Dr. Pascale GUICHENEY)

Canki –Klain et al. "Genetsko i epidemiološko istraživanje mišićnih distrofija u Hrvatskoj" Genetic and epidemiological study of muscular dystrophies in Croatia Ministry of Science and technology No 0108052/2002

Canki-Klain et al. Clinical, genetic and epidemiological study of muscular dystrophies in Croatia. Grant N° 108041/1998, from the Ministry of Sciences and Technology of the Republic of Croatia

Canki-Klain N, Milić A, Zurak N., Šoštarko M., Pažanin L., Bonne G., Urtizberea J.A., Kaplan J.-C., Leturcq F., Recan D. Clinical and genetic study of limb-girdle muscular dystrophies in Croatia. AFM, MNM1 1999-Funding-groupe 4, No 7233

Canki-Klain N, Avanzo-Velkavrh M, Audrezet MP, Pavlin K, Mlinarič-Raščan I, Debevec M, Mercier B, Verlingue C, Férec C. Screening for cystic Fibrosis in Slovenia using both immunoreactive trypsin and direct gene analysis. *Project of EEC N°BMH1CT 921391 and Ministry of science and technology RSlovenia N° P3-5261-0312-93-96*

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Galešić-Ljubanović D. et al: "Genotip-fenotip korelacija u Alportovom sindromu i nefropatiji tankih glomerularnih bazalnih membrana" Phenotype-Genotype correlation in Alport's syndrome and Thin Glomerular Basement Membrane Nephropathy" HRZZ (IP-2014-09-2151)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 6

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist. Prof. Darko Chudy, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine,
University Hospital Dubrava

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research Methods of
Psychological Functions and Behavior;

BIOGRAPHY

Name: Darko Chudy

Address: Department of Neurosurgery, Clinical Hospital Dubrava, Av. G. Šuška 6, 10000 Zagreb,
Croatia; e-mail: darko.chudy@gmail.com

Personal Data: born on February 8, 1962 in Zagreb, Croatia; married, father of four children

Professional education, training and activities:

1988.: M. D. degree, School of Medicine, University of Zagreb,

1989.: intern at the University Clinical Hospital Center Zagreb - Rebro, Zagreb, Croatia

1992-1997. Resident of neurosurgery,

1997- 2007: Neurosurgeon at the Department of Neurosurgery, University Clinical Hospital Centar
Zagreb,

2007- present: Head of Department of neurosurgery Clinical Hospital Dubrava, Zagreb

1994.: Visiting physician at the Cologne University, Department of Stereotactic and Functional
Neurosurgery, under supervision of Professor Volker Sturm (three months)

1996.: Visiting physician at the Stockholm, Sophiahemmet Hospital, under supervision of Professor Lauri
Laitinen, and Department of Neurosurgery, University of Umea, under supervision of Professor Marwan
Hariz (three months).

2001. : Visiting physician at the Ankara University, Department of Neurosurgery, under supervision of
Professor Yucel Kanpolat (two months)

2004.: Visiting physician at the La Timone Hospital, Marseille, Department of Stereotactic Neurosurgery
and Radiosurgery, under supervision of Professor Jean Regis (one month)

2009-present lecturer for functional neurosurgery at Medical School University of Maribor,

2011.: Associated affiliated professor at Medical School Washington University Seattle USA,

Positions, research activities and achievements:

1984.-1988.: Research Associate, Department of Anatomy, School of Medicine, University of Zagreb;

1988.-1992.: Assistant in Anatomy, Section of Neuroanatomy, School of Medicine, University of Zagreb;

1993-1995.: postgraduate course in neurobiology,

2000.: received Ph.D. degree at the School of Medicine, University of Zagreb (thesis title: "The clinical
study of possibilities and usefulness of the new stereoadapter in computer tomography and magnetic
resonance brain imaging").

2013. Associated professor at Medical School University of Zagreb

2015. Associated professor at Medical School University of Zagreb in University Hospital Dubrava

Main professional and scientific achievements and interests:

- the main interest is stereotactic and functional neurosurgery for movement disorders, pain surgery and epilepsy surgery.
- 1995: successfully introduced stereotactic biopsy at the Department of Neurosurgery, School of Medicine, University of Zagreb;
- 1997-2004: successfully introduced several functional neurosurgical procedures in Croatia: stereotactic ablative methods for movement disorders (pallidotomy and thalamotomy), DREZ operation for chronic pain syndrome and deep brain stimulation, motor cortex stimulation as a stereotactic neurosurgical procedure for movement disorders and chronic pain (thalamic, pallidal and subthalamic stimulation and vagus nerve stimulation for epilepsy).
- clinical and research collaboration with Department of Neurosurgery at the University of Umeo, Sweden
- 2004. introduced of gamma knife radiosurgery at the Department of Neurosurgery, School of Medicine, University of Zagreb.
- 2010. associate on technological project: Robotic in neurosurgery and in 2017., in cooperation with the Faculty of Mechanical Engineering and Naval Architecture and INETEC company, with the support of EU funds project NERO (Robotic Stereotactic Framework), in which today 27 researchers participate.
- in 2015., together with neurologist of University Hospital Dubrava establishes a Reference Center of the Ministry of Health, Republic of Croatia for Functional and Stereotactic Neurosurgery,
- Appointed for the proctor in the deep brain stimulation of Medtronic Company and participates in the introduction of DBS in Albania,
- Organizes the first Regional DBS Meeting in Zadar 2015 and the second in 2017 with the participation of a neurologist and neurosurgeon from Queen Square Hospital in London,

Awards:

1999. Award of the Croatian Medical Association.
2004. Award of the Medical School University of Zagreb
2018. Award of Croatian Medical Chamber

Membership in professional societies:

- 1987- present: member of the Croatian Medical Association (CMA),
- 1991-present: member of Croatian Neurosurgical Association (CNA),
- 1994-present: member of European Association of Neurosurgeons (EANS),
- 1994-present: member of World Neurosurgical Society (WNS),
- 1997-present: member of the World Society for Stereotactic and Functional Neurosurgery (WSSFN).
- 2009-present: member of the European Society for stereotactic and Functional Neurosurgery

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1: Grahovac G, Chudy D, Heinrich Z, Zarkovic K. Implantation metastasis of malignant fibrous histiocytoma along the stereotactic biopsy tract. *Clin Neurol Neurosurg.* 2012 Oct 3. doi:p11: S0303-8467(12)00496-9.
- 2: Basic S, Sporis D, Chudy D, Grahovac G, Nevajda B. The effect of vagus nerve stimulation on migraine in patient with intractable epilepsy: case report. *Neurol Sci.* 2012 Jun 22. [Epub ahead of print]
- 3: Jurjević I, Maraković J, Chudy D, Markelić I, Klarica M, Froebe A, Orešković D. Dependence of cerebrospinal fluid pressure and volume on the changes in serum osmolality in cats. *Acta Neurochir Suppl.* 2012;114:351-5.
- 4: Maraković J, Oresković D, Jurjević I, Rados M, Chudy D, Klarica M. Potential error in ventriculocisternal perfusion method for determination of cerebrospinal fluid formation rate in cats. *Coll Antropol.* 2011 Jan;35 Suppl 1:73-7.
- 5: Tomac D, Chudy D, Lambaša S, Topić I, Grahovac G, Zoric A. Extracranial propagation of glioblastoma with extension to pterygomaxillar fossa. *World J Surg Oncol.* 2011 May 19;9:53. Review.
- 6: Grahovac G, Vilendecic M, Chudy D, Srdoc D, Skrlin J. Nightmare complication after lumbar disc surgery: cranial nontraumatic acute epidural hematoma. *Spine (Phila Pa 1976).* 2011 Dec 15;36(26):E1761-4.
- 7: Basić S, Sporis D, Chudy D, Ivkić G, Vavro H. [Invasive SEEG imaging in preoperative care of patients with drug resistant epilepsy]. *Lijec Vjesn.* 2010 Sep-Oct;132(9-10):323-4.
- 8: Maraković J, Oresković D, Rados M, Vukić M, Jurjević I, Chudy D, Klarica M. Effect of osmolality on CSF volume during ventriculo-aqueductal and ventriculo-cisternal perfusions in cats. *Neurosci Lett.* 2010 Oct 29;484(2):93-7. Epub 2010 Jul 30.
- 9: Chudy D, Rados M, Ozretic D, Grahovac G, Zarkovic K. Stereotactically treated giant perivascular spaces in a 13-year-old boy mimicking brain tumor. *Cent Eur Neurosurg.* 2011 May;72(2):104-6. Epub 2010 Jun 18.
- 10: Habek M, Hajnsek S, Zarković K, Chudy D, Mubrin Z. Frontal variant of Alzheimer's disease: clinico-CSF-pathological correlation. *Can J Neurol Sci.* 2010 Jan;37(1):118-20. PubMed PMID: 20169785.
- 11: Melada A, Heinrich Z, Chudy D, Scap M, Rotim K. The difference between ultrasound-guided and stereotactic-guided neurosurgical procedures. *Minim Invasive Neurosurg.* 2000 Sep;43(3):149-52.
- 12: Laitinen LV, Chudy D, Tengvar M, Hariz MI, Bergenheim AT. Dilated perivascular spaces in the putamen and pallidum in patients with Parkinson's disease scheduled for pallidotomy: a comparison between MRI findings and clinical symptoms and signs. *Mov Disord.* 2000 Nov;15(6):1139-44.
- 13: Judas M, Chudy D, Priscan A, Radonić N, Papić J, Marusić A, Banfić H, Kostović I. [Chronology of civilian suffering in the war against Croatia]. *Lijec Vjesn.* 1991 Jul-Aug;113(7-8):198-202.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE



ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Mario Cifrek, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb, Faculty of Electrical Engineering and Computing

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Electrophysiological Methods in Medical Research

BIOGRAPHY

Born on March 24th 1964 in Varazdin. Graduated in 1987, MSc 1992, Ph.D. 1997 at the Faculty of Electrical Engineering and Computing in Zagreb. Since 1987 employed in FER. Scientific and professional work in the field of sensors, electronic instrumentation and biomedical engineering, with special emphasis on the measurement and analysis of biomedical signals. Teaching activity. FER undergraduate: Computer Aided Design of Electronic Systems, Technology in Medicine; FER-graduate studies: Biomedical Informatics, Biomedical Signals and Systems, Electronic Equipment Power Supplies, Multisensor Systems and Locomotion, Programming Industrial Embedded Systems, Sensor Technology; FER-postgraduate studies: Biomonitoring Systems, Systems for Measurement Nonelectrical Values; MEF Medical Studies in English: Measurement and analysis of human locomotion; MEF-postgraduate studies: Electrophysiological Methods in Medical Research. He participated in eight scientific and many professional projects. He led two Proof of Concept Grant Fund for Researchers – PoC Public projects (HAMAG BICRO) and two projects of bilateral cooperation with China. Currently he is leading one research and innovation project (strengthening capacity for research, development and innovation – IRI) and participating in Centre of Research Excellence for Data Science and Cooperative Systems – DATACROSS. He is editor of two scientific books and co-author of the nine chapters in scientific books, 31 journal papers, 20 of them CC with more than 350 citations (Wos), and more than 150 conference papers. He was a mentor of a six defended doctoral dissertation at the Faculty of Electrical Engineering and Computing and one at the School of Dental Medicine. Mentor of four PhD students. Member of the Institute of Electrical and Electronics Engineers, International Federation for Medical and Biological Engineering, European Society for Engineering and Medicine, International Federation for Automatic Control, Croatian Medical and Biological Engineering Society, Croatian Society for Communications, Computing, Electronics, Measurement and Control, and a member of the Croatian Academy of Engineering. He was awarded the silver medal "Josip Loncar" for significant and successful master's work, and for the successful doctoral dissertation. He also awarded Annual award of the City of Zagreb in 2014, and Annual Award "Rikard Podhorsky" of the Croatian Academy of Engineering.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 11. 12. 2012

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Book chapters:

Alan Jović, Kresimir Jozić, Davor Kukolja, Kresimir Friganović, Mario Cifrek: Challenges in Designing Software Architectures for Web Based Biomedical Signal Analysis. In „Medical Big Data and Internet of Medical Things: Advances, Challenges and Applications“, Hassanien, Aboul Ella; Dey, Nilanjan; Borra, Surekha (eds.). CRC Press, Taylor & Francis Group, 2018. pp-pp , ISBN 1138492477, 9781138492479

Mario Cifrek: Inspection and Testing of Electroencephalographs, Electromyographs, and Evoked Response Equipment. In „Inspection of Medical Devices – For Regulatory Purposes“, Almir Badnjević, Mario Cifrek, Ratko Magjarević, Zijad Džemić (eds.). Singapore Springer, 2018, 141-157, ISBN 978-981-10-6650-4

Almir Badnjević, Mario Cifrek, Lejla Gurbeta and Elma Ferić: Classification of Chronic Obstructive Pulmonary Disease Based on Neuro-Fuzzy Software. In “Chronic Obstructive Pulmonary Disease (COPD): Clinical Symptoms, Emerging Treatment Strategies and Impact on Quality of Life”, Jared King (ed.). New York, Nova Science Publishers, Inc., 2016, 1-26, ISBN: 978-1-63484-500-7

Mario Cifrek, Melita Valentić-Peruzović: Measurement and analysis of myoelectric signals with application in dentistry. In: „ Contemporary electrodiagnostic methods and their application in person with TMD “. Vjekoslav Jerolimov, (ed.). Zagreb: HAZU - Croatian Academy of Sciences and Arts, 2014, 21-58, ISBN 978-953-154-245-6

Melita Valentić-Peruzović, Mario Cifrek, Iva Alajbeg, Davor Illeš: The electromyography as diagnostic method for orofacial complex. In: „ Contemporary electrodiagnostic methods and their application in person with TMD “. Vjekoslav Jerolimov, (ed.). Zagreb: HAZU - Croatian Academy of Sciences and Arts, 2014, 3-19, ISBN 978-953-154-245-6

Vladimir Medved, Mario Cifrek: Kinesiological Electromyography. In “Biomechanics in Applications / Book 1”, Vaclav Klika (ed.). Rijeka, InTech, 2011, 349-366, ISBN 978-953-307-969-1

Journal papers:

Saša Ostojić, Stanislav Peharec, Vedran Srhoj-Egekhe, Mario Cifrek: Differentiating patients with radiculopathy from chronic low back pain patients by single surface EMG parameter. *Automatika*, 59:3-4, 2018, 400-407, DOI: 10.1080/00051144.2018.1553669

Kresimir Friganović, Davor Kukolja, Alan Jović, Mario Cifrek, Goran Krstačić: Optimizing the detection of characteristic waves in ECG based on processing methods combinations. *IEEE Access*, Volume 6, 2018, 50609-50626

Almir Badnjević, Mario Cifrek, Dragan Koruga, Dinko Osmanković: Neuro-fuzzy classification of asthma and chronic obstructive pulmonary disease. *BMC Medical Informatics and Decision Making*, 15(Suppl 3):S1, 2015.

Vedran Srhoj-Egekher, Mario Cifrek, Vladimir Medved: The application of Hilbert-Huang transform in the analysis of muscle fatigue during cyclic dynamic contractions. *Medical and Biological Engineering and Computing*, 49(6), 2011, 659-669.

Magdalena Krbot, Ana Branka Šefer, Mario Cifrek, Zoran Mitrović, Igor Krois, Velimir Išgum: Somatosensory Vibratory Evoked Potentials: Stimulation Parameters. *Automatika*, 52(1), 2011, 31-38.

Mario Cifrek, Vladimir Medved, Stanko Tonković, Saša Ostojić: EMG based muscle fatigue evaluation in biomechanics. *Clinical Biomechanics*, 24(4), 2009, 327-340.

Iva Žilić-Alajbeg, Melita Valentić-Peruzović, Ivan Alajbeg, Mario Cifrek: The influence of age and dental status on elevator and depressor muscle activity. *Journal of Oral Rehabilitation*, 33(2), 2006, 94-101.

Mario Cifrek, Stanko Tonković, Vladimir Medved: Measurement and analysis of surface myoelectric signals during fatigued cyclic dynamic contractions. *Measurement*, 27(2), 2000, 85-92.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Book chapters:

Alan Jović, Kresimir Jozić, Davor Kukolja, Kresimir Friganović, Mario Cifrek: Challenges in Designing Software Architectures for Web Based Biomedical Signal Analysis. In „Medical Big Data and Internet of

Medical Things: Advances, Challenges and Applications“, Hassanien, Aboul Ella; Dey, Nilanjan; Borra, Surekha (eds.). CRC Press, Taylor & Francis Group, 2018. pp-pp , ISBN 1138492477, 9781138492479

Mario Cifrek: Inspection and Testing of Electroencephalographs, Electromyographs, and Evoked Response Equipment. In „Inspection of Medical Devices – For Regulatory Purposes“, Almir Badnjević, Mario Cifrek, Ratko Magjarević, Zijad Džemić (eds.). Singapore Springer, 2018, 141-157, ISBN 978-981-10-6650-4

Almir Badnjević, Mario Cifrek, Lejla Gurbeta and Elma Ferić: Classification of Chronic Obstructive Pulmonary Disease Based on Neuro-Fuzzy Software. In “Chronic Obstructive Pulmonary Disease (COPD): Clinical Symptoms, Emerging Treatment Strategies and Impact on Quality of Life”, Jared King (ed.). New York, Nova Science Publishers, Inc., 2016, 1-26, ISBN: 978-1-63484-500-7

Mario Cifrek, Melita Valentić-Peruzović: Measurement and analysis of myoelectric signals with application in dentistry. In: „Contemporary electrodiagnostic methods and their application in person with TMD “. Vjekoslav Jerolimov, (ed.). Zagreb: HAZU - Croatian Academy of Sciences and Arts, 2014., 21-58, ISBN 978-953-154-245-6

Melita Valentić-Peruzović, Mario Cifrek, Iva Alajbeg, Davor Illeš: The electromyography as diagnostic method for orofacial complex. In: „Contemporary electrodiagnostic methods and their application in person with TMD “. Vjekoslav Jerolimov, (ed.). Zagreb: HAZU - Croatian Academy of Sciences and Arts, 2014., 3-19, ISBN 978-953-154-245-6

Journal papers:

Saša Ostojić, Stanislav Peharec, Vedran Srhoj-Egekhe, Mario Cifrek: Differentiating patients with radiculopathy from chronic low back pain patients by single surface EMG parameter. *Automatika*, 59:3-4, 2018, 400-407, DOI: 10.1080/00051144.2018.1553669

Kresimir Friganović, Davor Kukolja, Alan Jović, Mario Cifrek, Goran Krstajić: Optimizing the detection of characteristic waves in ECG based on processing methods combinations. *IEEE Access*, Volume 6, 2018, 50609-50626

Yue- Ming Gao, Heng- fei Zhang, Shi Lin, Rui- Xin Jiang, Zhi- Ying Chen, Željka Lučev Vasić, Mang- I Vai, Min Du, Mario Cifrek, Sio- Hang Pun: Electrical exposure analysis of galvanic- coupled intra- body communication based on the empirical arm models. *BioMedical Engineering OnLine*, (2018) 17:71, <https://doi.org/10.1186/s12938-018-0473-9>

Shi Lin, Yue-Ming Gao, Juan Cai, Željka Lučev Vasić, Mang-I Vai, Min Du, Mario Cifrek, and Sio-Hang Pun: Biological Evaluation of the Effect of Galvanic Coupling Intrabody Communication on Human Skin Fibroblast Cells. *Wireless Communications and Mobile Computing*, Volume 2017 (2017), Article ID 8674035, 8 pages, DOI:10.1155/2017/8674035.

Yue- Ming Gao, Yan- Ting Ye, Shi Lin, Željka Lučev Vasić, Mang- I Vai, Min Du, Mario Cifrek, Sio- Hang Pun: Investigation of implantable signal transmission characteristics based on visible data of the human leg. *BioMed Eng OnLine* (2017) 16:88, 1-14, DOI 10.1186/s12938-017-0379-y

Domagoj Prebeg, Božidar Pavelić, Mario Cifrek, Slobodan Milošević, Igor Krois, S. Šegović, Marina Katunarić, Milan Kordić: Analysis of electric field and emission spectrum in the glow discharge of therapeutic plasma electrode. *Automatika*, 58(1), 2017, 1-10.

Željka Lučev Vasić, Igor Krois, Mario Cifrek: Effect of transformer symmetry on intrabody communication channel measurements using grounded instruments. *Automatika*, 57(1), 2016, 15-26.

Almir Badnjević, Mario Cifrek, Dragan Koruga, Dinko Osmanković: Neuro-fuzzy classification of asthma and chronic obstructive pulmonary disease. BMC Medical Informatics and Decision Making, 15(Suppl 3):S1, 2015.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Research and development of the system for driver drowsiness and distraction identification – DFDM, 1. 10. 2018 – 30. 09. 2021, Coordinator XYLON d.o.o. Strengthening capacity for research, development and innovation (IRI).

Young researchers' career development project – training of doctoral students, Croatian Science Foundation. October, 2016 – October 2020. PhD student mentor (Krešimir Friganović), topic „Computer Based Detection of Atrial Fibrillation in Multi-channel Electrocardiogram“.

A software system for parallel analysis of multiple heterogeneous time series with application in biomedicine – MULTISAB (project leader dr. sc. Alan Jović), 1. 10. 2015. – 30. 9. 2018, supported by Croatian Science Foundation, UIP-2014-09-6889. Project associate.

Neurophysiology of Movement Investigated by Evoked Potential Methods (principal investigator Asst. Prof. Velimir Išgum, PhD), 01. 03. 2008 – 30. 10. 2013, Ministry of Science, Education and Sports project RH 312-0362979-3258. Project associate.

Noninvasive Measurements and Procedures in Biomedicine (principal investigator Prof. Stanko Tonković, PhD), 1. 1. 2007 – 30. 10. 2013, Ministry of Science, Education and Sports project RH 036-0362979-1554. Project associate.

Uninvasive Measurement and Technologies in Biomedicine (principal investigator Prof. Stanko Tonković, PhD), 2002 – 2007, Ministry of Science and Technology project RH 0036007. Project associate.

Measurement Systems for Processing of Biological Quantities (principal investigator Prof. Ante Šantić, PhD), 1997 – 2002, Ministry of Science and Technology project RH 036026. Project associate.

New Bioimpedance Methods for Measurement of Biological Parameters (principal investigator Prof. Ante Šantić, PhD), 1990 – 1996, Ministry of science and Technology project RH 2-07-259. Project associate.

Development of Special Instrumentation for Measurement, Analysis and Processing of Biological Parameters and Measurement of Non-electrical Quantities for Industrial Applications (principal investigator Prof. Ante Šantić, PhD), 1988 – 1990, scientific project 33.10. Project associate.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Research and development of the system for driver drowsiness and distraction identification – DFDM, 1. 10. 2018 – 30. 09. 2021, Coordinator XYLON d.o.o. Strengthening capacity for research, development and innovation (IRI).

Body area networks for health applications based on intrabody communication. 2017-2019. Fuzhou University, College of Physics and Information Engineering, Fujian Province, P.R. China. Croatian-Chinese Scientific and Technological Cooperation, project leader Asst. Prof. Željka Lučev Vasić, PhD. Project associate.

Centre of Research Excellence for Data Science and Cooperative Systems – DATACROSS, project leaders prof. Ivan Petrovi, PhD and prof. Sven Lončarić, PhD. 1. 11. 2017 – 31. 10. 2021. Project associate.

Young researchers' career development project – training of doctoral students, Croatian Science Foundation. October, 2016 – October 2020. Doctoral student (Krešimir Friganović) co-mentor with asst.



prof. Alan Jović, topic „Computer Based Detection of Atrial Fibrillation in Multi-channel Electrocardiogram“.

Intrabody Communication as a Key Technology for Internet of Things in Health Applications. 2015-2017. Fuzhou University, College of Physics and Information Engineering, Fujian Province, P.R. China. Croatian-Chinese Scientific and Technological Cooperation. Project leader.

A software system for parallel analysis of multiple heterogeneous time series with application in biomedicine – MULTISAB (project leader dr. sc. Alan Jović), 1. 10. 2015. – 30. 9. 2018, supported by Croatian Science Foundation, UIP-2014-09-6889. Project associate.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: Seven (7)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Maja Cigrovski Berković, MD, PhD, Assistant professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Sestre milosrdnice

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Molecular genetics of gastrointestinal tumors, Endocrine tumors of gastrointestinal tract and the pancreas

BIOGRAPHY

Assistant professor Maja Cigrovski Berković, MD, PhD

Identification number of the scientist: 314071

Department for Endocrinology, Diabetes and Metabolism UHC Sestre milosrdnice, Vinogradska 29, 10000 Zagreb, Croatia, email: maja.cigrovskiberkovic@gmail.com

EDUCATION

2013, subspecialist in Endocrinology and Diabetes

2009, PhD obtained at Medical School University of Zagreb, Croatia

2008, specialist in internal medicine

2000, MD, Medical School University of Zagreb

WORK EXPERIENCE

2013- present, subspecialist in Endocrinology and Diabetes at UHC Sestre milosrdnice, Zagreb, Croatia

2016-Assistant professor Faculty of Kinesiology University of Zagreb, Croatia

2008-2013, specialist in internal medicine UHC Sestre milosrdnice, Zagreb, Croatia

2004-2008, internship in internal medicine UHC Sestre milosrdnice, Zagreb, Croatia

2001-2004, young scientific researcher, Department of Endocrinology, Diabetes and Metabolism, Clinic of Internal medicine UHC Sestre milosrdnice, Zagreb, Croatia

2000-2001, MD, UHC Sestre milosrdnice, Zagreb, Croatia

RESEARCH AND SCIENTIFIC PROJECTS/GRANTS 2001-2004, young scientific researcher, project financed by Ministry of Science Neuroendocrine tumors of gastrointestinal tract and pancreas

2002, scientific associate, project by Veterinary School University of Zagreb, Measurement of glycogen in human blood

2004-2010, scientific associate, project financed by Ministry of Science, Neuroendocrine tumors of gastrointestinal tract and pancreas

2013, PI and national coordinator of multicentric and multinational noninterventional research of hypoglycemia in insulin treated type 1 and type 2 diabetes patients (HAT-Hypoglycemia Assessment Tool)

2010-2014, PI, project financed by Ministry of Science Neuroendocrine tumors of gastrointestinal tract and pancreas

AWARDS

2014. Etzweiler international scholarship for IDC and Mayo Clinic, MN, USA

2015 - present lecturer; Course: Molecular genetics of gastrointestinal tumors Doctoral Study in Biomedicine and Health Sciences School of Medicine, University of Zagreb

2015-present lecturer; Course Pancreatic Diseases, Doctoral Study in Biomedicine and Health Sciences School of Medicine, University of Zagreb

2015-present lecturer; Course Fundamentals of Medical Skills, School of Medicine, University of Zagreb, Croatia

2015- associate lecturer at School of Kinesiology University of Zagreb

2010 – present Course leader: Endocrine tumors of gastrointestinal tract and Pancreas, Doctoral Study in Biomedicine and Health Sciences School of Medicine, University of Zagreb

2004-2005, lecturer; Courses Rational use of medications and Medical Emergencies, School of Medicine, University of Zagreb, Croatia

2001-2009-lecturer; Course: Scientific approach to hypoglycemia, Doctoral study, School of Medicine University of Zagreb, Croatia

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 1.6.2016.

assistant professor; 13.12.2011. senior research associate

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Berković M, Čačev, T, Zjačić-Rotkvić V, Kapitanović S. TNF- α Promoter Single Nucleotide Polymorphisms in Gastroenteropancreatic Neuroendocrine Tumors. *Neuroendocrinology* 2006;84:346-352.
2. Cigrovski Berković M, Jokić M, Marout J, Radošević S, Zjačić-Rotkvić V, Kapitanović, S. IL-6-174 C/G polymorphism in the gastroenteropancreatic neuroendocrine tumors (GEP-NETs). *Experimental and Molecular Pathology* 2007;83:474-479.
3. Cigrovski Berković M, Altabas V, Herman D, Hrabar D, Goldoni V, Vizner B, Zjačić-Rotkvić V. A Single-Centre Experience with Octreotide in the Treatment of Different Hypersecretory Syndromes in Patients with Functional Gastroenteropancreatic Neuroendocrine Tumors. *Coll Antropol.* 2007;31:531-534.
4. Cigrovski Berkovic M, Jokic M, Marout J, Radošević S, Zjacić-Rotkvić V, Kapitanovic S. IL-2-330 T/G SNP and serum values-potential new tumor markers in neuroendocrine tumors of the gastrointestinal tract and pancreas (GEP-NETs). *J Mol Med* 2010;88:423-429.
5. Rustemović N, Cigrovski Berković M, Zjačić-Rotkvić V, Ostojić R, Hrabar D, Sertić J, Jakić-Razumović J, Krušlin B, Štern-Padovan R, Težak S, Kovačić K, Vrbanec D, Belev B, Škegro M. Postupnik za dijagnostiku, liječenje i praćenje oboljelih od neuroendokrinih tumora gušterače. *Liječ Vjesn* 2010;132:127-133.
6. Cigrovski Berković M, Catela Ivković T, Marout J, Zjačić-Rotkvić V, Kapitanović S. Interleukin 1 β gene single-nucleotide polymorphisms and susceptibility to pancreatic neuroendocrine tumors. *DNA Cell Biol* 2012;31(4):531-6.
7. Cigrovski Berkovic M, Cacev T, Catela Ivkovic T, Zjacić-Rotkvić V, Kapitanovic S. New insights into the role of chronic inflammation and cytokines in the etiopathogenesis of gastroenteropancreatic neuroendocrine tumors. *Neuroendocrinology.* 2014;99(2):75-84.
8. Cigrovski Berković M, Čačev T, Catela Ivković T, Marout J, Ulamec M, Zjacić-Rotkvić V, Kapitanovic S. High VEGF serum values are associated with locoregional spread of gastroenteropancreatic neuroendocrine tumors (GEP-NETs). *Mol Cell Endocrinol* 2016;425:61-68.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Khunti K, Cigrovski Berković M, Ludvik B, Moberg E, Barner Lekdorf J, Gydesen H, Pedersen-Bjergaard U. Regional variations in definitions and rates of hypoglycaemia: findings from the global HAT observational study of 27 585 people with Type 1 and insulin-treated Type 2 diabetes mellitus. *Diabet Med*. 2018 May 5. doi: 10.1111/dme.13662. [Epub ahead of print]
2. Pedersen-Bjergaard U, Alsifri S, Aronson R, Berković MC, Galstyan G, Gydesen H, Lekdorf JB, Ludvik B, Moberg E, Ramachandran A, Khunti K. Comparison of the HAT study, the largest global hypoglycaemia study to date, with similar large real-world studies. *Diabetes Obes Metab*. 2018 Nov 20. doi: 10.1111/dom.13588. [Epub ahead of print]
3. Polic MV, Miskulin M, Smolic M, Kralik K, Miskulin I, Berkovic MC, Curcic IB. Psoriasis Severity-A Risk Factor of Insulin Resistance Independent of Metabolic Syndrome. *Int J Environ Res Public Health*. 2018;15(7).
4. Božek T, Bilić-Ćurčić I, Berković MC, Gradišer M, Kurir TT, Majanović SK, Marušić S. The effectiveness of lixisenatide as an add on therapy to basal insulin in diabetic type 2 patients previously treated with different insulin regimes: a multi-center observational study. *Diabetol Metab Syndr*. 2018;10:16.
5. Khunti K, Alsifri S, Aronson R, Cigrovski Berković M, Enters-Weijnen C, Forsén T, Galstyan G, Geelhoed-Duijvestijn P, Goldfracht M, Gydesen H, Kapur R, Lalic N, Ludvik B, Moberg E, Pedersen-Bjergaard U, Ramachandran A; HAT Investigator Group. Impact of hypoglycaemia on patient-reported outcomes from a global, 24-country study of 27,585 people with type 1 and insulin-treated type 2 diabetes. *Diabetes Res Clin Pract*. 2017;130:121-129.
6. Berkovic MC, Bilic-Curcic I, Herman Mahecic D, Gradiser M, Grgurevic M, Bozek T. Long-Term Effectiveness of Liraglutide in Association with Patients' Baseline Characteristics in Real-Life Setting in Croatia: An Observational, Retrospective, Multicenter Study. *Diabetes Ther*. 2017;8(6):1297-1308.
7. Bilic-Curcic I, Berkovic MC. Gastrin - A Potential Predictor of Response to Incretin Therapy in Diabetes Type 2 Patients. *Endocr Metab Immune Disord Drug Targets*. 2017;17(4):297-302.
8. Cigrovski Berković M, Herman Mahečić D, Gradišer M, Bilić-Ćurčić I. Impact of health policy and practice on finding the best fit for patients with type 2 diabetes after metformin failure: Croatian pilot study. *Prim Care Diabetes*. 2017;11(3):265-272.
9. Gradišer M, Berković MC, Bilić-Ćurčić I. Changes in HbA1c and hypoglycemic episodes in type 1 diabetes patients after switching to insulin glargine U300: Pilot study. *Diabetes Res Clin Pract*. 2017 Jul;129:144-147.
10. Khunti K, Alsifri S, Aronson R, Cigrovski Berković M, Enters-Weijnen C, Forsén T, Galstyan G, Geelhoed-Duijvestijn P, Goldfracht M, Gydesen H, Kapur R, Lalic N, Ludvik B, Moberg E, Pedersen-Bjergaard U, Ramachandran A; HAT Investigator Group. Rates and predictors of hypoglycaemia in 27 585 people from 24 countries with insulin-treated type 1 and type 2 diabetes: the global HAT study. *Diabetes Obes Metab*. 2016;18(9):907-15.
11. Cigrovski Berkovic M, Petrovski G, Grulovic N. Effectiveness of insulin glargine in type 2 diabetes mellitus patients failing glycaemic control with premixed insulin: Adriatic countries data meta-analysis. *Acta Diabetol*. 2016;53(5):709-15.
12. Gradiser M, Bilic-Curcic I, Djindjic B, Berkovic MC. The Effects of Transition from Bedtime to Morning Glargine Administration in Patients with Poorly Regulated Type 1 Diabetes Mellitus: Croatian Pilot Study. *Diabetes Ther*. 2015;6(4):643-648



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2010-2014, PI scientific project financed by Ministry of Science Neuroendocrine tumors of gastrointestinal tract and pancreas

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2010-2014, PI scientific project financed by Ministry of Science Neuroendocrine tumors of gastrointestinal tract and pancreas

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Vladiana Crljen, assist. prof.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Structure, methodology and functioning of scientific work 1

BIOGRAPHY

Education and training M.D. – 1986. School of Medicine, University of Zagreb, 1981.-1986. M.Sc. – 1991. Faculty of Natural Sciences, University of Zagreb, postgraduate studies „Biology (Biomedicine) “ 1987.-1991. MSc Thesis title: „Insulin-like growth factor I stimulates phospholipid synthesis in renal cortical slices without production of inositol phosphates“, Ph.D. – 1995., School of Medicine, University of Zagreb, Area Biomedicine and health, field Basic Medical Sciences, branch Physiology, PhD Thesis title: "Effects of HGF on phospholipid metabolism in basal-lateral and brush-border membranes isolated from rat renal cortical slices"; Postdoctoral training: INSERM U356, France, 1995.-1996.; 2010 – Competence course for Scientists Using Animals in Research, Lab Animal Centre, University of Eastern Finland
Appointments: 2006. – Present - Assistant Professor of Physiology and Basics of Neurosciences, School of Medicine, University of Zagreb; 1996. - Senior Research Assistant (Senior Instructor), Physiology and Basics of Neuroscience, School of Medicine, University of Zagreb; 1995. – 1996. Postdoctoral training INSERM U356, France ; 1988.-1993. Research Assistant (Instructor) School of Medicine, University of Zagreb; 1987.-1988. Junior Researcher, School of Medicine, University of Zagreb; 1987. Intern, DZ Novi Zagreb

Professional, research, academic experience and achievements - Associate investigator in research projects: 2018. - The function of uroguanylin, a new protein in the brain, from the cell physiology to human health FURNACE (IP-2018-01-7416, prof. dr. sc. Aleksandra Sindić); 2018. - Role of inositol pyrophosphates in regulation of cellular growth (supported by University of Zagreb, prof. dr.sc. Hrvoje Banfić); 2017. - Role of inositol pyrophosphates in regulation of cellular growth (supported by University of Zagreb, prof. dr.sc. Hrvoje Banfić); 2016. - Role of inositol pyrophosphates in regulation of cellular growth (supported by University of Zagreb, prof. dr.sc. Hrvoje Banfić); 2015. - Role of inositol pyrophosphates in regulation of cellular growth (supported by University of Zagreb, prof. dr.sc. Hrvoje Banfić); 2014. - Role of phosphatidyl-inositol 3-kinases in leukaemia cells differentiation (supported by University of Zagreb, prof. dr.sc. Dora Višnjić); 2013. - Signalling pathways in the regulation of leukaemia cells proliferation and differentiation, (Support I) University of Zagreb (D. Višnjić); 2007 – The role of phosphatidyl-inositol 3-kinaseC2β in cell nuclei (108-1081347-0173, MZOS, H. Banfić); 2002 – 2007 Inositol lipid second messengers in cell nuclei (0108-015, MZOS, H. Banfić); 1996-2001 Phospholipid second messengers (108013, MZOS, H. Banfić); 1995-1996 Activation of PLD by angiotensin II in freshly isolated rat renal cortical tubules (INSERM, France); 1994-1996 Second messengers and mechanisms of transport in cells (MZOS, Banfić)

Academic experience: over 300 hours of teaching in graduate study programme of Physiology, Basics of neuroscience, elective Stress and Brain, Medical Ethics, Postgraduate PhD programme study – Structure, methods and functioning of scientific work, Postgraduate professional study Urology - Selected topics from physiology of urogenital system; Other activities: Vice President of Animal welfare committee
Publications in CC indexed journals: 8 Citations: 130

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 22.04.2013.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Sabolić I, Škarica M, Ljubojević M, Breljak D, Herak-Kramberger CM, Crljen V, Ljubešić N. Expression and imunolocalization of metolothioneins MT1, MT2 and MT3 in rat nephron. J Trace Elem Med Biol. 2018; 46:62-75
2. Banfić H, Crljen V, Lukinović-Škudar V, Dembitz V, Lalić H, Bedalov A, Višnjić D. Inositol pyrophosphates modulate cell cycle independently of alteration in telomere length. Adv Biol Regul 2016; 60:22-28

3. Crljen V, Sabolić I, Sušac J, Appenroth D, Herak-Kramberger CM, Ljubojević M, Anzai N, Antolović R, Burckhardt G, Fleck C, Sabolić I. Immunocytochemical characterization of the incubated rat renal cortical slices. *Pflugers Arch.* 2005; 450(4):269-79
 4. Trkulja V, Crljen-Manestar V, Banfić H, Lacković Z. Involvement of peripheral cholinergic muscarinic system in the compensatory ovarian hypertrophy in the rat. *Exp Biol Med.* 2004; 229 (8): 793-805 .
 5. Crljen V, Višnjić D, Banfić H. Presence of different phospholipase C isoforms in the nucleus and their activation during compensatory liver growth. *FEBS Lett.* 2004; 571 (1-3):35-42
 6. Crljen V, Volinia S, Banfić H. Hepatocyte growth factor activates phosphoinositide 3-kinase C2beta in renal brush-border plasma membranes. *Biochem J.* 2002; 365 (Pt3): 791-9
 7. Crljen V, Banfić H. Insulin-like growth factor I stimulates phospholipid synthesis in renal cortical slices without production of inositol phosphate. *Biochim Biophys Acta.* 1989; 1012(1):24-8
 8. Sinđić A, Crljen V, Matković K, Lukinović-Škudar V, Višnjić D, Banfić H. Activation of phosphoinositide 3-kinase C2 beta in the nuclear matrix during compensatory liver growth. *Adv Enzyme Regul* 2006; 46:280-287
 9. Crljen V, Karim-Jimenez Z, Defontaine N, Banfić H, Paillard M, Poggioli J. Angiotensin II activates phospholipase D in rat kidney cortical tubules. *Periodicum Biologorum* 2004; 106 (4): 337-342
- Other work

1. Nevalainen T., Leenaars M., Crljen V., Mikkelsen L.F., Dontas I., Savenije B., Hooijmans C., Ritskes-Hoitinga M.: "Impact of Handling, Radiotelemetry and Food Restriction" poglavlje u: "The COST Manual of Laboratory Animal Care and Use – Refinement, Reduction and Research", CRC Press – Francis and Taylor Group, Bryan, Howard, Nevalainen, Timo and Peretta, Gemma (ur.) 2011; 227-255
2. Crljen V. "Životinje u temeljnim biomedicinskim istraživanjima" ("Animals in basic biomedical research"). *Mef.hr* 2010; 2: 16-17

Abstracts

1. Marolt Banek I, Šućur A, Kelava T, Crljen V. Blood glucose in rat influenced by simple rat restrain procedure or standard anaesthesia during sampling blood from tail vein. 2nd Regional Congress of the Physiological Societies and 4th Congress of Croatian Physiological Society, 2017; 63
2. Marolt Banek I, Šućur A, Kelava T, Crljen V. Safe and simple procedure to restrain rats for blood sampling from tail vein. *Slov Vet Res*, 3 rd Congress of the SLAS and 1st joint SLAS-CroLASA meeting 2017; 54(18): 1-72

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Sabolić I, Škarica M, Ljubojević M, Breljak D, Herak-Kramberger CM, Crljen V, Ljubešić N. Expression and immunolocalization of metolothioneins MT1, MT2 and MT3 in rat nephron. *J Trace Elem Med Biol.* 2018; 46:62-75
2. Banfić H, Crljen V, Lukinović-Škudar V, Dembitz V, Lalić H, Bedalov A, Višnjić D. Inositol pyrophosphates modulate cell cycle independently of alteration in telomere length. *Adv Biol Regul* 2016; 60:22-28

Abstracts

1. Marolt Banek I, Šućur A, Kelava T, Crljen V. Blood glucose in rat influenced by simple rat restrain procedure or standard anaesthesia during sampling blood from tail vein. 2nd Regional Congress of the Physiological Societies and 4th Congress of Croatian Physiological Society, 2017; 63
2. Marolt Banek I, Šućur A, Kelava T, Crljen V. Safe and simple procedure to restrain rats for blood sampling from tail vein. *Slov Vet Res*, 3rd Congress of the SLAS and 1st joint SLAS-CroLASA meeting 2017; 54(18): 1-72

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018. - The function of uroguanylin, a new protein in the brain, from the cell physiology to human health FURNACE (IP-2018-01-7416, prof. dr. sc. Aleksandra Sinđić); 2018. - Role of inositol pyrophosphates regulation of cellular growth (supported by University of Zagreb, prof. dr.sc. Hrvoje Banfić); 2017. - Role of inositol pyrophosphates in regulation of cellular growth (supported by University of Zagreb, prof. dr.sc.



Hrvoje Banfić); 2016. - Role of inositol pyrophosphates in regulation of cellular growth (supported by University of Zagreb, prof. dr.sc. Hrvoje Banfić); 2015. - Role of inositol pyrophosphates in regulation of cellular growth (supported by University of Zagreb, prof. dr.sc. Hrvoje Banfić); 2014. - Role of phosphatidyl-inositol 3-kinases in leukaemia cells differentiation (supported by University of Zagreb, prof. dr.sc. Dora Višnjić); 2013. - Signalling pathways in the regulation of leukaemia cells proliferation and differentiation, (Support I) University of Zagreb (D. Višnjić); 2007 – The role of phosphatidyl-inositol 3-kinaseC2β in cell nuclei (108-1081347-0173, MZOS, H. Banfić); 2002 – 2007 Inositol lipid second messengers in cell nuclei (0108-015, MZOS, H. Banfić), 1996-2001 Phospholipid second messengers (108013, MZOS, H. Banfić); 1995-1996 Activation of PLD by angiotensin II in freshly isolated rat renal cortical tubules (INSERM, France); 1994-1996 Second messengers and mechanisms of transport in cells (MZOS, Banfić)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2018. - The function of uroguanylin, a new protein in the brain, from the cell physiology to human health FURNACE (IP-2018-01-7416, prof. dr. sc. Aleksandra Sindić); 2018. - Role of inositol pyrophosphates regulation of cellular growth (supported by University of Zagreb, prof. dr.sc. Hrvoje Banfić); 2017. - Role of inositol pyrophosphates in regulation of cellular growth (supported by University of Zagreb, prof. dr.sc. Hrvoje Banfić); 2016. - Role of inositol pyrophosphates in regulation of cellular growth (supported by University of Zagreb, prof. dr.sc. Hrvoje Banfić); 2015. - Role of inositol pyrophosphates in regulation of cellular growth (supported by University of Zagreb, prof. dr.sc. Hrvoje Banfić); 2014. - Role of phosphatidyl-inositol 3-kinases in leukaemia cells differentiation (supported by University of Zagreb, prof. dr.sc. Dora Višnjić);

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Danijela Cvijanović, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical methods in biomedical research

BIOGRAPHY

Personal data: born in Doboj (BiH), 1985. Education: 2009-2015 PhD in Chemistry, Faculty of Science, University of Zagreb. Work experience: 2015–present senior assistant, 2009–2015 assistant at Department of Medical Chemistry, Biochemistry and Clinical Chemistry, School of Medicine, University of Zagreb. Scientific projects: three. Publications: seven. Poster presentations: eight. Teaching: participation in various courses of integrated undergraduate and graduate study programmes (in both Croatian and English language) at School of Medicine and School of Dental Medicine, University of Zagreb. Member of Croatian Chemical Society.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Vrdoljak V, Prugovečki B, Primožič I, Hrenar T, Cvijanović D, Parlov Vuković J, Odžak R, Skočibušić M, Prugovečki S, Lovrić J, Matković-Čalogović D, Cindrić M. An integrated approach (synthetic, structural and biological) to the study of aroylhydrazone salts. *New J Chem.* 2018;42(14): 11697-11707.

Cindrić M, Rubčić M, Hrenar T, Pisk J, Cvijanović D, Lovrić J, Vrdoljak V. Novel enaminones as non-cytotoxic compounds with mild antibacterial activity: Synthesis and structure-activity correlations. *J Mol Struct.* 2018;1154: 636-642.

Pisk J, Bilić L, Đaković M, Cvijanović D, Damjanović V, Lovrić J, Rubčić M, Vrdoljak V, Cindrić M. Design of Mononuclear, Binuclear and Polynuclear Molybdenum(VI) Complexes Based on ONO Benzoylacetone Derived Enaminones and their in vitro Biological Activity. *Polyhedron.* 2018;145(1): 70-79.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Cvijanović D, Pisk J, Pavlović G, Šišak-Jung D, Matković-Čalogović D, Cindrić M, Agustin D, Vrdoljak V. Discrete mononuclear and dinuclear compounds containing a MoO_2^{2+} core and 4-aminobenzhydrazone ligands: synthesis, structure and organic-solvent-free epoxidation activity. *New J Chem.* 2019, Advance Article. DOI: 10.1039/C8NJ04074E

Vrdoljak V, Prugovečki B, Primožič I, Hrenar T, Cvijanović D, Parlov Vuković J, Odžak R, Skočibušić M, Prugovečki S, Lovrić J, Matković-Čalogović D, Cindrić M. An integrated approach (synthetic, structural and biological) to the study of aroylhydrazone salts. *New J Chem.* 2018;42(14): 11697-11707.

Cindrić M, Rubčić M, Hrenar T, Pisk J, Cvijanović D, Lovrić J, Vrdoljak V. Novel enaminones as non-cytotoxic compounds with mild antibacterial activity: Synthesis and structure-activity correlations. *J Mol Struct.* 2018;1154: 636-642.

Pisk J, Bilić L, Đaković M, Cvijanović D, Damjanović V, Lovrić J, Rubčić M, Vrdoljak V, Cindrić M. Design of Mononuclear, Binuclear and Polynuclear Molybdenum(VI) Complexes Based on ONO Benzoylacetone Derived Enaminones and their in vitro Biological Activity. *Polyhedron.* 2018;145(1): 70-79.



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2016–present Metallosupramolecular structures and inorganic-organic polyoxometalate hybrids (IP-2016-06-4221), Croatian Science Foundation, project leader: Prof. Višnja Vrdoljak, PhD (Faculty of Science, University of Zagreb)

2017–present Enaminones and their metal complexes as antibacterial agents, University of Zagreb, project leader: Prof. Jasna Lovrić, PhD (School of Medicine, University of Zagreb)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Tamara Čačev, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Rudjer Boskovic Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Molecular genetics of gastrointestinal tumors

BIOGRAPHY

Tamara Čačev, PhD, MBZ: 231201

Senior Research Associate

Laboratory for personalized medicine, Division of Molecular Medicine, RBI, Bijenička c. 54, Zagreb, Croatia; e-mail: tcacev@irb.hr

Personal data: Born in Zagreb, Croatia, 1976.

Education:

2007. - PhD, Molecular and cellular biology, Faculty of Science, University of Zagreb

2003. - M.Sc., Molecular and cellular biology, Faculty of Science, University of Zagreb

1998. - B.Sc., Molecular biology, Faculty of Science, University of Zagreb

Work experience:

2013. - today, senior research associate, Division of molecular medicine, RBI

2008. - 2013., research associate, Division of molecular medicine, RBI

2007. - 2008., senior research assistant, Division of molecular medicine, RBI

1999. - 2007., research assistant, Division of molecular medicine, RBI

Languages:

English, Italian, French

Scientific publications:

32 (28 indexed in Current Contents, JCR Q1:10, Q2:13)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 15.2.2010.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Čačev T, Zapletal E, Musani V, Rako I, Lončar B, Aralica G, Kapitanović S. Analysis of MSH2 loss of heterozygosity, expression, and IVS10+12G>A polymorphism in sporadic colon cancer. Anticancer Res. 2018;38(5):2841-2848.

2. Cigrovski Berković M, Čačev T, Catela Ivković T, Marout J, Ulamec M, Zjačić-Rotkvić V, Kapitanović S. High VEGF serum values are associated with locoregional spread of gastroenteropancreatic neuroendocrine tumors (GEP-NETs). *Molecular and cellular endocrinology* 2016; 425:61-8.
3. Nikolić A, Čačev T, Aralica G, Popović Hadžija M, Kapitanović S, Radojković D. Mononucleotide repeats in the SMAD4 gene promoter in colon carcinoma tissue of Croatian patients. *Experimental and molecular pathology* 2015;98(2):133-5.
4. Cigrovski Berković M, Čačev T, Catela Ivković T, Zjačić-Rotkvić V, Kapitanović S. New Insights into the Role of Chronic Inflammation and Cytokines in Etiopathogenesis of GEP-NETs. *Neuroendocrinology* 2014;99:75-84.
5. Čačev T, Aralica G, Lončar B, Kapitanović S. Loss of NF2/Merlin expression in advanced sporadic colorectal cancer. *Cellular Oncology* 2014;37:69-77.
6. Kapitanović S, Čačev T, Catela Ivković T, Lončar B, Aralica G. TNF α gene/protein in tumorigenesis of sporadic colon adenocarcinoma. *Experimental and molecular pathology* 2014;97:285-291
7. Kapitanović S, Čačev T, Lončar B, Catela Ivković T, Križanac Š, Pavelić K. Reduced FHIT expression is associated with tumor progression in sporadic colon adenocarcinoma. *Experimental and molecular pathology* 2014;96:92-97
8. Catela Ivković T, Aralica G, Čačev T, Lončar B, Kapitanović S. miR-106a overexpression and pRB downregulation in sporadic colorectal cancer. *Experimental and molecular pathology* 2013;93:148-154
9. Čačev T, Jokić M, Lončar B, Križanac Š, Kapitanović S. Interleukin-6 -174 G/C polymorphism is not associated with IL-6 expression and susceptibility to sporadic colon cancer. *DNA and cell biology* 2010;29:177-182
10. Čačev T, Lončar B, Seiwerth S, Spaventi Š, Kapitanović S. Vascular endothelial growth factor polymorphisms -1154 G/A and -460 C/T are not associated with VEGF mRNA expression and susceptibility to sporadic colon cancer. *DNA and Cell Biology* 2008;27:569-574
11. Čačev T, Radošević S, Križanac Š, Kapitanović S. Influence of interleukin-8 and interleukin-10 on sporadic colon cancer development and progression. *Carcinogenesis* 2008;29:1572-1580
12. Berković M, Čačev T, Zjačić-Rotkvić V, Kapitanović S. TNF- α promoter SNPs in gastroenteropancreatic neuroendocrine tumors (GEP-NET). *Neuroendocrinology* 2006;84:346-352
13. Boraska V, Terzić J, Škrabić V, Čačev T, Bučević-Popović V, Peruzović M, Markotić A, Zemunik T. NeuroD1 gene and interleukin-18 gene polymorphisms in type 1 diabetes in Dalmatian population of Southern Croatia. *Croatian medical journal* 2006;47:571-578
14. Čačev T, Jokić M, Spaventi R, Pavelić K, Kapitanović S. Loss of heterozygosity testing using real-time PCR analysis of single nucleotide polymorphisms. *Journal of cancer research and clinical oncology* 2006;132:200-204
15. Kapitanović S, Čačev T, Antica M, Kralj M, Cavrić G, Pavelić K, Spaventi R. Effect of indomethacin on E-cadherin and beta-catenin expression in HT-29 colon cancer cells. *Experimental and molecular pathology* 2006;80:91-96
16. Čačev T, Radošević S, Spaventi R, Pavelić K, Kapitanović S. NF1 gene loss of heterozygosity and expression analysis in sporadic colon cancer. *Gut* 2005;54:1129-1135

17. Kapitanović S, Čačev T, Berković M, Popović Hadžija M, Radošević S, Seiwert S, Spaventi Š, Pavelić K, Spaventi R. nm23-H1 expression and loss of heterozygosity in colon adenocarcinoma. *Journal of clinical pathology* 2004;57:1312-1318
18. Kapitanović S, Čačev T, Radošević S, Spaventi Š, Spaventi R, Pavelić K. APC gene loss of heterozygosity, mutations, E1317Q, and I1317K germ-line variants in sporadic colon cancer in Croatia. *Experimental and molecular pathology* 2004;77:193-200
19. Čačev T, Kapitanović S. Colon cancer: gone with the Wnt. *Periodicum biologorum* 2004;106:233-238
20. Kapitanović S, Čačev T, Spaventi R, Pavelić K. Submerged gel electrophoresis on Spreadex gels - a new method for APC gene mutation detection. *Journal of Molecular Medicine* 2001;79:333-337
21. Popović Hadžija M, Kapitanović S, Radošević S, Čačev T, Mirt M, Kovačević D, Lukač J, Hadžija M, Spaventi R, Pavelić K. Loss of heterozygosity of DPC4 tumor suppressor gene in human sporadic colon cancer. *Journal of Molecular Medicine* 2001;79:128-132

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Cigrovski Berković M, Čačev T, Catela Ivković T, Zjačić-Rotkvić V, Kapitanović S. New Insights into the Role of Chronic Inflammation and Cytokines in Etiopathogenesis of GEP-NETs. *Neuroendocrinology* 2014;99:75-84.
2. Čačev T, Aralica G, Lončar B, Kapitanović S. Loss of NF2/Merlin expression in advanced sporadic colorectal cancer. *Cellular Oncology* 2014;37:69-77.
3. Cigrovski Berković M, Čačev T, Catela Ivković T, Marout J, Ulamec M, Zjačić-Rotkvić V, Kapitanović S. High VEGF serum values are associated with locoregional spread of gastroenteropancreatic neuroendocrine tumors (GEP-NETs). *Molecular and cellular endocrinology* 2016;425:61-68.
4. Čačev T, Zapletal E, Musani V, Rako I, Lončar B, Aralica G, Kapitanović S. Analysis of MSH2 loss of heterozygosity, expression, and IVS10+12G>A polymorphism in sporadic colon cancer. *Anticancer Res.* 2018;38(5):2841-2848.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 2017.- today, collaborator on Croatian Science Foundation project „Microsatellite instability (MSI and EMAST) in molecular profiling of sporadic colon cancer“
- 2016.-2017., PI of bilateral project between Croatia and Serbia „The role of prothrombin in colorectal cancer“
2018. -2021., MC substitute in COST Action CA17118 „Identifying Biomarkers Through Translational Research for Prevention and Stratification of Colorectal cancer“
2014. – 2017., MC substitute in COST Action BM1206 „Cooperation Studies on Inherited Susceptibility to Colorectal Cancer“
- 2007.-2014., collaborator on MZOS project „Molecular genetics and pharmacogenetics of gastrointestinal tumors“
- 2002.-2007., scientific novice on MZOS project „Molecular genetics of gastrointestinal tumors“
- 1999.- 2002., scientific novice on MZOS project „Molecular genetic basis of metastasis“

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS



2017.- today, collaborator on Croatian Science Foundation project „Microsatellite instability (MSI and EMAST) in molecular profiling of sporadic colon cancer“

2016.-2017., PI of bilateral project between Croatia and Serbia „The role of prothrombin in colorectal cancer“

2018. -2021., MC substitute in COST Action CA17118 „Identifying Biomarkers Through Translational Research for Prevention and Stratification of Colorectal cancer“

2014. – 2017., MC substitute in COST Action BM1206 „Cooperation Studies on Inherited Susceptibility to Colorectal Cancer“

2007.-2014., collaborator on MZOS project „Molecular genetics and pharmacogenetics of gastrointestinal tumors“.

ORDINAL NUMBER: 5

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist. Prof. Rok Civljak, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb, School of Medicine; Dr. Fran Mihaljević University Hospital for Infectious Diseases, Zagreb, Croatia

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: “Pathogenesis of infectious diseases”, “Biomaterial infections”

BIOGRAPHY

PERSONAL INFORMATION: Address: Dr. Fran Mihaljević University Hospital for Infectious Diseases, Mirogojska 8, Zagreb; Department of Infectious Diseases, University of Zagreb School of Medicine, Šalata 3, Zagreb; Telephone: +385 91 4012547; Fax: +385 1 2826295; E-mail/Website: rok.civljak@bfm.hr; www.bfm.hr

Date of Birth: October 18, 1966, Šibenik, Croatia. Education: MD, University of Zagreb School of Medicine, 1994, Zagreb, Croatia. University of Zagreb School of Medicine, Postgraduate Study: Scientific postgraduate course in biomedicine. PhD Thesis: “The impact of a care bundle on reducing the risk of occupational exposure to blood-borne infections among hospital personnel”. Clinical and academic positions: 2016 – 2018, Dr. Fran Mihaljević University Hospital for Infectious Diseases, Zagreb, - Deputy Hospital Director. 2017 – 2018, Department for Acute Respiratory Infections – Head. 2010 – 2018 Research Associate, and since 2016 Assistant Professor at Zagreb University Medical School, Croatia. Abroad training: 1998, Istituto Nazionale per le Malattie Infettive “L. Spallanzani”, Rome, Italy, Visiting Clinician Fellowship, five-week training program: Management of HIV infection (WHO fellowship) and 2002 – 2003, Istituto Nazionale per le Malattie Infettive “L. Spallanzani”, Rome, Italy, five-month training program in European Project on “Standardization of the management of occupational exposure to HIV/blood-borne infections and evaluation of post-exposure prophylaxis in Europe” (as a fellow of Ministry of Foreign Affairs of Italian Government). Memberships: European network for ICU-related respiratory infections (ENIRRI), supported by the European Respiratory Society (member), ESCMID Study Group for Infections in Travelers and Migrants – ESGITM (member).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2016, assistant professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. De Pascale G, Ranzani OT, Nseir S, Chastre J, Welte T, Antonelli M, Navalesi P, Garofalo E, Bruni A, Coelho LM, Skoczynski S, Longhini F, Taccone FS, Grimaldi D, Salzer HJF, Lange C, Froes F, Artigas A, Díaz E, Vallés J, Rodríguez A, Panigada M, Comellini V, Fasano L, Soave PM, Spinazzola G, Luyt CE, Alvarez-Lerma F, Marin J, Masclans JR, Chiumello D, Pezzi A, Schultz M, Mohamed H, Van Der Eerden M, Hoek RAS, Gommers DAMPJ, Pasquale MD, Civljak R, Kutleša M, Bassetti M, Dimopoulos G, Nava S, Rios F, Zampieri FG, Pova P, Bos LD, Aliberti S, Torres A, Martín-Loeches I. Intensive care unit patients with lower respiratory tract nosocomial infections: the ENIRRI project. *ERJ Open Res* 2017;3(4). pii: 00092-2017.
2. Cag Y, Ozturk-Engin D, Gencer S, Hasbun R, Sengoz G, Crisan A, Ceran N, Savic B, Yasar K, Pehlivanoglu F, Kilicoglu G, Tireli H, Inal AS, Civljak R, Tekin R, et al. Hydrocephalus and vasculitis delay therapeutic responses in tuberculous meningitis: Results of Haydarpasa-III study. *Neurol India* 2016;64(5):896-905.
3. Cillóniz C, Civljak R, Nicolini A, Torres A. Polymicrobial community-acquired pneumonia: An emerging entity. *Respirology* 2016;21:65-75.
4. Senbayrak S, Ozkutuk N, Erdem H, Johansen IS, Civljak R, Inal AS, et al. Antituberculosis drug resistance patterns in adults with tuberculous meningitis: results of Haydarpasa-IV study. *Ann Clin Microbiol Antimicrob* 2015;14:47.

5. Erdem H, Senbayrak S, Gencer S, Hasbun R, Karahocagil MK, Sengoz G, Karsen H, Kaya S, Čivljak R, et al. Tuberculous and brucellosis meningitis differential diagnosis. *Travel Med Infect Dis* 2015;13:185-91.
6. Erdem H, Ozturk-Engin D, Tireli H, Kilicoglu G, Defres S, Gulsun S, Sengoz G, Crisan A, Johansen IS, Inan A, Nechifor M, Al-Mahdawi A, Čivljak R, et al. Hamsi scoring in the prediction of unfavorable outcomes from tuberculous meningitis: results of Haydarpasa-II study. *J Neurol* 2015;262:890-8.
7. Erdem H, Ozturk-Engin D, Elaldi N, Gulsun S, Sengoz G, Crisan A, Johansen IS, Inan A, Nechifor M, Al-Mahdawi A, Čivljak R, et al. The microbiological diagnosis of tuberculous meningitis: results of Haydarpasa-1 study. *Clin Microbiol Infect* 2014;20:O600-8.
8. Čivljak R, Giannella M, Di Bella S, Petrosillo N. Could chloramphenicol be used against ESKAPE pathogens? A review of in vitro data in the literature from the 21st century. *Expert Rev Anti Infect Ther* 2014;12(2):249-64.
9. Gulin M, Čivljak R, Bilić B, Sušić E, Gulin M. Infektivne komplikacije u primatelja bubrega tijekom prve godine nakon transplantacije: iskustvo županijske bolnice Šibenik. *Acta Med Croatica* 2014;68:121-7.
10. Čivljak R, Papić N, Stamenić V, Kalenić S, Kuzman I, Car J. Influenza and hepatitis B vaccination coverage among healthcare workers in Croatian hospitals: a series of cross-sectional surveys, 2006--2011. *BMC Infect Dis* 2013;13:520.
11. Pavić I, Cekinović D, Begovac J, Maretić T, Čivljak R, Trošelj-Vukić B. *Cryptococcus neoformans* meningoencephalitis in a patient with idiopathic CD4+ T lymphocytopenia. *Coll Antropol* 2013;37(2):619-23.
12. Kalenić S, Payerl Pal M, Vlahović Palčevski V, Horvatić J, Meštrović T, Baršić B, Stamenić V, Burcar I, Korušić A, Vučić M, Čivljak R, Stančić M, Budimir A. Smjernice za prevenciju, kontrolu i liječenje infekcija koje uzrokuje meticilin-rezistentni *Staphylococcus aureus* (MRSA): Izmjena i dopuna poglavlja 7.0.: Liječenje bolesnika s MRSA-infekcijom. *Liječ Vjesn* 2010;132:340-4.
13. Boban A, Radman I, Zadro R, Dubravčić K, Maretić T, Čivljak R, Lisić M, Begovac J. Acute promyelocytic leukemia after whole brain irradiation of primary brain lymphoma in an HIV-infected patient. *Eur J Med Res* 2009;14(1):42-3.
14. Čivljak R, Papeš D. Izloženost djelatnika hitne medicinske pomoći uzročnicima infektivnih bolesti. *Liječ Vjesn* 2009;131 Suppl 4:65-9.
15. Kalenić S, Payerl Pal M, Vlahović Palčevski V, Horvatić J, Meštrović T, Baršić B, Stamenić V, Aleraj B, Buljan M, Gržalja N, Burcar I, Korušić A, Vučić M, Čivljak R, Stančić M, Budimir A. Smjernice za prevenciju, kontrolu i liječenje infekcija koje uzrokuje meticilin-rezistentni *Staphylococcus aureus* (MRSA). *Liječ Vjesn* 2008;130 Suppl 1:7-32.
16. Maretić T, Čivljak R, Lisić M, Lukas D, Višković K, Begovac J. Progresivna multifokalna leukoencefalopatija u osoba zaraženih virusom humane imunodeficijencije: prikaz bolesnice i pregled bolesnika liječenih u Klinici za infektivne bolesti u Zagrebu. *Infektološki glasnik* 2008;28(2):75-81.
17. Gulin M, Čivljak R, Dražić Đogić V. Infekcija hepatitis G virusom (HGV) u bolesnika liječenih kroničnom hemodijalizom u Šibensko-kninskoj županiji. *Infektološki glasnik* 2007;27(4):171-75.
18. Petrosillo N, Cicalini S, Čivljak R. Kardiovaskularni sustav i infekcija virusom humane imunodeficijencije. *Infektološki glasnik* 2005;25(2):57-67.

19. Puro V, Cicalini S, De Carli G, Soldani F, Ippolito G, on behalf of the European Occupational Post-Exposure Prophylaxis Study Group. Towards a standard HIV post exposure prophylaxis for healthcare workers in Europe. *Euro Surveill* 2004;9(6):3-4.
20. Čivljak R, Begovac J, Puro V, Cicalini S, De Carli G, Ippolito G, on behalf of the European Occupational Post-Exposure Prophylaxis Study Group. Europske preporuke za postekspozicijsku profilaksu HIV-infekcije u zdravstvenih djelatnika – Hrvatske smjernice. *Infektološki glasnik* 2004;24(3):139-44.
21. Čivljak R, Begovac J. Preporuke za prevenciju profesionalne ekspozicije zdravstvenih djelatnika infekcijama koje se prenose krvlju. *Infektološki glasnik* 2004;24(1):33-41.
22. Puro V, Cicalini S, De Carli G, Soldani F, Čivljak R, et al. Post-exposure prophylaxis of HIV infection in healthcare workers: Recommendations for the European setting. *Eur J Epidemiol* 2004;19:577-84.
23. Puro V, Francisci D, Sighinolfi L, Čivljak R, et al. Benefits of a rapid HIV test for evaluation of the source patient after occupational exposure of healthcare workers. *J Hosp Infect* 2004;57(2):179-82.
24. Čivljak R, Begovac J. Profesionalna ekspozicija zdravstvenih djelatnika infekcijama koje se prenose krvlju. *Infektološki glasnik* 2003;23(4):183-8.
25. Čivljak R, Lisić M, Begovac J, Maretić T, Planinc D. Meningitis and Endocarditis Caused by B Streptococcus in a Human Immunodeficiency Virus (HIV) Infected Patient. *Croat Med J* 2001;42(5):572-5.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Ravensbergen SJ, Nellums LB, Hargreaves S, Stienstra Y, Friedland JS; ESGITM Working Group on Vaccination in Migrants; with the support of the Executive Committee and Membership of ESGITM. National approaches to the vaccination of recently arrived migrants in Europe: A comparative policy analysis across 32 European countries. *Travel Med Infect Dis* 2018. pii: S1477-8939(18)30366-1.
2. De Pascale G, Ranzani OT, Nseir S, Chastre J, Welte T, Antonelli M, Navalesi P, Garofalo E, Bruni A, Coelho LM, Skoczynski S, Longhini F, Taccone FS, Grimaldi D, Salzer HJF, Lange C, Froes F, Artigas A, Díaz E, Vallés J, Rodríguez A, Panigada M, Comellini V, Fasano L, Soave PM, Spinazzola G, Luyt CE, Alvarez-Lerma F, Marin J, Masclans JR, Chiumello D, Pezzi A, Schultz M, Mohamed H, Van Der Eerden M, Hoek RAS, Gommers DAMPJ, Pasquale MD, Čivljak R, Kutleša M, Bassetti M, Dimopoulos G, Nava S, Rios F, Zampieri FG, Pova P, Bos LD, Aliberti S, Torres A, Martín-Loeches I. Intensive care unit patients with lower respiratory tract nosocomial infections: the ENIRRI project. *ERJ Open Res* 2017;3(4). pii: 00092-2017.
3. Cag Y, Ozturk-Engin D, Gencer S, Hasbun R, Sengoz G, Crisan A, Ceran N, Savic B, Yasar K, Pehlivanoglu F, Kilicoglu G, Tireli H, Inal AS, Čivljak R, Tekin R, et al. Hydrocephalus and vasculitis delay therapeutic responses in tuberculous meningitis: Results of Haydarpasa-III study. *Neurol India* 2016;64(5):896-905.
4. Cillóniz C, Čivljak R, Nicolini A, Torres A. Polymicrobial community-acquired pneumonia: An emerging entity. *Respirology* 2016;21:65-75.
5. Senbayrak S, Ozkutuk N, Erdem H, Johansen IS, Čivljak R, Inal AS, et al. Antituberculosis drug resistance patterns in adults with tuberculous meningitis: results of Haydarpasa-IV study. *Ann Clin Microbiol Antimicrob* 2015;14:47.
6. Erdem H, Senbayrak S, Gencer S, Hasbun R, Karahocagil MK, Sengoz G, Karsen H, Kaya S, Čivljak R, et al. Tuberculous and brucellosis meningitis differential diagnosis. *Travel Med Infect Dis* 2015;13:185-91.
7. Erdem H, Ozturk-Engin D, Tireli H, Kilicoglu G, Defres S, Gulsun S, Sengoz G, Crisan A, Johansen IS, Inan A, Nechifor M, Al-Mahdawi A, Čivljak R, et al. Hamsi scoring in the prediction of unfavorable outcomes from tuberculous meningitis: results of Haydarpasa-II study. *J Neurol* 2015;262:890-8.

8. Topić A, Čivljak R, Butić I, Gužvinec M, Kuzman I. Relapsing bacteraemia due to *Corynebacterium striatum* in a patient with peripheral arterial disease. *Pol J Microbiol* 2015;64:295-8.
9. Cvejanov-Kezunović L, Mustajbegović J, Milošević M, Čivljak R. Occupational exposure to blood among hospital workers in Montenegro. *Arh Hig Rada Toksikol* 2014;65:273-80.
10. Tadin A, Bjedov L, Margaletic J, Zibrat B, Krajinovic LC, Svoboda P, Kurolt IC, Majetic ZS, Turk N, Rode OD, Čivljak R, Kuzman I, Markotic A. High infection rate of bank voles (*Myodes glareolus*) with Puumala virus is associated with a winter outbreak of haemorrhagic fever with renal syndrome in Croatia. *Epidemiol Infect* 2014;2:1-7.
11. Erdem H, Ozturk-Engin D, Elaldi N, Gulsun S, Sengoz G, Crisan A, Johansen IS, Inan A, Nechifor M, Al-Mahdawi A, Čivljak R, et al. The microbiological diagnosis of tuberculous meningitis: results of Haydarpasa-1 study. *Clin Microbiol Infect* 2014;20:O600-8.
12. Čivljak R, Giannella M, Di Bella S, Petrosillo N. Could chloramphenicol be used against ESKAPE pathogens? A review of in vitro data in the literature from the 21st century. *Expert Rev Anti Infect Ther* 2014;12(2):249-64.
13. Čivljak R, Bukovski S, Bambir S, Stanić M, Torić L, Sović S, Dumančić M, Čeljuska Tošev E. Postantimikrobni proljev i bolest povezana s *Clostridium difficile*: opservacijsko retrospektivno istraživanje u Klinici za infektivne bolesti "Dr. Fran Mihaljević" u Zagrebu. *Infektološki glasnik* 2014;34:133-43.
14. Čivljak R, Kljaković-Gašpić M, Kaić B, Bradarić N. Viral hepatitis in Croatia. *Viral Hepatitis Journal* 2014;20:49-56.
15. Gulin M, Čivljak R, Bilić B, Sušić E, Gulin M. Infektivne komplikacije u primatelja bubrega tijekom prve godine nakon transplantacije: iskustvo županijske bolnice Šibenik. *Acta Med Croatica* 2014;68:121-7.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. New and neglected respiratory viruses in vulnerable groups of patients - Croatian Science Foundation IP-2016-06-7556 Project, collaborator
2. Intensive care unit patients with lower respiratory tract nosocomial infections: the ENIRRI project - European network for ICU-related respiratory infections (ENIRRI), collaborator
3. The risk of occupational exposure to blood-borne infections among hospital personnel in Croatian hospitals, - National Hospital Infection Control Advisory Committee, Ministry of Health of the Republic of Croatia
4. Standardization of the management of occupational exposure to HIV/blood-borne infections and evaluation of post-exposure prophylaxis in Europe, - European Commission, Directorate-General Health Care and Consumer Protection. Unit F4. Project number SI2.322294.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. CONNECT: inCreasing cOmmunication, awareNEss and data sharing in a global approaCh against resisTance - Eighth Joint Transnational Call For Networks Within The Joint Programming Initiative On Antimicrobial Resistance "Building the Foundation of the JPIAMR Virtual Research Institute",
2. 2017-2021 collaborator on Croatian Science Foundation Project titled: "New and neglected respiratory viruses in vulnerable groups of patient" (grant: IP-2016-06-7556)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Silvija Čuković-Čavka, Assist. Prof.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb,
University Hospital Center Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pharmacogenomics

BIOGRAPHY

Born in Zagreb in 1963, Education: 1988 MD at the School of Medicine University of Zagreb; 1998 Specialist in Internal medicine, University Hospital Centre Zagreb, 2001 Subspecialist in Gastroenterology and Hepatology, 2003 MS degree in the field of hepatocarcinoma, School of Medicine University of Zagreb, 2008 PhD degree in the field of inflammatory bowel disease, School of Medicine University of Zagreb; Work experience: 1998 Division of Gastroenterology and Hepatology, Department of Medicine, University Hospital Centre Zagreb 2013 Assistant Professor of Internal Medicine, School of Medicine University of Zagreb, Other activities: Croatian national representative in European Crohn's and Colitis Organization and an active member of the ECCO EpiCom group. Member of the Croatian Society of Gastroenterology, Croatian IBD group, Croatian Society of Human Genetics: President of Adult Celiac Disease group of Croatian Society of Gastroenterology, Co-president of Croatian Society for Celiac Disease. Publications: author or co-author of 51 publications of which 26 in CC, and 29 chapters in books in the field of gastroenterology and internal medicine.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Burisch J, Chetcuti Zammit S, Ellul P, Turcan S, Duricova D, Bortlik M, Winther Andersen K, Andersen V, Kaimakliotis IP, Fumery M, Gower-Rousseau C, Girardin G, Valpiani D, Goldis A, Brinar M, Čuković-Čavka S, Oksanen P, Collin P, Barros L, Magro F, Misra R, Arebi N, Eriksson C, Halfvarson J, Kievit HAL, Pedersen N, Kjeldsen J, Myers S, Sebastian S, Katsanos KH, Christodoulou DK, Midjord J, Nielsen KR, Kiudelis G, Kupcinskis L, Nikulina I, Belousova E, Schwartz D, Odes S, Salupere R, Carmona A, Pineda JR, Vegh Z, Lakatos PL, Langholz E, Munkholm P; Epi-IBD group. Disease course of inflammatory bowel disease unclassified in a European population-based inception cohort - an Epi-IBD study. *J Gastroenterol Hepatol*. 2018 Dec 18. doi: 10.1111/jgh.14563. [Epub ahead of print] PubMed PMID: 30562421.
2. Grubelić Ravić K, Paić F, Vucelić B, Brinar M, Čuković-Čavka S, Božina N, Krznarić Ž, Kalauz M, Bešić D, Nikuševa Martić T. Association of polymorphic variants in serotonin re-uptake transporter gene with Crohn's disease: a retrospective case-control study. *Croat Med J*. 2018 Oct 31;59(5):232-243. PubMed PMID: 30394015; PubMed Central PMCID: PMC6240826.
3. Ladić A, Božina N, Borzan V, Brinar M, Vucelić B, Čuković-Čavka S. AN EPIDEMIOLOGICAL STUDY OF THIOPURINE-METHYLTRANSFERASE VARIANTS IN A CROATIAN INFLAMMATORY BOWEL DISEASE PATIENT COHORT. *Acta Clin Croat*. 2016 Mar;55(1):16-22. PubMed PMID: 27333713.
4. Brinar M, Čuković-Čavka S, Božina N, Ravić KG, Markos P, Ladić A, Cota M, Krznarić Z, Vucelić B. MDR1 polymorphisms are associated with inflammatory bowel disease in a cohort of Croatian IBD patients. *BMC Gastroenterol*. 2013;13:57.
5. Čuković-Čavka S, Vermeire S, Hrštic I, Claessens G, Kolacek S, Jakic-Razumovic J, Krznarić Z, Grubelić K, Radić D, Misak Z, Jadresin O, Rutgeerts P, Vucelić B. NOD2/CARD15 mutations in Croatian patients with

Crohn's disease: prevalence and genotype-phenotype relationship. *Eur J Gastroenterol Hepatol*. 2006;18(8):895-9.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Burisch J, Chetcuti Zammit S, Ellul P, Turcan S, Duricova D, Bortlik M, Winther Andersen K, Andersen V, Kaimakliotis IP, Fumery M, Gower-Rousseau C, Girardin G, Valpiani D, Goldis A, Brinar M, Čuković-Čavka S, Epi-IBD group. Disease course of inflammatory bowel disease unclassified in a European population-based inception cohort - an Epi-IBD study. *J Gastroenterol Hepatol*. 2018 Dec 18. doi: 10.1111/jgh.14563.
2. Chetcuti Zammit S, Ellul P, Girardin G, Valpiani D, Nielsen KR, Olsen J, Goldis A, Lazar D, Shonová O, Nováková M, Sebastian S, Whitehead E, Carmona A, Martinez-Cadilla J, Dahlerup JF, Kievit ALH, Thorsgaard N, Katsanos KH, Christodoulou DK, Magro F, Salupere R, Pedersen N, Kjeldsen J, Carlsen K, Ioannis K, Bergemalm D, Halfvarson J, Duricova D, Bortlik M, Collin P, Oksanen P, Kiudelis G, Kupcinskas L, Kudsk K, Andersen V, O'Morain C, Bailey Y, Doron S, Shmuel O, Almer S, Arebi N, Misra R, Čuković-Čavka S, Brinar M, Munkholm P, Vegh Z, Burisch J. Vitamin D deficiency in a European inflammatory bowel disease inception cohort: an Epi-IBD study. *Eur J Gastroenterol Hepatol*. 2018;30(11):1297-1303.
3. Grubelić Ravić K, Paić F, Vucelić B, Brinar M, Čuković-Čavka S, Božina N, Krznarić Ž, Kalauz M, Bešić D, Nikuševa Martić T. Association of polymorphic variants in serotonin re-uptake transporter gene with Crohn's disease: a retrospective case-control study. *Croat Med J*. 2018;59(5):232-243
4. Prijić R, Premužić V, Brinar M, Krznarić Ž, Jelaković B, Čuković-Čavka S. Increased arterial stiffness - similar findings in patients with inflammatory bowel disease without prior hypertension or diabetes and in patients with well-controlled hypertension. *Blood Press*. 2018;27(4):240-246.
5. Ladić A, Božina N, Borzan V, Brinar M, Vucelić B, Čuković-Čavka S. AN EPIDEMIOLOGICAL STUDY OF THIOPURINE-METHYLTRANSFERASE VARIANTS IN A CROATIAN INFLAMMATORY BOWEL DISEASE PATIENT COHORT. *Acta Clin Croat*. 2016;55(1):16-22.
6. Čuković-Čavka S, Vucelić B, Urek MC, Brinar M, Turk N. [The role of anti-TNF therapy in ulcerative colitis]. *Acta Med Croatica*. 2013;67(2):171-7.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2002-2013 "Inflammatory bowel disease" (MZOS Croatia, principal investigator B. Vucelić)

2009-2015; 2016-2020 "EpiCom (European Crohn's Colitis Organisation) project: "Is there an East-West gradient in IBD incidence in Europe caused by environmental factors and defensins?"; Principal Investigators Pia Munkholm, Johan Burisch, Copenhagen

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2002-2013 "Inflammatory bowel disease" (MZOS Croatia, principal investigator B. Vucelić)

2009-2015 - EpiCom project (European Crohn's Colitis Organisation): "Is there an East-West gradient in IBD incidence in Europe caused by environmental factors and defensins?" voditelj; Pia Munkholm, Copenhagen

2014-2018 - Project of HRZZ: Assessment of Microbiota, Inflammatory Markers, Nutritional and Endocrinological Status in IBD Patients (MINUTE for IBD), principal investigator, Donatella Verbanac



2016-2020, EpiCom project (European Crohn's Colitis Organisation): "Is there an East-West gradient in IBD incidence in Europe caused by environmental factors and defensins?" (voditelj Johan Burisch, Copenhagen)

2017- "The role of pharmacogenetics in interactions and side effects of opioid drugs". Support from the University of Zagreb (principal investigator, N. Božina)

2018 - "The role of genomic polymorphism of cytochrome P450 metabolic enzymes (CYP) as a hepatotoxicity factor", supported by the University of Zagreb (principal investigator, T. Božina)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Marijana Coric, assoc prof.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Medical School University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Kidney transplantation, Liver transplantation in children

BIOGRAPHY

WORK EXPERIENCE

1994 -1995 Children's Clinical Hospital, Zagreb, Croatia

1996-2000 Zagreb, Clinical Hospital Center, Zagreb, Croatia

2000 – till now, Zagreb, Clinical Hospital Center, Zagreb and Medical School University of Zagreb, Croatia

Main activities and responsibilities: Liver pathology, nephropathology, uropathology and electron microscopy

EDUCATION

Date: 1987-1993 Medical School University of Zagreb, Croatia, 1993 graduated – M.D.

1994 -1995 Internship – Children's Clinical Hospital, Zagreb, Croatia

1996-2000 Residency in pathology, Clinical Hospital Center, Zagreb, Croatia

1997-1998 Postgraduate study (Natural Science – Biomedicine); Medical Faculty University of Zagreb, Croatia

2000 Master of Science, Zagreb, Medical Faculty University of Zagreb, Croatia

2005 Ph.D. Zagreb, Medical Faculty University of Zagreb, Croatia

Title or qualification awarded MD; PhD

TRAINING

Year 1998 and 1999., Postgraduate course in theoretical and diagnostic histopathology

Place of training Alexandroupolis, Greece

Name and type of organisation providing training The Departments of Pathology, The Democritus University of Thrace, and University of Ioannina in collaboration with The St Bartholomew's and the Royal London School of Medicine and Dentistry, And the University of Sheffield Medical School, U.K.

Principal subjects/Occupational skills covered General and surgical pathology

Year 2006, training period in Nephropathology, Basel, Switzerland, Institute for Pathology, University Hospital of Basel, 2011, training period in Nephropathology, Boston, USA, Brigham and Women's Hospital and Harvard Medical School in Boston

Principal subjects/Occupational skills covered: nephropathology and electron microscopy, liver pathology, uropathology

Additional information: assistant in Pathology since 2000., senior assistant in Pathology since 2006, assistant professor in Pathology, since 2009, assoc. prof. since 2017.

2007.-2011. senior researcher of the scientific project "Hepatocellular tumors" (108-0532264-0048)

2007.-2011. researcher of the scientific project “Proteomic research of urinary biomarkers of idiopathic nephrotic syndrome” (108-0982464-0178)

since 2015. researcher of the HRZZ project: Genotype-Phenotype correlation in Alport's syndrome and Thin Glomerular Basement Membrane Nephropathy

since 2017. researcher of the HRZZ project: Epigenetic biomarkers in blood and ejaculate of patients with seminoma of the testis.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 16.1.2017.g.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Batinić D, Milošević D, Ćorić M, Scukanec-Špoljar M, Konjevoda P, Batinić D, Nizic L, Vrljicak K, Lemac M, Turudić D. Idiopathic nephrotic syndrome in children: review of 282 Croatian cases. Clin Nephrol. 2012;78:116-21.
2. Lela IV, Karanovic S, Maticic D, Kuzmanic D, Ćorić M, Simic M, Jelakovic B. Factitious proteinuria - the most dominant feature in a young female patient with Munchausen syndrome Clin Nephrol. 2013;77:166-170
3. Batinić D, Milošević D, Ćorić M, Topalović-Grković M, Jelušić M, Turudić D. Lupus nephritis in Croatian children: clinicopathologic findings and outcome. Lupus. 2015;24:307-14
4. Furić-Čunko V, Kes P, Ćorić M, Hudolin T, Kaštelan Z, Bašić-Jukić N. Expression of bone morphogenetic proteins 4, 6 and 7 is downregulated in kidney allografts with interstitial fibrosis and tubular atrophy. Int Urol Nephrol. 2015;47:1219-29.
5. Batinić D, Sertić J, Ćorić M, Konjevoda P, Batinić D, Milošević D. Angiotensin-Converting Enzyme Genotype Is Not a Significant Genetic Risk Factor for Idiopathic Nephrotic Syndrome in Croatian Children. Nephron. 2015;130:29-34
6. Bašić-Jukić N, Gulin M, Hudolin T, Kaštelan Z, Katalinić L, Ćorić M, Veda MV, Ivković V, Kes P, Jelaković B. Expression of BMP-2 in Vascular Endothelial Cells of Recipient May Predict Delayed Graft Function After Renal Transplantation. Kidney Blood Press Res. 2016;41:781-793
7. Premuzic V, Gamulin M, Coric M, Jelakovic B. The incidence of urinary tract cancers is related to preserved diuresis: a single-center report. Int Urol Nephrol. 2017;49:2257-2263.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Reiner Ž, Guardamagna O, Nair D, Soran H, Hovingh K, Bertolini S, Jones S, Ćorić M, Calandra S, Hamilton J, Eagleton T, Ros E. Lysosomal acid lipase deficiency--an under-recognized cause of dyslipidaemia and liver dysfunction. Atherosclerosis. 2014;235:21-30
2. Batinić D, Milošević D, Ćorić M, Topalović-Grković M, Jelušić M, Turudić D. Lupus nephritis in Croatian children: clinicopathologic findings and outcome. Lupus. 2015;24:307-14
3. Furić-Čunko V, Kes P, Ćorić M, Hudolin T, Kaštelan Z, Bašić-Jukić N. Expression of bone morphogenetic proteins 4, 6 and 7 is downregulated in kidney allografts with interstitial fibrosis and tubular atrophy. Int Urol Nephrol. 2015;47:1219-29.
4. Batinić D, Sertić J, Ćorić M, Konjevoda P, Batinić D, Milošević D. Angiotensin-Converting Enzyme Genotype Is Not a Significant Genetic Risk Factor for Idiopathic Nephrotic Syndrome in Croatian Children. Nephron. 2015;130:29-34

5. Michal M, Bulimbašić S, Ćorić M, Sedivcova M, Kazakov DV, Michal M, Hes O. Pancreatic analogue solid pseudopapillary neoplasm arising in the paratesticular location. The first case report. Hum Pathol. 2016;56:52-6.
6. Bašić-Jukić N, Gulín M, Hudolin T, Kaštelan Z, Katalinić L, Ćorić M, Veda MV, Ivković V, Kes P, Jelaković B. Expression of BMP-2 in Vascular Endothelial Cells of Recipient May Predict Delayed Graft Function After Renal Transplantation. Kidney Blood Press Res. 2016;41:781-793
7. Premuzić V, Gamulin M, Coric M, Jelakovic B. The incidence of urinary tract cancers is related to preserved diuresis: a single-center report. Int Urol Nephrol. 2017;49:2257-2263.
8. Bašić-Jukić N, Ćorić M, Kastelan Ž. IgA-dominant extracapillary proliferative glomerulonephritis following E.coli sepsis in a renal transplant recipient. Transpl Infect Dis. 2018 May 29:e12927. doi: 10.1111/tid.12927. [Epub ahead of print]
9. Premužić V, Santini M, Laganović M, Ćorić M, Jelaković B. Acute Kidney Failure as a Single Complication of Varicella Virus Infection in an Adult Patient. Case Rep Nephrol Dial. 2018 Aug 3;8:130-137

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

HRZZ project: Genotype-Phenotype correlation in Alport's syndrome and Thin Glomerular Basement Membrane Nephropathy

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

HRZZ project: Epigenetic biomarkers in blood and ejaculate of patients with seminoma of the testis .

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Marija Ćurlin, Assist. Prof.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Morphological research methods in biomedical sciences; Gene targeting in mammals; How to become a neuron?

BIOGRAPHY

Date and place of birth: 17.08.1973, Varaždin, Croatia

Current positions:

School of Medicine, University of Zagreb

-Assistant Professor of Histology and Embryology

-Head of the Laboratory for Neurogenetics and Developmental Genetics

-Head of the Electron Microscopy Centre

Previous working experience:

2009. – 2013.g. Postdoctoral research assistant at Department of Histology and Embryology, School of Medicine, University of Zagreb

2000. – 2009.g. Ph.D. research assistant at Croatian Institute for Brain Research, School of Medicine, University of Zagreb

1997. – 2000.g. research fellow at Croatian Institute for Brain Research, School of Medicine, University of Zagreb

Academic degrees achievement:

2013. Assistant Professor at University of Zagreb, School of Medicine and School of Dentistry

2006. Ph.D. in biomedical and basic medical sciences, University of Zagreb, School of Medicine

2000. Master of biomedical and basic medical sciences, University of Zagreb, School of Medicine

1997. Bachelor of science, molecular biology, University of Zagreb, Faculty of Science

Trainings:

Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany (2011.)

International Centre for Genetic Engineering and Biotechnology, Trieste, Italy (2002.),

active participation at more than 20 international conferences, meetings and workshops

Fields of research

- the role of neurotransmitters in molecular regulation of the endocervical gland activity
- interactions of metal nanoparticles with cells in vitro and in vivo (nerve and glandular tissue)
- regulation of gene expression in human and mouse brain
- intracellular regulation of endocytosis in neural cells (intracellular localization and function of the members of ESCRT complex)
- embryology, mouse developmental genetics and neurogenetics (cloning and analysis of gene trapped genes)

- development of human brain (appearance and morphological diversity of the NADPH-d reactive “subplate” neurons in the human foetal telencephalon)

Teaching experience

- lectures, seminars and practicals in Histology and Embriology and four electives to M.D. students at School of Medicine, University of Zagreb (in Croatian and English) and to students at School of Dentistry, University of Zagreb
- lectures, seminars and practicals in four electives to M.D. students at School of Medicine, University of Zagreb, and three electives to PhD students, School of Dentistry and School of Medicine, University of Zagreb
- mentor of 2 BSc, 2 PhD thesis, and a student research dean award

Member of the following professional associations:

Croatian Microscopy Society

Croatian Society for Neuroscience

Croatian Brain Council

Croatian Laboratory Animal Science Association

Natural Family Planning Centre

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 9/18/2013

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Skelin M, Bursać D, Kozina V, Winters T, Macan M, Ćurlin M. (2018) Key molecules in the GABA signalling pathway are present in mouse and human cervical tissue. Reproduction, Fertility and Development. Accepted 4 March 2018 (Q=1; IF=2.105)
2. Kapuralin K, Ćurlin M, Mitrečić D, Kosi N, Schwarzer C, Glavan G, Gajović S. (2015) STAM2, a member of the endosome-associated complex ESCRT-0 is highly expressed in neurons. Mol Cell Neurosci. 67:104-15. doi: 10.1016/j.mcn.2015.06.009. (Q=2; IF = 3.840)
3. Dobrivojević M, Habek N, Kapuralin K, Ćurlin M, Gajović S. (2015) Krüppel-like transcription factor 8 (Klf8) is expressed and active in the neurons of the mouse brain. Gene. 570(1):132-40. doi: 10.1016/j.gene.2015.06.016. (Q=3)
4. Knezovic A, Osmanovic-Barilar J, Curlin M, et al. (2015) Staging of cognitive deficits and neuropathological and ultrastructural changes in streptozotocin-induced rat model of Alzheimer's disease. Journal of neural transmission (SI). 122(4): 577-592 (Q=2)
5. Winters L, Winters T, Gorup D, Mitrečić D, Ćurlin M, Križ J, Gajović S (2013) Expression analysis of genes involved in TLR2-related signaling pathway: inflammation and apoptosis after ischemic brain injury. Neuroscience. 4522(13):118-8. (Q=2)
6. Maricic T, Günther V, Georgiev O, Gehre S, Ćurlin M, Schreiweis C, Naumann R, Burbano HA, Meyer M, Lalueza-Fox C, de la Rasilla M, Rosas A, Gajovic S, Kelso J, Enard W, Schaffner W, Pääbo S. A Recent Evolutionary Change Affects a Regulatory Element in the Human FOXP2 Gene. Mol Biol Evol. 2012 Dec 19. [Epub ahead of print] PubMed PMID: 23197593. (Q=1, IF = 10.353)

7. Kapuralin K, Van Ginneken C, Ćurlin M, Timmermans JP, Gajovic S. Neurons and a subset of interstitial cells of Cajal in the enteric nervous system highly express Stam2 gene. *Anat Rec (Hoboken)*. 2012 Jan;295(1):113-120. doi: 10.1002/ar.21522. Epub 2011 Dec 5. PubMed PMID: 22140097. (Q=2)
8. Ćurlin M, Lucić V, Gajović S. Splice variant of mouse Stam2 mRNA in nervous and muscle tissue contains additional exon with stop codon within region coding for VHS domain. *Croat Med J*. 2006 Feb;47(1):16-24. PubMed PMID: 16489693; PubMed Central PMCID: PMC2080372. (Q=2)
9. Ćurlin M, Kostović-Knežević Lj, Gajović S (2002) Gene trap mutagenesis of three genes expressed during mouse embryo development. *Periodicum Biologorum*. 104: 47-54 (Q=4)
10. Mitrečić D, Huzak M, Ćurlin M, Gajović S. An improved method for determination of gene copy numbers in transgenic mice by serial dilution curves obtained by real-time quantitative PCR assay. *J Biochem Biophys Methods*. 2005 Aug 31;64(2):83-98. PubMed PMID: 15985294. (Q=3)
11. Ćurlin M, Bursać D (2013) Cervical mucus: from biochemical structure to clinical implications. *Front Biosci (Schol Ed)* 5:507-515. PubMed PMID: 23277065. (Q=2)
12. Ćurlin M, Kapuralin K, Muro AF, Baralle FE, Chowdhury K, Gajović S. (2012) Stam2 expression pattern during embryo development. *Gene Expr Patterns*. 12(1-2):68-76. doi: 10.1016/j.gep.2011.11.005. Epub 2011 Nov 28. PubMed PMID: 22143071. (Q=2, IF = 1.967)
13. Ćurlin M, Kostović-Knežević Lj, Gajović S (2002) Gene trap mutagenesis of three genes expressed during mouse embryo development. *Periodicum Biologorum*. 104: 47-54 (Q=4)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Skelin M, Bursać D, Kozina V, Winters T, Macan M, Ćurlin M. (2018) Key molecules in the GABA signalling pathway are present in mouse and human cervical tissue. *Reproduction, Fertility and Development*. Accepted 4 March 2018 (Q=1; IF=2.105)
2. Novak S, Morasi Piperčić S, Makarić S, Primožič I, Ćurlin M, Štefanić Z, Domazet Jurašin D. Interplay of Noncovalent Interactions in Ionic Liquid/Sodium Bis(2-ethylhexyl) Sulfosuccinate Mixtures: From Lamellar to Bicontinuous Cubic Liquid Crystalline Phase. *J Phys Chem B*. 2016 Dec 15;120(49):12557-12567. Epub 2016 Dec 7. (Q=1, IF=3.146)
3. Domazet Jurašin D, Ćurlin M, Capjak I, Crnković T, Lovrić M, Babić M, Horák D, Vinković Vrček I, Gajović S. (2016) Surface coating affects behavior of metallic nanoparticles in a biological environment. *Beilstein Journal of Nanotechnology*. 7: 246-262 (Q=1; IF=2.968)
4. Vinković Vrček I, Žuntar I, Petlevski R, Pavičić I, Dutour Sikirić M, Ćurlin M, Goessler W (2016) Comparison of in vitro toxicity of silver ions and silver nanoparticles on human hepatoma cells. *Environ Toxicol*. 31: 679-692 (Q=1; IF = 3.197)
5. Vinković Vrček I, Pavičić I, Crnković T, Jurašin D, Babić M, Horak D, Lovrić M, Ferhatović L, Ćurlin M, Gajović S (2015) Does surface coating of metallic nanoparticles modulate their interference with in vitro assays? *RSC Advances* 5(87): 70787-70807 (Q=2; IF = 3.907)
6. Kapuralin K, Ćurlin M, Mitrečić D, Kosi N, Schwarzer C, Glavan G, Gajović S. (2015) STAM2, a member of the endosome-associated complex ESCRT-0 is highly expressed in neurons. *Mol Cell Neurosci*. 67:104-15. doi: 10.1016/j.mcn.2015.06.009. (Q=2; IF = 3.840)
7. Dobrivojević M, Habek N, Kapuralin K, Ćurlin M, Gajović S. (2015) Krüppel-like transcription factor 8 (Klf8) is expressed and active in the neurons of the mouse brain. *Gene*. 570(1):132-40. doi: 10.1016/j.gene.2015.06.016. (Q=3)

8. Knezovic A, Osmanovic-Barilar J, Curlin M, et al. (2015) Staging of cognitive deficits and neuropathological and ultrastructural changes in streptozotocin-induced rat model of Alzheimer's disease. Journal of neural transmission (SI). 122(4): 577-592 (Q=2)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- EU FP7 project „GlowBrain - Combining Stem Cells and Biomaterials for Brain Repair - Unlocking the Potential of the Existing Brain Research through Innovative In Vivo Molecular Imaging" (principal investigator Srećko Gajović)
- MSE project „Uloga gena u diferencijaciji i plastičnosti središnjeg živčanog sustava miša (principal investigator Srećko Gajović)
- UKF project „Regeneration and plasticity after ischemic brain damage studied on innovative transgenic mouse models" (principal investigator Srećko Gajović)
- MSE project "Poremećaji razvitka genetski promijenjenih miševa " (principal investigator: Lj. Kostović-Knežević)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- EU FP7 project „GlowBrain - Combining Stem Cells and Biomaterials for Brain Repair - Unlocking the Potential of the Existing Brain Research through Innovative In Vivo Molecular Imaging" (principal investigator Srećko Gajović)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Vladimir Damjanović, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of Chemistry and Biochemistry, School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical methods in biomedical research

BIOGRAPHY

Vladimir Damjanović was born on August 28th 1985 in Rijeka where he finished elementary and high school. He graduated at the Department of Chemistry, Faculty of Science University of Zagreb in 2009. He was awarded the medal of the Department of Chemistry for his achievements in study. As of 2009 he is employed as a teaching assistant/PhD student and from 2015 as a senior teaching assistant/postdoctoral researcher at the Department of Chemistry and Biochemistry, School of Medicine in Zagreb. He obtained his PhD in natural sciences (chemistry) in 2015 with the doctoral dissertation titled “*Synthesis and properties of biologically active o-, m- and p-isomers of N-substituted mono- and bis(pyridinium aldoximes) and their cyano complexes of iron(II)*”. His main research interests are related to the chemistry of the complexes of biologically relevant metals with ligands having potential pharmacological application. He is the author and co-author of 7 original scientific papers in journals cited by CC database, 3 original professional papers and 9 congress reports at national and international conferences. He participates in teaching the courses for medicine and dentistry students enrolled in the Integrated undergraduate and graduate study programme at School of Medicine and School of Dental Medicine, University of Zagreb, respectively, as well as for doctoral students enrolled in the Postgraduate study programme Biomedicine and Health Sciences at School of Medicine, University of Zagreb.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: -

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

M. Rubčić, J. Pisk, K. Pičuljan, **V. Damjanović**, J. Lovrić and V. Vrdoljak. Symmetrical disubstituted carbohydrazides: From solid-state structures to cytotoxic and antibacterial activity. *Journal of Molecular Structure* **1178** (2019) 222–228.

J. Pisk, T. Hrenar, M. Rubčić, G. Pavlović, **V. Damjanović**, J. Lovrić, M. Cindrić and V. Vrdoljak. Comparative studies on conventional and solvent-free synthesis toward hydrazones: Application of PXRD and chemometric data analysis in mechanochemical reaction monitoring. *CrystEngComm* **20** (2018) 1804–1817.

J. Pisk, L. Bilić, M. Đaković, D. Cvijanović, **V. Damjanović**, J. Lovrić, M. Rubčić, V. Vrdoljak and M. Cindrić. Design of mononuclear, binuclear and polynuclear molybdenum(VI) complexes based on ONO benzoylacetone derived enaminones and their *in vitro* biological activity. *Polyhedron* **145** (2018) 70–79.

M. Cindrić, A. Bjelopetrović, G. Pavlović, **V. Damjanović**, J. Lovrić, D. Matković-Čalogović and V. Vrdoljak. Copper(II) complexes with benzhydrazone-related ligands: synthesis, structural studies and cytotoxicity assay. *New Journal of Chemistry* **41** (2017) 2425–2435.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

M. Rubčić, J. Pisk, K. Pičuljan, **V. Damjanović**, J. Lovrić and V. Vrdoljak. Symmetrical disubstituted carbohydrazides: From solid-state structures to cytotoxic and antibacterial activity. *Journal of Molecular Structure* **1178** (2019) 222–228.



J. Pisk, T. Hrenar, M. Rubčić, G. Pavlović, **V. Damjanović**, J. Lovrić, M. Cindrić and V. Vrdoljak. Comparative studies on conventional and solvent-free synthesis toward hydrazones: Application of PXRD and chemometric data analysis in mechanochemical reaction monitoring. *CrystEngComm* **20** (2018) 1804–1817.

J. Pisk, L. Bilić, M. Đaković, D. Cvijanović, **V. Damjanović**, J. Lovrić, M. Rubčić, V. Vrdoljak and M. Cindrić. Design of mononuclear, binuclear and polynuclear molybdenum(VI) complexes based on ONO benzoylacetone derived enaminones and their *in vitro* biological activity. *Polyhedron* **145** (2018) 70–79.

M. Cindrić, A. Bjelopetrović, G. Pavlović, **V. Damjanović**, J. Lovrić, D. Matković-Čalogović and V. Vrdoljak. Copper(II) complexes with benzhydrazone-related ligands: synthesis, structural studies and cytotoxicity assay. *New Journal of Chemistry* **41** (2017) 2425–2435.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2017 – 2018: Project ***Enaminones and their complexes as antibacterial agents***, funded by University of Zagreb (Project leader: Prof. Dr. Jasna Lovrić)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2017 – 2021: Project ***Metallosupramolecular architectures and inorganic-organic polyoxometalate based hybrids***, funded by Croatian Science Foundation (Project leader: Prof. Dr. Višnja Vrdoljak)

2017 – 2018: Project ***Enaminones and their complexes as antibacterial agents***, funded by University of Zagreb (Project leader: Prof. Dr. Jasna Lovrić)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Sanja Darmopil, assistant profesor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb, School of Medicine and Croatian studies

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Human developmental neurobiology

BIOGRAPHY

Personal information: Born in Zagreb, August 17th 1975

E-mail: sdarmopil@hiim.hr, sanja.darmopil@gmail.com

Education:

2004 - 2009 PhD in neuroscience, Faculty of medicine, Universidad Autónoma de Madrid

2000 – 2002 MSc in immunology and physiology, Faculty of Science, University of Zagreb

1993 - 1999 BS in molecular biology, Faculty of Science, University of Zagreb, Croatia

Appointments:

2014- Assistant professor at Department of psychology, Croatian studies, University of Zagreb

2009 – 2014 Assistant at Department of Anatomy, Croatian Institute for Brain Research, School of Medicine, University of Zagreb, Croatia

2004 – 2009 Assistant at Biological psychology, Croatian studies, University of Zagreb

Training:

Sept – Nov 2011 French government scholarship, Cellular and Molecular Neuroanatomy laboratory, INSERM unit U751 “Epilepsy & Cognition”, Université de la Méditerranée, Faculté de médecine Timone, Marseille, France

2001 - 2002 Fellowship. Geriatric section, NOVUM; KI, Stockholm, Sweden (8 months).

Languages: Fluently speaking and writing English and Spanish, basic knowledge of French

Research and academic experience:

- Teaching experience in neuroanatomy for medical students, as well as biological psychology, cell biology and genetics for psychology students.
- Laboratory competencies include histological techniques (immunohistochemistry and histochemistry, in situ hybridization), neuromorphometric and stereological quantitative methods, Western blot, work with laboratory animals (mouse, rat); experimental stereotaxic surgery, behavioural testing and enriched environment housing.
- Author and co-author of 5 publications in CC, 4 SCI publications, 2 SCI abstracts, 477 citations. • Member of Croatian Society for Neuroscience

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2nd april 2014

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Espadas I, Darmopil S, Vergaño-Vera E, Ortiz O, Oliva I, Vicario-Abejón C, Martín ED, Moratalla R. L-DOPA-induced increase in TH-immunoreactive striatal neurons in parkinsonian mice: Insights into regulation and function. *Neurobiol. Dis.* 2012; 48 (3): 271-81.

Rasin MR, Darmopil S, Petanjek Z, Mohammed AH; Bogdanović N: Effect of environmental enrichment on morphology of deep layer III and layer V pyramidal cells of occipital cortex in oldest old rat – A quantitative Golgi Cox study. *Coll. Antropol.* 2011; 35 (Supl. 1), 253-258.

Darmopil S, Martin AB, Ruiz de Diego I, Ares S, Moratalla R. Genetic inactivation of dopamine D1 and D2 receptors inhibits L-DOPA induced dyskinesia and histone activation. *Biological Psychiatry* 2009; 66 (6): 603-13.

Darmopil S, Petanjek Z, Mohammed AH; Bogdanović N. Environmental enrichment alters dentate granule cell morphology in oldest-old rat. *J of Cell and Mol Med.* 2009; 13 (8b) 1845-1856.

Darmopil S, Muñeton–Gomez VC, de Ceballos ML, Bernson M, Moratalla R. Tyrosine hydroxylase cells appearing in the mouse striatum after dopamine denervation are likely to be projection neurones regulated by L-DOPA. *Eur J Neurosci.* 2008; 27(3):580-92.

Mohammed AH, Zhu SW, Darmopil S, Hjerling-Leffler J, Ernfors P, Winblad B, Diamond MC, Eriksson PS, Bogdanovic N. Environmental enrichment and the brain. *Prog Brain Res* 2002; 138:109-33.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Hladnik A, Džaja D, Darmopil S, Jovanov-Milošević N; Petanjek Z. Spatio-temporal extension in site of origin for cortical calretinin neurons in primates. *Frontiers in neuroanatomy* 2014; 8: 50.

Silva C, Métin C, Machado NJ, Darmopil S, Launay P, Ghestem A, Marie-Pascale Nesa MP, Baqi Y, Müller CE, Ivanov A, Zilberter Y, Cunha RA, Esclapez E, Bernard C. Maternal caffeine consumption interferes with adenosine 2A receptors with deleterious consequences on GABAergic networks in offspring. *Science Translational Medicine.* 2013; 5 (197).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2007 - 2009 – “Role of dopaminergic receptors in the structural and synaptic plasticity of the striatal neurons in mice model of L-DOPA induced dyskinesias”; Principal investigator: R. Moratalla; Ministry of health and consumption, Spain.

2003 - 2006 – “Characterization of neuronal codes and dopaminergic receptors involved in dyskinesias and dystonia”; Principal investigator: R. Moratalla i C. Magariños, Spanish Fond for sanitary investigation.

2003-2006 – “Molecular bases of the interactions between dopaminergic and cannaboid system”. Principal investigator: R. Moratalla; Spanish ministry of education and science.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2015- National centre of Excellence – “Centre for basic, clinical and translational neuroscience” Core - Neuro

2015 – 2018 "Biomarkers in schizophrenia – integration of complementary methods in longitudinal follow up of first episode psychosis patients"; HRZZ project. Principal investigator: Martina Rojnić Kuzman.

2014 – 2018“Microcircuitry of higher cognitive functions”; projekt HRZZ; 5493. Principal investigator: Zdravko Petanjek



NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Sanja Davidović-Mrsić, MD.PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: KBC Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical Methods in Biomedical Research; Laboratory approach to transplantation of haematopoietic stem cells; Methods of molecular biology in medicine

BIOGRAPHY

Education: Graduated from the School of Medicine, University of Zagreb, study visit and education at Medical College of Wisconsin, Milwaukee, USA (1990-1992), postgraduate study of Medical Genetics (Sch of Med, Univ of Zagreb), postgraduate study of Oncology (Sch of Med, Univ of Zagreb), specialist exam in transfusion medicine. MSc in the field of medicine, PhD in the field of clinical medical sciences, head doctor's position. Study visits to centers for hemato-oncological cytogenetics (University Hospital Center Ljubljana, Slovenia, Universitaire Ziekenhuizen, Amsterdam, Center for Human Genetics, University of Leuven, Belgium, Erasmus University, Dept. of Cell Biology and Genetics, Rotterdam, The Netherlands, Centre of Oncocytogenetics, Institute of Clinical Biochemistry and Laboratory Diagnostics and General Teaching Hospital, Prague, Czech Republic, Department of Hemato-Oncology, Faculty of Medicine and University Olomouc, Czech Republic).

An attendee and active participant in many continuous education courses in Croatia covering the fields of cytogenetics and molecular cytogenetics in hemato-oncology. An attendee and active participant (invited speaker, organizer) of a large number of symposia, scientific meetings, workshops, congresses in Croatia, and participant in many international congresses.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: KRSTO DAWIDOWSKY, MD PhD, ASSOCIATED PROFESSOR

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: MEDICAL SCHOOL UNIVERSITY OF ZAGREB

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: ELECTROPHYSIOLOGICAL METHODS IN SCIENTIFIC RESEARCH

BIOGRAPHY

Krsto Dawidowsky was born in Zagreb in 1968. Since 1998 he is employed at University clinic for Otorhinolaryngology and Head & Neck Surgery, presently at the position as chief of the department. His professional field of work is neurotology, otosurgery and audiology. Since 2008 he teaches at Medical School, University of Zagreb, from 2015 as an Associated Professor of otorhinolaryngology. He is fluent in English, speaks German and Italian. In 1994 he graduated at Medical School, University of Zagreb, where he received his master's degree in 2006 and his PhD in 2011. He is author of five chapters in books, 16 articles published in ENT journals, and 50 congress presentations.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 15.12.2015.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Dawidowsky, Krsto. Odnos promjera Fallopijeva kanala prema lokalizaciji oštećenja ličnog živca u Bellovoj paralizi / **magistarski rad**. Zagreb: Prirodoslovno-matematički fakultet, 5. lipnja 2006., 56 str. Voditelj: Šprem, Nikola.

Dawidowsky, Krsto. Promjene funkcije vestibularnog sustava u bolesnika s Bellovom parezom / **disertacija**. Zagreb: Medicinski fakultet, 29. lipnja 2011., 57 str. Voditelj: Branica, Srećko.

Dawidowsky K, Branica S, Batelja L, Dawidowsky B, Kovač-Bilić L, Simunić-Veselić A. Anatomical study of the facial nerve canal in comparison to the site of the lesion in Bells palsy. Coll Antropol 2011;35(1):61-5. Branica S, **Dawidowsky K**, Kovač-Bilić L. Sensorineural Hearing Loss, Traumatic. U: Encyclopedia of Otolaryngology, Head and Neck Surgery. S. E. Kountakis (editor). Springer-Verlag Berlin Heidelberg, 2013. pp 2397-2399

Branica S, **Dawidowsky K**, Šprem N, McKinnon B. Otologic Blast Trauma: The War in Croatia Experience. U: Explosion and Blast Injuries: Effects of Explosion and Blast from Military Operations and Acts of Terrorism by Nabil Mohamed Elsayed, James L. Atkins Publisher: Elsevier Science & Technology Books Pub, 2008. p. 353-367.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Ivančica Delaš

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical methods in biochemical research

BIOGRAPHY

EDUCATION:

1999: PhD, Biomedicine and Health, School of Medicine, University of Zagreb, Croatia

1986: Master of sciences, Biochemistry, University of Zagreb, Zagreb, Croatia

1980: University degree in Biotechnology, Faculty of Food Technology and Biotechnology, University of Zagreb, Zagreb, Croatia

Teaching activities

1986 – now

Integrated undergraduate and graduate study of medicine:

"Medical chemistry and biochemistry I", School of Medicine, University of Zagreb;

"Medical chemistry and biochemistry II", School of Medicine, University of Zagreb;

"Clinical biochemistry", School of Medicine, University of Zagreb;

Integrated undergraduate and graduate study of dental medicine:

"Biochemistry", School of Dental Medicine, University of Zagreb;

Postgraduate Specialist Programmes

2001 - "Selected topics in biochemistry of skin and subcutaneous lipids", Postgraduate studies of Dermatovenereology, School of Medicine, University of Zagreb;

"Principles of Nutrition", The Coach Training and Education Department, Social Sciences Polytechnics in Zagreb

Postgraduate PhD Study Programmes

2001 - "The role of nutrition in a healing process", Postgraduate PhD Study in Nutrition, Faculty of Food Technology and Biotechnology, University of Zagreb;

2002 - 2007. Coordinator and teacher for "Medical Chemistry and Biochemistry I", "Medical Chemistry and Biochemistry II" i "Clinical Biochemistry", Medical Studies in English, School of Medicine, University of Zagreb.

2001 - 2007 Course teacher "Diet therapy" for students of nutrition at the Faculty of Food Technology and Biotechnology, University of Zagreb;

2002 - Associate Faculty of Kinesiology, University of Zagreb on the "Recreation"; Associate Faculty of Kinesiology, University of Zagreb, postgraduate study, the subject of "Models of kinesiology program in recreation"

2006- 2009 Associate at the Health Polytechnic, Zagreb, on modules "Chemistry" and "Biochemistry" for students of sanitary engineering, medical laboratory diagnostics and radiological technology.

2012 - Associate at the elective course "Nutrition in Health and Disease - selected topics" at the School of Medicine, University of Zagreb

2012. - Lecturing on "Biochemical methods in biomedical research" on postgraduate studies in the field of medicine and health care at the Medical University of Zagreb.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

2012. Scientific advisor

2015. Full professor

**LIST OF PUBLISHED WORK, WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME,
THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME**

Educational materials

1. Božina, Tamara; Cvijanović, Danijela; Damjanović, Vladimir; Delaš, Ivančica; Fabris, Dragana; Foretić, Blaženka; Kalanj Bognar, Svjetlana; Karmelić, Ivana; Lovrić, Jasna; Mlinac Jerković, Kristina; Pašalić, Daria; Picek, Igor; Potočki, Slavica; Sertić, Jadranka; Vukelić, Željka. Priručnik za vježbe iz medicinske kemije i biokemije za studente medicine ; 3., obnovljeno i preuređeno izdanje / Lovrić, Jasna (ur.). Zagreb, Medicinska naklada, 2017.
2. Delaš, Ivančica. Klinička prehrana. U: Klinička kemija i molekularna dijagnostika u kliničkoj praksi / Sertić, Jadranka (ur.). Zagreb, Medicinska naklada, 2015. Str. 613-622.
2. Delaš, Ivančica. Primjena plinske kromatografije. U: Biokemijske metode u biomedicinskim istraživanjima / Lovrić, Jasna ; Rogić, Dunja (ur.). Zagreb, Medicinska naklada, 2015. Str. 7-9.
3. Andrijašević, Mirna; Barić, Ivo; Čačić Hribljan, Melita; Delaš, Ivančica; Dujmović, Mihela; Knezić, Koraljka; Lasić, Mirna; Maretić Dumić, Mirjana; Martinis, Irena; Omerza, Lana; Pašalić, Daria; Pavić, Eva; Rahelić, Dario; Tišljarić, Miroslav; Tješić Drinković, Dorian; Tješić Drinković, Duška; Uroić, Valentina. Prilog spoznajama o značenju prehrane u prevenciji i liječenju bolesti /Delaš, Ivančica ; Čačić Hribljan, Melita (ur.). Zagreb, Medicinska naklada, 2011.
4. Autori prijevoda: Nicoletta Burger, Ivančica Delaš, Robert Domitrović, Irena Drmić Hofman, Blaženka Foretić, Ljubica Glavaš-Obrovac, Nikola Habuzin, Svjetlana Kalanj Bognar, Jasna Lovrić, Jelena Marinić, Anita Markotić, Milan Mesić, Čedomila Milin, Daria Pašalić, Maja Pavela-Vrančić, Jasminka Rupčić, Jadranka Sertić, Marin Tota, Jadranka Varljen, Željka Vukelić. Harper's Illustrated Biochemistry /Jasna Lovrić, Jadranka Sertić (ur.). Zagreb, Medicinska naklada, 2011.
5. Mesarić, Marko; Stavljenić-Rukavina, Ana; Kljaić, Ksenija; Burger, Nikoleta; Ondrušek, Vilko; Delaš, Ivančica; Jandrić, Zlatica; Lovrić, Jasna; Foretić, Blaženka; Vukelić, Željka; Pašalić, Daria; Ribar, Slavica. Laboratory Course in Medical Chemistry and Biochemistry /Mesarić, Marko (ur.). Zagreb, Medicinska naklada, 2004.
6. Stavljenić-Rukavina, Ana; Kljaić, Ksenija; Burger, Nicoletta; Mesarić, Marko; Lovrić, Jasna; Delaš, Ivančica; Foretić, Blaženka; Vukelić, Željka; Pašalić, Daria; Ribar, Slavica; Ondrušek, Vilko. Vježbe iz medicinske biokemije za studente stomatologije /Mesarić, Marko (ur.). Zagreb, Medicinska naklada; Medicinski fakultet Sveučilišta u Zagrebu, 2002.

Scientific papers

1. Barišić, Josip; Čož-Rakovac, Rozelinda; Delaš, Ivančica; Topić Popović, Natalija; Gavrilović, Ana; Jug-Dujaković, Jurica; Brailo, Marina; Sauerborn-Klobučar, Roberta; Babić, Sanja; Strunjak-Perović, Ivančica. Predictive modeling of European flat oyster (*Ostrea edulis* L.) fatty acid composition. // Aquaculture International. 25 (2017), 2; 805-825
2. Vranković, Lana; Delaš, Ivančica; Reljić, Slaven; Huber, Đuro; Maltar-Strmečki, Nadica; Klobučar, Karla; Krivić, Gabriela; Stojević, Zvonko; Aladrović, Jasna. The Lipid Composition of Subcutaneous Adipose Tissue of Brown Bears (*Ursus arctos*) in Croatia. Physiological and biochemical zoology. 90 (2017), 3; 399-406.
3. Borovac Štefanović, Leda; Kalinić, Dubravka; Mimica, Ninoslav; Beer Ljubić, Blanka; Aladrović, Jasna; Mandelsamen Perica, Marina; Ćurić, Maja; Folnegović Grošić, Petra; Delaš, Ivančica. Oxidative status and the severity of clinical symptoms in patients with post-traumatic stress disorder. Annals of clinical biochemistry. 52 (2015), 1; 95-104.
4. Bučević-Popović, Viljemka; Delaš, Ivančica; Međugorac, Sanja; Pavela-Vrančić, Maja; Kulišić-Bilušić, Tea. Oxidative stability and antioxidant activity of bovine, caprine, ovine and asinine milk. International journal of dairy technology. 67 (2014) , 3; 394-401.

5. Kalinić, Dubravka; Borovac Štefanović, Leda; Jerončić, Ana; Mimica, Ninoslav; Dodig, Goran; Delaš, Ivančica. Eicosapentaenoic acid in serum lipids could be inversely correlated with severity of clinical symptomatology in Croatian war veterans with posttraumatic stress disorder. *Croatian medical journal*. 55 (2014), 1; 27-37
6. Tudor Kalit, Milna; Kalit, Samir; Delaš, Ivančica; Kelava, Nikolina; Karolyi, Danijel; Kaić, Dubravka; Vrdoljak, Marija; Havranek, Jasmina. Changes in the composition and sensory properties of Croatian cheese in a lamb skin sack (Sir iz mišine) during ripening. *International journal of dairy technology*. 67 (2014), 2; 255-264.
7. Berberović, Edina; Ivanišević, Marina; Juras, Josip; Horvatiček, Marina; Delaš, Ivančica; Đelmiš, Josip. Arachidonic and docosahexaenoic acid in the blood of a mother and umbilical vein in diabetic pregnant women. *Journal of maternal-fetal & neonatal medicine*. 26 (2013), 13; 1287-1291
8. Delaš, Ivančica; Popović, Milivoj; Petrović, Tomislav; Delaš, Frane; Ivanković, Davor. Changes in the Fatty Acid Composition of Brain and Liver Phospholipids from Rats Fed Fat-Free Diet. *Food Technology and Biotechnology*. 46 (2008), 3; 278-285.
9. Delaš, Ivančica; Popović, Milivoj; Delaš, Frane. Changes in Tissue Fatty Acids Composition Due to a Fat Free Diet. *Food Technology and Biotechnology*. 37 (1999), 3; 173-179.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Barišić, Josip; Čož-Rakovac, Rozelinda; Delaš, Ivančica; Topić Popović, Natalija; Gavrilović, Ana; Jug-Dujaković, Jurica; Brailo, Marina; Sauerborn-Klobučar, Roberta; Babić, Sanja; Strunjak-Perović, Ivančica. Predictive modeling of European flat oyster (*Ostrea edulis* L.) fatty acid composition. *Aquaculture International*. 25 (2017), 2; 805-825
2. Vranković, Lana; Delaš, Ivančica; Reljić, Slaven; Huber, Đuro; Maltar-Strmečki, Nadica; Klobučar, Karla; Krivić, Gabriela; Stojević, Zvonko; Aladrović, Jasna. The Lipid Composition of Subcutaneous Adipose Tissue of Brown Bears (*Ursus arctos*) in Croatia. *Physiological and biochemical zoology*. 90 (2017), 3; 399-406
3. Jurić, Anita; Delaš, Ivančica; Vukušić, Tomislava; Milošević, Slobodan; Režek Jambrak, Anet; Herceg, Zoran. Influence of Gas Phase Plasma and High Power Ultrasound on Fatty Acids in Goat Milk. *American journal of food technology*. 11 (2016), 4; 125-133
4. Tudor Kalit, Milna; Buntić, Ivan; Morone, Giuseppe; Delaš, Ivančica; Kalit, Samir. The content of free fatty acids in relation to electronic nose sensors responses and sensory evaluation of cheese in a lamb skin sack (Sir iz mišine) throughout ripening. *Mljekarstvo*. 66 (2016), 1; 26-33
5. Borovac Štefanović, Leda; Kalinić, Dubravka; Mimica, Ninoslav; Beer Ljubić, Blanka; Aladrović, Jasna; Mandelsamen Perica, Marina; Ćurić, Maja; Folnegović Grošić, Petra; Delaš, Ivančica. Oxidative status and the severity of clinical symptoms in patients with post-traumatic stress disorder. *Annals of clinical biochemistry*. 52 (2015), 1; 95-104
6. Bučević-Popović, Viljemka; Delaš, Ivančica; Međugorac, Sanja; Pavela-Vrančić, Maja; Kulišić-Bilušić, Tea. Oxidative stability and antioxidant activity of bovine, caprine, ovine and asinine milk. *International journal of dairy technology*. 67 (2014), 3; 394-401
7. Kalinić, Dubravka; Borovac Štefanović, Leda; Jerončić, Ana; Mimica, Ninoslav; Dodig, Goran; Delaš, Ivančica. Eicosapentaenoic acid in serum lipids could be inversely correlated with severity of clinical symptomatology in Croatian war veterans with posttraumatic stress disorder. *Croatian medical journal*. 55 (2014), 1; 27-37
8. Tudor Kalit, Milna; Kalit, Samir; Delaš, Ivančica; Kelava, Nikolina; Karolyi, Danijel; Kaić, Dubravka; Vrdoljak, Marija; Havranek, Jasmina. Changes in the composition and sensory properties of Croatian cheese in a lamb skin sack (Sir iz mišine) during ripening. *International journal of dairy technology*. 67 (2014), 2; 255-264 .

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018. - Principal investigator „Specificity of lipid status in patients with endometriosis“,
2015 - 2016 Collaborator „Composition and role of follicular fluid in the development of healthy and fertile egg cells“,
2014 - 2015 Collaborator “Healthy sperm membrane as a prerequisite of fertile ability”
2013. - Collaborator, „Application of electrical discharge plasma for preservation of liquid foods”, HRZZ, NTP01
2009 - 2010. Principal investigator, scientific project "Relationship between lipid metabolism and the prevalence of PTSD", Croatian Academy of Sciences and Arts;
2008 - Collaborator; Scientific project "Mycotoxins in Foods and Feeds in the Territory of the Republic of Croatia", Ministry of Science, Education and Sports of the Republic of Croatia.
2009 – 2010. Principal investigator; Scientific project "Relationship between lipid metabolism and the prevalence of PTSD", Croatian Academy of Sciences and Arts.
2001 – 2007. Principal investigator; Scientific project "Reactions of the organism on modifications in diet"; Ministry of Science, Education and Sports of the Republic of Croatia.
1996 – 2001. Collaborator; Scientific project "Variations of lipid molecules by food and environmental influence", Ministry of Science, Education and Sports of the Republic of Croatia.
1991 – 1995. Collaborator; Scientific project "Modulation of lipid molecules: influence of food and environment", Ministry of Science, Education and Sports of the Republic of Croatia.
1986 – 1990. Collaborator; Scientific project "Modulation of fatty acids by nonconventional nutrition and lipophylic environmental factors", Ministry of Science, Education and Sports of the Republic of Croatia.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2018. - Principal investigator „Specificity of lipid status in patients with endometriosis“,
2015 - 2016 Collaborator „Composition and role of follicular fluid in the development of healthy and fertile egg cells“,
2014 - 2015 Collaborator “Healthy sperm membrane as a prerequisite of fertile ability”
2013. - Collaborator, „Application of electrical discharge plasma for preservation of liquid foods”, HRZZ, NTP01

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Associate Professor Diana Delić-Brkljačić, MD,
Ph.D.NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Electrophysiological methods in medical research, Application of Doppler in research and diagnosis of diseases of blood vessels

BIOGRAPHY

Work experience:

Since 10/2015 Chair, Department of Cardiology, University Hospital Center „Sisters of Mercy“
Since 2012 vice chair, Cathedra for Internal Medicine, University of Zagreb School of Medicine (UZSM)
Since 2012 vice president, Croatian Cardiac Society
11/2008-10/2015 chief doctor, Division of cardiac and blood vessel diseases, Internal medicine Department, Univ.Hospital Center „Sisters of Mercy“, Zagreb
9/2003-2009 assistant and higher assistant, Cathedra for Internal Medicine, UZSM
2009-2015 assist. Professor, since 20.7.2015. Associate professor of internal medicine, UZSM
Since 7/1996 board certified internist, UHC Sisters of Mercy
1992-1996 resident in internal medicine, UHC SM
1990-1992 scientific trainee, Internal Medicine Department, UH Sisters of Mercy

Education and training:

Elementary school and Mathematical Gymnasium, Zagreb
University of Zagreb School of Medicine, 1983-1988.; graduated on 15.7.1988., average mark 4.80;
Demonstrator, Department of Anatomy
1988-90. internship, UH Sisters of Mercy, Zagreb
13.4.1990. State competence exam
1990.-92. Postgraduate studies of natural sciences (Biomedicine), Natural-Mathematic Faculty, and University of Zagreb
1992.-1996. Resident in internal medicine
3.7.1996. Board certified internal medicine specialist
Subspecialisation in cardiology 2002-2004. 26.2.2004. Subspecialist exam
May and June 2000. – visiting fellowship Department of Cardiology, University Hospital of Hamburg-Eppendorf, transesophageal echocardiography training. Several times training in cardiac electro stimulation in Switzerland.
M.Sc. and Ph.D. thesis: 18.12.1992. Master of Science thesis in cardiology, UZSM
19.12.2007. PhD thesis «Influence of ATII blockers and calcium channel blockers on Doppler resistance index, acceleration time and acceleration index in intrarenal arteries of patients with essential hypertension, UZSM

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: Assist. Professor, since 20.7.2015. Associate professor of internal medicine, UZSM

LIST OF PUBLISHED WORK, WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Experience in scientific projects: Principal investigator in Ministry of Science project „Predictors of atrial fibrillation in patients with AV block and cardiac pacemaker (134-0362979-0119) “. Collaborator on project: „Application of Doppler and multislice CT in kidney and blood vessel diseases (108-1080232-0141) “ and on the University support project „Sjögren's syndrome – proteogenomics of neurotransmitters, autoimmunity and atherogenesis“ –2013-14

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Huisman MV, Rothman KJ, Paquette M, Teutsch C, Diener HC, Dubner SJ, Halperin JL, Ma CS, Zint K, Elsaesser A, Bartels DB, Lip GY; GLORIA-AF INVESTIGATORS. THE CHANGING LANDSCAPE FOR STROKE PREVENTION IN AF: FINDINGS FROM THE GLORIA-AF REGISTRY PHASE 2. J Am Coll Cardiol 2017; 69(7): 777-785. doi: 10.1016/j.jacc.2016.11.061. – (collaborator)
2. Zeljković I, Bulj N, Kolačević M, Čabrilo V, Brkljačić DD, Manola Š. FAILURE OF INTRACARDIAC PACING AFTER FATAL PROPAFENONE OVERDOSE: A CASE REPORT. J Emerg Med. 2018;54(4):e65-e68. doi: 10.1016/j.jemermed.2017.12.021. Epub 2018 Jan 11.
3. Škerk V, Markotić A, Delić-Brkljačić B, Manola Š, Krčmar T, Gabrić ID, Štajminger G, Pintarić H. THE ASSOCIATION OF VENTRICULAR TACHYCARDIA AND ENDOTHELIAL DYSFUNCTION IN THE SETTING OF ACUTE MYOCARDIAL INFARCTION WITH ST ELEVATION. Med Sci Monit 2013;19:1027-1036.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 2007th to 13th Head of the MZOS scientific project "Atrial fibrillation predictors in patients with AV block and heart electrostimulator"
- 2007th to 13th - researcher at the scientific project "Application of Doppler and multilayer CT in kidney and blood vessels"
- 2008 - the author of the chapters in the textbook "Internal Medicine" of the Faculty of Medicine of the University of Zagreb
- 2009 - author of chapters in the textbook "Internal Medicine" of the Faculty of Dentistry of the University of Zagreb
- 2013 - 14 associates on the project / support "Sjögren's Syndrome - Neurotransmitters, Autoimmunity and Atherogenesis Proteogenomics" at the University of Zagreb
- co-author of 28 published scientific / professional papers in indexed journals; out of which 14 papers were published in CC-indexed journals and 14 in SCOPUS and MEDLINE
- Lecturer at several domestic and foreign scientific and professional conferences

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 2007th to 13th Head of the MZOS scientific project "Atrial fibrillation predictors in patients with AV block and heart electrostimulator"
- 2007th to 13th Researcher at the scientific project "Application of Doppler and multilayer CT in kidney and blood vessels"
- 2013 - 14 Associates on the project / support "Sjögren's Syndrome - Neurotransmitters, Autoimmunity and Atherogenesis Proteogenomics" at the University of Zagreb

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 3

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: MD, PhD Alma Demirovic

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: UHC "Sestre milosrdnice"

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: "Viral hepatitis"

BIOGRAPHY

ALMA DEMIROVIĆ, MD, PhD

(birth last name Dubravić)

Dunjevac 15B

10000 Zagreb, Croatia

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Work address University Hospital Centre "Sestre milosrdnice"

Vinogradska cesta 29

10000 Zagreb, Croatia

Phone: +385 1 37 87 465; Fax: +385 1 37 87 244

Date and place of birth June 12, 1980, Tuzla, Bosnia and Herzegovina

Citizenship Croatia

Education 1999-2005, School of Medicine, University of Zagreb

2005, September 22: MD degree, School of Medicine, University of Zagreb

2006, April 15: Research Assistant, University Department of Pathology, University Hospital Centre "Sestre milosrdnice", Zagreb

2007, February 22: License for clinical practice in Croatia

2007, September 1: Residency, Anatomic Pathology

2006-2009. PhD study: Zagreb University School of Medicine, Zagreb, Croatia

2009: Postgraduate Study in Anatomic Pathology, Zagreb University School of Medicine, Zagreb, Croatia

2011, December 16: PhD degree, Zagreb University School of Medicine, Croatia

2013: Pathologist (Board Certified, Croatia)

Appointments 2006: Internship, Clinical Hospital Centre, Zagreb, Croatia

2006: Research Assistant, University Department of Pathology, University Hospital Centre "Sestre milosrdnice", Zagreb

2007: Resident, University Department of Pathology, University Hospital Centre "Sestre milosrdnice", Zagreb

2013: Staff Pathologist, Specialist, University Department of Pathology, University Hospital Centre "Sestre milosrdnice", Zagreb

2014: Research associate (Biomedicine – clinical medical science)

Scientific interests GI pathology

Molecular pathology of the tumors

Urothelium

Neuroendocrine tumors (GEP, Breast)

Language skills English (C1)

German (B1)

IT skills Office (Word, Excel, Power Point), Endnote

Organization skills 2006-2012 - Member of the Organizing Committee of „Ljudevit Jurak“

International Symposium on Comparative Pathology, Zagreb, Croatia

2008 - Member of the Organizing Committee of 23rd Meeting of Adriatic Society of Pathology, Dubrovnik, Croatia

2012.... – Member of the Organizing Committee of the Round table at the Croatian Academy of Sciences and Arts "Apoptosis and tumors"

Awards

2012. University of Zagreb School of Medicine: Award as most productive PhD student
2012. University of Zagreb School of Medicine, Sergej Saltykow foundation: Award for the best doctoral dissertation
2013. Bursary from the European Society of Pathology (ESP) for participation on 25th European Congress of Pathology, Lisbon, 2013
2014. Bursary from the Sergej Saltykow foundation for the participation at “Basic molecular biology for pathologist”, Institute of Pathology; Medical University of Graz, March 31- April 4, 2014
2017. Bursary from the Sergej Saltykow foundation for the participation at “Postgraduate Course Gastrointestinal Pathology”, Graz, May 18 – 20, 2017.

Seminars, education

2006 – Methodological Courses in Biology and Medicine – DNA and RNA (isolation of DNA, isolation of RNA, PCR, RT-PCR, Real-time PCR, Southern blot hybridization, dot blot hybridization, sequencing and genotypization using microsatellites), Ruđer Bošković Institute, Zagreb, Croatia
2006 – 1st Training and Proposal Building Meeting of the Medical Research Initiative South Eastern Europe, Maribor, Slovenia
2010 - European School of Pathology – Gastrointestinal Pathology, Zagreb, Croatia
2010 - British-Bosnian School of Pathology - Dermatopathology , Sarajevo, Bosnia and Herzegovina
2010 - Apoptosis, programmed cell-death - The Academy of Medical Sciences of Croatia (Board of Basic Medical Sciences) – Round table
2012 - European School of Pathology – Update in Dermatopathology, Zagreb, Croatia
2013 - The Open Medical Institute of American Austrian Foundation – Salzburg Cleveland Seminar in Pathology, Salzburg, Austria
2014 - Basic molecular biology for pathologist, Institute of Pathology; Medical University of Graz, Austria
2015 - European School of Pathology – Update in the Gastrointestinal Pathology, Zagreb, Croatia
2015 – Bryan Warren School of Pathology – Pancreatic and Liver Pathology, Sarajevo, Bosnia and Herzegovina
2016 - Apoptosis, programmed cell-death - The Academy of Medical Sciences of Croatia (Board of Basic Medical Sciences) – Round table
2016 - The Open Medical Institute of American Austrian Foundation – Salzburg Cleveland Seminar in Pathology, Salzburg, Austria
2016 - Bryan Warren School of Pathology – GI and Breast Pathology, Sarajevo, Bosnia and Herzegovina
2016 – Third Scientific Symposium: Gastrointestinal tumors: colorectal cancer. Croatian Academy of Sciences and Arts (invited speaker), 16th November, Zagreb, Croatia
2017 – Fourth Scientific Symposium “Apoptosis and neoplasms”, Croatian Academy of Sciences and Arts, 28th March, Zagreb, Croatia.
2017 – 14th ENETS Conference – Post ENETS Webinar, April.
2017 – 6th E-congress „Cases from clinical practice in endocrinology and diabetology”, Department for endocrinology, University Hospital Center “Sestre milosrdnice”, April, Zagreb, Croatia (invited speaker)
2017 - Zagreb School of Endocrine Oncology, 13-17 March, University Hospital Center Sestre milosrdnice, Zagreb (invited speaker)
2017 - 2nd Meeting of the Pannonian Working Group of Gastrointestinal Pathology, Ljubljana, 7-8 April (invited speaker)
2017 – Fourth Scientific Symposium: Gastrointestinal tumors: colorectal cancer. Croatian Academy of Sciences and Arts, 21st November (invited speaker)
2018 – Zagreb School of Endocrine Oncology, 12-16 March, University Hospital Center Sestre milosrdnice, Zagreb (invited speaker)
2018 – Symposium: Collections in acute pancreatitis, 6 April, University Hospital Center Sestre milosrdnice, Zagreb

Memberships ENETS (2016-)
ENGIP (2016-)
European Society of Pathology (ESP) (2013-)
European Association for Cancer Research (2011-)
Croatian Association for Cancer Research (Member of European Association for Cancer Research) (2011-)

Family status Married, two children

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: /

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Terlević R, Perić Balja M, Tomas D, Skenderi F, Krušlin B, Vranic S, Demirović A. Somatostatin receptor SSTR2A and SSTR5 expression in neuroendocrine breast cancer. *Ann Diagn Pathol* 2018; 38:62-66. (CC)
2. Krištić A, Aralica D, Demirović A, Krušlin B. Pathohistologic prognostic and predictive parameters in colorectal cancer – tumor budding. *Rad Hrvat Akad Znan Umjet Med Znan.* 2018;45(533):113–26.
3. Kruljac I, Vurnek I, Maasberg S, Kust D, Blaslov K, Ladika Davidović B, Štefanović M, Demirović A, Biščanin A, Filipović-Čugura J, Marić Brozić J, Pape UF, Vrkljan M. A score derived from routine biochemical parameters increases the diagnostic accuracy of chromogranin A in detecting patients with neuroendocrine neoplasms. *Endocrine* 2018;60:395-406. (CC)
4. Demirović A, Krušlin B. Recommendations for histopathology report of colorectal carcinoma specimens. *Rad Hrvat Akad Znan Umjet Med Znan.* 2017;44 (530):67-72.
5. Strinović M, Kruljac I, Dabelić N, Nikolić M, Ljubičić N, Filipović Čugura J, Vazdar Lj, Marić Brozić J, Kust D, Petranović Ovčariček P, Gladić Nenadić V, Marjan D, Ulamec M, Demirović A, Miculinić A, Vrkljan M. Duodenal neuroendocrine tumors (d-NETs): challenges in diagnosis and treatment. *Endocr Oncol Metab* 2016;2(3):174-193.
6. Demirović A, Čupić H, Krušlin B. Patološke promjene bubrežnih arterija u bolesnika s karcinomom bubrežnih stanica. *Liječ Vjesn* 2016;138:133–137.
7. Budimir I, Demirović A, Iveković R, Pažanin L. Epithelioid hemangioma of the orbit: case report. *Acta Clin Croat* 2015; 54:92-95 (SCI)
8. Demirović A, Cesarec S, Marušić Z, Tomas D, Milošević M, Hudolin T, Krušlin B. TGF-β1 expression in chromophobe renal cell carcinoma and renal oncocytoma. *Eur J Histochem* 2014;58:2265. (CC)
9. Demirović A, Ulamec M, Bezjak M, Belicza M, Krušlin B. Apoptotic markers (P53, Bcl-2 and Bax) expression in renal oncocytoma and chromophobe renal cell carcinoma. *Period Biol* 2014;116:173-76.
10. Demirović A, Tomas D, Tomić K, Spajić B, Ibukić A, Čupić H, Krušlin B. Correlation of VEGF and HIF-1α expression with pathological renal artery changes in patients with renal cell carcinoma. *Scand J Urol* 2014;48:34-40. (CC)
11. Štimac G, Demirović A, Krušlin B, Tomas D. Testicular angioleiomyoma presenting with haemospermia. *Asian Journal of Andrology* 2013;15:573–574. (CC)
12. Tomas D, Spajić B, Milošević M, Demirović A, Marušić Z, Krušlin B. Extensive retraction artifact predicts biochemical recurrence-free survival in prostatic carcinoma. *Histopathology* 2011;58:447-54. (CC)
13. Benko G, Spajić B, Demirović A, Stimac G, Krušlin B, Tomas D. Prognostic value of connexin43 expression in patients with clinically localized prostate cancer. *Prostate Cancer Prostatic Dis* 2011;14:90-5. (CC)
14. Spajić B, Grubišić I, Spajić M, Marušić Z, Demirović A, Mijić A, Krušlin B, Tomas D. Synchronous rectal adenocarcinoma and bilateral clear cell renal carcinoma. *Acta Clin Croat* 2010; 49:169-172. (SCI)

15. Demirović A, Džombeta T, Tomas D, Spajić B, Pavić I, Hudolin T, Milošević M, Čupić H, Krušlin B. Immunohistochemical expression of tumor antigens MAGE-A3/4 and NY-ESO-1 in renal oncocytoma and chromophobe renal cell carcinoma. *Pathol Res Pract* 2010;206:695-9. (CC)
16. Demirović A, Marušić Z, Leniček T, Spajić B, Baličević D, Tomas D, Krušlin B. CD138-positive plasmacytoid urothelial carcinoma of urinary bladder with focal micropapillary features. *Tumori* 2010;96:358-360. (CC)
17. Tomas D, Spajić B, Milošević M, Demirović A, Marušić Z, Krušlin B. Intensity of stromal changes predicts biochemical recurrence-free survival in prostatic carcinoma. *Scand J Urol Nephrol* 2010;44:284-90. (CC)
18. Demirović A, Cesarec S, Spajić B, Tomas D, Bulimbašić S, Milošević M, Marušić Z, Krušlin B. Can renal oncocytoma be distinguished from chromophobe renal cell carcinoma by the presence of fibrous capsule? *Virchows Arch* 2010;456:85-89. (CC)
19. Popović A, Demirović A, Spajić B, Štimac G, Krušlin B, Tomas D. Expression and prognostic role of syndecan-2 in prostate cancer. *Prostate Cancer Prostatic Dis* 2010;13:78-82. (CC)
20. Belicza M, Demirović A, Tomić K, Leniček T, Pavić I, Jakovina K, Vukelić M, Jakovina T, Mišić M, Krušlin B. Comparison of occurrence of upper urinary tract carcinomas in the region with endemic villages and non-endemic nephropathy region in Croatia. *Coll Antropol* 2008;4:1203-7. (CC)
21. Leniček T, Szerda F, Demirović A, Mijić A, Krušlin B, Tomas D. Pleomorphic ductal carcinoma of the breast with predominant micropapillary features. *Pathol Int* 2007;57:694-7. (CC)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Terlević R, Perić Balja M, Tomas D, Skenderi F, Krušlin B, Vranic S, Demirović A. Somatostatin receptor SSTR2A and SSTR5 expression in neuroendocrine breast cancer. *Ann Diagn Pathol* 2018; 38:62-66. (CC)
2. Krištić A, Aralica D, Demirović A, Krušlin B. Pathohistologic prognostic and predictive parameters in colorectal cancer – tumor budding. *Rad Hrvat Akad Znan Umjet Med Znan.* 2018;45(533):113-26.
3. Kruljac I, Vurnek I, Maasberg S, Kust D, Blaslov K, Ladika Davidović B, Štefanović M, Demirović A, Biščanin A, Filipović-Čugura J, Marić Brozić J, Pape UF, Vrkljan M. A score derived from routine biochemical parameters increases the diagnostic accuracy of chromogranin A in detecting patients with neuroendocrine neoplasms. *Endocrine* 2018;60:395-406. (CC)
4. Demirović A, Krušlin B. Recommendations for histopathology report of colorectal carcinoma specimens. *Rad Hrvat Akad Znan Umjet Med Znan.* 2017;44 (530):67-72.
5. Strinović M, Kruljac I, Dabelić N, Nikolić M, Ljubičić N, Filipović Čugura J, Vazdar Lj, Marić Brozić J, Kust D, Petranović Ovčariček P, Gladić Nenadić V, Marjan D, Ulamec M, Demirović A, Miculinić A, Vrkljan M. Duodenal neuroendocrine tumors (d-NETs): challenges in diagnosis and treatment. *Endocr Oncol Metab* 2016;2(3):174-193.
6. Demirović A, Čupić H, Krušlin B. Patološke promjene bubrežnih arterija u bolesnika s karcinomom bubrežnih stanica. *Liječ Vjesn* 2016;138:133-137.
7. Budimir I, Demirović A, Iveković R, Pažanin L. Epithelioid hemangioma of the orbit: case report. *Acta Clin Croat* 2015; 54:92-95 (SCI)
8. Demirović A, Cesarec S, Marušić Z, Tomas D, Milošević M, Hudolin T, Krušlin B. TGF-β1 expression in chromophobe renal cell carcinoma and renal oncocytoma. *Eur J Histochem* 2014;58:2265. (CC)



9. Demirović A, Ulamec M, Bezjak M, Belicza M, Krušlin B. Apoptotic markers (P53, Bcl-2 and Bax) expression in renal oncocytoma and chromophobe renal cell carcinoma. *Period Biol* 2014;116:173-76.
10. Demirović A, Tomas D, Tomić K, Spajić B, Ibukić A, Čupić H, Krušlin B. Correlation of VEGF and HIF-1 α expression with pathological renal artery changes in patients with renal cell carcinoma. *Scand J Urol* 2014;48:34-40. (CC)
11. Štimac G, Demirović A, Krušlin B, Tomas D. Testicular angioleiomyoma presenting with haemospermia. *Asian Journal of Andrology* 2013;15:573–574. (CC)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Od 2017 - Regenerativna i reproduktivna medicina –istraživanja novih platformi i potencijala (CERRM) - Europski strukturni i investicijski fondovi

2006-2009 - Organizacija i evaluacija patoanatomskog tumorskog registra i banke tumora – Ministarstvo znanosti, obrazovanja i športa

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Od 2017 - Regenerativna i reproduktivna medicina –istraživanja novih platformi i potencijala (CERRM) - Europski strukturni i investicijski fondovi

2006-2009 - Organizacija i evaluacija patoanatomskog tumorskog registra i banke tumora – Ministarstvo znanosti, obrazovanja i športa

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

/

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Margareta Dobrenić, MD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb,
University hospital centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Analysis of medical images

BIOGRAPHY

Date of birth: 12/11/1980

Education:

1999-2005: School of medicine University of Zagreb

2005-2006: internship, General hospital Sisak, Sisak

2007-2011: nuclear medicine resident, Department of nuclear medicine and radiation protection,
University hospital centre Zagreb, Zagreb, Croatia

Work experience:

01/2017 – present: assistant in education, Department of nuclear medicine, School of Medicine
University of Zagreb

2016- present: nuclear medicine physician, Department of nuclear medicine and radiation protection –
unit for PET/CT, University hospital centre Zagreb

2007-2011: nuclear medicine resident, Department of nuclear medicine and radiation protection,
University hospital centre Zagreb, Zagreb, Croatia

2006-2007: general practice physician, Medical centre for railway workers, Sisak

2005-2006: internship, General hospital Sisak, Sisak

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2017

**LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS,
WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME**

1. Hmelik S, Dobrenić M, Huić D F-18 FDG PET/CT in pulmonary artery sarcoma: clinical vignette. Nucl Med Rev Cent East Eur. 2018;21(1):48-49. doi: 10.5603/NMR.a2018.0011.
2. Baretić M, Tomić Brzac H, Dobrenić M, Jakovčević A. Parathyroid carcinoma in pregnancy. World J Clin Cases. 2014 May 16;2(5):151-6. doi: 10.12998/wjcc.v2.i5.151.
3. Dobrenic M, Huic D, Zuvic M, Grosev D, Petrovic R, Samardzic T. Usefulness of low iodine diet in managing patients with differentiated thyroid cancer - initial results. Radiol Oncol. 2011 Sep;45(3):189-95. doi: 10.2478/v10019-011-0017-4. Epub 2011 Jun 24.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Baretic M, Tomic Brzac H, Dobrenic M, Jakovcevic A. Parathyroid carcinoma in pregnancy. World J Clin Cases. 2014 May 16; 2(5): 151-156.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

IAEA Coordinated Research Project *Dosimetry in Radiopharmaceutical therapy for personalized patient treatment*. Role: secondary chief scientific investigator

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS



IAEA Coordinated Research Project *Dosimetry in Radiopharmaceutical therapy for personalized patient treatment*. Role: secondary chief scientific investigator

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Jagoda Doko Jelinić

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb, School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Reproduction and workplace

BIOGRAPHY

Born in Mostar, Bosnia and Herzegovina. Education: University of Zagreb: BSc. 1978; M. Sc. (Biology – Molecular biology) 1988; Ph. D. (Biomedicine) 1998. Training: University of Oxford, Oxford, UK, 1994. Employment: Since 1990 employed in School of Medicine, University Zagreb. Research activities: Main research interests: effects of environmental factors on human health, improving the health of employees in the metal industry, the level of molecular and genetic response to exposure to environmental factors, APOE gene polymorphism. Since 1990 investigator in research projects (8). Publications: >50 scientific and professional papers in journals, books and proceedings, >20 of which are indexed in SCI / CC.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: April 2018.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Doko Jelinić J Lasić I, Nola IA, Žuškin E, Ramić S. Hazardous agents in anode manufacture. Arh Hig rada Toksikol 2008;59(2):73-9.
2. Nola IA, Doko Jelinić J, Žuškin E, Kratochvil M. Potresi – povijesni pregled, okolišni i zdravstveni učinci i mjere zdravstvene skrbi Arh Hig rada Toksikol 2013;64(2):327-37.
3. Doko Jelinić J, Nola IA, Udovičić R, Ostojić D, Žuškin E. Exposure to chemical agents in aluminium potrooms, Med Lav 2007;98(5):407-14.
4. Nola IA, Doko Jelinić J. Zdravstveni menadžment katastrofa. Sigurnost 2012;54:165-72.
5. Doko Jelinić J, Lukić J, Udovičić R, Žuškin E, Nola IA, Zajec Z. Workplace Noise Exposure After Modernisation of an Aluminium Processing Complex Arh Hig rada Toksikol 2009;60(3):343-8.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Sveučilišna potpora: *Znanstveno utemeljen održivi sustav zaštite na radu na Sveučilištu u Zagrebu* (voditelj: prof.dr.sc. Jagoda Doko Jelinić; 2014.-2016.)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Sveučilišna potpora: *Znanstveno utemeljen održivi sustav zaštite na radu na Sveučilištu u Zagrebu* (voditelj: prof.dr.sc. Jagoda Doko Jelinić; 2014.-2016.)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Associate Professor Tomislav Domazet-Lošo, Dr. rer. nat.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Genomic approaches in biomedical and translational research

BIOGRAPHY

Professor Domazet-Lošo was born in 1974 in Split, Croatia. He graduated biology from Faculty of Science, Zagreb, Croatia in 1997 and attained his doctorate in genetics from University of Cologne, Cologne, Germany in 2003. He was a postdoc at the Max-Planck Institute for Evolutionary Biology in Plön and a visiting scientist at the University of Kiel between 2008 and 2011. Since 2011 he has been an independent group leader at Ruđer Bošković Institute, and since 2016 a professor at Catholic University of Croatia, Zagreb, Croatia. Prof. Domazet-Lošo's area of scientific interest is evolutionary genomics, evolution of development, evolution of genetic diseases and cancer, and macroevolution. He has published 25 scientific papers which have been cited 4260 times according to the Google Scholar, and held more than 29 invited lectures at international scientific conferences. Prof. Domazet-Lošo is the recipient of twelve awards and distinctions including Order of the Croatian Morning Star for outstanding contributions to science (2012), Croatian State Award for Science (2012), and Postdoctoral Fellowship of the Max-Planck Society (2008-2010).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 07.02.2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Pozhitkov AE, Neme R, Domazet-Lošo T, Leroux BG, Soni S, Tautz D, Noble PA (2017) Tracing the dynamics of gene transcripts after organismal death. *Open Biology* 7,160267 (Q1, IF4.82 - 2015)

Bosch TCG, Domazet-Lošo T, Gruender S, Holstein TW, Jékely G, Klimovich A, Miller DJ, Murillo A, Rentzsch F, Richards G, Schröder K, Technau U, Yuste R (2017) Back to the basics: Pre-Bilaterian Nervous Systems Start to Fire. *Trends in Neurosciences* 40 (2), 92-105. (Q1, IF12.5 - 2015)

Šestak MS, Domazet-Lošo T (2015) Phylostratigraphic profiles in zebrafish uncover chordate origins of the vertebrate brain. *Molecular Biology and Evolution* 32, 299–312 (Q1, IF9.1 - 2014)

Domazet-Lošo T, Klimovich A, Anokhin B, Anton-Erxleben F, Hamm MJ, Lange C, Bosch TCG (2014) Naturally occurring tumors in the basal metazoan *Hydra*. *Nature Communications* 5, 4222, doi: 10.1038/ncomms5222 (Q1, IF11.47 - 2014)

McFall-Ngai M, Hadfield MG, Bosch, TCG, Carey HV, Domazet-Lošo T, Douglas AE, Dubilier N, Eberl G, Fukami T, Gilbert SF, et al. (2013) Animals in a bacterial world: a new imperative for the life sciences. *PNAS* 110, 3229–36 (Q1, IF9.81 - 2013)

Tautz D, Domazet-Lošo T (2011) The evolutionary origin of orphan genes. *Nature Reviews Genetics* 12(10):692-702. (Q1, IF38.1 - 2011)

Domazet-Lošo T, Tautz D (2010) A phylogenetically based transcriptome age index mirrors ontogenetic divergence pattern. *Nature* 468(7325):815–818 (Q1, IF36.1 - 2010)

Domazet-Lošo T, Tautz D (2010) Phylostratigraphic tracking of cancer genes suggests a link to the emergence of multicellularity in metazoans. *BMC Biology* 8:66 (Q1, IF5.2 - 2010)

Domazet-Lošo T, Tautz D (2008) An ancient evolutionary origin of genes associated with human genetic diseases. *Molecular Biology and Evolution* 25(12):2699-2707 (Q1, IF7.2 - 2008)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Anselm V, Krug K, Lenuzzi M, Sebastijan Šestak M, Domazet-Lošo T, Mijakovic I, Macek B (2018) In-depth analysis of *Bacillus subtilis* proteome identifies new ORFs and traces the evolutionary history of modified proteins. *Scientific reports* 8(1):17246. (Q1, IF4.122 - 2017)

Stancik IA, Šestak MS, Ji B, Axelson-Fisk M, Franjevic D, Jers C, Domazet-Lošo T, Mijakovic I (2018) Serine/Threonine protein kinases from bacteria, archaea and eukarya share a common evolutionary origin deeply rooted in the tree of life. *Journal of Molecular Biology* 430(1):27-32. (Q1, IF4.894 - 2017)

Pozhitkov AE, Neme R, Domazet-Lošo T, Leroux BG, Soni S, Tautz D, Noble PA (2017) Tracing the dynamics of gene transcripts after organismal death. *Open Biology* 7,160267 (Q1, IF4.82 - 2015)

Domazet-Lošo T, Carvunis A-R, Albà MM, Šestak MS, Bakarić R, Neme R, Tautz D (2017) No evidence for phylostratigraphic bias impacting inferences on patterns of gene emergence and evolution. *Molecular Biology and Evolution* 34 (4), 843-856.(Q1, IF13.65 - 2015)

Bosch TCG, Domazet-Lošo T, Gruender S, Holstein TW, Jékely G, Klimovich A, Miller DJ, Murillo A, Rentzsch F, Richards G, Schröder K, Technau U, Yuste R (2017) Back to the basics: Pre-Bilaterian Nervous Systems Start to Fire. *Trends in Neurosciences* 40 (2), 92-105. (Q1, IF12.5 - 2015)

Domazet-Lošo M, Domazet-Lošo T (2016) gmos: Rapid detection of genome mosaicism over short evolutionary distances. *PLOS One* 11(11): e0166602. (Q1, IF3.05 - 2015)

Xu F, Domazet-Lošo T, Fan D, Dunwell TL, Li L, Fang X, Zhang G (2016) High expression of new genes in trochophore enlightening the ontogeny and evolution of spiralian. *Scientific Reports* 6, 34664 (Q1, IF5.23 - 2015)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Croatian Science Foundation, Phylostratigraphy of gene gain and loss IP-2016-06-5924, principal investigator, 2017– 2021

Zaklada Adris, Phylo-transcriptomics of the sexual and asexual ontogeny in grapevine (*Vitis vinifera* L.); principal investigator, 2014 – 2016

Grad Zagreb, Evolutionary systems biology of the multicellularity behavior in bacteria; principal investigator, 2014 – 2017

Centar Izvrsnosti - Znanstveni centar izvrsnosti za znanost o podacima i kooperativne sustave, MZOS, suradnik, <https://across-datascience.zci.hr/zci> , 2015 –

Centar Izvrsnosti - Znanstveni centar izvrsnosti za reproduktivnu i regenerativnu medicinu, MZOS, suradnik, <http://cerm.mef.hr>, 2015 –

The University of Western Australia Research Collaboration Award, Building the vertebrate: evolutionary implications of DNA methylation in zebrafish body plan formation; member, 2014 – 2016

Deutschen Forschungsgemeinschaft, Molecular mechanisms of epithelial defense in the phylogenetically old metazoan Hydra; member, 2010 – 2014

Unity Knowledge Grant No.49, Phylostratigraphic analysis of disease genes expression in the context of life cycle; member, 2009 – 2010



Zaklada Adris, Start-up of the Genomic phylostratigraphy centre; member, 2008 – 2011

MZOŠ projekt 098–0982913–2832, Evolution and function of the fast evolving genome sequences; member, 2007 – 2012

MZOŠ projekt, Evolutionary dynamics of satellite DNA; 416,000 HRK, member, 2002 – 2006

Deutschen Forschungsgemeinschaft Project Ta99-17, Evolution of fast evolving genes in *Drosophila*; 160.000 EUR; member, 1999 – 2001

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Croatian Science Foundation, Phylostratigraphy of gene gain and loss IP-2016-06-5924, principal investigator, 2017– 2021

Zaklada Adris, Phylo-transcriptomics of the sexual and asexual ontogeny in grapevine (*Vitis vinifera* L.); principal investigator, 2014 – 2016

Grad Zagreb, Evolutionary systems biology of the multicellularity behavior in bacteria; principal investigator, 2014 – 2017

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Klara Dubravčić

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Center Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of molecular biology in medicine

BIOGRAPHY

Klara Dubravčić was born in Split on October 15, 1969. She graduated in medical biochemistry from the School of Pharmacy and Biochemistry, University of Zagreb. Currently she works as medical biochemistry specialist in Department of Laboratory Diagnostics, University Hospital Center Zagreb and participates in under- and postgraduate teaching.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Dujmović D, Škaro V, Bašić-Kinda S, Markulin D, Samaržija I, Rončević P, Radman I, Kolenc D, Dubravčić K, Aurer I: Izvanstanična cirkulirajuća DNA (cfDNA) kao prognostički biljeg u bolesnika s limfomom. *Bilten kroeema*. 2014;6(1):56.
2. Rak S, Cimbora-Zovko T, Gajski G, Dubravčić K, Domijan AM, Delaš I, Garaj-Vrhovac V, Batinić D, Sorić J, Osmak M. Carboplatin resistant human laryngeal carcinoma cells are cross resistant to curcumin due to reduced curcumin accumulation. *Toxicol In Vitro*. 2013;27(2):523-532.
3. Dubravčić K, Batinić D. Imunofenotipizacija akutnih leukemija i minimalna ostatna bolest. *Paediatr Croat* 2013;57(Suppl 1):258-262.
4. Zekušić M, Majić Ž, Ćuk M, Dubravčić K, Bilić K, Škaričić A, Fumić K, Barić I. Human myoblast cell culture - a model for the study of metabolic myopathies. *Paediatr Croat*. 2013;57(1):38.
5. Jakopec S, Karlović D, Dubravčić K, Batinić D, Sorić J, Brozović A, Buljan D, Osmak M. Lithium effect on glutamate induced damage in glioblastoma cells. *Coll Antropol*. 2008;32 Suppl 1:87-91.
6. Deželjin M, Bosnar MH, Dubravčić K, Bago R, Pavelić J. The utilization of pEGFP reporter system in cell-cycle analysis of adherent cells. *Periodicum biologorum*. 2008;110(1):73-76.
7. Bosnar MH, Dubravčić K, Bago R, Pavelić J. Head and neck tumor cells exhibit altered proliferation upon overexpression of nm23 genes. *Croatica Chemica Acta*. 2008;81:183-189.
8. Karlović D, Jakopec S, Dubravčić K, Batinić D, Buljan D, Osmak M. Lithium increases expression of p21(WAF/Cip1) and survivin in human glioblastoma cells. *Cell Biol Toxicol*. 2007;23(2):83-90.
9. Antica M, Dubravčić K, Weber I, Raic L, Labar B, Batinić D. A search for a mutation of the Aiolos phosphorylation domain in lymphocytes from patients with leukemia. *Haematologica*. 2007;92(2):260-261.
10. Jakopec S, Dubravčić K, Brozović A, Polanc S, Osmak M. Structurally similar diazenes exhibit significantly different biological activity. *Cell Biol Toxicol*. 2006;22(1):61-71.
11. Batinić D, Rnjak L, Dubravčić K. Protočna citometrija u hematologiji. *Paediatr Croat*. 2006;50(Suppl1):176-182.

12. Petelin Z, Brinar V, Petravic D, Zurak N, Dubravcic K, Batinic D. CD95/Fas expression on peripheral blood T lymphocytes in patients with multiple sclerosis: effect of high-dose methylprednisolone therapy. *Clin Neurol Neurosurg.* 2004;106(3):259-262.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Krečak I, Bašić Kinda S, Dujmović D, Hude I, Radman-Livaja I, Dubravčić K, Gjadrov Kuveždić K, Ilić I, Aurer I. Fludarabin, ciklofosamid i rituksimab (FCR) u liječenju bolesnika s kroničnom limfocitnom leukemijom (KLL): iskustvo Kliničkoga bolničkog centra Zagreb. *Lijec Vjesn.* 2017;139(7-8):210-15.
2. Roganović J, Čučak T, Seili-Bekafigo I, Dubravčić K, Lasan-Trčić R. Akutna mijeloična leukemija u djece: analiza kliničkih i bioloških značajki te rezultata liječenja u Klinici za pedijatriju Kliničkog Bolničkog Centra Rijeka. *Medicina Fluminensis.* 2016;52(4):532-9.
3. Grubic Z, Stingl Jankovic K, Kelecic J, Batinic D, Dubravcic K, Zunec R. A case of maternal-foetal chimerism identified during routine histocompatibility testing for hematopoietic stem cell transplantation. *Int J Immunogenet.* 2016; 43(1):1-7.
4. Batinić J, Perić Z, Šegulja D, Last J, Prijić S, Dubravčić K, Volarić L, Sertić D, Radman I, Bašić-Kinda S, Matišić D, Batinić D, Labar B, Nemet D. Immunoglobulin heavy/light chain analysis enhances the detection of residual disease and monitoring of multiple myeloma patients. *Croat Med J.* 2015;56(3):263-271.
5. Bašić Kinda S, Duraković N, Dotlić S, Serventi Seiwert R, Davidović M, Mrsić S, Dubravčić K, Aurer I. Hepatosplenic $\alpha\beta$ T-cell lymphoma arising after long-term azathioprine therapy successfully treated with allogeneic bone marrow transplant. *Leuk Lymphoma.* 2013;54(6):1334-1335.
6. Bojanić I, Seiwert RS, Mazić S, Dubravčić K, Batinić D, Cepulić BG, Labar B. Extracorporeal photopheresis in treatment of chronic graft versus host disease. *Lijec Vjesn.* 2013;135(5-6):139-144.
7. Bojanic I, Serventi Seiwert R, Golubic Cepulic B, Mazic S, Lukic M, Raos M, Plenkovic F, Golemovic M, Dubravcic K, Perkovic S, Batinic D, Labar B. Treatment of chronic GVHD with extracorporeal photochemotherapy. *Transfus Apher Sci.* 2013;48(2):193-194.
8. Rak S, Cimbora-Zovko T, Gajski G, Dubravčić K, Domijan AM, Delaš I, Garaj-Vrhovac V, Batinić D, Sorić J, Osmak M. Carboplatin resistant human laryngeal carcinoma cells are cross resistant to curcumin due to reduced curcumin accumulation. *Toxicol In Vitro.* 2013;27(2):523-532.
9. Dubravčić K, Batinić D. Imunofenotipizacija akutnih leukemija i minimalna ostatna bolest. *Paediatr Croat* 2013;57(Suppl 1):258-262.
10. Zekušić M, Majić Ž, Ćuk M, Dubravčić K, Bilić K, Škaričić A, Fumić K, Barić I. Human myoblast cell culture - a model for the study of metabolic myopathies. *Paediatr Croat.* 2013;57(1):38.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2017-2021. Signalni mehanizmi i metaboličke promjene u diferencijaciji stanica akutne mijeloične leukemije. (Voditelj: prof dr. sc. Dora Višnjić)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: prof Aleksandra Dugandžić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Electrophysiological methods in medical research

BIOGRAPHY

WORK EXPERIENCE

2008-present School of medicine, University of Zagreb

2006-2007 Mayo Clinic, Physiology & Biomedical Engineering, Rochester, MN, USA

2005-2006 Case Western Reserve University, School of Medicine, Dept Physiol&Biophys, Cleveland, OH, USA

2000-2005 Med Klinik und Poliklinik D, Exp Nephrologie, Universitaetsklinikum Muenster, Germany

1996-1999 Department of Physiology School of Medicine, University of Zagreb, Croatia

EDUCATION

2000-2003 School of medicine, University of Zagreb, Ph.D.

1996-1999 School of Medicine, University of Zagreb, Department of Physiology, M.S.

1989-1996 School of Medicine, University of Zagreb, M.D.

TRAINING

May 2006 Washington D.C., USA, NIH, Single channels recordings

TEACHING

2008 – present

Undergraduate program Physiology and elective "Body fluids and oedema" for MD students (for Croatian and foreigner students) at Department of Physiology and Immunology, School of Medicine, University of Zagreb, Zagreb

Graduate curriculum:

Neuricience:

“Research of membrane proteins in different expression systems”

"Introduction to patch-clamp"

"Cellular neurophysiology"

Biomedicine and health sciences:

"Electrophysiological methods in medical research"

Physiology for students at Collage of Medicine, Zagreb

2006 Undergraduate program Physiology for MD students at Department of Physiology and Biophysics - Case Western Reserve University, Cleveland, OH, USA

1998-2000 physiology for students at Collage of Medicine, Zagreb

1996 – 1999 Physiology, Immunology, Neurophysiology and elective CURRICULUM (Body fluids and oedema) at Department of Physiology and Immunology, School of Medicine, University of Zagreb

1991-1995 teacher assistant at Department of Physiology and Immunology, School of Medicine, University of Zagreb

MENTORSHIP OF DEFENDED DOCTORAL DISSERTATIONS

Doctoral theses:

2018 Nikola Habek: „Expression and effects of uroguanylin in the mouse brain“, School of Medicine, University of Zagreb, Croatia

2016 Franjo Jurenec: Effects of thymoglobuline on the hypoxia-reoxygenation injury in HEK-293 cells in culture. Faculty of science, University of Zagreb, Croatia

2014 Katarina Špiranec. “The effects of natriuretic peptides on the bradykinin signaling pathway in primary culture of neurons” Faculty of Veterinary Medicine University of Zagreb, Croatia

2013 Marina Dobrivojević: “The effect of natriuretic peptides on the bradykinin signaling pathway after ischemic injury in the mouse brain“ Medical school, University of Zagreb, Croatia

Diploma theses:

2013 Karolina Rubik: “Effects of guanylin peptides on bradykinin signaling pathway in HEK293 cell culture” Faculty of science, University of Zagreb, Croatia

2007 Ulrike Lehner: „Ligands and signaling of the G-protein-coupled receptor, GPR14, expressed in human kidney cells„Med Klinik und Poliklinik D, Exp Nephrologie, Universitätsklinikum Münster, Germany

AWARDS AND RECOGNITIONS

2017 Outstanding reviewer, Elsevier, Biomedicine & Pharmacotherapy

2003 WCN 2003 GfN/Deutsche Nierenstiftung TRAVEL GRANTS

1995 Rector’s Award of the School of Medicine University of Zagreb

ORGANIZATIONAL SKILLS AND COMPETENCES

2017 member of organizing committee of The 4th Congress of Croatian Physiological Society and 2nd Regional Congress of the Physiological Societies, 21st – 24th Sep 2017, Dubrovnik, Croatia, 150 participants

2016 member of organizing committee of The 11th Annual CPS Symposium with International Participation, 17th - 19th Sep 2016, Zagreb, Croatia, 50 participants

2013 member of organizing committee of The 3rd Congress of Croatian Physiological Society and 1st Regional Congress of the Physiological Societies, 13th – 15th Sep 2013, Rijeka, Croatia, 170 participants

2008 member of organizing committee of The 1st Eastern European CF Conference, 28th - 30th Nov 2008, Zagreb, Croatia, 150 participants

MEMBERSHIP IN SCIENCE ORGANIZATIONS AND BODIES

Croatian Physiological Society

Croatian Society for Neuroscience

OTHER RESEARCH ACTIVITIES

I attended 35 international and national conferences.

REVIEWER: Frontiers in Pharmacology, Frontiers in Physiology

ADDITIONAL INFORMATION AND NOTES

Invited Talks (selected):

Sindic A. Actions of guanylin peptides in mouse and human kidney. 2002

Dept. Physiology, Emory University, School of Medicine, Atlanta;

Dept Physiology & Biophysics, University of Alabama, Birmingham;

Dept Cellular & Molecular Physiology, Yale Univ. School of Medicine, New Haven,

Sindic A. Effects of guanylin peptides in mouse and human CCD. Aventis Frankfurt, Germany 2003

Sindic A. Effekte von Guanylin Peptide in Mause- und Humane-kortikalen Sammelrohren. University of Münster, Germany, 2003

Sindic A. CFTR regulira nov anionski transporter, Slc26a9. IMI, Zagreb, Croatia, 2005

Sindic A Effects of natriuretic peptides on Bradykinin signaling pathways: potential use in treatment of Angioedema?, University of Münster, Germany, 2010

2013 The 3rd Congress of Croatian Physiological Society and 1st Regional Congress of the Physiological Societies, 13th – 15th Sep 2013, Rijeka, Croatia

2013 Göttinger Transporttage, 23th – 24th Nov 2013, Göttingen, Germany

2015 7th International Conference on cGMP, 19th – 21st June 2015, Trier, Germany

2015 5th Croatian Neuroscience Congress, 17th - 19th September 2015., Split, Croatia

2016 The 11th Annual CPS Symposium with International Participation, 17th - 19th Sep 2016, Zagreb, Croatia

2017 The 4th Congress of Croatian Physiological Society and 2nd Regional Congress of the Physiological Societies, 21st – 24th Sep 2017, Dubrovnik, Croatia

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 26th march 2013

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Habek N, Kordić M, Jurenec F, Dugandžić A. Infrared thermography, a new method for detection brown adipose tissue activity after a meal in humans. *Infrared Phys. Technol.* 89:271-276 2018 (1,71)
2. Medvidovic-Grubisic M, Stambolija V, Kolenc D, Katancic J, Murselovic T, Plestina-Borjan I, Strbe S, Drmic D, Barisic I, Sindic A, Seiwerth S, Sikiric P. Hypermagnesemia disturbances in rats, NO-related: pentadecapeptide BPC 157 abrogates, L-NAME and L-arginine worsen. *Inflammopharmacology.* 25:439-449 2017 (2,30)
3. Zivanovic-Posilovic G, Balenovic D, Barisic I, Strinic D, Stambolija V, Udovicic M, Uzun S, Drmic D, Vlainic J, Bencic ML, Sindic A, Seiwerth S, Sikiric P. Stable gastric pentadecapeptide BPC 157 and bupivacaine. *Eur J Pharmacol.* pii: S0014-2999(16)30675-6 2016 (2,73)
4. Dobrivojević M, Špiranec K, Gorup D, Erjavec I, Habek N, Radmilović M, Unfirer S, Ćosić A, Drenjančević I, Gajović S, Sindić A. Urodilatin reverses the detrimental influence of bradykinin in acute ischemic stroke. *Exp. Neurol.* 284:1-10 2016 (4,66)
5. Jurenec F, Mihovilović K, Špiranec K, Sindić A, Knotek M. In vitro Effects of Thymoglobuline in Human Embryonic Kidney Cell Line (HEK293) in Culture. *Transpl Proc.* 48:2840-4 2016 (0,87)
6. Dobrivojević M, Špiranec K, Sindić A. Involvement of bradykinin in brain edema development after ischemic stroke. *Pflügers Arch.* 467:201-12 2015 (3,07)
7. Massmann V, Edemir B, Schlatter E, Al-Monajjed R, Harrach S, Klassen P, Holle SK, Sindic A, Dobrivojevic M, Pavenstädt H, Ciarimboli G. The organic cation transporter 3 (OCT3) as molecular target of psychotropic drugs: transport characteristics and acute regulation of cloned murine OCT3. *Pflügers Arch.* 466:517-27 2014. (4,86)
8. Sindic A. Current Understanding of Guanylin Peptides Actions. *ISRN Nephrology*, vol. 2013, Article ID 813648, 17 pages, 2013.
9. Barisic I, Balenovic D, Klicek R, Radic B, Nikitovic B, Drmic D, Udovicic M, Strinic D, Bardak D, Berkopic L, Djuzel V, Sever M, Cvjetko I, Romić Z, Sindic A, Seiwerth S, Sikiric P. Mortal hyperkalemia disturbances in rats are NO-system related. The lifesaving effect of pentadecapeptide BPC 157. *Regul Pept.* 181:50-66 2013.
10. Schmidt-Lauber C, Harrach S, Pap T, Fischer M, Victor M, Heitzmann M, Hansen U, Fobker M, Brand S-M, Sindic A, Pavenstädt H, Edemir B, Schlatter E, Bertrand J Ciarimboli G. Transport mechanisms and their pathology-induced regulation govern tyrosine kinase inhibitor delivery in rheumatoid arthritis. *PLOS ONE.* 7(12):e52247 2012.
11. Dobrivojević M, Sindić A, Edemir B, Kalweit S, Forssmann W-G, Hirsch JR. Interaction between bradykinin and natriuretic peptides via RGS protein activation in HEK-293 cells. *Am J Physiol* 303(12):C1260-8 2012. (4,2)
12. Balenovic D, Barisic I, Prkacin I, Horvat I, Udovicic M, Uzun S, Strinic D, Pevec D, Drmic D, Radic B, Bardak D, Zlatar M, Aralica G, Lovric Bencic M, Separovic Hanzevacki J, Romić Z, Sindic A, Seiwerth S, Sikiric P.: Mortal Furosemide-Hypokalemia-Disturbances in Rats NO-System Related Shorten Survival by L-NAME. Therapy Benefit with BPC 157 Peptide More Than With L-Arginine. *J Clin Exp Cardiol* 3:201, 2012 (IF 1.07)
13. Sindić A, Dobrivojević M, Hirsch JR. Natriuretic peptides in brain physiology. *Translational Neuroscience*, 2(3); 246-251, 2011.

14. Sindić A, Sussman CR, Romero MF. Primers on molecular pathways: bicarbonate transport by the pancreas. *Pancreatology*, 10:660-3, 2010. (IF 3.0)
15. Chang MH, Plata C, Sindić A, Ranatunga WK, Chen AP, Zandi-Nejad K, Chan KW, Thompson J, Mount DB, Romero MF. Slc26a9 is inhibited by the R-region of the cystic fibrosis transmembrane conductance regulator via the STAS domain. *J Biol Chem.*, 284:28306-18, 2009. (IF 5.5)
16. Klokkeers J, Langehanenberg P, Kemper B, Kosmeier S, von Bally G, Riethmüller C, Wunder F, Sindić A, Pavenstädt H, Schlatter E, Edemir B. Atrial natriuretic peptide and nitric oxide signaling antagonizes vasopressin-mediated water permeability in inner medullary collecting duct cells. *Am J Physiol Renal Physiol.*, 297:F693-703, 2009. (IF 3.9)
17. Sindić A, Huang C, Chen AP, Ding Y, Miller-Little WA, Che D, Romero MF, Miller RT. MUPP1 complexes renal K⁺ channels to alter cell surface expression and whole cell currents. *Am J Physiol Renal Physiol.*, 297:F36-45, 2009. (IF 3.9)
18. Chang MH, Plata C, Zandi-Nejad K, Sindić A, Sussman CR, Mercado A, Broumand V, Raghuram V, Mount DB, Romero MF. Slc26a9--anion exchanger, channel and Na⁺ transporter. *J Membrane Biol.*, 228:125-40, 2009 (IF 2.3)
19. Sindić A, Chang MH, Mount DB, Romero MF. Renal physiology of SLC26 anion exchangers. *Curr Opin Nephrol Hypertens*, 16: 484-490, 2007. (IF 4.0)
20. Lehner U, Velic A, Schlatter E, Sindić A. Ligands and signaling of the G-protein-coupled receptor, GPR14, expressed in human kidney cells. *Cell Physiol Biochem*, 20: 181-192, 2007. (IF 3.2)
21. Plata C, Sussman CR, Sindić A, Liang JO, Mount DB, Josephs ZM, Chang M-H, Romero MF. Zebrafish Slc5a12 encodes an electroneutral sodium monocarboxylate transporter (SMCTn). A comparison with the electrogenic SMCT (SMCTe/Slc5a8). *J Biol Chem*, 282: 11996-12009, 2007. (IF 5.5)
22. Sindić A, Schlatter E. Renal electrolytes effects of guanylin and uroguanylin. *Curr Opin Nephrol Hypertens*, 16: 10-15, 2007. (IF 4.0)
23. Huang C, Sindić A, Hill CE, Hujer KM, Chan KW, Sassen M, Wu Z, Kurachi Y, Nielsen S, Romero MF, Miller RT. Interaction of the Ca²⁺-sensing receptor with the inwardly-rectifying potassium channels Kir4.1 and Kir4.2 results in inhibition of channel function. *Am J Physiol Renal Physiol*, 292: F1073-F1081, 2007. (IF 3.9)
24. Sindić A, Schlatter E. Mechanisms of action of uroguanylin and guanylin and their role in salt handling. *Nephrol Dial Transplant*, 21: 3007-3012, 2006. (IF 3.6)
25. Biermann J, Lang D, Gorboulev V, Koepsell H, Sindić A, Schröter R, Zvirbliene A, Pavenstädt H, Schlatter E, Ciarimboli G: Characterization of regulatory mechanisms and states of human organic cation transporter 2. *Am J Physiol Cell Physiol*, 290: C1521-1531, 2006. (IF 4.2)
26. Sindić A, Schlatter E. Cellular effects of guanylin and uroguanylin. *J Am Soc Nephrol*, 17: 607-616, 2006. (IF 7.5)
27. Sindić A, Crljen V, Matković K, Lukinović-Škudar V, Višnjić D, Banfić H. Activation of phosphoinositide 3-kinase C2 α in the nuclear matrix during compensatory liver growth *Adv Enz Reg.* 46: 280-287, 2006.
28. Choe K, Kato A, Hirose S, Plata C, Sindić A, Romero M, Claiborne J, Evans D. NHE3 in an ancestral vertebrate: primary sequence, distribution, localization, and function in gills. *Am J Physiol Regul Integr Comp Physiol.* 289: R1520-R1534, 2005. (IF 3.3)
29. Sindić A, Schlatter E. Mechanisms of guanylin peptides actions in the kidney. *Pflügers Arch*, 450: 283-291, 2005. (IF 3.5)

30. Sindić A, Velic A, Başoglu C, Hirsch JR, Edemir B, Kuhn M, Schlatter E. Uroguanylin and guanylin regulate transport of mouse cortical collecting duct independent of guanylate cyclase C. *Kidney Int*, 68: 1008-1017, 2005. (IF 6.4)
31. Sindić A, Hirsch JR, Velic A, Piechota H, Schlatter E. Guanylin and uroguanylin regulate electrolyte transport in isolated human cortical collecting ducts. *Kidney Int*, 67: 1420-1427, 2005. (IF 6.4)
32. Kurbel S, Sindić A, Marić S. Can arteries of skeletal muscles act as a circulatory bottleneck during heavy exercise? *Med Hypotheses*, 64: 367-374, 2005. (IF 1.4)
33. Roša J, Sindić A, Roša J. Metabolic changes in rats on raw sunflower diet. *Periodicum Biologorum*, 106: 417-421, 2004 (IF 0.1)
34. Sindić A, Basoglu C, Çerçi A, Hirsch JR, Potthast R, Kuhn M, Ghanekar Y, Visweswariah SS, Schlatter E. Guanylin, uroguanylin and STa activate guanylate cyclase C and/or a PT-sensitive G protein in human proximal tubule cells. *J Biol Chem*, 277: 17758-17764, 2002. (IF 5.5)
35. Potthast R, Ehler E, Scheving LA, Sindić A, Schlatter E, Kuhn M. High salt intake increases uroguanylin expression in mouse kidney. *Endocrinology*, 142: 3087-3097, 2001. (IF 4.9)
36. Sindić A, Aleksandrova A, Fields AP, Volinia S, Banfic H. Presence and activation of nuclear phosphoinositide 3-kinase C2 β during compensatory liver growth. *J Biol Chem*, 276: 17754-17761, 2001 (IF 5.5)

Chapters in books:

1. Sindić A: „Mechanisms of action of guanylin peptides“ in *Natriuretic Peptides: Physiology, Molecular Biology and Clinical Implications*. Nova Science Publishers, Inc. Hauppauge NY USA: 259-276, 2014
2. Sindić A, Romero MF: “NBCe1, an Electrogenic Na⁺ Bicarbonate Cotransporter, in Epithelia” in *Ion Channels and Transporters of Epithelia in Health and Disease*. Springer New York: 437-461, 2015

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Habek N, Kordić M, Jurenec F, Dugandžić A. Infrared thermography, a new method for detection brown adipose tissue activity after a meal in humans. *Infrared Phys. Technol.* 89: 271-276 2018 (1.71)
2. Medvidovic-Grubisic M, Stambolija V, Kolenc D, Katancic J, Murselovic T, Plestina-Borjan I, Strbe S, Drmic D, Barisic I, Sindić A, Seiwerth S, Sikiric P. Hypermagnesemia disturbances in rats, NO-related: pentadecapeptide BPC 157 abrogates, L-NAME and L-arginine worsen. *Inflammopharmacology*. 25:439-449 2017 (2,30)
3. Zivanovic-Posilovic G, Balenovic D, Barisic I, Strinic D, Stambolija V, Udovicic M, Uzun S, Drmic D, Vlacinic J, Bencic ML, Sindić A, Seiwerth S, Sikiric P. Stable gastric pentadecapeptide BPC 157 and bupivacaine. *Eur J Pharmacol*. pii: S0014-2999(16)30675-6 2016 (2,73)
4. Dobrivojević M, Špiranec K, Gorup D, Erjavec I, Habek N, Radmilović M, Unfirer S, Ćosić A, Drenjančević I, Gajović S, Sindić A. Urodilatin reverses the detrimental influence of bradykinin in acute ischemic stroke. *Exp. Neurol.* 284:1-10 2016 (4,66)
5. Jurenec F, Mihovilović K, Špiranec K, Sindić A, Knotek M. In vitro Effects of Thymoglobuline in Human Embryonic Kidney Cell Line (HEK293) in Culture. *Transpl Proc.* 48:2840-4 2016 (0,87)
6. Dobrivojević M, Špiranec K, Sindić A. Involvement of bradykinin in brain edema development after ischemic stroke. *Pflügers Arch.* 467:201-12 2015 (3,07)

7. Massmann V, Edemir B, Schlatter E, Al-Monajjed R, Harrach S, Klassen P, Holle SK, Sindic A, Dobrivojevic M, Pavenstädt H, Ciarimboli G. The organic cation transporter 3 (OCT3) as molecular target of psychotropic drugs: transport characteristics and acute regulation of cloned murine OCT3. *Pflugers Arch.* 466:517-27 2014. (4,86)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2006-2008 Cystic fibrosis foundation (CFF) postdoctoral fellowship

2009 PI, Brain Gain – Homing Programme – Croatian Science Foundation

2008 – 2012 PI, research grant CardioPep GmbH, Hannover, Germany

2012 – collaborator at prof dr Srećka Gajovića grant EU FP7 GlowBrain

2014 – supported by University “Mechanism of action of guanylin peptides in the signalling pathway of bradykinin in the brain”

2015 – supported by University “Mechanism of action of guanylin peptides in the brain”

2015 – collaborator at asst prof Dinko Mitrečić grant "Development of Technology of Regenerative Medicine for Treatment of Brain Diseases" European Social Fund

2016 – supported by University “Expression and function of uroguanylin in the brain”

2017 – supported by University “Physiological role of uroguanylin and GC-C in the brain”

2017 – 2021 collaborator - grant of Svjetlane Kalanj Bognar „Molecular markers of vulnerability, adaptation and neuronal plasticity in acute and chronic brain injury”

2017. – 2022. collaborator - grant No. KK.01.1.1.01.0007, CoRE - Neuro at Centre of Excellence for basic, clinical and translational neuroscience, School of Medicine, University of Zagreb founded by European Union

2019. – 2023. PI – research grant „The function of uroguanylin, a new protein in the brain, from the cell physiology to human health” (IP-2018-01-7416)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2012 – collaborator at prof dr Srećka Gajovića grant EU FP7 GlowBrain

2014 – supported by University “Mechanism of action of guanylin peptides in the signalling pathway of bradykinin in the brain”

2015 – supported by University “Mechanism of action of guanylin peptides in the brain”

2015 – collaborator at asst prof Dinko Mitrečić grant "Development of Technology of Regenerative Medicine for Treatment of Brain Diseases" European Social Fund

2016 – supported by University “Expression and function of uroguanylin in the brain”

2017 – supported by University “Physiological role of uroguanylin and GC-C in the brain”

2017 – 2021 collaborator - grant of Svjetlane Kalanj Bognar „Molecular markers of vulnerability, adaptation and neuronal plasticity in acute and chronic brain injury”

2017. – 2022. collaborator - grant No. KK.01.1.1.01.0007, CoRE - Neuro at Centre of Excellence for basic, clinical and translational neuroscience, School of Medicine, University of Zagreb founded by European Union



2019. – 2023. PI – research grant „The function of uroguanylin, a new protein in the brain, from the cell physiology to human health“ (IP-2018-01-7416)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 4

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Davorka Dušek, MD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital for Infectious Diseases, School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: PhD Programme Biomedicine and Health Science - course "Viral hepatitis"

BIOGRAPHY: Davorka Dušek, born on 5th October 1980, following graduation from School of Medicine at the University of Zagreb in 2005, worked as a Research Fellow at the University Hospital for Infectious Diseases in Zagreb in the field of viral hepatitis and immunocompromised patients. She started Infectious Disease residency in 2007 that she finished in 2012; since then she is working as attending physician at Department for Viral Hepatitis in University Hospital for Infectious Diseases. During her residency, in 2009 she gained additional education in infections in immunocompromised patients at National Institutes of Health, NCI/ETIB, Bethesda, USA. Since 2015, she is involved in graduate training in the course of Infectious Diseases (Croatian and English studies), as well as postgraduate training (Viral Hepatitis Course). From 2012-2015 she has been Treasurer of the Trainee Association of European Society for Clinical Microbiology and Infectious Diseases. She is currently also working as Secretary and Treasurer of UEMS Infectious Diseases Section.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Papić N, Budimir J, Kurelac I, **Dušek D**, Jugović D, Krajcar N, Vince A. Treatment of Elderly Patients with Chronic Hepatitis C: A Retrospective Cohort Study. Acta Clin Croat. 2018 Mar;57(1):61-70.

Kurelac I, Zidovec LS, Grgić I, Gorenec L, Papić N, **Dusek D**, Barsic B, Vince A. Chemokine CXCL10 at week 4 of treatment predicts sustained virological response in patients with chronic hepatitis C. J Interferon Cytokine Res. 2012;32(8):386-91.

Kurelac I, Papić N, Sakoman S, Orban M, **Dusek D**, Corić M, Vince A. Intravenous Drug Users Can Achieve a High Sustained Virological Response Rate: experience From Croatian Reference Center for Viral Hepatitis. Hepat Mon. 2011;11(12):986-92.

Papić N, Zidovec LS, Kurelac I, Čajić V, Budimir J, **Dusek D**, Vince A. Treatment of chronic hepatitis C in Croatian war veterans: experiences from Croatian reference center for viral hepatitis. Croat Med J. 2011;52(1):35-40.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Papić N, Budimir J, Kurelac I, **Dušek D**, Jugović D, Krajcar N, Vince A. Treatment of Elderly Patients with Chronic Hepatitis C: A Retrospective Cohort Study. Acta Clin Croat. 2018 Mar;57(1):61-70.

Maraolo AE, Ong DSY, Cortez J, Dedić K, **Dušek D**, Martin-Quiros A, Maver PJ, Skevaki C, Yusuf E, Poljak M, Sanguinetti M, Tacconelli E; Trainee Association of the European Society of Clinical Microbiology and Infectious Diseases (ESCMID). Personal life and working conditions of trainees and young specialists in clinical microbiology and infectious diseases in Europe: a questionnaire survey. *Eur J Clin Microbiol Infect Dis*. 2017 Jul;36(7):1287-1295.

Yusuf E, Ong DS, Martin-Quiros A, Skevaki C, Cortez J, Dedić K, Maraolo AE, **Dušek D**, Maver PJ, Sanguinetti M, Tacconelli E; Trainee Association of the European Society of Clinical Microbiology and Infectious Diseases (ESCMID). A large survey among European trainees in clinical microbiology and infectious disease on training systems and training adequacy: identifying the gaps and suggesting improvements. *Eur J Clin Microbiol Infect Dis*. 2017 Feb;36(2):233-242.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Research project “Molecular diagnostics of Epstein-Barr and CMV infection”

Research project “Imunopathogenesis of hepatitis B and C” – evaluation of predictors for response during treatment of chronic hepatitis C, evaluation of chemokine profile during HCV treatment

“Infectomics Study of Human Liver Non-parenchymal Cells in Chronic Hepatitis C” (HRZZ)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Collaborator in project “Clinical and biological factors determining severity and activity of chronic graft- versus-host disease after allogeneic hematopoietic stem cell transplantation”- ID consultant, research on viral infection (esp. herpesviridae) and fungal infection in correlation with cGVHD

“Infectomics Study of Human Liver Non-parenchymal Cells in Chronic Hepatitis C” (HRZZ), junior researcher

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Tina Dušek, MD PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Surgical treatment of pituitary tumors; Disorders of adrenal gland

BIOGRAPHY

Education

School of Medicine, University of Zagreb 2002. Specialist in Internal medicine 2008. Consultant endocrinologist 2012. PhD degree in endocrinology, University of Zagreb 2010.

Position

Consultant endocrinologist at the Department of Endocrinology and Diabetes, University Hospital Zagreb.
Head of the Croatian Referral Centre for neuroendocrinology

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 26 October 2014.
Assist Professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Kastelan D, Kraljevic I, **Dusek T**, Knezevic N, Solak M, Gardijan B, Kralik M, Poljicanin T, Skoric-Polovina T, Kastelan Z. The clinical course of patients with adrenal incidentaloma: is it time to reconsider the current recommendations? Eur J Endocrinol 2015;173:275-82.

Kastelan D, **Dusek T**, Kraljevic I, Aganovic I. Hypercoagulable state in Cushing's syndrome is reversible following remission. Clin Endocrinol 2013;78:102-6.

Kastelan D, Dzibur F, **Dusek T**, Poljicanin T, Crncevic-Orlic Z, Kraljevic I, Solak M, Bencevic T, Aganovic I, Knezevic N, Kastelan Z, Korsic M. Health-related quality of life and fatigue in patients with adrenal incidentaloma. Endocrine 2011;40:84-9.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Zibar Tomšić K, **Dušek T**, Kraljević I, Heinrich Z, Solak M, Vučinović A, Ozretić D, Mihailović Marasanov S, Hršak H, Kaštelan D. Hypopituitarism after gamma knife radiosurgery for pituitary adenoma. Endocr Res. 2017;42(4):318-324.

Misir Krpan A, **Dusek T**, Rakusic Z, Solak M, Kraljevic I, Bisof V, Ozretic D, Kastelan D. A Rapid Biochemical and Radiological Response to the Concomitant Therapy with Temozolomide and Radiotherapy in an Aggressive ACTH Pituitary Adenoma. Case Rep Endocrinol. 2017;2017:2419590.

Solak M, Kraljevic I, **Dusek T**, Melada A, Kavanagh MM, Peterkovic V, Ozretic D, Kastelan D. Management of Cushing's disease: a single-center experience. Endocrine. 2016;51(3):517-23.

Kastelan D, Kraljevic I, **Dusek T**, Knezevic N, Solak M, Gardijan B, Kralik M, Poljicanin T, Skoric-Polovina T, Kastelan Z. The clinical course of patients with adrenal incidentaloma: is it time to reconsider the current recommendations? Eur J Endocrinol 2015;173:275-82.

Kastelan D, Kraljevic I, **Dusek T**, Knezevic N, Solak M, Gardijan B, Kralik M, Poljicanin T, Skoric-Polovina T, Kastelan Z. The clinical course of patients with adrenal incidentaloma: is it time to reconsider the current recommendations? Eur J Endocrinol 2015;173:275-82.



Kastelan D, **Dusek T**, Kraljevic I, Aganovic I. Hypercoagulable state in Cushing's syndrome is reversible following remission. Clin Endocrinol 2013;78:102-6.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

ADIUVO (protocol NCT00777244) - "Efficacy of adjuvant mitotane treatment in prolonging recurrence-free survival in patients with adrenocortical carcinoma at low-intermediate risk of recurrence.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ADIUVO (protocol NCT00777244) - "Efficacy of adjuvant mitotane treatment in prolonging recurrence-free survival in patients with adrenocortical carcinoma at low-intermediate risk of recurrence.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Marko Duvnjak, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Metabolic syndrome, Viral hepatitis

BIOGRAPHY

CURRICULUM VITAE

Prof. Marko Duvnjak, M.D., Ph.D.

Mob: +38598 98 38 930

E-mail: marko.duvnjak1@gmail.com

Personal:

Date of Birth: December 5, 1949

Place of Birth: Virovitica, Croatia

Marital Status: Married, two child

Citizenship: Croatian

Language: Croatian, English

Education:

1975. Medical Doctor Degree, University of Zagreb, Medical School

1984. Post-Graduate Program in Gastroenterology and Hepatology

1986. Master's Thesis "Parallel Ultrasound and Radioactive Colloid Gold Measurement of Liver Blood Flow in Chronic Liver Disease", Medical School, University of Zagreb

1989. Ph.D.Thesis: "Diagnostic significance of pancreatic pseudocyst considering therapeutic approach", Medical School University of Zagreb.

2002. Postgraduate Course Health Services Financial Management

Employment:

1975. Internship, Sibenik General Hospital

1978-1982. Internal Medicine Residency, "Sveti Duh" General Hospital, Zagreb, Croatia

1982-1989. Dept of Gastroenterology "Sveti Duh" General Hospital, Department of Medicine, Zagreb, Croatia

1989-2017. Dept of Gastroenterology and Hepatology Clinical Hospital "Sestre milosrdnice", Zagreb, Croatia

1994-2017. Head, Department of Gastroenterology and Hepatology, Clinical Hospital "Sestre milosrdnice", Zagreb, Croatia

2003-2004. Head of Clinical Hospital Centre "Sestre milosrdnice"

2011-2018. Head of Department of internal medicine of Clinical hospital centre "Sestre milosrdnice"

Academic Appointments

1988. Scientific Assistant, Department of Medicine, Medical School, University of Zagreb

1991. Scientific Associate, Department of Medicine, Medical School, University of Zagreb

1993- present Instructor, Post-Graduate Course "Gastroenterologic endocrinology", Medical School, University of Zagreb

1994 - 1998. Assistant Professor, Department of Internal Medicine, Medical School, University of Zagreb

1998 – 2007. Associate Professor, Department of Internal Medicine, Medical School, University of Zagreb

2003- Scientific Advisor

2007- 2012. Professor, Department of Medicine, Medical School, University of Zagreb

2012.- Distinguished Professor, Department of Medicine, Medical School, University of Zagreb

Certificates:

1976 State Licence Exam

1982 Internal Medicine Licence Exam

1996 Subspeciality in Gastroenterology

Activities:

- President of Croatian Society of Ultrasound in Medicine and Biology (2005-present)
- Former President of Croatian Society of Gastroenterology (2001-2003)
- Member of the Editorial Board of World Journal of Gastroenterology (2004.-)
- Member of the Editorial Board in Acta Clinica Croatica (1991. - 1996.) and Acta Medica Croatica (2002. -)
- Member of American Gastroenterology Association (AGA)
- Member of European Association for the Study of the Liver (EASL)
- Member of American Society for Gastrointestinal Endoscopy (ASGE)
- Member of European Pancreatic Club (EPC)
- Member of International Association of Pancreatology (IAP)
- Assistant to the Editor of Experimental and Clinical Gastroenterology (1990. -1994.)
- President of the 3rd Congress of the Croatian Society of Gastroenterology with International Participation, Zagreb, September 23-26,2001

- President of the 2nd Croatian-Austrian-Slovenian-Hungarian Gastroenterology Meeting, Dubrovnik, June 27-29, 2002

Scientific Projects Sponsored by Ministry of Science and Technology:

- "Transrectal Endosonography in Evaluation of Rectal Carcinoma" (1991-1996)
- "The Role of Hepatitis B Virus X Protein in the Development of Liver Carcinoma and Optimization of Gene therapy Approach for the Destruction of X Protein mRNA by Antisense Oligonucleotides" (1997-2002)
- "The Role of Hepatotropic Viruses in Liver Carcinogenesis and Potential Therapies" (2003-2007)
- "Nonalcoholic steatohepatitis in association with metabolic syndrome" (2007.-present)

Mentorship

R. Troskot "Prognostička vrijednost ultrazvuka u akutnom pankreatitisu"

V. N. Šimičević "Učinak cink-sulfata u liječenju vrijeda dvanaesnika u štakora"

PHD: M. Skalicky "Istraživanje promjena papile Vateri u kolecistektomiranih osoba s proširenim glavnim žučovodom" (1999)

PHD L. Virović-Jukić: "Modifikacija ribavirina radi ciljane dostave hepatocitima u svrhu poboljšanja terapije virusnog hepatitis C"

PHD T. Pavic: "Utjecaj bilijarne opstrukcije na koncentraciju grelina, kolecistokinina, humoralnih pokazatelja upale I nutritivni status"

PHD L. Neven Baršić: "Važnost povišenih vrijednosti gama glutamil transpeptidaze za otkrivanje I procjenu težine nealkoholnog steatohepatitisa.

PHD L. Marija Gomerčić Palčić: "Ekspresija I distribucija kaveolina -1 I transformirajućeg čimbenika rasta beta u hepatocitima bolesnika s nealkoholnom masnom bolešću jetara."

Experience in clinical trials:

- Phase III study in viral hepatitis
- Phase III clinical trial in chemotherapy for colorectal cancer
- Phase III clinical study in GERD
- Phase III clinical study in bleeding peptic ulcers
- Phase II & III trials in Crohn's disease
- Phase II clinical study in Ulcerative Colitis
- Phase III trail in Crohn's disease
- Phase II trial in Ulcerative colitis

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2012.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Ljubičić N, Duvnjak M, Rotkvić I, Kopjar B: Influence of the degree of liver failure on portal blood flow in patients with liver cirrhosis. *Scand J Gastroenterol* 1990;25:395-400.
- Antoljak N, Topić E, Duvnjak M, Vrkić N, Žuntar I. Hepatocyte Growth Factor Levels in Croatian Healthy and Alcoholic Liver Cirrhosis Patients. *Coll. Antropol.* 2001, 25 (1):341-8.
- Duvnjak M, Lerotić I, Baršić N, Tomašić V, Virović-Jukić L, Velagić V. Pathogenesis and management issues for non-alcoholic fatty liver disease. // *World Journal of Gastroenterology*. 13 (2007) , 34; 4539-4550
- Virović Jukić L, Duvnjak M, Wu CH., Wu GY. Human uridine-cytidine kinase phosphorylation of ribavirin: a convenient method for activation of ribavirin for conjugation to proteins. // *Journal of Biomedical Science*. 15 (2008) , 2; 205-213
- Duvnjak Marko, Baršić Neven, Tomašić Vedran, et al. Genetic polymorphisms in non-alcoholic fatty liver disease: Clues to pathogenesis and disease progression. *World Journal of Gastroenterology* 2009;15(48):6023-6027.
- Duvnjak M, Tomasić V, Gomercić M, Smircić Duvnjak L, Barsić N, Lerotić I. Therapy of nonalcoholic fatty liver disease: current status. *J Physiol Pharmacol* 2009;60 Suppl 7:57-66.
- Duvnjak L, Duvnjak M. The metabolic syndrome - an ongoing story. *J Physiol Pharmacol* 2009;60 Suppl 7:19-24.
- Baršić N, Lerotić I, Smirčić-duvnjak L, Tomašić V, Duvnjak M. Overview and developments in noninvasive diagnosis of nonalcoholic fatty liver disease. *World J Gastroenterol* 2012;18(30):3945-54.
- Stojsavljević S, Gomerčić Palčić M, Virović Jukić L, Smirčić Duvnjak L, Duvnjak M. Adipokines and proinflammatory cytokines, the key mediators in the pathogenesis of nonalcoholic fatty liver disease. *World J Gastroenterol* 2014;20(48):18070-18091.
- Živković R, Čvorišćec B, Sket-Janković N, Duvnjak M. Imunoglobulin E u serumu bolesnika oboljelih od ciroze jetre i kroničnog hepatitisa. *Acta med. iug.* 1979, 33:83-92.
- Kralj D, Virović Jukić L, Stojsavljević S, Duvnjak M, Smolić M, Bilić Čurčić I. Hepatitis C virus, Insulin Resistance, and Steatosis. *Journal of Clinical and Translational Hepatology* 2016;4:66-75.
- Duvnjak M, Dodig M, Rotkvić I: Efficacy of interferon in chronic hepatitis C. *Acta clin Croat.* 1992;31:285-287.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- Kralj D, Virović Jukić L, Stojsavljević S, Duvnjak M, Smolić M, Bilić Čurčić I. Hepatitis C virus, Insulin Resistance, and Steatosis. *Journal of Clinical and Translational Hepatology* 2016;4:66-75.
- Duvnjak M, Virović Jukić L. Indikacije za liječenje bolesnika s ekstrahepatičnim manifestacijama kroničnoga hepatitisa C. *Medix* 2016;123:126-132.
- Vince, A., Duvnjak, M., & Kurelac, I. (2014). TREATMENT GUIDELINES FOR PATIENTS WITH GENOTYPE 1 CHRONIC HEPATIS C INFECTION. *Acta medica Croatica*, 67(4), 329-338.
- Duvnjak, M., Blažević, N., & Jukić, L. V. (2017). Hepatitis C Virus (HCV) Treatment in Croatia: Recent Advances and Ongoing Obstacles. In *Update on Hepatitis C*. InTech.



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Scientific Projects Sponsored by Ministry of Science and Technology:

- "The Role of Hepatitis B Virus X Protein in the Development of Liver Carcinoma and Optimization of Gene therapy Approach for the Destruction of X Protein mRNA by Antisense Oligonucleotides" (1997-2002)
- "The Role of Hepatotropic Viruses in Liver Carcinogenesis and Potential Therapies" (2003-2007)
- "Nonalcoholic steatohepatitis in association with metabolic syndrome" (2007.- 2014.)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Istraživanje sastavnica metaboličkog sindroma u procjeni rizika za razvoj malignoma GI sustava (2018.-)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Nikola Đaković, professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb, School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical laboratory diagnostics of malignant melanoma with special reference to molecular-biological diagnosis assesment

BIOGRAPHY

1985 – graduated at University of Zagreb, School of Medicine, MD degree

1985-1986 – internship, Institute of Public Health, Zagreb

1986-1988 – postgraduate studies in Epidemiology and Oncology, University of Zagreb, School of Medicine

1988-1991 – residency, Oncology and Radiotherapy, Clinical Hospital Centre Sestre Milosrdnice. Zagreb

1995 assistant professor, University of Zagreb, School of Medicine

2002 associate professor, University of Zagreb, School of Medicine

2008 full professor, University of Zagreb, School of Medicine

Head, Institute for Clinical Medical Research and Education, Sisters of Charity University Hospital Centre

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2014

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Ikić D, Spaventi Š, Padovan I, Kusić Z, Čajkovac V, Ivanković D, Đaković N, Nola P. Local interferon therapy for melanoma patients. International Journal of Dermatology 1995;34:872-4.

Pape E, Soldić Ž, Đaković N, Kusić Z, Ikić D. Current approach in melanoma therapy. Acta clinica Croatica 1998;37:93-7.

Ikić D, Padovan I, Knežević M, Pipić N, Đaković N. Application of interferon in patients with carcinoma basocellulare. Rad JAZU 1989;447:73-85.

Ikić D, Padovan I, Knežević M, Pipić N, Đaković N. Application of interferon in patients with carcinoma planocellulare. Rad JAZU 1989;447:87-96.

Ikić D, Spaventi Š, Knežević M, Pokrajac B, Đaković N. Melanomas. Therapy with recombinant interferon HuIFN alpha 2c. Preliminary report. Rad JAZU 1989;447:97-103.

Ikić D, Spaventi Š, Padovan I, Čajkovac V, Kusić Z, Đaković N, Pokrajac B, Nola P, Pipić N, Georgijević A, Gregurek-Novak T, Soldo-Belić A, De Syo D, Despot I. Melanomas. Interferon therapy. Rad HAZU 1996;469:7-20.

Marić Brozić J, Đaković N, Bolanča A, Lukač J, Kusić Z. Adjuvantna terapija melanoma kože. 2nd Congress of Croatian Oncological Society, Opatija, Abstract book, 2004;91.



Đaković N. Imunološko liječenje melanoma. 4th Congress of Croatian Oncological Society, Zagreb, Abstract book, 2009;82.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

J Marić Brozić, N Đaković Personalised therapy for melanoma Rad Hrvatske akademije znanosti i umjetnosti: Medicinske znanosti, 51-60, 2014.

N Dabelić, J Marić Brozić, N Đaković, A Bolanča Novosti u terapiji melanoma, Libri Oncologici: Croatian Journal of Oncology 45 (2-3), 46-51, 2017.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Interferon Therapy for Melanoma Patients, Ministry of Science and Education

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NRF2 at the intersection of epigenetic modeling, metabolism and proliferation of cancer cells, Croatian Science Foundation

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: prof. emeritus Josip Đelmiš, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER:

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Physiology and biochemistry of the uterus in pregnancy and labor, Diabetes and pregnancy

BIOGRAPHY

Current position: Professor emeritus, University of Zagreb School of Medicine, Department of Obstetrics and Gynecology

Education:

1990.-1992. Postgraduate study: Diabetology

1984. PhD in Biomedicine and Health Sciences, University of Zagreb School of Medicine

1980.-1982. Postgraduate study: Perinatology and neonatology, University of Zagreb School of Medicine

1980. Master postgraduate study, University of Zagreb School of Medicine

1977.-1979. Postgraduate study in Medical cytology, University of Zagreb School of Medicine

1972.-1977. Gynecology and Obstetrics Residency, General hospital Subotica

1971. Doctor of medicine (MD), University of Zagreb School of Medicine

Scholarships and courses:

1988-1989. Assistant and Collaborator at project on Brown University, Rhode Island USA

Employment:

2016-now: Professor emeritus

2012. Full Professor Tenure of Obstetrics and Gynecology (Undergraduate and Postgraduate study, University of Zagreb School of Medicine)

2009.-2015. Head of Department for perinatology (Women's Clinical Hospital, University Hospital Centre Zagreb)

2003.-2015. Head State referral center for diabetes in pregnancy, Ministry of health, Republic of Croatia

1994.-2009. Head of Unit for diabetes and fetal growth

1985.-2015 Cumulatively employed at the School of Medicine (Department Obstetrics and Gynecology) and University Hospital Centre Zagreb (Women's Clinical Hospital)

1977.-2015. Specialist in obstetrics and gynecology, Women's Clinical Hospital, University Hospital Centre Zagreb

Research projects :

Collaborator in projects of Support for scientific research (University of Zagreb):

2018. „Prevention of hypoglycemia in pregnant women and puerpera with type 1 diabetes", PI professor M. Ivanišević, PhD

2017. "Prevention of hypoglycemia in pregnant women and puerperas with diabetes type 1", PI professor M. Ivanišević, PhD

2016. "The effect of diet on lipid content and adipokines concentration in placental tissue", PI professor M. Ivanišević, PhD

2015. "The effect of diet on lipid content in placental tissue", PI professor M. Ivanišević, PhD

Project leader in Croatian Ministry of Science, Education and Sports projects: Teaching activity and mentoring:

2007-2013: "Metabolic and endocrine changes in diabetic pregnant women

2002-2006: "Diabetes and pregnancy"

1997-2002: "Diabetes and pregnancy"

1991-1996: "Hypertension and pregnancy"

Collaborator in Croatian Ministry of Science, Education and Sports projects:

2009-2014: "Diabetes and metabolic syndrome after previous gestational diabetes" (PI: prof. M. Ivanišević, PhD)

2002-2006: "Hypertension and pregnancy" (PI: prof. M. Ivanišević, PhD)

Full Professor Tenure of Obstetrics and Gynecology at Undergraduate study (course OB/GYN), and course leader of 2 Postgraduate's courses University of Zagreb School of Medicine

1989.–2013. Mentor of PhD thesis:

1. Berberović Edina. Utjecaj glikemije i lipidemije dijabetičnih trudnica na metabolizam ugljikohidrata i lipida fetusa. Doktorska disertacija. Medicinski fakultet Zagreb, 2013.
2. Starčević V. Sadržaj lipida u posteljicama trudnica s tipom 1 šećerne bolesti. Doktorska disertacija. Medicinski fakultet Zagreb, 2008.
3. Blajić J. Čimbenici angiogeneze u trudnica s dijabetesom tipa 1 i u zdravih trudnica. Doktorska disertacija. Medicinski fakultet Zagreb, 2007.
4. Špoljarić A. Razina posteljičnog i vaskularnog endotelijalnog faktora rasta u trudnica s preeklampsijom. Doktorska disertacija. Medicinski fakultet Zagreb, 2005.
5. Kendić S. Koagulacijske promjene za vrijeme trudnoće, poroda i babinja u zdravih trudnica i trudnica s teškim oblicima EPH-gestoze. Doktorska disertacija. Medicinski fakultet Zagreb, 1997.
6. Grujić Koračin J. Sindrom antifosfolipidnih protutijela u žena s nepovoljnom reproduktivnom anamnezom. Doktorska disertacija. Medicinski fakultet Zagreb, 1997.

Mentor of master thesis:

1. Šegregur J. Rast fetusa u trudnica s gestacijskim dijabetesom, Zagreb, 2005.
2. Starčević V. Utjecaj hiperglikemije na rani embrionalni zastoj u trudnica s inzulin ovisnim dijabetesom. Magistarski rad. Medicinski fakultet Zagreb, 1998.
3. Špoljarić A. Utjecaj ritodrina na promjene koagulacijskog i fibrinolitičkog sustava u trudnica. Magistarski rad. Medicinski fakultet Zagreb, 1996.
4. Franić D. Učinak ritodrina na razinu masnih kiselina u plazmi trudnica s prijetjećim prijevrenim porodom. Magistarski rad. Medicinski fakultet Zagreb, 1994.

5. Kendić S. Koagulopatije u trudnica s kroničnom hipertenzijom. Magistarski rad. Medicinski fakultet Zagreb, 1990.
6. Mišković N. Tromboembolijske bolesti u trudnoći i porodu. Magistarski rad. Medicinski fakultet Zagreb, 1990.
7. Zrnić Š. Rast i razvoj fetusa u trudnica s kroničnom hipertenzijom. Magistarski rad. Medicinski fakultet, 1989.

Memberships in professional associations:

Croatian Medical Association, Croatian society of obstetricians and gynecologists, Croatian society of perinatal medicine (President from 2013. till 2017.), Croatian diabetology Society, European association for perinatal medicine (EAPM), International Society for Placenta, American diabetes association (ADA), Diabetes Pregnancy Study Group of EASD.

Head and lecturer in courses for continuous medical education.

2010.-now: Chief Editor of Journal "Gynaecologia et perinatologia" of Croatian Medical Association

1999.-now: ordinary member of Diabetes Pregnancy Study Group of EASD

ORGANISATION OF SCIENTIFIC MEETINGS (conferences, congress, symposia):

Head and lecturer in courses for continuous medical education: Improvements in Perinatology, Prostaglandins in gynecology, obstetrics and related areas, New insights into the placenta, Hypertension and pregnancy, Diabetes and pregnancy, Neurological diseases and pregnancy, Emergencies in obstetrics and gynecology, Ultrasound in obstetrics and fetal medicine as well as Ultrasound in fetal cardiology.

1. „Parinatalni dani – Ante Dražančić“ 2016., Zagreb (predsjednik skupa)
2. „Parinatalni dani – Ante Dražančić“ 2014., Zagreb (predsjednik skupa)
3. „Parinatalni dani – Ante Dražančić“ 2013., Osijek (predsjednik skupa)
4. „Alpe Adria Perinatal Medicine Meeting“ 2011., Zagreb (predsjednik skupa)
5. „Kongres ginekologa i opstetričara“ 2011., Split (član znanstvenog odbora)
6. „Parinatalni dani – Ante Dražančić“ 2010. , solin (član znanstvenog odbora)
7. „Diabetes Pregnancy Study Group – EASD“ 2008., Cavtat (predsjednik skupa)
8. „Diabetes Pregnancy Study Group – EASD“ 1999., Brijuni (predsjednik skupa)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Djelmis J, Ivanišević M, Desoye G, van Poppel M, Berberovic E, Soldo D, Oreskovic S. Higher Cord Blood Levels of Fatty Acids in Pregnant Women With Type 1 Diabetes Mellitus. J Clin Endocrinol Metab. 2018 Jul 1;103(7):2620-2629. doi:10.1210/jc.2018-00272. PubMed PMID: 29722816.
2. Horvaticek M, Djelmis J, Ivanisevic M, Oreskovic S, Herman M. Effect of eicosapentaenoic acid and docosahexaenoic acid supplementation on C-peptide preservation in pregnant women with type-1 diabetes: randomized placebo controlled clinical trial. Eur J Clin Nutr. 2017 Aug;71(8):968-972. doi: 10.1038/ejcn.2017.46. Epub 2017 Apr 5. PubMed PMID: 28378851.

3. Gauster M, Majali-Martinez A, Maninger S, Gutschi E, Greimel PH, Ivanisevic M, Djelmis J, Desoye G, Hiden U. Maternal Type 1 diabetes activates stress response in early placenta. *Placenta*. 2017 Feb;50:110-116. doi: 10.1016/j.placenta.2017.01.118. Epub 2017 Jan 16. PubMed PMID: 28161055.
4. Djelmis J, Pavić M, Mulliqi Kotori V, Pavlić Renar I, Ivanisevic M, Oreskovic S. Prevalence of gestational diabetes mellitus according to IADPSG and NICE criteria. *Int J Gynaecol Obstet*. 2016 Dec;135(3):250-254. doi: 10.1016/j.ijgo.2016.07.005. Epub 2016 Aug 27. PubMed PMID: 27612531.
5. Berberovic E, Ivanisevic M, Juras J, Horvaticek M, Delas I, Djelmis J. Arachidonic and docosahexaenoic acid in the blood of a mother and umbilical vein in diabetic pregnant women. *J Matern Fetal Neonatal Med*. 2013 Sep;26(13):1287-91. doi: 10.3109/14767058.2013.783800. Epub 2013 Apr 12. PubMed PMID: 23480524.
6. Lovrencić MV, Honović L, Kralik S, Matica J, Prasek M, Pape-Medvidović E, Ivanisević M, Delmis J. Redefinition of gestational diabetes mellitus: implications for laboratory practice in Croatia. *Biochem Med (Zagreb)*. 2013;23(1):7-11.
7. Hiden U, Greimel P, Ghaffari-Tabrizi N et al. Type 1 diabetes impairs placental mmp expression in early pregnancy. *PLACENTA*. 2011 Sep;32(9):A115-A115.
8. Đelmiš J, Ivanišević M, Juras J. Consequences after previous gestational diabetes. *Journal of maternal-fetal and neonatal medicine*. 2009;21:125-128.
9. Hiden U, Glitzner E, Ivanisevic M, Djelmis J, Wadsack C, Lang U, Desoye G. MT1-MMP expression in first-trimester placental tissue is upregulated in type 1 diabetes as a result of elevated insulin and tumor necrosis factor-alpha levels. *Diabetes*. 2008 Jan;57(1):150-7. Epub 2007 Oct 10. PubMed PMID: 17928399.
10. Hiden U, Ivanisevic M, Djelmis J et al. Altered MT1-MMP expression in first trimester placental tissue of type-1 diabetic women. *Placenta*. 2007 Aug-Sep;28(8-9): A38-A38
11. Ivanisević M, Djelmis J, Jalovec D, Bljajic D. Ultrasonic morphological characteristics of yolk sac in pregnancy complicated with type-1 diabetes mellitus. *Gynecol Obstet Invest*. 2006;61(2):80-6. Epub 2005 Oct 13. PubMed PMID: 16224187.
12. Starcević V, Djelmis J. [Glycemic control and the risk of preeclampsia in women with gestational diabetes mellitus]. *Acta Med Croatica*. 2004;58(5):367-71. Croatian. PubMed PMID: 15756801.
13. Djelmis J, Ivanisević M, Reljanović M, Ilijić M, Bljajić D, Tuzović L. [Cardiovascular neuropathy in pregnant women with type 1 diabetes]. *Acta Med Croatica*. 2003;57(4):275-80. Croatian. PubMed PMID: 14639861.
14. Starcevic V, Djelmis J, Ivanisevic M et al. The effect of glycemia on early embryonic development in diabetic pregnancies. *Prenatal and neonatal medicine*. 2001 Aug;6(4):208-213.
15. Ivanisević M, Buković D, Starcević V, Djelmis J, Pfeifer D. Influence of hyperglycemia on early embryonal growth in IDDM pregnant women. *Coll Antropol*. 1999 Jun;23(1):183-8. PubMed PMID: 10402721.
16. Djelmis J, Buković D, Pfeifer D, Ivanisević M. Ponderal index and disproportionate fetal growth in IDDM pregnancies. *Coll Antropol*. 1998 Dec;22(2):491-5. PubMed PMID: 9887605.
17. Djelmis J. Clinical and scientific results in perinatal care of pregnancy complicated by insulin dependent diabetes mellitus in Croatia. *Acta Med Croatica*. 1998;52(3):147-53. Review. PubMed PMID: 9818436.

18. Djelmiš J, Blajić J, Buković D, Pfeifer D, Ivanisević M, Kendić S, Votava-Raić A. Glycosylated hemoglobin and fetal growth in normal, gestational and insulin dependent diabetes mellitus pregnancies. Coll Antropol. 1997 Dec;21(2):621-9. PubMed PMID: 9439079.

19. Djelmiš J, Bukovic D, Ivanisevic M et al. Risk factors in women with gestational diabetes and impaired glucose tolerance. Collegium Antropologicum. 1996 Dec;20(2):463-468.

Author of books:

Đelmiš, Josip; Ivanišević, Marina; Orešković, Slavko. Hitna stanja u ginekologiji, opstetriciji i anesteziologiji. Zagreb : Josip Đelmiš, 2011 (monografija).

Đelmiš, Josip; Ivanišević, Marina; Metelko, Željko. Dijabetes u žena. Zagreb : Medicinska naklada, 2009 (udžbenici).

Đelmiš, Josip, Orešković, Slavko (ur.). Fetalna medicina i opstetricija. Zagreb: Medicinska naklada, 2014 (monografija).

Đelmiš, Josip; Desoye, Gernot; Ivanišević, Marina (ur.). Diabetology of Pregnancy Basel : Karger, 2005 (priručnik).

Đelmiš, Josip; Ivanišević, Marina (ur.). Dijabetes u trudnoći. Zagreb : Medias, 2002 (monografija).

Book chapters:

1. Đelmiš, Josip. Dijabetes i trudnoća // Fetalna medicina i opstetricija / Đelmiš, Josip ; Orešković, Slavko (ur.). Zagreb : Medicinska naklada, 2014. Str. 401-416.

2. Đelmiš, Josip. Prekonceptijska obradba bolesnica sa šećernom bolešću // Dijabetes u žena / Đelmiš, Josip ; Ivanišević, Marina ; Metelko, Željko (ur.). Zagreb : Medicinska Naklada, 2009. Str. 195-197.

3. Đelmiš, Josip. Metaboličke promjene u zdravih i dijabetičnih trudnica // Dijabetes u žena / Đelmiš, Josip ; Ivanišević, Marina ; Metelko, Željko (ur.). Zagreb : Medicinska Naklada, 2009. Str. 198-202.

4. Đelmiš, Josip. Skrb o dijabetičnim trudnicama // Dijabetes u žena / Đelmiš, Josip ; Ivanišević, Marina ; Metelko, Željko (ur.). Zagreb : Medicinska Naklada, 2009. Str. 203-210.

5. Đelmiš, Josip. Kontrola glikemije u dijabetičnih trudnica // Dijabetes u žena / Đelmiš, Josip ; Ivanišević, Marina ; Metelko, Željko (ur.). Zagreb : Medicinska Naklada, 2009. Str. 219-222.

6. Đelmiš, Josip. Gestacijski dijabetes // Dijabetes u žena / Đelmiš, Josip ; Ivanišević, Marina ; Metelko, Željko (ur.). Zagreb : Medicinska Naklada, 2009. Str. 325-332.

7. Đelmiš, Josip. Hrvatski model zdravstvene zaštite trudnica sa šećernom bolešću // Dijabetes u žena / Đelmiš, Josip ; Ivanišević, Marina ; Metelko, Željko (ur.). Zagreb : Medicinska Naklada, 2009. Str. 340-346.

8. Đelmiš, Josip. Dijabetes i trudnoća // Porodništvo / Kuvačić, Ivan ; Kurjak, Asim ; Đelmiš, Josip (ur.). Zagreb : Medicinska naklada, 2009. Str. 365-373.

9. Đelmiš, Josip; Juras, Josip. Babinje i šećerna bolest // Dijabetes u žena / Đelmiš, Josip ; Ivanišević, Marina ; Metelko, Željko (ur.). Zagreb : Medicinska naklada, 2009. Str. 371-380.

10. Đelmiš, Josip; Ljubas, Nikica. Povijest dijabetesa // Dijabetes u žena / Đelmiš, Josip ; Ivanišević, Marina ; Metelko, Željko (ur.). Zagreb : Medicinska Naklada, 2009. Str. 3-9.

11. Đelmiš, Josip. Clinical Management of Pregnancies Complicated with Type 1/Type 2 Diabetes mellitus // Diabetology of Pregnancy / Đelmiš, Josip ; Desoye, Gernot ; Ivanišević, Marina (ur.). Basel : Karger, 2005. Str. 161-173.

12. Đelmiš, Josip; Pfeifer, Dina. Dijabetes i trudnoća // Ginekologija i perinatologija II / Kurjak, Asim ; Đelmiš, Josip (ur.). Varaždinske Toplice : Tonimir, 2004.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Djelms J, Ivanišević M, Desoye G, van Poppel M, Berberovic E, Soldo D, Oreskovic S. Higher Cord Blood Levels of Fatty Acids in Pregnant Women With Type 1 Diabetes Mellitus. J Clin Endocrinol Metab. 2018 Jul 1;103(7):2620-2629. doi:10.1210/jc.2018-00272. PubMed PMID: 29722816.

2. Horvaticsek M, Djelms J, Ivanisevic M, Oreskovic S, Herman M. Effect of eicosapentaenoic acid and docosahexaenoic acid supplementation on C-peptide preservation in pregnant women with type-1 diabetes: randomized placebo controlled clinical trial. Eur J Clin Nutr. 2017 Aug;71(8):968-972. doi: 10.1038/ejcn.2017.46. Epub 2017 Apr 5. PubMed PMID: 28378851.

3. Gauster M, Majali-Martinez A, Maninger S, Gutschi E, Greimel PH, Ivanisevic M, Djelms J, Desoye G, Hiden U. Maternal Type 1 diabetes activates stress response in early placenta. Placenta. 2017 Feb;50:110-116. doi: 10.1016/j.placenta.2017.01.118. Epub 2017 Jan 16. PubMed PMID: 28161055.

4. Djelms J, Pavić M, Mulliqi Kotori V, Pavlić Renar I, Ivanisevic M, Oreskovic S. Prevalence of gestational diabetes mellitus according to IADPSG and NICE criteria. Int J Gynaecol Obstet. 2016 Dec;135(3):250-254. doi: 10.1016/j.ijgo.2016.07.005. Epub 2016 Aug 27. PubMed PMID: 27612531.

5. Berberovic E, Ivanisevic M, Juras J, Horvaticsek M, Delas I, Djelms J. Arachidonic and docosahexaenoic acid in the blood of a mother and umbilical vein in diabetic pregnant women. J Matern Fetal Neonatal Med. 2013 Sep;26(13):1287-91. doi: 10.3109/14767058.2013.783800. Epub 2013 Apr 12. PubMed PMID: 23480524.

6. Lovrencić MV, Honović L, Kralik S, Matica J, Prasek M, Pape-Medvidović E, Ivanisević M, Delms J. Redefinition of gestational diabetes mellitus: implications for laboratory practice in Croatia. Biochem Med (Zagreb). 2013;23(1):7-11.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Collaborator in projects of Support for scientific research (University of Zagreb):

2018. „Prevention of hypoglycemia in pregnant women and puerpera with type 1 diabetes“, PI professor M. Ivanišević, PhD

2017. “Prevention of hypoglycemia in pregnant women and puerperas with diabetes type 1”, PI professor M. Ivanišević, PhD

2016. “The effect of diet on lipid content and adipokines concentration in placental tissue”, PI professor M. Ivanišević, PhD

2015. “The effect of diet on lipid content in placental tissue”, PI professor M. Ivanišević, PhD

Project leader in Croatian Ministry of Science, Education and Sports projects: Teaching activity and mentoring:

2007-2013: "Metabolic and endocrine changes in diabetic pregnant women

2002-2006: "Diabetes and pregnancy"

1997-2002: "Diabetes and pregnancy"

1991-1996: "Hypertension and pregnancy"

Collaborator in Croatian Ministry of Science, Education and Sports projects:

2009-2014: "Diabetes and metabolic syndrome after previous gestational diabetes" (PI: prof. M. Ivanišević, PhD)

2002-2006: "Hypertension and pregnancy" (PI: prof. M. Ivanišević, PhD)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Collaborator in projects of Support for scientific research (University of Zagreb):

2018. „Prevention of hypoglycemia in pregnant women and puerpera with type 1 diabetes", PI professor M. Ivanišević, PhD

2017. "Prevention of hypoglycemia in pregnant women and puerperas with diabetes type 1", PI professor M. Ivanišević, PhD

2016. "The effect of diet on lipid content and adipokines concentration in placental tissue", PI professor M. Ivanišević, PhD

2015. "The effect of diet on lipid content in placental tissue", PI professor M. Ivanišević, PhD

Project leader in Croatian Ministry of Science, Education and Sports projects: Teaching activity and mentoring:

2007-2013: "Metabolic and endocrine changes in diabetic pregnant women

Collaborator in Croatian Ministry of Science, Education and Sports projects:

2009-2014: "Diabetes and metabolic syndrome after previous gestational diabetes" (PI: prof. M. Ivanišević, PhD)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Dragan Đurđević, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Traumatology Clinic, Clinical Hospital Center
“Sestre Milosrdnice”

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Bone morphogenetic proteins in regeneration of bone and cartilage, Doctoral postgraduate study in the field of Biomedicine and public health

BIOGRAPHY

Born on July 6th 1960 in Sušak, Rijeka. After finishing elementary school and high school enrolled to the University of Zagreb School of Medicine from which I graduated in 1987. Since 1992 I have been an employee of the Zagreb Traumatology Clinic, which has since July 2010 been a part of the Clinical Hospital Center “Sestre Milosrdnice”. In 1997 I had my specialist exam in general surgery. My special area of interest is surgery of the pelvis and acetabulum, as well as of the shoulder. I have had training in the USA and France, and have actively participated in a great number of Croatian and international specialist conferences. In 2002 I obtained my master’s degree, and in April 2017 my PhD degree (title “Efficacy of bone morphogenetic protein BMP1-3 in bone healing”).

I am a member of the International Collegue of Surgeons, Croatian Surgical Society, Croatian Traumatology Society, Croatian Association of Orthopaedic and Trauma Surgeons, and Croatian Physicians Association. I am married, wife Marijana, daughter Nina and son Marin.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, Pauk M, Erjavec I, Francetic I, Dumic-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikic-Topic S, Peric M, Pecina M, Grgurevic L. The clinical use of bone morphogenetic proteins revisited: a novel biocompatible carrier device OSTEOGROW for bone healing. *Int Orthop*. 2014 Mar;38(3):635-47

Grgurevic L, Macek B, Jelic M, Smoljanovic T, Erjavec I, Djurdevic D, Maticic D, Vnuk D, Lipar M, Kufner V, Brkljacic J, Dumic-Cule I, Stern-Padovan R, Vukicevic S. Bone morphogenetic protein (BMP)1-3 enhances bone repair. *Biochem.Biophys.Res. Commun.* 408: 25-31, 2011

Grgurevic L, Macek B, Durdevic D, Vukicevic S. Detection of bone and cartilage-related proteins in plasma of patients with a bone fracture using liquid chromatography-mass spectrometry. *International Orthopaedics* 31:743-751, 2007

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Matejčić A, Vidović D, Ivica M, Đurđević D, Tomljenović M, Bekavac – Bešlin M, Mijić A, Punda M, Bakota B, Misir Z. Internal fixation with locking plate of 3- and 4- part proximal humeral fractures in elderly patients: complications and functional outcome *Acta Clin Croat* 52(1), 2013

Vidović D, Matejčić A, Ivica M, Đurđević D, Tomljenović M, Bekavac-Bešlin B, Mijić A, Bakota B, Misir Z. Approach to the distal femur by osteotomy of the distal pole of the patella and internal fixation with basket plate in complex articular fracture: report of five cases *Acta Clin Croat* 52(1), 2013



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. "OSTEOGROW - Novel Bone Morphogenetic Protein 6 Biocompatible Carrier Device for Bone Regeneration" 2012 – 2017 (European Commission, FP7 HEALTH program, Grant Agreement No. 279239)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. "OSTEOGROW - Novel Bone Morphogenetic Protein 6 Biocompatible Carrier Device for Bone Regeneration" 2012 – 2017 (European Commission, FP7 HEALTH program, Grant Agreement No. 279239)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mr Tarek El-Toukhy

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Consultant and Senior Lecturer in Reproductive Medicine, King's College London, UK

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Human reproduction

BIOGRAPHY

- **Qualifications:** MBBCh, USMLE, MSc, MD, MRCOG
- **Experience:** Subspecialty accreditation in Reproductive Medicine obtained in October 2007 and CCT in Obstetrics and Gynaecology obtained in February 2008
- **Special Skills Modules completed:** Level II laparoscopic surgery, Level II hysteroscopic surgery, Gynaecological Ultrasound, Urodynamics, Colposcopy and Medical Education
- **Special interests:** Reproductive Medicine and Minimal Access Surgery
- **Experience:** Over 80 publications in peer-reviewed journals and over 100 oral and poster presentations in national and international meetings
- **Peer-reviewer:** For the following journals: BMJ, BJOG, EJO, Human Reproduction, Fertility and Sterility, RBM Online, Archives of Gynecology and Obstetrics and Expert Review in Obstetrics and Gynecology. Currently, I am a scientific editor of the British Journal of Obstetrics and Gynaecology and Human Reproduction Journals.
- **Research interests:** single embryo transfer, pre-implantation genetic diagnosis (PGD), frozen embryo replacement cycles, minimal access surgery and meta-analysis of randomised studies in the field of reproductive medicine
- Completed the RCOG Special Skills Module in Medical Education
- Faculty member in a 6-monthly Laparoscopic Simulation Training course
- Faculty member in a 3-monthly course on advanced surgical techniques
- Faculty member in a 6-monthly MRCOG revision course
- Faculty member in the British Fertility Society Embryo Transfer Training Course
- Faculty member of a twice yearly Gynaecological Ultrasound Course
- Weekly teaching of medical students from King's College London (KCL)
- Regular participation in the Reproductive and Sexual Health SSM at KCL
- Regular participation in year 4 medical students end of year OSCE examinations
- Regular supervision and mentoring of SSM and BSc students in preparing their projects

Credentials and membership of societies:

Associate Professor of Obstetrics and Gynaecology, Cairo University, Egypt.

Member of the Royal College of Obstetricians and Gynaecologists, UK.

Member of the British Fertility Society, UK

Member of the European Society for Human Reproduction and Embryology, Belgium

Graduate Qualification

MBBCh, Grade Excellent with Honours, Faculty of Medicine, Cairo University, Egypt 1991

Post-graduate Qualifications

. USMLE - American National Board Examination, USA September 1993

. MSc - Obstetrics and Gynaecology, Cairo University, Egypt May 1996

. MRCOG - London September 1998

- . MD - Obstetrics and Gynaecology, Cairo University, Egypt November 1998
- . Completion of Subspecialty Training in Reproductive Medicine, UK 2007
- . Certificate of Completion of Training (CCT) in Obstetrics and Gynaecology, UK 2007

Certificates

- . Management Development Programme for SpRs, King's College Hospital, London 2004
- . Laparoscopy Level II certificate, RCOG, London 2005
- . Hysteroscopy Level II certificate, RCOG, London 2005
- . Ultrasound in Gynaecological Conditions, RCOG London 2005
- . Embryo Transfer Accreditation, British Fertility Society, London 2005
- . Colposcopy Accreditation, BSCCP/RCOG, London 2005
- . Urodynamics Accreditation, BSUG/RCOG, London 2006
- . Medical Education Certificate, RCOG, London 2008

Prizes and Awards

- . Numerous prizes during undergraduate education
- . Best performance in the Master Degree (MSc) examination in Obstetrics and Gynaecology, Cairo University, Egypt, June 1996
- . South East Gynaecological Society prize for SpR presentations, KCH, London, November 1999
- . South East Gynaecological Society Annual prize for SpR presentations, Lewisham Hospital, London, November 2001
- . Short-listed for the "*Promising Young Clinician Award*" by the European Society of Human Reproduction and Embryology (ESHRE), Vienna, Austria, July 2002
- . Oral presentation prize, the Annual South Thames Postgraduate Conference, St. Thomas' Hospital, London, September 2004
- . First prize for best poster presentation, 14th Annual Congress of the International Society of Gynecological Endoscopy, London, April 2005
- . First prize for poster presentations, 6th International RCOG Meeting, Cairo, September 2005
- . Second prize for poster presentations, 6th International RCOG Meeting, Cairo, September 2005
- . Oral presentation prize, the Annual South Thames Postgraduate Conference, St. Thomas' Hospital, London, September 2006
- . *Hospital Doctor Award* for "Best Innovative Team of the year", London, November 2006
- . *Best Young Clinician Award* from the Annual conference of the British Fertility Society, University of York, April 2007
- . Fertility Society of Australia Prize for best judged presentation, Fertility UK 2007 meeting, April 2007
- . Finalist for the *Hospital Doctor Award* for "Best Obstetrics and Gynaecology Team of the year", London, November 2007
- . Oral presentation prize, 7th International RCOG Meeting, Montreal, Canada, September 2008.

Present Appointment

Consultant Gynaecologist and sub-specialist in Reproductive Medicine and Surgery and PGD, Guy's and St. Thomas' Hospital NHS Foundation Trust, London.

Senior lecturer, King's College London, University of London

Previous Appointments Sub-specialty Registrar in Reproductive Medicine, Guy's and St. Thomas' Hospital NHS Foundation Trust, London (April 2006-December 2008)

The RCOG accredited subspecialty training programme in Reproductive Medicine at Guy's and St. Thomas' Hospital offers comprehensive experience in reproductive medicine, including advanced techniques of assisted conception, pre-implantation genetic diagnosis, embryology, genetics, endocrinology, andrology

and psychosexual medicine. This post has equipped me with the necessary skills to achieve my ambition of working as an NHS consultant in a tertiary-referral Reproductive Medicine centre offering specialized fertility care of the highest standard and producing high quality teaching and academic output.

Specialist Registrar, Benenden Hospital Trust and Maidstone and Tunbridge Wells Hospitals NHS Trust (October 2005 – April 2006) SpR to Mr M Hefni, FRCOG, Miss A E Davies, FRCOG and Mr M Mossa, FRCOG Specialist Registrar, Queen Mary's Sidcup Hospital NHS Trust (October 2004 – October 2005) SpR to Miss L Hanna, FRCOG and Mr A Seif, MRCOG

Specialist Registrar, Princess Royal University (Farnborough) Hospital, Bromley NHS Trust (October 2003 – October 2004) SpR to Mr J Erian, FRCOG and Mr N Hill, FRCOG

Fellow in Reproductive Medicine and Assisted Conception, Assisted Reproduction and Gynaecology Centre, London (June 2003 – September 2003) Clinical Fellow to Mr M Taranissi, FRCOG

Fellow/ Registrar in Reproductive Medicine, Guy's and St. Thomas' Hospital NHS Trust, London (June 2000 – June 2003) Fellow to Professor P Braude, Miss A Taylor and Mr Y Khalaf

Specialist Registrar in Obstetrics and Gynaecology, Birmingham Heartlands and Solihull NHS Trust (March 2000 – June 2000) SpR to Miss A E Payne, FRCOG

SHO in Gynaecology, Benenden Hospital, Kent, (August 1998 – February 2000) SHO to Mr M Hefni, FRCOG and Miss A E Davies, FRCOG

Senior Registrar and Lecturer in Obstetrics and Gynaecology, Cairo University Hospital, Egypt (December 1996 - August 1998)

Clinical Fellow, Al-Ebtessama Centre for Reproductive Medicine and Endocrinology, Cairo, Egypt (October 1996 - December 1996)

Registrar (Chief Resident) in Obstetrics and Gynaecology, Cairo University Hospital, Egypt (September 1993 - September 1996)

Registrar in General Surgery, Kasr El-Manial Hospital, Cairo, Egypt. (March 1993 - September 1993)

House officer in Urology, Cairo University Hospital, Egypt (January 1993 - March 1993)

House officer, Cairo University Hospital, Egypt. (March 1992 - December 1992)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2006

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

“Preimplantation Genetic Diagnosis in Clinical Practice” T El-Toukhy and P Braude, Editors. Springer-Verlag, London, 2014.

“Compliance with hormone replacement therapy after prophylactic oophorectomy” M. Hefni, A. Apoola, A. Davies, S. Mahadevan, **T. El-Toukhy. *Journal of Obstetrics and Gynaecology*, 1999; 3: 301-302.**

“Evaluation of the value of increasing the dose of human menopausal gonadotrophins in the course of an In-Vitro Fertilization treatment cycle in low responders” Y. Khalaf, **T. El-Toukhy**, A. Taylor, P. Braude. ***Middle East Fertility Society Journal* 2000; 5(2): 19-20.**

“Poor response to ovarian stimulation: a sign of incipient ovarian failure” R. Lawson, **T. El-Toukhy**, A. Taylor, P. Braude, J. Parsons and P. Seed. ***Fertility and Sterility* 2001; 76(3): S161**

“Increasing the gonadotrophin dose in the course of an *in-vitro* fertilization cycle does not rectify an initial poor response” Y. Khalaf, **T. El-Toukhy**, A. Taylor, P. Braude. ***European Journal of Obstetrics and Gynaecology and Reproductive Biology* 2002; 103(2): 146-149.**

“Young age does not protect against the adverse effects of reduced ovarian reserve - an eight year study”
T.El-Toukhy, Y.Khalaf, R.Hart, A.Taylor, P.Braude. *Human Reproduction* 2002; 17(6): 1519-1524.

“Poor response to superovulation is a stronger predictor of early menopause than elevated basal FSH: a life table analysis” R.Lawson, **T.El-Toukhy, A.Kassab, A.Taylor, P.Braude, J.Parsons, P. Seed. *Human Reproduction* 2003; 18(3): 527-533.**

“Effect of blastomere loss on the outcome of frozen embryo replacement” **T.El-Toukhy, Y.Khalaf, K.Al-Darazi, V.Andritsos, A.Taylor, P.Braude. *Fertility and Sterility* 2003; 79(5): 1106-1111.**

“Cryo-thawed embryos obtained from conception cycles have double the implantation potential of those from unsuccessful cycles” **T.El-Toukhy, Y.Khalaf, K.Al-Darazi, E Warf, F O’Mahony, A.Taylor, P.Braude. *Human Reproduction* 2003; 18: 1313-1318.**

“Pituitary suppression in ultrasound-monitored frozen embryo replacement cycles. A randomized study”
T.El-Toukhy, A.Taylor, Y.Khalaf, K.Al-Darazi, P.Rowell, P.Seed, P.Braude. *Human Reproduction* 2004; 19(4): 874-879.

“Influence of female age on the outcome of PGD aneuploidy screening in recurrent implantation failure”
M.Taranissi, **T.El-Toukhy, A.Gorgy, Y.Verlinsky. *Reproductive Biomedicine Online* 2005; 10(5): 628-632.**

“Detecting genetic diseases before implantation” **T.El-Toukhy. *Pulse* 2005; 65(16): 58-59.**

“Pelvic infection after oocyte retrieval: a preventable complication or an inevitable risk?” **T.El-Toukhy, L.Hanna. *Journal of Obstetrics and Gynaecology* 2006; 26(6): 705-706.**

“330 cycles of preimplantation genetic diagnosis for serious genetic disorder. Clinical considerations affecting outcome” J.Grace, **T.El-Toukhy, P.Scriven, C.Ogilvie, S.Pickering, A.Lashwood, Y.Khalaf, P.Braude. *BJOG International* 2006; 113(12): 1393-1401.**

“Aspirin in women undergoing in vitro fertilization treatment: a systematic review and meta-analysis” M Khairy, K Banerjee, **T.El-Toukhy, A.Coomarasamy, Y.Khalaf. *Fertility and Sterility* 2007; 88 (4): 822-831.**

“Validity of the IVF league tables: influence of patients’ characteristics” A.Johnson, **T.El-Toukhy, K.Sunkara, M.Khairy, A.Comarasamy, C.Ross, Y.Khalaf, P.Braude *BJOG International* 2007; 114 (12): 1569-1574.**

“Pituitary suppression regimens in poor responders undergoing in-vitro fertilization: a systematic review and meta-analysis” K.Sunkara, J.Tuthill, M.Khairy, **T.El-Toukhy, A.Coomarasamy, Y.Khalaf, P.Braude. *Reproductive Biomedicine Online* 2007; 15(5): 539-546.**

“The relationship between endometrial thickness and outcome of medicated frozen embryo replacement cycles” **T.El-Toukhy, A.Comarasamy, M.Khairy, K.Sunkara, P.Seed, Y.Khalaf, P.Braude. *Fertility and Sterility* 2008, 89 (4): 832-839.**

“The ethics of preimplantation genetic diagnosis” **T.El-Toukhy, C.Williams, P.Braude. *The Obstetrician and Gynaecologist* 2008; 10: 49-54.**

“Selective single blastocyst transfer reduces the multiple pregnancy rate after IVF treatment: a prospective study” Y.Khalaf, **T.El-Toukhy**, V.Bolton, A.Coomarasamy, P.Braude. ***BJOG International* 2008; 115 (3): 385-390.**

“Outpatient hysteroscopy and subsequent IVF cycle outcome. A systematic review and meta-analysis” **T.El-Toukhy**, K.Sunkara, A.Coomarasamy, J.Grace, Y.Khalaf. ***Reproductive Biomedicine Online* 2008; 16 (5): 712-719.**

“Antral follicle count at down regulation and prediction of poor ovarian response” M.Khairi, **A.McClough**, T.El-Toukhy, **A.Coomarasamy**, **Y.Khalaf**. ***Reproductive Biomedicine Online* 2008; 17 (4): 508-514.**

“Infertility information on the World Wide Web: a cross-sectional survey of quality of infertility information on the net” J.Marriott, P.Stec, **T.El-Toukhy**, Y.Khalaf, P.Braude, A.Coomarasamy. ***Human Reproduction* 2008; 23 (7): 1520-1525.**

“A systematic review and meta-analysis of acupuncture in IVF” **T.El-Toukhy**, S.Sunkara, M.Khairi, R.Dyer, Y.Khalaf, A.Coomarasamy. ***BJOG International* 2008; 115 (10): 1203-1213.**

“Treatment of unexplained infertility” **T.El-Toukhy**, Y.Khalaf. ***BMJ* 2008 Aug7; 337: a772.**

“Reduction of the multiple pregnancy rate in a preimplantation genetic diagnosis programme after introduction of single blastocyst transfer and cryopreservation of blastocysts biopsied on day 3” **T.El-Toukhy**, A.Kamal, E.Wharf, J.Grace, V.Bolton, Y.Khalaf, P.Braude. ***Human Reproduction* 2009; 24(10): 2642-2648.**

“Preimplantation genetic diagnosis for the prevention of sickle cell disease: current trends and barriers to uptake in a London teaching hospital”. A.Oyewo, J.Salubi-UDU, Y.Khalaf, P.Braude, P.Renwick, A.Lashwood, **T.El-Toukhy**, E.Oteng-Ntim. ***Human Fertility* 2009; 12(3): 153-159.**

“Treatment with adalimumab (Humira) and intravenous immunoglobulin improves pregnancy rates in women undergoing IVF” E.Winger, J.Reed, S.Ashoush, S.Ahuja, **T.El-Toukhy**, M.Taranissi. ***American Journal of Reproductive Immunology* 2009; 61(2):113-120.**

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2) “Unexplained subfertility: a pragmatic approach” **T.El-Toukhy**. *Journal of Obstetrics and Gynaecology* **2002; 22(3): 239-242**.

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4) “Male infertility and ICSI” **T.El-Toukhy** and P.Braude. *Current Obstetrics and Gynaecology* **2002; 12(5): 276-285**.

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- 7) “Successful embryo transfer: clean, gentle and measured” **T.El-Toukhy**, M.Taranissi. *Middle East Fertility Society Journal* **2004; 9 (3): 212-214.**
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- 9) “IVF Results: optimise not maximize” **T.El-Toukhy**, Y.Khalaf, P.Braude. *American Journal of Obstetrics and Gynecology* **2006; 194(2): 322-331.**
- 10) “Towards better quality research in recurrent implantation failure: standardization of its definition should be the first step” **T.El-Toukhy**, M.Taranissi *Reproductive Biomedicine Online* **2006; 12(3): 383-385.**
- 11) “Which is more counterproductive: a brief delay or “start anyway”? **T.El-Toukhy**, M.Taranissi. *Human Reproduction* **2006; 21(9): 2456-2457.**
- 12) “Management of unexplained infertility: the journey from uncertainty to maternity” **T.El-Toukhy**. *Capital Doctors* **2007; 60: 12-15.**
- 13) “Single embryo transfer in preimplantation genetic diagnosis cycles for women less than 36 years does not reduce delivery rate” Y.Khalaf, **T.El-Toukhy**. *Human Reproduction* **2007; 22(9): 2575-2576.**
- 14) “Impact of acupuncture on ART outcome” **T.El-Toukhy**, Y.Khalaf. *Current Opinion in Obstetrics and Gynaecology* **2009; 21(3): 240-246.**
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- 16) “Preimplantation genetic diagnosis for haematologic conditions” **T.El-Toukhy**, H.Bickerstaff, S.Meller. *Current Opinion in Paediatrics* **2010; 22(1): 28-34.**
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- 20) “Too late or too many – dilemmas facing the modern woman seeking help with fertility” Braude P, **El-Toukhy T**. In: *Birth rites and rights*. Editors: Ebtehaj F, Herring J, Johnson MH, Richards M. Hart Publishing, UK 2011. pp255-270.
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- 22) “The patient with cystic fibrosis” **El-Toukhy T**. In: *Assisted reproduction Techniques. Challenges and Management Options*. Editors: Sharif K, Coomarasamy A. Wiley-Blackwell, UK, 2012. pp 21-24.

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- 24) “Response: the overlooked endometrial injury underlying hysteroscopy procedures.” El-Toukhy T, Pundir J. *Reprod Biomed Online*. 2014; 29(1): 141.**
- 25) “Response: hysteroscopy prior to a first IVF treatment cycle: the need for well-performed RCT.” El-Toukhy T, Pundir J. *Reprod Biomed Online*. 2014; 29(1): 143.**
- 26) “Training and Accreditation in PGD” Flinter F, Mackie Ogilvie C, Bolton V, Lashwood A, El-Toukhy T. In: *Preimplantation Genetic Diagnosis in Clinical Practice*. Editors: T El-Toukhy and P Braude. Springer-Verlag, London 2014. pp111-120.**
- 27) “PGD facts and figures”. El-Toukhy T. In: *Preimplantation Genetic Diagnosis in Clinical Practice*. Editors: T El-Toukhy and P Braude. Springer-Verlag, London 2014. pp133-140.**
- 28) “New developments in PGD” Jones A, Renwick P, Lashwood A, El-Toukhy T. In: *Preimplantation Genetic Diagnosis in Clinical Practice*. Editors: T El-Toukhy and P Braude. Springer-Verlag, London 2014. pp197-210.**
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“Preimplantation Genetic Diagnosis in Clinical Practice” T El-Toukhy and P Braude, Editors. Springer-Verlag, London, 2014.

“Response: the overlooked endometrial injury underlying hysteroscopy procedures.” El-Toukhy T, Pundir J. *Reprod Biomed Online*. 2014; 29(1): 141.

“Response: hysteroscopy prior to a first IVF treatment cycle: the need for well-performed RCT.” El-Toukhy T, Pundir J. *Reprod Biomed Online*. 2014; 29(1): 143.

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“PGD facts and figures”. El-Toukhy T. In: *Preimplantation Genetic Diagnosis in Clinical Practice*. Editors: T El-Toukhy and P Braude. Springer-Verlag, London 2014. pp133-140.

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“Macronutrient intake, fertility and pregnancy outcome” El-Toukhy T, Osman A. In: *Nutrition, Fertility and Human Reproductive Function*. Editors: Tremellen K, Pearce K. CRC Press, New York 2014. pp 51-68.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

“The predictive value of mean sac diameter, fetal heart rate evaluation and serum B-HCG and CA-125 levels in the prognosis of first trimester threatened abortion” This was a two year project accepted for MD Degree in Obstetrics and Gynaecology at Cairo University.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 7

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Marijan Erceg, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Croatian Institute of Public Health

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Epidemiological research methods

BIOGRAPHY

Graduated in 1987 on the Faculty of Medicine of the University of Zagreb and gained the title of Doctor of Medicine. In 1994 he completed his postgraduate studies in Health Information Systems and defended his master's thesis entitled "Model of information system for continuous epidemiological research based on the method of small area analysis". In 1996 he placed a specialist exam in epidemiology with a postgraduate study "Epidemiology". In 2012 he defended his dissertation titled "Five-year cumulative incidence of arterial hypertension in cohort of subjects with initially normal arterial pressure or prehypertension" at the Faculty of Medicine, University of Osijek, mentored by prof.dr.sc. Silvije Vuletić. From 1989 to 1993 he worked as a general practitioner and head of the Information Center of the Community Health Centre in Split. Specialization in epidemiology started at the Public Health Institute of Split-Dalmatia County in 1993 and passed a specialist examination in 1996. From 1996 to 2002 he worked as epidemiologists at the County Institute of Public Health of the Split-Dalmatia County. Since 2002 he has been working at the Croatian Institute for Public Health. From 2002-2004 he was the Director of the Croatian Institute for Public Health. From 2005 to 2012 he worked as a head of department at the Department of Public Health. From 2013 to 2017 he has been working as head of the Epidemiology Department. Since 2018, he has been working as head of the Department of Mortality Statistics at the Department of Epidemiology and Prevention of Chronic Diseases. Since 2016 he has been a scientific associate in the scientific field of biomedicine and healthcare - field of public health and health care.

He participated in the Croatia Health Survey 2003 and 2008 projects and the twining project "Improving the Quality of the National Cancer Screening Programs" (CRO SCREENING) during 2016-2017.

As an external associate he participated in the teaching of the subjects of Epidemiology at the Faculty of Medicine, University of Zagreb where he proved to be a responsible and successful teacher.

In performing the work of the epidemiologist at the Croatian Institute for Public Health, he has proved himself a conscientious and reliable collaborator in projects that require cooperation with domestic and foreign stakeholders.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: research associate– 30. 3. 2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Šitum M, Đogaš Z, Vujnović Z, Erceg M, Terzić J, Marušić J, Mirić D. Increased Incidence of Colorectal Cancer in the Split – Dalmatia County: Epidemiological Study. Croat Med J 2001;42:181-187.
2. Ivanišević M, Erceg M, Smoljanović A, Trošić Ž. The Incidence and Seasonal Variations of Acute Primary Angle-Closure Glaucoma. Coll.Antropol. 26(2002)1:41-45.
3. Ledina D, Bradaric N, Borcic B, Turkovic B, Ivic I, Bakic J, Erceg M, Tvrtkovic N. Dinara - new natural focus of hemorrhagic fever with renal syndrome in Croatia. Croat Med J. 2002 Oct;43(5):576-80.
4. Babic-Erceg A, Klismanic Z, Erceg M, Tandara D, Smoljanovic M. An outbreak of Yersinia enterocolitica O:3 infections on an oil tanker. Eur J Epidemiol. 2003;18(12):1159-61.

5. Cvitanovic S, Znaor L, Konsa T, Ivancevic Z, Peric I, Erceg M, Vujovic M, Vukovic J, Beg-Zec Z. Malignant and non-malignant asbestos-related pleural and lung disease: 10-year follow-up study. *Croat Med J*. 2003 Oct;44(5):618-25.
6. Babic-Erceg A, Barisic Z, Erceg M, Babic A, Borzic E, Zoranic V, Kaliterna V. Dermato-phytoses in Split and Dalmatia, Croatia, 1996-2002. *Mycoses*. 2004 Aug;47(7):297-299.
7. Erceg M, Kujundžić-Tiljak M, Babić-Erceg A, Coric T, Lang S. Physicians' strike and general mortality: Croatia's experience of 2003. *Coll Antropol*. 2007 Sep;31(3):891-5.
8. Uhernik AI, Erceg M, Milanović SM. Association of BMI and nutritional habits with hypertension in the adult population of Croatia. *Public Health Nutr*. 2009. 12(1):97-104.
9. Erceg M, Kern J, Babić-Erceg A, Ivcević-Uhernik A, Vuletić S. Regional differences in the prevalence of arterial hypertension in Croatia. *Coll Antropol*. 2009 Apr;33 Suppl 1:19-23.
10. Uhernik AI, Erceg M, Mihel S. Risk of angina pectoris, non-fatal myocardial infarction and non-fatal stroke among hypertensives: the CroHort study. *Coll Antropol*. 2012 Jan;36 Suppl 1:135-8.
11. Uhernik AI, Erceg M, Milanović SM. Association of hypertension with long-term overweight status and weight gain: the CroHort study. *Coll Antropol*. 2012 Jan;36 Suppl 1:131-4.
12. Erceg M, Ivcević-Uhernik A, Kern J, Vuletić S. Is there any association between blood pressure and education level? The CroHort study. *Coll Antropol*. 2012 Jan;36 Suppl 1:125-9.
13. Erceg M, Ivcević-Uhernik A, Kern J, Vuletić S. Five-year cumulative incidence of hypertension in adult Croatian population: the CroHort study. *Coll Antropol*. 2012 Jan;36 Suppl 1:83-7.
14. Uhernik AI, Vuletić S, Kern J, Decković-Vukres V, Mihel S, Erceg M, Pristas I. The Croatian Adult Health Cohort Study (CroHort) --background, methodology & perspectives. *Coll Antropol*. 2012 Jan;36 Suppl 1:3-7.
15. Stipčić A, Ćorić T, Erceg M, Mihanović F, Kolčić I, Polašek O. Socioeconomic inequalities show remarkably poor association with health and disease in Southern Croatia. *Int J Public Health*. 2015 Mar 3.
16. Padjen I, Cerovec M, Erceg M, Mayer M, Stevanovic R, Anić B. Disease characteristics and causes of early and late death in a group of Croatian patients with systemic lupus erythematosus deceased over a 10-year period. *CMJ* 2018; 59: 3-12.

b) Radovi objavljeni u časopisima koji su zastupljeni u Science Citation Indexu – Expanded Ili SSCI

1. Pem-Novosel I, Vilibic-Cavlek T, Gjenero-Margan I, Kaic B, Babic-Erceg A, Merdic E, Medic A, Ljubic M, Pahor D, Erceg M. Dengue virus infection in Croatia: seroprevalence and entomological study. *New Microbiol*. 2015 Jan;38(1):97-100.
2. Babic-Erceg A, Vilibic-Cavlek T, Erceg M, Mlinaric-Missoni E, Begovac J. Prevalence of *Pneumocystis jirovecii* pneumonia (2010-2013): the first Croatian report. *Acta Microbiol Immunol Hung*. 2014 Jun;61(2):181-8

c) Radovi objavljeni u drugim katalogiziranim publikacijama ili sažeci u indeksiranim časopisima

1. Ivanisevic M, Erceg M, Eterovic D. Rhegmatogenous retinal detachment and seasonal variations. *Acta Med Croatica*. 2002;56(2):49-51.

2. Erceg M, Stevanović R, Babić-Erceg A. Nacionalni javnozdravstveni informacijski sustav. *Acta Med Croatica*, 59 (2005) 245-249
3. Erceg M, Hrabak-Zerjavić V, Ivčević Uhernik A. Regional characteristics of arterial hypertension in adult population of Croatia. *Acta Med Croatica*. 2007 Jun;61(3):293-8
4. Kern J, Erceg M, Poljicanin T. [Efficacy of public health surveillance systems]. *Acta Med Croatica*. 2010 Dec;64(5):415-23. Croatian.
5. Kern J, Bergman Marković B, Pale P, Heim I, Trnka B, Rafaj G, Lončarek K, Fišter K, Mađarić M, Deželić Đ et al. Smjernice za unaprjeđenje elektroničkog zdravstvenog zapisa // *Acta medica Croatica*, 71 (2017), 2; 79-93
6. Smoljanović A, Erceg M, Mayer V. Prirodno kretanje stanovništva Republike Hrvatske. *Paediatrica Croatica*. 1996; 40 (Suppl. 2):1-8.
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8. Glavina-Dundov M, Kuzmić-Prusac I, Smoljanović A, Erceg M, Sutton J. Barle M, Roje D. Morfološki nalaz posteljice i novorođenčadi u majki – ovisnica o heroinu. *Gynaecol Perinatol*. 2000;Vol 9, suppl. 2: 78
9. Decković-Vukres V, Corić T, Tomić B, Erceg M, Mihel S, Ivčević Uhernik A, Pristas I. [Incidence and prevalence of asbestos-related diseases in Croatia]. *Arh Hig Rada Toksikol*. 2009 Nov;60 Suppl:23-30. na hrvatskom
10. Padjen I, Erceg M, Cerovec M, Mayer M, Stevanović R, Anić B. Causes of Early and Late Death of Patients with Systemic Lupus Erythematosus over A 10-Year Period. *Annals of the rheumatic diseases*, 75 (2016), suppl.2; 1063-1064
11. Padjen I, Erceg M, Cerovec M, Mayer M, Stevanović R, Anić B. Damage accrual in a group of systemic lupus erythematosus (SLE) patients deceased during a 10-year period. *Clinical and experimental rheumatology*, 33 (2015), 3; S42-S42

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Erceg M, Ivčević-Uhernik A, Kern J, Vuletić S. Is there any association between blood pressure and education level? The CroHort study. *Coll Antropol*. 2012 Jan;36 Suppl 1:125-9.
2. Erceg M, Ivčević-Uhernik A, Kern J, Vuletić S. Five-year cumulative incidence of hypertension in adult Croatian population: the CroHort study. *Coll Antropol*. 2012 Jan;36 Suppl 1:83-7.
3. Uhernik AI, Vuletić S, Kern J, Decković-Vukres V, Mihel S, Erceg M, Pristas I. The Croatian Adult Health Cohort Study (CroHort) --background, methodology & perspectives. *Coll Antropol*. 2012 Jan;36 Suppl 1:3-7.
4. Stipčić A, Čorić T, Erceg M, Mihanović F, Kolčić I, Polašek O. Socioeconomic inequalities show remarkably poor association with health and disease in Southern Croatia. *Int J Public Health*. 2015 Mar 3.
5. Padjen I, Cerovec M, Erceg M, Mayer M, Stevanović R, Anić B. Disease characteristics and causes of early and late death in a group of Croatian patients with systemic lupus erythematosus deceased over a 10-year period. *CMJ* 2018; 59: 3-12.

b) Radovi objavljeni u časopisima koji su zastupljeni u Science Citation Indexu – Expanded Ili SSCI



6. Pem-Novosel I, Vilibic-Cavlek T, Gjenero-Margan I, Kaic B, Babic-Erceg A, Merdic E, Medic A, Ljubic M, Pahor D, Erceg M. Dengue virus infection in Croatia: seroprevalence and entomological study. New Microbiol. 2015 Jan;38(1):97-100.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

The Croatian Adult Health Survey (CAHS) – 2003.

The Croatian Adult Health Cohort Study (CroHort) – 2008.

“Improvement of quality of the National Cancer Screening Programmes implementation” (CRO SCREENING); Twinning Number: HR 14 IB SO 01; Contract number: TF/HR/P3-M2-O4-0101 2016-2017.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Viktorija Erdeljić Turk, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Characteristics of clinical medical research

BIOGRAPHY

Viktorija Erdeljić Turk, MD, PhD, qualified in medicine in 1999. During and following her medical training she participated in research programs conducted in cooperation with United Nations High Committee for Refugees (Health Surveillance Program), United Nations Children's Fund (Nutrition and Health Status Improvement in War Affected Areas) and World Health Organization (Development of Information and Rehabilitation System for Crisis Situations; Land Mines: Protection, Epidemiology, Financial Analysis and Raising Awareness). Following graduation at Medical School Zagreb she worked for 3 years for a Contract Research Organization. After completing her training in clinical pharmacology she continued her work at the University Hospital Zagreb, further developing protocols for drug allergy testing and consultations following pregnancy drug exposure, in addition to pursuing her other professional interests in biostatistics and rational pharmacotherapy. She is also a consultant supervising antimicrobial prescribing at the hospital level. Dr Erdeljić Turk is strongly clinically oriented; she is seeing patients on the floor at the Division of Clinical Pharmacology, in the outpatient clinic as well as in the emergency room. She is a member of the Drug and Therapeutics Committee at the University Hospital Zagreb. She is instructor in Advanced Life Support of the Croatian Resuscitation Council. In addition, Dr Erdeljić Turk is involved in the training of medical students at the graduate and postgraduate level. She is a member of the National Committee for Medicines and Medicinal Products (Ministry of Health). Her other interests and hobbies include hiking, mountain climbing, mountain biking. She is a trainee of the Croatian Mountain Guides Association.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Henigsberg N, Savić A, Radoš M, Šarac H, Radoš M, Ozretić D, Bajs Janović M, Erdeljić Turk V, Šečić A, Kalember P, Hrabač P. Choline and N-acetyl aspartate levels in the dorsolateral prefrontal cortex at the beginning of the recovery phase as markers of increased risk for depressive episode recurrence under different duration of maintenance therapy and after it. *Croat Med J.* 2018;59:244-52.
2. Makar-Aušperger K, Krželj K, Lovrić Benčić M, Radačić Aumiler M, Erdeljić Turk V, Božina N. Warfarin Dosing According to the Genotype-guided Algorithm is Most Beneficial in Patients With Atrial Fibrillation: A Randomized Parallel Group Trial. *Ther Drug Monit.* 2018 Jun;40(3):362-368. doi: 10.1097/FTD.0000000000000501.
3. Bielen L, Likić R, Erdeljić V, Mareković I, Firis N, Grgić-Medić M, Godan A, Tomić I, Hunjak B, Markotić A, Bejuk D, Tičić V, Balzar S, Bedenić B. Activity of fosfomycin against nosocomial multiresistant bacterial pathogens from Croatia: a multicentric study. *Croat Med J.* 2018 Apr 30;59(2):56-64.
4. Juricic Nahal D, Cegec I, Erdeljic Turk V, Makar Ausperger K, Kraljickovic I, Simic I. Hypersensitivity reactions to LMWHs: different patterns of cross-reactivity in three patients. Case series and a literature review. *Can J Physiol Pharmacol.* 2018 Apr;96(4):428-432

5. Henigsberg N, Šarac H, Radoš M, Radoš M, Ozretić D, Foro T, Erdeljić Turk V, Hrabáč P, Bajš Janović M, Rak B, Kalember P. Lower Choline-Containing Metabolites/Creatine (Cr) Rise and Failure to Sustain NAA/Cr Levels in the Dorsolateral Prefrontal Cortex Are Associated with Depressive Episode Recurrence under Maintenance Therapy: A Proton Magnetic Resonance Spectroscopy Retrospective Cohort Study. *Front Psychiatry*. 2017 Dec 13;8:277. doi: 10.3389/fpsy.2017.00277. eCollection 2017.
6. Viktorija Erdeljić Turk. Farmakoterapija u trudnoći i dojenju. *Paediatr Croat* 2017;61(Supl 1):193-198.
7. Turk VE, Šimić I, Makar-Aušperger K, Radačić-Aumiler M. Amoxicillin-induced aseptic meningitis: case report and review of published cases. *Int J Clin Pharmacol Ther*. 2016 Sep;54(9):716-8. doi: 10.5414/CP202645.
8. Radacic-Aumiler M, Kraljickovic I, Edeljic-Turk V, Makar-Ausperger K, Likic R, Simic I. No Adverse Effects After Radioiodine Treatment at 3 Weeks of Pregnancy. *Clin Nucl Med*. 2016 Dec;41(12):964-965.
9. Viktorija Erdeljić Turk: Pharmacogenetics of cytotoxic therapy in colorectal cancer. *Rad* 522. *Medical Sciences*, 2015;41: 183-19.
10. Marusic S, Bacic-Vrca V, Obreli Neto PR, Franic M, Erdeljic V, Gojo-Tomic N. Actual drug-drug interactions in elderly patients discharged from internal medicine clinic: a prospective observational study. *Eur J Clin Pharmacol*. 2013 Sep;69(9):1717-24. doi: 10.1007/s00228-013-1531-7. Epub 2013 Jun 6. PubMed PMID: 23739998.
11. Šarac H, Markeljević J, Erdeljić V, Josipović-Jelić Z, Hajnšek S, Klapan T, Batinica M, Baršić I, Sertic J, Dobrila Dintinjana R. Signal hyperintensities on brain magnetic resonance imaging in patients with primary Sjögren syndrome and frequent episodic tension-type headache: relation to platelet serotonin level and disease activity. *J Rheumatol*. 2013 Aug;40(8):1360-6. doi: 10.3899/jrheum.121132. Epub 2013 Jun 1. PubMed PMID: 23729799.
12. Marusic S, Gojo-Tomic N, Erdeljic V, Bacic-Vrca V, Franic M, Kirin M, Bozikov V. The effect of pharmacotherapeutic counseling on readmissions and emergency department visits. *Int J Clin Pharm*. 2013 Feb;35(1):37-44. doi: 10.1007/s11096-012-9700-9. Epub 2012 Sep 25. PubMed PMID: 23007693.
13. Sarac H, Markeljevic J, Mokrovic G, Erdeljic V, Bozina N, Cicin-Sain L. Platelet serotonin in primary Sjögren's syndrome: level and relation with disease activity. *J Neuroimmunol*. 2012 Oct 15;251(1-2):87-9. doi: 10.1016/j.jneuroim.2012.06.011. Epub 2012 Jul 20. PubMed PMID: 22819441.
14. Erdeljić V, Francetić I, Makar-Ausperger K, Likić R, Sarinić VM. Pain relief in medical patients: does clinical judgment and prescribing knowledge suffice? *Coll Antropol*. 2011 Jun;35(2):363-8. PubMed PMID: 21755704. 6: Ivkić G, Erdeljić V. Could a neurological disease be a part of Mozart's pathography? *Coll Antropol*. 2011 Jan;35 Suppl 1:169-73. PubMed PMID: 21648330.
15. Erdeljić V, Francetić I, Bošnjak Z, Budimir A, Kalenić S, Bielen L, Makar-Aušperger K, Likić R. Distributed lags time series analysis versus linear correlation analysis Pearson's r) in identifying the relationship between antipseudomonal antibiotic consumption and the susceptibility of *Pseudomonas aeruginosa* isolates in a single Intensive Care Unit of a tertiary hospital. *Int J Antimicrob Agents*. 2011 May;37(5):467-71. doi: 10.1016/j.ijantimicag.2010.11.030. Epub 2011 Jan 31. PubMed PMID: 21277747.
16. Erdeljic V, Francetic I, Vlahovic-Palcevski V, Radošević N, Makar-Ausperger K, Likic R. Avoiding concomitant prescription of drugs with a potential for interaction: mission impossible? *Int J Clin Pharmacol Ther*. 2010Dec;48(12):821-9. PubMed PMID: 21084038.

17. Bacic-Vrca V, Marusic S, Erdeljic V, Falamic S, Gojo-Tomic N, Rahelic D. The incidence of potential drug-drug interactions in elderly patients with arterial hypertension. *Pharm World Sci.* 2010 Dec;32(6):815-21. doi: 10.1007/s11096-010-9442-5. Epub 2010 Oct 5. PubMed PMID: 20922479.
18. Erdeljić V, Francetić I, Makar-Ausperger K, Likić R, Radacić-Aumiler M. Clinical pharmacology consultation: a better answer to safety issues of drug therapy during pregnancy? *Eur J Clin Pharmacol.* 2010 Oct;66(10):1037-46. doi:10.1007/s00228-010-0867-5. Epub 2010 Jul 20. PubMed PMID: 20644922.
19. Erdeljic V, Francetic I, Likic R, Bakran I, Makar-Ausperger K, Simic P. Is referring patients with a positive history of allergic drug reactions or atopy for allergy testing to local anesthetics justified? *Methods Find Exp Clin Pharmacol.* 2009 Apr;31(3):177-82. doi: 10.1358/mf.2009.31.3.1354126. PubMed PMID:19536361.
20. Bekić M, Davila S, Hrskanović M, Bekić M, Seiwert S, Erdeljić V, Capak D, Butković V. Application of a novel bone osteotomy plate leads to reduction in heat-induced bone tissue necrosis in sheep. *Coll Antropol.* 2008. Dec;32(4):1229-37. PubMed PMID: 19149233.
21. Herceg M, Jukić V, Vidović D, Erdeljić V, Celić I, Kozumplik O, Bagarić D, Silobrcić Radić M. Two-year rehospitalization rates of patients with newly diagnosed or chronic schizophrenia on atypical or typical antipsychotic drugs: retrospective cohort study. *Croat Med J.* 2008 Apr;49(2):215-23. PubMed PMID:18461677; PubMed Central PMCID: PMC2359893.
22. Francetić I, Kalenić S, Huić M, Mercep I, Makar-Ausperger K, Likić R, Erdeljić V, Tripković V, Simić P. Impact of aminoglycoside cycling in six tertiary intensive care units: prospective longitudinal interventional study. *Croat Med J.* 2008 Apr;49(2):207-14. PubMed PMID: 18461676; PubMed Central PMCID: PMC2359892.
23. Likić R, Francetić I, Bilusić M, Erdeljić V, Makar-Ausperger K, Junacko C, Simić P. Antibiotic use optimization program in the largest Croatian university hospital--benefits of restrictions on unlimited antibiotic use. *Coll Antropol.* 2007 Mar;31(1):241-6. PubMed PMID: 17598408.
24. Francetic I, Bilusic M, Macolic-Sarinic V, Huic M, Mercep I, Makar-Ausperger K, Erdeljic V, Mimica S, Baotic I, Simic P. Inadequate use of preventive strategies in patients receiving NSAIDs. *Clin Drug Investig.* 2005;25(4):265-70. PubMed PMID: 17523777.
25. Erdeljic V, Francetic I, Macolic Sarinic V, Bilusic M, Makar Ausperger K, Huic M, Mercep I. Use of gastroprotective agents in recommended doses in hospitalized patients receiving NSAIDs: a drug utilization study. *Pharm World Sci.* 2006 Oct;28(5):318-25. Epub 2006 Nov 17. PubMed PMID: 17111239.
26. Babić Z, Deskin M, Muacević-Katanec D, Erdeljić V, Misigoj-Duraković M, Metelko Z. Estimation of physical activity by different questionnaires in overweight subjects and patients with Type 2 diabetes mellitus: relationship with anthropometric and metabolic variables. *Diabetes Nutr Metab.* 2004 Oct;17(5):280-9. PubMed PMID: 16295050.
27. Erdeljić V, Francetić I, Macolić Sarinić V, Bilusić M, Huić M, Merćep I, Makar-Ausperger K. [Evaluation of justification for antibiotic use at the Internal Medicine Clinic of the Clinical Hospital in Zagreb]. *Acta Med Croatica.* 2004;58(4):293-9. Croatian. PubMed PMID: 15700685.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Henigsberg N, Savić A, Radoš M, Šarac H, Radoš M, Ozretić D, Bajs Janović M, Erdeljić Turk V, Šečić A, Kalember P, Hrabac P. Choline and N-acetyl aspartate levels in the dorsolateral prefrontal cortex at the

beginning of the recovery phase as markers of increased risk for depressive episode recurrence under different duration of maintenance therapy and after it. *Croat Med J.* 2018;59:244-52.

2. Makar-Aušperger K, Krželj K, Lovrić Benčić M, Radačić Aumiler M, Erdeljić Turk V, Božina N. Warfarin Dosing According to the Genotype-guided Algorithm is Most Beneficial in Patients With Atrial Fibrillation: A Randomized Parallel Group Trial. *Ther Drug Monit.* 2018 Jun;40(3):362-368. doi: 10.1097/FTD.0000000000000501.
3. Bielen L, Likić R, Erdeljić V, Mareković I, Firis N, Grgić-Medić M, Godan A, Tomić I, Hunjak B, Markotić A, Bejuk D, Tičić V, Balzar S, Bedenić B. Activity of fosfomycin against nosocomial multiresistant bacterial pathogens from Croatia: a multicentric study. *Croat Med J.* 2018 Apr 30;59(2):56-64.
4. Juricic Nahal D, Cegec I, Erdeljic Turk V, Makar Ausperger K, Kraljickovic I, Simic I. Hypersensitivity reactions to LMWHs: different patterns of cross-reactivity in three patients. Case series and a literature review. *Can J Physiol Pharmacol.* 2018 Apr;96(4):428-432
5. Henigsberg N, Šarac H, Radoš M, Radoš M, Ozretić D, Foro T, Erdeljić Turk V, Hrabac P, Bajs Janović M, Rak B, Kalember P. Lower Choline-Containing Metabolites/Creatine (Cr) Rise and Failure to Sustain NAA/Cr Levels in the Dorsolateral Prefrontal Cortex Are Associated with Depressive Episode Recurrence under Maintenance Therapy: A Proton Magnetic Resonance Spectroscopy Retrospective Cohort Study. *Front Psychiatry.* 2017 Dec 13;8:277. doi: 10.3389/fpsy.2017.00277. eCollection 2017.
6. Viktorija Erdeljić Turk. Farmakoterapija u trudnoći i dojenju. *Paediatr Croat* 2017;61(Supl 1):193-198.
7. Turk VE, Šimić I, Makar-Aušperger K, Radačić-Aumiler M. Amoxicillin-induced aseptic meningitis: case report and review of published cases. *Int J Clin Pharmacol Ther.* 2016 Sep;54(9):716-8. doi: 10.5414/CP202645.
8. Radacic-Aumiler M, Kraljickovic I, Edeljic-Turk V, Makar-Ausperger K, Likic R, Simic I. No Adverse Effects After Radioiodine Treatment at 3 Weeks of Pregnancy. *Clin Nucl Med.* 2016 Dec;41(12):964-965.
9. Viktorija Erdeljić Turk: Pharmacogenetics of cytotoxic therapy in colorectal cancer. *Rad* 522. *Medical Sciences*, 2015;41: 183-19.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Multimodal approach to treatment and follow up of patients with depression up by MR imaging

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- Multimodal approach to treatment and follow up of patients with depression up by MR imaging
Croatian Science Foundation, Postdoctoral researcher
- Antibiotic Consumption and Bacterial Resistance
Research project supported by the Ministry of Science and Education
- Mental health in the community
Pilot project of the World Health Organization, in cooperation with the European Council and Office for Public Health of the City of Zagreb.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Igor Erjavec, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Bone morphogenetic proteins in regeneration of bone and cartilage; Proteomics in biomedical research

BIOGRAPHY

Igor Erjavec was born on 21.04.1982 in Zagreb, Croatia. He graduated molecular biology at Faculty of Science, University of Zagreb in 2007. He enrolled in „Biomedicine and Health“ PhD programme in 2009, while obtaining his PhD in 2014 with a dissertation „Effect of Serotoninemia on Bone Remodelling Metabolism“. He published 16 scientific papers with an *h-index* of 8 with 163 citations according to Scopus and 161 citations according to Web of Science database. In 2012 he was awarded with the „New investigator“ award by European Calcified Tissue Society (ECTS). In 2017 he was a postdoctoral fellow for one year at Center for excellence in metabolomics and bioanalysis (Centro de excelencia en Metabolomica y Bioanalysis; CEMBio), Sveučilište CEU San Pablo, Madrid. In 2019 he was promoted to research assistant at the Department of Anatomy.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

15.1.2019; research associate

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Bone morphogenetic protein (BMP)1-3 enhances bone repair. Grgurevic L, Macek B, Mercep M, Jelic M, Smoljanovic T, **Erjavec I**, Dumic-Cule I, Prgommet S, Durdevic D, Vnuk D, Lipar M, Stejskal M, Kufner V, Brkljacic J, Maticic D, Vukicevic S. Biochem Biophys Res Commun. 2011 Apr 29;408(1):25-31.
- Computed microtomography visualization and quantification of mouse ischemic brain lesion by nonionic radio contrast agents. Dobrivojević M, Bohaček I, **Erjavec I**, Gorup D, Gajović S. Croat Med J. 2013 Feb;54(1):3-11.
- The clinical use of bone morphogenetic proteins revisited: a novel biocompatible carrier device OSTEOGROW for bone healing. Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, Pauk M, **Erjavec I**, Francetic I, Dumic-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikić-Topic S, Peric M, Pecina M, Grgurevic L. Int Orthop. 2014 Mar;38(3):635-47.
- Constitutively Elevated Blood Serotonin Is Associated with Bone Loss and Type 2 Diabetes in Rats. **Erjavec I**, Bordukalo-Niksic T, Brkljacic J, Grcevic D, Mokrovic G, Kesic M, Rogic D, Zavadovski W, Paralkar VM, Grgurevic L, Trkulja V, Cicin-Sain L, Vukicevic S. PLoS One. 2016 Feb 23;11(2).

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- Exogenous heparin binds and inhibits bone morphogenetic protein 6 biological activity. Brkljacic J, Pauk M, **Erjavec I**, Cipic A, Grgurevic L, Zadro R, Inman GJ, Vukicevic S. Int Orthop. 2013 Mar;37(3):529-41.
- The clinical use of bone morphogenetic proteins revisited: a novel biocompatible carrier device OSTEOGROW for bone healing. Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, Pauk M, **Erjavec I**, Francetic I, Dumic-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikić-Topic S, Peric M, Pecina M, Grgurevic L. Int Orthop. 2014 Mar;38(3):635-47.

- Molecular background and physiological consequences of altered peripheral serotonin homeostasis in adult rats perinatally treated with tranylcypromine. Blazevec S, **Erjavec I**, Brizic M, Vukicevic S, Hranilovic D. J Physiol Pharmacol. 2015 Aug;66(4):529-37.
- Constitutively Elevated Blood Serotonin Is Associated with Bone Loss and Type 2 Diabetes in Rats. **Erjavec I**, Bordukalo-Niksic T, Brkljacic J, Grcevic D, Mokrovic G, Kesic M, Rogic D, Zavadski W, Paralkar VM, Grgurevic L, Trkulja V, Cicin-Sain L, Vukicevic S. PLoS One. 2016 Feb 23;11(2).
- Urodilatin reverses the detrimental influence of bradykinin in acute ischemic stroke. Dobrivojević M, Špiranec K, Gorup D, **Erjavec I**, Habek N, Radmilović M, Unfirer S, Čosić A, Drenjančević I, Gajović S, Sindić A. Exp Neurol. 2016 Oct;284(Pt A):1-10.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 2010.-2012. „Bone morphogenetic protein-1 isoforms in bone regeneration“ UKF project, project leader academician Slobodan Vukičević
- 2011.-2014. „Novel targeted therapy for treating osteoporosis: BONE6-BIS“, Croatian Science Foundation, project leader academician Slobodan Vukičević
- 2012.-2016. „OSTEOGROW“ - Novel Bone Morphogenetic Protein 6 Biocompatible Carrier Device for Bone Regeneration, FP7 HEALTH, project coordinator academician Slobodan Vukičević
- 2018.-2022. „OSTEOproSPINE - Novel Bone Regeneration Drug “Osteogrow”: Therapeutic Solution for Lumbar Back Pain“, HORIZON2020, project coordinator academician Slobodan Vukičević

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 2010.-2012. „Bone morphogenetic protein-1 isoforms in bone regeneration“ UKF project, project leader academician Slobodan Vukičević
- 2011.-2014. „Novel targeted therapy for treating osteoporosis: BONE6-BIS“, Croatian Science Foundation, project leader academician Slobodan Vukičević
- 2012.-2016. „OSTEOGROW“ - Novel Bone Morphogenetic Protein 6 Biocompatible Carrier Device for Bone Regeneration, FP7 HEALTH, project coordinator academician Slobodan Vukičević
- 2018.-2022. „OSTEOproSPINE - Novel Bone Regeneration Drug “Osteogrow”: Therapeutic Solution for Lumbar Back Pain“, HORIZON2020, project coordinator academician Slobodan Vukičević

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Dr.sc. Božidar Ferek-Petrić

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Medtronic Adriatic d.o.o. Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Electrophysiological methods in medical research, Structure, methodology and functioning of scientific work 2

BIOGRAPHY

Personal Data

Born May 30th 1955 in Zagreb. Father of the two daughters.

University degree

1974- 1979 University of Zagreb, Faculty of Electrical Engineering. MS electrical engineering

2005 University of Zagreb, Faculty of Electrical Engineering, PhD in technical science, electronic engineering

EMPLOYMENT

1980 – 1997 Clinic of Cardiac Surgery, University Hospital Rebro, clinical engineer

March 1997 – September 2013. Medtronic Adriatic d.o.o. Therapy Development Manager

Rujan 2013 - danas. Principal Medical Affairs Specialist, Medtronic Academia - Eastern Europe

AWARDS & CERTIFICATES

1985. god. State Award for Scientific Research Nikola Tesla.

2009. god. Certified Cardiac Device Specialist (CCDS) at the International Board of Heart Rhythm Examiners of the Heart Rhythm Society of America.

FOREIGN LANGUAGES English (active), German (active), Russian (passive)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

<http://bib.irb.hr/lista-radova?autor=124606>

<https://scholar.google.com/citations?user=MNnDojsAAAAJ&hl=en&oi=ao>

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Malčić, Ivan; Kniewald, Hrvoje; Buljević, Bruno; Ferek-Petrić, Božidar; Boban, Marko; Hrabak Paar, Maja; Težak, Stanko; Strozzi, Maja; Dilber, Daniel.

Medicinski aspekti // Prirođene srčane greške od dječje do odrasle dobi – smjernice za liječenje odraslih s prirođenim srčanim greškama (OPSG) / Malčić, Ivan ; Šmalcelj, Anton ; Anić, Darko ; Planinc, Danijel (ur.).

Zagreb : Medicinska naklada, 2017. Str. 23-111.



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018 g. Analiza strukture miokarda u zatajivanju srca fazno-kontrastnim oslikavanjem srca X-zrakama

2017. g. Liječenje uznapređovalog zatajivanja srca kombinacijom mehaničke potpore lijevoj klijetci i naprednih oblika elektrostimulacije

2016. g. Novija saznanja o mehanici srca u procjeni kliničkih ishoda bolesnika liječenih resinkronizacijom srca

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2018 g. Analiza strukture miokarda u zatajivanju srca fazno-kontrastnim oslikavanjem srca X-zrakama

2017. g. Liječenje uznapređovalog zatajivanja srca kombinacijom mehaničke potpore lijevoj klijetci i naprednih oblika elektrostimulacije

2016. g. Novija saznanja o mehanici srca u procjeni kliničkih ishoda bolesnika liječenih resinkronizacijom srca

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Igor Filipčić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Psychiatric Hospital "Sveti Ivan", Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Telemedicine; Clinical psychopharmacology

BIOGRAPHY

Specialist psychiatrist and subspecialist of biological psychiatry. I am the Head manager of the Psychiatric Hospital "Sveti Ivan" and head of the integrative psychiatry program "PIPS" of Psychiatric Hospital "Sveti Ivan". 2008 year I defended my doctoral dissertation "The Depth of Depression and the Impact of treating depression on the quality of life of patients with chronic somatic diseases" and received the Croatian psychiatric society award for best doctoral dissertation from the psychiatry.

From 2002 to 2008 I was an associate in the design, writing and implementation project "The program of reduction of stigma and discrimination of psychic patients". Continually I am improving my professional competence in the field of biological psychiatry – education for Transcranial magnetic stimulation at the Boston University Hospital in neurology and psychiatry Harvard Medical School, in 2016 I get the qualification for the use deep transcranial magnetic stimulation "Certificate of Brainsway deep TMS operator" and in association with Harvard TH Chan, School of Public Health and Institute for Healthcare improvement I completed "The International Leadership Development for Physicians Program". I am member and president number of organizational committees from psychiatric fields. Author and co-author in 8 books and 65 scientific papers (CC, SCI or SSCI). As a lecturer I participated in over 50 domestic and international conferences. I am an extraordinary professor at the Department of Psychiatry at the Department of Dental Medicine and Health at the University of Josip Juraj Strossmayer in Osijek - head of the Psychiatric Department. Also, I am head of the University undergraduate study for nursing in Čakovec and Pregrada the same Faculty of dental medicine and health at Josip Juraj Strossmayer University in Osijek, Croatia. Professor of high school of the Zagreb University Health Care Center - head of Department for Psychiatry. I am an extraordinary professor at the Department of Psychiatry and Psychological Medicine at the University of Zagreb Medical School. I have participated in several domestic and international projects, and I am an active member of the research team for clinical trials. I am Co-editor in the CURENT OPINION PSYCHIATRY magazine, as well, a member of the Editorial Board of the HPD Journal of Social Psychology and Journal of Alcoholism and Psychiatry Research. I am the President of the Croatian Society for Brain Neurostimulation at Croatian Medical Association.

I am a member of the Bureau of Biomedicine and Health Sciences of the Agency for Science and Higher Education. Also, I am a deputy member of the High Court of the Croatian Medical Chamber and member of the Ethics Committee of the Institute for Anthropology.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 05/28/2018

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Šimunović Filipčić I, Filipčić I, Glamuzina L, Devčić S, Bajić Ž, Braš M, Mihaljević Peleš A, Marčinko D, Sartorius N., : The effect of chronic physical illnesses on psychiatric hospital admission in patients with recurrent major depression. Psychiatry Res. 2019 Jan 2;272:602-608. doi: 10.1016/j.psychres.2018.12.178.
2. **Filipčić I**, Šimunović Filipčić I, Gajšak T, Milovac Ž, Sučić S, Ivezić E, Zečević Penić S, Orgulan I, Šebo D, Jeleč V, Bajić Ž.: Efficacy and safety of repetitive transcranial magnetic stimulation using an H1-coil or figure-8-coil in the treatment of unipolar major depressive disorder: A study protocol for a randomized controlled trial; Psychiatr Danub. 2018 Mar;30(1):41-46. doi: 10.24869/psyd.2018.41.

3. Bodor D., Ricijaš N, Zoričić Z, Dodig Hundrić D, **Filipčić I.**: Prevalence of Pathological Gambling among Alcohol Addicts in Outpatient Treatment in the City of Zagreb: a Cross-Sectional Study; *Psychiatr Danub.* 2018 Sep;30(3):348-355. doi: 10.24869/psyd.2018.348.
4. Ivana Todorčić Laidlaw, Ninoslav Mimica, Berislav Momčilović, Jasna Jurasović, Sandra Caratan, **Igor Filipčić**, Sandra Vuk Pisk, Žarko Bajić, Stipe Drmić: Trace elements concentrations association with schizophrenia symptoms; a cross-sectional study in Croatia; *Psychiatria Danubina*, 2018; Vol. 30, No. 2, pp 164-171
5. **Filipčić I**, Milovac Z, Sucic S, Gajsak T, Filipčić IS, Ivezić E, Aljinovic V, Orgulan I, Penic SZ, Bajic Z: Efficacy, Safety and Tolerability of Augmentative rTMS in Treatment of Major Depressive Disorder (MDD): A Prospective Cohort Study in Croatia; *Psychiatr Danub.* 2017 Mar; 29 (1):31-38.
6. Vuk Pisk S, **Filipčić I**, Bogović A, Milovac Ž, Todorčić Laidlaw I, Caratan S. Maligne bolesti i psihčki poremećaji – prevalencija, mortalitet, terapijski izazov. *Socijalna psihijatrija* 2017;45(3):187-201.
7. Restek-Petrović, Branka; Majdančić, Ana; Molnar, Sven; Grah, Majda; Ivezić, Ena; **Filipčić, Igor**; Bogović, Anamarija; Grošić, Vladimir; Mayer, Nina; Kezić, Slobodanka; Pavlović, Irena. Early intervention programme for patients with psychotic disorders in “Sveti Ivan” Psychiatric hospital (RIPEPP) - sociodemographic and baseline characteristics of the participants, *Psychiatria Danubina* (0353-5053) 29 (2017); 162-170.
8. Basic S, Markovic I, Sporis D, Sporis IS, **Filipčić I.**: Psychogenic non epileptic seizure status - diagnostic and treatment challenge; *Psychiatr Danub.* 2017 Mar;29(1):87-89.
9. **Igor Filipčić**, Ivona Šimunović Filipčić, Vladimir Grošić, Ivana Bakija, Daniela Šago, Tomislav Benjak, Boran Uglešić, Žarko Bajić, Norman Sartorius: Patterns of chronic physical multimorbidity in psychiatric and general population; Elsevier, *Journal of Psychosomatic Research*, (ISSN: 0022-3999, IF:2.947)
10. Šago D, **Filipčić I**, Lovretić V, Mayer N.: Day hospital for early intervention for individuals with psychotic disorders; *Psychiatr Danub.* 2018 Jun; 30 (Suppl 4):192-197.
11. Šimunović Filipčić I, Filipčić I.: Schizophrenia and Physical Comorbidity; *Psychiatr Danub.* 2018 Jun;30(Suppl 4):152-157.
12. Matić K, Gereš N, Gerlach J, Prskalo-Čule D, Zadravec Vrbanc T, Lovretić V, Librenjak D, Vuk Pisk S, Ivezić E, Šimunović Filipčić I, Jeleč V, **Filipčić I.**: Early Intervention Services for Early-Phase Psychosis - Centre for integrative psychiatry in Psychiatric Hospital "Sveti Ivan", Croatia; *Psychiatr Danub.* 2018 Jun; 30 (Suppl 4):158-165.
13. **Filipčić, I.**, Simunovic Filipčić, I., Ivezić, E., Matic, K., Tunjic Vukadinovic, N., Vuk Pisk, S., Bodor, D., Bajic, Z., Jakovljevic, M., Sartorius, N.: Chronic physical illnesses in patients with schizophrenia spectrum disorders are independently associated with higher rates of psychiatric rehospitalization; a cross-sectional study in Croatia (2017) *European Psychiatry*, 43, pp. 73-80.
14. Mayer N, Petrović BR, Grah M, Lovretić V, **Filipčić I.** : Treatment of patients in early phase of psychosis on psychotherapeutic inpatient unit - presentation of the therapeutic programme and evaluation of some aspects; *Psychiatr Danub.* 2017 Sep;29(Suppl 3):447-451.
15. Vuk Pisk S., Vuk T., Ivezić E., Jukić I., Bingulac-Popović J., **Filipčić I.**: ABO blood groups and psychiatric disorders: a Croatian study; *Blood Transfus.* 2018 Feb 15:1-6. doi: 10.2450/2018.0266-17.
16. Vuk Pisk, Sandra; Mihanović, Mate; **Filipčić, Igor**; Bogović, Anamarija; Ruljančić, Nedjeljka. The impact of obesity on suicidality among female patients suffering from bipolar affective disorder: the indirect role of body dissatisfaction. *Alcoholism and Psychiatry Research* (1849-8582) 53 (2017); 5-16
17. Ž. Milovac, S. Sučić, T. Gajšak, V. Aljinović, S.Z. Penić, E. Ivezić, **I. Filipčić**: New insights into transcranial magnetic stimulation (TMS) treatment of depression, *Socijalna Psihijatrija*, Jun 2017.
18. Vuk, Antonia MD; Baretic, Maja MD, PhD; Osvatic, Martina Matovinovic MD, PhD; **Filipčić, Igor MD, PhD**; Jovanovic, Nikolina MD, PhD; Kuzman, Martina Rojnic MD, PhD Treatment of Diabetic Ketoacidosis Associated With Antipsychotic Medication, *Journal of Clinical Psychopharmacology* (IF:2.891), August 2017, Volume 37, Issue 4

19. Todorić Laidlaw I., Drmić S., Caratan S., **Filipčić I.**, Vuk Pisk S., Momčilović B., Mimica N. : Concentration of trace elements in the hair of patients diagnosed with schizophrenia compared to patients with major depressive disorder. A cross sectional study in Croatia. Jun 2017 Journal of Trace Elements in Medicine and Biology DOI: 10.1016/j.jtemb.2017.03.210
20. Matić, K., Šimunović Filipčić, I., Bajić, Ž., **Filipčić, I.** GERD is associated with the outcome of MDD treatment. April 2017 DOI: 10.1016/j.eurpsy.2017.01.559
21. Lučev, N., Vuk, A., Šimunović Filipčić, I., **Filipčić I.** Comparison of ten-years risk of fatal cardiovascular events calculated by heartscore in diabetic patients with and without post-traumatic stress disorder (PTSD) comorbidity, April 2017

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1. Šimunović Filipčić I, Filipčić I, Glamuzina L, Devčić S, Bajić Ž, Braš M, Mihaljević Peleš A, Marčinko D, Sartorius N. : The effect of chronic physical illnesses on psychiatric hospital admission in patients with recurrent major depression. Psychiatry Res. 2019 Jan 2;272:602-608. doi: 10.1016/j.psychres.2018.12.178.
2. **Filipčić I**, Šimunović Filipčić I, Gajšak T, Milovac Ž, Sučić S, Ivezić E, Zečević Penić S, Orgulan I, Šebo D, Jeleč V, Bajić Ž.: Efficacy and safety of repetitive transcranial magnetic stimulation using an H1-coil or figure-8-coil in the treatment of unipolar major depressive disorder: A study protocol for a randomized controlled trial; Psychiatr Danub. 2018 Mar;30(1):41-46. doi: 10.24869/psyd.2018.41.
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6. Vuk Pisk S, **Filipčić I**, Bogović A, Milovac Ž, Todorić Laidlaw I, Caratan S. Maligne bolesti i psihčki poremećaji – prevalencija, mortalitet, terapijski izazov. Socijalna psihijatrija 2017;45(3):187-201.
7. Restek-Petrović, Branka; Majdančić, Ana; Molnar, Sven; Grah, Majda; Ivezić, Ena; **Filipčić, Igor**; Bogović, Anamarija; Grošić, Vladimir; Mayer, Nina; Kezić, Slobodanka; Pavlović, Irena. Early intervention programme for patients with psychotic disorders in “Sveti Ivan” Psychiatric hospital (RIPEPP) - sociodemographic and baseline characteristics of the participants, Psychiatria Danubina (0353-5053) 29 (2017); 162-170.
8. Basic S, Markovic I, Sporis D, Sporis IS, **Filipčić I.**: Psychogenic non epileptic seizure status - diagnostic and treatment challenge; Psychiatr Danub. 2017 Mar;29(1):87-89.
9. **Igor Filipčić**□, Ivona Šimunović Filipčić□, Vladimir Grošić□, Ivana Bakija□, Daniela Šago□, Tomislav Benjak□, Boran Uglešić□, Žarko Bajić□, Norman Sartorius: Patterns of chronic physical multimorbidity in psychiatric and general population; Elsevier, Journal of Psychosomatic Research, (ISSN: 0022-3999, IF:2.947)
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LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. 2002 - 2008 Associate in designing, writing and Implementing the Project "The Program for the reduction of stigma and discrimination of psychiatric patients"
2. 2015 - ... Project associate at the University of Zagreb Medical School "Biomarkers in Schizophrenia - integration of complementary approaches in monitoring persons with the first psychotic episode ", project manager doc. dr. sc. Martina Rojnić Kuzman
3. 2015 - 2018. - Project associate at the University of Zagreb Medical School " Multimodal approach in treatment and long-term tracking process of depressive disorder by magnetic resonance method ", ,project manager prof. dr. sc. Neven Henigsberg
4. 2016 year Project Manager of the Center for Integrative TMS Management Integration (CEKOM) Psychiatric Hospital "Sveti Ivan".
5. 2016 year associate in the interdisciplinary project "Influence biometeorological and climatic events on health"
6. 2017 year Project Manager of the Center for Integrative Psychiatry (CIP) Psychiatric Hospital "Sveti Ivan"
7. 2017 year project manager "Reducing depression and PTSD symptoms by treatment and innovative method - transcranial magnetic stimulation with HF-R TMS SH1 8 helmet"
8. 2017 year Associate in the project "Wave II of the International Prevalence and Treatment of Diabetes and Depression (INTERPRET-DD),

9. 2017 year associate in the implementation of the DENAMIC research project (Developmental neurotoxicity assessment of mixtures in children)
10. 2017 year associate in the implementation of the scientific-research project "Therapeutic potential of neurosteroids and neuntrophins in dementia (TePoNEDe)"

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

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NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Tajana Filipec Kanižaj

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University hospital Merkur, School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Liver Transplantation; Viral hepatitis;

BIOGRAPHY

Education:

High School MIOC, Zagreb .

1991-1997. study at the School of Medicine, University in Zagreb .

2001-5. specialist of internal medicine.

2008-10. subspecialist of gastroenterology.

2008 training in the field of hepatology at the Medizinische Hochschule, Hanover .

Scientific:

1999-2011. Research assistant

2011-2017. Assistant Professor

May 2017 - Associate Professor

Work experience:

In 1999 started working as a research assistant and resident in internal medicine at the Medical Faculty in Zagreb. Since 2017 associate professor at the School of Medicine, University of Zagreb. Now working as a specialist in internal medicine, subspecialist of gastroenterology, at the University Hospital Merkur, Department of Gastroenterology. From 1. July 2013 head of the Department of Gastroenterology, University hospital Merkur.

Research, teaching and mentoring activities:

Scientific and teaching career started in 1999. From 1.4.1999. research assistant on the project of the Ministry of Science and Technology and the School of Medicine, University of Zagreb; Project Leader: Prof. dr. Sc. Miroslav Katičić (project number 108-0000000-3114: " Helicobacter pylori infection - the evolution of the disease and new therapeutic procedures ", formerly 0108126: " The evolution of the changes associated with Helicobacter pylori infection, " 0108104 " Epidemiology, diagnosis and treatment Helicobacter pylori associated disease ".) 29.11.2004. MSc thesis at the Faculty of Science, University of Zagreb (Field: Biology, Physiology and Immunology) entitled: " 'Western blot' and PCR reliability in the detection of cagA and vacA Helicobacter pylori virulence genes " (Mentor Prof. dr. Vladimir Presečki) 16.10.2009. PhD thesis at the Faculty of Medicine, University of Zagreb, entitled: "Role of Helicobacter pylori eradication therapy success and virulence antigens on dynamics of gastric mucosa premalignant changes." (Mentor: prof. dr. sc. Miroslava Katičić) Current scientific research is directed to research in liver transplantation and chronic liver diseases. Currently is actively participating as scientific associate on a projects:

1. "Infectomics study of human liver non-parenchymal cells in chronic hepatitis C (ILHNCHC)", financed by the Croatian Science Foundation, School of Medicine, University of Zagreb (guidance of Prof. Adriana Vince,)
2. "Genetic background of alcoholic liver disease", project financed of School of medicine, University of Zagreb (guidance prof. Vesna Medved)
3. "Genetic background of non-alcoholic fatty liver disease after liver transplantation", project financed by Medical School, University of Rijeka: (guidance assist.prof. Ivana Mikolašević).

The organiser or lecturer at:

1. 5 undergraduate courses (Internal Medicine, Internal medicine - English programme, Internal Propedeutics, Emergencies in medicine, Elective course - Liver transplantation)

2. 3 postgraduate courses on Medical School, University of Zagreb: *Helicobacter pylori* infection, Liver transplantation, Viral hepatitis
3. postgraduate studies for residents of gastroenterology, infectology, family medicine and pathology,
4. different courses of continuing medical education organized by Croatian gastroenterology association and School of Medicine, University of Zagreb .

The most important technical and scientific achievements: Author and co-author of many papers and book chapters in the field of research of *Helicobacter pylori* infection, hepatology and liver transplantation. Mentor of 5 students of PhD programme at School of Medicine, University of Zagreb, preparing PhD thesis. Mentor of 13 students in graduation thesis at the School of Medicine, University of Zagreb. Mentor of 10 residents undergoing specialist training in internal medicine and gastroenterology. Organiser of 6 international congresses and many domestic in field of hepatology and liver transplantation.

Functions, awards and professional associations: Since 2005 member of the liver transplant team University hospital Merkur. Since 2008. Member of the Croatian consensus team for the treatment of viral hepatitis and *Helicobacter pylori* treatment. Member of the Croatian Medical Association, the Board of Directors Croatian Society of Gastroenterology , EASL , ILTS , Subcommittee for liver transplantation in the Ministry of Health. Since 1. July 2013. Head of Department of gastroenterology, University hospital Merkur.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME.

1. Filipec Kanizaj T, Colic Cvrlje V, Mrzljak A, Kardum Skelin I, Sustercic D, Skegro D, Gustin D, Kocman B. Epitheloid haemangioendothelioma in patient with liver transplantation. *Coll Antropol.* 2010; 34(1): 177–180.
2. Mrzljak A, Kardum Skelin I, Colic Cvrlje V, Filipec Kanizaj T, Sustercic D, Gustin D, Kocman B. Parvovirus B19 (PVB19) induced pure red cell aplasia (PRCA) in immunocompromised patient after liver transplantation. *Coll Antropol.* 2010; 34(1): 271-274.
3. Mrzljak A, Kardum-Skelin I, Cvrlje VC, Filipec-Kanizaj T, Sustercić D, Skegro D. Role of fine needle aspiration cytology in management of hepatocellular carcinoma: a single centre experience. *Coll Antropol.* 2010 Jun;34(2):381-5.
4. Kocman B, Mikulić D, Jadrijevic S, Poljak M, Kocman I, Gašparov S, Kanižaj TF, Cvrlje VC. Long-term survival after living-donor liver transplantation for unresectable colorectal metastases to the liver: case report. *Transplant Proc.* 2011 Dec;43(10):4013-5.
5. Filipec Kanizaj T, Kunac N. Hepatitis C: New challenges in liver transplantation. *World J Gastroenterol* 2015 May 21;21(19):5768-77.
6. Grgurevic I, Bokun T, Salkic NN, Brkljacic B, Vukelić-Markovic M, Stoos-Veic T, Aralica G, Rakic M, Filipec-Kanizaj T, Berzigotti A. Liver Elastography Malignancy Prediction (LEMP) score for noninvasive characterization of Focal Liver Lesions. *Liver Int.* 2017 Oct 13. doi: 10.1111/liv.13611. PMID: 29028279.
7. Mikolasevic I, Milic S, Filipec-Kanizaj T. Fatty liver allografts are associated with primary graft non-function and high mortality after transplantation. *Liver Int.* 2017 Aug;37(8):1113-1115. doi: 10.1111/liv.13453. PMID: 28710818
8. Filipec Kanizaj T, Mijic M. Inflammatory bowel disease in liver transplanted patients. *World J Gastroenterol.* 2017 May 14;23(18):3214-3227. doi: 10.3748/wjg.v23.i18.3214. Review. PMID: 28566881
9. Ivana Mikolasevic, Tajana Filipec-Kanizaj, Ivan Jakopcic, Iva Majurec, Alemka Brncic-Fischer, Nikola Sobocan, Irena Hrstic, Tea Stimac, Davor Stimac, Sandra Milic. A challenging clinical issue: liver disease during pregnancy. *Medical Science Monitor*, 24 (2018), 26; 4080-4090.

10. Mikolasevic I, Filipec Kanizaj T, Mijic M, Jakopcic I, Milic S, Hrstic I, Sobocan N, Stimac D, Burra P. Nonalcoholic fatty liver disease and liver transplantation – Where do we stand? *World J Gastroenterol*. 2018. 24 (2018), 14; 1491-1506.
11. Mikolasevic I, Bokun T, Filipec-Kanizaj T. Non-invasive assessment of kidney allograft fibrosis with shear wave elastography: a radiological-pathological correlation analysis. *International journal of urology*, 5 (2018), 25; 456-456.
12. Papic N, Zidovec Lepej S, Gorenec L, Grgic I, Gasparov S, Filipec Kanizaj T, Vince A. The association of semaphorins 3C, 5A and 6D with liver fibrosis stage in chronic hepatitis C. *PLoS One*. 2018 Dec 28;13(12):e0209481. doi: 10.1371/journal.pone.0209481.

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1. Filipec Kanizaj T, Kunac N. Hepatitis C: New challenges in liver transplantation. *World J Gastroenterol* 2015 May 21;21(19):5768-77.
2. Grgurevic I, Bokun T, Salkic NN, Brkljacic B, Vukelić-Markovic M, Stoos-Veic T, Aralica G, Rakic M, Filipec-Kanizaj T, Berzigotti A. Liver Elastography Malignancy Prediction (LEMP) score for noninvasive characterization of Focal Liver Lesions. *Liver Int*. 2017 Oct 13. doi: 10.1111/liv.13611. PMID: 29028279.
3. Mikolasevic I, Milic S, Filipec-Kanizaj T. Fatty liver allografts are associated with primary graft non-function and high mortality after transplantation. *Liver Int*. 2017 Aug;37(8):1113-1115. doi: 10.1111/liv.13453. PMID: 28710818
4. Filipec Kanizaj T, Mijic M. Inflammatory bowel disease in liver transplanted patients. *World J Gastroenterol*. 2017 May 14;23(18):3214-3227. doi: 10.3748/wjg.v23.i18.3214. Review. PMID: 28566881
5. Ivana Mikolasevic, Tajana Filipec-Kanizaj, Ivan Jakopcic, Iva Majurec, Alemka Brncic-Fischer, Nikola Sobocan, Irena Hrstic, Tea Stimac, Davor Stimac, Sandra Milic. A challenging clinical issue: liver disease during pregnancy. *Medical Science Monitor*, 24 (2018), 26; 4080-4090.
6. Mikolasevic I, Filipec Kanizaj T, Mijic M, Jakopcic I, Milic S, Hrstic I, Sobocan N, Stimac D, Burra P. Nonalcoholic fatty liver disease and liver transplantation – Where do we stand? *World J Gastroenterol*. 2018. 24 (2018), 14; 1491-1506.
7. Mikolasevic I, Bokun T, Filipec-Kanizaj T. Non-invasive assessment of kidney allograft fibrosis with shear wave elastography: a radiological-pathological correlation analysis. *International journal of urology*, 5 (2018), 25; 456-456.
8. Mikolasevic I, Bokun T, Filipec-Kanizaj T. Gastroesophageal reflux disease, Barrett esophagus and esophageal adenocarcinoma - where do we stand?, *Croat Med J*. 2018 Jun 30;59(3):97-99.
9. Papic N, Zidovec Lepej S, Gorenec L, Grgic I, Gasparov S, Filipec Kanizaj T, Vince A. The association of semaphorins 3C, 5A and 6D with liver fibrosis stage in chronic hepatitis C. *PLoS One*. 2018 Dec 28;13(12):e0209481. doi: 10.1371/journal.pone.0209481.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. project financed by Ministry of science and School of Medicine, University of Zagreb number 108-0000000-3114: " *Helicobacter pylori* infection - the evolution of the disease and new therapeutic procedures "
2. project financed by Ministry of science and School of Medicine, University of Zagreb number 0108126: " *The evolution of the changes associated with Helicobacter pylori* infection "
3. project financed by Ministry of science and School of Medicine, University of Zagreb number " 0108104 " *Epidemiology, diagnosis and treatment Helicobacter pylori* associated disease "



4. project financed of School of Medicine, University of Zagreb: Genetic background of alcoholic liver disease
5. project financed of School of medicine, University of Rijeka: Genetic background of non-alcoholic fatty liver disease after liver transplantation
6. project financed by the Croatian Science Foundation: Infectomics study of human liver non-parenchymal cells in chronic hepatitis C (ILHNCHC)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. project financed of School of Medicine, University of Zagreb: Genetic background of alcoholic liver disease
2. project financed of School of medicine, University of Rijeka: Genetic background of non-alcoholic fatty liver disease after liver transplantation
3. project financed by the Croatian Science Foundation: Infectomics study of human liver non-parenchymal cells in chronic hepatitis C (ILHNCHC)
4. project financed by Ministry of science and School of Medicine, University of Zagreb number " 0108104 " Epidemiology, diagnosis and treatment Helicobacter pylori associated disease "

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

5 in progress, 1 at finished and scheduled for dissertation defence

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Kristina Fišter (MD, MSc, DSc), Assistant Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine, Andrija Štampar School of Public Health

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Medical Informatics Methods

BIOGRAPHY

Kristina Fišter is Assistant Professor and Head of the Division for Medical Informatics at the University of Zagreb School of Medicine, Andrija Štampar School of Public Health, Department of Medical Statistics, Epidemiology and Medical Informatics in Zagreb, Croatia. She is a medical doctor and holds a master of science degree in information sciences as well as a doctorate of science in epidemiology. She leads biomedical informatics courses across graduate and postgraduate studies at the University of Zagreb School of Medicine, including medical, nursing, and PhD studies, as well as professional postgraduate studies for medical doctors specialising in family medicine, occupational medicine, school and adolescent medicine, and epidemiology. She is Associate editor for original research at the Canadian Medical Association Journal, and has previously served as editor at the British Medical Journal (2004-2018) and the Croatian Medical Journal (2002-2004). Assistant Professor Fišter is recipient of the Zagreb University Chancellor Award and Best Poster Award at the European Federation for Medical Informatics MIE2000 meeting in Hannover, Germany. She has co-authored four books, including two textbooks, as well as over 50 articles with more than 180 independent citations in the Web of Science. Assistant Professor Fišter is a member of the Executive Committee at the Croatian Society for Medical Informatics, and a member of the Committee for eHealth at the Croatian Academy for Medical Sciences.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 1st December 2014 Assistant Professor at the University of Zagreb School of Medicine

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Fišter K, Pleše B, Pristaš I, Kurth T, Kujundžić Tiljak M. Setting up research infrastructure for secondary use of routinely collected health care data in Croatia. *Croat Med J* 2017;58:327-9.

Kern J, Bergman Marković B, Pale P, Heim I, Trnka B, Rafaj G, Lončarek K, Fišter K, Mađarić M, Deželić Đ, Ilakovac V, Erceg M, Pristaš I, Margan Šulc A, Vuletić S. Guidelines for improvement of electronic medical records. *Acta Med Croatica* 2017;71:79-93.

Sonicki Z, Fišter K, Božikov J, Sović S, Kujundžić Tiljak M, Ivanković D, Kern J, Vuletić S. Analytical approach in development of a decision support system. *Med Inform* 2015;12:13-14.

Kern J, Božikov J, Fišter K, Svetić Čišić R, Gačina S. Nursing informatics at the graduate university studies in nursing at the Zagreb University School of Medicine. *Med Inform* 2013;11:13-6.

Fišter K, Vuletić S, Kern J. Paving the way for personalised behaviourally based prevention of obesity: systematic search of the literature. *Coll Antropol* 2012;36 Suppl 1:201-10.

Kern J, Erceg M, Poljičanin T, Sović S, Fišter K, Ivanković D, Vuletić S. Public health ICT based surveillance system. In: *Telemedicine and e-health services, policies, and applications: Advancements and developments*. Rodrigues JJ, de la Torre Diez I, de Abajo BS, editors. Hershey, USA: Medical Information Science Reference; 2012.

Kern J, Fišter K. Medical informatics meets medical education – the Croatian experience. *European Journal for Biomedical Informatics* 2011;7:58-63.

Fišter K, Polašek O, Vuletić S, Kern J. Single nucleotide polymorphisms and health behaviours related to obesity - trawling the evidence in the prospect of personalised prevention. *Stud Health Technol Inform* 2009;150:762-6.

Baždarić K, Fišter K, Polašek O. Data organisation. In: Kern J, Petrovečki M, editors. *Medicinska informatika [Medical Informatics]*. Zagreb: Medicinska naklada 2009.

Kern J, Fišter K, Polašek O. Active patient role in recording health data. In: Encyclopedia of Information Science and Technology. 2nd edition. Khosrow-Pour M, editor. Hershey, USA: Medical Information Science Reference; 2009.

Kern J, Fišter K, Petrovečki M, Polašek O, Stevanović R, Vuletić S, et al. Action-grid: international networking in grid computing and biomedical informatics. *Acta Informatica Medica* 2008;16:156-8.

Fišter K, McKee M, editors. Europe in transition.[theme issue] *BMJ* 2005;331: 25 July.

Fišter K. Specifics of presenting clinical studies. In: Marušić M, editor. *Uvod u znanstveni rad u medicini* [Introduction to Scientific Work in Medicine]. 3rd edition. Zagreb: Medicinska naklada; 2004.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Fišter K, Hrabac P, Relić D, Išgum B, Erceg M. Educational Landscape of Biomedical Informatics in Croatia: Who Are the Teachers and What Are Their Attitudes. *Studies in Health Technology and Informatics*. 2018;217–21.

Fišter K, Pleše B, Pristaš I, Kurth T, Kujundžić Tiljak M. Setting up research infrastructure for secondary use of routinely collected health care data in Croatia. *Croat Med J* 2017;58:327-9.

Kern J, Bergman Marković B, Pale P, Heim I, Trnka B, Rafaj G, Lončarek K, Fišter K, Mađarić M, Deželić Đ, Ilakovac V, Erceg M, Pristaš I, Margan Šulc A, Vuletić S. Guidelines for improvement of electronic medical records. *Acta Med Croatica* 2017;71:79-93.

Fišter K, Pleše B, Pristaš I, Kujundžić Tiljak M, Kurth T. What is missing? The issue of secondary use of routinely collected health care data in Croatia. *Med Inform* 2017;13:9-12.

Balić R, Fišter K. eSchool: e-learning for health professionals in peritoneal dialysis. *Med Inform* 2017;13:69-70.

Sonicki Z, Fišter K, Božikov J, Sović S, Kujundžić Tiljak M, Ivanković D, Kern J, Vuletić S. Analytical approach in development of a decision support system. *Med Inform* 2015;12:13-14.

Božikov J, Fišter K, Relić D. Training of students for the use and critical evaluation of mobile applications for health. *Eur J Public Health* 2016;26 Suppl 1.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

ACTION-Grid: International Cooperative Action on Grid Computing and Biomedical Informatics between the European Union, Latin America, the Western Balkans and North Africa. Funded by: FP7-ICT (224176). Researcher.

Regionalism of cardiovascular behavioral risks - the intervention model. Funded by: Ministry of Science, Education and Sports of the Republic of Croatia (108-1080135-0264). Research fellow.

Scientific foundations of health care system quality. Funded by: Ministry of Science, Education and Sports of the Republic of Croatia. Research fellow.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Educational landscape of biomedical informatics in Croatia: opinions and attitudes of higher education teachers and congruence of syllabi and curricula with educational needs and international guidelines. Funded by: University of Zagreb. Principal investigator.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Dr sc Aleksandra Fučić Sci adviser

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Institute for Medical Research and occupational Health

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Genotoxicological research of exposure to physical and chemical mutagens in the working and living environment; Methods of molecular biology in medicine

BIOGRAPHY

She has 30 years of research experience in genotoxicology and she is EU expert in biomonitoring. Her main scientific interests are carcinogenesis mechanisms in subjects with genome damage after exposure to chemical and physical agents. She has published over 100 original papers and several books. She is fellow of academia Collegium Ramazzini.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2005

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Aghajanyan A, Fucic A, Tskhovrebova L, Gigani O, Konjevoda P. Genome damage in children with classical Ehlers-Danlos syndrome - An in vivo and in vitro study. *Eur J Med Genet.* 2018. pii: S1769-7212(18)30033-8

Druzhinin VG, Matskova LV, Fucic A. Induction and modulation of genotoxicity by the bacteriome in mammals. *Mutat Res.* 2018;776:70-77.

Markulin D, Vojta A, Samaržija I, Gamulin M, Bečeheli I, Jukić I, Maglov Č, Zoldoš V, Fučić A. Association Between RASSF1A Promoter Methylation and Testicular Germ Cell Tumor: A Meta-analysis and a Cohort Study. *Cancer Genomics Proteomics.* 2017;14(5):363-372

Fucic A, Guszak V, Mantovani A. Transplacental exposure to environmental carcinogens: Association with childhood cancer risks and the role of modulating factors. *Reprod Toxicol.* 2017;72:182-190.

Fucic A, Guszak V, Keser T, Wagner J, Juretić E, Plavec D, Stojković R, Gornik O, Lauc G. Micronucleus, cell-free DNA, and plasma glycan composition in the newborns of healthy and diabetic mothers. *Mutat Res.* 2017;815:6-15

Stojković R, Fucic A, Ivanković D, Jukić Z, Radulović P, Grah J, Kovačević N, Barišić L, Krušlin B. Age and sex differences in genome damage between prepubertal and adult mice after exposure to ionising radiation. *Arh Hig Rada Toksikol.* 2016;67(4):297-303.

Fucic A, Aghajanyan A, Druzhinin V, Minina V, Neronova E. Follow-up studies on genome damage in children after Chernobyl nuclear power plant accident. *Arch Toxicol.* 2016;90(9):2147-2159.

Minina VI, Sinitsky MY, Druzhinin VG, Fucic A, Bakanova ML, Ryzhkova AV, Savchenko YA, Timofeeva AA, Titov RA, Voronina EN, Volobaev VP, Titov VA. Chromosome aberrations in peripheral blood lymphocytes of lung cancer patients exposed to radon and air pollution. *Eur J Cancer Prev.* 2018;27(1):6-12.

Fucic A, Bonassi S, Gundy S, Lazutka J, Sram R, Ceppi M, Lucas JN. Frequency of Acentric Fragments Are Associated with Cancer Risk in Subjects Exposed to Ionizing Radiation. *Anticancer Res.* 2016;36(5):2451-7.

Druzhinin V, Bakanova M, Fucic A, Golovina T, Savchenko Y, Sinitsky M, Volobaev V. Lymphocytes with multiple chromosomal damages in a large cohort of West Siberia residents: Results of long-term monitoring. *Mutat Res.* 2016;784-785:1-7.

Stojkovic R, Ivankovic S, Ivankovic D, Attias L, Mantovani A, Fucic A. Testosterone-induced micronuclei and increased nuclear division rate in L929 cell line expressing the androgen receptor. *Toxicol In Vitro*. 2015;29(5):1021-5.

Fucic A, Katic J, Fthenou E, Kogevinas M, Plavec D, Koppe J, Batinic D, Chalkiadaki G, Chatzi L, Lasan R, Kleinjans J, Kirsch-Volders M. Increased frequency of micronuclei in mononucleated lymphocytes and cytome analysis in healthy newborns as an early warning biomarkers of possible future health risks. *Reprod Toxicol*. 2013;42:110-5.

Fucic A, Gamulin M, Ferencic Z, Katic J, Kraymer von Krauss M, Bartonova A, Merlo DF. Environmental exposure to xenoestrogens and oestrogen related cancers: reproductive system, breast, lung, kidney, pancreas, and brain. *Environ Health*. 2012;11 Suppl 1:S8

Fucić A, Stojkovic R, Katić J, Markovic D, Ferencic Z, Korsić M, Jazbec AM, Gamulin M. Animal model for age- and sex-related genotoxicity of diethylstilbestrol. *Braz J Med Biol Res*. 2009;42(11):1090-6

Bonassi S, Norppa H, Ceppi M, Strömberg U, Vermeulen R, Znaor A, Cebulska-Wasilewska A, Fabianova E, Fucic A, Gundy S, Hansteen IL, Knudsen LE, Lazutka J, Rossner P, Sram RJ, Boffetta P. Chromosomal aberration frequency in lymphocytes predicts the risk of cancer: results from a pooled cohort study of 22 358 subjects in 11 countries. *Carcinogenesis*. 2008;29(6):1178-83.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Aghajanyan A, Fucic A, Tskhovrebova L, Gigani O, Konjevoda P. Genome damage in children with classical Ehlers-Danlos syndrome - An in vivo and in vitro study. *Eur J Med Genet*. 2018. pii: S1769-7212(18)30033-8.

Fucic A, Aghajanyan A, Culig Z, Le Novère N. Systems Oncology: Bridging Pancreatic and Castrate Resistant Prostate Cancer. *Pathol Oncol Res*. 2018

Fucic A, Galea KS, Duca RC, El Yamani M, Frery N, Godderis L, Halldorsson TI, Iavicoli I, Ndaw S, Ribeiro E, Viegas S, Moshammer H. Fucic A, Aghajanyan A, Culig Z, Le Novère N. *Pathol Oncol Res*. 2018 Sep 16. Potential Health Risk of Endocrine Disruptors in Construction Sector and Plastics Industry: A New Paradigm in Occupational Health. *Int J Environ Res Public Health*. 2018 Jun 11;15(6). pii: E1229. doi: 10.3390/ijerph15061229.

Druzhinin VG, Matskova LV, Fucic A. Induction and modulation of genotoxicity by the bacteriome in mammals. *Mutat Res*. 2018 ;776:70-77.

Muhaxheri G, Vucicevic Boras V, Fucic A, Plavec D, Sekerija M, Filipovic M, Grsic K, Stubljar B, Krnic T, Vrdoljak B. Multivariate analysis of preoperative and postoperative neutrophil-to-lymphocyte ratio as an indicator of head and neck squamous cell carcinoma outcome. *Int J Oral Maxillofac Surg*. 2018;47(8):965-970.

Miškov S, Gjergja Juraški R, Mikula I, Bašić S, Bošnjak Pašić M, Košec V, Sabol Z, Fučić A, Sajko T, Bašić Kes V. The Croatian Model of Integrative Prospective Management of Epilepsy and Pregnancy. *Acta Clin Croat*. 2016;55(4):535-548.

Vucicevic Boras V, Fucic A, Virag M, Gabric D, Blivajs I, Tomasovic-Loncaric C, Rakusic Z, Bisof V, Novère NL, Velimir Vrdoljak D. Significance of stroma in biology of oral squamous cell carcinoma. *Tumori*. 2018 ;104(1):9-14.

- Markulin D, Vojta A, Samaržija I, Gamulin M, Bečeheli I, Jukić I, Maglov Č, Zoldoš V, Fučić A. Association Between RASSF1A Promoter Methylation and Testicular Germ Cell Tumor: A Meta-analysis and a Cohort Study. *Cancer Genomics Proteomics*. 2017 ;14(5):363-372.
- Fucic A, Guszak V, Mantovani A. Transplacental exposure to environmental carcinogens: Association with childhood cancer risks and the role of modulating factors. *Reprod Toxicol*. 2017;72:182-190.
- Fucic A, Guszak V, Keser T, Wagner J, Juretić E, Plavec D, Stojković R, Gornik O, Lauc G. Micronucleus, cell-free DNA, and plasma glycan composition in the newborns of healthy and diabetic mothers. *Mutat Res*. 2017 Mar;815:6-15. doi: 10.1016/j.mrgentox.2017.01.002.
- Stojković R, Fucic A, Ivanković D, Jukić Z, Radulović P, Grah J, Kovačević N, Barišić L, Krušlin B. Age and sex differences in genome damage between prepubertal and adult mice after exposure to ionising radiation. *Arh Hig Rada Toksikol*. 2016;67(4):297-303.
- Jukic Z, Radulovic P, Stojković R, Mijic A, Grah J, Krušlin B, Ferencic Z, Fucic A. Gender Difference in Distribution of Estrogen and Androgen Receptors in Intestinal-type Gastric Cancer. *Anticancer Res*. 2017 ;37(1):197-202.
- Knudsen LE, Andersen ZJ, Sram RJ, Braun Kohlová M, Gurzau ES, Fucic A, Gribaldo L, Rossner P, Rossnerova A, Máca V, Zvěřinová I, Gajdosova D, Moshhammer H, Rudnai P, Ščasný M. Perinatal health in the Danube region - new birth cohort justified. *Rev Environ Health*. 2017;32(1-2):9-14.
- Fucic A, Aghajanyan A, Druzhinin V, Minina V, Neronova E. Follow-up studies on genome damage in children after Chernobyl nuclear power plant accident. *Arch Toxicol*. 2016;90(9):2147-2159.
- Minina VI, Sinitsky MY, Druzhinin VG, Fucic A, Bakanova ML, Ryzhkova AV, Savchenko YA, Timofeeva AA, Titov RA, Voronina EN, Volobaev VP, Titov VA. Chromosome aberrations in peripheral blood lymphocytes of lung cancer patients exposed to radon and air pollution. *Eur J Cancer Prev*. 2018 Jan;27(1):6-12.
- Fucic A, Bonassi S, Gundy S, Lazutka J, Sram R, Ceppi M, Lucas JN. Frequency of Acentric Fragments Are Associated with Cancer Risk in Subjects Exposed to Ionizing Radiation. *Anticancer Res*. 2016 May;36(5):2451-7.
- Andersen ZJ, Sram RJ, Ščasný M, Gurzau ES, Fucic A, Gribaldo L, Rossner P Jr, Rossnerova A, Kohlová MB, Máca V, Zvěřinová I, Gajdosova D, Moshhammer H, Rudnai P, Knudsen LE. Newborns health in the Danube Region: Environment, biomonitoring, interventions and economic benefits in a large prospective birth cohort study. *Environ Int*. 2016 Mar;88:112-122. doi: 10.1016/j.envint.2015.12.009.
- Druzhinin V, Bakanova M, Fucic A, Golovina T, Savchenko Y, Sinitsky M, Volobaev V. Lymphocytes with multiple chromosomal damages in a large cohort of West Siberia residents: Results of long-term monitoring. *Mutat Res*. 2016 Feb-Mar;784-785:1-7.
- Stojkovic R, Ivankovic S, Ivankovic D, Attias L, Mantovani A, Fucic A. Testosterone-induced micronuclei and increased nuclear division rate in L929 cell line expressing the androgen receptor. *Toxicol In Vitro*. 2015 Aug;29(5):1021-5.
- Fucic A, Plavec D, Casteleyn L, Aerts D, Biot P, Katsonouri A, Cerna M, Knudsen LE, Castano A, Rudnai P, Gutleb A, Ligocka D, Lupsa IR, Berglund M, Horvat M, Halzlova K, Schoeters G, Koppen G, Hadjipanayis A, Krskova A, Középesy S, Arendt M, Fischer ME, Janasik B, Gurzau AE, Gurzau ES, Grandér M, Larsson K, Jajcay M, Kolossa-Gehring M, Sepai O, Exley K, Bartolome M, Cutanda F, Mazej D, Nielsen JK, Snoj-Tratnik J, Schwedler G, Fiddicke U, Seiwert M, Govarts E, Den Hond E, Koch HM, Lopez A, Joas A, Joas R. Gender differences in cadmium and cotinine levels in prepubertal children. *Environ Res*. 2015;141:125-31.

Jukic Z, Ferencic Z, Radulovic P, Mijic A, Fucic A. Estrogen and androgen receptors in inflammatory fibroid polyp (Vanek's tumor): case report. *Anticancer Res.* 2014;34(12):7203-6.

Martinić R, Sošić H, Turčić P, Konjevoda P, Fučić A, Stojković R, Aralica G, Gabričević M, Weitner T, Stambuk N. Hepatoprotective effects of Met-enkephalin on acetaminophen-induced liver lesions in male CBA mice.

Molecules. 2014;19(8):11833-45.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Human Micronucleus Collaborative Study, HUMN (kooordinator M. Fenech, CSIRO, Australia 1995-

Cytogenetic Biomarkers and Human Cancer Risk" (kooordinator H. Norppa, Finland European Commission, FP5) 2001-2004

Newborns and genotoxic risks: Development and application of biomarkers of dietary exposure to genotoxic and immunotoxic chemicals and of biomarkers of early effects, using mother-child birth cohorts and biobanks, (kooordinator J. Kleinjans, Netherlands, European Commission, FP6) 2005-2011

Expert team to support biomonitoring in Europe (kooordinator R. Joas, Germany, European Commission, FP6) 2006-2009

European Coordination action on human biomonitoring (kooordinator R. Joas, Germany, European Commission, FP 7) 2009-2013

Demonstration of a study to coordinate and perform human biomonitoring on a European scale, (LIFE09 ENV) (kooordinator R. Joas, Germany, European Commission) 2010-2013

Human biomonitoring for Europe, Horizon 2020, 2017-2021 (coordinator, M. Kolossa, UB, Germany), partner

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Human biomonitoring for Europe, Horizon 2020, 2017-2021 (coordinator, M. Kolossa, UB, Germany)

Scientific Center of Excellence for Reproductive and Regenerative Medicine, School of Medicine, University of Zagreb

The role of androgen and estrogen receptors in active stroma of oral cancer and their influence on patients' survival (ccordinator V. Boras Vučićević, School of Dentistry, University of Zagreb), 2015-2019

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ksenija Fumić, prof

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Center Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of molecular biology in medicine; Biochemical methods in biomedical research

BIOGRAPHY

Ksenija Fumić was born in Zagreb on January 14, 1961. She graduated in medical biochemistry from the School of Pharmacy and Biochemistry, University of Zagreb. She earned PhD degree in natural sciences at Karl-Franzens University, Graz, Austria. Currently she is Head of Division of Laboratory Diagnostics of Inborn Errors of Metabolism and Newborn Screening, Department of Laboratory Diagnostics, University Hospital Center Zagreb. She is a medical biochemistry specialist, senior research scientist, professor of Zagreb University School of Pharmacy and Biochemistry. She participates in under- and postgraduate teaching; her major scientific interest is diagnostics of inherited metabolic disorders. She is author of 40 CC-indexed papers, 4 chapters in university textbooks, she held 35 invited lectures at scientific meetings. Citation count: WoS: 434, Scopus: 502. In 2007, she received annual award for scientific achievement from Croatian Society of Medical Biochemistry and Laboratory Medicine.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2010

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Hofer D, Paul K, Fantur K, Beck M, Burger F, Callaud C, Fumic K, Ledvinova J, Lugowska A, Michelakakis H, Radeva B, Ramaswami U, Plecko B, Paschke E. GM1 gangliosidosis and Morquio B disease: expression analysis of missense mutation affecting the catalytic site of acid beta galactosidase. *Hum Mutat* 2009;30(8):1214-1221.
2. Karačić I, Meili D, Sarnavka V, Heintz C, Thony B, Ramadza DP, Fumić K, Mardesić D, Barić I, Blau N. Genotype-predicted tetrahydrobiopterin (BH4)-responsiveness and molecular genetics in Croatian patients with phenylalanine hydroxylase (PAH) deficiency. *Mol Genet Metab* 2009;97(3):165-71.
3. Petković Ramadža D, Stipoljev F, Sarnavka V, Begović D, Potočki K, Fumić K, Mornet E, Barić I. Hypophosphatasia: Phenotypic Variability and Possible Croatian Origin of the c.1402G>A Mutation of TNSALP Gene. *Coll Antropol* 2009; (33)4:1255-1260.
4. Čulić V, Betz RC, Refke M, Fumic K, Pavelic J. Tyrosinemia type II (Richner-Hanhart syndrome): a new mutation in the TAT gene. *Eur J Med Genet*. 2011 May-Jun;54(3):205-8. Epub 2010 Dec 9.
5. Cvitanović-Šojat L, Gjergja Juraski R, Sabourdy F, Fensom AH, Fumic K, Paschke E, Levade T. Farber lipogranulomatosis type 1--Late presentation and early death in a Croatian boy with a novel homozygous ASAH1 mutation. *Eur J Paediatr Neurol*. 2011 Mar;15(2):171-3. Epub 2010 Jul 7.
6. Kroos M, Hoogetveen-Westerveld M, Michelakakis H, Pomponio R, Van der Ploeg A, Halley D, Reuser A, Augoustides-Savvopoulou P, Aueims M, Llona JB, Bautista Lorite J, van der Beek N, Bonafe L, Cuk M, D'Hooghe M, Engelen B, Farouk A, Fumic K, Garcia-Delgado E, Herzog A, Hurst J, Jones S, Kariminejad MH, Küçükçongar A, Lissens W, Lund A, Majoor-Krakauer D, Kumamoto S, Maravi E, Marie S, Mengel E, Mavridou I, Munteis Olivas E, Najmabadi H, Okumiya T, Peric S, Paschke E, Plecko B, Robberecht W, Serdaroglu P, Shboul M, Tansek MZ, Tarnutzer A, Stojanovic VR, Tylki-Szymanska A, Venâncio M, Verhoeven K; GAA Database Consortium. Update of the Pompe disease mutation database with 60 novel

GAA sequence variants and additional studies on the functional effect of 34 previously reported variants. Hum Mutat. 2012 Aug;33(8):1161-5.

7. Barić I, Fumić K, Petković Ramadža D, Sperl W, Zimmermann FA, Muačević-Katanec D, Mitrović Z, Pažanin L, Cvitanović Šojat L, Kekez T, Reiner Ž, Mayr JA. Mitochondrial myopathy associated with a novel 5522G>A mutation in the mitochondrial tRNA(Trp) gene. Eur J Hum Genet 2013;21(8):871-5

8. Perić S, Fumić K, Bilić K, Reuser A, Rakocevic Stojanovic V. Rupture of the middle cerebral artery aneurysm as a presenting symptom of late-onset Pompe disease in an adult with a novel GAA gene mutation. Acta Neurologica Belgica 2013;114:165-166.

9. Dvorakova L, Vlaskova H, Sarajlija A, Ramadza DP, Poupetova H, Hrubá E, Hlavata A, Bzduch V, Peskova K, Storkanova G, Kecman B, Djordjevic M, Barić I, Fumić K, Barisic I, Reboun M, Kulhanek J, Zeman J, Magner M. Genotype-phenotype correlation in 44 Czech, Slovak, Croatian and Serbian patients with mucopolysaccharidosis type II. Clin Genet 2017 May;91(5):787-796.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Haberlova J, Mitrović Z, Žarković K, Lovrić D, Barić V, Berlingi L, Bilić K, Fumić K, Kranz K, Huebner A. et al. Psycho-organic symptoms as early manifestation of adult onset POMT1-related limb girdle muscular dystrophy : case report. Neuromuscular disorders 2014; 24:11

2. Nikolac N, Šimundić AM, Kackov S, Serdar T, Dorotić A, Fumić K, Gudasić-Vrdoljak J, Klenkar K, Sambunjak J, Vidranski V. The quality and scope of information provided by medical laboratories to patients before laboratory testing: Survey of the Working Group for Patient Preparation of the Croatian Society of Medical Biochemistry and Laboratory Medicine. Clinica chimica acta 2015;450 :104-109.

3. Ninković, Dorotea; Sarnavka, Vladimir; Bašnec, Anica; Ćuk, Mario; Ramadža, Danijela Petković; Fumić, Ksenija; Kušec, Vesna; Santer, René; Barić, Ivo

Hyperinsulinism-hyperammonemia syndrome : a de novo mutation of the GLUD1 gene in twins and a review of the literature // Journal of pediatric endocrinology & metabolism, 29 (2016), 9; 1083-1088

4. Giannuzzi V, Devlieger H, Margari L, Odilind VL, Ragab L, Bellettato CM, D'Avanzo F, Lampe C, Cassis L, Cortès-Saladelafont E, Cazorla ÁG, Barić I, Cvitanović-Šojat L, Fumić K, Dali CI, Bartoloni F, Bonifazi F, Scarpa M, Ceci A. The ethical framework for performing research with rare inherited neurometabolic disease patients. Eur J Pediatr 2017 Mar;176(3):395-405.

5. Dvorakova L, Vlaskova H, Sarajlija A, Ramadza DP, Poupetova H, Hrubá E, Hlavata A, Bzduch V, Peskova K, Storkanova G, Kecman B, Djordjevic M, Barić I, Fumić K, Barisic I, Reboun M, Kulhanek J, Zeman J, Magner M. Genotype-phenotype correlation in 44 Czech, Slovak, Croatian and Serbian patients with mucopolysaccharidosis type II. Clin Genet 2017 May;91(5):787-796.



6. Ramadža DP, Sarnavka V, Vuković J, Fumić K, Krželj V, Lozić B, Pušeljić S, Pereira H, Silva MJ, Tavares de Almeida I, Barić I, Rivera I. Molecular basis and clinical presentation of classic galactosemia in a Croatian population. J Pediatr Endocrinol Metab 2018 Jan 26;31(1):71-75

7. Krecak I, Gveric-Krecak V, Roncevic P, Basic-Kinda S, Gulin J, Lopic I, Fumic K, Ilic I, Horvat I, Zadro R, Holik H, Cocha B, Peran N, Aurer I, Durakovic N.
Serum chitotriosidase: a circulating biomarker in polycythemia vera. Hematology.
2018 :1-10.

8. Žigman T, Petković Ramadža D, Lušić M, Zekušić M, Ninković D, Gardijan D, Potočki K, Omerza L, Beljan L, Žarković K, Kerkhof J, Ljubojević M, de Sain-van der Velden M, Vuković J, Fumić K, Sadiković B, Barić I. Hypogammaglobulinemia and imaging features in a patient with infantile free sialic acid storage disease (ISSD) and a novel mutation in the SLC17A5 gene. J Pediatr Endocrinol Metab. 2018

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2013.-2016. European project- The Inherited NeuroMetabolic Diseases Information Network (InNerMeD) (voditelj projekta prof.dr.Maurizio Scarpa)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ivana Furač, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of molecular biology in medicine

BIOGRAPHY

Born 19/5/1968 in Karlovac, Croatia. I hold Bachelor of Science in Chemistry and I earned PhD in Biochemistry at the Faculty of Science University of Zagreb. Since 1995. I work in the DNA Laboratory at the Department of Forensic Medicine and Criminology School of Medicine University of Zagreb. Before that I was in the Neurochemical Lab of the Department of Medical Chemistry, Biochemistry and Clinical Chemistry. I was trained at Neurogenetic Laboratory University of Antwerp (Belgium), Armed Forces DNA Identification Lab (USA), forensic DNA Laboratory University of Innsbruck and attended many specialized courses like FEBS Advanced Course: DNA Sequencing and Microinjection and FEBS Course "Techniques in Molecular Biology", The Analysis of Food Samples for the Presence of Genetically Modified Organisms by European Commission Joint Research Centre and WHO, EMBL Courses Gene Quantification by Real-Time qRT-PCR, SNP Genotyping and Haploblock Analysis EMBO Practical Course and Next Generation Sequencing. Besides my work in forensic DNA Laboratory I am involved in teaching medical students (graduate and postgraduate) at School of Medicine and chemistry students at Faculty of Science. Therefore, I attended workshop Innovations in Molecular Bioscience Education, Reading and writing for critical thinking and Computer based learning. I was on academic mobility programme in 2018 at Penn State University and Erasmus+ at University of Santiago de Compostela. Also, I am trainer of statistical methods in forensic genetics certified by EUROFORGEN. Fluent in English and Spanish, good in German, Greek and Latin. Published 20 articles in Current Contents. Main fields of interest: DNA analysis and its different application, molecular diagnostics and innovations in teaching methods.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

J. Purps et al., A global analysis of Y-chromosomal haplotype diversity for 23 STR loci. *Forensic Sci Int Genet.* 12 (2014) 12-23.

D. Zgonjanin, I. Veselinovic, M. Kubat, I. Furac, M. Antov, E. Loncar, M. Tasic, R. Vukovic, R. Omorjan, Sequence polymorphism of the mitochondrial DNA control region in the population of Vojvodina Province, Serbia. *Legal Medicine* 12 (2010) 104-107.

W. Parson et al., The EDNAP mitochondrial DNA population database (EMPOP) collaborative exercises: organisation, results and perspectives. *Forensic Sci. Int.* 139 (2004) 215-226.

J. Ross, I. Furač, W. Parson, M. Kubat and M. Holland, Multiplex PCR amplification of eight STR loci in Austrian and Croatian Caucasian populations. *Int. J Legal Med.* 115 (2001) 57-60.

I. M. Klarić, L. Barač, D. Buković, I. Furač, G. Geber, B. Janičijević, M. Kubat, M. Peričić, B. V. Pupiće and P. Rudan, Short tandem repeat (STR) variation in eight village populations of the island of Korcula (Croatia). *Annals of Hum. Biol.* 28 (2001) 281-294.

L. Oruč, G. R. Verheyen, I. Furač, M. Jakovljević, S. Ivezić, P. Raeymaekers and C. Van Broeckhoven, Association analysis of the 5-HT_{2c} receptor and 5-HT transporter genes in bipolar disorder. *Am. J Med. Genet.* 74 (1997) 504-506.



M. Kubat, I. Furač, D. Strinović, D. Zečević, Short tandem repeat polymorphism at the HUMCD4 and HUMF13B loci in a Croatian population. *Int. J Legal Med.* 110 (1997) 230-231.

L. Oruč, G. R. Verheyen, I. Furač, M. Jakovljević, S. Ivezić, P. Raeymaekers and C. Van Broeckhoven, Analysis of the tyrosine hydroxylase and dopamine D4 receptor genes in a Croatian sample of bipolar I and unipolar patients. *A. J Med. Genet.* 74 (1997) 176-178.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

J. Purps et al., A global analysis of Y-chromosomal haplotype diversity for 23 STR loci. *Forensic Sci Int Genet.* 12 (2014) 12-23.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

BIOMED 1 CT 92-1217 (EK)

Glycosphingolipids in brain development, ageing and neurodegeneration. (2002-2005, MSES)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Thioesterolytic and nuclease activity of some pyridinium oximes, 2015.

Thioesterolytic and nuclease reactivity of penacyano(pyridinium-aldoxime)ferrate(II) complexes, 2016.

Novel cyanometalic and supramolecular systems of esterolytically active pyridinium oximes, 2017.

Supramolecular complexes between derivatives of biologically active pyridinium-4-oximes and cyanometalates, 2018

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Asst. Prof. Alenka Gagro, MD, PhD, Research Adviser

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Children's Hospital Zagreb, Department of Pediatrics, Department of Pulmonology, Allergology, Immunology and Rheumatology, School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Immunocytokines; Mechanisms of allergic reactions; Pathogenesis of infective diseases

BIOGRAPHY

Born in Ljubuški, Bosnia and Herzegovina, May 11, 1965.

Education: MD, Medical School University of Zagreb, 1989; Laboratory for Cell Biology and Histology, Sveučilište u Amsterdamu, Nizozemska, 1994.; PhD, Medical School University of Zagreb 1994; Department of Immunology, Medical School, University of Birmingham, UK, 1998-1999.; Pediatrician, 2008;

Professional Experience: University Hospital for Contagious Diseases "Dr. Fran Mihaljević", Zagreb, 1989-1991.; Institute of Immunology 1991-1998; 1999-2008 Department of Immunology, Medical School, University of Birmingham, UK (postdoctoral fellowship) 1998-1999; Children's Hospital Zagreb, 2009-;

Research Associate 1998; Senior Research Associate 2002; Research Adviser 2006 (re-election 2013); Department of Physiology and Immunology, Medical School, University of Osijek 2009- (Honorary Assistant Professor 2009). Principal investigator on 4 international projects (2 supported by The Wellcome Trust, UK, one Faculty Research Grant, University of Birmingham, one from MSD, USA) and 5 national projects supported by MOSES. Teaching and mentoring: Since 1998 participates in teaching at medical schools in Zagreb and Osijek, Faculty of Science and Faculty of Food Technology and Biotechnology, University of Zagreb. Mentor of 2 MSc and 6 PhD theses, 3 PhD theses in preparation. Main scientific interests: immunodeficiencies, allergic, autoimmune and autoinflammatory diseases in children. Principal investigator in 4 international and 5 national (MOSES) scientific projects. Member of Executive Board of the National Foundation for Science, Higher Education, and Technological Development of the Republic of Croatia, 2005-2010; Vice president of the Core Board of Croatian Ministry of Science, Education and Sports in the field of basic medical sciences, clinical medical sciences, public health, dental health and pharmacy, 2005-2009; Croatian Immunological Society (Secretary 1994-1998; Vice President 2002-2006; Member of Council 2006-; Vice-president October 2018-); Secretary of Croatian Pediatric Society, 2009- . Awards: National Science Award for 2008, 2009; "Ante Šerčer" Award from Croatian Academy of Medical Sciences, 1996; Award from Croatian Academy of Sciences and Arts in the field of medical sciences, 1996; Publications: 65 (46 in CC/SCIE, 19 in other indexed databases), number of citations 1132 (Google Scholar).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: November 13, 2013 (permanent), Field: Basic medical sciences, branch: immunology

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Gagro A, Gordon J. The interplay between T helper subset cytokines and IL-12 in directing human B lymphocyte differentiation. Eur J Immunol 1999; 29:3369-79.

2. Bendelja K, Gagro A, Baće A, Lokar-Kolbas R, Kršulović-Hrešić V, Draženović V, Mlinarić-Galinović G, Rabatić S. Predominant type-2 response in infants with respiratory syncytial virus (RSV) infection demonstrated by cytokine flow cytometry. *Clin Exp Immunol* 2000;121:332-8.
3. Gagro A, Toellner K-M, Grafton G, Servis D, Branica B, Radojčić V, Kosor E, Hrabak M, Gordon J. Naïve and memory B cells respond differentially to T-dependent signalling but display an equal potential for differentiation toward the centroblast-restricted CD77/globotriaosylceramide phenotype. *Eur J Immunol* 2003;33:1889-98.
4. Gagro A, Tominac M, Krsulovic-Hresic V, Bace A, Matic M, Drazenovic V, Mlinaric-Galinovic G, Kosor E, Gotovac K, Bolanca I, Batinica S, Rabatic S. Increased Toll-like receptor 4 expression in infants with respiratory syncytial virus bronchiolitis. *Clin Exp Immunol* 2004;135:267-72.
5. Gagro A, Servis D, Cepika AM, Toellner KM, Grafton G, Taylor DR, Branica S, Gordon J. Type I cytokine profiles of human naive and memory B lymphocytes: a potential for memory cells to impact polarization. *Immunology* 2006;118:66-77.
6. Boras Z, Juretić A, Gagro A, Pavelić Lj. Cytokine profile of T-lymphocytes from peripheral blood and bronchoalveolar lavage fluid in patients with active pulmonary tuberculosis. *Scand J Immunol* 2007;65:257-64.
7. Ajduk J, Marinic I, Aberle N, Rabatic S, Gagro A. Effect of house dust mite immunotherapy on transforming growth factor beta1-producing T cells in asthmatic children. *Ann Allergy Asthma Immunol* 2008;100: 314-22.
8. Servis D, Bušić Ž, Stipančić I, Patrlj L, Gagro A. Serum cytokine changes after gastric resection or gastrectomy for gastric cancer. *Hepatogastroenterology* 2008;55:1868-72.
9. Bendelja K, Vojvoda V, Aberle N, Cepin-Bogovic J, Gagro A, Mlinaric-Galinovic G, Rabatic S. Decreased Toll-like receptor 8 expression and lower TNF-alpha synthesis in infants with acute RSV infection. *Respir Res* 2010; 11:143; doi: 10.1186/1465-9921-11-143.
10. Cepika AM, Bendelja K, Vergles JM, Malenica B, Kapitanovic S, Gagro A. Monocyte response to LPS after exposure to corticosteroids and chloroquine with implications for systemic lupus erythematosus. *Scand J Immunol* 2010; 72:434-43.
11. Cepika AM, Soldo Juresa D, Morovic Vergles J, Malenica B, Santak M, Kapitanovic S, Mayer M, Anic B, Sentic M, Gagro A. Decrease in circulating DNA, IL-10 and BAFF levels in newly-diagnosed SLE patients after corticosteroid and chloroquine treatment. *Cell Immunol* 2012;276:196-203.
12. Ajduk J, Turkalj M, Gagro A. Regulatory T cells in children undergoing rush venom immunotherapy. *Allergy Asthma Proc* 2012;33:525-30.
13. Hojsak I, Gagro A, Petković I, Mišak Z, Kolaček S. Chromosomal aberrations in peripheral blood lymphocytes in patients with newly diagnosed celiac and Crohn's disease. *Eur J Gastroenterol Hepatol* 2013;25:22-7.
14. Grimbacher B; ESID Registry Working Party. The European Society for Immunodeficiencies (ESID) registry 2014. *Clin Exp Immunol* 2014;178 Suppl 1:18-20.
15. Ljubin-Sternak S, Marijan T, Ivković-Jureković I, Čepin-Bogović J, Gagro A, Vraneš J. Etiology and Clinical Characteristics of Single and Multiple Respiratory Virus Infections Diagnosed in Croatian Children in Two Respiratory Seasons. *J Pathog.* 2016;2016:2168780. doi: 10.1155/2016/2168780.

16. Pasini AM, Gagro A, Roić G, Vrdoljak O, Lujić L, Žutelija-Fattorini M. Ataxia Telangiectasia and Juvenile Idiopathic Arthritis. *Pediatrics* 2017;139. pii: e20161279. doi: 10.1542/peds.2016-1279.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Hojsak I, Gagro A, Petković I, Mišak Z, Kolaček S. Chromosomal aberrations in peripheral blood lymphocytes in patients with newly diagnosed celiac and Crohn's disease. *Eur J Gastroenterol Hepatol* 2013;25:22-7.
2. Grimbacher B; ESID Registry Working Party. The European Society for Immunodeficiencies (ESID) registry 2014. *Clin Exp Immunol* 2014;178 Suppl 1:18-20.
3. Ljabin-Sternak S, Marijan T, Ivković-Jureković I, Čepin-Bogović J, Gagro A, Vraneš J. Etiology and Clinical Characteristics of Single and Multiple Respiratory Virus Infections Diagnosed in Croatian Children in Two Respiratory Seasons. *J Pathog.* 2016;2016:2168780. doi: 10.1155/2016/2168780.
4. Pasini AM, Gagro A, Roić G, Vrdoljak O, Lujić L, Žutelija-Fattorini M. Ataxia Telangiectasia and Juvenile Idiopathic Arthritis. *Pediatrics* 2017;139. pii: e20161279. doi: 10.1542/peds.2016-1279.
5. Gagro A. Vaccination in paediatric patients with rheumatic diseases [In Croatian]. *Paediatr Croat* 2017; 61: (Suppl 1): 48-55.
6. Gagro A. Autoimmunity and immunodeficiency [In Croatian]. *Reumatizam* 2016;63(Suppl 1):66-72.
7. Pleša Premilovac Z, Pasini AM, Kolaček Vacka I, Pustišek N, Gagro A. Acute hemorrhagic edema of infancy [In Croatian]. *Paediatr Croat* 2014;58:315-7.
8. Žutelija Fattorini M, Gagro A, Dapic T, Krakar G, Marjanovic J. Neurogenic muscle hypertrophy in a 12-year-old girl. *Brain Dev* 2017;39:89-92.
9. Pasini AM, Marjanović J, Roić G, Dukarić N, Tripalo Batoš A, Bahtijarević Z, Gagro A. Melatonin as an alternative sedation method during magnetic resonance imaging in preschool children with musculoskeletal problems. *Eur J Pediatr* 2018:1359-62.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

"Modulation of human regulatory T cell function", No. 072-1080229-0337 (Ministry of Science, Education and Sports, MOSES), 2006-2014., project leader

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

"Modulation of human regulatory T cell function", No. 072-1080229-0337 (Ministry of Science, Education and Sports, MOSES), 2006-2014., project leader

(IF THE TEACHER IS AT THE SAME TIME A POTENTIAL SUPERVISOR)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

6

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Srecko Gajovic, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research methods in vivo and in vitro; Structure, methodology and functioning of scientific work 3: Research Projects; Morphological research methods in biomedical sciences; Gene targeting in mammals; How to become a neuron?; Laboratory animals in biomedical research

BIOGRAPHY

Professor Srećko Gajović is Head of Department of Histology and Embryology at Zagreb University School of Medicine, and Section for Neurogenetics, Medical Genetics, and Regenerative Neuroscience at Croatian Institute for Brain Research. He was Coordinator of EU-FP7 project “GlowBrain: Combining Stem Cells and Biomaterials for Brain Repair - Unlocking the Potential of the Existing Brain Research through Innovative In Vivo Molecular Imaging”, and established preclinical in vivo imaging platform (GlowLab) for magnetic resonance (7T) and optical imaging (bioluminescence and fluorescence). His major scientific interest is brain repair (in particular after stroke) and its relation to neuroinflammation and stem cell applications. He is one of the founder of Navigating Knowledge Landscapes international interdisciplinary network (<http://knowledge-landscapes.hiim.hr>), which deals how innovative knowledge is communicated in the digital society. He is former editor of the Croatian Medical Journal, the best general medical journal in Central-East Europe. He is a former president of the European COST Domain Committee for Biomedicine and Molecular Biosciences, former president of Croatian Microscopy Society, and now the president of the Croatian Association for Regenerative Medicine and Stem Cell Therapies. He is Advisory Board member of Doctors Against Forced Organ Harvesting (DAFOH), organization nominated in 2016 for the Nobel Peace Prize.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Pongrac IM, Ahmed LB, Mlinarić H, Jurašin DD, Pavičić I, Marjanović Čermak AM, Milić M, Gajović S, Vinković Vrček I. Surface coating affects uptake of silver nanoparticles in neural stem cells. *J Trace Elem Med Biol.* 2017. pii: S0946-672X(17)30537-0.
2. Brkić Ahmed L, Milić M, Pongrac IM, Marjanović AM, Mlinarić H, Pavičić I, Gajović S, Vinković Vrček I. Impact of surface functionalization on the uptake mechanism and toxicity effects of silver nanoparticles in HepG2 cells. *Food Chem Toxicol.* 2017;107(Pt A):349-361.
3. Alić I, Kosi N, Kapuralin K, Gorup D, Gajović S, Pochet R, Mitrečić D. Neural stem cells from mouse strain Thy1 YFP-16 are a valuable tool to monitor and evaluate neuronal differentiation and morphology. *Neurosci Lett.* 2016;634:32-41.
4. Pongrac IM, Dobrivojević M, Ahmed LB, Babić M, Šlouf M, Horák D, Gajović S. Improved biocompatibility and efficient labeling of neural stem cells with poly(L-lysine)-coated maghemite nanoparticles. *Beilstein J Nanotechnol.* 2016;7:926-36.
5. Pongrac IM, Pavičić I, Milić M, Brkić Ahmed L, Babić M, Horák D, Vinković Vrček I, Gajović S. Oxidative stress response in neural stem cells exposed to different superparamagnetic iron oxide nanoparticles. *Int J Nanomedicine.* 2016;11:1701-15.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Saccomano M, Albers J, Tromba G, Dobrivojević Radmilović M, Gajović S, Alves F, Dullin C. Synchrotron inline phase contrast μ CT enables detailed virtual histology of embedded soft-tissue samples with and without staining. *J Synchrotron Radiat.* 2018;25:1153-1161.
2. Polšek D, Bago M, Živaljić M, Rosenzweig I, Lacza Z, Gajović S. A novel adjustable automated system for inducing chronic intermittent hypoxia in mice. *PLoS One.* 2017;12(3):e0174896.
3. Dobrivojević M, Špiranec K, Gorup D, Erjavec I, Habek N, Radmilović M, Unfirer S, Ćosić A, Drenjančević I, Gajović S, Sinđić A. Urodilatin reverses the detrimental influence of bradykinin in acute ischemic stroke. *Exp Neurol.* 2016;284(Pt A):1-10.
4. Kapuralin K, Ćurlin M, Mitrečić D, Kosi N, Schwarzer C, Glavan G, Gajović S. STAM2, a member of the endosome-associated complex ESCRT-0 is highly expressed in neurons. *Mol Cell Neurosci.* 2015;67:104-115.
5. Gorup D, Bohaček I, Miličević T, Pochet R, Mitrečić D, Križ J, Gajović S. Increased expression and colocalization of GAP43 and CASP3 after brain ischemic lesion in mouse. *Neurosci Lett.* 2015;597:176-82.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 2017-2019 EU-H2020-SC1-HCO-08-2017-779303 Alliance4Life: Alliance for Life Sciences: Closing Research and Innovation Divide in the European Union (Partner; awarded by European Commission)
- 2017-2021 IP-06-2016-1892 Multimodal molecular imaging of the mouse brain repair after ischemic lesion (RepairStroke) (awarded by Croatian Science Foundation)
- 2016-2017 Mouse with bioluminescent neurons (awarded by HAMAG BICRO, Croatia)
- 2015-2019 EU-H2020-PHC-2015-681103 BIO-CHIP: BIOengineered grafts for Cartilage Healing In Patients (Partner; awarded by European Commission)
- 2015-2019 EU-H2020-ERC-2014-SUPPORT-1-672302 ScienceSquared: ERC = ScienceSquared (Partner; awarded by European Commission)
- 2012-2016 EU-FP7-REGPOT-2012-CT2012-316120 GlowBrain: Combining Stem Cells and Biomaterials for Brain Repair - Unlocking the Potential of the Existing Brain Research through Innovative In Vivo Molecular Imaging (Project Coordinator; awarded by European Commission)
- 2012-2013 Regulation of FGFR1 trafficking in brain tumors and neural stem cells (bilateral project with Austria, awarded by Ministry of Science and Technology, Republic of Croatia)
- 2012-2013 Corticogenesis controlling genes in the brain repair and regeneration after ischemic lesion in the mouse (bilateral project with Germany, awarded by Ministry of Science and Technology, Republic of Croatia)
- 2009-2011 UKF 35/08 Regeneration and plasticity after ischemic brain damage studied on innovative transgenic mouse models (awarded by Unity through Knowledge Fund for cooperation with Laval University, Quebec, Canada)
- 2008-2010 The role of endosomes in excitotoxic neural damage - the implications in pathogenesis of amyotrophic lateral sclerosis (bilateral project with Serbia, awarded by Ministry of Science and Technology, Republic of Croatia)
- 2007-2009 Endosomes and the mouse nervous system: function of signal transducing adaptor molecule 2 (STAM2) (awarded by International Centre for Genetic Engineering and Biotechnology)
- 2006-2009 EU FP6 SSA Neuroimage (Third Party Participant)

2007-2014 Gene function in differentiation and plasticity of mouse central nervous system (awarded by Ministry of Science and Technology, Republic of Croatia)

2003-2006 Functional analysis of nucleolar protein 1 (Nol1) in mouse (awarded by Ministry of Science and Technology, Republic of Croatia)

2001-2004 Expression and function of nucleolar protein 1 (Nol1) in mouse (awarded by International Centre for Genetic Engineering and Biotechnology)

1996-2000 Expression of Nol1 gene in mouse (awarded as young investigator grant by Ministry of Science and Technology, Republic of Croatia)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2017-2019 EU-H2020-SC1-HCO-08-2017-779303 Alliance4Life: Alliance for Life Sciences: Closing Research and Innovation Divide in the European Union (Partner; awarded by European Commission)

2017-2021 IP-06-2016-1892 Multimodal molecular imaging of the mouse brain repair after ischemic lesion (RepairStroke) (awarded by Croatian Science Foundation)

2016-2017 Mouse with bioluminescent neurons (awarded by HAMAG BICRO, Croatia)

2015-2019 EU-H2020-PHC-2015-681103 BIO-CHIP: BIOengineered grafts for Cartilage Healing In Patients (Partner; awarded by European Commission)

2015-2019 EU-H2020-ERC-2014-SUPPORT-1-672302 ScienceSquared: ERC = ScienceSquared (Partner; awarded by European Commission)

2012-2016 EU-FP7-REGPOT-2012-CT2012-316120 GlowBrain: Combining Stem Cells and Biomaterials for Brain Repair - Unlocking the Potential of the Existing Brain Research through Innovative In Vivo Molecular Imaging (Project Coordinator; awarded by European Commission)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

9

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assoc. Prof. Koraljka Gall Trošelj, MD, Ph.D.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Rudjer Boskovic Institute, Zagreb, Croatia

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Molecular oncology – insight into new technologies; Genomic approaches in biomedical and translational research

BIOGRAPHY

Koraljka Gall Trošelj (Gall - maiden name)
Kuslanova 5A
HR-10000 Zagreb, Croatia

Education

March 2000. Ph.D. degree in Biomedicine – Molecular Oncology, University of Zagreb, School of Medicine, Zagreb, Croatia

January 1995. M.Sc. degree in Biomedicine, University of Zagreb, Faculty of Natural Sciences, Zagreb, Croatia

June 1989. - MD degree, School of Medicine, University of Zagreb, Croatia

B) Employment/Positions held:

Current: Head, Laboratory for Epigenomics, Division of Molecular Medicine, Rudjer Boskovic Institute, Zagreb Croatia

2017: Senior Scientist: first election; Rudjer Boskovic Institute, Zagreb Croatia

2016: Associate Professor (re-elected): Josip Juraj Strossmayer University of Osijek, Dept. for Biology

2012 (January – June) – Head, Division of Molecular Medicine, Rudjer Boskovic Institute, Zagreb Croatia

2010 – 2015 Associate Professor – Department of Biotechnology, University of Rijeka, Rijeka, Croatia

2008 (September) – present. Head, Laboratory of Epigenomics, Division of Molecular Medicine, Rudjer Boskovic Institute, Zagreb Croatia

2007-2008. (July) Visiting Fellow, Weill Medical College, Cornell University, New York, USA

2006-2007. Fulbright Scholar, Weill Medical College, Cornell University, New York, USA

2006-2017 Senior Research Associate - Rudjer Boskovic Institute, Zagreb, Croatia

2001 – 2006 Head, Laboratory of Molecular Pathology, Division of Molecular Medicine, Rudjer Boskovic Institute, Zagreb Croatia

2001-2006 Research Associate – Rudjer Boskovic Institute, Zagreb, Croatia

1995 - Cancer Research Scientist, Division of Molecular Medicine, Rudjer Bošković Institute, Zagreb Croatia

1991-1995. Fellow, Croatian Academy of Sciences and Arts, Zagreb, Croatia

1991 (January-August) MD - General Practice, Orahovica, Croatia

1989-1990 MD – General Practice, Medical Centre, Našice, Croatia

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

Research: 11.7.2017, Senior Scientist;

Teaching: 15.09.2016, Associated Professor (re-election), Josip Juraj Strossmayer University of Osijek

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Gall Trošelj K, Novak Kujundžić R, Ugarković D. Polycomb repressive complex's evolutionary conserved function: the role of EZH2 status and cellular background. Clin Epigenetics. 2016;27;8:55

2. Grbeša I, Pajares MJ, Martínez-Terroba E, Agorreta J, Mikecin AM, Larráyoz M, Idoate MA, Gall-Trošelj K, Pio R, Montuenga LM. Expression of sirtuin 1 and 2 is associated with poor prognosis in non-small cell lung cancer patients. PLoS One. 2015;10(4):e0124670.

3. Stepanić V, Čipak Gašparović A, Gall Trošelj K, Amić D, Žarković N. Selected attributes of polyphenols in targeting oxidative stress in cancer. Curr Top Med Chem. 2015;15(5):496-509.

4. Gall Trošelj K, Novak Kujundžić R. Curcumin in combined cancer therapy. *Curr Pharm Des.* 2014;20(42):6682-96
5. Novak Kujundžić R, Grbeša I, Ivkić M, Krušlin B, Konjevoda P, Gall Trošelj K. Possible prognostic value of BORIS transcript variants ratio in laryngeal squamous cell carcinomas - a pilot study. *Pathol Oncol Res* 2014;20:687-95.
6. Gall Trošelj K, Novak Kujundžić R. Epigenomics – A bird's eye perspective on the genome. *Period Biol* 2010;112:411-418.
7. Martin-Kleiner I, Gall Trošelj K. Mannose-6-phosphate/insulin-like growth factor 2 receptor (M6P/IGF2R) in carcinogenesis. *Cancer Lett* 2010;289:11-22.
8. Grbeša I, Marinković M, Ivkić M, Krušlin B, Novak-Kujundžić R, Pegan B, Bogdanović O, Bedeković V, Gall Trošelj K. Loss of imprinting of IGF2 and H19, loss of heterozygosity of IGF2R and CTCF, and *Helicobacter pylori* infection in laryngeal squamous cell carcinoma. *J Mol Med* 2008; 86:1057-1066.
9. Novak Kujundžić R, Grbeša I, Ivkić K, Katdare M, Gall-Trošelj K. Curcumin downregulates H19 transcription in tumor cells. *J Cell Biochem* 2008;104:1781-1792

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Matić S, Jadrijević-Mladar Takač M, Barbarić M, Lučić B, Gall Trošelj K, Stepanić V. The influence of in vivo metabolic modifications on ADMET properties of green tea catechins—in silico analysis. *J Pharm Sci.* 2018;107:2957-2964.
2. Milković Periša M, Šarčević B, Gall Trošelj K, Gršić K, Šitić S, Seiwerth S. Expression of nm23-H1 and COX-2 in thyroid papillary carcinoma and microcarcinoma. *Oncology Lett.* 2017;13:3547-3555.
3. Gall Trošelj K, Novak Kujundžić R, Ugarković D. Polycomb repressive complex's evolutionary conserved function: the role of EZH2 status and cellular background. *Clin Epigenetics.* 2016;27;8:55.
4. Velen A, Zarkovic N, Gall Trošelj K, Bisenieks E, Krauze A, Poikans J, Duburs G. 1,4-Dihydropyridine derivatives: Dihydronicotinamide analogues-model compounds targeting oxidative stress. *Oxid Med Cell Longev.* 2016;2016:1892412.
5. Grbeša I, Pajares MJ, Martínez-Terroba E, Agorreta J, Mikecin AM, Larráyoz M, Idoate MA, Gall-Trošelj K, Pio R, Montuenga LM. Expression of sirtuin 1 and 2 is associated with poor prognosis in non-small cell lung cancer patients. *PLoS One.* 2015;10(4):e0124670.
6. Stepanić V, Čipak Gašparović A, Gall Trošelj K, Amić D, Žarković N. Selected attributes of polyphenols in targeting oxidative stress in cancer. *Curr Top Med Chem.* 2015;15(5):496-509.
7. Gall Trošelj K, Novak Kujundžić R. Curcumin in combined cancer therapy. *Curr Pharm Des.* 2014;20(42):6682-96.
8. Novak Kujundžić R, Žarković N, Gall Trošelj K. Pyridine nucleotides in regulation of cell death and survival by redox and non-redox reactions. *Crit Rev Eukaryot Gene Expr.* 2014;24(4):287-309.
9. Novak Kujundžić R, Grbeša I, Ivkić M, Krušlin B, Konjevoda P, Gall Trošelj K. Possible prognostic value of BORIS transcript variants ratio in laryngeal squamous cell carcinomas - a pilot study. *Pathol Oncol Res* 2014;20:687-95.
10. Stepanić V, Gall Trošelj K, Lučić B, Marković Z, Amić D. Bond dissociation free energy as a general parameter for flavonoid radical scavenging activity. *Food Chem* 2013;141:1562-70.



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Ministry of Science, Education and Sports RH (098-0982464-2511) Gall Trošelj, K (Project Leader)
1.1.2007-31.12.2013. Epigenetic and immunomodulatory changes in malignant head and neck tumors
2. Ministry of Science, Education and Sports of Croatia (108-0000000-0028) Žarkovic, N (Project Manager)
1.1.2007-31.12.2013. Lipids, Free Radicals and Their Messengers in Integrative Oncology K. Gall Trošelj - Associate on the Project

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Croatian Science Foundation Gall Trošelj, K (Principal Investigator). NRF2 at the intersection of epigenetic remodeling, metabolism and proliferation of cancer cells. Project manager

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Dragan Gamberger, dr. sc.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: -

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Knowledge discovery in medical domains

BIOGRAPHY

Dragan Gamberger obtained PhD from University of Zagreb, Faculty of electrical engineering and computing, in the year 1986. He has been working at Rudjer Boskovic Institute since year 1975 till 2016. His last position has been senior scientist. He has been head of Laboratory for Information Systems for 17 years.

His scientific interests include machine learning, intelligent data analysis, knowledge discovery, knowledge representation by ontologies, reasoning for decision support, and applications of these techniques in medicine, biology, chemistry, social sciences, economics, and manufacturing.

According to WOS, Dragan Gamberger has 58 publications that have been cited in total 423 times. His h-index is 11. He is co-author of the authored book “Foundations of Rule Learning” (Springer, 2012) that presents most of his long-term research results in the field of machine learning. He is author of the handbook for students and scientists “Data Mining for Knowledge Discovery” (in Croatian). He is main author of the public service “Data Mining Server” that is already for more than 10 years available at <http://dms.irb.hr/>. The service integrates the rule learning algorithms developed at Rudjer Boskovic Institute with a very simple user interface appropriate for teaching and data analysis tasks. Recently he developed the web services for exploratory clustering and predictive induction (<http://rr.irb.hr/>). In year 2018 he served as evaluator for EU Marie Curie projects.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 01.02.2004.
scientific advisor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Fuernkranz, J., Gamberger, D., Lavrac, N. (2012). Foundations of Rule Learning. Springer

Gamberger, D. (2013) Handbook: Data Mining for Knowledge Discovery (in Croatian, web publication only) <http://lis.irb.hr/Prirucnik/prirucnik-otkrivanje-znanja.pdf>

Gamberger, D. and Lavrac, N. (2002) Expert-guided subgroup discovery: Methodology and Application. Journal of Artificial Intelligence Research, Vol. 17 pp.501-527.

Gamberger, D., Lavrac, N., Krstacic, G. (2003) Active subgroup mining: A case study in a coronary heart disease risk group detection. Artificial Intelligence in Medicine, Vol. 28 pp.27-57.

Gamberger, D., Lavrac, N., Zelezny, F., and Tolar, J. (2004) Induction of comprehensible models for gene expression datasets by subgroup discovery methodology. Journal of Biomedical Informatics 37/4:269-284

Gamberger, D., Lavrac, N., Krstacic, A. and Krstacic, G. (2007) Clinical data analysis based on iterative subgroup discovery: Experiments in brain ischaemia data analysis. Applied Intelligence, 27:205-217

Jovic, A., Gamberger, D., Krstacic, G. (2011) Heart failure ontology. Bio-algorithms and med-systems, 7(2):101-110.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Gamberger, D., Lavarac, N., Srivatsa, S., Tanzi, R. E., Doraiswamy, P. M. (2017) Identification of clusters of rapid and slow decliners among subjects at risk for Alzheimer's disease. Scientific Reports 7:6763-1-6763-12

Gamberger, D., Zenko, B., Lavarac, N. (2017) Exploratory Clustering for Patient Subpopulation Discovery. In Proc. of EFMI 2017: Informatics for Health: Connected Citizen-Led Wellness and Population Health, pp.101-105

Gamberger, D., Zenko, B., Mitelpunkt, A., Lavarac, N. (2016) Homogeneous clusters of Alzheimer's disease patient population. BioMedical Engineering OnLine, 15(Suppl 1):78

Gamberger, D., Zenko, B., Mitelpunkt, A., Schachar, N., Lavarac, N. (2016) Clusters of male and female Alzheimer's disease patients in the Alzheimer's Disease Neuroimaging Initiative (ADNI) database. Brain Informatics, web publication

Gamberger, D., Zenko, B., Mitelpunkt, A., Lavarac, N. (2015) Identification of gender specific biomarkers for Alzheimer's disease. In Proc. of Brain Informatics and Health, BIH 2015, pp.57-66

Gamberger, D., Mihelcic, M., Lavarac, N. (2014) Multilayer clustering: A discovery experiment on country level trading data. . Discovery Science 2014 Conference Proceedings, Springer, pp 87-98

Sluban, B., Gamberger, D., Lavarac, N. (2014) Ensemble-based noise detection: noise ranking and visual performance evaluation.. Data Mining and Knowledge Discovery, 28:265-303

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

EU project "HEARTFAID: A knowledge based platform of services for supporting medical-clinical management of heart failure withing elderly population", workpackage leader
<https://cordis.europa.eu/project/rcn/79484/factsheet/en>

Croatian national project "Machine Learning Algorithms and their Applications", project leader

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

HRZZ project : "Machine learning algorithms for insightful analysis of complex data structures", project leader <http://lis.irb.hr/MLCS/index.html>

EU project "MAESTRA: learning from massive, incompletely annotated, and structured data", researcher <http://maestra-project.eu/>

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Marija Gamulin, MD, PhD, research advisor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb, Department of Oncology, Kispaticeva 12, 10 000 Zagreb, Croatia

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical methods in biomedical research

BIOGRAPHY

Date of birth, November 8, 1963.

Education in Croatia: Medical School, University of Zagreb (1983-1990); PhD Thesis, "The estimate of mutagenic effects of radiotherapy on lymphocytes from peripheral blood in patients treated for solid tumors" (2006); Specialization in radiotherapy and oncology (Clinical Oncology), Zagreb, Croatia (1996-2000). Most important education abroad: Training on prostate and testicular cancer Maastricht Clinic, Maastricht, Netherlands (October 2010, May 2011); Training on testicular, prostate, kidney and bladder tumors Indiana University, School of Medicine, Hematology Oncology Division, Indiana, USA (November/December 2011). Present position: Urogenital Unit at the Division of Medical Oncology, Clinical Hospital Centre Zagreb, Zagreb – (since May/2003), Functions: Head of Urogenital Unit at the Division of Medical Oncology, Clinical Hospital Centre Zagreb – (since 4/2015); Head of Referral Centre for the Treatment of Germ Cell Tumors and Extragonadal Germ Cell Tumors in the Republic of Croatia (since October/2013), Deputy of Referral Centre for Uro-Oncology in the Republic of Croatia (since July/2016), Head of Croatian Society for Uro-oncology Croatian Medical Association (since July/2017), Head of the Multidisciplinary Uro-oncological Team at the UHC Zagreb (since June/2015)

Area of interest in daily work: treatment of the kidney, adrenal gland, bladder, prostate, testicular and penile cancer. Over the last 5 years I have especially been interested in immunotherapy in genitourinary cancers.

Main Scientific projects: co-investigator in the consortium "Genome-Wide Association Study of Common Cancers" Prostate cancer- Prostate cancer Association group To Investigate Cancer Associated alterations in the genome (PRACTICAL), The Institute of Cancer Research, London, UK (since February 2014-ongoing); co-investigator in the project with Institute of Human Genetics, University Medical Center Hamburg-Eppendorf, Germany, (Germ cell tumors), (since 2010-ongoing); National Presenter - PI of the 1553-SPECTA EORTC Study (European Organisation for Research and Treatment of Cancer), (uro-oncology), (since January 2019-ongoing).

Collaboration in Scientific Center for the reproductive and regenerative Medicine with a Project "Reproductive and regenerative medicine" – scientific investigation of the new platforms and potential with financial by European Union Foundation with agreement KK.01.1.1.01.0008. , Principal investigator is Prof Davora Ježek, MD, Ph.D., "Characterisation epigenetic changes Leydig cells in the disorders in male fertility" and the element "Epi-genetic of the embryonal testicular germ cells tumors"; Assist. prof. Nino Sinčić, MD, PHD, investigation "Identification epi-genetic biomarkers with translation potential from the testicular non-seminoma germ cell tumors in patients blood and ejaculate" Croatian Scientific Association IP-06-2016 "Epi-genetic biomarkers with translation potential from the testicular non-seminoma germ cell tumors in patients blood and ejaculate" - „epi_Sem“ principal investigator Prof Davora Ježek, MD, Ph.D.

Over last 20 years my area of research have been the mechanisms of carcinogenesis and genome damage through chemotherapy and radiotherapy and genetics in urooncology. Last 5 years I my special interst is immunouro-oncology .

I am a lecturer to undergraduates and postgraduates studies, a menthor for post study students for PhD at the Medical School, University of Zagreb and PI of the clinical urooncological studies at the UHC Zagreb.

Publications: book chapters: 16 published in oncological books; more than 50 abstracts; 53 articles (30 CC).

poglavlja u knjigama: 16 poglavlja iz područja onkologije; više od 50 kongresnih sažetaka; 53 članka-rada Web of Science (21/3/2019): citate of the articles = 434, h-index= 12.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 14/07/2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. AlDubayan SH, Pyle LC, Gamulin M. et al. Association of Inherited Pathogenic Variants in Checkpoint Kinase 2 (CHEK2) With Susceptibility to Testicular Germ Cell Tumors. JAMA Oncol. 2019 Jan 24. doi: 10.1001/jamaoncol.2018.6477. [Epub ahead of print]
2. Matejčić M, Saunders EJ, Dadaev T. et al. Germline variation at 8q24 and prostate cancer risk in men of European ancestry. Nat Commun. 2018 Nov 5;9(1):4616. doi: 10.1038/s41467-018-06863-1. Erratum in: Nat Commun. 2019 Jan 17;10(1):382. IF=12,353
3. Shen H, Shih J, Hollern DP. et al Cancer Genome Atlas Research Network, Akbani R, Wheeler DA, Laird PW, Nathanson KL, Cortessis VK, Hoadley KA. Integrated Molecular Characterization of Testicular Germ Cell Tumors. Cell Rep. 2018 Jun 12;23(11):3392-3406.
4. Dadaev T, Saunders EJ, Newcombe PJ. et al. Fine-mapping of prostate cancer susceptibility loci in a large meta-analysis identifies candidate causal variants. Nat Commun. 2018 Jun 11;9(1):2256. IF=12,353
5. Schumacher FR, Al Olama AA, Berndt SI. Et al. Association analyses of more than 140,000 men identify 63 new prostate cancer susceptibility loci. Nat Genet. 2018 Jul;50(7):928-936. Erratum in: Nat Genet. 2019 Feb;51(2):363. IF=27,125
6. Premuzić V, Gamulin M, Corić M, Jelaković B. The incidence of urinary tract cancers is related to preserved diuresis: a single-center report. Int Urol Nephrol. 2017 Dec;49(12):2257-2263. IF=1,682
7. Markulin D, Vojta A, Samaržija I, Gamulin M. et al. Association Between RASSF1A Promoter Methylation and Testicular Germ Cell Tumor: A Meta-analysis and a Cohort Study. Cancer Genomics Proteomics. 2017 Sep-Oct;14(5):363-372.
8. Tariba B, Živković T, Filipović Marijić V, Erk M, Gamulin M, Pizent A. Does the Serum Metallothionein Level Reflect the Stage of Testicular Germ Cell Tumor? Arch Med Res. 2016 Apr;47(3):232-5. IF=2,718
9. Tariba B, Živković T, Krasnići N, Marijić VF, Erk M, Gamulin M, Grgić M, Pizent A. Serum metallothionein in patients with testicular cancer. Cancer Chemother Pharmacol. 2015 Apr;75(4):813-20. IF=2,824

10. Vladušić T, Hrašćan R, Krušlin B, Pećina-Šlaus N, Perica K, Bićanić A, Vrhovac I, Gamulin M, Franekić J. Histological groups of human postpubertal testicular germ cell tumours harbour different genetic alterations. *Anticancer Res.* 2014 Aug;34(8):4005-12. IF=1,826
11. Fucic A, Gamulin M, Katic J, Milic M, Druzhinin V, Grgić M. Genome damage in testicular seminoma patients seven years after radiotherapy. *Int J Radiat Biol.* 2013 Nov;89(11):928-33 IF=1,823
12. Fucic A, Gamulin M, Ferencic Z, Katic J, Kreyer von Kraus M, Bartonova A, Merlo M. Environmental exposure to xenoestrogens and estrogen related cancers of reproductive system, breast, lung, kidney, pancreas and brain. *Environ Health*, 2012 Jun 28;Suppl 1:Y S8. IF=2,714
13. Merlo M, Filiberti R, Kobernus M, Bartonova A, Gamulin M, Ferencic Z, Dusinska M, Fucic A. Cancer risk and the complexity of the interactions between environmental and host factors: HENVINET interactive diagrams as simple tools for exploring and understanding the scientific evidence. *Environ Health* 2012 Jun 28;Suppl 1:Y S9. IF=2,714
14. Lessel D, Gamulin M, Kulis T, Toliat MR, Grgic M, Friedrich K, Zunec R, Balijsa M, Nürnberg P, Kastelan Z, Högel J, Kubisch C. Replication of genetic susceptibility loci for testicular germ cell cancer in the Croatian population. *Carcinogenesis* 2012;33(8):1548-1552. IF=5,635
15. Merlo DF, Ceppi M, Filiberti R, Bocchini V, Znaor A, Gamulin M, Primic-Žakelj M, Bruzzi P, Bouchardy C, Fucic A; AIRTUM WG. Breast Cancer incidence trends in European women aged 20-39 years at diagnosis. *Breast Cancer Res Treat.* 2012 Jul;134(1):363-70. IF=4,469
16. Fucic A, Fucic L, Katic J, Stojkovic R, Gamulin M, Seferovic E. Radiochemical indoor environment and possible health risks in current building technology. *Building and Environment* 2011;46(12):2609-2614. IF=2,400
17. Fucic A, Gamulin M. Interaction between ionizing radiation and estrogen: what we are missing? *Med Hypotheses* 2011;77 (6):966-9. IF=1,150
18. Matkovic B, Juretic A, Spagnoli GS, Separovic V, Gamulin M, Separovic R, Saric N, Basic-Koretic M, Novosel I, Krušlin B. „Expression of MAGE-A and NY-ESO-1 Cancer/testis antigens in medullary breast cancer: a retrospective immunohistochemical study“. *Croat Med J* 2011;15:52(2);171-7. IF=1,796
19. Jokić M, Brčić-Kostić K, Štefulj J, Catela Ivković T, Lončar B, Gamulin M, Kapitanović S. Association of MTHFR, MTR, MTRR, RFC1 and DHFR Gene Polymorphisms With Susceptibility to Sporadic Colon Cancer. *DNA and Cell Biology* 2011;30(10):771-6. IF=2,072
20. Fucic A, Gamulin M, Ferencic Z, Rokotov DS, Katic J, Bartonova A, Lovasic IB, Merlo DF. Lung Cancer and Environmental Chemical Exposure: A Review of Our Current State of Knowledge with Reference to the Role of Hormones and Hormone Receptors as an Increased Risk Factor for Developing Lung Cancer in Man. *Toxicol Pathol* 2010;38:849-855. IF=2,168
21. Gamulin M, Kopjar N, Grgić M, Ramić S, Viculin T, Petković M, Garaj-Vrhovac V. Cytogenetic Follow Up in Testicular Seminoma Patients Exposed to Adjuvant Radiotherapy. *Collegium Antropologicum* 2010, 34(2): 455–465. IF=0,491
22. Vladušić T, Hrašćan R, Vrhovac I, Krušlin B, Gamulin M, Grgić M, Pećina-Šlaus N, Franekić Čolić J. Loss of heterozygosity of selected tumor suppressor genes in human testicular germ cell tumors. *Pathol Res Pract* 2010 Mar 15;206(3):163-7. IF=1,258

23. Gamulin M, Garaj-Vrhovac V, Kopjar N, Ramic S, Viculin T, Juretic A, Grgic M. DNA and Cytogenetic Damage in White Blood Cells of Postmenopausal Breast Cancer Patients Treated with Radiotherapy. *J Environ Sci Health Part A*, 2010;45(3):292-304. IF=1,107
24. Fucic A, Stojkovic R, Katic J, Markovic D, Ferencic Z, Korsic M, Jazbec AM, Gamulin M. Animal model for age and sex related genotoxicity of diethylstilbestrol. *Brazilian Journal of Medical and Biological Research* 2009;42(11):1090-1096. IF=1,075
25. Fucic A, Miškov S, Želježić D, Bogdanovic N, Katić J, Gjergja R, Karelson E, Gamulin M. Is the role of estrogens and estrogen receptors in epilepsy still underestimated? *Med Hypotheses* 2009;73(5):703-5. IF=1,393
26. Matkovic B, Juretic A, Separovic V, Novosel I, Separovic R, Gamulin M, Kruslin B. Immunohistochemical analysis of ER, PR and HER-2, CK 5/6, p63 and EGFR antigen expression in medullary breast cancer. *Tumori* 2008;94:838-844. IF=0,791
27. Fucic A, Markovic D, Herceg Z, Gamulin M, Katic J, Stojkovic R, Ferencic Z, Mildner B, Jazbec AM, Dobranic T. Developmental and transplacental genotoxicology: Fluconazole. *Mutat Res* 2008 Nov 17;657(1):43-7 IF=2,363
28. Gamulin M, Kopjar N, Grgić M, Ramić S, Bišof V, Garaj-Vrhovac V. Genome damage in oropharyngeal cancer patients treated by radiotherapy. *Croat Med J* 2008;49(4):515-527. IF=1,114
29. Gamulin M, Garaj-Vrhovac V, Kopjar N. Evaluation of DNA damage in radiotherapy- treated cancer patients using the alkaline comet assay. *Collegium Antropologicum* 2007;31 (3):837-845. IF=0,414
30. Kopjar N, Želježić D, Lucić Vrdoljak A, Radić B, Ramić S, Milić M, Gamulin M, Pavlica V, Fučić A. Irinotecan toxicity of human blood cells in vitro-relationships between various biomarkers. *Basic & Clinical Pharmacology & Toxicology* 2007;100:403-413. IF=1,821
31. Kopjar N, Milas I, Garaj-Vrhovac V, Gamulin M. Cytogenetic outcomes of adjuvant chemotherapy in non-target cells of breast cancer patients. *Human & Experimental Toxicology* 2007;26:1-9. IF=1,335
32. Šarcevic B, Spagnoli G.S, Terracciano L, Schultz-Thater E, Heberer M, Gamulin M., Orešić T., Separovic R., Juretić A.: Expression of cancer/testis tumor associated antigens in invasive squamous cell cervical carcinoma. *Oncology* 2003;64:443-449. IF=2,381

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. AlDubayan SH, Pyle LC, Gamulin M. et al. Association of Inherited Pathogenic Variants in Checkpoint Kinase 2 (CHEK2) With Susceptibility to Testicular Germ Cell Tumors. *JAMA Oncol*. 2019 Jan 24. doi: 10.1001/jamaoncol.2018.6477. [Epub ahead of print]
2. Matejčić M, Saunders EJ, Dadaev T. et al. Germline variation at 8q24 and prostate cancer risk in men of European ancestry. *Nat Commun*. 2018 Nov 5;9(1):4616. doi: 10.1038/s41467-018-06863-1. Erratum in: *Nat Commun*. 2019 Jan 17;10(1):382.
3. Shen H, Shih J, Hollern DP. et al. Cancer Genome Atlas Research Network, Akbani R, Wheeler DA, Laird PW, Nathanson KL, Cortessis VK, Hoadley KA. Integrated Molecular Characterization of Testicular Germ Cell Tumors. *Cell Rep*. 2018 Jun 12;23(11):3392-3406.
4. Dadaev T, Saunders EJ, Newcombe PJ. et al. Fine-mapping of prostate cancer susceptibility loci in a large meta-analysis identifies candidate causal variants. *Nat Commun*. 2018 Jun 11;9(1):2256.

5. Schumacher FR, Al Olama AA, Berndt SI. Et al. Association analyses of more than 140,000 men identify 63 new prostate cancer susceptibility loci. *Nat Genet.* 2018 Jul;50(7):928-936. Erratum in: *Nat Genet.* 2019 Feb;51(2):363.
6. Premuzic V, Gamulin M, Coric M, Jelakovic B. The incidence of urinary tract cancers is related to preserved diuresis: a single-center report. *Int Urol Nephrol.* 2017 Dec;49(12):2257-2263.
7. Markulin D, Vojta A, Samaržija I, Gamulin M. et al. Association Between RASSF1A Promoter Methylation and Testicular Germ Cell Tumor: A Meta-analysis and a Cohort Study. *Cancer Genomics Proteomics.* 2017 Sep-Oct;14(5):363-372.
8. Tariba B, Živković T, Filipović Marijić V, Erk M, Gamulin M, Pizent A. Does the Serum Metallothionein Level Reflect the Stage of Testicular Germ Cell Tumor? *Arch Med Res.* 2016 Apr;47(3):232-5.
9. Tariba B, Živković T, Krasnići N, Marijić VF, Erk M, Gamulin M, Grgić M, Pizent A. Serum metallothionein in patients with testicular cancer. *Cancer Chemother Pharmacol.* 2015 Apr;75(4):813-20.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. co-investigator «Concomitant immunity and tumor metastasing» (No. 108005) 1997.-1998.
2. co-investigator «Biomarkers genome cells damage in cytogenetic investigations» (No. 0022020) 2002.- 2006.
3. Consultant - «Influencis chemo and radiotherapy in lymphocytes in operated rectal cancer patients» (No.0074004) 2002.-2006.
4. investigator «Moleculat genetic and pharmacogenetic in the gastrointestinal tumors» which is included in the programme «Integrative genomic and proteomic during the cancer investigation» (No. 098-0982464-2508) 2006.-2010.
5. Co-investigator in the European project -Programme 6“Health and Enviroment Network” (HENVINET, GCE-7.2.037019) 2006.-2010
6. Co-investigator “Genetic Studies of Testicular Germ Cell Tumors (TGCT)” with “The Cancer Genome Atlas Project from the National Cancer Institute (NCI)” and “The National Human Genome Research Institute (NHORI), USA, od 2010-2014.
7. co-investigator in the consortium “Genome-Wide Association Study of Common Cancers” Prostate cancer- PROstate cancer AssoCiation group To Investigate Cancer Associated aLterations in the genome (PRACTICAL), The Institute of Cancer Research, London, UK (since February 2014-ongoing);
8. co-investigator in the project with Institute of Human Genetics, University Medical Center Hamburg-Eppendorf, Germany, (Germ cell tumors), (since 2010-ongoing);
9. National Presenter - PI of the 1553-SPECTA EORTC Study (European Organisation for Research and Treatment of Cancer), (uro-oncology), (since January 2019-ongoing).
10. Colaborator in Scientific Center for the reproductive and regenerative Medicine with a Project “Reproductive and regenerative medicine” – scientific investigation of the new platforms and potential with finantial by European Union Fondation with agreement KK.01.1.1.01.0008. , Principal investigator is Prof Davora Ježek, MD, Ph.D., “Characterisation epigenetic changes Leydigs cells in the disorders in male fertility” and the element “Epi-genetic of the embrional testicular germ cells tumors”;

11. Colaborator wtih Assist. prof. Nino Sinčić, MD, PHD, investigation "Identification epi-genec biomarkers with translation potential from the testicular non-seminoma germ cell tumors in patients blood and ejaculate" Croatian Scientific Assotiation IP-06-2016 "Epi-genec biomarkers with translation potential from the testicular non-seminoma germ cell tumors in patients blood and ejaculate"- „epi_Sem“ principal investigator Prof Davora Ježek, MD, Ph.D.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. co-investigator in the consortium "Genome-Wide Association Study of Common Cancers "Prostate cancer- PRostate cancer AssoCiation group To Investigate Cancer Associated aLterations in the genome (PRACTICAL), The Institute of Cancer Research, London, UK (since February 2014-ongoing);
2. co-investigator in the project with Institute of Human Genetics, University Medical Center Hamburg-Eppendorf, Germany, (Germ cell tumors), (since 2010-ongoing);
3. National Presenter - PI of the 1553-SPECTA EORTC Study (European Organisation for Research and Treatment of Cancer), (uro-oncology), (since January 2019-ongoing).
- 4.Colaborator in Scientific Center for the reproductive and regenerative Medicine with a Project "Reproductive and regenerative medicine" – scientific investigation of the new platforms and potential with finantial by European Union Fondation with agreement KK.01.1.1.01.0008. , Principal investigator is Prof Davora Ježek, MD, Ph.D., "Characterisation epigenetic changes Leydigs cells in the disorders in male fertility" and the element "Epi-genetcic of the embrional testicular germ cells tumors";
5. Colaborator wtih Assist. prof. Nino Sinčić, MD, PHD, investigation "Identification epi-genec biomarkers with translation potential from the testicular non-seminoma germ cell tumors in patients blood and ejaculate" Croatian Scientific Assotiation IP-06-2016 "Epi-genec biomarkers with translation potential from the testicular non-seminoma germ cell tumors in patients blood and ejaculate"- „epi_Sem“ principal investigator Prof Davora Ježek, MD, Ph.D.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assoc. Prof. Ozren Gamulin, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: “Biomaterial Infections”.

BIOGRAPHY

Date of Birth: March 5th, 1964, Zagreb, Croatia. Education: Faculty of Physics, University of Zagreb, 1983-1989, Zagreb, Croatia. Postgraduate Study, Master degree thesis in 1996, PhD thesis in 2004. Employment: staff associate at “Rade Končar” Electrotechnical Institute in Zagreb, 1989-2000. Staff associate at Department of Physics and Biophysics, Medical School, University of Zagreb, 1999-2000. Assistant 2000-2005, senior assistant 2005-2008, assistant professor 2008-2019, and associate professor since 2019 at Medical School, University of Zagreb. Head of Department of Physics and Biophysics at Zagreb University Medical School, 2010-. Awarded in 2006 with distinguish acknowledgement at 4. International display of inovations, new ideas, products and technologies - ARCA for project: “Changes Induced by Heat Shock in *in vitro* Culture of Gastrulating Mammalian Embryo - Application of FTIR and Raman Spectroscopy”.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2019, associate professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Gamulin O., Serec K., Bilić V., Balarin M., Kosović M., Drmić D., Brčić L., Seiwerth S., Sikirić P.; Monitoring the healing process of rat bones using Raman spectroscopy; JOURNAL OF MOLECULAR STRUCTURE; 2013; Volume:1044; Issue:Page:308-313; Q3; IF 1.599; ISSN: 00222860; DOI: 10.1016/j.molstruc.2013.01.049;
2. Ristić D., Ivanda M., Speranza G., Siketić Z., Bogdanović-Radović I., Marciuš M., Ristić M., Gamulin O., Musić S., Furić K., Righini GC., Ferrari M.; Local Site Distribution of Oxygen in Silicon-Rich Oxide Thin Films: A Tool to Investigate Phase Separation; JOURNAL OF PHYSICAL CHEMISTRY C; 2012; Volume:116; Issue:18; Page:10039-10047; ISSN: 19327447; DOI: 10.1021/jp301181y;
3. Tijanić Z., Ristić D., Ivanda M., Bogdanović-Radović I., Marciuš M., Ristić M., Gamulin O., Musić S., Furić K., Chiasera A., Ferrari M., Righini GC.; Low Temperature Deposition of SiNx Thin Films by the LPCVD Method; CROATICA CHEMICA ACTA; 2012; Volume:85; Issue:1; Page:97-100; ISSN: 00111643;
4. Gamulin O., Balarin M., Ivanda M., Kosović M., Derek V., Mikac L., Serec K., Furić K., Ristić D., Krilov D.; Micro and Nano Structure of Electrochemically Etched Silicon Epitaxial Wafers; CROATICA CHEMICA ACTA; 2012; Volume:85; Issue:1; Page:101-106;
5. Balarin M., Gamulin O., Ivanda M., Kosović M., Ristić D., Ristić M., Musić S., Furić K., Krilov D.; Optical properties of porous silicon on an insulator layer; JOURNAL OF MOLECULAR STRUCTURE; 2011; Volume:993; Issue:1-3; Page:208-213; Q3; IF 1.634;
6. Ristić D., Holy V., Ivanda M., Marciuš M., Buljan M., Gamulin O., Furić K., Ristić M., Musić S., Mazzola M., Chiasera A., Ferrari M., Righini GC.; Surface characterization of thin silicon-rich oxide films; JOURNAL OF MOLECULAR STRUCTURE; 2011; Volume:993; Issue:1-4; Page:214-218; Q3; IF 1.634; ISSN: 00222860; DOI: 10.1016/j.molstruc.2010.11.066;Citati 4/WOS 5/Scopus
7. Gamulin O., Ivanda M., Mitsa V., Balarin M., Kosović M.; Monitoring structural phase transition of $(\text{Ge}_2\text{S}_3)_x(\text{As}_2\text{S}_3)_{(1-x)}$ chalcogenide glass with Raman spectroscopy; JOURNAL OF MOLECULAR STRUCTURE; 2011; Volume:993; Issue:1-5; Page:264-268; Q3; IF 1.634; ISSN: 00222860; DOI: 10.1016/j.molstruc.2011.01.059;Citati 3/WOS 4/Scopus
8. Krilov D., Kosović M., Balarin M., Gamulin O., Brnjas-Kraljević J.; Interaction of High Density Lipoprotein with Nicotine - an IR and Raman Study; CROATICA CHEMICA ACTA; 2010; Volume:83; Issue:4; Page:387-393;Q3;IF 0.713; ISSN: 0011-1643; ;Citati 2/WOS 2/Scopus

9. Buljan M., Bogdanović-Radović I., Karlusić M., Desnica UV., Radić N., Skukan N., Dražić G., Ivanda M., Gamulin O., Matej Z., Vales V., Grenzer J., Cornelius TW., Metzger HT., Holy V.; Generation of an ordered Ge quantum dot array in an amorphous silica matrix by ion beam irradiation: Modeling and structural characterization; *PHYSICAL REVIEW B*; 2010; Volume:81; Issue:8; Page:-; Q1; IF 3.774; **ISSN**:10980121; **DOI**: 10.1103/PhysRevB.81.085321;Citati 16/WOS 16/Scopus
10. Krilov D., Balarin M., Kosović M., Gamulin O., Brnjas-Kraljević J.; FT-IR spectroscopy of lipoproteins-A comparative study; *SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY*; 2009; Volume:73; Issue:4; Page:701-706; Q2; IF 1.566; **ISSN**: 13861425;Citati 24/WOS 27/
11. Balarin M., Gamulin O., Ivanda M., Kosović M., Ristić D., Ristić M., Musić S., Furić K., Krilov D., Brnjas-Kraljević J.; Structural, optical and electrical characterization of porous silicon prepared on thin silicon epitaxial layer; *JOURNAL OF MOLECULAR STRUCTURE*; 2009; Volume:924; Issue:Page:285-290; Q3; IF 1.551; **ISSN**: 00222860; **DOI**: 10.1016/j.molstruc.2008.10.045;Citati 2/WOS 5/Scopus
12. Gebavi H., Milanese D., Liao GH., Chen QP., Ferraris M., Ivanda M., Gamulin O., Taccheo S.; Spectroscopic investigation and optical characterization of novel highly thulium doped tellurite glasses; *JOURNAL OF NON-CRYSTALLINE SOLIDS*; 2009; Volume:355; Issue:9; Page:548-555; Q1; IF 1.252; **ISSN**: 00223093; **DOI**: 10.1016/j.jnoncrysol.2009.01.016;Citati 30/WOS 31/Scopus
13. Buljan M., Radović IB., Desnica UV., Ivanda M., Jakšić M., Saguy C., Kalish R., Djerdj I., Tonejc A., Gamulin O.; Implantation conditions for diamond nanocrystal formation in amorphous silica; *JOURNAL OF APPLIED PHYSICS*; 2008; Volume:104; Issue:3; Page:-; Q1; IF 2.201; **ISSN**: 00218979; **DOI**: 10.1063/1.2968204;Citati 7/WOS 2/Scopus
14. Ivanda M., Gebavi H., Ristić D., Furić K., Musić S., Ristić M., Zonja S., Biljanović P., Gamulin O., Balarin M., Montagna M., Ferarri M., Righini GC.; Silicon nanocrystals by thermal annealing of Si-rich silicon oxide prepared by the LPCVD method; *JOURNAL OF MOLECULAR STRUCTURE*; 2007; Volume:834; Issue:Page:461-464; Q3; IF 1.594; **ISSN**: 00222860; **DOI**: 10.1016/j.molstruc.2006.09.036;Citati 7/WOS /Scopus
15. Balarin M., Gamulin O., Ivanda M., Djerek V., Celan O., Musić S., Ristić M., Furić K.; Structure and optical properties of porous silicon prepared on thin epitaxial silicon layer on silicon substrates; *JOURNAL OF MOLECULAR STRUCTURE*; 2007; Volume:834; Issue:Page:465-470; Q3; IF 1.594; **ISSN**: 00222860; **DOI**: 10.1016/j.molstruc.2006.12.010; ;Citati 8/WOS 11/
16. Barcot O., Balarin M., Gamulin O., Jezek D., Romac P., Brnjas-Kraljević J.; Investigation of spermatozoa and seminal plasma by Fourier transform infrared spectroscopy; *APPLIED SPECTROSCOPY*; 2007; Volume:61; Issue:3; Page:309-313; Q1; IF 1.902; **ISSN**: 00037028; **DOI**: 10.1366/000370207780220804;Citati 12/WOS 16/
17. Gamulin O., Ivanda M., Mitsa V., Pasić S., Balarin M.; Spectroscopy studies of structural phase transitions of chalcogenide glass thin films $(\text{Ge}_2\text{S}_3)_x(\text{As}_2\text{S}_3)_{(1-x)}$ at coordination number 2.67; *SOLID STATE COMMUNICATIONS*; 2005; Volume:135; Issue:11-12; Page:753-758; Q2; IF 1.480; **ISSN**: 00381098; **DOI**: 10.1016/j.ssc.2005.05.006;Citati 6/WOS 6/Scopus
18. Pasić S., Uroić M., Tocilj Z., Majer M., Gamulin O., Bokulić T., Ilakovac K.; Experimental determination of absolute-scale compton cross sections using the K X-ray escape and a comparison with three versions of the impulse approximation; *RADIATION PHYSICS AND CHEMISTRY*; 2005; Volume:73; Issue:6; Page:303-310; Q2; IF 0.725; **ISSN**: 0969806X; **DOI**: 10.1016/j.radphyschem.2005.04.001;Citati 1/WOS 0/Scopus
19. Desnica UV., Desnica-Franković ID., Gamulin O., White CW., Sonder E., Zuhr RA.; UV-visible reflectivity study of the synthesis and growth of nanocrystals obtained by ion implantation; *VACUUM*; 2002; Volume:67; Issue:3-4; Page:451-455; Q2 ;IF 0.723; **ISSN**: 0042207X; **DOI**: 10.1016/S0042-207X(02)00230-0;Citati 0/WOS 0/Scopus
20. Desnica UV., Desnica-Franković ID., Gamulin O., White CW., Sonder E., Zuhr RA.; Formation of CdS nanocrystals in SiO₂ by ion implantation; *JOURNAL OF NON-CRYSTALLINE SOLIDS*; 2002; Volume:299; Issue:Page:1100-1104; Q1; IF 1.363; **ISSN**: 00223093; **DOI**: 10.1016/S0022-3093(02)00941-9;Citati 9/WOS 9/Scopus
21. Desnica UV., Gamulin O., Tonejc A., Ivanda M., White CW., Sonder E., Zuhr RA.; CdS nanocrystals formed in SiO₂ substrates by ion implantation; *MATERIALS SCIENCE & ENGINEERING C-*

BIOMIMETIC AND SUPRAMOLECULAR SYSTEMS; 2001; Volume: 15; Issue:1-2; Page:105-107; Q2; IF 0.905; **ISSN:** 09284931; **DOI:** 10.1016/S0928-4931(01)00262-4;Citati 5/WOS 5/Scopus

22. Ivanda M., Musić S., Gotić M., Turković A., Tonejc AM., Gamulin O.; The effects of crystal size on the Raman spectra of nanophase TiO₂; JOURNAL OF MOLECULAR STRUCTURE; 1999; Volume:481; Issue:Page:641-644; Q3; IF 0.868; **ISSN:** 00222860; **DOI:** 10.1016/S0022-2860(98)00921-1;Citati 64/WOS 62/Scopus

23. Ivanda M., Gamulin O., Kiefer W.; Mechanism of Raman scattering in amorphous silicon; JOURNAL OF MOLECULAR STRUCTURE; 1999; Volume:481; Issue:Page:651-655; Q3; IF 0.868; **ISSN:** 00222860; **DOI:** 10.1016/S0022-2860(98)00922-3 ;Citati 4/WOS 7/Scopus

24. Gamulin O., Ivanda M., Desnica UV., Furić K.; Structural relaxation of amorphous silicon during thermal and CW laser annealing; JOURNAL OF NON-CRYSTALLINE SOLIDS; 1998; Volume:227; Issue:Page:943-948; Q1; IF 1.062; **ISSN:** 00223093;Citati 1/WOS 1/Scopus

25. Gamulin O., Ivanda M., Desnica UV., Furić K.; Comparison of structural changes in amorphous silicon induced by thermal and cw laser annealing; JOURNAL OF MOLECULAR STRUCTURE; 1997; Volume:410; Issue:Page:249-252; Q3; IF 0.884; **ISSN:** 00222860; **DOI:** 10.1016/S0022-2860(96)09579-8;Citati 0/WOS 0/Scopus

26. Lugomer S., Furić K., Bitelli G., Stipančić M., Stubičar M., Gamulin O.; Modification of the surface properties of Ti by explosion of laser-plasma containing Coulomb particles; VACUUM; 1996; Volume:47; Issue:3; Page:255-263; Q4; IF 0.484; **ISSN:** 0042207X; **DOI:** 10.1016/0042-207X(95)00219-7;Citati 1/WOS 1/Scopus

27. Ivanda M., Gamulin O., Furić K., Gracin D.; Raman-study of light-induced-changes in silicon-hydrogen bond stretching vibration in a-Si-H; JOURNAL OF MOLECULAR STRUCTURE; 1992; Volume:267; Issue:Page:275-280; Q3; IF 0.884; **ISSN:** 00222860; **DOI:** 10.1016/0022-2860(92)87044-V;Citati 1/WOS 7/Scopus

28. Ivanda M., Furić K., Gamulin O., Gracin D.; Boson peak in raman-spectra of hydrogenated amorphous-silicon; JOURNAL OF NON-CRYSTALLINE SOLIDS; 1991; Volume:137; Issue:Page:103-106; Q1; IF 1.017; **ISSN:** 00223093; **DOI:** 10.1016/S0022-3093(05)80067-5

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Par M., Španović N., Bjelovučić R., Marović D., Schmalz G., Gamulin O., Tarle Z.; Long-term water sorption and solubility of experimental bioactive composites based on amorphous calcium phosphate and bioactive glass; Dental Materials Journal DEC 2018 ; doi:10.4012/dmj.2018-145

2. Par, M. ; Spanovic, N. ; Bjelovucic, R. ; Skenderovic, H. ; Gamulin, O. ; Tarle, Z. ; Curing potential of experimental resin composites with systematically varying amount of bioactive glass: Degree of conversion, light transmittance and depth of cure; ; JOURNAL OF DENTISTRY Volume: 75 Pages: 113-120 Published: AUG 2018; DOI: 10.1016/j.jdent.2018.06.004

3. Par M., Marović D., Skenderović H., Gamulin O., Klarić E., Tarle Z.; Light transmittance and polymerization kinetics of amorphous calcium phosphate composites; CLINICAL ORAL INVESTIGATIONS; 2017; Volume:21; Issue:4; Page:1173-1182; Q1;IF 2.207; ISSN: 14326981; DOI: 10.1007/s00784-016-1880-6;

4. Par M., Šantić A., Gamulin O., Marović D., Moguš-Milanković A., Tarle Z.; Impedance changes during setting of amorphous calcium phosphate composites; DENTAL MATERIALS; 2016; Volume:32; Issue:11; Page:1312-1321.

5. Par M., Gamulin O., Marović D., Skenderović H., Klarić E., Tarle Z.; Conversion and temperature rise of remineralizing composites reinforced with inert fillers; JOURNAL OF DENTISTRY; 2016; Volume:48; Issue:Page:26-33.

6. Gamulin J., Gamulin O., Kermek D.; Using Fourier coefficients in time series analysis for student performance prediction in blended learning environments; EXPERT SYSTEMS; 2016; Volume:33; Issue:2;Page:189-200.

7. Kosović M., Balarin M., Ivanda M., Derek V., Marcuš M., Ristić M., Gamulin O.; Porous Silicon Covered with Silver Nanoparticles as Surface-Enhanced Raman Scattering (SERS) Substrate for Ultra-Low

Concentration Detection; APPLIED SPECTROSCOPY; 2015; Volume:69; Issue:12; Page:1417-1424; Q2; if 1.798; ISSN: 00037028; DOI: 10.1366/14-07729;Citati 4/WOS 4/Scopus

8. Par M., Gamulin O., Marović D., Klarić E., Tarle Z.; Raman Spectroscopic Assessment of Degree of Conversion of Bulk-Fill Resin Composites - Changes at 24 Hours Post Cure; OPERATIVE DENTISTRY; 2015; Volume:40; Issue:3; Page:E92-E101;Q1,IF 2.819; ISSN: 03617734; DOI: 10.2341/14-091-L ;Citati 8/WOS 15/

9. Par M., Gamulin O., Marović D., Klarić E., Tarle Z.; Effect of temperature on post-cure polymerization of bulk-fill composites; JOURNAL OF DENTISTRY; 2014; Volume:42; Issue:10; Page:1255-1260; Q1;IF 2.749; ISSN: 03005712; DOI: 10.1016/j.jdent.2014.08.004;Citati 13/WOS 16/

10. Kosović M., Gamulin O., Balarin M., Ivanda M., Derek V., Ristić D., Marcuš M., Ristić M.; Phonon confinement effects in Raman spectra of porous silicon at non-resonant excitation condition; JOURNAL OF RAMAN SPECTROSCOPY; 2014; Volume:45; Issue:6; Page:470-475; Q1; 2.671; ;Citati 4/WOS 4/

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2002 – 2005 Collaborator, Croatian Ministry of Health project No. 0098022: “Fizika i primjena nanostruktura”; project leader: Krešimir Furić, PhD,

2006 - 2013 Collaborator, Croatian Ministry of Health project No. 108-108134-3105: “Mehanizmi narušavanja strukture lipoproteina djelovanjem vanjskih čimbenika”; project leader prof. Dubravka Krilov, PhD,

2013 Project leader, Croatian Ministry of Health project No. 108-108134-3105: “Mehanizmi narušavanja strukture lipoproteina djelovanjem vanjskih čimbenika”,

2006 - 2011 Collaborator, Croatian Ministry of Health project No. 108-1080399-0383: “Muški i ženski spolni sustav: razvoj, normalna histofiziologija i neplodnost”; project leader: prof. Davor Ježek, MD, PhD,

2014 University of Zagreb Short-term Grant: “Detektiranje jako niskih koncentracija bioloških molekula površinski pojačanom Ramanovom spektroskopijom“

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2014 - Collaborator at Croatian Center of Excellency for Advanced Materials and Sensors, project leader Mile Ivanda, PhD,

2015 - Collaborator, project No: IP-2014-09-2046, Croatian Science Foundation: “Hibridne silicijeve nanostrukture za senzoriku”; project leader Mile Ivanda, PhD,

2015. University of Zagreb Short-term Grant: “Razvoj biosenzora temeljenih na poroznom siliciju i površinski pojačanoj vibracijskoj spektroskopiji”, project leader,

2016., 2017 i 2018 University of Zagreb Short-term Grants: “Biosenzor za vibracijsku analizu tankih filmova DNA temeljen na SERS i SEIRA spektroskopiji”, projects leader

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 3

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: prof. dr. sc. Slavko Gašparov, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of pathology, School of Medicine,
Department of pathology, Clinical hospital Merkur

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Liver transplantation

BIOGRAPHY

I was born on 20th of May 1962. in Virovitica, Croatia. I graduated at Zagreb University School of Medicine in 1989. After internship (1989-1990) in County Hospital Virovitica I passed the State (licensing) exam, and spent three years working at the same Hospital.

In the period 1993-1997 I finished the Residency in Pathology. I have been working as a pathologist at Department of pathology and Cytology, Clinical Hospital Merkur since 1997. In 1998. I finished the Postgraduate Study in Pathology and received a Master degree at Medical School, University of Zagreb in 2000. The title of my Master thesis was “Significance of lymphatic follicles and lymphoepithelial lesion in *Helicobacter pylori*-associated gastritis”. From 1996-2009 I was a co-worker on three projects at Medical School Zagreb (“*Helicobacter pylori* – epidemiology and infection in Croatia”, “*Helicobacter pylori* infection – evolution of disease and new therapeutic approach” and “Prognostic factors, diagnosis and treatment of hemoblastoses”). All three projects were financed by the Croatian Ministry of Science, Education and Sport.

In 2004 I finished my PhD thesis at Zagreb University, School of Medicine (“Trisomy 3, oncoprotein Bcl-10 and gastric MALT lymphoma in *Helicobacter pylori* infections”). In 2005. I spent three months as a visiting fellow in the Division of Transplantation Pathology, University of Pittsburgh Medical Center (Pittsburgh, USA).

Since 2009 I have been the leading scientist of the project „Prognostic value of FOXP1 and FOXP3 in B lymphoproliferative disorders“. Project number is 108-1081873-1891, and the project is financed by Ministry of Science, Education and Sport of Republic of Croatia.

I was a mentor of four PhD thesis and five students' thesis. Currently, I am a mentor of two PhD thesis in progress.

From 2007 to 2012 I was employed in a position of Assistant professor at Department of pathology, University of Zagreb, School of Medicine. Since 2012 I have been working as a professor at the same University. In 2011 I became the Head of Department of pathology and cytology Clinical Hospital Merkur. I am a member of European Society of Pathology, Croatia Medical Association, Croatian Medical Chamber, Croatian Society of Pathologists and the president of the Croatian Hematopathological section.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2012. professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Kušić B, **Gašparov S**, Katičić M, Dominis M, Antica. Monoclonality in *Helicobacter pylori*-positive gastric biopsies: An early detection of Mucosa-Associated Lymphoid Tissue Lymphoma. M. Exp Mol Pathol 2003;74:61-67.

(IF = 1,727)

Is quadrant biopsy sufficient in men likely to have advanced prostate cancer? Comparison with extended biopsy. Brnić Z, **Gašparov S**, Lozo PV, Anić P, Patrlj L, Ramljak V. Pathol Oncol Res 2005;11(1):40-44. (IF = 1,16)

Gunawan B, von Heyderbreck A, Sander B, Schulten HJ, Haller F, Langer C, Armbrust T, Bollman M, **Gašparov S**, Kovač D, Fuzesi L. An oncogenetic tree model in gastrointestinal stromal tumours (GISTs) identifies different pathways of cytogenetic evolution with prognostic implications. *J Pathol* 2007;211:463-70. (IF = 5,423)

Šitić S, Korać P, Peharec P, Zovko G, Periša MM, **Gašparov S**. BCL2 and MALT1 genes are not involved in the oncogenesis of uterine tumors resembling ovarian sex-cord tumors. *Pathol Oncol Res* 2007;13:153-6. (IF = 1,272)

Brčić L, Vuletić LB, Stepan J, Bonevski A, Jakovljević G, **Gašparov S**, Marjanović K, Seiwerth S. Mast-cell sarcoma of the tibia. *J Clin Pathol* 2007;60:424-5. (IF = 2,426)

Filipek Kanižaj T, Katičić M, Presečki V, **Gašparov S**, Colić Cvrlje V, Kolarić B, Mrzljak A. Serum antibodies positivity to 12 *Helicobacter pylori* virulence antigens in patients with benign or malignant gastroduodenal diseases-cross sectional study. *Croat Med J* 2009;50:124-32 (IF = 1,373)

Mrzljak A, **Gašparov S**, Kardum-Skelin I, Čolić-Cvrlje V, Ostojić-Kolonić S. Febrile cholestatic disease as an initial presentation of nodular lymphocyte-predominant Hodgkin lymphoma. *World J Gastroenterol*. 2010 Sep 21;16(35):4491-3. (IF = 2,240)

Dotlic S, **Gašparov S**, Lovric E, Dominis M, Korac P. Is it possible to overcome antiapoptotic API2/MALT1 events in tumor B-cells by influencing Tregs in MALT lymphoma? *Med Hypotheses*. 2012 Oct;79(4):500-3. (IF = 1,054)

Nikuševa-Martić T, Serman L, Zeljko M, Vidas Z, **Gašparov S**, Zeljko HM, Kosović M, Pećina-Šlaus N. Expression of secreted frizzled-related protein 1 and 3, T-cell factor 1 and lymphoid enhancer factor 1 in clear cell renal cell carcinoma. *Pathol Oncol Res*. 2013 Jul;19(3):545-51.

Aurer I, **Gašparov S**, Kralik M, Balenović A, Huić D, Santek F, Duletić-Nacinović A, Pejisa V, Ostojić-Kolonić S, Grah JJ. Lymphoma diagnosis and treatment - second Croatian consensus. Croatian Society for Hematology and Transfusion; Croatian Cooperative Group for Treatment of Hematologic Diseases; Croatian Medical Society. *Lijec Vjesn*. 2013 Mar-Apr;135(3-4):63-76.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Bišof V, Jakovčević A, Seiwerth S, Rakušić Z, **Gašparov S**. Prognostic value of ERCC1 in head and neck carcinoma treated with definitive or adjuvant radiotherapy. *J Cancer Res Clin Oncol*. 2013 Feb;139(2):187-94. (IF = 3,009)

Gasljevic G, Lamovec J, Contreras JA, Zadnik V, Blas M, **Gašparov S**. HER2 in gastric cancer: an immunohistochemical study on tissue microarrays and the corresponding whole-tissue sections with a supplemental fish study. *Pathol Oncol Res*. 2013 Oct;19(4):855-65. (IF = 1,806)

[Croatian guidelines for gastric cancer prevention by eradication of *Helicobacter pylori* infection]. Katičić M, Banić M, Urek MC, **Gašparov S**, Krznarić Z, Prskalo M, Stimac D, Skrtić A, Vucelić B. *Lijec Vjesn*. 2014 Mar-Apr;136(3-4):59-68.

Flux K, Kutzner H, Rutten A, Plaza JA, **Gašparov S**, Michal M, Guenova E, Kazakov DV. Infundibulocystic structures and prominent squamous metaplasia in sebaceoma – a rare feature. A clinicopathologic study od 10 cases *Am J Dermatopathol* 2016 ;9:678-682 (IF= 1,095)

Hinneburg H, Korać P, Schirmeister F, **Gašparov S**, Seeberger PH, Zoldoš V, Kolarich D. Unlocking cancer glycomes from histopathological formalin-fixed and paraffin embedded (FFPE) tissue microdissections *Mol Cell Proteomics*. 2017 Apr ;16(4): 524-536. (IF = 6,540)

Shahini L, **Gašparov S**, Petruševska G, Manxhuka Kerliu S, Veselaj F, Kurshumliu F, Kavaja F. Clinical significance of VEGF-A and microvessel density in diffuse large B cell lymphoma and low-grade follicular lymphoma *Acta Clin Croat*. 2017 Dec ;56(4) :588-593. (IF = 0,497)



Papic N, Zidovec Lepej S, Gorenec L, Grgic I, **Gasparov S**, Filipec Kanizaj T, Vince A. The association of semaphorins 3C, 5A and 6D with liver fibrosis stage in chronic hepatitis C. PLoS One. 2018 Dec 28;13(12)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

„Prognostic value of FOXP1 and FOXP3 in B lymphoproliferative disorders“. Project number is 108-1081873-1891, and the project is financed by Ministry of Science, Education and Sport of Republic of Croatia

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist Prof. Romana Gjergja Juraški, Assist Prof, MD PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Children's Hospital Srebrnjak

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Selected chapters in epileptology in developmental age

BIOGRAPHY

Romana Gjergja Juraški is Paediatrician Specialist from 2003, and Pediatrician Neurologist from 2007. She is the Head of Neuropediatric Unit and Unit for sleep disorders in children at the Children's Hospital Srebrnjak, from 2011 till today. She gained her PhD at the Medical School of Zagreb in 2009 in the field of biomedicine and health, with the Thesis title: The clinical significance of interictal single-photon emission computerized brain tomography in the assessment of functional brain damage in children with partial epilepsy. She is a Scientific Associate at Medical School Zagreb since 2010, an Assistant Professor at Medical School of Osijek and at the Faculty of health studies of Rijeka since 2018. She is a lecturer at undergraduate and postgraduate academic education in Zagreb and Osijek. In her professional and scientific work, she deals with sleep medicine in children, developmental epileptology, syndromology, teratology and neurogenetic counseling within the medical genetics and developmental neurology. So far, she has published several professional and scientific papers from these areas and is an active participant in conferences in Croatia and abroad. She is a co-author in the books and manuals of Medical genetics and Neuropediatrics. She had advanced education in the field of sleep medicine in abroad (Harvard Medical School and Atlanta School of Sleep Medicine). She is a member of the Croatian Medical Association, the Croatian Medical Chamber, the Croatian Society for Child Neurology, the Croatian Society for Human Genetics, the Croatian Somnology Society, the Society for Neuroscience and FENS, the European Society for Sleep Medicine (ESRS).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

March 2018 - Assist Professor at Medical School, University of Osijek

June 2018 - Assist Professor at Faculty of Health Studies, University of Rijeka

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Turnpenny PD, Wright MJ, Sloman M, Caswell R, van Essen AJ, Gerkes E, Pfundt R, White SM, Shaul-Lotan N, Carpenter L, Schaefer GB, Fryer A, Innes AM, Forbes KP, Chung WK, McLaughlin H, Henderson LB, Roberts AE, Heath KE, Paumard-Hernández B, Gener B; DDD study, Fawcett KA, Gjergja-Juraški R, Pilz DT, Fry AE.

Missense Mutations of the Pro65 Residue of PCGF2 Cause a Recognizable Syndrome Associated with Craniofacial, Neurological, Cardiovascular, and Skeletal Features. Am J Hum Genet. 2018 Nov 1;103(5):786-793. doi: 10.1016/j.ajhg.2018.09.012. Epub 2018 Oct 18.

Nenadic-Baranasic N, Gjergja-Juraski R, Lehman I, Turkalj M, Nogalo B, Barisic N. Overnight Video-Polysomnographic Studies in Children with Intractable Epileptic Encephalopathies. Med Sci Monit. 2018;24:5405-5411.

Turkalj M, Miranović V, Lulić-Jurjević R, Gjergja Juraški R, Primorac D. Cardiorespiratory complications in patients with osteogenesis imperfecta. Paediatr Croat. 2017;61:106-12.

Gjergja Juraški R, Turkalj M, Mikula I, Primorac D. Neurologic manifestations and sleep issues in osteogenesis imperfecta. *Paediatr Croat*. 2017;61:113-21.

Mišković S, Gjergja Juraški R, Mikula I, Bašić S, Bošnjak Pašić M, Košec V, Sabol Z, Fučić A, Sajko T, Bašić Kes V. The Croatian model of integrative prospective management of epilepsy and pregnancy. *Acta Clin Croat* 2016; 55(4):535-48.

Barišić N, Prpić I, Sabol Z, Cvitanović- Šojat Lj, Gjergja Juraški R, Novak M, Pavliša G, Epileptički napadaji - dijagnostički i terapijski postupci i razine zbrinjavanja u pedijatriji. *Paediatr Croat*. 2016;60 (Suppl 3):52-66.

Gjergja Juraški R, Sabol Z, Turkalj M, Nenadić N, Marušić I, Kučić D, Miloš M, Vlašić V. Sleep disorders in children with cerebral palsy. *Paediatr Croat* 2013;57:115-22.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Turnpenny PD, Wright MJ, Sloman M, Caswell R, van Essen AJ, Gerkes E, Pfundt R, White SM, Shaul-Lotan N, Carpenter L, Schaefer GB, Fryer A, Innes AM, Forbes KP, Chung WK, McLaughlin H, Henderson LB, Roberts AE, Heath KE, Paumard-Hernández B, Gener B; DDD study, Fawcett KA, Gjergja-Juraški R, Pilz DT, Fry AE.

Missense Mutations of the Pro65 Residue of PCGF2 Cause a Recognizable Syndrome Associated with Craniofacial, Neurological, Cardiovascular, and Skeletal Features. *Am J Hum Genet*. 2018 Nov 1;103(5):786-793. doi: 10.1016/j.ajhg.2018.09.012. Epub 2018 Oct 18. Nenadić-Baranasić N, Gjergja-Juraski R, Lehman I, Turkalj M, Nogalo B, Barisic N. Overnight Video-Polysomnographic Studies in Children with Intractable Epileptic Encephalopathies. *Med Sci Monit*. 2018;24:5405-5411.

Stipoljević F, Mirić-Tesanić D, Hafner T, Barbalic M, Logara M, Lasan-Trčić R, Vikić A, Gjergja-Juraski R. Prenatal diagnosis of complex phenotype in a 13-week-old fetus with an interstitial multigene deletion 20q13.13.-q13.2 by chromosomal microarray. *Eur J Med Genet*. 2017;60(11):589-594. doi: 10.1016/j.ejmg.2017.08.010. Epub 2017 Aug 12

Lupattelli A, Spigset O, Björnsdóttir I, Hämeen-Anttila K, Mårdbj AC, Panchaud A, Juraski R G, Rudolf G, Odalović M, Drozd M, Twigg MJ, Juch H, Moretti ME, Kennedy D, Rieutord A, Zagorodnikova K, Passier A, Nordeng H. Patterns and factors associated with low adherence to psychotropic medications during pregnancy – a cross-sectional, multinational web based study. *Depress Anxiety*. 2015 Online first: Feb 20. doi: 10.1002/da.22352.

Turkalj M, Miranović V, Lulić-Jurjević R, Gjergja Juraški R, Primorac D. Cardiorespiratory complications in patients with osteogenesis imperfecta. *Paediatr Croat*. 2017;61:106-12.

Gjergja Juraški R, Turkalj M, Mikula I, Primorac D. Neurologic manifestations and sleep issues in osteogenesis imperfecta. *Paediatr Croat*. 2017;61:113-21.

Mišković S, Gjergja Juraški R, Mikula I, Bašić S, Bošnjak Pašić M, Košec V, Sabol Z, Fučić A, Sajko T, Bašić Kes V. The Croatian model of integrative prospective management of epilepsy and pregnancy. *Acta Clin Croat* 2016; 55(4):535-48.

Barišić N, Prpić I, Sabol Z, Cvitanović- Šojat Lj, Gjergja Juraški R, Novak M, Pavliša G, Epileptički napadaji - dijagnostički i terapijski postupci i razine zbrinjavanja u pedijatriji. *Paediatr Croat*. 2016;60 (Suppl 3):52-66.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS



ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Igor Gliha, Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Law

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Structure, methodology and functioning of Scientific work 2

BIOGRAPHY

Prof. dr. sc. Igor Gliha, born on April 16, 1962 in Zagreb. Graduated from the Faculty of Law in Zagreb in 1985; graduated in 1990 from the Postgraduate studies in international public and private law and international relations; Ph.D. in 1996 defending his dissertation under the title "Legal nature of publisher's rights". He continued his studies at foreign scientific institutes: Institut für Rechtsvergleichung, Rechtswissenschaftliche Fakultät, Universität Wien (1993-1997); Max Planck Institute for Geistiges Eigentum, Wettbewerbs- und Steuerrecht (1998 and 2004). He continued his post-graduate courses at the Interuniversity Center in Dubrovnik as well as a professional course: Western European Integration and All-European Developments at the Gustav Streseman Institute in Bonn, 1990. He conducted a six-month court practice at the Municipal Court in Zagreb (September 1987). Judicial Examination passed in 1988. Professional Exam for Trademark Representatives in 2007.

He began his professional career in 1986, working as a lawyer, until joining the Faculty of Law of the University of Zagreb, Civil Rights Department, where he has been working continuously since 1987. He was elected Full Professor on 12 April 2005. From 1992 to 1993 he was an advisor to the Embassy of the Republic of Croatia in the United States.

Dean of the Faculty of Law, University of Zagreb, since October 1, 2017, and vice dean of the same Faculty in academic year 2007/08. and 2008/09. He was a member of the General Committee of the Republic of Croatia for humanities in the field of law. For ten years he was the president of the Committee for university teaching literature of the University of Zagreb.

Author of a hundred papers published in domestic and foreign journals. He has participated in seventy domestic and international scientific and professional conferences. Editor and member of editorial boards of a number of scientific and professional international and domestic conferences. Editor-in-Chief of Publishing at the Faculty of Law, University of Zagreb since 2006. Member of the Editorial Board of the Proceedings of the Croatian Society for Copyright, and a multi-year member of the Proceedings of the Zagreb School of Law.

Head of the working group "Intellectual Property Rights" for the preparation of negotiations on Croatia's accession to the European Union. A member of working groups for drafting the Copyright and Related Rights Act, the Law on Succession, the Property Act and other real rights, and the Act on Amendments to the Copyright Act. As a representative of the Republic of Croatia, he participated in the work of expert groups of the World Intellectual Property Organization (WIPO). Member of the Delegation of the Republic of Croatia to the Diplomatic Conference on Certain Copyright and Neighboring Rights Questions, Geneva, 1996. and at the Diplomatic Conference on the Protection of Audiovisual Performances, Geneva, 2000.

Arbitrator: Permanent Court of Arbitration at the Croatian Chamber of Commerce; The HR DNS subdomain service within the top HR domain, the Arbitration Court's sports court at the COO and a member of the HOO's Arbitration Council.

He received the Croatian Academy of Science and Art's Award for a Contribution of Persistent and Lasting Importance to the Republic of Croatia in the Field of Social Sciences for 1999 (together with Prof. Dr. Nikola Gavell, Prof. Dr. Tatjana Josipović, Prof. Dr. Vlado Belaj, and Prof. Dr. Zlatan Stipković).

Full member of the Academy of Legal Sciences of Croatia. President of the Croatian Society for Copyright, President of the Croatian National group Association littéraire et artistique internationale (ALAI). Member of the Comité Exécutif Association littéraire et artistique internationale, Paris. Member of the Executive Committee of Almae Matris alumnae et alumni Croaticae - Facultas Iuridica. Founding member of the Association of Friends of the Max Planck Institute for Intellectual Property, Competition and Tax Law, Croatian Society for Civil Law and Practice and member of the Croatian Society for the Study of the European Community.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 20.4.2010. Full Professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Zastara u pravu intelektualnog vlasništva, (Gliha, I., Matanovac Vučković, R.) u: Djelotvorna pravna zaštita u parničnom postupku - Liber amicorum Mihajlo Dika, Zagreb, 2013.

Pravna zaštita autorskih djela stvorenih u svezi s radnim odnosom na sveučilištu u: Intelektualno vlasništvo i sveučilište, Hrvatska akademija znanosti i umjetnosti, Modernizacija prava, knj. 21, 2013

Copyright and Related Rights u: Josipović, T. (ed): Introduction to The Law of Croatia, Wolters Kluwer, 2014

Copyright Throughout the World - Croatia, (ed. Silke von Lewinski), Thomson Reuters, Rel. 7, 2015

Pregled hrvatskog autorskopravnog poretka u: Zaštita intelektualnog vlasništva, Hrvatska akademija znanosti i umjetnosti, Modernizacija prava, knj. 21, 2017.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Private Law Reform: Croatia (Josipović, T., Gliha, I., Nikšić, S.) u: Private Law Reform, ed. Lavicky, P., Hurdik, J., Brno, 2014., (s. 111-131) ISBN 978-80-210-7603-7

Alternative Licensing Contracts in Croatian Copyright Legislation (Gliha, I., Matanovac Vučković, R.) u: Metzger, A (ed.): Free and Open Source Software (FOSS) and other Alternative License Models, Springer, 2015. (s. 105-127) ISBN 978-3-319-21560-0

Computer programs in between copyright, contract and consumer protection law – a Croatian perspective (Matanovac Vučković, R., Gliha, I.,) u: The Current Issues of Intellectual Property Law and Competition Law: A view from the Balkans, ed. Marković, S.M., Popović, D.V., Beograd, 2016.

Neka pitanja protupravnosti u sportu, Izzivi prava v življenjski resničnosti - Challenges of Law in Life Reality, Liber amicorum Marko Ilešič, Ljubljana, 2017.

A view onto ISP's "copyright liability" in the European Union's digital single market (Gliha, I., Gliha D.) u: Urheberrecht! Festschrift für Michel M. Walter zum 80. Geburtstag, Wien, 2018., (s. 199-209) ISBN 978-3-900741-74-7

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS



ORDINAL NUMBER:

FIRST NAME, LAST NAME AND TITLE OF THE TEACHER; KARMEN GODIČ-TORKAR

NAME OF THE INSTITUTION OF EMPLOYMENT OF THE TEACHER; FACULTY OF THE HEALTH SCIENCES,
UNIVERSITY OF LJUBLJANA

NAME OF THE COURSE/MODULE THAT SHE TEACHES: MULTIRESISTANT BACTERIA-CAUSATIVE AGENTS OF
HOSPITAL INFECTIONS

BIOGRAPHY:

1984: obtained graduate degree at Biotechnical Faculty, University of Ljubljana; title of graduate thesis: Sensitivity of *Pseudomonas aeruginosa* isolates from wounds and burns to antibiotics

1990: obtained masters degree at Interfaculty microbiology studies at Medical faculty and Biotechnical faculty, University of Ljubljana; title of masters thesis: Beta-galactosidase and proteolytic activity of *Streptococcus thermophilus*

2001: obtained PhD degree at Biotechnical Faculty, University of Ljubljana; title of doctoral thesis: Detection and monitoring of *Bacillus cereus* in milk and dairy products using biochemical, immunological and molecular genetic methods

Work experience

1984-1989: junior researcher at Institute for milk and probiotics, Biotechnical Faculty, University of Ljubljana

1991-2007: senior research associate at Institute for milk and probiotics, Biotechnical Faculty, University of Ljubljana. Head of accredited microbiology laboratory for milk and dairy products.

2005-present day: honorary lecturer at the Biotechnical educational center Ljubljana in the following fields: Sustainable development with biology and Food microbiology and biotechnology

2007-present day: assistant professor at the Faculty of Health Sciences, University of Ljubljana; lecturer in the following fields: Microbiology and parasitology, Sampling methods, Food hygiene and technology, Microbiology methods in the environment

DATE OF LAST APPOINTMENT TO A RESEARCH OR TEACHING RANK: 4th September 2014

LIST OF PUBLISHED PUBLICATIONS WHICH QUALIFIES HER FOR THE IMPLEMENTATION OF THE PROGRAMME, RELEVANT FOR THE FIELD OF THE PHD PROGRAMME:

1. GODIČ TORKAR, Karmen, BEDENIĆ, Branka. Antimicrobial susceptibility and characterization of metallo- β -lactamases, extended-spectrum β -lactamases, and carbapenemases of *Bacillus cereus* isolates. Microbial pathogenesis, ISSN 0882-4010, maj 2018, vol. 118, str. 14

LIST OF PUBLICATIONS IN THE LAST FIVE YEARS

2. GODIČ TORKAR, Karmen, DRAŽETIČ, Mirjana. The microbial contamination and the presence of β -lactamase producing Gram-negative bacteria in the water and on the surfaces of public recreation water facilities. International journal of environmental health research, ISSN 0960-3123, 2017, vol. 27, no. 4, str.

293-305, graf. prikazi. <http://www.tandfonline.com/doi/full/10.1080/09603123.2017.1342227>, doi: 10.1080/09603123.2017.1342227.

3. GODIČ TORKAR, Karmen, BEDENIĆ, Branka, PLEČKO, Vanda. Antimicrobial susceptibility and the in vitro postantibiotic effects of vancomycin and ciprofloxacin against *Bacillus cereus* isolates. *Journal of chemotherapy*, ISSN 1120-009X, 2016, vol. 28, iss. 3, str. 151-158, graf. prikazi. <http://www.tandfonline.com/doi/full/10.1179/1973947815Y.0000000069>, doi: 10.1179/1973947815Y.0000000069.

4. BEDENIĆ, Branka, BEADER, Nataša, GODIČ TORKAR, Karmen, PRAHIN, Esmina, MIHALJEVIĆ, Ljiljana, ČAČIĆ, Marko, VRANEŠ, Jasmina. Postantibiotic effect of colistin alone and combined with vancomycin or meropenem against *Acinetobacter* spp. with well defined resistance mechanisms. *Journal of chemotherapy*, ISSN 1120-009X, 2016, vol. 28, iss. 5, str. 375-382, graf. prikazi. <http://www.tandfonline.com/doi/full/10.1179/1973947815Y.0000000062>, doi: 10.1179/1973947815Y.0000000062.

5. BEDENIĆ, Branka, ZUJIĆ ATALIĆ, Vlasta, BOGDAN, Maja, BEADER, Nataša, GODIČ TORKAR, Karmen, IŽAKOVIĆ, Senka. Prvi opis karbapenemaze u Osječko-baranjskoj županiji u unesenom izolatu enterobacteria cloacae in vitro osjetljivom na karbapeneme = First report of carbapenemases in osijek-baranja county in imported *Enterobacter cloacae* isolate in vitro susceptible to carbapenems. *Liječnički vjesnik : glasilo Hrvatskog liječničkog zbora*, ISSN 0024-3477, 2015, god. 137, br. 1-2, str. 17-21. <http://hrcak.srce.hr/172668>. [COBISS.SI-ID 5271147], [SNIP, Scopus do 28. 9. 2017: št. citatov (TC): 2, čistih citatov (CI): 2]

6. BEDENIĆ, Branka, BEADER, Nataša, GODIČ TORKAR, Karmen, VRANIĆ-LADAVAC, Mirna, LUXNER, Josefa, VEIR, Zoran, GRISOLD, Andrea J., ZARFEL, Gernot. Nursing home as a reservoir of carbapenem-resistant *Acinetobacter baumannii*. *Microbial drug resistance*, ISSN 1076-6294, 2015, vol. 21, no. 3, str. 270-278. <http://online.liebertpub.com/doi/pdfplus/10.1089/mdr.2014.0157>, doi: 10.1089/mdr.2014.0157.

7. GODIČ TORKAR, Karmen, FINK, Rok. Potential applications of rapid microbiological methods for detection of antibiotic residues in wastewater, surface and well water. *Journal for sanitary Engineering*, ISSN 1854-0678, dec. 2013, no. 1, vol. 7, str. 31-47, ilustr. <http://journal.institut-isi.si/wp-content/uploads/2013/02/Potential-applications-of-rapid-microbiological-methods-for-detection-of-antibiotic-residues-in-wastewater-surface-and-well-water.pdf>.

8. GODIČ TORKAR, Karmen, SEME, Katja. Antimicrobial susceptibility, beta-lactamase and enterotoxin production in *Bacillus cereus* isolates from clinical and food samples. *Folia microbiologica*, ISSN 0015-5632. [Print ed.], 2009, letn. 54, št. 3, str. 233-238, doi: 10.1007/s12223-009-0037-2.

9. GODIČ TORKAR, Karmen. The presence of the bacterium *Bacillus cereus* in the clinical department and in the infectious samples, its enterotoxin production and susceptibility to antibiotics. *Obzornik zdravstvene nege : strokovno glasilo Zveze društev medicinskih sester in zdravstvenih tehnikov Slovenije*, ISSN 1318-2951, 2009, letn. 43, št. 1, str. 21-29.

LIST OF SCIENTIFIC AND RESEARCH PROJECTS IN WHICH SHE PARTICIPATED WHICH ARE RELEVANT FOR THE PHD PROGRAMME

1-4067 Control of microbial adhesion on contact surfaces (1.7.2011-30.6.2014, Bohinc Klemen) Slovenian Research Agency V4-0512 Presence of microbiological, pharmaceutical and genotoxic contaminants



in drinking, surface and groundwater (1.9.2008-31.8.2010, Godič Torkar Karmen) Slovenian Research Agency

LIST OF SCIENTIFIC PROJECTS IN THE LAST FIVE YEARS

- 1) J2-8162 Municipal wastewater treatment with green technologies (1.5.2017-30.4.2020, Griessler Bulc Tjaša)
- 2) J2-7371 High-performance nanostructured coatings for concentrator solar power plants (1.1.2016.-31.12.2018, Jerman Ivan)
- 3) J2-5462 Development of new technologies for separation and purification of black and gray water (1.8.2013-31.7.2016, Griessler Bulc Tjaša)
- 4) L1-4067 Control of microbial adhesion on contact surfaces (1.7.2011-30.6.2014, Bohinc Klemen)
- 5) P3-0388 Mechanisms of health protection (1.1.2014-31.12.2016, Griessler Bulc Tjaša)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mirna Golemovic, PhD, molecular biologist

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of Molecular Biology in Medicine

BIOGRAPHY

Mirna Golemovic was born in 1973 in Zagreb. She graduated in 1997 at the Faculty of Science, University of Zagreb in the field of biology, molecular biology. In 2002 she defended her Master's thesis and obtained the title Master of Science. She spent two years (2002-2004) working at the Department of Leukemia, The University of Texas M. D. Anderson Cancer Center, Houston, Texas, USA. In 2006 she defended her doctoral thesis at the Faculty of Science and obtained her PhD title. In 2009, she was promoted to Research Associate at The University of Zagreb School of Medicine. From 1998 until 2007 she was employed as a scientific novice at the Department of Immunology at University Hospital Centre Zagreb (UHC Zagreb). Since 2007 she has been employed as a full-time employee at the Clinical Department of Transfusion Medicine and Transplantation Biology, UHC Zagreb. In 2012 she completed International On-line Course in Tissue Banking, Cell Therapy and Regenerative Medicine and 4th Advanced Course in Tissue Banking, Cell Therapy and Regenerative Medicine – Transplant Procurement Management (TPM) at University of Barcelona (Extension Certificates). From 2011 until 2017, she was head of the Cellular Therapy Unit. Since January 2016, she is the Croatian delegate at the Committee for Advanced Therapies in the European Medicines Agency. In 2015 she was the President of the Scientific Committee of 24th Congress of European Association of Tissue Banks.

She is a lecturer at the University of Applied Health Studies Zagreb. She participates in one course at Specialist postgraduate study in Transfusion Medicine at The University of Zagreb School of Medicine.

She was a mentor at one doctoral thesis (Faculty of Sciences) and co-mentor at another (Faculty of Mechanical Engineering and Naval Architecture). She is currently co-mentoring one PhD student at School of Medicine. She was a mentor at two master graduation theses at Faculty of Sciences and one at the University of Applied Health Studies. She was the author or co-author in 14 published papers and 57 conference reports. She is a co-author in two chapters of two manuals for students at the doctoral study at the School of Medicine. She is a member of the Croatian Immunological Society, the European Association of Tissue Banks and a Board member in the Croatian Society of Biologists in Health Care. Her scientific interests are related to the fields of cellular therapy and tissue banking.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2009., Research Associate, The University of Zagreb School of Medicine

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Skific M, Golemovic M, Crkvenac-Gornik K, Vrhovac R, Golubic Cepulic B. Comparative analysis of biological and functional properties of bone marrow mesenchymal stromal cells expanded in media with different platelet lysate content. *Cells Tissues Organs*. 2018;205(4):226-239. doi: 10.1159/000492581. Epub 2018 Sep 17.

Golemovic M. Advanced therapy medicinal products - an overview. *Molecular and Experimental Biology in Medicine*, 2017, 1:21-25. in Croatian.

Bojanic I, Serventi Seiwert R, Golubic Cepulic B, Mazic S, Lukic M, Raos M, Plenkovc F, Golemovic M, Dubravcic K, Perkovic S, Batinic D, Labar B. Treatment of chronic GVHD with extracorporeal photochemotherapy. *Transfus Apher Sci*. 2013;48(2):193-4. Epub 2013 Mar 17.

Cheng X, Quintás-Cardama A, Golemovic M, Zingaro R, Gao MZ, Freireich EJ, Andreeff M, Kantarjian HM, Verstovsek S. The organic arsenic derivative GMZ27 induces PML-RAR α -independent apoptosis in myeloid leukemia cells. *Anticancer Res*. 2012 Jul;32(7):2871-80.

Golemovic M, Skific M, Golubic Cepulic B. Mesenchymal stem cells: immunomodulatory properties and clinical application. *Lijec Vjesn*. 2012 Jan-Feb;134(1-2):42-9. Review. Croatian.

Golemovic M, Quintás-Cardama A, Manshouri T, Orsolic N, Duzkale H, Johansen M, Freireich EJ, Kantarjian H, Zingaro RA, Verstovsek S. MER1, a novel organic arsenic derivative, has potent PML-RAR α -independent cytotoxic activity against leukemia cells. *Invest New Drugs* 2010;28(4):402-12.

Orsolic N, Golemovic M, Quintas-Cardama A, Scappini B, Manshouri T, Chandra J, Basic I, Giles F, Kantarjian H, Verstovsek S. Adaphostin has significant and selective activity against chronic and acute myeloid leukemia cells. *Cancer Sci* 2006;97(9):952-60.

Golemovic M, Sucic M, Zadro R, Mrcic S, Mikulic M, Labar B, Rajic Lj, Batinic D. IgH and TCR γ gene rearrangements, cyclin A1 and HOXA9 gene expression in biphenotypic acute leukemias. *Leuk Res* 2006;30(2):211-21.

Verstovsek S, Golemovic M, Kantarjian H, Manshouri T, Estrov Z, Manley P, Sun T, Arlinghaus RB, Alland L, Dugan M, Cortes J, Giles F, Beran M. AMN107, a novel aminopyrimidine inhibitor of p190 Bcr-Abl activation and of in vitro proliferation of Philadelphia-positive acute lymphoblastic leukemia cells. *Cancer* 2005;104(6):1230-6.

Golemovic M, Verstovsek S, Giles F, Cortes J, Manshouri T, Manley PW, Mestan J, Dugan M, Alland L, Griffin JD, Arlinghaus RB, Sun T, Kantarjian H, Beran M. AMN107, a novel aminopyrimidine inhibitor of Bcr-Abl, has in vitro activity against imatinib-resistant chronic myeloid leukemia. *Clin Cancer Res* 2005;11(13):4941-7.

Orsolic N, Giles FJ, Gourdeau H, Golemovic M, Beran M, Cortes J, Freireich EJ, Kantarjian H, Verstovsek S. Troxacitabine and imatinib mesylate combination therapy of chronic myeloid leukaemia: preclinical evaluation. *British Journal of Haematology* 2004;124:727-38.

Duzkale H, Jilani I, Orsolic N, Zingaro RA, Golemovic M, Giles FJ, Kantarjian H, Albitar M, Freireich EJ, Verstovsek S. In vitro activity of dimethylarsinic acid against human leukaemia and multiple myeloma cell lines. *Cancer Chemother Pharmacol* 2003;51:427-32.

Golemovic M, Batinic D. Origin and development of haematopoietic cells. *Lijec Vjesn*. 2002 Jun-Jul;124(6-7):203-11. Review. Croatian.

Sucic M, Boban D, Markovic-Glamocak M, Uzarevic B, Zadro R, Petroveck M, Ries S, Gjadrov K, Golemovic M, Stavljenic-Rukavina A, Labar B, Batinic D. Double immunoenzymatic APAAP staining for the detection of leukemia-associated immunophenotypes. *J Hematother & Stem Cell Res* 1999;8:635-43.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Skific M, Golemovic M, Crkvenac-Gornik K, Vrhovac R, Golubic Cepulic B. Comparative analysis of biological and functional properties of bone marrow mesenchymal stromal cells expanded in media with different platelet lysate content. *Cells Tissues Organs*. 2018;205(4):226-239. doi: 10.1159/000492581.



2. Golemovic M. Advanced therapy medicinal products - an overview. Molecular and Experimental Biology in Medicine, 2017, 1:21-25. in Croatian.

3. Bojanic I, Serventi Seiwert R, Golubic Cepulc B, Mazic S, Lukic M, Raos M, Plenkovic F, Golemovic M, Dubravcic K, Perkovic S, Batinic D, Labar B. Treatment of chronic GVHD with extracorporeal photochemotherapy. Transfus Apher Sci. 2013;48(2):193-4. Epub 2013 Mar 17.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Participation in scientific projects sponsored by Croatian Ministry of Science (position: scientific novice):

1. "In vitro parameters of biphenotypic acute leukemia" (PI: prof. D. Batinic, M.D., code: 0214006/1998)
2. "The effect of stromal cells on the growth and differentiation of acute leukemia blasts" (PI: prof. D. Batinic, M.D., code: 214201/2002)
3. "The role of PI3K/Akt and MAPK in regulation of chemoresistance of leukemic cells" (PI: prof. D. Batinic, M.D., code: 214-1081347-0355)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

-

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist. Prof. Branka Golubić Čepulić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb, Department of Transfusion Medicine and Transplantation Biology

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Laboratory approach to transplantation of haematopoietic stem cells

BIOGRAPHY

Date and place of birth

25.8.1958, Zagreb

Education

1990 specialization in transfusion medicine

1987 postgraduate study in Medical Cytology

1982 medical doctor, University of Zagreb, School of Medicine

Work experience

1996-present head of the Department of Transfusion Medicine and Transplantation Biology, University Hospital Centre Zagreb

1995-1996 advisor, Croatian institute for health insurance

1990-1995 specialist in transfusion medicine, Department of Transfusion Medicine, University Hospital Centre Zagreb

1987-1990 residency in transfusion medicine, University Hospital Centre Zagreb

1983-1987 general practitioner, Public Health Care Centre Trnje, Zagreb

1982-1983 internship, Children's Hospital Zagreb

Academic degrees

2011 PhD, Dissertation: Sources of Errors and Their Control: An Adverse Event Management Model in Clinical Transfusion, University of Zagreb, School of Medicine

1998 Master of Science, Thesis: Influence of high doses of gamma irradiation on platelets concentrates, University of Zagreb, School of Medicine

Teaching position

2015-present Assistant Professor, School of medicine, University of Zagreb (160 h)

2013-present Assistant Professor, Department of Health Studies, University of Split (100 h)

2002-present College professor, University of Applied Health Sciences, Zagreb (90 h)

In total 350 teaching hours

Publications

in total 65 articles in medical journals: 40 articles in indexed journals (18 Current Contents, 13 Medline, 6 Scopus, 3 WOS)

author or co-author of 20 chapters in student's textbooks and 19 chapters in other books (all in Croatian)

editor of 4 books in the field of transfusion medicine (all in Croatian)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 20.07.2015

Assistant Professor, University of Zagreb; 10.06.2013 Assistant Professor, University of Split

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Golubić Čepulić B, Bojanić I. Laboratorijski aspekti transplantacije krvotvornih matičnih stanica. U: Sertić J. i sur. Klinička kemija i molekularna dijagnostika u kliničkoj praksi. Zagreb: Medicinska naklada, 2015: 553-559.
2. Golubić-Čepulić B, Bojanić I Sustav krvnih grupa i njihova klinička važnost. U: Labar B i sur: Hematologija. 3. izd. Zagreb: Školska knjiga, 2017:635-640.

3. Golubić-Čepulić B, Bojanić I. Osobitosti transfuzijskog liječenja. U: Labar B i sur: Hematologija. 3. izd. Zagreb: Školska knjiga, 2017:645-657.
4. Golubić-Čepulić B, Bojanić I. Prikupljanje, obrada i pohrana krvotvornih matičnih stanica. U: Labar B i sur: Hematologija. 3. izd. Zagreb: Školska knjiga, 2017:657-663.
5. Golubić-Čepulić B, Bojanić I. Neželjene reakcije na transfuziju. U: Labar B i sur: Hematologija. 3. izd. Zagreb: Školska knjiga, 2017:664-672.
6. Bojanic I, Cepulic BG, Mazic S, Batinic D, Nemet D, Labar B. Toxicity related to autologous peripheral blood haematopoietic progenitor cell infusion is associated with number of granulocytes in graft, gender and diagnosis of multiple myeloma. *Vox Sanguinis* 2008; 95:70-75. doi: 10.1111/j.1423-0410.2008.01060.x.
7. Raos M, Nemet D, Bojanić I, Sertić D, Batinić D, Dušak V, Mazić S, Golubić Čepulić B, Labar B. Collection and composition of autologous peripheral blood stem cells graft in patients with acute myeloid leukemia: influence on hematopoietic recovery and outcome. *Collegium Antropologicum* 2010; 34:105-15.
8. Bojanic I, Dubravac K, Batinic D, Golubic Cepulic B, Mazic S, Hren D, Nemet D, Labar B. Large volume leukapheresis: Efficacy and safety of processing patient's total blood volume six times. *Trans Apheres Sci* 2011; 44: 139-47. doi: 10.1016/j.transci.2011.01.005.
9. Bojanic I, Serventi Seiwert R, Golubic Cepulic B, Mazic S, Lukic M, Raos M, Plenkovic F, Golemovic M, Dubravac K, Perkovic S, Batinic D, Labar B. Treatment of chronic GVHD with extracorporeal photochemotherapy. *Transfus Apher Sci* 2013; 48:193-4. doi: 10.1016/j.transci.2013.02.033.
10. Bojanic I, Mazic S, Rajic L, Jakovljevic G, Stepan J, Cepulic BG. Large volume leukapheresis is efficient and safe even in small children up to 15 kg body weight. *Blood Transfus*. 2017 doi: 10.2450/2016.0151-15.
11. Tomac G, Bojanić I, Mazić S, Vidović I, Raos M, Čepulić BG, Seiwert RS, Kelečić J, Labar B. Haemolysis, pure red cell aplasia and red cell antibody formation associated with major and bidirectional ABO incompatible haematopoietic stem cell transplantation. *Blood Transfus* 2017; 19:1-8. doi: 10.2450/2017.0322-16.
12. Bojanic I, Mravak Stipetic M, Pulanic D, Desnica L, Mazic S, Golubic Cepulic B, Serventi Seiwert R, Vrhovac R, Nemet D, Pavletic SZ. Autologous blood as a source of platelet gel for the effective and safe treatment of oral chronic graft-versus-host disease. *Transfusion*. 2018 Jun;58(6):1494-1499. doi: 10.1111/trf.14594. Epub 2018 Mar 14.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Raos M, Zunec R, Mocibob M, Gojceta K, Lukic M, **Golubic Cepulic B**. Susceptible and protective HLA-DR and HLA-DQ alleles for Fya alloimmunization in Croatian population. *Transfusion*, in press
2. Skific M, Golemovic M, Crkvenac-Gornik K, Vrhovac R, **Golubic Cepulic B**. Comparative analysis of biological and functional properties of bone marrow mesenchymal stromal cells expanded in media with different platelet lysate content. *Cells Tissues Organs* 2018; 205:226–239
3. Burek Kamenaric M, Maskalan M, Drabbels J, **Golubic Cepulic B**, Grubic Z. Identification of the novel HLA-B*18:37:02 allele in a Croatian individual. *HLA*. 2018; 91(4):299-300.
4. Bojanic I, Mravak Stipetic M, Pulanic D, Desnica L, Mazić S, **Golubic Cepulic B**, Serventi Seiwert R, Vrhovac R, Nemet D, Pavletic SZ. Autologous blood as a source of platelet gel for the effective and safe treatment of oral chronic graft-versus-host disease. *Transfusion*. 2018;58:1494-1499.
5. Tomac G, Bojanić I, Mazić S, Vidović I, Raos M, **Čepulić BG**, Seiwert RS, Kelečić J, Labar B. Haemolysis, pure red cell aplasia and red cell antibody formation associated with major and bidirectional ABO incompatible haematopoietic stem cell transplantation. *Blood Transfus*. 2017; 19:1-8.
6. Raos M, Novoselac J, Burnac IL, Lukic M, Leskovar I, **Golubic Cepulic B**. Evaluation of antibody screening and identification pre-transfusion tests using DG Gel cards. *J. appl. health sci*. 2018; 4(2): 179-186.
7. Bojanic I, Mazić S, Rajic L, Jakovljevic G, Stepan J, **Cepulic BG**. Large volume leukapheresis is efficient and safe even in small children up to 15 kg body weight. *Blood Transfus*. 2016; 15:85-92.
8. Maskalan M, Grubic Z, Jankovic KS, **Cepulic BG**, Zunec R. Identification of the novel HLA-A*01:200 allele by sequence-based typing in a Croatian individual. *HLA*. 2016; 87(5):381-2.

9. Borovečki A, Caenazzo L, Ježek D, Karija-Vlahović M, **Golubić B**. Croatian National Centre for Biobanking – a new perspective in biobanks governance? Croat Med J. 2014; 28:416-22.
10. Tomicic M, Starcevic M, Ribicic R, **Golubic-Cepulic B**, Hundric-Haspl Z, Jukic I. Alloimmune neonatal neutropenia in Croatia during the 1998-2008 period. Am J Reprod Immunol. 2014; 71:451-7.
11. Kopjar T, Biocina B, **Cepulic BG**, Milicic D. Implantation of CD133(+) stem cells in patients undergoing coronary bypass surgery. Can J Cardiol. 2013; 29(11):1533
12. Bojanic I¹, Serventi Seiwert R, **Golubic Cepulic B**, Mazic S, Lukic M, Raos M, Plenkovic F, Golemovic M, Dubravcic K, Perkovic S, Batinic D, Labar B. Treatment of chronic GVHD with extracorporeal photochemotherapy. Transfus Apher Sci. 2013; 48:193-194.
13. Petrunic M¹, Mestrovic T, Loncaric Y, **Golubic-Cepulic B**, Oberman B, Safradin I. In situ repair of a mycotic suprarenal aortic aneurysm using a cryopreserved aortic homograft and visceral debranching in a patient with spondylodiscitis and left psoas muscle abscess. Ann Thorac Cardiovasc Surg. 2013;19:394-8.
14. Bojanić I¹, Seiwert RS, Mazić S, Dubravčić K, Batinić D, **Cepulić BG**, Labar B. Extracorporeal photopheresis in treatment of chronic graft versus host disease Lijec Vjesn. 2013;135:139-44.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Leukemia and hematopoietic stem cells transplantation (Ministry of science, education and sport; number: 108-1081872-1913; principal investigator: Prof. Boris Labar, MD, PhD)
2. Lymphoproliferative diseases and hematopoietic stem cells transplantation (Ministry of science, education and sport; number: 108-1081872-2061; principal investigator: prof. Damir Nemet, MD, PhD)
3. Scientific Center of Excellence for Reproductive and Regenerative medicine (CERRM) School of Medicine University of Zagreb; Horizon 2020 project OSTEOproSPINE Contract No EU (K.K. 01.1.01.008), collaborator

Other projects

1. EURO-GTP II - Good Practices for demonstrating safety and quality through recipient follow-up Contract No 709567) -WP leader (WP 3 Evaluation) (2016-present)
2. Twinning light project "Strengthening national institutional capacities in the field of Substance of Human Origin (SoHO) to improve the safety of blood in transfusion and transplantation", in Serbia Contract No SR 13 IPA HE 02 17 TWL., Short term expert (2017-2018)
3. EU-Patient Blood Management Project EU-PBM. Good practices in the field of blood transfusion (2014-2016) (Contract No. 2013 61 06 concerning the EAHC/2013/Health/02), collaborator (2014-2017)
4. ARTHIOS-ART and HSC Improvements for Quality and Safety. (Executive Agency for Health and Consumers; Agreement number-2013 21 01), collaborator (2014-2017)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Scientific Center of Excellence for Reproductive and Regenerative medicine (CERRM) School of Medicine University of Zagreb; Horizon 2020 project OSTEOproSPINE Contract No EU (K.K. 01.1.01.008), collaborator

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Kristina Gotovac Jerčić, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Clinical Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Genomic approaches in biomedical and translational research

BIOGRAPHY

Kristina Gotovac Jerčić was born in 1983 in Zagreb, Croatia. She graduated from Faculty of Science, Department of Biology in 2008 and attained her PhD from Faculty of Science, Department of Biology in 2014. From 2008 to 2016 she was employed at the Department for Functional Genomics (Center for Translational and Clinical Research). Since 2016 she has been employed as a molecular biologist at the Department of Neurology, University Hospital Center Zagreb. For the purpose of scientific training she spent two months in 2010 in the group of prof. Dr. Nicholas Hastie at the Medical Research Council Human Genetics Unit in Edinburgh (Scotland), and in the laboratory of prof Dr Tiago Outeiro at Georg-August University in Göttingen (Germany). So far she has published 12 publications indexed in CC and WoS databases which have been cited 165 times according to Scopus database and has actively participated in several scientific congresses in the country and abroad.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Martins M, Rosa A, Guedes L, Fonseca B, Gotovac K; Violant S, Mestre T, Coelho M, Rosa M, Martin E, Vance J, Outeiro T, Wang L, Borovečki F, Ferreira J, Oliveira S. Convergence of miRNA Expression Profiling, α -Synuclein Interactome and GWAS in Parkinson's Disease. PLoS One. 2011 ; e25443-e25443.

Gotovac K, Pivac N, Hajnšek S, Muck-Šeler D, Borovečki F. Quest for new genomic and proteomic biomarkers in neurology. Translational Neuroscience. 2011; 1; 69-75.

Gotovac K, Grubić Z, Kaštelan Ž, Štingl K, Kuliš T, Krhen I, Hudolin T, Kaštelan M, Žunec R. Pilot Study of the Association between the HLA Region and Testicular Carcinoma among Croatian Patients. Urologia internationalis. 2011; 288-292.

Koršić M, Gotovac K, Nikolac M, Dušek T, Škegro M, Muck-Šeler D, Borovečki F, Pivac N. Gene expression in visceral and subcutaneous adipose tissue in overweight women. Frontiers in Bioscience-Landmark. 2012; 4: 2834-2844.

Gotovac K, Hajnšek S, Bosnjak Pasić M, Pivac N, Borovečki F. Personalized Medicine in Neurodegenerative Diseases: How Far Away? Mol Diagn Ther. 2014;18:17-24.

Pećina-Šlaus N, Gotovac K, Kafka A, Tomas D, Borovečki F. Genetic changes observed in a case of adult pilocytic astrocytoma revealed by array CGH analysis. Molecular Cytogenetics. 2014;7:95.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Lamot L, Borovečki F, Tambić BL, Vidović M, Perica M, Gotovac K, Harjacek M. Aberrant expression of shared master-key genes contributes to the immunopathogenesis in patients with juvenile spondyloarthritis. PLoS One. 2014;9:e115416.

Rincic M, Rados M, Krsnik Z, Gotovac K, Borovecki F, Liehr T, Brecevic L. Complex intrachromosomal rearrangement in 1q leading to 1q32.2 microdeletion: a potential role of SRGAP2 in the gyrification of cerebral cortex. *Mol Cytogenet*. 2016; 9:19.

Gotovac K, Nikolac Perković M, Pivac N, Borovečki F. Biomarkers of aggression in dementia. *Prog Neuropsychopharmacol Biol Psychiatry*. 2016;69:125-30.

Paiva I, Jain G, Lázaro DF, Jerčić KG, Hentrich T, Kerimoglu C, Pinho R, Szegő EM, Burkhardt S, Capece V, Halder R, Islam R, Xylaki M, Caldi Gomes LA, Roser AE, Lingor P, Schulze-Hentrich JM, Borovečki F, Fischer A, Outeiro TF. Alpha-synuclein deregulates the expression of COL4A2 and impairs ER-Golgi function. *Neurobiol Dis*. 2018;119:121-135.

Pinho R, Paiva I, Jercic KG, Fonseca-Ornelas L, Gerhardt E, Fahlbusch C, Garcia-Esparcia P, Kerimoglu C, Pavlou MA, Villar-Piqué A, Szego É, Fonseca TL, Odoardi F, Soeroes S, Rego AC, Fischle W, Schwamborn JC, Meyer T, Kügler S, Ferrer I, Attems J, Fischer A, Becker S, Zweckstetter M, Borovecki F, Outeiro TF. Nuclear localization and phosphorylation modulate pathological effects of Alpha-Synuclein. *Hum Mol Genet*. 2018 Sep 13.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

EU FP7 - „Integrating and Strengthening Genomic Research in South-Eastern Europe – INTEGERS“ (01. 05. 2008. – 30. 04. 2010.) - associate

Michael J. Fox Foundation – Rapid Response Innovation Award „Deciphering the molecular effects of alpha-synuclein in the nucleus: DNA binding and transcriptional dysregulation“ (2010.-2011.) - associate

HIT Tehnologijski projekt – “Ciljani aCGH čipovi za dijagnostiku neurorazvojnih bolesti” (2011.-2014.) – associate

Parkinson’s UK – “The role of glycosylation in Parkinson’s disease” – associate (2012.-2013.)

DAAD - „Post-translational modifications of proteins in pathophysiology of Parkinson’s disease” – associate (2014.-2015.)

DAAD - „The role of nuclear alpha-synuclein on transcriptional modulation in mouse models of Parkinson’s disease ” – associate (2015.-2017.)

Adris zaklada – „NGS tests for neurodevelopmental disorders” – associate (2016.-2017.)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

HRZZ – Istraživački projekt – „Genetski mehanizmi lizosomalne disfunkcije u Parkinsonovoj bolesti” (2014.-2018.) – associate

BICRO/HAMAG potpora za transfer tehnologije – „Genomski testovi za dijagnostiku neurorazvojnih bolesti” – associate (2016.-2018.)

DAAD - „The role of lysosomal dysfunction on protein accumulation in Parkinson's disease” – associate (2018.-2019.)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Danka Grčević

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Selected topics in transplantation immunology, Immunological recognition, Understanding bone metabolism – basic science in clinical practice

BIOGRAPHY

DATE AND PLACE OF BIRTH: 15. 7. 1967. ZAGREB

EDUCATION

1992.: MD, School of Medicine University of Zagreb;

1998.: MS in Natural Sciences – Biology Postgraduate Education in Biomedicine, University of Zagreb School of Natural Sciences, Thesis: Alleviation of graft versus host reaction by the pharmacological inactivation of T lymphocytes in murine bone marrow; supervisor Prof M Marusic);

2001.: PhD in Medical Sciences – Biomedicine and Health, Doctoral thesis: Role of T and B lymphocytes in osteoclast differentiation, supervisor Prof M Marusic);

2013: Specialisation in laboratory immunology, Ministry of Health RH

EMPLOYEMENT

1995 - 1996: PhD student, Department of Physiology and Immunology;

1996 - 2003: Assistant, Department of Physiology and Immunology;

2003 - 2010: Assistant Professor, Department of Physiology and Immunology,

2010 - 2016: Associate Professor, Department of Physiology and Immunology,

2016- : Professor, Department of Physiology and Immunology.

RESEARCH AND TEACHING ACTIVITIES

Scientific training:

1997 (4 months) i 1999 (3 months): Scientific training in the laboratory of Prof J Lorenzo, University of Connecticut Health Center, Farmington, CT, USA;

2002, 2003 i 2004 (total 4 months): Scientific training in the laboratory of Prof P Croucher, Institute of Musculoskeletal Sciences, University of Oxford, Headington, UK;

2009 – 2018 (total 12 months): Visiting researcher (laboratories of Prof HL Aguila and Prof I Kalajzić), University of Connecticut Health Centre, Farmington, CT, USA.

Teaching experience: Involved in several obligatory courses at the Medical School in Zagreb (Physiology, Immunology, Introduction to Research) and Medical Studies in English, collaborator at several postgraduate courses of Doctoral Studies at Medical School in Zagreb.

Selected textbooks:

1. Abbas AK, Lichtman AH, Pillai S. Stanična i molekularna imunologija, 8th ed. Batinić D, Lukinović-Škudar V (ed.). Zagreb: Medicinska naklada, 2018. (kotranslator)

2. Grčević, Danka; Kovačić, Nataša. Anatomija i fiziologija muskuloskeletnog sustava, U: Pedijatrijska reumatologija. Jelušić M, Malčić, I (ur.). Zagreb : Medicinska naklada, 2014.

3. Andreis I, Batinić D, Čulo F, Grčević D, Marušić M, Taradi M, Višnjić D. Imunologija, sedmo prerađeno izdanje. Taradi M (ur.). Zagreb: Medicinska naklada, 2010.

4. Guyton AC, Hall JE. Medicinska fiziologija, 11th ed. Kukolja Taradi S, Andreis I (ed.). Zagreb: Medicinska naklada, 2012. (kotranslator)

5. Grčević, Danka. Starenje imunološkog sustava, In: Gerijatrija – medicina starije dobi. Duraković, Zijad (ed.). Zagreb : C.T.-poslovne informacije, 2007.

RESEARCH INTERESTS

Mechanisms of functional interactions between immune and one systems in the bone marrow microenvironment, particularly the molecular interactions between immune and bone cells in physiological and pathological conditions.

MAJOR SCIENTIFIC ACHIEVEMENTS

- PI of the project awarded by the Croatian Scientific Foundation, participation in several national and international scientific projects, invited speaker at the number of scientific meetings.
- Co-organizer of the EMBO workshop: “Anatomy and Embryology of the Mouse” at Medical School.
- Long-term member of the Executive Board of the Croatian Medical Journal, membership and active participation in scientific and professional organizations (Croatian Immunological Society (president), America Association of Immunologists)
- Co-leader (leader Prof Batinić) of the Postgraduate specialty study in Laboratory immunology, School of Medicine University of Zagreb

NUMBER OF PUBLICATIONS/ CITATIONS: 47 / 792 CITATIONS (Scopus)

AWARDS

2017. State Award for Scientific Achievement, Biomedicine and Health, Ministry of Science and Education

2012. Award for Scientific Achievements, University of Zagreb School of Medicine

2010. Short term fellowship award European Molecular Biology Organization (EMBO) for scientific training in the Laboratory of Prof HL Aquila, UConn Health Center, USA

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 19 Jan 2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Lazić Mosler E, Lukač N, Flegar D, Fadljević M, Radanović I, Cvija H, Kelava T, Ivčević S, Šućur A, Markotić A, Katavić V, Marušić A, Grčević D, Kovačić N (2018) Fas receptor induces apoptosis of synovial bone and cartilage progenitor populations and promotes bone loss in antigen-induced arthritis. FASEB J. (Q1)

- Glasnović A, Stojić M, Dežmalj L, Tudorić-Đeno I, Romić D, Jeleč V, Vrca A, Vuletić V, Grčević D (2018) RANKL/RANK/OPG Axis Is Deregulated in the Cerebrospinal Fluid of Multiple Sclerosis Patients at Clinical Onset. Neuroimmunomodulation 25(1):23-33. (Q2)

- Grčević D, Sironi M, Valentino S, Deban L, Cvija H, Inforzato A, Kovačić N, Katavić V, Kelava T, Kalajzić I, Mantovani A, Bottazzi B (2018) The Long Pentraxin 3 Plays a Role in Bone Turnover and Repair. Front Immunol 9:417. (Q1)

- Sucur A, Jajic Z, Artukovic M, Matijasevic MI, Anic B, Flegar D, Markotic A, Kelava T, Ivcevic S, Kovacic N, Katavic V, Grcevic D (2017) Chemokine signals are crucial for enhanced homing and differentiation of circulating osteoclast progenitor cells. Arthritis Res Ther 19(1):142. (Q1)

- Matthews BG, Roeder E, Wang X, Aguila HL, Lee SK, Grcevic D, Kalajzic I (2017) Splenomegaly, myeloid lineage expansion and increased osteoclastogenesis in osteogenesis imperfecta murine. *Bone* 103:1-11. (Q1)
- Matic I, Matthews BG, Wang X, Dymont NA, Worthley DL, Rowe DW, Grcevic D, Kalajzic I (2016) Quiescent Bone Lining Cells Are a Major Source of Osteoblasts During Adulthood. *Stem Cells* 34(12):2930-2942. (Q1)
- Matulic M, Skelin J, Radic-Kristo D, Kardum-Skelin I, Grcevic D, Antica M (2015) Notch affects the prodifferentiating effect of retinoic acid and PMA on leukemic cells. *Cytom Part A* 87:129-136. (Q2)
- Peric M, Dumic-Cule I, Grcevic D, Matijasic M, Verbanac D, Paul R, Grgurevic L, Trkulja V, Bagi CM, Vukicevic S (2015) The rational use of animal models in the evaluation of novel bone regenerative therapies. *Bone* 70(SI):73-86. (Q1)
- Kuzmac S, Grcevic D, Sucur A, Ivcevic S, Katavic V (2014) Acute hematopoietic stress in mice is followed by enhanced osteoclast maturation in the bone marrow microenvironment. *Exp Hematol* 42:966-975. (Q2)
- Glasnović A, Cvija H, Stojić M, Tudorić-Đeno I, Ivčević S, Romić D, Tičinović N, Vuletić V, Lazibat I, Grčević D (2014) Decreased level of sRAGE in the cerebrospinal fluid of multiple sclerosis patients at clinical onset. *Neuroimmunomodulation* 21:226-233. (Q3)
- Topić I, Ikić M, Ivčević S, Kovačić N, Marušić A, Kušec R, Grčević D (2013) Bone morphogenetic proteins regulate differentiation of human promyelocytic leukemia cells. *Leuk Res* 37:705-12. (Q2)
- Cvija H, Kovacic N, Katavic V, Ivcevic S, Aguila HL, Marusic A, Grčević D (2012) Chemotactic and immunoregulatory properties of bone cells are modulated by endotoxin-stimulated lymphocytes. *Inflammation* 35:1618-1631. (Q4)
- Grčević D, Pejda S, Matthews BG, Repic D, Wang L, Li H, Kronenberg MS, Jiang X, Maye P, Adams DJ, Rowe DW, Aguila HL, Kalajzic I (2012) In vivo fate mapping identifies mesenchymal progenitor cells. *Stem Cells* 30:187-196. (Q1)
- Grčević D, Kusec R, Kovacic N, Lukic A, Lukic IK, Ivcevic S, Nemet D, Serventi Seiwert R, Kolonić-Ostojic S, Croucher PI, Marusic A (2010) Bone morphogenetic proteins and receptors are over-expressed in bone-marrow cells of multiple myeloma patients and support myeloma cells by inducing ID genes. *Leuk Res* 34:742-751. (Q2)
- Kovacic N, Grčević D, Katavic V, Lukic IK, Grubisic V, Mihovilovic K, Cvija H, Croucher PI, Marusic A (2010) Fas receptor is required for estrogen deficiency-induced bone loss in mice. *Lab Invest* 90:402-413. (Q1)
- Grčević D, Lee SK, Marušić A, Lorenzo JA. Depletion of CD4 and CD8 T lymphocytes in mice in vivo enhances 1,25-dihydroxyvitamin D3-stimulated osteoclast-like cell formation in vitro by a mechanism that is dependent on prostaglandin synthesis. *J Immunol* 2000;165:4231-4238. (Q1)
- Grčević D, Batinić D, Ascensao JL, Marušić M. Pre-treatment of transplant bone marrow cells with hydrocortisone and CsA alleviates graft-versus-host reaction in a murine allogeneic host-donor combination. *Bone Marrow Transplant* 1999;23:1145-52. (Q2)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Lazić Mosler E, Lukač N, Flegar D, Fadljević M, Radanović I, Cvija H, Kelava T, Ivčević S, Šućur A, Markotić A, Katavić V, Marušić A, Grčević D, Kovačić N (2018) Fas receptor induces apoptosis of synovial bone and cartilage progenitor populations and promotes bone loss in antigen-induced arthritis. *FASEB J.* (Q1)

2. Glasnović A, Stojić M, Dežmalj L, Tudorić-Đeno I, Romić D, Jeleč V, Vrca A, Vuletić V, Grčević D (2018) RANKL/RANK/OPG Axis Is Deregulated in the Cerebrospinal Fluid of Multiple Sclerosis Patients at Clinical Onset. *Neuroimmunomodulation* 25(1):23-33. (Q2)
3. Grčević D, Sironi M, Valentino S, Deban L, Cvija H, Inforzato A, Kovačić N, Katavić V, Kelava T, Kalajzić I, Mantovani A, Bottazzi B (2018) The Long Pentraxin 3 Plays a Role in Bone Turnover and Repair. *Front Immunol* 9:417. (Q1)
4. Sucur A, Jajic Z, Artukovic M, Matijasevic MI, Anic B, Flegar D, Markotic A, Kelava T, Ivcevic S, Kovacic N, Katavic V, Grcevic D (2017) Chemokine signals are crucial for enhanced homing and differentiation of circulating osteoclast progenitor cells. *Arthritis Res Ther* 19(1):142. (Q1)
5. Matthews BG, Roeder E, Wang X, Aguila HL, Lee SK, Grcevic D, Kalajzic I (2017) Splenomegaly, myeloid lineage expansion and increased osteoclastogenesis in osteogenesis imperfecta murine. *Bone* 103:1-11. (Q1)
6. Matic I, Matthews BG, Wang X, Dymont NA, Worthley DL, Rowe DW, Grcevic D, Kalajzic I (2016) Quiescent Bone Lining Cells Are a Major Source of Osteoblasts During Adulthood. *Stem Cells* 34(12):2930-2942. (Q1)
7. Mitrović S, Kelava T, Šućur A, Grčević D (2016) Levels of Selected Aqueous Humor Mediators (IL-10, IL-17, CCL2, VEGF, FasL) in Diabetic Cataract. *Ocul Immunol Inflamm* 24:159-66. (Q2)
8. Matthews BG, Torreggiani E, Roeder E, Matic I, Grcevic D, Kalajzic I (2016) Osteogenic potential of alpha smooth muscle actin expressing muscle resident progenitor cells. *Bone* 84:69-77. (Q2)
9. Erjavec I, Bordukalo-Niksic T, Brkljacic J, Grcevic D, Mokrovic G, Kesic M, Rogic D, Zavadoski W, Paralkar VM, Grgurevic L, Trkulja V, Cicin-Sain L, Vukicevic S (2016) Constitutively Elevated Blood Serotonin Is Associated with Bone Loss and Type 2 Diabetes in Rats. *PLoS One* 23;11(2):e0150102. (Q1)
10. Ikić Matijašević M, Flegar D, Kovačić N, Katavić V, Kelava T, Šućur A, Ivčević S, Cvija H, Lazić Mosler E, Kalajzić I, Marušić A, Grčević D (2016) Increased chemotaxis and activity of circulatory myeloid progenitor cells may contribute to enhanced osteoclastogenesis and bone loss in the C57BL/6 mouse model of collagen-induced arthritis. *Clin Exp Immunol* 186(3):321-335. (Q1)
11. Flegar D, Šućur A, Markotić A, Kovačić N, Grčević D (2015) Osteoporosis in the View of Osteoimmunology: Common Feature Underlined by Different Pathogenic Mechanisms. *Period Biol* 117: 35-43. (Q4)
12. Matulic M, Skelin J, Radic-Kristo D, Kardum-Skelin I, Grcevic D, Antica M (2015) Notch affects the prodifferentiating effect of retinoic acid and PMA on leukemic cells. *Cytom Part A* 87:129-136. (Q2)
13. Peric M, Domic-Cule I, Grcevic D, Matijasic M, Verbanac D, Paul R, Grgurevic L, Trkulja V, Bagi CM, Vukicevic S (2015) The rational use of animal models in the evaluation of novel bone regenerative therapies. *Bone* 70(SI):73-86. (Q1)
14. Bobek D, Grčević D, Kovačić N, Lukić IK, Jelušić M (2014) The presence of high mobility group box-1 and soluble receptor for advanced glycation end-products in juvenile idiopathic arthritis and juvenile systemic lupus erythematosus. *Pediatr Rheumatol Online* 12:50. (Q2)
15. Kuzmac S, Grcevic D, Sucur A, Ivcevic S, Katavic V (2014) Acute hematopoietic stress in mice is followed by enhanced osteoclast maturation in the bone marrow microenvironment. *Exp Hematol* 42:966-975. (Q2)

16. Šućur A, Katavić V, Kelava T, Jajić Z, Kovačić N, Grčević D (2014) Induction of osteoclast progenitors in inflammatory conditions: key to bone destruction in arthritis. *Int Orthop* 38:1893-1903. (Q2)
17. Matthews BG, Grcevic D, Wang L, Hagiwara Y, Roguljic H, Joshi P, Shin DG, Adams DJ, Kalajzic I (2014) Analysis of α SMA-labeled progenitor cell commitment identifies notch signaling as an important pathway in fracture healing. *J Bone Miner Res* 29:1283-1294. (Q1)
18. Glasnović A, Cvija H, Stojić M, Tudorić-Đeno I, Ivčević S, Romić D, Tičinović N, Vuletić V, Lazibat I, Grčević D (2014) Decreased level of sRAGE in the cerebrospinal fluid of multiple sclerosis patients at clinical onset. *Neuroimmunomodulation* 21:226-233. (Q3)
19. Ikić M, Jajić Z, Lazić E, Ivčević S, Grubišić F, Marušić A, Kovačić N, Grčević D (2014) Association of systemic and intra-articular osteoclastogenic potential, proinflammatory mediators and disease activity with the form of inflammatory arthritis. *Int Orthop* 38:183-192. (Q1)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Scientific project, Croatian Scientific Foundation: "Notch signaling in osteoclast progenitors induced by rheumatoid arthritis", 2018-2022.
2. Scientific project, Croatian science foundation: "Molecular mediators of Fas-driven osteoresorption in arthritis" (headed by Prof N Kovacic), 2015-2019.
3. Scientific project, Croatian Scientific Foundation: "Characterization of osteoclast progenitor responses to arthritis"; 2014-2017.
4. European Commission 7th Framework Programme: Development of Stem Cell-Based Therapy for Thymic Regeneration (co-ordinator Prof CC Blackburn, University of Edinburg), 2013-2017.
5. Bilateral Croatian-Italian project: "Role of PTX3 in osteoclast and osteoblast differentiation" (co-investigator Prof B Bottazzi na Istituto Clinico Humanitas IRCCS, Milan, Italy), 2009-2011.
6. Croatian Ministry of Science, Education and Sports project: Molecular mechanisms of the effects of immune disturbances on bone (No 108-1080229-0142), 2007.-2014.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. Scientific project, Croatian Scientific Foundation: "Notch signaling in osteoclast progenitors induced by rheumatoid arthritis", 2018-2022.
2. Scientific project, Croatian science foundation: "Molecular mediators of Fas-driven osteoresorption in arthritis" (headed by Prof N Kovacic), 2015-2019.
3. European Regional Development Fund (Operative program for competence and cohesion, section Science and technology) "Scientific Center of Excellence for Reproductive and Regenerative medicine" (co-leadr Prof Vukicevoic and Prof Jezek), 2015-2020.
4. Scientific project, Croatian Scientific Foundation: "Characterization of osteoclast progenitor responses to arthritis"; 2014-2017.
5. European Commission 7th Framework Programme: Development of Stem Cell-Based Therapy for Thymic Regeneration (co-ordinator Prof CC Blackburn, University of Edinburg), 2013-2017.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

8

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. RUDOLF GREGUREK, M.D., Ph.D.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research Methods of Psychological Functions and Behavior ; Liaison and consultative psychiatry; Mental health service management;

BIOGRAPHY

He was born on 17th January 1958. He graduated in University of Zagreb Medical School in 1981. In 1987 started residency in psychiatry in a Clinic for Psychological Medicine and he finished it in 1990. Since then he works as a psychiatrist on a Clinic for Psychological Medicine, Clinical Hospital Centre Zagreb. In 2000 he became subspecialist in psychotherapy. Same year he became head of Polyclinic for Psychotherapy and in 2003 he became head of Clinic for Psychological Medicine.

From 2003.- 2013.he was head of Clinic for Psychological Medicine, Clinical Hospital Centre Zagreb, head of Desk for Psychiatry and Psychological Medicine, University of Zagreb Medical School

From 1990 to 1995 he was in education and supervision in individual psychotherapy, and when he finished it he became supervisor in individual psychoanalytical psychotherapy. He started personal group analysis in 1987 that was finished in 1992 and also become supervisor in group analysis and in dynamic family marital and partner therapy as well.

In 1994 he became assistant on a desk for Psychiatry and Psychological Medicine, University of Zagreb Medical School, in 1998 he became assistant professor, and in 2003 professor of psychological medicine. In 2006- 2009 he was head of Desk for Psychiatry and Psychological Medicine at University of Zagreb Medical School. Presently, from 2014. he is full professor of Psychological Medicine and Psychiatry on School of Medicine, University of Zagreb.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2014.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Pavic, L., Gregurek, R., Rados, M., Brkljacic, B., Brajkovic, L., Simetin-Pavic, I., Ivanac, G., Pavlisa, G., Kalousek, V. Smaller right hippocampus in war veterans with posttraumatic stress disorder. *Psychiatry Research: Neuroimaging*. 154(2):191-198, 2007.
2. Vuger-Kovačić, D., Gregurek, R., Kovačić, D., Vuger, T., Kalenić, B. Relation between anxiety, depression and locus of control of patients with multiple sclerosis. *Mult Scler*. 13(8):1065-1067, 2007.
3. Gregurek, R., Brajković, L., Kalenić, B., Bras, M., Persić-Brida, M. Five years study on impact of anxiety on quality of life in patients treated with bone marrow transplantation. *Psychiatr Danub*. 2009 Mar;21(1):49-55
4. Gregurek, R. Posttraumatic stress disorder from neurophysiology to psychotherapy: A Croatian experience. In *Interpersonnal Trauma and its Consequences in Adulthood*. Widera-Wysoczanska A. & A. Kuczynska (Eds.) Cambridge Scholars Publishing, Newcastle upon Tyne, UK., 129-139, 2010.
5. Jevtović, S., Gregurek, R., Kalenić, B., Brajković, L., Bras, M., Loncar, M., Germain, A. Correlation of sleep disturbance, anxiety and depression in Croatian war veterans with posttraumatic stress disorder. *Coll Antropol*. 2011 Jan;35 Suppl 1:175-81
6. Gregurek, R., Psychotherapy in 21st century. *Psychiatria Danubina* 24 Suppl 3:345-5, 2012.

7. Petrovic, R., Samardzic, T., Gregurek, R., et al. Changes in regional cerebral blood flow in patients with eating disorders. *European Journal Of Nuclear Medicine and Molecular Imaging* Vol: 40 Suppl: 2 S446-S446, 2013.
8. Kusevic, Z, Vukusic Rukavina, T; Babic, G, Loncar, M, VuksanCusa B, Gregurek R. The connection between alexithymia and somatic morbidity in a population of Combat veterans with chronic PTSD. *Acta Inform Med.* 2013; 21 (1) 7-11.
9. Restek-Petrović, B., Gregurek, R., Petrović, R., Orešković-Krezler N., Mihanović, M., Ivezić E. Characteristic of the Group Process in Long-Term Psychodynamic Group Psychotherapy for Patients with Psychosis. *Internattional Journal of Group Psychotherapy* 2016, 66: 132- 143.
10. Gregurek, R. sr. Gregurek, R. jr., Basic Principles of Psychoneuroendocrinology. *Gyrus* 2015: 2 (3); 50-53.
11. Gregurek R., Razić-Pavičić A, Gregurek R. ml. Anksioznost: psihodinamski i neurobiološki dijalog, *Soc. psihijat.* Vol. 45; 2, 117-124, 2017
12. Gregurek, R. A General Approach to the Treatment of Post-Traumatic Disordres: The Croatian Exoperience. In: *Trauma Treatment. Factors Contributing to Efficiency.* Widera-Wysoczanska A. (Ed) Cambridge Scholars Publishing. Newcastle upon Tyne, UK., 211-221, 2016.
13. Gregurek, R., sr, Gregurek, R., jr. The integration of Psychodynamics Theories and Biological Aspects in the Development of Anxiety and Anxiety Disorders. In: *Neew Developments in Anxiety Disorders.* Douarte F. & B. Marchesi (Eds). Milano, 47-64; 2016, ISBN:978-953-51-4900-2, 2017.
14. Gregurek, R., Gregurek, R. IV. Psychological Aspects of Bone Marrow Transplantation. In: *Bone marow Transplantation.* Avid publication, Ch.2.; 2017:2-35, <http://www.avidscience.com/wp-content/uploads/2017/06/BMT-17-02>.
15. Gregurek, R. Psihodinamska psihoterapija u 21. stoljeću. U: V. Jukić i sur. (eds). *Hrvatska psihijatrija početkom 21. stoljeća.* Medicinska naklada, Zagreb, 2018: 282-292.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Petrovic, R., Samardzic, T., Gregurek, R., et al. Changes in regional cerebral blood flow in patients with eating disorders. *European Journal Of Nuclear Medicine and Molecular Imaging* Vol: 40 Suppl: 2 S446-S446, 2013.
2. Gregurek, R. Posttraumatic stress disorder from neurophysiology to psychotherapy: A Croatian experience. In *interpersonnal Trauma and its Consequences in Adulthood.* Widera-Wysoczanska A. & A. Kuczynska (Eds.) Cambridge Scholars Publishing, Newcastle upon Tyne, UK., 129-139, 2010
3. Gregurek, R., Psychotherapy in 21st century. *Psychiatria Danubina* 24 Suppl 3:345-5, 2012.
4. Restek-Petrović, B., Gregurek, R., Petrović, R., Orešković-Krezler N., Mihanović, M., Ivezić E. Characteristic of the Group Process in Long-Term Psychodynamic Group Psychotherapy for Patients with Psychosis. *Internattional Journal of Group Psychotherapy* 2016, 66: 132- 143.
5. Gregurek, R. sr. Gregurek, R. jr., Basic Principles of Psychoneuroendocrinology. *Gyrus* 2015: 2 (3); 50-53.
6. Gregurek, R. A General Approach to the Treatment of Post-Traumatic Disordres: The Croatian Exoperience. In: *Trauma Treatment. Factors Contributing to Efficiency.* Widera-Wysoczanska A. (Ed) Cambridge Scholars Publishing. Newcastle upon Tyne, UK., 211-221, 2016.



7. Gregurek, R., sr, Gregurek, R., jr. The integration of Psychodynamics Theories and Biological Aspects in the Development of Anxiety and Anxiety Disorders. In: Neew Developments in Anxiety Disorders. Douarte F. & B. Marchesi (Eds). InTech Press, Milano, 47-64; 2016, ISBN:978-953-51-4900-2, 2017.

9. Gregurek, R., Gregurek, R. IV. Psychological Aspects of Bone Marrow Transplantation. In:, Bone marrow Transplantation. Avid publication, Ch.2.; 2017:2-35, <http://www.avidscience.com/wp-content/uploads/2017/06/BMT-17-02>.

10. Gregurek, R, sr., Ražić-Pavić, A., Gregurek, R, jr,. Anxiety: Psychodynamic and Neurobiologic Dialogue. Soc. Psihiatri, Vol. 45; 2, 117-124, 2017.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Leader and principal investigator Quality of life of chronic patients and transplanted
2. Leader and Principal Investigator of the Project Neurobiological aspects of human adaptation on stress and response to psychotherapy
3. Leader and principal investigator Experimental development of the Croatian PTSD psychotherapy model (0108092)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

5.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ivica Grgurevic, MD PhD, Assoc Prof

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Dubrava

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Advanced ultrasonography in gastroenterology and hepatology; Proteomics in biomedical research;

BIOGRAPHY

Ivica Grgurevic is Assist. Prof. of Medicine and Board certified Consultant in Internal Medicine, Gastroenterology and Hepatology. He graduated at University of Zagreb School of Medicine and attended postgraduate clinical fellowship in Hepatology at Institute for Liver and Digestive Health, University College London, Royal Free Hospital, UK. Currently works at Department of Gastroenterology, Hepatology and Clinical Nutrition (Head), University hospital Dubrava Zagreb. He was the first in Croatia who introduced Quantitative ultrasound elastography (in 2009); Contrast-enhanced ultrasound (2014) and invasive measurement of portal pressure (HVPG) (2015). His principal scientific interests are in the field of Hepatology and Ultrasound, more specifically diagnostic performance of noninvasive methods for assessment of liver fibrosis, steatosis, and portal hypertension. Member of EASL, EFSUMB, IASGO, Member of the Governing Board of the Central European Hepatology Collaboration, President-elect of the Croatian Society of Gastroenterology, Vice-president of the Croatian Society for the Ultrasound in Medicine and Biology. He serves as the Associate professor at University of Zagreb, Faculty of pharmacy and biochemistry and Assistant professor at University of Zagreb School of Medicine. He has published 45 scientific papers (25 indexed in Current contents), 90 congress abstracts, held 69 invited talks, authored or co-authored several chapters in books, was awarded the best poster in the category of Liver imaging at United European Gastroenterology Week in Vienna 2016.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: December 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- **Grgurević I**, Jukić I, Sokol S, Banić M, Bilić B, Gunjača I, Kujundžić M, Rora M, Matić V. Omjer broja trombocita i veličine slezene ima nisku specifičnost u neinvazivnoj predikciji i karakterizaciji varikoziteta jednjaka kod bolesnika s alkoholnom cirozom jetre. *Acta Med Croatica*, 2014; 68: 353-360
- **Grgurevic I**, Puljiz Z, Brnic D, Bokun T, Heinzl R, Lukic A, Luksic B, Kujundzic M, Brkljacic B. Liver and spleen stiffness and their ratio assessed by real-time two-dimensional shear wave elastography in patients with liver fibrosis and cirrhosis due to chronic viral hepatitis. *Eur Radiol* 2015; 25(11):3214-21
- **Grgurević I**, Bokun T, Mustapić S, Trkulja V, Heinzl R, Banić M, Puljiz Ž, Luksic B, Kujundžić M. Real-time two-dimensional shear wave ultrasound elastography of the liver is a reliable predictor of clinical outcomes and the presence of esophageal varices in patients with compensated liver cirrhosis: a preliminary evaluation. *Croat Med J* 2015;56:470-81
- Unić A, Derek L, Duvnjak M, Patrlj L, Rakić M, Kujundžić M, Renjić V, Štoković N, Dinjar P, Jukic A, **Grgurević I**. Diagnostic specificity and sensitivity of PIVKAI, GP3, CSTB, SCCA1 and HGF for the diagnosis of hepatocellular carcinoma in patients with alcoholic liver cirrhosis. *Ann Clin Biochem*. 2017 Jan 1:4563217726808. doi: 10.1177/0004563217726808.

- **Grgurevic I**, Bokun T, Salkic NN, Brkljacic B, Vukelić-Markovic M, Stoos-Veic T, Aralica G, Rakic M, Filipec-Kanizaj T, Berzigotti A. Liver elastography malignancy prediction score for noninvasive characterization of focal liver lesions. *Liver Int.* 2017 Oct 13. doi: 10.1111/liv.13611.
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- **Grgurevic I**, Salkic N, Bozin T, Mustapic S, Matic V, Domic-Cule I, Tjesic Drinkovic I, Bokun T. Magnitude dependant discordance in liver stiffness measurements using elastography point quantification with transient elastography as the reference test. *European Radiology* 2018; doi.org/10.1007/s00330-018-5831-2
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- **Grgurevic I**, Tjesic Drinkovic I, Pinzani M. Multiparametric ultrasound in liver diseases: an overview for the practising clinician. *Postgrad Med J* 2019;0:1–8. doi:10.1136/postgradmedj-2018-136111.

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- Božin T, Mustapic S, Bokun T, Patrlj L, Rakić M, Aralica G, Kujundžić M, Trkulja V and **Grgurević I**. ALBI score as a predictor of survival in patients with compensated cirrhosis resected for hepatocellular carcinoma: exploratory evaluation in relationship to liver function scores – PALBI AND MELD. *Acta Clin Croat* 2018; 57:292-300
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LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



- Diseases of pancreato-biliary system: etiology, diagnosis and treatment. Ministry of science, education and sport of the Republic of Croatia. Project No. 198-0000000-1124. Project leader: Prof. dr. sc. Milan Kujundžić
- Croatian center of excellence in regenerative and reproductive medicine. University of Zagreb School of Medicine. Leaders: Prof. dr. sc. Slobodan Vukičević i Prof. dr. sc. Davor Ježek
- Noninvasive approaches to diagnosing portal hypertension: evaluation and comparison of the existing methods and discovery of new serum markers (HePortoNew). University of Zagreb School of Medicine and The Adris Foundation. Leader: Assoc. prof. dr. sc. Ivica Grgurević

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- Diseases of pancreato-biliary system: etiology, diagnosis and treatment. Ministry of science, education and sport of the Republic of Croatia. Project No. 198-0000000-1124. Project leader: Prof. dr. sc. Milan Kujundžić
- Croatian center of excellence in regenerative and reproductive medicine. University of Zagreb School of Medicine. Leaders: Prof. dr. sc. Slobodan Vukičević i Prof. dr. sc. Davor Ježek
- Noninvasive approaches to diagnosing portal hypertension: evaluation and comparison of the existing methods and discovery of new serum markers (HePortoNew). University of Zagreb School of Medicine and The Adris Foundation. Leader: Assoc. prof. dr. sc. Ivica Grgurević

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1. Bokun Tomislav „Characterisation of liver tumours by quantitative ultrasound elastography“, University of Zagreb School of Medicine, 11.7.2017. Mentor: Assist. prof. dr. sc. Ivica Grgurević

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Lovorka Grgurević, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Medical school University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical methods in biomedical research; Methods of molecular biology in medicine; Proteomics in biomedical research

BIOGRAPHY

Lovorka Grgurevic conducts research in the Center for Translational and Clinical Research (CETRI), University of Zagreb School of Medicine, head of the proteomic centre where she conducted research program related with rare bone disease and tissue regeneration. She explores the structure and function of bone morphogenetic proteins (BMPs) in biological fluids, has discovered circulating osteogenic proteins and associated molecules in the plasma, and then investigated their effectiveness in bone healing and in models of acute and chronic renal failure. She contributed significantly to the discovery of a new carrier for BMPs and tested its efficacy in animal models of bone defects. Dr Grgurevic discovered novel biomarkers for bone repair, breast and prostate cancer prognosis. She received a new laboratory installation grant from the Croatian Science Foundation and was awarded by the Croatian Academy of Sciences and Arts for scientific achievements.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: full professor
September 2019

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Grgurevic L, Macek B, Erjavec I, Oppermann H, Mann M, Vukicevic S. Urine release of systemically administered bone morphogenetic protein hybrid molecule. *Journal of Nephrology* 20:311-319, 2007.

2. Grgurevic L, Macek B, Durdevic D, Vukicevic S. Detection of bone and cartilage-related proteins in plasma of patients with a bone fracture using liquid chromatography-mass spectrometry. *International Orthopaedics* 31:743-751, 2007.

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9. Bozic D, Grgurevic L, Erjavec I, Brkljacic J, Orlic I, Razdorov G, Grgurevic I, Vukicevic S, Plancak D. The proteome and gene expression profile of cementoblastic cells treated by bone morphogenetic protein-7 in vitro. *Journal of Clinical Periodontology* 39:80-90, 2012.
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33. Grgurevic L, Erjavec I, Grgurevic I, Dumic-Cule I, Brkljacic J, Verbanac D, Matijasic M, Paljetak HC, Novak R, Plecko M, Bubic-Spoljar J, Rogic D, Kufner V, Pauk M, Bordukalo-Niksic T, Vukicevic S: Systemic inhibition of BMP1-3 decreases progression of CCl₄-induced liver fibrosis in rats. *Growth Factors*, 35(6):201-215, 2017
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4. Dumic-Cule I, Draca N, Tikvica Luetic A, Jezek D, Rogic D, Grgurevic L, Vukicevic S. TSH prevents bone resorption and with calcitriol synergistically stimulates bone formation in rats with low levels of calciotropic hormones. Hormone and Metabolic Research, 46:305-312, 2014.
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11. Pauk M, Grgurevic L, Brkljacic J, Kufner V, Bordukalo-Niksic T, Grabusic K, Razdorov G, Rogic D, Zuvc M, Oppermann H, Babitt J, Lin H, Volarevic S, Vukicevic S. Exogenous BMP7 corrects the plasma iron overload and bone loss in Bmp6-/- mice. International Orthopaedics 39:161-172, 2015

12. Cvjeticanin B, Prutki M, Dumic-Cule I, Veir Z, Grgurevic L, Vukicevic S. Possible target for preventing fibrotic scar formation following acute myocardial infarction. *Med Hypotheses*. 83:656-8, 2014
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14. Stokovic N, Trkulja V, Dumic-Cule I, Cukovic-Bagic I, Lauc T, Vukicevic S, Grgurevic L. Sphenoid sinus types, dimensions and relationship with surrounding structures. *Annals of Anatomy* 203:69-76, 2016
15. Jurisic D, Erjavec I, Trkulja V, Dumic-Cule I, Hadzibegovic I, Kovacevic L, Svagusa T, Stanec Z, Vukicevic S, Grgurevic L: Soluble type III TGF β receptor in diagnosis and follow-up of patients with breast cancer. *Growth Factors* 33(3):200-9, 2015
16. Grgurević L, Christensen GL, Schulz T, Vukicevic S: Bone morphogenetic proteins in inflammation, glucose homeostasis and adipose tissue energy metabolism. *Cytokine and Growth Factor Reviews* 27:205-118, 2016
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20. Grgurevic L, Erjavec I, Dumic-Cule I, Bordukalo-Niksic T, Pauk M, Trkulja V, Maticic D, Pecin M, Lipar M, Peric M, Vukicevic S: Osteogrow: A Novel Bone Graft Substitute for Orthopedic. In: *Bone Morphogenetic Proteins: System Biology Regulators* (Editors: Vukicevic S, Sampath KT), Springer International Publishing AG, 2017.
21. Sampath KT, Grgurevic L, Vukicevic S: Bone Morphogenetic Protein-7 and Its Role in Acute Kidney Injury and Chronic Kidney Failure. In: *Bone Morphogenetic Proteins: System Biology Regulators* (Editors: Vukicevic S, Sampath KT), Springer International Publishing AG, 2017.
22. Grgurevic L, Dumic-Cule I, Vukicevic S: BMPs in Inflammation. In: *Bone Morphogenetic Proteins: System Biology Regulators* (Editors: Vukicevic S, Sampath KT), Springer International Publishing AG, 2017.
23. Mokos ZB, Jovic A, Grgurevic L, Dumic-Cule I, Kostovic K, Ceovic R, Marinovic B. Current Therapeutic Approach to Hypertrophic Scars. *Front Med (Lausanne)*, 20;4:83, 2017
24. Štoković N, Trkulja V, Čuković-Bagić I, Lauc T, Grgurević L.: Anatomical variations of the frontal sinus and its relationship with the orbital cavity. *Clinical Anatomy*, 31(4):576-582, 2018
25. Grgurevic L, Erjavec I, Grgurevic I, Dumic-Cule I, Brkljacic J, Verbanac D, Matijasic M, Paljetak HC, Novak R, Plecko M, Bubic-Spoljar J, Rogic D, Kufner V, Pauk M, Bordukalo-Niksic T, Vukicevic S: Systemic inhibition of BMP1-3 decreases progression of CCl4-induced liver fibrosis in rats. *Growth Factors*, 35(6):201-215, 2017
26. Vukicevic S, Kusic Z, Grgurevic L: Science communication to the public. *Croat Med J*. 30;59(2):43-45, 2018

27. Dumic-Cule I, Peric M, Kucko L, Grgurevic L, Pecina M, Vukicevic S.: Bone morphogenetic proteins in fracture repair. *Int Orthop*. 42(11):2619-2626, 2018
28. Grgurevic L, Pecin M, Erjavec I, Pauk M, Bordukalo-Niksic T, Kufner V, Lipar M, Capak H, Bubic Spoljar J, Maticic D, Oppermann H, Peric M, Sampath T. K, Vukicevic S: Recombinant Human Bone Morphogenetic Protein 6 delivered within Autologous Blood Coagulum Restores Critical Size Segmental Defects of Ulna in Rabbits. *JMBR*, 2018. In press
29. Suton P, Bolanca A, Grgurevic L, Erjavec I, Nikles I, Muller D, Manojlovic S, Vukicevic S, Petroveckii M, Dokuzovic S, Luksic I: Prognostic significance of bone morphogenetic protein 6 (BMP6) expression, clinical and pathological factors in clinically node-negative oral squamous cell carcinoma (OSCC). *J Craniomaxillofac Surg* 2018 [Epub ahead of print]
30. Pauk M, Bordukalo-Niksic T, Brkljacic J, Paralkar VM, Brault AL, Dumic-Cule I, Borovecki F, Grgurevic L, Vukicevic S: A novel role of bone morphogenetic protein 6 (BMP6) in glucose homeostasis. *Acta Diabetologica* 2018 In press

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

project leader:

- 2008. „Praćenje uspješnosti cijeljenja prijeloma pomoću novih serumskih markera“, sponzor Hrvatski institut za tehnologiju, voditelj projekta dr. sc. Lovorka Grgurević
- 2013. Adris donacije i projekt HEPATOPROTECT i OPREMANJE ZAVODA, voditelj prof.dr.sc. Lovorka Grgurević
- 2013. Projekt potpore sveučilišta REDUSCAR , voditelj prof.dr.sc. Lovorka Grgurević
- 2014. Projekt potpore sveučilišta „Sistemijski utjecaj koštanih morfogenetskih proteina 2 i 7 na koštani metabolizam“, voditelj prof.dr.sc. Lovorka Grgurević
- 2016. Uspostavni istraživački projekt Hrvatske zaklade za znanost „Novootkrivene cirkulirajuće izoforme BMP1 proteina kao biomarkeri i terapijski ciljevi za humane bolesti“
- 2017. Donacija Zaklade Adris, projekt „Novi markeri za otkrivanje i praćenje tumora dojke - BIOBREAST“

Associate project:

- 2002.-2006. „Mehanizam i učinkovitost koštanog morfogenetskog proteina 6 u liječenju osteoporoze“, sponzor Ministarstvo znanosti, obrazovanja i sporta, voditelj projekta prof. dr. Slobodan Vukičević
- 2004.-2007. „Osteoinduktivna molekula“, sponzor Hrvatski institut za tehnologiju, voditelj projekta prof. dr. Slobodan Vukičević
- 2007.-2012. Genomska i proteomska analiza biomarkera u krvi kod rijetkih koštanih bolesti (108-1080327-0343), sponzor Ministarstvo znanosti, obrazovanja i športa, voditelj projekta doc. dr. sc. Darko Antičević
- 2007.-2012. „Uloga TSH u modelu osteoporoze i u bolesnika sa smanjenom koštanom masom“, sponzor Ministarstvo znanosti, obrazovanja i sporta, voditelj projekta prof. dr. Slobodan Vukičević

- 2010.-2012. „Bone morphogenetic protein-1 isoforms in bone regeneration“ UKF projekt, voditelj projekta prof. dr. Slobodan Vukičević
- 2011.-2014. „Nova ciljana anabolička terapija za liječenje osteoporoze: BONE6-BIS“, sponzor Hrvatska zaklada za znanost, voditelj projekta prof. dr. Slobodan Vukičević
- 2012.- EU FP7 Project GlowBrain, voditelj prof.dr.sc. Srećko Gajović
- 2012.-2016. „OSTEOGROW“ - Novel Bone Morphogenetic Protein 6 Biocompatible Carrier Device for Bone Regeneration, FP7 HEALTH projekt, kordinator projekta prof. dr. Slobodan Vukičević, voditelj dva podprojekta (WP 2,3) za kliničko testiranje novog lijeka.
- 2012.-2013. “Novi intervencijski postupak uvođenjem tehnologije poboljšanja srčane funkcije nakon preboljenog infarkta miokarda”, BICRO PoC (Program provjere inovativnog koncepta), voditelj projekta prof. dr. Slobodan Vukičević
- 2017.-2022. „Reproduktivna i regenerativna medicina – istraživanja novih platformi i potencijala“, projekt Znanstvenog centra izvrsnosti za reproduktivnu i regenerativnu medicinu, voditelji: prof. dr. sc. Davor Ježek i prof. dr. sc. Slobodan Vukičević
- 2018.-2022. „OSTEOproSPINE - Novel Bone Regeneration Drug Osteogrow: Therapeutic Solution for Lumbar Back Pain“, HORIZON 2020, voditelj 1 podprojekta (WP5), koordinator projekta: prof. dr. sc. Slobodan Vukičević

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Project leader:

- 2008. „Praćenje uspješnosti cijeljenja prijeloma pomoću novih serumskih markera“, sponzor Hrvatski institut za tehnologiju, voditelj projekta dr. sc. Lovorka Grgurević
- 2013. Adris donacije i projekt HEPATOPROTECT i OPREMANJE ZAVODA, voditelj prof.dr.sc. Lovorka Grgurević
- 2013. Projekt potpore sveučilišta REDUSCAR , voditelj prof.dr.sc. Lovorka Grgurević
- 2014. Projekt potpore sveučilišta „Sistemijski utjecaj koštanih morfogenetskih proteina 2 i 7 na koštani metabolizam“, voditelj prof.dr.sc. Lovorka Grgurević
- 2016. Uspostavni istraživački projekt Hrvatske zaklade za znanost „Novootkrivene cirkulirajuće izoforme BMP1 proteina kao biomarkeri i terapijski ciljevi za humane bolesti“
- 2017. Donacija Zaklade Adris, projekt „Novi markeri za otkrivanje i praćenje tumora dojke - BIOBREAST“

Associate project:

- 2002.-2006. „Mehanizam i učinkovitost koštanog morfogenetskog proteina 6 u liječenju osteoporoze“, sponzor Ministarstvo znanosti, obrazovanja i sporta, voditelj projekta prof. dr. Slobodan Vukičević
- 2004.-2007. „Osteoinduktivna molekula“, sponzor Hrvatski institut za tehnologiju, voditelj projekta prof. dr. Slobodan Vukičević
- 2007.-2012. Genomska i proteomska analiza biomarkera u krvi kod rijetkih koštanih bolesti (108-1080327-0343), sponzor Ministarstvo znanosti, obrazovanja i športa, voditelj projekta doc. dr. sc. Darko Antičević

- 2007.-2012. „Uloga TSH u modelu osteoporoze i u bolesnika sa smanjenom koštanom masom“, sponzor Ministarstvo znanosti, obrazovanja i sporta, voditelj projekta prof. dr. Slobodan Vukičević
- 2010.-2012. „Bone morphogenetic protein-1 isoforms in bone regeneration“ UKF projekt, voditelj projekta prof. dr. Slobodan Vukičević
- 2011.-2014. „Nova ciljana anabolička terapija za liječenje osteoporoze: BONE6-BIS“, sponzor Hrvatska zaklada za znanost, voditelj projekta prof. dr. Slobodan Vukičević
- 2012.- EU FP7 Project GlowBrain, voditelj prof.dr.sc. Srećko Gajović
- 2012.-2016. „OSTEOGROW“ - Novel Bone Morphogenetic Protein 6 Biocompatible Carrier Device for Bone Regeneration, FP7 HEALTH projekt, kordinator projekta prof. dr. Slobodan Vukičević, voditelj dva podprojekta (WP 2,3) za kliničko testiranje novog lijeka.
- 2012.-2013. “Novi intervencijski postupak uvođenjem tehnologije poboljšanja srčane funkcije nakon preboljenog infarkta miokarda”, BICRO PoC (Program provjere inovativnog koncepta), voditelj projekta prof. dr. Slobodan Vukičević
- 2017.-2022. „Reproduktivna i regenerativna medicina – istraživanja novih platformi i potencijala“, projekt Znanstvenog centra izvrsnosti za reproduktivnu i regenerativnu medicinu, voditelji: prof. dr. sc. Davor Ježek i prof. dr. sc. Slobodan Vukičević
- 2018.-2022. „OSTEOproSPINE - Novel Bone Regeneration Drug Osteogrow: Therapeutic Solution for Lumbar Back Pain“, HORIZON 2020, voditelj 1 podprojekta (WP5), koordinator projekta: prof. dr. sc. Slobodan Vukičević

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

7

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: dr. sc. Darko Grošev

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Analiza medicinskih slika

BIOGRAPHY

1962: born in Skopje, Macedonia.

1981- graduated from High school for mathematics and informatics, Zagreb Croatia.

1989- obtained BSc degree in physics at Faculty of Natural sciences and mathematics, Zagreb, Croatia, in the field of theoretical particle physics

1989 - until present: Employed as a health physicist in Clinical Department of Nuclear Medicine and Radiation Protection, Clinical Hospital Center, Zagreb, Croatia.

1996- Completing the postgraduate study in Medical Physics at the Faculty of Natural sciences and mathematics, Zagreb, Croatia; obtained Master of Science degree with thesis „*Calculation of thyroid volume from ultrasonic cross sections*“.

2011- PhD degree in medical physics at the Faculty of Natural sciences and mathematics, Zagreb, Croatia; Thesis title: „*Determination of Thyroid Remnant Geometrical Parameters in the Dosimetry of Radioiodine Ablation*“

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1) Grošev D, Medvedec M, Lončarić S et al. Determination of small objects from pinhole scintigrams. *Nucl Med Comm*;19:679-688, 1998.
- 2) Grošev D, Lončarić S, Vandenberghe S et al. Triple-head gama camera PET: system overview and performance characteristic. *Nucl Med Comm*;23:809-814, 2002.
- 3) Huić D, Mutvar A, Radman I, Grošev D et al. The Value of F-18 FDG Triple-Head Coincidence PET in the Posttreatment Evaluation of Patients With Lymphoma. *Clinical Nuclear Medicine*. 31(5):275-278, 2006.
- 4) Grošev D, Lončarić S, Huić D et al. Geometric models in dosimetry of thyroid remnant mass. *Nuklearmedizin*; 47:120-126, 2008.
- 5) Eterović D, Antunović Ž, Marković V, Grošev D. Planning of ¹³¹I Therapy for Graves Disease Based on the Radiation Dose to Thyroid Follicular Cells. *J Nucl Med*;49:2026-2030, 2008.
- 6) Dobrenić M, Huić D, Žuvić M, Grošev D. et al. Usefulness of low iodine diet in managing patients with differentiated thyroid cancer - initial results. *Radiol Oncol*; 45(3):189-95, 2011.
- 7) Zimmerman BE, Grošev D, Buvat I et al., Multi-centre evaluation of accuracy and reproducibility of planar and SPECT image quantification: An IAEA phantom study. *Z Med Phys*. 2017 Jun;27(2):98-112.
- 8) Grošev D, Gregov M, Wolfl MR et al. Extension of the International Atomic Energy Agency phantom study in image quantification: results of multicentre evaluation in Croatia. *Nucl Med Commun*. 2018 Aug; 39(8):797-802



LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1) Zimmerman BE, Grošev D, Buvat I et al., Multi-centre evaluation of accuracy and reproducibility of planar and SPECT image quantification: An IAEA phantom study. *Z Med Phys.* 2017 Jun;27(2):98-112.
- 2) Grošev D, Gregov M, Wolfl MR et al. Extension of the International Atomic Energy Agency phantom study in image quantification: results of multicentre evaluation in Croatia. *Nucl Med Commun.* 2018 Aug; 39(8):797-802

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2009-2014- Research project with IAEA, Vienna: 'IAEA Coordinated Research Project (CRP)' *'Development of Quantitative Nuclear Medicine Imaging for Patient Specific Dosimetry'*

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2017.- Individual research project with IAEA, Vienna: *'Use of Quantitative Imaging for Activity Measurements in Radioiodine Ablation of Thyroid Remnants, as a part of the Coordinated Research Project: 'Dosimetry in Molecular Radiotherapy for Personalized Patient Treatments'.*

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Zorana Grubić, Prof

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Tissue Typing Center, Department of Clinical Transfusiology and Transplantation Biology, University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Immunological recognition

BIOGRAPHY

Zorana Grubić was born on 10 May 1963 in Split. In 1986 she graduated from the Department of Biology, Faculty of Science in Zagreb. In 1991 she earned her Master's Degree, and in 1997 her PhD from the same Faculty. Since 1987 she has been an employee of the Tissue Typing Department of the Department of Clinical Transfusiology and Transplantation Biology of the University Hospital Centre Zagreb. She was awarded the title of Research Associate in the area of Biomedicine and Health; field of clinical medical sciences, University of Zagreb, School of Medicine in 2005, and in 2017 the title of Scientific Advisor in the area of Biology, University of Zagreb, Faculty of Science.

In 2017, she was awarded the title of Full Professor in the area of Biomedicine and Health, field of fundamental medical sciences at the Postgraduate interdisciplinary university programme Molecular Biosciences at the University of Josip Juraj Strossmayer in Osijek.

The main area of her scientific work is the research of the main histocompatibility system (HLA) in humans, and its role in the transplantation of tissues and organs, HLA gene polymorphism and links between the HLA system and diseases. As the first author or a co-author, she has published 70 scientific papers indexed in CC journals and is the co-author of 5 university textbooks. She has actively participated at 80 scientific conferences (55 international and 25 national) and has given over 20 keynote speeches. Since 2003, she has participated in implementation of the undergraduate programme at the Department of Biology of the Faculty of Science in Zagreb as the coordinator of the elective course "Transplantation immunology". Since 2004 she has taught at the undergraduate programme of the Department of Biology at the University of Josip Juraj Strossmayer in Osijek as the coordinator of the elective subject "Immunocompetence and Transplantation". She has also taught at the postgraduate programme in Molecular biosciences at the University of Josip Juraj Strossmayer in Osijek as the coordinator of the elective subject "Immunogenetics of transplantation". She has introduced the subjects listed above into these programmes and has so far taught over 1000 norm hours. At the same time, she has been the mentor of 27 diploma papers, 3 master's thesis and 5 doctoral dissertations. She has actively participated in 13 scientific projects (5 international and 8 national). She acted as the project manager of one of the projects, a researcher on 9 projects, consultant on 2 projects, while she was a researcher and representative of the Republic of Croatia. She is the member of 9 international and national professional associations.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 29.11.17.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Grubić Z., Štingl K., Čečuk Jeličić E., Žunec R., Kaštelan A., Serventi Seiwert R., Bogdanić V., Labar B., Brkljačić Kerhin V. Repetitive DNA polymorphisms in following chimerism after allogeneic bone marrow transplantation. *Clinical Transplantation* 2005, 19, 586-590.

Grubić Z., Štingl K., Kerhin-Brkljačić V., Žunec R. The study on the extended haplotypes of rare HLA-B*2730 allele using microsatellite loci. *Tissue Antigens* 2008, 71(6), 514-519.34.

Grubić Z., Štingl K., Žunec R., Car H., Čečuk-Jeličić E., Brkljačić-Kerhin V. Linkage disequilibrium between human leucocyte antigen – B and closely linked microsatellites in the Croatian population. *Tissue Antigens* 2007, 69, 86-94.

Grubić Z., Žunec R., Peroš-Golubić T., Tekavec-Trkanjec J., Martinez N., Alilović M., Brkljačić-Kerhin V. HLA class I and class II frequencies in patients with sarcoidosis from Croatia: role of HLA-B8, -DRB1*0301, -DQB1*0201 haplotype in clinical variations of the disease. *Tissue Antigens* 2007, 70, 301-306.

Štingl K., Grubić Z., Car H., Žunec R., Brkljačić-Kerhin V. The relationship of polymorphisms located in the Tumor Necrosis Factor region and HLA loci among Croatians. *Am J Hum Biol* 2009, 220-223.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Grubic Z., Maskalan M., Stingl Jankovic K., Zvecic S., Dumic Kubat K., Krnic N., Zunec R., Ille J., Kusec V., Dumic M. Association of HLA alleles and haplotypes with CYP21A2 gene p. V282L mutation in the Croatian population. *HLA* 2016, 88(5), 239-244.

Burek Kamenaric M., Stingl Jankovic K., Grubic Z., Serventi Seiwert R., Maskalan M., Nemet D., Mikulic M., Zunec R. The impact of KIR2DS4 gene on clinical outcome after hematopoietic stem cell transplantation. *Hum Immunol.* 2017, 78(2), 95-102.

Grubic Z, Maskalan M., Radmanic L., Stingl Jankovic K., Burek Kamenaric M., Zunec R. The distribution of the DRB4*01:03:01:02N null allele in HLA-DRB1~DQB1 haplotypes in the Croatian population. *HLA* 2018, 91(1), 23-28.

Burek Kamenaric M., Maskalan M., Drabbels J., Golubic Cepulic B., Grubic Z. Identification of the novel HLA-B*18:37:02 allele in a Croatian individual. *HLA* 2018, 91(4), 299-300.

Grubic Z, Putarek NR, Maskalan M, Zunec R, Jankovic KS, Kamenaric MB, Knezevic-Cuca J, Uroic AS, Dumic M. Human Leukocyte Antigen class II polymorphisms among Croatian patients with type 1 diabetes and autoimmune polyglandular syndrome type 3 variant. *Gene* 2018, 674, 93-97.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Researcher on: “Definition of DRB haplotypes by simplified DRB-STR microsatellite typing”
(Project manager: Gabriela Doxiadis) 2006.-2008.

Researcher on: XVI International Histocompatibility Workshop
“Frequency of rare alleles” (Project manager:) Derek Middleton 2008.-2012.

Consultant on: „Uloga gena non-HLA u transplantaciji tkiva i organa“

Ministarstvo znanosti i tehnologije RH (šifra: 241-0000000-3573) (Project manager: Renata Žunec)
2008.-2014.

Project manager on: „Istraživanja mikrosatelita unutar regije glavnog sustava tkivne podudarnosti“
Ministarstvo znanosti i tehnologije RH (šifra: 241-0000000-3354)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Researcher and representative of RH on: “HLANET (COST projekt; šifra BM 0803)”
(Voditelj projekta: Alicia Sanchez-Mazas) 2009.-2015.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Full Prof. Dubravko Habek, MD, PhD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Croatian Catholic University Zagreb, Clinical Hospital "Sveti Duh" Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Fetal and Neonatal Neurophysiology, Fetal Behavior

BIOGRAPHY

Dubravko Habek (1965.), specialist of Obstetrics and Gynecology, superspecialist of Fetomaternal medicine, forensic expert in obstetrics and gynecology. Master Thesis from early fetal behaviour in early pregnancy, first PhD Thesis from fetal neurology / fetal hypoxia and second PhD Thesis from medicohistoriography. Head in University Department of Obstetrics and Gynecology Clinical Hospital Sveti Duh in Zagreb, Croatia. Former Director of University Hospital Osijek. Full Professor of Obstetrics and Gynecology in Croatian Catholic University Zagreb. Member of Austrian College of Pre und Perinatal Medicine. President of Surgeon Collegium of the Croatian Academy of Medical Sciences. Author of more than 500 original and professional articles, books, books chapters and conference reports. Research interest: perinatology, fetal neurology, operative obstetrics and gynecology, obstetrics emergencies, forensic obstetrics and gynecology, history of surgery, obstetrics and midwifery

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 14.11.2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Habek D, Salihagić A, Hodek B, Herman R, Matičević A, Čerkez Habek J, Jugović D. Fetal biophysical profile and cerebroumbilical ratio in assessment of perinatal outcome in growth restricted fetuses. *Fetal Diagn Ther* 2003; 18:12-16.

Habek D, Barbir A, Čerkez Habek J, Jančuljak D, Bobić-Vuković M. Success of Acupuncture and Acupressure of the Pc 6 Acupoint in the Treatment of Hyperemesis Gravidarum. *Forsch Komplementarmed Klass Naturheilkd* 2004;11:20-23.

Habek D, Jugović D, Hodek B, Herman R, Matičević A, Čerkez Habek J, Pišl Z, Salihagić A. Fetal biophysical profile and cerebro-umbilical ratio in assessment of brain damage in growth restricted fetuses. *Eur J Obstet Gynecol Reprod Biol* 2004;114:29-34.

Habek D, Kulaš T, Selthofer R, Rosso M, Popović Z, Petrović D, Ugljarević M. 3-D ultrasound detection of fetal grasping of the umbilical cord and fetal outcome. *Fetal Diagn Ther* 2006;21:332-333.

Habek D, Salihagić A, Jugović D, Herman R. Doppler cerebroumbilical ratio and fetal biophysical profile in assessment of peripartal cardiotocography in growth retarded fetuses. *Fetal Diagn Ther* 2007;22:452-456.

Habek D. Effects of smoking and fetal hypokinesia in early pregnancy. *Arch Med Res* 2007;38:864-867.

Habek D, Kovačević M. Adverse pregnancy outcomes and long-term morbidity after early fetal hypokinesia in maternal smoking pregnancies. *Arch Gynecol Obstet* 2011;3:491-496.

Habek D, Vuković Bobić M, Čerkez Habek J, Kulaš T. Fetal behaviour in smoking pregnancies in early pregnancies. *3LT ULTRASCHALL* 2006, 30. Dreiländertreffen, Graz 18-21. Oktober 2006. *Ultrasch Med* 2006;(S1) 27:25.

Salihagić A, Jugović D, Hodek B, Herman R, Habek D, Matičević A. Doppler Assesment of The Fetal Brain Response to Hypoxia. *Per Biol* 1998; 100: 175-182.

Habek D, Hodek B, Herman R, Matičević A, Salihagić A, Jugović D. Fetal biophysical profile in the assessment of fetal hypoxia-clinical value. *Per Biol* 2000; 102: 373-378.

Habek D, Čerkez Habek J, Jugović D, Salihagić A. Fetal metabolic-humoral response of hypoxia. *Per Biol* 2000; 102:379-383.

Habek D, Dujaković T, Habek JC, Jurković I. Twenty-three-year long-term health outcome after the war in Vukovar. *Acta Clin Croat* 2016;55(1):58-62.

Habek D, Hodek B, Herman R, Čerkez Habek J. Fetalna hipoksija – etiologija i patofiziologija hipoksičnih oštećenja. *Liječ Vjesn* 2000;122:82-89.

Habek D, Hodek B, Herman R, Matičević A, Čerkez Habek J, Jugović D, Salihagić A. Modified fetal biophysical profile in assessment of perinatal outcome. *Zentralbl Gynakol* 2001;123: 411-414.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Habek D, Dujaković T, Habek JC, Jurković I. Twenty-three-year long-term health outcome after the war in Vukovar. *Acta Clin Croat* 2016;55(1):58-62.

Rožman A, Habek D, Zaputović Brajnović S, Horvatić E, Jurković I. Sudden infant death syndrome and perinatal risk factors. *Cent Eur J Med* 2014;9(2):217-222.

Vuković Bobić M, Habek D, Čerkez Habek J. Perinatal epidemiological risk factors for preeclampsia. *Acta Clin Croat* 2015;54:9-13.

Tikvica Luetić A, Habek D, Stanojević M, Mirić Tesanić D, Padovan-Štern R. Prenatal Diagnosis of a Fetal Epidural Hematoma. *Z Geburtshilfe Neonatol* 2016;220(6):262-264.

Mirić Tešanić D, Tikvica Luetić A, Habek D, Stanojević M, Grujić Koračin J. Prenatal Diagnosis of Ambient Cistern Cyst. *Ultraschall Med* 2012;33(7):350-351.

Habek D, Dujaković T, Jurković I. Perinatal outcome during the war in Vukovar 1991. *Gynaecol Perinatol* 2016;25(2):59-62.

Habek D. Fetalno ponašanje i intrauterini life-style. Veleučilište u Bjelovaru, 2012.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Project of Croatian Ministry of Science, No 108193 “Fetal hypoxia and cerebrovascular reactivity”, 1997-2001; leader: prof. Aida Salihagić, MD, PhD.

Project of Croatian Ministry of Science, No 0127131: «Early and late consequences of intrauterine lifestyle», 2005-2009.

Project of Croatian Ministry of Science, „4D-ultrasound parameters of behaviour in normal and disturbed development of the fetus“, 2006; leader: prof. Asim Kurjak, MD, PhD

Group leader of the Project of Croatian Ministry of Science : „Short-term and long-term consequences of adverse perinatal events“, No 129-0000000-3376; 2009-2013.

Group leader of the scientific project of the Croatian Catholic University: „Influence of biometeorological and climatic events on health“, 2016.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Group leader of the Project of Croatian Ministry of Science : „Short-term and long-term consequences of adverse perinatal events“, No 129-0000000-3376; 2009-2013.



Group leader of the scientific project of the Croatian Catholic University: „Influence of biometeorological and climatic events on health“, 2016.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mario Habek, MD, Assistant Professor of Neurology

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb and University Hospital Center Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research Methods of Psychological

Functions and Behavior, Structure, methodology and functioning of scientific work 2

BIOGRAPHY

Mario Habek was born in Slavonski Brod in 1978. He graduated from School of Medicine, University of Zagreb in 2003, and in 2010 he received the PhD title at the same School. Since 2009 he has worked at the Department of Neurology, University Hospital Center Zagreb, as a consultant neurologist. He is Head of the Laboratory for Autonomic Nervous System Testing and the Head of the Referral Center for Autonomic Nervous System. Since 2004 he has worked at the School of Medicine, University of Zagreb, and from 2013 he is Assistant Professor at the Department of Neurology. He is a lecturer at the graduate and postgraduate study at the School of Medicine, University of Zagreb, and the lecturer at the professional postgraduate study Clinical Neurology. He is the Head of several scientific project, one funded by CSF, "Brainstem Evoked Potentials Score and Composite Autonomic Scoring Scale as Predictors of Disease Progression in Clinically Isolated Syndrome", and three projects funded by University of Zagreb, and he also participates in different scientific research projects, whose results are presented in numerous national and international scientific journals. He is a reviewer for internationally recognized journals. He is vice-president of the Croatian Federation for EEG and Clinical Neurophysiology of the Croatian Medical Association, member of the advisory board of the Croatian Neurological Society, member of the European Academy of Neurology, where he is member of the Scientific panel for Multiple Sclerosis, Autonomic Nervous System i Clinical Neurophysiology; member of the Management group of the Scientific panel for Autonomic Nervous System of the European Academy of Neurology and Co-Chair of the Scientific panel for Autonomic Nervous System of the European Academy of Neurology. His field of scientific interest are multiple sclerosis, autonomic nervous system and clinical neurophysiology.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2013, Assistant Professor at the Department of Neurology, School of Medicine, University of Zagreb

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Ruška B, Pavičić T, Pavlović I, Junaković A, Adamec I, Crnošija L, Krbot Skorić M, Habek M. Performance of the COMPASS-31 questionnaire with regard to autonomic nervous system testing results and medication use: a prospective study in a real-life setting. *Neurol Sci* 2018, doi: 10.1007/s10072-018-3542-8.
2. Krbot Skorić M, Crnošija L, Adamec I, Barun B, Gabelić T, Smoljo T, Stanić I, Pavičić T, Pavlović I, Drušević J, Pekmezović T, Habek M. Autonomic symptom burden is an independent contributor to multiple sclerosis related fatigue. *Clin Auton Res* 2018, doi: 10.1007/s10286-018-0563-6
3. Martinkova P, Freeman J, Drabinova A, Erosheva E, Cattaneo D, Jonsdottir J, Baert I, Smedal T, Romberg A, Feys P, Alves-Guerreiro J, Habek M, Henze T, Medina CS, Beiske A, Van Asch P, Bakalidou D, Salci Y, Dimitrova EN, Pavlikova M, Rasova K. Physiotherapeutic interventions in multiple sclerosis across Europe: Regions and other factors that matter. *Mult Scler Relat Disord* 2018;22:59-67

4. Drulovic J, Gavrilovic A, Crnosija L, Kistic-Tepavcevic D, Krbot Skoric M, Ivanovic J, Adamec I, Dujmovic I, Junakovic A, Maric G, Martinovic V, Pekmezovic T, Habek M. Validation and cross-cultural adaptation of the COMPASS-31 in Croatian and Serbian patients with multiple sclerosis. *Croat Med J* 2017;58(5):342-348.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Habek M, Mutak T, Nevajdić B, Pucić D, Crnošija L, Krbot Skorić M. Adrenergic hyperactivity: a missing link between multiple sclerosis and cardiovascular comorbidities? *Acta Neurol Belg* 2018, doi: 10.1007/s13760-018-1051-4.
2. Krbot Skorić M, Crnošija L, Adamec I, Barun B, Gabelić T, Smoljo T, Stanić I, Pavičić T, Pavlović I, Drulović J, Pekmezović T, Habek M. Autonomic symptom burden is an independent contributor to multiple sclerosis related fatigue. *Clin Auton Res* 2018, doi: 10.1007/s10286-018-0563-6.
3. Ruška B, Pavičić T, Pavlović I, Junaković A, Adamec I, Crnošija L, Krbot Skorić M, Habek M. Performance of the COMPASS-31 questionnaire with regard to autonomic nervous system testing results and medication use: a prospective study in a real-life setting. *Neurol Sci* 2018, doi: 10.1007/s10072-018-3542-8.
4. Blažeković A, Ozretić D, Habek M, Bilić E, Borovečki F. Neurosyphilis: The shape of a rising threat. *Int J Infect Dis* 2018 Nov;76:1-3.
5. Adamec I, Habek M. Superior oblique myokymia. *Pract Neurol* 2018;18:415-416.
6. Habek M, Pavičić T, Ruška B, Pavlović I, Gabelić T, Barun B, Adamec I, Crnošija L, Krbot Skorić M. Establishing the diagnosis of multiple sclerosis in Croatian patients with clinically isolated syndrome: 2010 versus 2017 McDonald criteria. *Mult Scler Relat Disord* 2018;25:99-103.
7. Adamec I, Pavlović I, Pavičić T, Ruška B, Habek M. Toxic liver injury after high-dose methylprednisolone in people with multiple sclerosis. *Mult Scler Relat Disord* 2018;25:43-45. Adamec I, Junakovic A, Krbot Skoric M, Habek M. Association of Autonomic Nervous System Abnormalities on Head-Up Tilt Table Test with Joint Hypermobility. *Eur Neurol* 2018;79(5-6):319-324.
8. Adamec I, Crnosija L, Junakovic A, Krbot Skoric M, Habek M. Progressive multiple sclerosis patients have a higher burden of autonomic dysfunction compared to relapsing remitting phenotype. *Clin Neurophysiol* 2018;129(8):1588-1594.
9. Baresic M, Reihl M, Habek M, Vukojevic N, Anic B. Improvement of neurological and ocular symptoms of Behcet's disease after the introduction of infliximab. *Rheumatol Int* 2018;38(7):1301-1306.
10. Benjak T, Stefancic V, Drausnik Z, Cerovecki I, Roginic D, Habek M, Mihel S, Stevanovic R. Prevalence of multiple sclerosis in Croatia: data from national and non-governmental organization registries. *Croat Med J* 2018;59(2):65-70.
11. Martinkova P, Freeman J, Drabinova A, Erosheva E, Cattaneo D, Jonsdottir J, Baert I, Smedal T, Romberg A, Feys P, Alves-Guerreiro J, Habek M, Henze T, Medina CS, Beiske A, Van Asch P, Bakalidou D, Salci Y, Dimitrova EN, Pavlikova M, Rasova K. Physiotherapeutic interventions in multiple sclerosis across Europe: Regions and other factors that matter. *Mult Scler Relat Disord* 2018;22:59-67.
12. Rolla S, De Mercanti SF, Bardina V, Horakova D, Habek M, Adamec I, Cocco E, Annovazzi P, Vladic A, Novelli F, Durelli L, Clerico M. Lack of CD4+ T cell percent decrease in alemtuzumab-treated multiple sclerosis patients with persistent relapses. *J Neuroimmunol* 2017;313:89-91.

13. Krbot Skoric M, Crnosija L, Gabelic T, Adamec I, Habek M. Relationship Between Sensory Dysfunction and Walking Speed in Patients With Clinically Isolated Syndrome. *J Clin Neurophysiol* 2018;35(1):65-70.
14. Drulovic J, Gavrilovic A, Crnosija L, Kistic-Tepavcevic D, Krbot Skoric M, Ivanovic J, Adamec I, Dujmovic I, Junakovic A, Maric G, Martinovic V, Pekmezovic T, Habek M. Validation and cross-cultural adaptation of the COMPASS-31 in Croatian and Serbian patients with multiple sclerosis. *Croat Med J* 2017;58(5):342-348.
15. Sega-Jazbec S, Barun B, Horvat Ledinek A, Fabekovac V, Krbot Skoric M, Habek M. Management of infusion related reactions associated with alemtuzumab in patients with multiple sclerosis. *Mult Scler Relat Disord* 2017;17:151-153.
16. Pavelic A, Krbot Skoric M, Crnosija L, Habek M. Postprandial hypotension in neurological disorders: systematic review and meta-analysis. *Clin Auton Res* 2017;27(4):263-271.
17. Pavlovic I, Ruska B, Pavicic T, Krbot Skoric M, Crnosija L, Adamec I, Habek M. Video head impulse test can detect brainstem dysfunction in multiple sclerosis. *Mult Scler Relat Disord* 2017;14:68-71.
18. Crnosija L, Krbot Skoric M, Lovric M, Junakovic A, Miletic V, Alfirc RS, Pavelic A, Adamec I, Habek M. Differences in neurohumoral and hemodynamic response to prolonged head-up tilt between patients with high and normal standing norepinephrine forms of postural orthostatic tachycardia syndrome. *Auton Neurosci* 2017;205:110-114.
19. Habek M, Krbot Skoric M, Crnosija L, Gabelic T, Barun B, Adamec I. Postural Orthostatic Tachycardia Predicts Early Conversion to Multiple Sclerosis after Clinically Isolated Syndrome. *Eur Neurol* 2017;77(5-6):253-257.
20. Skoric MK, Adamec I, Pavicic T, Pavlovic I, Ruska B, Crnosija L, Habek M. Vestibular evoked myogenic potentials and video head impulse test in patients with vertigo, dizziness and imbalance. *J Clin Neurosci* 2017;39:216-220.
21. Habek M, Adamec I, Barun B, Crnosija L, Gabelic T, Krbot Skoric M. Clinical Neurophysiology of Multiple Sclerosis. *Adv Exp Med Biol* 2017;958:129-139.
22. Crnosija L, Krbot Skoric M, Gabelic T, Adamec I, Habek M. Vestibular evoked myogenic potentials and MRI in early multiple sclerosis: Validation of the VEMP score. *J Neurol Sci* 2017;372:28-32.
23. Krbot Skoric M, Adamec I, Crnosija L, Gabelic T, Barun B, Zadro I, Butkovic Soldo S, Habek M. Tongue somatosensory evoked potentials reflect midbrain involvement in patients with clinically isolated syndrome. *Croat Med J* 2016;57:558-565.
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26. Adamec I, Lakos Jukic I, Habek M. Erythromelalgia as a manifestation of autonomic nervous system involvement in multiple sclerosis. *Mult Scler Relat Disord* 2016;8:1-3.

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28. Maslovara S, Butkovic-Soldo S, Drvis P, Roje-Bedekovic M, Trotic R, Branica S, Habek M, Cvjetko T, Vesligaj T, Adamec I, Gabelic T, Juric S, Vceva A, Vranjes Z, Saric I, Cejic O, Zivic T. [Croatian Guidelines for Diagnosis and Management of Benign Paroxysmal Positional Vertigo (Bppv)]. *Lijec Vjesn* 2015;137:335-42.
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33. Adamec I, Habek M. Crocodile tears syndrome. *Clin Auton Res* 2016;26:167.
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36. Crnosija L, Krbot Skoric M, Adamec I, Lovric M, Junakovic A, Mismas A, Miletic V, Sprljan Alfired R, Pavelic A, Habek M. Hemodynamic profile and heart rate variability in hyperadrenergic versus non-hyperadrenergic postural orthostatic tachycardia syndrome. *Clin Neurophysiol* 2016;127:1639-44.
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40. Adamec I, Krbot Skoric M, Gabelic T, Barun B, Ljevak J, Bujan Kovac A, Jurjevic I, Habek M. Intravenous dexamethasone in acute management of vestibular neuritis: a randomized, placebo-controlled, single-blind trial. *Eur J Emerg Med* 2016;23:363-9.
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51. Ljevak J, Poljakovic Z, Adamec I, Habek M. Glioblastoma multiforme presenting as Froin's syndrome: a new face of an old foe. *Acta Neurol Belg* 2014;114:319-20.
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66. Adamec I, Nankovic S, Zadro I, Hajnsek S, Habek M. Oxcarbazepine-induced jerky see-saw nystagmus. *Neurol Sci* 2013;34:1839-40.
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71. Adamec I, Ozretic D, Habek M. Autonomic dysfunction in multiple sclerosis presenting with postural orthostatic tachycardia. *Acta Neurol Belg* 2013;113:337-9.
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73. Habek M, Adamec I, Zarkovic K, Ozretic D, Brinar VV. Multiple brain cysts: an unusual form of radiologically isolated syndrome. *Can J Neurol Sci* 2012;39:689-90.
74. Milivojevic I, Bakran Z, Adamec I, Miletic Grskovic S, Habek M. Eyelid nystagmus and primary position upbeat nystagmus. *Neurol Sci* 2013;34:1463-4.
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76. Habek M, Barun B, Adamec I, Mitrovic Z, Ozretic D, Brinar VV. Early-onset ataxia with progressive external ophthalmoplegia associated with POLG mutation: autosomal recessive mitochondrial ataxic syndrome or SANDO? *Neurologist* 2012;18:287-9.
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80. Gabelic T, Radmilovic M, Posavec V, Skvorc A, Boskovic M, Adamec I, Milivojevic I, Barun B, Habek M. Differences in oligoclonal bands and visual evoked potentials in patients with radiologically and clinically isolated syndrome. *Acta Neurol Belg* 2013;113:13-7.
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LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Brainstem Evoked Potentials Score and Composite Autonomic Scoring Scale as a Predictors of Disease Progression in Clinically Isolated Syndrome (CSF)

Vestibular activation of the autonomic nervous system (University of Zagreb)

Autonomic dysfunction in different forms of multiple sclerosis (University of Zagreb)

The influence of the autonomic dysfunction on the comorbidities related to multiple sclerosis (University of Zagreb)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Brainstem Evoked Potentials Score and Composite Autonomic Scoring Scale as a Predictors of Disease Progression in Clinically Isolated Syndrome (CSF)

Vestibular activation of the autonomic nervous system (University of Zagreb)

Autonomic dysfunction in different forms of multiple sclerosis (University of Zagreb)

The influence of the autonomic dysfunction on the comorbidities related to multiple sclerosis (University of Zagreb)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

3

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Miro Hanževački, MD, PhD, Assistant Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Health Care Center Zagreb West, Medical University Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Telemedicine

BIOGRAPHY

Miro Hanževački is practicing physician, specialist in Family Practice / General Medicine also working as Director of Primary Health Care Center in Zagreb, Croatia.

Graduated in Zagreb University in 1994, completed post graduate study in pharmacology. During the period 1994. and 2005. worked in Pharmaceutical industry as Scientific Associate, .Marketing and Sales Manager and Business Unit Manager. Specialized in Family Practice in 2011. and defended the PhD Thesis in Geriatrics in 2012.

His area of interest is Pharmacology and Primary Care. He participated in publication of more than 10 scientific publications in the field of pharmacology and primary care.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2018

LIST OF PUBLISHED WORK, WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Sikirić P, Šeparović J, Buljat G, Anić T, Stancić-Rokotov D, Mikus D, Marović A, Prkacin I, Duplancić I, Zorićić I, Aralica G, Lovrić-Bencić M, Miše S, Hanževački M, Seiwerth S, Turković B, Grabarević B, Petek M, Rucman R: The antidepressant effect of an antiulcer pentadecapeptide BPC 157 in Porsolt's test and chronic unpredictable stress in rats. A comparison with antidepressants. *Journal of Physiology (Paris)* 2000; 94(2): 99-104.
2. Sikirić P, Jadrijević S, Seiwerth S, Sosa T, Desković S, Perović D, Aralica G, Grabarević Z, Ručman R, Petek M, Jagić V, Turković B, Žiger T, Rotkvić I, Miše S, Zorićić I, Sebecić B, Patrlj L, Kocman B, Sarlija M, Mikus D, Šeparović J, Hanževački M, Gjurasić M, Miklić P: Long-lasting cytoprotection after pentadecapeptide BPC157, ranitidine, sucralfate or cholestiramine application in reflux oesophagitis in rats. *Journal of Physiology (Paris)* 1999; 93:467-477.
3. Sikirić P, Šeparović J, Anić T, Buljat G, Mikus D, Seiwerth S, Grabarević Z, Stancić-Rokotov S, Pigac B, Hanževački M, Marović A, Rucman R, Petek M, Zorićić I, Aralica G, Prkacin I, Gjurasić M, Artuković B, Tisljar B, Bratulić M, Miše S, Rotkvić I: The effect of pentadecapeptide BPC 157, H-2-blockers omeprazole and sucralfate on new vessels and new granulation tissue formation. *Journal of Physiology (Paris)* 1999; 93(6):479-485.
4. Sikirić P, Seiwerth S, Grabarević Z, Ručman R, Petek M, Jagić V, Turković B, Rotkvić I, Miše S, Zorićić I, Konjevoda P, Perović D, Simicević V, Šeparović J, Hanževački M, Ljubanović D, Artuković B, Bratulić M, Tisljar M, Rekić B, Gjurasić M, Miklić P, Buljat G: Pentadecapeptide BPC157 positively affects both non-steroidal anti-inflammatory agent-induced gastrointestinal lesions and adjuvant arthritis in rats. *Journal of Physiology (Paris)* 1997; 91: 113-122.
5. Seiwerth S, Sikirić P, Grabarević Z, Zorićić I, Hanževački M, Ljubanović D, Corić V, Konjevoda P, Petek M, Rucman R, Turković B, Perović D, Mikus D, Jandrijević S, Medvidović M, Tadić T, Romac B, Kos J, Perić J, Kolega Z: BPC 157's effect on healing. *Journal of physiology-Paris* 1997;91(3-5):173-8.

6. Sikirić P, Seiwerth S, Grabarević Z, Ručman R, Petek M, Jagić V, Turković B, Rotkvić I, Miše S, Zoričić I, Konjevoda P, Perović D, Jurina L, Šeparović J, Hanževački M, Artuković B, Bratullić M, Tišljar M, Gjurašin M, Miklić P, Sančić-Rokotov D, Slobodnjak Z, Jelovac N, Marović A: The influence of a novel pentadecapeptide BPC 157 on N-G-nitro-L-arginine methylester and L-arginine effects on stomach mucosa integrity and blood pressure. *European Journal of Pharmacology* 1997; 332(1):23-33.
7. Anđelković M, Bjornsson E, DeBono V, Đikić N, Devue K, Ferlin D, Hanzevacki M, Jonsottir F, Shakarayan M, Walser S: The development and appraisal of a tool designed to find patients harmed by falsely labeled, falsified (counterfeit) medicines. *BMC Health Services Research* 2017;17:419-22

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Petrazzuoli F, Vikler S, Koskela T, Frese T, Buono N, Soler J, Ahrensberg J, Asenova R, Boreu Q, Peker G, Collins C, Hanževački M, Hoffman K, Kurpas D, LeReste J, Lichtwarck B, Petek D, Pinto D, Streit S, Tank E, Tatsioni A: Exploring dementia management attitudes in primary care: a key informant survey to primary care physicians in 25 European countries. *International Psychogeriatrics* 2017;29(9):1413-23.
2. Hanževački M, Jakovina T, Bajić Ž, Tomac A, Mercer S: Reliability and validity of the Croatian version of Consultation and Relational Empathy (CARE) Measure in primary care setting. *Croatian Medical Journal* 2015; 56(1):50-6.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

EUROSPIRE 3, EUROSPIRE 4

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

E-portfolio as a teaching tool

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1 in progress

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Marija Heffer, Prof. dr. sc.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Faculty of Medicine Osijek, Osijek

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: How to become a neuron?

BIOGRAPHY

Born: 1965, Osijek. Education: MD, 1989, Faculty of Medicine, University of Zagreb. Postgraduate and Doctorate study: Zagreb, Faculty of Natural Sciences and Mathematics, Ph.D. in 1996. Postdoctoral study: 1997-1998. John Hopkins Medical School, Baltimore (USA). From 1990 to 2011 he has been working at the Faculty of Medicine in Zagreb, and since 1999 he has been working at the Faculty of Medicine of the University of Josip Juraj Strossmayer in Osijek. She has passed through these institutions through the following positions: researcher trainee, assistant, senior assistant, docent and at the end of 11.07.2011. Marija Heffer is Full Professor of Biomedicine and Health Sciences, Scientific Field of Basic Medical Science and Scientific Neuroscience. Tenure position from: 30.05.2017. So far she has been the leader of 8 national projects and has participated in 4 national and 10 international projects. The area of scientific interest: the role of glycoconjugates in the development and aging of the brain, stress and stem cells. Mentor of: 11 doctoral thesis, one master's degree and 6 graduate theses. Author of: 40 CC and 14 SCI papers. In the period 2003 - 2019 she has held 85 lectures aimed in educating and popularizing science. So far she organized of 17 manifestations of the Brain Week, first at the Faculty of Medicine in Zagreb (2002) and then for the J. J. Strossmayer University (since 2003). Also, she had been running 5 projects of the DANA Foundation for the popularization of science. She participated in the organization of 4 TEDxOsijek events, and lectured at one. Cited 15019 times, h-index 17.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 30.05.2017., 117/373

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Vyas, A.A., Patel, H.V., Fromholt, S.E., Heffer-Lauc, M., Vyas, K.A., Dang, J., Schachner, M., and Schnaar, R.L. (2002) "Gangliosides are functional nerve cell ligands for myelin-associated glycoprotein (MAG), and inhibitor of nerve regeneration," *Proc. Natl. Acad. Sci. USA* 99, 8412-8417.

Sun J, Shaper NL, Itonori S, Heffer-Lauc M, Sheikh KA, Schnaar RL. (2004) Myelin-associated glycoprotein (Siglec-4) expression is progressively and selectively decreased in the brains of mice lacking complex gangliosides. *Glycobiology*. 14:851-7.

Heffer-Lauc M., Lauc G., Nimrichter L., Fromholt S.E., and Schnaar, R.L. (2005) Membrane redistribution of gangliosides and glycosylphosphatidylinositol-anchored proteins in brain tissue sections under conditions of lipid raft isolation. *BBA Mol. Cell. Biol. L.*, 1686(3):200-8.

Lauc G. and Heffer-Lauc M. (2006) Shedding and uptake of gangliosides and glycosylphosphatidylinositol-anchored proteins. *BBA Gen. Sub.*, 1760:584-602.

Schnaar, R.L., Fromholt, S.E., Gong, Y., Vyas, A.A., Laroy, W., Wayman, D.M., Heffer-Lauc, M., Ito, H., Hideharu, I., Kiso, M., Griffin, J.W., and Sheikh, K.A. (2002) "IgG-class mouse monoclonal antibodies to major brain gangliosides," *Anal. Biochem.* 302, 276-284.

Kwan KY, Lam MM, Johnson MB, Dube U, Shim S, Rašin MR, Sousa AM, Fertuzinhos S, Chen JG, Arellano JI, Chan DW, Pletikos M, Vasung L, Rowitch DH, Huang EJ, Schwartz ML, Willemssen R, Oostra BA, Rakic P,

Heffer M, Kostović I, Judaš M, Sestan N. Species-dependent posttranscriptional regulation of NOS1 by FMRP in the developing cerebral cortex. *Cell*, 2012 May 11;149(4):899-911.

Sturgill ER, Aoki K, Lopez PH, Colacurcio D, Vajn K, Lorenzini I, Majic S, Yang WH, Heffer M, Tiemeyer M, Marth JD, Schnaar RL. (2012) Biosynthesis of the major brain gangliosides GD1a and GT1b. *Glycobiology*, 2012 Oct;22(10):1289-301.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Škrlec I, Milic J, Heffer M, Peterlin B, Wagner J. Genetic variations in circadian rhythm genes and susceptibility for myocardial infarction. *Genet Mol Biol*. 2018 Apr./Jun;41(2):403-409. doi: 10.1590/1678-4685-GMB-2017-0147. Epub 2018 May 14.
2. Labak, Irena; Pavić, Valentina; Zjalić, Milorad; Blažetić, Senka; Merdić, Enrih; Heffer, Marija. PSA-NCAM expression in the teleost optic tectum is related to ecological niche and use of vision in finding food // *J Fish Biol*. 2017 Aug;91(2):473-489. doi: 10.1111/jfb.13352. Epub 2017 Jun 27.
3. Müller A, Wagner J, Hodžić A, Maver A, Škrlec I, Heffer M, Zibar L, Peterlin B. Genetic variation in leptin and leptin receptor genes is a risk factor for idiopathic recurrent spontaneous abortion. *Croat Med J*. 2016 Dec 31;57(6):566-571. DOI: 10.3325/cmj.2016.57.566
4. Ivić, Vedrana; Blažetić, Senka; Labak, Irena; Balog, Marta; Vondrak, Luka; Blažeković, Robert; Vari, Sandor G.; Heffer, Marija. Ovariectomy and chronic stress lead toward leptin resistance in the satiety centers and insulin resistance in the hippocampus of Sprague-dawley rats. // *Croatian Med J*. 57 (2016) , 2; 194-206 (članak, znanstveni).
5. Balog M, Miljanović M, Blažetić S, Labak I, Ivić V, Viljetić B, Borbely A, Papp Z, Blažeković R, Vari SG, Fagyas M, Heffer M. Sex -specific chronic stress response at the level of adrenal gland modified sexual hormone and leptin receptors. *Croatian Med J*. 56 (2015);104-113. . [IF(2015)=1.305] TC=0, Q2
6. Kalasz J, Pasztor T, Bodi B, Fagyas M, Toth A, Pal H. B, Vari G. S, Balog M, Blažetić S, Heffer M, Papp Z, Borbely A. Single acute stress-induced progesterone and ovariectomy alter cardiomyocyte contractile function in female rats. *Croatian Med J*. 55 (2014); 239-249. [IF(2015)=1.305] TC=1, Q2
7. Blažetić S, Labak I, Viljetić B, Balog M, Vari G.S, Krivošikova Z, Gajdoš M, Kramarova P, Kebis A, Vuković R, Puljak L, Has-Schon E, Heffer M. Effects of high fat diet, ovariectomy, and physical activity on leptin receptor expression in rat brain and whit fat tissue. *Croatian Med J*. 55 (2014); 228-238 . [IF(2015)=1.373] TC=1, Q2
8. Vuković R, Blažetić S, Oršolić I, Heffer M, Vari SG, Gajdoš M, Krivošiková Z, Kramárová P, Kebis A, Has-Schön E. Impact of ovariectomy, high fat diet, and lifestyle modifications on oxidative/antioxidative status in the rat liver. *Croat Med J*. 55(2014):218-27. [IF(2014)=1.305] TC=0, Q2
9. Balogh A, Németh M, Koloszar I, Markó L, Przybyl L, Jinno K, Szigeti C, Heffer M, Gebhardt M, Szeberényi J, Müller DN, Sétáló G Jr, Pap M. Overexpression of CREB protein protects from tunicamycin-induced apoptosis in various rat cell types. *Apoptosis*. 2014 Jul;19(7):1080-98. [IF(2014)=3.685] TC=0, Q2
10. Mlinac K, Fabris D, Vukelić Z, Rožman M, Heffer M, Bogner SK. Structural analysis of brain ganglioside acetylation patterns in mice with altered ganglioside biosynthesis. *Carbohydr Res*. 2013 Sep 27;382C:1-8. doi: 10.1016/j.carres.2013.09.007. [IF(2013)=1.966] TC=2, Q2/3
11. Vajn K, Viljetić B, Degmečić IV, Schnaar RL, Heffer M. Differential distribution of major brain gangliosides in the adult mouse central nervous system. *PLoS One*. 2013 Sep 30;8(9):e75720. doi: 10.1371/journal.pone.0075720. [IF(2014)=3.534] TC=4, Q1

12. Ferhatovic L, Banozic A, Kostic S, Kurir TT, Novak A, Vrdoljak L, Heffer M, Sapunar D, Puljak L. Expression of calcium/calmodulin-dependent protein kinase II and pain-related behavior in rat models of type 1 and type 2 diabetes. *Anesth Analg*. 2013 Mar;116(3):712-21. [IF(2013)=3.422] TC=14, Q1

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1998-2001: Project Manager "Glycoconjugates in the Human Brain" Ministry of Science and Technology of the Republic of Croatia

2002-2006: project leader "The role of gangliosidosis in maturation and plasticity of the brain" of the Ministry of Science, Education and Sports of the Republic of Croatia (0219021)

2007-2014: Project Manager "The role of lipid rafts and glycoconjugates in the development and regeneration of the nervous system", Ministry of Science, Education and Sports of Croatia (219-0061194-2157)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2015-2016: Project Manager "The potential of multiplying adult stem cells after chronic stress on the model of young and old rats", VIF2015-MEFOS-1.

2015-2016: Project Manager "Pregnancy Obesity as a Risk Factor for the Development of Metabolic Syndrome in Mother and Child", VIF2016-MEFOS-22.

2015-2019: project leader "Pathophysiological Consequences of Changes in Lipid Raft Composition", Croatian Science Foundation (IP-2014-09-2324) for 48 months (10/12/2017 - 09/12/2018).

2016-2020: Project Leader of Young Scientist Career Development Project, Croatia Foundation for Science.

2016-2016: Project Leader "Lipid micro-environment of leptin and insulin receptors in development and aging", projects for visiting professors at J. J. Strossmayer University, INGI-2016-35.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

11

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Associate professor Neven Henigsberg, M.D.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb, School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Mental health service management

BIOGRAPHY

EDUCATION

2009 Subspecialty in Biological Psychiatry

School of Medicine, University of Zagreb

2003 Master of economic sciences

School of Economy, University of Zagreb

2000 Doctor of medical sciences, field of psychiatry (thesis title: Seasonality of schizophrenic births and characteristics of developed schizophrenia features)

School of Medicine, University of Zagreb

1996 Specialist in psychiatry

School of Medicine, University of Zagreb, Vrapče University Hospital

1994 Master of medical sciences

School of Medicine, University of Zagreb

1993 – 1995 International postgraduate study „School of Business Management“

School of Economy, University of Zagreb

1989 – 1991 Postgraduate study „Health Information Systems“

School of Medicine, University of Zagreb

1987 Medical doctor

School of Medicine, University of Zagreb

CURRENT POSITION(S)

2017 - Full professor, Chair of Psychiatry and Psychological Medicine

Medical School, University of Zagreb

2013 – present Head of Department of Cognitive Neuroscience

Croatian Institute for Brain Research, Medical School, University of Zagreb

2012 – present Head of Department of Research, Head of Research Department in Psychiatry Vrapče University Hospital

2004 – present Head of Department for Neuropsychopharmacology and Pharmacology of Behaviour

Croatian Institute for Brain Research, Medical School, University of Zagreb

School of Public Health „Andrija Štampar“, Medical School, University of Zagreb

PREVIOUS POSITIONS

- 2011 – 2017 Associate professor of psychiatry, Chair of Psychiatry and Psychological Medicine
Medical School, University of Zagreb
- 2006 – 2011 Assistant professor of psychiatry, Chair of Psychiatry and Psychological Medicine
Medical School, University of Zagreb
- 2002 – 2006 Senior Assistant, Chair of Psychiatry and Psychological Medicine
Medical School, University of Zagreb
- 1997- 2002 Assistant, Chair of Psychiatry and Psychological Medicine
Medical School, University of Zagreb
- 1993 – 1996 Resident in psychiatry
University Hospital for Diabetes, Endocrinology and Metabolic Diseases „Vuk Vrhovec“, Medical School,
University of Zagreb
- 1989 – 1993 General practitioner, Primary Health Care Centre
- 1987 – 1989 Research Assistant, School of Public Health "Andrija Štampar", Medical School, University
of Zagreb

TEACHING ACTIVITIES

- 2017 - Full professor, Chair of Psychiatry and Psychological Medicine, Medical School, University of Zagreb
- 2011 – 2017 Associate professor of psychiatry, Chair of Psychiatry and Psychological Medicine
Medical School, University of Zagreb
- 2009 – 2018 Honorary Associate professor of psychiatry, Chair of Psychiatry and Psychological
Medicine, Medical School, University of Osijek
- 2006 – 2011 Assistant professor of psychiatry, Chair of Psychiatry and Psychological Medicine
Medical School, University of Zagreb
- 2003 - 2009 Honorary Assistant professor of psychiatry, Chair of Psychiatry and Psychological Medicine
Medical School, University of Osijek
- 2002 – 2006 Senior Assistant, Chair of Psychiatry and Psychological Medicine
Medical School, University of Zagreb
- 1997- 2002 Assistant, Chair of Psychiatry and Psychological Medicine
Medical School, University of Zagreb

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: January 17, 2017,
full professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Henigsberg N, Kalember P, Petrović ZK, Šečić A. Neuroimaging research in posttraumatic stress disorder - Focus on amygdala, hippocampus and prefrontal cortex. *Prog Neuropsychopharmacol Biol Psychiatry*. 2019 Mar 2;90:37-42.

Bin Wei Y, McCarthy M, Ren H, Carrillo-Roa T, Shekhtman T, DeModena A, Liu JJ, Leckband SG, Mors O, Rietschel M, Henigsberg N, Cattaneo A, Binder EB, Aitchison KJ, Kelsoe JR. A functional variant in the serotonin receptor 7 gene (HTR7), rs7905446, is associated with good response to SSRIs in bipolar and unipolar depression. *Mol Psychiatry*. 2019 Mar 15. doi: 10.1038/s41380-019-0397-1.

Henigsberg N, Kalember P, Petrović ZK, Šečić A. Neuroimaging research in posttraumatic stress disorder - Focus on amygdala, hippocampus and prefrontal cortex. *Prog Neuropsychopharmacol Biol Psychiatry*. 2019 Mar 2;90:37-42. doi: 10.1016/j.pnpbp.2018.11.003. Epub 2018 Nov 9. Review.

Henigsberg N, Savić A, Radoš M, Šarac H, Radoš M, Ozretić D, Bajš Janović M, Erdeljić Turk V, Šečić A, Kalember P, Hrabač P. Choline and N-acetyl aspartate levels in the dorsolateral prefrontal cortex at the beginning of the recovery phase as markers of increased risk for depressive episode recurrence under different duration of maintenance therapy and after it: a retrospective cohort study. *Croat Med J*. 2018 Oct 31;59(5):244-252.

Fabbri C, Tansey KE, Perlis RH, Hauser J, Henigsberg N, Maier W, Mors O, Placentino A, Rietschel M, Souery D, Breen G, Curtis C, Lee SH, Newhouse S, Patel H, O'Donovan M, Lewis G, Jenkins G, Weinshilboum RM, Farmer A, Aitchison KJ, Craig I, McGuffin P, Schruers K, Biernacka JM, Uher R, Lewis CM. Effect of cytochrome CYP2C19 metabolizing activity on antidepressant response and side effects: Meta-analysis of data from genome-wide association studies. *Eur Neuropsychopharmacol*. 2018 Aug;28(8):945-954. doi: 10.1016/j.euroneuro.2018.05.009. Epub 2018 Jun 28.

Ren H, Fabbri C, Uher R, Rietschel M, Mors O, Henigsberg N, Hauser J, Zobel A, Maier W, Dernovsek MZ, Souery D, Cattaneo A, Breen G, Craig IW, Farmer AE, McGuffin P, Lewis CM, Aitchison KJ. Genes associated with anhedonia: a new analysis in a large clinical trial (GENDEP). *Transl Psychiatry*. 2018 Aug 13;8(1):150. doi: 10.1038/s41398-018-0198-3.

Iniesta R, Hodgson K, Stahl D, Malki K, Maier W, Rietschel M, Mors O, Hauser J, Henigsberg N, Dernovsek MZ, Souery D, Dobson R, Aitchison KJ, Farmer A, McGuffin P, Lewis CM, Uher R. Antidepressant drug-specific prediction of depression treatment outcomes from genetic and clinical variables. *Sci Rep*. 2018 Apr 3;8(1):5530. doi: 10.1038/s41598-018-23584-z.

Henigsberg N, Šarac H, Radoš M, Radoš M, Ozretić D, Foro T, Erdeljić Turk V, Hrabač P, Bajš Janović M, Rak B, Kalember P. Lower Choline-Containing Metabolites/Creatine (Cr) Rise and Failure to Sustain NAA/Cr Levels in the Dorsolateral Prefrontal Cortex Are Associated with Depressive Episode Recurrence under Maintenance Therapy: A Proton Magnetic Resonance Spectroscopy Retrospective Cohort Study. *Front Psychiatry*. 2017 Dec 13;8:277. doi: 10.3389/fpsy.2017.00277. eCollection 2017.

Fabbri C, Tansey KE, Perlis RH, Hauser J, Henigsberg N, Maier W, Mors O, Placentino A, Rietschel M, Souery D, Breen G, Curtis C, Sang-Hyuk L, Newhouse S, Patel H, Guipponi M, Perroud N, Bondolfi G, O'Donovan M, Lewis G, Biernacka JM, Weinshilboum RM, Farmer A, Aitchison KJ, Craig I, McGuffin P, Uher R, Lewis CM. New insights into the pharmacogenomics of antidepressant response from the GENDEP and STAR*D studies: rare variant analysis and high-density imputation. *Pharmacogenomics J.* 2018 May 22;18(3):413-421. doi: 10.1038/tpj.2017.44. Epub 2017 Nov 21.

Sarac H, Ozretic D, Henigsberg N, Hrabac P, Bagaric I, Bagaric-Krakan L. Proton magnetic resonance spectroscopy in Huntington's disease accompanying neuroborreliosis. *Psychiatr Danub.* 2017 Jun;29(2):226-230.

Köhler-Forsberg O, Buttenschøn HN, Tansey KE, Maier W, Hauser J, Dernovsek MZ, Henigsberg N, Souery D, Farmer A, Rietschel M, McGuffin P, Aitchison KJ, Uher R, Mors O. Association between C-reactive protein (CRP) with depression symptom severity and specific depressive symptoms in major depression. *Brain Behav Immun.* 2017 May;62:344-350. doi: 10.1016/j.bbi.2017.02.020. Epub 2017 Mar 1.

García-González J, Tansey KE, Hauser J, Henigsberg N, Maier W, Mors O, Placentino A, Rietschel M, Souery D, Žagar T, Czerski PM, Jerman B, Buttenschøn HN, Schulze TG, Zobel A, Farmer A, Aitchison KJ, Craig I, McGuffin P, Guipponi M, Perroud N, Bondolfi G, Evans D, O'Donovan M, Peters TJ, Wendland JR, Lewis G, Kapur S, Perlis R, Arolt V, Domschke K; Major Depressive Disorder Working Group of the Psychiatric Genomic Consortium, Breen G, Curtis C, Sang-Hyuk L, Kan C, Newhouse S, Patel H, Baune BT, Uher R, Lewis CM, Fabbri C. Pharmacogenetics of antidepressant response: A polygenic approach. *Prog Neuropsychopharmacol Biol Psychiatry.* 2017 Apr 3;75:128-134. doi: 10.1016/j.pnpbp.2017.01.011. Epub 2017 Jan 31.

Iniesta R, Malki K, Maier W, Rietschel M, Mors O, Hauser J, Henigsberg N, Dernovsek MZ, Souery D, Stahl D, Dobson R, Aitchison KJ, Farmer A, Lewis CM, McGuffin P, Uher R. Combining clinical variables to optimize prediction of antidepressant treatment outcomes. *J Psychiatr Res.* 2016 Jul;78:94-102. doi: 10.1016/j.jpsychires.2016.03.016. Epub 2016 Apr 1.

Hodgson K, Tansey KE, Powell TR, Coppola G, Uher R, Zvezdana Dernovšek M, Mors O, Hauser J, Souery D, Maier W, Henigsberg N, Rietschel M, Placentino A, Aitchison KJ, Craig IW, Farmer AE, Breen G, McGuffin P, Dobson R. Transcriptomics and the mechanisms of antidepressant efficacy. *Eur Neuropsychopharmacol.* 2016 Jan;26(1):105-112. doi: 10.1016/j.euroneuro.2015.10.009. Epub 2015 Nov 12.

Markeljevic J, Sarac H, Bozina N, Henigsberg N, Simic M, Cicin Sain L. Serotonin transporter gene polymorphisms: Relation with platelet serotonin level in patients with primary Sjogren's syndrome. *J Neuroimmunol.* 2015 May 15;282:104-9. doi: 10.1016/j.jneuroim.2015.04.002. Epub 2015 Apr 2.

Hodgson K, Tansey KE, Uher R, Dernovšek MZ, Mors O, Hauser J, Souery D, Maier W, Henigsberg N, Rietschel M, Placentino A, Craig IW, Aitchison KJ, Farmer AE, Dobson RJ, McGuffin P. Exploring the role of drug-metabolising enzymes in antidepressant side effects. *Psychopharmacology (Berl)*. 2015 Jul;232(14):2609-17. doi: 10.1007/s00213-015-3898-x. Epub 2015 Mar 12.

Ferentinos P, Koukounari A, Power R, Rivera M, Uher R, Craddock N, Owen MJ, Korszun A, Jones L, Jones I, Gill M, Rice JP, Ising M, Maier W, Mors O, Rietschel M, Preisig M, Binder EB, Aitchison KJ, Mendlewicz J, Souery D, Hauser J, Henigsberg N, Breen G, Craig IW, Farmer AE, Müller-Myhsok B, McGuffin P, Lewis CM. Familiarity and SNP heritability of age at onset and episodicity in major depressive disorder. *Psychol Med*. 2015 Jul;45(10):2215-25. doi: 10.1017/S0033291715000215. Epub 2015 Feb 20.

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Markeljjevic J, Sarac H, Bozina N, Henigsberg N, Simic M, Cicin Sain L. Serotonin transporter gene polymorphisms: Relation with platelet serotonin level in patients with primary Sjogren's syndrome. *J Neuroimmunol*. 2015 May 15;282:104-9. doi: 10.1016/j.jneuroim.2015.04.002. Epub 2015 Apr 2.

Hodgson K, Tansey KE, Uher R, Dernovšek MZ, Mors O, Hauser J, Souery D, Maier W, Henigsberg N, Rietschel M, Placentino A, Craig IW, Aitchison KJ, Farmer AE, Dobson RJ, McGuffin P. Exploring the role of drug-metabolising enzymes in antidepressant side effects. *Psychopharmacology (Berl)*. 2015 Jul;232(14):2609-17. doi: 10.1007/s00213-015-3898-x. Epub 2015 Mar 12.

Ferentinos P, Koukounari A, Power R, Rivera M, Uher R, Craddock N, Owen MJ, Korszun A, Jones L, Jones I, Gill M, Rice JP, Ising M, Maier W, Mors O, Rietschel M, Preisig M, Binder EB, Aitchison KJ, Mendlewicz J, Souery D, Hauser J, Henigsberg N, Breen G, Craig IW, Farmer AE, Müller-Myhsok B, McGuffin P, Lewis CM. Familiality and SNP heritability of age at onset and episodicity in major depressive disorder. *Psychol Med*. 2015 Jul;45(10):2215-25. doi: 10.1017/S0033291715000215. Epub 2015 Feb 20.

Mullins N, Hodgson K, Tansey KE, Perroud N, Maier W, Mors O, Rietschel M, Hauser J, Henigsberg N, Souery D, Aitchison K, Farmer A, McGuffin P, Breen G, Uher R, Lewis CM. Investigation of blood mRNA biomarkers for suicidality in an independent sample. *Transl Psychiatry*. 2014 Oct 28;4:e474. doi: 10.1038/tp.2014.112.

Bajs Janović M, Kalember P, Janović S, Hrabač P, Folnegović Grošić P, Grošić V, Radoš M, Henigsberg N. No change in N-acetyl aspartate in first episode of moderate depression after antidepressant treatment: (1)H magnetic spectroscopy study of left amygdala and left dorsolateral prefrontal cortex. *Neuropsychiatr Dis Treat*. 2014 Sep 17;10:1753-62. doi: 10.2147/NDT.S64702. eCollection 2014.

Lončar M, Plašč ID, Bunjevac T, Hrabač P, Jakšić N, Kozina S, Henigsberg N, Sagud M, Marčinko D. Predicting symptom clusters of posttraumatic stress disorder (PTSD) in Croatian war veterans: the role of socio-demographics, war experiences and subjective quality of life. *Psychiatr Danub*. 2014 Sep;26(3):231-8.

Grošić V, Folnegović Grošić P, Kalember P, Bajs Janović M, Radoš M, Mihanović M, Henigsberg N. The effect of atypical antipsychotics on brain N-acetylaspartate levels in antipsychotic-naïve first-episode patients with schizophrenia: a preliminary study. *Neuropsychiatr Dis Treat*. 2014 Jul 7;10:1243-53. doi: 10.2147/NDT.S61415. eCollection 2014.

Uher R, Tansey KE, Dew T, Maier W, Mors O, Hauser J, Dernovsek MZ, Henigsberg N, Souery D, Farmer A, McGuffin P. An inflammatory biomarker as a differential predictor of outcome of depression treatment

with escitalopram and nortriptyline. *Am J Psychiatry*. 2014 Dec 1;171(12):1278-86. doi: 10.1176/appi.ajp.2014.14010094. Epub 2014 Oct 31.

Tansey KE, Rucker JJ, Kavanagh DH, Guipponi M, Perroud N, Bondolfi G, Domenici E, Evans DM, Hauser J, Henigsberg N, Jerman B, Maier W, Mors O, O'Donovan M, Peters TJ, Placentino A, Rietschel M, Souery D, Aitchison KJ, Craig I, Farmer A, Wendland JR, Malafosse A, Lewis G, Kapur S, McGuffin P, Uher R. Copy number variants and therapeutic response to antidepressant medication in major depressive disorder. *Pharmacogenomics J*. 2014 Aug;14(4):395-9. doi: 10.1038/tpj.2013.51. Epub 2014 Jan 21.

Hodgson K, Uher R, Crawford AA, Lewis G, O'Donovan MC, Keers R, Dernovsek MZ, Mors O, Hauser J, Souery D, Maier W, Henigsberg N, Rietschel M, Placentino A, Aitchison K, Farmer A, Davis O, McGuffin P. Genetic predictors of antidepressant side effects: a grouped candidate gene approach in the Genome-Based Therapeutic Drugs for Depression (GENDEP) study. *J Psychopharmacol*. 2014 Feb;28(2):142-50. doi: 10.1177/0269881113517957. Epub 2014 Jan 10.

Hodgson K, Tansey K, Dernovsek MZ, Hauser J, Henigsberg N, Maier W, Mors O, Placentino A, Rietschel M, Souery D, Smith R, Craig IW, Farmer AE, Aitchison KJ, Belsey S, Davis OS, Uher R, McGuffin P. Genetic differences in cytochrome P450 enzymes and antidepressant treatment response. *J Psychopharmacol*. 2014 Feb;28(2):133-41. doi: 10.1177/0269881113512041. Epub 2013 Nov 20. Erratum in: *J Psychopharmacol*. 2015 Apr;29(4):456. Belsey, Sarah [corrected to Belsey, Sarah].

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018 – Project leader, „Spacijalni korelati 1H-MRS s povratom depresije i konverzijom u bipolarni poremećaj“, University of Zagreb

2015 – 2018 Project leader, „Multimodal approach to treatment and long-term assessment of depressive disorder by means of magnetic resonance“, Croatian Science Foundation

2017 – 2018 Project leader, „Spacijalni korelati 1-H MRS terapijskog odgovora u praćenju povrata depresije“, University of Zagreb

2016 – 2017 Project leader, „Spacijalni korelati 1-H MRS terapijskog odgovora u praćenju povrata depresije“, University of Zagreb

2015 – 2016 Project leader, „Spacijalni korelat 1-H MRS s terapijskim odgovorom u liječenju depresivnog poremećaja, University of Zagreb

2014 – 2015 Project leader, „Longitudinalno praćenje 1H-MRS promjena kao prediktora terapijskog odgovora, relapsa i povrata depresije“, University of Zagreb

2007 – 2010 Researcher, „Neuroimaging, neurogenomics and pharmacogenomics of the frontal lobe connectivity: normal development and abnormalities in developmental cognitive disorders“, project within UKF programme, in cooperation with School of Medicine, Yale i McGill University

2006 – 2014 Project Leader, „1H-MRS promjene u predviđanju terapijskog odgovora, relapsa i povrata“, Croatian Ministry of Science

- 2005 –2009 Member of Steering Committee; “Electronic Neuronal Oscillations and Cognition (ENOC)”;
COST project B27
- 2004 – 2008 Contractor (principal investigator in Croatia), «Genomic based therapies for depression (GENDEP)», European Commission funded scientific project in 6th Framework Program (coordinator: London Institute of Psychiatry, King’s College, London)
- 2002 - 2006 Project Leader, “Predictive role of genetic loading on therapeutic outcome in treatment of psychoses”, Croatian Ministry of Science
- 2002 - 2005 Researcher, “Efficacy of health care system in war time period”, Croatian Ministry of Science
- 2002 - 2006 Researcher, “Are functional psychoses a nosologic entity?”, Croatian Ministry of Science
- 1996 - 2000 Researcher, “Effects of privatisation to Croatian health care system”, Croatian Ministry of Science
- 1996 – 2002 Researcher, “Functional psychoses as nosologic entity”, Croatian Ministry of Science
- 1996 – 2000 Researcher, “Analysis of the Croatian health care system during the war”, Croatian Ministry of Science
- 1996 - 1999 Researcher, «Development of antemortal database for identification of war victims», Smithsonian Institution and Medical School, University of Zagreb; scientific project approved by US-Croatian Joint Board

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 2018 – Project leader, “1H-MRS spatial correlates of recurrence of depression and conversion to bipolar disorder”, University of Zagreb
- 2015 – 2018 Project leader, „Multimodal approach to treatment and long-term assessment of depressive disorder by means of magnetic resonance”, Croatian Science Foundation
- 2017 – 2018 Project leader, „1H-MRS spatial correlates of recurrence of depression“, University of Zagreb
- 2016 – 2017 Project leader, „1H-MRS spatial correlates of recurrence of depression“, University of Zagreb
- 2015 – 2016 Project leader, „1H-MRS spatial correlates of recurrence of depression“, University of Zagreb
- 2014 – 2015 Project leader, „Longitudinal 1H-MRS changes in prediction of therapeutic response, relapse and recurrence of depression“, University of Zagreb

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

6

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mislav Herman, MD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb, Department of Gynaecology and Obstetrics

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Diabetes and pregnancy

BIOGRAPHY

Born on March 21st, 1977, Zagreb, Croatia

Education:

2017-present - subspecialist in maternal-fetal medicine at the Clinical Hospital Center Zagreb, Department of Obstetrics and Gynecology

2015-2017 - fellowship in maternal-fetal medicine at the Clinical Hospital Center Zagreb, Department of Obstetrics and Gynecology

2008-present - OBGY specialist

2004-2008 - residency in obstetrics and gynecology at the Clinical Hospital Center Zagreb, Department of Obstetrics and Gynecology

2004-present - Postgraduate doctoral study "Biomedicine and Health" at the University of Zagreb

1995-2001 - Medical School, University of Zagreb

1991-1995 - High school - XVI. Gymnasium, Zagreb

1983-1991 - Elementary school "Ivan Goran Kovacic", Zagreb

Work experience:

2017-present - Member of the City Assembly of the City of Zagreb

2016.- present - Chief Medical Officer (CMO) of the Republic of Croatia

2008-present- specialist in University Hospital Centre Zagreb, Department of Gynaecology and Obstetrics

2004-2008 - OBGY resident at University Hospital Centre Zagreb, Department of Gynaecology and Obstetrics

2001-2002 - medical internship at the Clinical Hospital Center "Sisters of Mercy"

In the academic year 1996-1997 and 1997-1998 demonstrator in the Department of Anatomy "Drago Perovic" 'School of Medicine, University of Zagreb

An Associate of the Department of Obstetrics and Gynecology, School of Medicine, University of Zagreb

2005-2012 - Lecturer in the School of Nursing in Mlinarska street in Zagreb

Lecturer on "Course for pregnant women" in the organization of the Department of Obstetrics and Gynecology of the Clinical Hospital Center Zagreb

Doctor of Croatian waterpolo team

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Horvaticek M, Djelmis J, Ivanisevic M, Oreskovic S, Herman M. Effect of eicosapentaenoic acid and docosahexaenoic acid supplementation on C-peptide preservation in pregnant women with type-1 diabetes: randomized placebo controlled clinical trial. *Eur J Clin Nutr.* 2017 Aug;71(8):968-972.
- Đelmiš J, Ivanišević M, Juras J, Herman, M. Dijagnoza hiperglikemije u trudnoći. *Gynaecol Perinatol.* 2010; 19(2); 86-9.
- Djelmiš J, Ivanišević M, Starčević V, Franičević D, Bljajić D, Herman M. Ishod trudnoće u trudnica s dijabetičnom nefropatijom. Treći hrvatski dijabetološki kongres: Knjiga sažetaka / Čikeš, Nada (ur.). Zagreb : Liječnički vijesnik, 2005; 127(suppl 1):37.
- Ivanišević M, Herman M, Đelmiš J. The influence of obesity on pregnancy outcome. XXXII. Alpe Adria meeting of perinatal medicine, Book of abstracts. Meir, Yoram (ur.). Bassano del Grappa, 2010; 14.
- Herman M. Ishod trudnoće u žena s prekomjernom težinom i gestacijskim dijabetesom. *Gynaecol.Perinatol* 2011;20(Suppl.1):S32-36.
- Starčević V., Đelmiš J., Herman M., Blajić J., Juras J. Novi kriteriji za određivanje gestacijskog dijabetesa. *Gynaecol.Perinatol* 2011;20(Suppl.1):S47-50.
- Juras J., Ivanišević M., Herman M., Horvatiček M., Anzulović D., 2011. The impact of prepregnancy BMI weight gain during pregnancy on pregnancy outcome among women with GDM. XXXIII Alpe Adria Meeting of Perinatal Medicine (XXXIII Alpe Adria Perinatal Congress), 30th September-01st October 2011, Zagreb Croatia
- Herman M., Ivanišević M., Juras J., Horvatiček M., Blajić J., 2011. Pregnancy outcome in patients with optimally treated gestational diabetes mellitus. XXXIII Alpe Adria Meeting of Perinatal Medicine (XXXIII Alpe Adria Perinatal Congress), 30th September-01st October 2011, Zagreb Croatia
- Herman M., Ivanišević M., Đelmiš J., Blajić J., Starčević V., Sokol V. Ishod trudnoća kod trudnica s gestacijskim dijabetesom liječenih u referentnom centru za dijabetes u trudnoći između 2000. i 2010.godine. XXVI Perinatalni dani „Ante Dražančić“ i XX Savjetovanje o perinatalnom mortalitetu Republike Hrvatske 23.-25.11. 2012. Zagreb, Hotel Aristos,; Slobodno priopćenje. *Gynaecol.Perinatol* 2012;21(Suppl.1):S91-126.
- Sokol V., Ivanišević I., Đelmiš J., Herman M. Utjecaj tjelesne težine i gestacijskog dijabetesa na perinatalni ishod. XXVI Perinatalni dani „Ante Dražančić“ i XX Savjetovanje o perinatalnom mortalitetu Republike Hrvatske 23.-25.11. 2012. Zagreb, Hotel Aristos,; Slobodno priopćenje. *Gynaecol.Perinatol* 2012;21(Suppl.1):S91-126.
- Herman M, Đelmiš J, Ivanišević M, Blajić J, Starčević V, Sokol V. Pregnancy outcome of mothers with diabetic nephropathy. XXXV. Alpe Adria Meeting of Perinatal Medicine (XXVII. Alpe Adria Perinatal Congress), September 20–21, 2013, Bled Slovenia
- Herman M. Gestational Diabetes in Women with PCOS. XXXVI. Alpe Adria Meeting of Perinatal Medicine (XXVIII. Alpe Adria Perinatal Congress), September 26–27, 2014, Klagenfurt, Austria.
- Herman M, Pavić M, Juras J, Berberović E. Sindrom policističnih jajnika i gestacijski dijabetes. 3. hrvatski kongres o reprodukcijom zdravlju, kontracepciji i IVF-u. 15-17. svibnja 2014., Šibenik, Solaris.
- Herman M, Djelmis J, Ivanisevic M, Blajic J, Starcevic V. Pregnancy outcome of mothers with diabetic nephropathy-poster presentation. XXIV European Congress Perinatal Medicine, Florence, June 4th - 7th, 2014.

- Herman M, Djelmis J, Berberovic E, Horvaticek M, Ivanisevic M. Fatty acid profile in maternal and fetal blood of pregnant women with type 1 diabetes mellitus. DIP 2017 - The 9th International DIP Symposium on Diabetes, Hypertension, Metabolic Syndrome, and Pregnancy, March 8-12, 2017, Palau de Congressos de Catalunya, Barcelona, Spain.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Baldani DP, Skrgatic L, Kasum M, Zlopasa G, Kralik Oguic S, Herman M. Altered leptin, adiponectin, resistin and ghrelin secretion may represent an intrinsic polycystic ovary syndrome abnormality. *Gynecol Endocrinol*. 2019 Jan 9:1-5. doi:10.1080/09513590.2018.1534096. [Epub ahead of print].

- Kastelan S, Anic Jurica S, Oreskovic S, Zupić T, Herman M, Gverovic Antunica A, Markovic I, Bakija I. A Survey of Current Prophylactic Treatment for Ophthalmia Neonatorum in Croatia and a Review of International Preventive Practices. *Med Sci Monit*. 2018 Nov 10;24:8042-8047. doi: 10.12659/MSM.910705.
- Horvaticek M, Djelmis J, Ivanisevic M, Oreskovic S, Herman M. Effect of eicosapentaenoic acid and docosahexaenoic acid supplementation on C-peptide preservation in pregnant women with type-1 diabetes: randomized placebo controlled clinical trial. *Eur J Clin Nutr*. 2017 Aug;71(8):968-972.
- Sokol V, Ivanišević M, Herman M, Đelmiš J. The role of low molecular weight heparin in women with hereditary thrombophilia for good perinatal outcome. *Acta Clin Croat*. 2016 Jun;55(2):309-15.
- Herman M. Gestational Diabetes in Women with PCOS. XXXVI. Alpe Adria Meeting of Perinatal Medicine (XXVIII. Alpe Adria Perinatal Congress), September 26–27, 2014, Klagenfurt, Austria.
- Herman M, Pavić M, Juras J, Berberović E. Sindrom policističnih jajnika i gestacijski dijabetes. 3. hrvatski kongres o reproduktivskom zdravlju, kontracepciji i IVF-u. 15-17. svibnja 2014., Šibenik, Solaris.
- Herman M, Djelmis J, Ivanisevic M, Blajic J, Starcevic V. Pregnancy outcome of mothers with diabetic nephropathy-poster presentation. XXIV European Congress Perinatal Medicine, Florence, June 4th - 7th, 2014.
- Herman M, Djelmis J, Berberovic E, Horvaticek M, Ivanisevic M. Fatty acid profile in maternal and fetal blood of pregnant women with type 1 diabetes mellitus. DIP 2017 - The 9th International DIP Symposium on Diabetes, Hypertension, Metabolic Syndrome, and Pregnancy, March 8-12, 2017, Palau de Congressos de Catalunya, Barcelona, Spain.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018-2022 Scientific project of Croatian Science Foundation "Prevention of hypoglycemia in pregnant women with type I diabetes"

2018. „Prevention of hypoglycemia in pregnant women and puerpera with type 1 diabetes", Support for scientific research (University of Zagreb) , PI prof. Marina Ivanišević, PhD

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2018-2022 Scientific project of Croatian Science Foundation "Prevention of hypoglycemia in pregnant women with type I diabetes"

2018. „Prevention of hypoglycemia in pregnant women and puerpera with type 1 diabetes", Support for scientific research (University of Zagreb) , PI prof. Marina Ivanišević, PhD

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Iva Hojsak, Md, PhD, senior research associate

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Children's Hospital Zagreb, University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical nutrition

BIOGRAPHY

Iva Hojsak, MD, PhD is pediatric gastroenterologist and head of the Referral Center for Pediatric Gastroenterology and Nutrition, Children's Hospital Zagreb, Croatia and deputy director of Children's Hospital Zagreb. She graduated on Medical School of Zagreb, where she also received her PhD degree. She has published more than 120 scientific and clinical papers (100 published in CC cited journals) and has been a coworker in more than 15 international and Croatian scientific projects.

She was a head of Scientific Committee of the Children's Hospital Zagreb (2104-2018), ESPGHAN Council Member as Education Secretary (2017-2019), secretary of the ESPGHAN Committee on Nutrition (2012-2018), associate editor of Journal of Pediatric Gastroenterology and Nutrition (since 2014) and board member of ESPGHAN Young Investigators Forum (since 2016).

Her main clinical/research interests include probiotics, intestinal failure and parenteral nutrition and inflammatory bowel disease.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 18/07/2018, postdoctorate, University of Zagreb Medical School

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Mihatsch WA, Braegger C, Bronsky J, Cai W, Campoy C, Carnielli V, Darmaun D, Desci T, Domellof M, Embleton N, Fewtrell M, Mis NF, Franz A, Goulet O, Hartman C, Susan H, Hojsak I, Iacobelli S, Jochum F, Joosten K, Kolacek S, Koletzko B, Ksiazek J, Lapillonne A, Lohner S, Mesotten D, Mihalyi K, Mimouni F, Molgaard C, Moltu SJ, Nomayo A, Picaud JC, Prell C, Puntis J, Riskin A, de Pipaon MS, Senterre T, Shamir R, Simchowicz V, Sztanyi P, Tabbers MM, van den Akker CHB, van Goudoever JB, van Kempen A, Verbruggen S, Wu J, Yan W. ESPGHAN/ESPEN/ESPR/CSPEN guidelines on pediatric parenteral nutrition. Clin Nutr 2018;37(6 Pt B):2303-2305.
2. Jadresin O, Sila S, Trivic I, Misak Z, Hojsak I, Kolacek S. Lack of Benefit of Lactobacillus reuteri DSM 17938 as an Addition to the Treatment of Functional Constipation. J Pediatr Gastroenterol Nutr 2018;67(6):763-766.
3. Hojsak I, Fabiano V, Pop TL, Goulet O, Zuccotti GV, Cokugras FC, Pettoello-Mantovani M, Kolacek S. More research is needed on the use of probiotics for critically ill patients. Acta Paediatr 2019;108(1):181.
4. Puntis J, Hojsak I, Ksiazek J, et al. ESPGHAN/ESPEN/ESPR/CSPEN guidelines on pediatric parenteral nutrition: Organisational aspects. Clin Nutr 2018;37(6 Pt B):2392-2400.
5. Kolacek S, Puntis JWL, Hojsak I, et al. ESPGHAN/ESPEN/ESPR/CSPEN guidelines on pediatric parenteral nutrition: Venous access. Clin Nutr 2018;37(6 Pt B):2379-2391.
6. Hojsak I, Lacaille F, Gupte GL, Koglmeier J. Central Line in Long-term Parenteral Nutrition in Children: A European Survey. J Pediatr Gastroenterol Nutr 2018;67(3):409-413.

7. Laursen RP, Hojsak I. Probiotics for respiratory tract infections in children attending day care centers-a systematic review. *Eur J Pediatr* 2018;
8. Miele E, Shamir R, Aloï M, Assa A, Braegger C, Bronsky J, de Ridder L, Escher JC, Hojsak I, Kolacek S, Koletzko S, Levine A, Lionetti P, Martinelli M, Ruemmele F, Russell RK, Boneh RS, van Limbergen J, Veereman G, Staiano A. Nutrition in Pediatric Inflammatory Bowel Disease: A Position Paper on Behalf of the Porto Inflammatory Bowel Disease Group of the European Society of Pediatric Gastroenterology, Hepatology and Nutrition. *J Pediatr Gastroenterol Nutr* 2018;66(4):687-708.
9. Laursen RP, Larnkjaer A, Ritz C, Hojsak I, Michaelsen K, Molgaard C. Risks for upper respiratory infections in infants during their first months in day care included environmental and child-related factors. *Acta Paediatr* 2018;
10. Fidler Mis N, Braegger C, Bronsky J, Campoy C, Domellof M, Embleton ND, Hojsak I, Hulst J, Indrio F, Lapillonne A, Mihatsch W, Molgaard C, Vora R, Fewtrell M, Nutrition ECo. Response to Letter: How Much Free Sugars Intake Should Be Recommended for Children Younger Than 2 Years Old? *J Pediatr Gastroenterol Nutr* 2018;66(3):e87-e88.
11. Hojsak I, Fabiano V, Pop TL, Goulet O, Zuccotti GV, Cokugras FC, Pettoello-Mantovani M, Kolacek S. Guidance on the use of probiotics in clinical practice in children with selected clinical conditions and in specific vulnerable groups. *Acta Paediatr* 2018;107(6):927-937.
12. van den Akker CHP, van Goudoever JB, Szajewska H, Embleton ND, Hojsak I, Reid D, Shamir R, Espghan Working Group for Probiotics P, Committee on N. Probiotics for Preterm Infants: A Strain-Specific Systematic Review and Network Meta-analysis. *J Pediatr Gastroenterol Nutr* 2018;67(1):103-122.
13. Mis NF, Braegger C, Bronsky J, Campoy C, Domellof M, Embleton ND, Hojsak I, Hulst J, Indrio F, Lapillonne A, Mihatsch W, Molgaard C, Vora R, Fewtrell M, Nutrition ECo. Response to Letter: How Much Free Sugars Intake Should Be Recommended for Children Younger Than Two Years Old? *J Pediatr Gastroenterol Nutr* 2017;
14. Hojsak I, Bronsky J, Campoy C, Domellof M, Embleton N, Fidler Mis N, Hulst J, Indrio F, Lapillonne A, Molgaard C, Vora R, Fewtrell M, Nutrition ECo. Young Child Formula: A Position Paper by the ESPGHAN Committee on Nutrition. *J Pediatr Gastroenterol Nutr* 2018;66(1):177-185.
15. Hojsak I. Probiotics in Children: What Is the Evidence? *Pediatr Gastroenterol Hepatol Nutr* 2017;20(3):139-146.
16. Fidler Mis N, Braegger C, Bronsky J, Campoy C, Domellof M, Embleton ND, Hojsak I, Hulst J, Indrio F, Lapillonne A, Mihatsch W, Molgaard C, Vora R, Fewtrell M, Nutrition ECo. Sugar in Infants, Children and Adolescents: A Position Paper of the European Society for Paediatric Gastroenterology, Hepatology and Nutrition Committee on Nutrition. *J Pediatr Gastroenterol Nutr* 2017;65(6):681-696.
17. Romano C, van Wynckel M, Hulst J, Broekaert I, Bronsky J, Dall'Oglio L, Mis NF, Hojsak I, Orel R, Papadopoulou A, Schaeppi M, Thapar N, Wilschanski M, Sullivan P, Gottrand F. European Society for Paediatric Gastroenterology, Hepatology and Nutrition Guidelines for the Evaluation and Treatment of Gastrointestinal and Nutritional Complications in Children With Neurological Impairment. *J Pediatr Gastroenterol Nutr* 2017;65(2):242-264.
18. Kolacek S, Hojsak I, Berni Canani R, Guarino A, Indrio F, Orel R, Pot B, Shamir R, Szajewska H, Vandenplas Y, van Goudoever J, Weizman Z, Probiotics EWGf, Prebiotics. Commercial Probiotic Products: A Call for Improved Quality Control. A Position Paper by the ESPGHAN Working Group for Probiotics and Prebiotics. *J Pediatr Gastroenterol Nutr* 2017;65(1):117-124.

19. Hojsak I, Szajewska H, Canani RB, Guarino A, Indrio F, Kolacek S, Orel R, Shamir R, Vandenplas Y, van Goudoever JB, Weizman Z, Probiotics/Prebiotics EWGf. Probiotics for the Prevention of Nosocomial Diarrhea in Children. *J Pediatr Gastroenterol Nutr* 2018;66(1):3-9.
20. Fewtrell M, Bronsky J, Campoy C, Domellof M, Embleton N, Fidler Mis N, Hojsak I, Hulst JM, Indrio F, Lapillonne A, Molgaard C. Complementary Feeding: A Position Paper by the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) Committee on Nutrition. *J Pediatr Gastroenterol Nutr* 2017;64(1):119-132.
21. Jadresin O, Hojsak I, Misak Z, Kekez AJ, Trbojevic T, Ivkovic L, Kolacek S. *Lactobacillus reuteri* DSM 17938 in the Treatment of Functional Abdominal Pain in Children: RCT Study. *J Pediatr Gastroenterol Nutr* 2017;64(6):925-929.
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27. Hojsak I, Mocic Pavic A, Kos T, Dumancic J, Kolacek S. *Bifidobacterium animalis* subsp. *lactis* in prevention of common infections in healthy children attending day care centers - Randomized, double blind, placebo-controlled study. *Clin Nutr* 2016;35(3):587-91.
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LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

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14. Savic Mlakar A, Hojsak I, Bendelja K. Combining Histologic and Molecular Techniques to Distinguish Inflamed From Uninflamed Tissue. *Gastroenterology* 2018;155(1):229-230.
15. Trivic I, Hojsak I. Use of Probiotics in the Prevention of Nosocomial Infections. *J Clin Gastroenterol* 2018;52 Suppl 1, Proceedings from the 9th Probiotics, Prebiotics and New Foods, Nutraceuticals and Botanicals for Nutrition & Human and Microbiota Health Meeting, held in Rome, Italy from September 10 to 12, 2017:S62-S65.
16. Laursen RP, Hojsak I. Probiotics for respiratory tract infections in children attending day care centers-a systematic review. *Eur J Pediatr* 2018;
17. Pavic I, Babic I, Matijasic N, Hojsak I. Combined multichannel intraluminal impedance-pH monitoring should be used to diagnose reflux-related otitis media with effusion in children. *Acta Paediatr* 2018;

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22. Hojsak I, Fabiano V, Pop TL, Goulet O, Zuccotti GV, Cokugras FC, Pettoello-Mantovani M, Kolacek S. Guidance on the use of probiotics in clinical practice in children with selected clinical conditions and in specific vulnerable groups. *Acta Paediatr* 2018;107(6):927-937.
23. Savic Mlakar A, Hojsak I, Jergovic M, Cimic S, Bendelja K. Pediatric Crohn disease is characterized by Th1 in the terminal ileum and Th1/Th17 immune response in the colon. *Eur J Pediatr* 2018;177(4):611-616.
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27. Kifer T, Misak Z, Jadresin O, Hojsak I. Anterior Cutaneous Nerve Entrapment Syndrome in Children: A Prospective Observational Study. *Clin J Pain* 2018;34(7):670-673.
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29. Hojsak I. Probiotics in Children: What Is the Evidence? *Pediatr Gastroenterol Hepatol Nutr* 2017;20(3):139-146.
30. Fidler Mis N, Braegger C, Bronsky J, Campoy C, Domellof M, Embleton ND, Hojsak I, Hulst J, Indrio F, Lapillonne A, Mihatsch W, Molgaard C, Vora R, Fewtrell M, Nutrition ECo. Sugar in Infants, Children and Adolescents: A Position Paper of the European Society for Paediatric Gastroenterology, Hepatology and Nutrition Committee on Nutrition. *J Pediatr Gastroenterol Nutr* 2017;65(6):681-696.

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33. Hojsak I, Szajewska H, Canani RB, Guarino A, Indrio F, Kolacek S, Orel R, Shamir R, Vandenplas Y, van Goudoever JB, Weizman Z, Probiotics/Prebiotics EWGf. Probiotics for the Prevention of Nosocomial Diarrhea in Children. *J Pediatr Gastroenterol Nutr* 2018;66(1):3-9.
34. Amil-Dias J, Kolacek S, Turner D, Paerregaard A, Rintala R, Afzal NA, Karolewska-Bochenek K, Bronsky J, Chong S, Fell J, Hojsak I, Hugot JP, Koletzko S, Kumar D, Lazowska-Przeorek I, Lillehei C, Lionetti P, Martin-de-Carpi J, Pakarinen M, Ruemmele FM, Shaoul R, Spray C, Staiano A, Sugarman I, Wilson DC, Winter H, Kolho KL, ESPGHAN IBDWGo. Surgical Management of Crohn Disease in Children: Guidelines From the Paediatric IBD Porto Group of ESPGHAN. *J Pediatr Gastroenterol Nutr* 2017;64(5):818-835.
35. Fewtrell M, Bronsky J, Campoy C, Domellof M, Embleton N, Fidler Mis N, Hojsak I, Hulst JM, Indrio F, Lapillonne A, Molgaard C. Complementary Feeding: A Position Paper by the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) Committee on Nutrition. *J Pediatr Gastroenterol Nutr* 2017;64(1):119-132.
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37. Pavic I, Babic I, Cepin Bogovic J, Hojsak I. The importance of combined 24-hour multichannel intraluminal impedance-pH monitoring in the evaluation of children with suspected laryngopharyngeal reflux. *Clin Otolaryngol* 2017;42(3):544-549.
38. Savic Mlakar A, Hojsak I, Jergovic M, Vojvoda Parcina V, Babic Z, Troskot B, Mihaljevic Z, Bendelja K. Comparison of Cytokine and Efflux Transporter Expression in Pediatric Versus Adult-onset Ulcerative Colitis. *J Pediatr Gastroenterol Nutr* 2017;64(6):943-948.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

OD 2016 HRZZ project PedIBD - Pediatric inflammatory bowel disease: incidence and natural history, and the role of diet and gut flora in etiopathogenesis

2013 - 2016 Pediatric Inflammatory Bowel Disease; cancer and mortality (PIBD C&M), nacionalni koordinator

2013 Utjecaj probiotika *Bifidobacterium lactis* BB12 na prevenciju gastrointestinalnih i crijevnih infekcija u djece, suvoditelj

2012 Rezistencija na lijekove u upalnim bolestima crijeva - Pgp i MRP1 ekspresija u crijevnoj sluznici, suradnik

2012 2012 – danas – Utjecaj samoiniciranih dijeta na nutritivni status i tijek bolesti u djece s upalnim bolestima crijeva, mentor doktorata



2008-2009 Utjecaj probiotika u prevenciji gastrointestinalnih i respiratornih infekcija u djece, doktorand

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

OD 2016 HRZZ project PedIBD - Pediatric inflammatory bowel disease: incidence and natural history, and the role of diet and gut flora in etiopathogenesis

2013 - 2016 Pediatric Inflammatory Bowel Disease; cancer and mortality (PIBD C&M), nacionalni koordinator

2013 Utjecaj probiotika Bifidobacterium lactis BB12 na prevenciju gastrointestinalnih i crijevnih infekcija u djece, suvoditelj

2012 Rezistencija na lijekove u upalnim bolestima crijeva - Pgp i MRP1 ekspresija u crijevnoj sluznici, suradnik

2012 2012 – danas – Utjecaj samoiniciranih dijeta na nutritivni status i tijek bolesti u djece s upalnim bolestima crijeva, mentor doktorata

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

Defended theme of PhD thesis: 2; co-mentor of defended theme of PhD thesis: 1; PhD thesis applied: 1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Marina Horvatiček, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute, Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: "Diabetes and Pregnancy",
"Physiology and biochemistry of uterus in pregnancy and labour"

BIOGRAPHY

Born 1982. in Zagreb. Graduated in 2007 at Biology department, Faculty of science, University of Zagreb. 2012-2017. PhD degree: University Postgraduate Interdisciplinary doctoral study Molecular Biosciences. 2009-2016. Junior researcher/Scientific fellow at project "Diabetes and metabolic syndrome after previous gestation diabetes", PI prof. dr. sc. Marina Ivanišević, School of Medicine Zagreb.

From 2015. Teaching assistant at Postgraduate Study in Biomedicine and Health Sciences University of Zagreb School of Medicine (Diabetes and pregnancy; Nutritional and respiratory function of the placenta, fetal growth and fetal endocrinology; Physiology and biochemistry of the uterus during pregnancy and delivery)

2016. - 2018. Teaching assistant at Medical chemistry and biochemistry (Graduate medical studies, University of Zagreb School of Medicine)

From 2018. postdoc at Ruđer Bošković Institute.

Attendant at summer school "Mass Spectrometry in Biotechnology and Medicine" 2013. g. and workshop "How to build biobank - learning by doing" 2015. g.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 22.09.2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Horvatiček, Marina; Đelmiš, Josip; Ivanišević, Marina; Orešković, Slavko; Herman, Mislav. Effect of eicosapentaenoic acid and docosahexaenoic acid supplementation on C-peptide preservation in pregnant women with type-1 diabetes: randomized placebo controlled clinical trial. European journal of clinical nutrition. 71 (2017), 8; 968-972.

Ivanišević, Marina; Horvatiček, Marina; Đelmiš, Josip; Herman, Mislav; Starčević, Vito. State referral centre for diabetes in pregnancy biobank. 9th International DIP Symposium on Diabetes, Hypertension, Metabolic Syndrome & Pregnancy. Barcelona, Španjolska, 2017.

Berberović, Edina; Ivanišević, Marina; Juras, Josip; Horvatiček, Marina; Delaš, Ivančica; Đelmiš, Josip. Arachidonic and docosahexaenoic acid in the blood of a mother and umbilical vein in diabetic pregnant women. Journal of maternal-fetal & neonatal medicine. 26 (2013), 13; 1287-1291.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Horvatiček, Marina; Đelmiš, Josip; Ivanišević, Marina; Orešković, Slavko; Herman, Mislav. Effect of eicosapentaenoic acid and docosahexaenoic acid supplementation on C-peptide preservation in pregnant women with type-1 diabetes: randomized placebo controlled clinical trial. European journal of clinical nutrition. 71 (2017), 8; 968-972.

2. Blažević, Sofia;* Horvatiček, Marina;* Kesić, Maja*; Zill, Peter; Hranilović, Dubravka; Ivanišević, Marina; Desoye, Gernot; Štefulj, Jasminka. Epigenetic adaptation of the placental serotonin transporter gene (SLC6A4) to gestational diabetes mellitus. PLoS One, 12(2017/06/26),6; e0179934 (*jednak doprinos).

3. Horvatiček, Marina; Đelmiš, Josip; Ivanišević, Marina; Tuškan, Ksenija. C-peptide in type 1 diabetic pregnant patients. 9th International DIP Symposium on Diabetes, Hypertension, Metabolic Syndrome & Pregnancy. Barcelona, Španjolska, 2017.
4. Ivanišević, Marina; Horvatiček, Marina; Đelmiš, Josip; Herman, Mislav; Starčević, Vito. State referral centre for diabetes in pregnancy biobank. 9th International DIP Symposium on Diabetes, Hypertension, Metabolic Syndrome & Pregnancy. Barcelona, Španjolska, 2017.
5. Herman, Mislav; Đelmiš, Josip; Berberović, Edina; Horvatiček, Marina; Ivanišević, Marina. Fatty acid profile in maternal and fetal blood of pregnant women with type 1 diabetes mellitus. 9th International DIP Symposium on Diabetes, Hypertension, Metabolic Syndrome & Pregnancy. Barcelona, Španjolska, 2017.
6. Đelmiš, Josip; Radončić, Erden; Horvatiček, Marina; Ivanišević, Marina. Dietary effect on c-peptide preservation in type 1 diabetic pregnant women. *Gynaecologia et perinatologia*. 24 (2015), 1; 31-36.
7. Berberović, Edina; Ivanišević, Marina; Juras, Josip; Horvatiček, Marina; Delaš, Ivančica; Đelmiš, Josip. Arachidonic and docosahexaenoic acid in the blood of a mother and umbilical vein in diabetic pregnant women. *Journal of maternal-fetal & neonatal medicine*. 26 (2013), 13; 1287-1291.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 2018-2022. "Influence of maternal metabolic state on placental and neonatal serotonin system: from DNA methylation to protein function ", Croatian Science Foundation , PI Jasminka Štefulj, PhD
- 2017-2018. „Association of maternal emotional state in pregnancy and placental DNA methylation of serotonin-related genes “, Catholic University of Croatia; PI J. Štefulj, PhD
2018. „Prevention of hypoglycemia in pregnant women and puerpera with type 1 diabetes", Support for scientific research (University of Zagreb) , PI prof. Marina Ivanišević, PhD
2017. „Prevention of hypoglycemia in pregnant women and puerpera with type 1 diabetes", Support for scientific research (University of Zagreb) , PI prof. Marina Ivanišević, PhD
2016. „Effect of diet on lipid content and concentration of adipochin in placental tissue“, Support for scientific research (University of Zagreb) , PI prof. Marina Ivanišević, PhD
2016. „Serotonin transporter gene regulation in human placenta and establishment of a biobank for further research “, Catholic University of Croatia; PI J. Štefulj, PhD
2015. „Effect of diet on lipid content in placental tissue“, Support for scientific research (University of Zagreb) , PI prof. Marina Ivanišević, PhD
- 2009-2016. Junior researcher/Scientific fellow at project “Diabetes and metabolic syndrome after previous gestation diabetes”, PI prof. dr. sc. Marina Ivanišević, School of Medicine Zagreb.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 2018-2022. "Influence of maternal metabolic state on placental and neonatal serotonin system: from DNA methylation to protein function ", Croatian Science Foundation , PI Jasminka Štefulj, PhD
- 2017-2018. „Association of maternal emotional state in pregnancy and placental DNA methylation of serotonin-related genes “, Catholic University of Croatia; PI J. Štefulj, PhD
2018. „Prevention of hypoglycemia in pregnant women and puerpera with type 1 diabetes", Support for scientific research (University of Zagreb) , PI prof. Marina Ivanišević, PhD



2017. „Prevention of hypoglycemia in pregnant women and puerpera with type 1 diabetes“, Support for scientific research (University of Zagreb) , PI prof. Marina Ivanišević, PhD

2016. „Effect of diet on lipid content and concentration of adipochin in placental tissue“, Support for scientific research (University of Zagreb) , PI prof. Marina Ivanišević, PhD

2016. „Serotonin transporter gene regulation in human placenta and establishment of a biobank for further research “, Catholic University of Croatia; PI J. Štefulj, PhD

2015. „Effect of diet on lipid content in placental tissue“, Support for scientific research (University of Zagreb) , PI prof. Marina Ivanišević, PhD

2009-2016. Junior researcher/Scientific fellow at project “Diabetes and metabolic syndrome after previous gestation diabetes”, PI prof. dr. sc. Marina Ivanišević, School of Medicine Zagreb

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist. Prof. Maja Hrabak Paar

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Medical Image Analysis

BIOGRAPHY

Education

- 2018 European diploma in cardiovascular radiology
- 2009 PhD degree in medical sciences at the University of Zagreb School of Medicine, Croatia; dissertation title: Abdominal fat measurement in patients with morphological changes of the aorta on MSCT angiography
- 2004-2008 radiology residency at the University Hospital Center Zagreb, Croatia
- 2003-2006 postgraduate programme “Biomedicine and Health Sciences” at the University of Zagreb School of Medicine, Croatia
- 1996-2002 undergraduate education at the University of Zagreb School of Medicine, Croatia

Work Experience

- 2018 – head of Division for urogenital radiology, Department of diagnostic and interventional radiology, University Hospital Center Zagreb
- 2017 – member of the Education & EBCR Committee of the European Society of Cardiovascular radiology (ESCR)
- 2016 – president of the Section for cardiac radiology, Croatian Society of Radiology
- 2016 – assistant professor at the Department of Radiology, University of Zagreb School of Medicine
- 10/2014 - 09/2015 Marie-Curie fellow at the University Hospital Basel, Switzerland
- 2009-2016 postdoctoral researcher/senior assistant at the University of Zagreb School of Medicine, Department of Radiology
- 2008 – board certified radiologist at the University Hospital Center Zagreb
- 2003-2009 research fellow/teaching assistant at the University of Zagreb School of Medicine, Department of Radiology
- 2002-2003 intern (Croatian Institute of Public Health, University Hospital Center Zagreb)
- 1999-2001 demonstrator at the Department of pathophysiology, School of Medicine
- 1997-1999 demonstrator at the Department of pathophysiology, School of Medicine

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: Nov 7, 2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Schmieder RE, Wagner F, Mayr M, Delles C, Ott C, Keicher C, Hrabak-Paar M, Heye T, Aichner S, Khder Y, Yates D, Albrecht D, Langenickel T, Freyhardt P, Janka R, Bremerich J. The effect of sacubitril/valsartan compared to olmesartan on cardiovascular remodelling in subjects with essential hypertension: the results of a randomized, double-blind, active-controlled study. Eur Heart J 2017;38:3308-17.
2. Hrabak-Paar M, Kralik M. Case 244: Systemic amyloidosis – A complication of Waldenström macroglobulinemia. Radiology 2017;284:597-602.
3. Hrabak-Paar M, Kralik M. Diagnosis Please: Case 244. Radiology 2017;283:300-2.
4. Hrabak-Paar M. Intense adrenal enhancement: A CT feature of cardiogenic shock. Cardiovasc Intervent Radiol 2016;39:296-8.

5. Hrabak-Paar M, Đido V, Štern-Padovan R. Should we use CT or MRI for detection and characterization of benign adrenal lesions? *Ann Endocrinol (Paris)* 2015;76:272-80.
6. Hrabak-Paar M, Hübner M, Štern-Padovan R, Lušić M. Hemangioma of the interatrial septum: CT and MRI features. *Cardiovasc Intervent Radiol* 2011;34:S90-3.
7. Hrabak-Paar M, Štern-Padovan R. Evaluation of carcinoid heart disease using delayed enhancement imaging. *Ir J Med Sci* 2011;180:619.
8. Hrabak M, Stern Padovan R, Kralik M, Ozretic D, Potocki K. Scenes from the past: Nikola Tesla and the discovery of X-rays. *RadioGraphics* 2008;28:1189-92.
9. Stern Padovan R, Kralik M, Prutki M, Hrabak M, Oberman B, Potocki K. Cross-sectional imaging of the pelvic tumors and tumor-like lesions in gynecologic patients – misinterpretation points and differential diagnosis. *Clin Imag* 2008;32:296-302.
10. Potocki K, Prutki M, Kralik M, Hrabak M, Stern Padovan R. Ewing sarcoma of the third metatarsal: a case report and review of the literature. *Tumori* 2007;93:212-4.
11. Stern Padovan R, Hrabak M, Prutki M, Kralik M, Lusic M, Pasini J, Potocki K. Multidetector computed tomography of iatrogenic urinary trauma – pictorial review. *Curr Med Imag Rev* 2007;3:277-82.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Papers published in journals indexed in Current Contents:

1. Schmieder RE, Wagner F, Mayr M, Delles C, Ott C, Keicher C, Hrabak-Paar M, Heye T, Aichner S, Khder Y, Yates D, Albrecht D, Langenickel T, Freyhardt P, Janka R, Bremerich J. The effect of sacubitril/valsartan compared to olmesartan on cardiovascular remodelling in subjects with essential hypertension: the results of a randomized, double-blind, active-controlled study. *Eur Heart J* 2017;38:3308-17.
2. Hrabak-Paar M, Kralik M. Case 244: Systemic amyloidosis – A complication of Waldenström macroglobulinemia. *Radiology* 2017;284:597-602.
3. Hrabak-Paar M, Kralik M. Diagnosis Please: Case 244. *Radiology* 2017;283:300-2.
4. Hrabak-Paar M. Intense adrenal enhancement: A CT feature of cardiogenic shock. *Cardiovasc Intervent Radiol* 2016;39:296-8.
5. Hrabak-Paar M, Đido V, Štern-Padovan R. Should we use CT or MRI for detection and characterization of benign adrenal lesions? *Ann Endocrinol (Paris)* 2015;76:272-80.

Papers published in journals indexed in Scopus/EMBASE:

1. Hrabak Paar M, Balaško T. Uloga magnetne rezonancije srca u obradi bolesnika s prirođenim srčanim greškama. *Paediatr Croat* 2017; 61 (Supl 1), 100-106.

Other papers:

1. Mursic M, Balasko Josipovic T, Hrabak Paar M. Life after Senning surgery - long-term follow-up using MRI and CT. *European Congress of Radiology ECR 2018, Vienna, Austria, February 28 - March 4, 2018. DOI: 10.1594/ecr2018/C-0561.*

2. Sicaja MN, Juzbašić K, Hrabak Paar M. Cardiac MRI assessment after Tetralogy of Fallot (TOF) repair. European Congress of Radiology ECR 2017, Vienna, Austria, March 1-5, 2017. DOI: 10.1594/ecr2017/C-0985.
3. Hrabak Paar M, Sicaja MN, Mursic M, Rados M, Heye T, Bremerich J. MRI assessment of vascular age: Principles, techniques and applications. European Congress of Radiology ECR 2016, Vienna, Austria, March 2-6, 2016. DOI: 10.1594/ecr2016/C-1909.
4. Hrabak Paar M, Bremerich J, Redheuil A, Heye T. How variable is aortic strain measurement using magnetic resonance imaging? European Congress of Radiology ECR 2015, Vienna, Austria, March 4-8, 2015. DOI: 10.1594/ecr2015/C-1057.
5. Hrabak Paar M, Štern-Padovan R. Visceral fat accumulation is a risk factor for atherosclerosis of the aorta. European Congress of Radiology ECR 2014, Vienna, Austria, March 6-10, 2014. DOI: 10.1594/ecr2014/B-0115.

Book chapters:

1. Potočki K, Hrabak Paar M, Štekić Novački K, Prutki M. Radiološka dijagnostika u hematologiji. U: Labar B (ur.): Hematologija. Zagreb, Školska knjiga 2017:773-786.
2. Malčić I, Kniewald H, Buljević B, Ferek-Petrić B, Boban M, Hrabak Paar M, Težak S, Strozzi M, Dilber D. Medicinski aspekti. U: Malčić I, Šmalcelj A, Anić D, Planinc D (ur.): Prirođene srčane greške od dječje do odrasle dobi – smjernice za liječenje odraslih s prirođenim srčanim greškama (OPSG). Zagreb, Medicinska naklada 2017:23-111.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2014-2016 project manager „Cardiovascular remodeling in patients with arterial hypertension (CARAHY)“, New International Fellowship Mobility Programme for Experienced Researchers in Croatia – NEWFELPRO, co-financed through the Marie Curie FP7-PEOPLE-2011-COFUND program

2007-2013 researcher on the project “Perception and prevention of cardiovascular risk factors in Croatia” (No. 108-1080134-0121, principal investigator professor Željko Reiner), supported by the Croatian Ministry of Science, Education and Sports

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2014-2016 project manager „Cardiovascular remodeling in patients with arterial hypertension (CARAHY)“, New International Fellowship Mobility Programme for Experienced Researchers in Croatia – NEWFELPRO, co-financed through the Marie Curie FP7-PEOPLE-2011-COFUND program

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Tvrtko Hudolin, MD, PhD, Assistant Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of Urology, KBC Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Kidney transplantation

BIOGRAPHY

Date of birth: 10.11.1972

Place of birth: Vinkovci, Croatia

Education

1998 MD, Medical School in Zagreb, Zagreb, Croatia

2004 PhD, Medical School in Zagreb, Zagreb, Croatia

2011 Research Associate Medical School in Zagreb, Zagreb, Croatia

2011 Senior Research Associate Medical School in Zagreb, Zagreb, Croatia

2013 Scientific Advisor to the Medical School of Zagreb, Zagreb, Croatia

2015 Senior Assistant of Urology Clinic, Medical School in Zagreb, Zagreb, Croatia

2016 Assistant Professor, Urology Clinic, Medical School in Zagreb, Zagreb, Croatia

Work experience:

1998 - 01 Volunteer, Department of Surgery, Institute of Tumors, Zagreb, Croatia

2001 - 07 Urology Specialization, Urology Clinic, KBC Zagreb, Zagreb, Croatia

2005 - 06 Urology Clinic, Basel University Hospital, Basel, Switzerland

2007 - Urology Clinic, KBC Zagreb, Zagreb, Croatia

2008-2009 Urology Clinic, Memorial Sloan-Kettering Cancer Center, New York, USA

2012 Urology Clinic, Mayo Clinic, Rochester, Minnesota, USA

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 31.1.2016.

Assistant Professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Basic-Jukic N, Hrsak-Puljic I, Kes P, Bubic-Filipi L, Pasini J, Hudolin T et al. Renal transplantation in patients with Balkan endemic nephropathy. Transplant Proc. 2007;39:1432-5.

Basic-Jukic N, Furic-Cunko V, Kes P, Bubic-Filipi L, Pasini J, Hudolin T et al. Outcome after renal transplantation in a "senior" program: the Croatian experience. Transplant Proc. 2008;40:3418-21.

Basić-Jukić N, Kes P, Hudolin T et al. Anderson-Fabry disease and renal transplantation. Acta Med Croatica. 2011;65:377-80.

Mesar I, Basić-Jukić N, Hudolin T et al. Varicella zoster virus reactivation in hemodialysis patients: manifestations, treatment, complications and outcome. Acta Clin Croat. 2011;50:549-52.

Vrdoljak A, Pasini J, Kastelan Z, Hudolin T et al. Spontaneous retroperitoneal bleeding caused by rupture of the native kidney oncocytoma twelve years after renal transplantation Acta Med Croatica. 2012;66:251-3.

Furic-Cunko V, Kes P, Coric M, Hudolin T, Kastelan Z, Basic-Jukic N. Expression of bone morphogenetic proteins 4, 6 and 7 is downregulated in kidney allografts with interstitial fibrosis and tubular atrophy. *Int Urol Nephrol*. 2015;47:1219-29.

Basic-Jukic N, Gulin M, Hudolin T, Kastelan Z, Katalinic L, Coric M, Veda MV, Ivkovic V, Kes P, Jelakovic B. Expression of BMP-2 in vascular endothelial cells of recipient may predict delayed graft function after renal transplantation. *Kidney Blood Press Res*. 2016;41:781-793.

Levarda-Hudolin K, Hudolin T, Bašić-Jukić N and Ž. Kaštelan. Oral lesions in kidney transplant recipients. *Acta Clin Croat* 2016;55:1-5.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Hudolin T, Kastelan Z, Ilic I, Levarda-Hudolin K et al. Immunohistochemical analysis of the expression of MAGE-A and NY-ESO-1 cancer/testis antigens in diffuse large B-cell testicular lymphoma. *J Transl Med*. 2013;11:123.

Mesar I, Kes P, Hudolin T and Basic-Jukic N. Rescue therapy with sirolimus in a renal transplant recipient with tacrolimus-induced hepatotoxicity. *Ren Fail*. 2013;35:1434-5.

Linder BJ, Boorjian SA, Hudolin T, Cheville JC, Thapa P, Tarrell RF, Frank I. Late recurrence after radical cystectomy: patterns, risk factors and outcomes. *J Urol*. 2014;191:1256-61.

Demirović A, Cesarec S, Marušić Z, Tomas D, Milošević M, Hudolin T, Krušlin B. TGF- β 1 expression in chromophobe renal cell carcinoma and renal oncocytoma. *Eur J Histochem*. 2014;58:2265.

Furic-Cunko V, Kes P, Coric M, Hudolin T, Kastelan Z, Basic-Jukic N. Expression of bone morphogenetic proteins 4, 6 and 7 is downregulated in kidney allografts with interstitial fibrosis and tubular atrophy. *Int Urol Nephrol*. 2015;47:1219-29.

Stingl Jankovic K, Hudolin T, Kastelan Z, Zunec R, Grubic Z. The possible role of the tumour necrosis factor polymorphisms and human leucocyte antigens in the development of prostate cancer. *Int J Immunogenet* 2016;43:143-150.

Basic-Jukic N, Gulin M, Hudolin T, Kastelan Z, Katalinic L, Coric M, Veda MV, Ivkovic V, Kes P, Jelakovic B. Expression of BMP-2 in vascular endothelial cells of recipient may predict delayed graft function after renal transplantation. *Kidney Blood Press Res*. 2016;41:781-793.

Levarda-Hudolin K, Hudolin T, Bašić-Jukić N and Ž. Kaštelan. Oral lesions in kidney transplant recipients. *Acta Clin Croat* 2016;55:1-5.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2005 - 2006 Characterization of CTL immune activity against BKV large T antigen in BKV seropositive HLA-A2*0201 prostate cancer patients. Department of Urology, Clinical Hospital Basel, Basel, CH

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mirjana Huic, MD, MSc, PhD, specialist in clinical pharmacology and toxicology

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Agency for Quality and Accreditation in Health Care and Social Welfare, Department for Development, Research and Health Technology Assessment till 31/12/2018; from 01/01/2019 Ministry of Health due to merging the Agency with MoH

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Evidence-based medicine

BIOGRAPHY

EDUCATION

1983-1989: Zagreb University School of Medicine, Zagreb, Croatia;

1989-1990: Postgraduate study “Allergology and Clinical Immunology”, Zagreb University School of Medicine, Zagreb, Croatia;

1996-2002: Resident in Clinical pharmacology and toxicology, Section of Clinical Pharmacology, Department of Medicine, Zagreb University Hospital Center, Zagreb, Croatia;

2000-2001: Postgraduate study “Clinical pharmacology”, Zagreb University School of Medicine, Zagreb, Croatia;

Academic Degrees:

1989: MD, Zagreb University School of Medicine, Zagreb, Croatia

1996: MSc, Zagreb University School of Medicine, Zagreb, Croatia

2013: PhD (“Completeness and Changes in Registered Data and Reporting Bias of Randomized Controlled Trials in ICMJE Journals after Trial Registration Policy”), Split University School of Medicine, Split, Croatia

Mirjana Huic is a medical doctor and specialist in clinical pharmacology and toxicology. She represents Croatia in the European HTA Network and serves as a WHO national HTA focal point. Since 2009, as the Assistant Director in Croatian Agency for Quality and Accreditation in Health Care and Social Welfare and Head of Department for Development, Research and HTA, she is responsible for establishing a transparent, evidence-based HTA process in Croatia. Since 2010 she actively participated in different EUnetHTA scientific work and production of European joint HTA reports on the whole range of health technologies. Previously she worked as a clinician, clinical trials investigator and lecturer at the UHC Zagreb. She participated in different national and international scientific projects and is the author or co-author of numerous scientific articles, book chapters, international and national HTA Reports.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Rutten-van Mölken M, Leijten F, Hoedemakers M, Tsiachristas A, Verbeek N, Karimi M, Bal R, de Bont A, Islam K, Askildsen JE, Cypionka T, Kraus M, Huic M, Pitter JG, Vogt V, Stokes J, Baltaxe E; SELFIE consortium. Strengthening the evidence-base of integrated care for people with multi-morbidity in

Europe using Multi-Criteria Decision Analysis (MCDA). *BMC Health Serv Res*. 2018 Jul 24;18(1):576. doi: 10.1186/s12913-018-3367-4.

Németh B, Kulchaitanaroaj P, Lester-George A, Huic M, Coyle K, Coyle D, Pokhrel S, Kaló Z. A utility of model input uncertainty analysis in transferring tobacco control-related economic evidence to countries with scarce resources: results from the EQUIPT study. *Addiction*. 2018 Jun;113 Suppl 1:42-51. doi: 10.1111/add.14092. Epub 2018 Jan 28.

Ettinger S, Stanak M, Szymański P, Wild C, Tandara Haček R, Erčević D, Grenković R, Huić M. Wearable cardioverter defibrillators for the prevention of sudden cardiac arrest: a health technology assessment and patient focus group study. *Med Devices (Auckl)*. 2017 Nov 14;10:257-271. doi: 10.2147/MDER.S144048. eCollection 2017.

Huic M, Tandara Hacek R, Svajger I. HEALTH TECHNOLOGY ASSESSMENT IN CENTRAL, EASTERN, AND SOUTH EUROPEAN COUNTRIES: CROATIA. *Int J Technol Assess Health Care*. 2017 Jan;33(3):376-383. doi: 10.1017/S026646231700054X. Epub 2017 Aug 14.

Huic M. Health Technology Assessment (HTA) In Croatia: National And International View. *Clin Ther*. 2016 Oct 6;38(10S):e16. doi: 10.1016/j.clinthera.2016.07.124.

Kaló Z, Gheorghe A, Huic M, Csanádi M, Kristensen FB. HTA Implementation Roadmap in Central and Eastern European Countries. *Health Econ*. 2016 Feb;25 Suppl 1:179-92. doi: 10.1002/hec.3298. Epub 2016 Jan 14.

Kalo Z, Csanadi M, Vitezic D, Huic M, Husereau D, Kristensen FB. Comparison of current and preferred status of hta implementation in central and eastern european countries. *Value Health*. 2015 Nov;18(7):A538. doi: 10.1016/j.jval.2015.09.1695. Epub 2015 Oct 20.

Guegan EW, Huić M, Teljeur C. Eunethhta: further steps towards European cooperation on health technology assessment. *Int J Technol Assess Health Care*. 2014 Nov;30(5):475-7. doi: 10.1017/S0266462314000658.

Kleijnen S, Toenders W, de Groot F, Huic M, George E, Wieseler B, Pavlovic M, Bucsics A, Siviero PD, van der Graaff M, Rdzany R, Kristensen FB, Goettsch W. European collaboration on relative effectiveness assessments: What is needed to be successful? *Health Policy*. 2015 May;119(5):569-76. doi: 10.1016/j.healthpol.2015.01.018. Epub 2015 Feb 7. Review.

Pokhrel S, Evers S, Leidl R, Traperro-Bertran M, Kalo Z, Vries Hd, Crossfield A, Andrews F, Rutter A, Coyle K, Lester-George A, West R, Owen L, Jones T, Vogl M, Radu-Loghin C, Voko Z, Huic M, Coyle D. EQUIPT: protocol of a comparative effectiveness research study evaluating cross-context transferability of economic evidence on tobacco control. *BMJ Open*. 2014 Nov 24;4(11):e006945. doi: 10.1136/bmjopen-2014-006945.

Zechmeister-Koss I, Huić M, Fischer S; European Network for Health Technology Assessment (EUnetHTA). The duodenal-jejunal bypass liner for the treatment of type 2 diabetes mellitus and/or obesity: a systematic review. *Obes Surg*. 2014 Feb;24(2):310-23. doi: 10.1007/s11695-013-1137-2. Review.

Huić M, Nachtnebel A, Zechmeister I, Pasternak I, Wild C. Collaboration in health technology assessment (EUnetHTA joint action, 2010-2012): four case studies. *Int J Technol Assess Health Care*. 2013 Jul;29(3):323-30. doi: 10.1017/S0266462313000305. Epub 2013 Jun 12.

Eikermann M, Gluud C, Perleth M, Wild C, Sauerland S, Gutierrez-Ibarluzea I, Antoine SL, Demotes-Mainard J, Neugebauer EA; Signatories of Our Open Letter to the European Union. Commentary: Europe

needs a central, transparent, and evidence based regulation process for devices. *BMJ*. 2013 May 7;346:f2771. doi: 10.1136/bmj.f2771.

Hulstaert F, Neyt M, Vinck I, Stordeur S, Huić M, Sauerland S, Kuijpers MR, Abrishami P, Vondeling H, Flamion B, Garattini S, Pavlovic M, van Brabant H. Pre-market clinical evaluations of innovative high-risk medical devices in Europe. *Int J Technol Assess Health Care*. 2012 Jul;28(3):278-84. doi: 10.1017/S0266462312000335.

Zechmeister-Koss I, Huic M. Vascular endothelial growth factor inhibitors (anti-VEGF) in the management of diabetic macular oedema: a systematic review. *Br J Ophthalmol*. 2012 Feb;96(2):167-78. doi: 10.1136/bjophthalmol-2011-300674. Epub 2011 Dec 1. Review.

Huić M, Marušić M, Marušić A. Completeness and changes in registered data and reporting bias of randomized controlled trials in ICMJE journals after trial registration policy. *PLoS One*. 2011;6(9):e25258. doi: 10.1371/journal.pone.0025258. Epub 2011 Sep 21.

Mittermayer R, Huić M, Mestrovic J. Quality of health care, accreditation, and health technology assessment in Croatia: role of agency for quality and accreditation in health. *Acta Med Croatica*. 2010 Dec;64(5):425-34. Croatian.

Marušić A, Huić M. Registration of clinical trials still moving ahead--September 2008 update to Uniform Requirements for Manuscripts Submitted to Biomedical Journals. *Croat Med J*. 2008 Oct;49(5):582-5.

Vrhovac B, Sarapa N, Bakran I, Huic M, Macolic-Sarinic V, Francetic I, Wolf-Coporda A, Plavsic F. Pharmacokinetic changes in patients with oedema. *Clin Pharmacokinet*. 1995 May;28(5):405-18. Review.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Leijten FRM, Hoedemakers M, Struckmann V, Kraus M, Cheraghi-Sohi S, Zemplényi A, Ervik R, Vallvé C, Huić M, Cypionka T, Boland M, Rutten-van Mölken MPMH; SELFIE consortium. Defining good health and care from the perspective of persons with multimorbidity: results from a qualitative study of focus groups in eight European countries. *BMJ Open*. 2018 Aug 30;8(8):e021072. doi: 10.1136/bmjopen-2017-021072.
2. Rutten-van Mölken M, Leijten F, Hoedemakers M, Tsiachristas A, Verbeek N, Karimi M, Bal R, de Bont A, Islam K, Askildsen JE, Cypionka T, Kraus M, Huic M, Pitter JG, Vogt V, Stokes J, Baltaxe E; SELFIE consortium. Strengthening the evidence-base of integrated care for people with multi-morbidity in Europe using Multi-Criteria Decision Analysis (MCDA). *BMC Health Serv Res*. 2018 Jul 24;18(1):576. doi: 10.1186/s12913-018-3367-4.
3. Németh B, Kulchaitanaroaj P, Lester-George A, Huic M, Coyle K, Coyle D, Pokhrel S, Kaló Z. A utility of model input uncertainty analysis in transferring tobacco control-related economic evidence to countries with scarce resources: results from the EQUIPT study. *Addiction*. 2018 Jun;113 Suppl 1:42-51. doi: 10.1111/add.14092. Epub 2018 Jan 28.
4. Ettinger S, Stanak M, Szymański P, Wild C, Tandara Haček R, Erčević D, Grenković R, Huić M. Wearable cardioverter defibrillators for the prevention of sudden cardiac arrest: a health technology assessment and patient focus group study. *Med Devices (Auckl)*. 2017 Nov 14;10:257-271. doi: 10.2147/MDER.S144048. eCollection 2017.
5. Huic M, Tandara Hacek R, Svajger I. HEALTH TECHNOLOGY ASSESSMENT IN CENTRAL, EASTERN, AND SOUTH EUROPEAN COUNTRIES: CROATIA. *Int J Technol Assess Health Care*. 2017 Jan;33(3):376-383. doi: 10.1017/S026646231700054X. Epub 2017 Aug 14.
6. Huic M. Health Technology Assessment (HTA) In Croatia: National And International View. *Clin Ther*. 2016 Oct 6;38(10S):e16. doi: 10.1016/j.clinthera.2016.07.124.

7. Kaló Z, Gheorghe A, Huic M, Csanádi M, Kristensen FB. HTA Implementation Roadmap in Central and Eastern European Countries. *Health Econ.* 2016 Feb;25 Suppl 1:179-92. doi: 10.1002/hec.3298. Epub 2016 Jan 14.
8. Kalo Z, Csanadi M, Vitezic D, Huic M, Husereau D, Kristensen FB. Comparison of current and preferred status of hta implementation in central and eastern european countries. *Value Health.* 2015 Nov;18(7):A538. doi: 10.1016/j.jval.2015.09.1695. Epub 2015 Oct 20.
9. Guegan EW, Huić M, Teljeur C. Eunethta: further steps towards European cooperation on health technology assessment. *Int J Technol Assess Health Care.* 2014 Nov;30(5):475-7. doi: 10.1017/S0266462314000658.
10. Kleijnen S, Toenders W, de Groot F, Huic M, George E, Wieseler B, Pavlovic M, Bucsics A, Siviero PD, van der Graaff M, Rdzany R, Kristensen FB, Goettsch W. European collaboration on relative effectiveness assessments: What is needed to be successful? *Health Policy.* 2015 May;119(5):569-76. doi: 10.1016/j.healthpol.2015.01.018. Epub 2015 Feb 7. Review.
11. Pokhrel S, Evers S, Leidl R, Trapero-Bertran M, Kalo Z, Vries Hd, Crossfield A, Andrews F, Rutter A, Coyle K, Lester-George A, West R, Owen L, Jones T, Vogl M, Radu-Loghin C, Voko Z, Huic M, Coyle D. EQUIPT: protocol of a comparative effectiveness research study evaluating cross-context transferability of economic evidence on tobacco control. *BMJ Open.* 2014 Nov 24;4(11):e006945. doi: 10.1136/bmjopen-2014-006945.
12. Zechmeister-Koss I, Huić M, Fischer S; European Network for Health Technology Assessment (EUnetHTA). The duodenal-jejunal bypass liner for the treatment of type 2 diabetes mellitus and/or obesity: a systematic review. *Obes Surg.* 2014 Feb;24(2):310-23. doi: 10.1007/s11695-013-1137-2. Review.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

National projects (Co-investigator on national projects financed by Croatian Ministry of Sciences, Education and Sport):

Influence of illness to drugs pharmacokinetics;

Influence of rotation of antimicrobial drugs to bacterial resistance;

RegPok.hr-Croatian clinical trials register.

International projects:

TAIEX Project, 2010, organized by the Technical Assistance Information Exchange Instrument of the European Commission (TAIEX) in co-operation with Croatian HTA Department: 2 days Workshop - "Health Technology Assessment; main principles, HTA process and report";

FP7 EQUIPT project (European-study on Quantifying Utility of Investment in Protection from Tobacco);

EUnetHTA Joint Action 1 Project, EUnetHTA and European Commision, European Commision and European HTA Agencies;

EUnetHTA Joint Action 2 Project;

EUnetHTA Joint Action 3 Project;

Obzor2020 SELFIE (Sustainable intEgrated care modeLs for multi-morbidity: delivery, Flnancing and performance) project.



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

FP7 EQUIPT project (European-study on Quantifying Utility of Investment in Protection from Tobacco);

EUnetHTA Joint Action 1 Project, EUnetHTA and European Commission, European Commission and European HTA Agencies;

EUnetHTA Joint Action 2 Project;

EUnetHTA Joint Action 3 Project;

Horizont2020 SELFIE (Sustainable intEgrated care modeLs for multi-morbidity: delivery, Financing and performance) project.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Renata Huzjan Korunić

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Dubrava

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Application of Doppler in research and diagnosis of blood vessels

BIOGRAPHY

Contact information

Address: Martićeva 73, Zagreb, Croatia

phonel. ++385 91 513 0582

E-mail: rhuzjan@yahoo.com

Croatian Scientific Bibliography (CROSB) 345865

Datum i mjesto rođenja: 13/3/1973, Zagreb, Croatia

Education

4.4.2014. Subspecialty Ultrasound

30.6.2013. PhD – Medical School University of Zagreb - dissertation “The value of targeted US examination in diagnosis of MR lesions ”

18.4.2008. Board examined radiologist

31.5.2007. Masters degree – Medical School University of Zagreb

2004-2005. Education in breast imaging - 6 months “The Applicability of the Breast Imaging Reporting and Data System to Mammographic detection of Breast Cancer in Southeast Europe”, Memorial Sloan Kettering Cancer Center, New York, SAD

2002-2003. Scientific postdoctoral study “Biomedical sciences” Medical School University of Zagreb, 2002-2003.

2003 “Color Doppler in extracranial and intracranial circulation” theoretical and practical course, Clinical Hospital “Sestre milosrdnice” Zagreb

2000-2001. Scientific postdoctoral study “Zaštita majke i djeteta” Medical School University of Zagreb

2001 “Ultrasound in diagnosis of perinatal brain damage” theoretical and practical course, Childrens Hospital Zagreb

1997-1998. Pripravnički staž Klinička bolnica “Sestre milosrdnice”, Zagreb

1991-1997. Medical School University of Zagreb

1987-1991. Matematički informatički obrazovni centar (MIOC)

Radno iskustvo

2008.- today Radiologist, University Hospital Dubrava

2002.- 2008. Residency in radiology University Hospital Dubrava Zagreb

2001.-2002. Medical Development and regulatory affairs, Belupo d.d.

1999.-2001. Scientific fellow, “Perinatal brain damage”, Childrens Hospital Zagreb

Memberships

Croatian Medical Chamber, Croatian radiological Society, Radiological Society of North America, European Society of radiology

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 05 September 2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Magistarski rad: "Ispitivanje arterijske cirkulacije podlaktice i radijalne arterije color dopplerom u preoperativnoj i postoperativnoj obradi bolesnika s koronarnim premoštenjem premostnicom radijalne arterije", Medicinski fakultet Sveučilišta u Zagrebu. Datum obrane 27. studenog. 2006.g. Mentor: Prof. dr. sc. Boris Brkljačić.

Huzjan R, Brkljacic B, Delic-Brkljacic D, Biocina B, Sutlic Ž. B-mode and Color Doppler ultrasound of the forearm arteries in the preoperative screening prior to coronary artery bypass grafting. Coll Anthropol 2004;28 Suppl 2:235-41

Brkljacic B, Mišević T, Huzjan R, Brajčić H, Ivanac G. Duplex Doppler Ultrasound in the detection of lower extremities deep venous thrombosis and in the detection of alternative findings. Coll Antropol 2004;28:761-7

Đuranovic V, Mejaški-Bošnjak V, Marušić-Della Marina B, Duplancic R, Lujic L, Lenicek-Krleža J, Huzjak N, Huzjan R. Diagnostic approach to cerebrovascular disorders in childhood-evaluation by transcranial-duplex-doppler ultrasonography. Paediat Croat 2000;44:57-64

Đuranovic V, Bošnjak Mejaški V, Bešenski N, Marušić Della Marina B, Lujic L, Duplancic R, Huzjan R. Contribution of transcranial duplex Doppler sonography to the diagnosis of great cerebral artery stenosis in a child. Acta clin Croat 2000;39:287-291

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:.

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Dr Dusko ILIC, Reader in Stem Cell Science

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: King's College London

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Human reproduction

BIOGRAPHY

Dr Dusko Ilic obtained his MD degree and BSci in Molecular Biology at the University of Belgrade. After receiving a PhD degree at the Tokyo University, Japan, he did postdoctoral work at the University of California in San Francisco. He held position of Adjunct Associate Professor at the University of California San Francisco and Consultant at the Veteran Affairs Medical Center, San Francisco. He also worked as the Director of R&D at California-based company StemLifeLine. Since 2009, he works at King's College London. He is also a co-founder and CSO of VitroLabs, CA, USA.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2014

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 114 peer-reviewed publications, *h*-index 36;
- Since 2014: 52 peer-reviewed publications, including two in *Stem Cell Reports* (IF = 7.338) and one in *Human Reproduction Update* (IF = 11.366) as a senior author and two in *Nature* (IF = 41.458) and two in *Nature Cell Biology* (IF = 19.679) as a co-author.
- 8326 citations (422 in 2014, 382 in 2015, 528 in 2016, 451 in 2017, and 431 in 2018).
- Three most significant outputs in the fields of embryology since 2014:

- 1) Noli et al. *Discordant Growth of monozygotic twins starts at the blastocyst stage: case report*. *Stem Cell Reports*. 2015 Dec 8;5:946-953. I am a senior author.

The first RNAseq analysis of human monozygotic twins at Day 6 of development points to the key role of IGF-1 signalling in growth of inner cell mass of embryo.

- 2) Noli et al. *Developmental clock compromises human twin model created by embryo splitting*. *Hum Reprod*. 2015;30:2774-2784. I am a senior author.

Analyses of 176 twin embryos created by splitting of 88 human embryos from either early (2–5 blastomeres) or late (6–10 blastomeres) cleavage stages suggested that the human preimplantation development is subjected to a strict temporal control. This is the first time shown that humans have “developmental clock”

- 3) Concise review *hESC - What have we done? What are we doing? Where are we going?* published in *Stem Cells* in 2017 was one of the journal's top 20 most downloaded papers (5247 downloads with the first 12 months of online publication). I am a lead author.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

2014

Ilic D, Bollinger JM, Gelb M, Mauro TM: sPLA2 and the epidermal barrier. *Biochim Biophys Acta Mol Cell Biol Lipids* 2014;1841:416-421. doi: 10.1016/j.bbalip.2013.11.002.

Petrova A, Celli A, Jacquet L, Dafou D, Crumrine D, Hupe M, Arno M, Hobbs C, Cvorovic A, Karagiannins P, Devito L, Sun R, Adame LC, Vaughan R, McGrath JA, Mauro TM, Ilic D: 3D in vitro model of a functional epidermal permeability barrier from hESC and iPSC. *Stem Cell Reports* 2014;2:675-689. doi: 10.1016/j.stemcr.2014.03.009.

Devito L, Petrova A, Miere C, Codognotto S, Ogilvie C, Khalaf Y, **Ilic D**: Cost-Effective Master Cell Bank Validation of Multiple Clinical-Grade Human Pluripotent Stem Cell Lines from a Single Donor. *Stem Cell Transl Med* 2014;3:1116-1124. doi: 10.5966/sctm.2014-0015.

Devito L, Badraiq H, Galleu A, Taheem DK, Codognotto S, Siow R, Khalaf Y, Briley A, Shennan A, Poston L, McGrath J, Gentleman E, Dazzi F, **Ilic D**: Wharton's jelly MSC derived under chemically defined animal product-free low oxygen conditions are rich in MSCA-1+ subpopulation. *Regen Med* 2014;9:723-732. doi: 10.2217/rme.14.60.

2015

Sun R, Celli A, Crumrine D, Hupe M, Adame LC, Pennypecker SD, Park K, Uchida Y, Feingold KR, Elias PM, **Ilic D**, Mauro TM: Lowered Humidity Produces Human Epidermal Equivalents with Enhanced Barrier Properties. *Tissue Engineering Part C Methods* 2015;21:15-22. doi: 10.1089/ten.TEC.2014.0065.

Cvoro A, Devito L, Milton FA, Noli L, Zhang A, Filippi C, Sakai K, Suh JH, Sieglaff DH, Dhawan A, Sakai T, **Ilic D**, Webb P. A Thyroid Hormone Receptor/KLF9 Axis in Human Hepatocytes and Pluripotent Stem Cells. *Stem Cells* 2015;33:416-428. doi: 10.1002/stem.1875.

Badraiq H, Devito L, **Ilic D**. Isolation and Expansion of Mesenchymal Stromal/Stem Cells from Umbilical Cord Under Chemically Defined Conditions. *Methods Mol Biol* 2015;1283:65-71. doi: 10.1007/7651_2014_116.

Jacquet L, Neueder A, Földes G, Karagiannis P, Hobbs K, Jolinon N, Mioulane M, Sakai T, Harding SE, **Ilic D**. Three Huntington's disease specific mutation-carrying human embryonic stem cell lines have stable number of CAG repeats upon in vitro differentiation into cardiomyocytes. *PLoS One* 2015;10:e0126860. doi: 10.1371/journal.pone.0126860.

Noli L, Dajani Y, Capalbo A, Bvumbe J, Rienzi L, Ubaldi FM, Ogilvie C, Khalaf Y, **Ilic D**. Developmental clock compromises human twin model created by embryo splitting. *Hum Reprod* 2015;30:2774-84. doi: 10.1093/humrep/dev252

Noli L, Capalbo A, Ogilvie C, Khalaf Y, **Ilic D**. Discordant Growth of Monozygotic Twins Starts at the Blastocyst Stage: A Case Study. *Stem Cell Reports* 2015;5:946-53. doi: 10.1016/j.stemcr.2015.10.006.

Canham MA, Van Deusen A, Brison DR, De Sousa P, Downie J, Devito L, Hewitt ZA, **Ilic D**, Kimber SJ, Moore HD, Murray H, Kunath T. The Molecular Karyotype of 25 Clinical-Grade Human Embryonic Stem Cell Lines. *Sci Rep* 2015;5:17258. doi: 10.1038/srep17258.

Ilic D, Devito L, Miere C, Codognotto S. Human embryonic and induced pluripotent stem cells in clinical trials. *Br Med Bull* 2015;116:19-27. doi: 10.1093/bmb/ldv045

2016

Capalbo A, Ubaldi FM, Cimadomo D, Noli L, Khalaf Y, Farcomeni A, **Ilic D**, Rienzi L. MicroRNAs in spent blastocyst culture medium are derived from trophectoderm cells and can be explored for human embryo reproductive competence assessment. *Fertil Steril* 2016;105:225-35. doi: 10.1016/j.fertnstert.2015.09.014.

Miere C, Devito L, **Ilic D**. Sendai Virus-Based Reprogramming of Mesenchymal Stromal/Stem Cells from Umbilical Cord Wharton's Jelly into Induced Pluripotent Stem Cells. *Methods Mol Biol* 2016;1357:33-44. doi: 10.1007/7651_2014_163.

Ilic D, Vicovac L, Nikolic M, Lazic Ilic E. Human amniotic membrane grafts in therapy of chronic non-healing wounds. *Br Med Bull* 2016;117:59-67. doi: 10.1093/bmb/ldv053.

Miere C, Hewitson H, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D**: Generation of KCL021 research grade human embryonic stem cell line carrying a ΔF508 mutation in the CFTR gene. *Stem Cell Res* 2016;16:177-179. doi: 10.1016/j.scr.2015.12.042

Jacquet L, Hewitson H, Wood V, Kadeva N, Cornwell G, Codognotto S, Hobbs C, Stephenson E, **Ilic D**. Generation of KCL012 research grade human embryonic stem cell line carrying a mutation in the HTT gene. *Stem Cell Res* 2016;16:264-267 (2016). doi: 10.1016/j.scr.2016.01.012

- Jacquet L, Hewitson H, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D.** Generation of KCL013 research grade human embryonic stem cell line carrying a mutation in the *HTT* gene. *Stem Cell Res* 2016;16:293-295. doi: 10.1016/j.scr.2016.01.011
- Miere C, Hewitson H, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D.** Generation of KCL016 research grade human embryonic stem cell line carrying a mutation in *VHL* gene. *Stem Cell Res* 2016;16:37-39. doi: 10.1016/j.scr.2015.12.003
- Hewitson H, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D.** Generation of KCL017 research grade human embryonic stem cell line carrying a mutation in *VHL* gene. *Stem Cell Res* 2016;16(2):268-270 (2016). doi: 10.1016/j.scr.2016.01.013
- Miere C, Hewitson H, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D.** Generation of KCL018 research grade human embryonic stem cell line carrying a mutation in the *DMPK* gene. *Stem Cell Res* 2016;16:342-344. doi: 10.1016/j.scr.2016.01.004
- Hewitson H, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D.** Generation of KCL024 research grade human embryonic stem cell line carrying a mutation in *NF1* gene. *Stem Cell Res* 2016;16:243-245. doi: 10.1016/j.scr.2016.01.010
- Hewitson H, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D.** Generation of KCL025 research grade human embryonic stem cell line carrying a mutation in *NF1* gene. *Stem Cell Res* 2016;16:256-258. doi: 10.1016/j.scr.2016.01.009
- Hewitson H, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D.** Generation of KCL026 research grade human embryonic stem cell line carrying a mutation in *SMN1* gene. *Stem Cell Res* 2016;16:249-251. doi: 10.1016/j.scr.2016.01.005
- Jacquet C, Hewitson H, Wood V, Kadeva N, Cornwell G, Codognotto S, Hobbs C, Stephenson E, **Ilic D.** Generation of KCL027 research grade human embryonic stem cell line carrying a mutation in *HTT* gene. *Stem Cell Res* 2016;16:274-277. doi: 10.1016/j.scr.2016.01.008
- Jacquet C, Hewitson H, Wood V, Kadeva N, Cornwell G, Codognotto S, Hobbs C, Stephenson E, **Ilic D.** Generation of KCL028 research grade human embryonic stem cell line carrying a mutation in *HTT* gene. *Stem Cell Res* 2016;16:278-281. doi: 10.1016/j.scr.2016.01.006
- Miere C, Hewitson H, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D.** Generation of KCL029 research grade human embryonic stem cell line carrying a mutation in *WAS* gene. *Stem Cell Res* 2016;16:198-191. doi: 10.1016/j.scr.2015.12.040
- Jacquet L, Wood V, Kadeva N, Cornwell G, Codognotto S, Hobbs C, Stephenson E, **Ilic D.** Generation of KCL031 clinical grade human embryonic stem cell line. *Stem Cell Res* 2016;16:195-198. doi: /10.1016/j.scr.2015.12.033
- Miere C, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D.** Generation of KCL032 clinical grade human embryonic stem cell line. *Stem Cell Res* 2016;16:17-19. doi: 10.1016/j.scr.2015.11.007
- Devito L, Petrova A, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D.** Generation of KCL033 clinical grade human embryonic stem cell line. *Stem Cell Res* 2016;16:296-299. doi: 0.1016/j.scr.2015.12.047
- Devito L, Jacquet L, Petrova A, Miere C, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D.** Generation of KCL034 clinical grade human embryonic stem cell line. *Stem Cell Res* 2016;16:184-188. doi: 10.1016/j.scr.2015.12.034
- Hewitson H, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D.** Generation of KCL035 research grade human embryonic stem cell line carrying a mutation in *HBB* gene. *Stem Cell Res* 2016;16:210-212. doi: 10.1016/j.scr.2016.01.007

Jacquet C, Hewitson H, Wood V, Kadeva N, Cornwell G, Codognotto S, Hobbs C, Stephenson E, **Ilic D**. Generation of KCL036 research grade human embryonic stem cell line carrying a mutation in HTT gene. *Stem Cell Res* 2016;16:345-348. doi: 0.1016/j.scr.2016.02.026

Miere C, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D**. Generation of KCL037 clinical grade human embryonic stem cell line. *Stem Cell Res* 2016;6:149-151. doi: 10.1016/j.scr.2015.12.023

Miere C, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D**. Generation of KCL038 clinical grade human embryonic stem cell line. *Stem Cell Res* 2016;16:137-139. doi: 10.1016/j.scr.2015.12.024

Devito L, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D**. Generation of KCL039 clinical grade human embryonic stem cell line. *Stem Cell Res* 2016;16:170-172. doi: 10.1016/j.scr.2015.12.036

Jacquet L, Wood V, Kadeva N, Cornwell G, Codognotto S, Stephenson E, **Ilic D**. Generation of KCL040 clinical grade human embryonic stem cell line. *Stem Cell Res* 2016;16:173-176. doi: 10.1016/j.scr.2015.12.035

Shahbazi MN, Jedrusik A, Vuoristo S, Recher G, Hupalowska A, Bolton V, Fogarty NNM, Campbell A, Devito-Gasparini L, **Ilic D**, Khalaf Y, Braude P, Niakan KK, Fishel S, Zernicka-Goetz M. Self-organization of the human embryo in the absence of maternal tissues. *Nat Cell Biol.* 2016;18:700-708. doi: 10.1038/ncb3347

Petrova A, Capalbo A, Jacquet L, Hazelwood-Smith S, Dafou D, Hobbs C, Arno M, Farcomeni A, Devito L, Badraiq H, Simpson M, McGrath JA, Di WL, Cheng JB, Mauro TM, **Ilic D**: Induced Pluripotent Stem Cell Differentiation and Three-Dimensional Tissue Formation Attenuate Clonal Epigenetic Differences in Trichohyalin-Case Study. *Stem Cells Dev* 2016;25:1366-1375. doi: 10.1089/scd.2016.0156

Noli L, Capalbo A, Dajani Y, Cimadomo D, Bvumbe J, Rienzi L, Ubaldi FM, Ogilvie C, Khalaf Y, **Ilic D**. Human Embryos Created by Embryo Splitting Secrete Significantly Lower Levels of miRNA-30c. *Stem Cells Dev* 2016; 25:1853-1862. doi: 10.1089/scd.2016.0212

Ilic D. iPSC in the past decade: The Japanese dominance. *Regen Med* 2016;11:747-749.

2017

Ilic D, Ogilvie C: Concise Review: hESC - What have we done? What are we doing? Where are we going? *Stem Cells* 2017;35:17-25. doi: 10.1002/stem.2450

Noli L, Ogilvie C, Khalaf Y, **Ilic D**. Potential of human twin embryos generated by embryo splitting in assisted reproduction and research. *Hum Reprod Update* 2017; 23:156-165. doi: 10.1093/humupd/dmw041

Merkle FT, Ghosh S, Kamitaki N, Mitchell J, Avior Y, Mello C, Kashin S, Mekhoubad S, **Ilic D**, Charlton M, Saphier G, Handsaker RE, Genovese G, Bar S, Benvenisty N, McCarroll SA, Eggan K. Human pluripotent stem cells recurrently acquire and expand dominant negative P53 mutations. *Nature* 2017;545:229-233. doi: 10.1038/nature22312.

Ilic D, Ogilvie C, Noli L, Kolundzic N, Khalaf Y. Human embryos from induced pluripotent stem cell-derived gametes: ethical and quality considerations. *Regen Med* 2017;12(6):681-691. doi: 10.2217/rme-2017-0052.

Shahbazi MN, Scialdone A, Skorupska N, Weberling A, Recher G, Zhu M, Jedrusik A, Devito LG, Noli L, Macaulay IC, Buecker C, Khalaf Y, **Ilic D**, Voet T, Marioni JC, Zernicka-Goetz M. Pluripotent state transitions coordinate morphogenesis in mouse and human embryos. *Nature* 2017;552(7684):239-243. doi: 10.1038/nature24675.

Badraiq H, Cvoro A, Galleu A, Simon M, Miere C, Hobbs C, Schulz R, Siow R, Dazzi F, **Ilic D**. Effects of maternal obesity on Wharton's Jelly mesenchymal stromal cells. *Sci Rep* 2017;7(1):17595. doi: 10.1038/s41598-017-18034-1.

2018

Floros VI, Pyle A, Dietmann S, Wei W, Tang WWC, Irie N, Payne B, Capalbo A, Noli L, Coxhead J, Hudson G, Crosier M, Strahl H, Khalaf Y, Saitou M, **Ilic D**, Surani MA, Chinnery PF. Segregation of mitochondrial DNA heteroplasmy through a developmental genetic bottleneck in human embryos. *Nat Cell Biol* 2018;20(2):144-151. doi: 10.1038/s41556-017-0017-8.

Taheem DK, Foyt DA, Loaiza S, Ferreira SA, Ilic D, Auner HW, Grigoriadis AE, Jell G, Gentleman E. Differential Regulation of Human Bone Marrow Mesenchymal Stromal Cell Chondrogenesis by Hypoxia Inducible Factor-1 α Hydroxylase Inhibitors. *Stem Cells* 2018;36(9):1380-1392.. doi: 10.1002/stem.2844.

Devito L, Donne M, Kolundzic N, Khurana P, Hobbs C, Kaddour G, Dubrac S, Gruber R, Schmuth M, Mauro T, Ilic D. Induced pluripotent stem cell line from an atopic dermatitis patient heterozygous for c.2282del4 mutation in filaggrin: KCLi001-A. *Stem Cell Res* 2018;31:122-126. doi: 10.1016/j.scr.2018.07.014

Stanton MM, Tzatzalos E, Donne M, Kolundzic N, Helgason I, Ilic D. Prospects for the Use of Induced Pluripotent Stem Cells (iPSC) in Animal Conservation and Environmental Protection. *Stem Cells Transl Med* 2018 Sep 24. doi: 10.1002/sctm.18-0047. [Epub ahead of print]

Blackford SJI, Ng SS, Segal JM, King AJF, Austin AL, Kent D, Moore J, Sheldon M, Ilic D, Dhawan A, Mitry RR, Rashid TM. Validation of cGMP-compliant human pluripotent stem cell-derived hepatocytes for cell-based therapy. *Stem Cells Transl Med* 2018. doi: 10.1002/sctm.18-0084. [Epub ahead of print]

Ilic D, Telfer EE, Ogilvie C, Kolundzic N, Khalaf Y. What can stem cell technology offer to IVF patients? *BJOG* In press.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Effect of maternal metabolic intrauterine environment on fetal methylome
- Embryo twinning
- Effects of maternal obesity on child
- Developing embryo and foetus
- Fertility preservation for women undergoing cancer treatment

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

In addition to above:

- Full thickness skin models from human pluripotent stem cells for identification and testing effectiveness of personalized therapies in atopic dermatitis

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

Eight PhD students

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist. prof. Gordana Ivanac

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Application of Doppler in research and diagnosis of diseases of blood vessels, Hand surgery; Morphological research methods in biomedical sciences; Advanced ultrasonography in gastroenterology and hepatology;

BIOGRAPHY

MD, PhD, specialist radiologist, scientific advisor, assistant professor of radiology

Author in 20 articles in journals cited in WOS, number of citations: 140; invited speaker at more than 20 domestic and international meetings, including European radiology congresses and Euroson ultrasound congresses

5.9.2018. scientific advisor in biomedicine and health, Ministry of Science of Croatia

2005-16 Eight educational courses organized by European Society of Radiology

7/2015 – full docent/ass.proff, Radiology Cathedra, University of Zagreb School of Medicine

2014- Euroson 2014 Tel Aviv, IS – award for the best scientific presentation

April 2013.– Clinical observership, Department of Radiology, Memorial Sloan-Kettering Cancer Center, New York City, NY, USA

30.1.2013. senior research associate in biomedicine and health, Ministry of Science of Croatia

2011. fellowship, University of Szeged, HU, „Teach the teachers“ programme of European Society of Radiology

12.7.2010. elected as docent / ass.proffessor honoris causa, Cathedra for Radiology, University of Zagreb School of Medicine

17.11.2009. elected as research associate, Ministry of Science of Croatia

25.8.2009. PhD thesis, UZSM, „Conventional ultrasound and color Doppler in diagnosis of joint alterations in patients with rheumatoid arthritis“

2009. Subspecialty exam in ultrasonography in radiology, Univ.Hospital „Dubrava“

14.12.2006. Board exam in radiology, University Hospital „Dubrava“

20.12.2005. MSc thesis, UZSM, „Evaluation of thyroid nodules vascularisation with high resolution transducer“

2004-2005 Specialty postgraduate study in radiology, University of Zagreb School of Medicine

1998-2000 Scientific Postgraduate Course in Biomedical Sciences, University of Zagreb School of Medicine

1991-1997 MD, graduated at UZSM on 15/9/1997, average score 4.5

1987-1991 High School / Mathematical Gymnasium, Zagreb

Work experience:

Since 2014 – section head for Diagnostic Radiology, Department of Diagnostic and Interventional Radiology, Univ.Hospital „Dubrava“, Zagreb

2012-2014- section head of Breast and Musculoskeletal Radiology Unit of the Department

2007-2009 fellowship in ultrasound in radiology, Univ.Hospital „Dubrava“

Since 2006- board certified radiologist, Department of Diagnostic and Interventional Radiology, Univ.Hospital „Dubrava“, Zagreb

2001-2006 – residency in radiology, UH Dubrava, Zagreb

1999-2001- research assistant at scientific project funded by Ministry of Science of Croatia „Tumors in thyroid autoimmune diseases“, PI Franjo Škreb, Nuclear Medicine Division, Univ.Hospital Dubrava, Zagreb

1998-1999 Internship, Hospital for Lung Diseases, Zagreb

Memberships and functions

Croatian Medical Association, Croatian Society for Ultrasound in Medicine and Biology – vice president, Croatian Society of Radiology 2nd vice president, European Society of Radiology, European Society of Breast Imaging, European Society of Urogenital Radiology, Central European Vascular Forum, European Society of Skeletal Radiology

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 20.7.2015.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Ivanac G, Rozman B, Skreb F, Brkljacic B, Pavic L. Ultrasonographic measurement of the thyroid volume. Coll Antropol. 2004;28:287-291.
2. Brkljacic B, Misevic T, Huzjan R, Brajdic H, Ivanac G. Duplex-Doppler ultrasonography in the detection of lower extremities deep venous thrombosis and in the detection of alternative findings. Coll Antropol. 2004;28:761-767.
3. Huzjan R, Vukelic-Markovic M, Brkljacic B, Ivanac G. The value of ultrasound in diagnosis and follow-up of fibrous cortical defect. Ultraschall Med. 2005;26:420-3.
4. Pavic L, Gregurek R, Rados M, Brkljacic B, Brajkovic L, Simetin-Pavic I, Ivanac G, Pavlisa G, Kalousek V. Smaller right hippocampus in war veterans with posttraumatic stress disorder. Psychiatry Res. Psychiatry Res. 2007;154:191-8.
5. Ivanac G, Brkljacic B, Ivanac K, Huzjan R, Skreb F, Cikara I. Vascularisation of benign and malignant thyroid nodules: CD US evaluation. Ultraschall Med. 2007;28:502-6.
6. Delic-Brkljacic D, Galesic K, Ivanac G, Manola S, Pintaric H, Stambuk K, Gacina P, Radeljic V. Influence of ATII blockers and calcium channel blockers on renal vascular resistance in patients with essential hypertension. Coll Antropol. 2009;34:1129-1138.
7. Brkljacic B, Cikara I, Ivanac G, Hrkac Pustahija A, Zic R, Stanec Z. Ultrasound-Guided Bipolar Radiofrequency Ablation of Breast Cancer in Inoperable Patients: a Pilot Study Ultraschall Med. 2010;31:156-62.
8. Cavka M, Jankovic I, Sikanjic Rajic P, Ticinovic N, Rados S, Ivanac G, Brkljacic B. Insights into a mummy: a paleoradiological analysis. Coll Antropol. 2010;34:797-802.
9. Dediol E, Manojlovic S, Biocic J, Franceski D, Ivanac G. Facial artery pseudoaneurysm without evidence of trauma. Int J Oral Maxillofacial Surgery. 2011;40:988-990.
10. Cikara I, Hrkac Pustahija A, Ivanac G, Pavic P, Brkljacic B. True Aneurysm of the Antecubital Vein: Ultraschall Med. 2011;32:203-5.

11. Cavka M, Petaros A, Ivanac G, Aganovic L, Jankovic I, Reiter G, Speier P, Nilles-Vallespin S, Brkljacic B. A probable case of Hand-Schueller-Christian's disease in an Egyptian mummy revealed by CT and MR investigation of a dry mummy. *Coll Antropol.* 2012;36:281-6.
12. Ajduk M, Bulimbasic S, Pavic L, Sarlija M, Patrlj L, Brkljacic B, Pavic P, Cikara I, Ivanac G. Comparison of multidetector-row computed tomography and duplex Doppler ultrasonography in detecting atherosclerotic carotid plaques complicated with intraplaque hemorrhage. *Coll Antropol.* 2013;37:213-9.
13. Ivanac G, Morović-Vergles J, Brkljačić B. Gray scale and color duplex Doppler ultrasound of hand joints in the evaluation of disease activity and treatment in rheumatoid arthritis. *Croatian Medical Journal* 2015 June 56(3):280-9.
14. Petaros A, Janković I, Cavalli F, Ivanac G, Brkljačić B, Čavka M. Mummified remains from the Archaeological Museum in Zagreb, Croatia - Reviewing peculiarities and limitations of human and non-human radiological identification and analysis in mummified remains.. *J Forensic Leg Med.* 2015 Oct;35:54-61.
15. Brkljačić B, Divjak E, Tomasović-Lončarić Č, Tešić V, Ivanac G. Shear-wave sonoelastographic features of invasive lobular breast cancers. *Croat Med J.* 2016 Feb;57(1):42-50.
16. Džoić Dominković M, Ivanac G, Kelava T, Brkljačić B. Elastographic features of triple negative breast cancers. *Eur Radiol.* 2016 Apr;26(4):1090-7.
17. Bojanic K, Katavic N, Smolic M, Peric M, Kralik K, Sikora M, Vidačić K, Pacovski M, Stimac D, Ivanac G. Implementation of Elastography Score and Strain Ratio in Combination with B-Mode Ultrasound Avoids Unnecessary Biopsies of Breast Lesions. *Ultrasound Med Biol.* 2017 Apr;43(4):804-816.
18. Medakovic P, Biloglav Z, Padjen I, Pristas I, Jukic M, Zuvela F, Ivanac G, Brkljacic B, Jukic T, Turk L. Quantification of coronary atherosclerotic burden with coronary computed tomography angiography: adapted Leaman score in Croatian patients. *Int J Cardiovasc Imaging.* 2018 Oct;34(10):1647-1655.
19. Hrkac Pustahija A, Ivanac G, Brkljacic B. US and MRI in the evaluation of mammographic BI-RADS 4 and 5 microcalcifications. *Diagn Interv Radiol.* 2018 Jul;24(4):187-194
20. Bojanić K, Bilić Ćurčić I, Kuna L, Kizivat T, Smolic R, Raguž Lučić N, Kralik K, Šerić V, Ivanac G, Tucak-Zorić S, Včev A, Smolić M. Association of Wnt Inhibitors, Bone Mineral Density and Lifestyle Parameters in Women with Breast Cancer Treated with Anastrozole Therapy. *J Clin Med.* 2018 Sep 17;7(9). pii: E287
21. Radovic N, Ivanac G, Divjak E, Biondic I, Bulum A, Brkljacic B. Evaluation of Breast Cancer Morphology Using Diffusion-Weighted and Dynamic Contrast-Enhanced MRI: Intermethod and Interobserver Agreement. *J Magn Reson Imaging.* 2018 Oct 16

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Ivanac G, Morović-Vergles J, Brkljačić B. Gray scale and color duplex Doppler ultrasound of hand joints in the evaluation of disease activity and treatment in rheumatoid arthritis. *Croatian Medical Journal* 2015 June 56(3):280-9.
2. Petaros A, Janković I, Cavalli F, Ivanac G, Brkljačić B, Čavka M. Mummified remains from the Archaeological Museum in Zagreb, Croatia - Reviewing peculiarities and limitations of human and non-human radiological identification and analysis in mummified remains.. *J Forensic Leg Med.* 2015 Oct;35:54-61.

3. Brkljačić B, Divjak E, Tomasović-Lončarić Č, Tešić V, Ivanac G. Shear-wave sonoelastographic features of invasive lobular breast cancers. *Croat Med J*. 2016 Feb;57(1):42-50.
4. Džoić Dominković M, Ivanac G, Kelava T, Brkljačić B. Elastographic features of triple negative breast cancers. *Eur Radiol*. 2016 Apr;26(4):1090-7.
5. Bojanic K, Katavic N, Smolic M, Peric M, Kralik K, Sikora M, Vidačić K, Pacovski M, Stimac D, Ivanac G. Implementation of Elastography Score and Strain Ratio in Combination with B-Mode Ultrasound Avoids Unnecessary Biopsies of Breast Lesions. *Ultrasound Med Biol*. 2017 Apr;43(4):804-816.
6. Medakovic P, Biloglav Z, Padjen I, Pristas I, Jukic M, Zuvela F, Ivanac G, Brkljacic B, Jukic T, Turk L. Quantification of coronary atherosclerotic burden with coronary computed tomography angiography: adapted Leaman score in Croatian patients. *Int J Cardiovasc Imaging*. 2018 Oct;34(10):1647-1655.
7. Hrkac Pustahija A, Ivanac G, Brkljacic B. US and MRI in the evaluation of mammographic BI-RADS 4 and 5 microcalcifications. *Diagn Interv Radiol*. 2018 Jul;24(4):187-194
8. Bojanić K, Bilić Ćurčić I, Kuna L, Kizivat T, Smolic R, Raguž Lučić N, Kralik K, Šerić V, Ivanac G, Tucak-Zorić S, Včev A, Smolić M. Association of Wnt Inhibitors, Bone Mineral Density and Lifestyle Parameters in Women with Breast Cancer Treated with Anastrozole Therapy. *J Clin Med*. 2018 Sep 17;7(9). pii: E287
9. Radovic N, Ivanac G, Divjak E, Biondic I, Bulum A, Brkljacic B. Evaluation of Breast Cancer Morphology Using Diffusion-Weighted and Dynamic Contrast-Enhanced MRI: Intermethod and Interobserver Agreement. *J Magn Reson Imaging*. 2018 Oct 16

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Researcher on project funded by Ministry of Science 2007-14 „Doppler and MSCT in diseases of kidneys and blood vessels“ 108-1080232-0141, PI Boris Brkljačić; 2015-16

External associate at FP7 project „Glow Brain“ (REGPOT-2012-CT2012-316120), PI Srećko Gajović;

Scientific investigator on project “ Sonoelastography and MRI in diagnosis and treatment of the breast cancer” supported by Croatian Science Foundation IP-2016-06-2997 University Hospital Dubrava, Zagreb(2016-)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Scientific investigator on project “ Sonoelastography and MRI in diagnosis and treatment of the breast cancer” supported by Croatian Science Foundation IP-2016-06-2997 University Hospital Dubrava, Zagreb(2016-)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: prof. Marina Ivanišević, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine,
Women's Clinical Hospital, University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: "Diabetes and Pregnancy",
"Physiology and biochemistry of uterus in pregnancy and labour"

BIOGRAPHY

EDUCATION

1994-1996. Postdoctoral study, Fogarty Fellowship; Name of the institution: UCLA, Los Angeles

1989. PhD.; Name of the institution: New York Hospital, Cornell University Medical College, Fulbright fellowship. University of Zagreb School of Medicine

1986 Master postgraduate studies in "Allergology and clinical immunology"; University of Zagreb School of Medicine

1982 Doctor of medicine (MD): University of Zagreb School of Medicine

Employment

2016 – Position: Full Professor tenure of Obstetrics and Gynecology; University of Zagreb School of Medicine

2009 – Position: Head of Unit for diabetes and fetal growth, Women's Clinical Hospital, University Hospital Centre Zagreb

1989 – Position: Cumulatively employed as Assistant at the School of Medicine (Department for Obstetrics and Gynecology) and University Hospital Centre Zagreb (Women's Clinical Hospital, Department for diabetes in pregnancy)

1985 – 1989 Position: Obstetrics and Gynecology residency, Women's Clinical Hospital, University Hospital Centre Zagreb

Previous employments

1982 – 1985 Position: General Practitioner, Primary Health Care Center, Zagreb

FELLOWSHIPS AND AWARDS

1994 – 1996 Fogarty fellowship, Postdoctoral study, UCLA, Los Angeles, SAD

1987 – 1988 Doctoral study, Fulbright fellowship; Cornell University Medical College, New York, SAD

SUPERVISION OF GRADUATE/ DOCTORAL STUDENTS AND POSTDOCTORAL RESEARCHERS

1997– 2017: Mentor of 1 master and 6 PhD thesis.

1. Sokol Karadjole, Vesna. „Adequacy of low- molecular- weight heparin prophylaxis in pregnant women with hereditary thrombophilia as a cause of recurrent pregnancy loss“. University of Zagreb School of medicine, 2018.

2. Horvatiček, Marina. “The impact of supplementation n-3 unsaturated fatty acids on concentration of C-peptide in pregnant women with type 1 diabetes mellitus“. Interdisciplinary Doctoral Study of Molecular biosciences, University of Osijek, 2017.

3. Šklempe Kokić, Iva. "The Impact of Structured Aerobic and Resistance Exercise on the Course and Outcome of Gestational Diabetes Mellitus". Fakulteta za matematiko, naravoslovje in informacijske tehnologije, University of Primorska, Kopar, Slovenija, 2016.

4. Juras, Josip. "Diabetes and metabolic syndrome after previous gestational diabetes" University of Zagreb School of medicine, 2015.

4. Bljajić, Danko. "The influence of gestational diabetes and obesity of mother on insulin resistance and levels of adiponectin, resistin and leptin in maternal and umbilical blood". University of Zagreb School of Medicine, 2010.

6. Červar-Živković, Mila. "Vasoactive substances in placentas of normal and preeclamptic pregnancies". University of Zagreb School of Medicine, 1997.

Mentor of master thesis:

1. Radončić, Erden. "Lupus anticoagulant in pregnant women with retained abortion". University of Zagreb School of Medicine, 1999.

TEACHING ACTIVITIES

2016 – Position: Full Professor tenure of Obstetrics and Gynecology, at Undergraduate and Graduate Study of Medicine in Croatian and English, Postgraduate study "Biomedicine and Health". University of Zagreb School of medicine

2011 – 2015: Cumulatively employed as Full Professor of Obstetrics and Gynecology at the School of Medicine (Department Obstetrics and Gynecology) and University Hospital Centre Zagreb (Women's Clinical Hospital)

2000 – 2011: Cumulatively employed as Associate Professor of Obstetrics and Gynecology at the School of Medicine (Department Obstetrics and Gynecology) and University Hospital Centre Zagreb (Women's Clinical Hospital)

1994 – 1999: Cumulatively employed as Assistant professor at the School of Medicine (Department Obstetrics and Gynecology) and University Hospital Centre Zagreb (Women's Clinical Hospital)

1990: Cumulatively employed as Assistant at the School of Medicine (Department Obstetrics and Gynecology) and University Hospital Centre Zagreb (Women's Clinical Hospital)

ORGANISATION OF SCIENTIFIC MEETINGS (conferences, congress, symposia)

Head and lecturer in courses for continuous medical education: Improvements in Perinatology, Prostaglandins in gynecology, obstetrics and related areas, New insights into the placenta, Hypertension and pregnancy, Diabetes and pregnancy, Neurological diseases and pregnancy, Emergencies in obstetrics and gynecology, Ultrasound in obstetrics and fetal medicine as well as Ultrasound in fetal cardiology.

ORGANISATIONAL RESPONSIBILITIES

2015-now: member of two committee (University of Zagreb School of Medicine):

- Committee for continuous professional medical education
- Committee for Student's Scientific Research

MEMBERSHIPS (e.g. scientific committees or associations; evaluation committees, editorial boards; etc.; specify the year and name of the institution) (if applicable):

2017- now: First Vice President of the Croatian Perinatal Association

2014- now: Associate member of Diabetes Pregnancy Study Group of European Association for the Study of Diabetes EASD

2014- now: A member of the Agency for Research of the European Commission (Research Executive Agency) as an expert for the evaluation of the program Horizon 2020

1987. Founder of International Society of Ultrasound, London, UK

1986. Member of Croatian Perinatal Association

President of the Croatian Perinatal Fund

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Djelmis J, Ivanišević M, Desoye G, van Poppel M, Berberovic E, Soldo D, Oreskovic S. Higher Cord Blood Levels of Fatty Acids in Pregnant Women With Type 1 Diabetes Mellitus. *J Clin Endocrinol Metab.* 2018 Jul 1;103(7):2620-2629. doi:10.1210/jc.2018-00272. PubMed PMID: 29722816.
2. Sklempe Kokic I, Ivanisevic M, Kokic T, Simunic B, Pisot R. Acute responses to structured aerobic and resistance exercise in women with gestational diabetes mellitus. *Scandinavian Journal of Medicine & Science in Sports.* 2018. 28(7):1793-1800.
3. Sklempe Kokic I, Ivanisevic M, Biolo G, Simunic B, Kokic T, Pisot R. Combination of a structured aerobic and resistance exercise improves glycaemic control in pregnant women diagnosed with gestational diabetes. *Women and Birth.* 2018. 31(4): e232-e238
4. Horvaticek M, Djelmis J, Ivanisevic M, Oreskovic S, Herman M. Effect of eicosapentaenoic acid and docosahexaenoic acid supplementation on C-peptide preservation in pregnant women with type-1 diabetes: randomized placebo controlled clinical trial. *Eur J Clin Nutr.* 2017 Aug;71(8):968-972. doi: 10.1038/ejcn.2017.46. Epub 2017 Apr 5. PubMed PMID: 28378851.
5. Blažević, Sofia Ana; Horvatiček, Marina; Kesić, Maja; Zill, Peter; Hranilović, Dubravka; Ivanišević, Marina; Desoye, Gernot; Štefulj, Jasminka. Epigenetic adaptation of the placental serotonin transporter gene (SLC6A4) to gestational diabetes mellitus. *PLoS One.* 2017. 12 (6):e0179934-e0179934
6. Sklempe Kokic I, Ivanisevic M, Uremović M, Kokic T, Pisot R, Šimunič B. Effect of therapeutic exercises on pregnancy-related low back pain and pelvic girdle pain: Secondary analysis of a randomized controlled trial. *Journal of rehabilitation medicine.* 2017. 49(3):251-257
7. Gauster M, Majali-Martinez A, Maninger S, Gutschi E, Greimel PH, Ivanisevic M, Djelmis J, Desoye G, Hiden U. Maternal Type 1 diabetes activates stress response in early placenta. *Placenta.* 2017 Feb;50:110-116. doi: 10.1016/j.placenta.2017.01.118. Epub 2017 Jan 16. PubMed PMID: 28161055.
8. Djelmis J, Pavić M, Mulliqi Kotori V, Pavlić Renar I, Ivanisevic M, Oreskovic S. Prevalence of gestational diabetes mellitus according to IADPSG and NICE criteria. *Int J Gynaecol Obstet.* 2016 Dec;135(3):250-254. doi: 10.1016/j.ijgo.2016.07.005. Epub 2016 Aug 27. PubMed PMID: 27612531.
9. Hod, Moshe; Mathiesen, Elisabeth R.; Jovanović, Lois; McCance, David R.; Ivanišević, Marina; Durán-Garcia, Santiago; Brøndsted, Lise; Nazeri, Avidah; Damm, Peter. A randomized trial comparing perinatal outcomes using insulin detemir or neutral protamine Hagedorn in type 1 diabetes. *Journal of maternal-fetal & neonatal medicine.* 2104. 27(1):7-13.
10. Berberovic E, Ivanisevic M, Juras J, Horvaticek M, Delas I, Djelmis J. Arachidonic and docosahexaenoic acid in the blood of a mother and umbilical vein in diabetic pregnant women. *J Matern Fetal Neonatal*

Med. 2013 Sep;26(13):1287-91. doi: 10.3109/14767058.2013.783800. Epub 2013 Apr 12. PubMed PMID: 23480524.

11. Lovrenčić MV, Honović L, Kralik S, Matica J, Prasek M, Pape-Medvidović E, Ivanisević M, Delmis J. Redefinition of gestational diabetes mellitus: implications for laboratory practice in Croatia. *Biochem Med (Zagreb)*. 2013;23(1):7-11.

12. Hiden U, Greimel P, Ghaffari-Tabrizi N, Dieber Rotheneder M, Ivanisevic M, Djelmis J, Desoye G. Type 1 diabetes impairs placental mmp expression in early pregnancy. *PLACENTA*. 2011 Sep;32(9):A115-A115.

13. Đelmiš J, Ivanišević M, Juras J. Consequences after previous gestational diabetes. *Journal of maternal-fetal and neonatal medicine*. 2009;21:125-128.

14. Hiden U, Glitzner E, Ivanisevic M, Djelmis J, Wadsack C, Lang U, Desoye G. MT1-MMP expression in first-trimester placental tissue is upregulated in type 1 diabetes as a result of elevated insulin and tumor necrosis factor-alpha levels. *Diabetes*. 2008 Jan;57(1):150-7. Epub 2007 Oct 10. PubMed PMID: 17928399.

15. Hiden U, Ivanisevic M, Djelmis J et al. Altered MT1-MMP expression in first trimester placental tissue of type-1 diabetic women. *Placenta*. 2007 Aug-Sep;28(8-9): A38-A38

16. Ivanisević M, Djelmis J, Jalsovec D, Bljajic D. Ultrasonic morphological characteristics of yolk sac in pregnancy complicated with type-1 diabetes mellitus. *Gynecol Obstet Invest*. 2006;61(2):80-6. Epub 2005 Oct 13. PubMed PMID: 16224187.

17. Djelmis J, Ivanisević M, Reljanović M, Ilijić M, Bljajić D, Tuzović L. [Cardiovascular neuropathy in pregnant women with type 1 diabetes]. *Acta Med Croatica*. 2003;57(4):275-80. Croatian. PubMed PMID: 14639861.

18. Starcevic V, Djelmis J, Ivanisevic M et al. The effect of glycemia on early embryonic development in diabetic pregnancies. *Prenatal and neonatal medicine*. 2001 Aug;6(4):208-213.

19. Ivanisević M, Buković D, Starcević V, Djelmis J, Pfeifer D. Influence of hyperglycemia on early embryonal growth in IDDM pregnant women. *Coll Antropol*. 1999 Jun;23(1):183-8. PubMed PMID: 10402721.

20. Djelmis J, Buković D, Pfeifer D, Ivanisević M. Ponderal index and disproportionate fetal growth in IDDM pregnancies. *Coll Antropol*. 1998 Dec;22(2):491-5. PubMed PMID: 9887605.

21. Djelmis J, Blajić J, Buković D, Pfeifer D, Ivanisević M, Kendić S, Votava-Raić A. Glycosylated hemoglobin and fetal growth in normal, gestational and insulin dependent diabetes mellitus pregnancies. *Coll Antropol*. 1997 Dec;21(2):621-9. PubMed PMID: 9439079.

22. Djelmis J, Bukovic D, Ivanisevic M et al. Risk factors in women with gestational diabetes and impaired glucose tolerance. *Collegium Antropologicum*. 1996 Dec;20(2):463-468.

23. Đelmiš, Josip; Radončić, Erden; Horvatiček, Marina; Ivanišević, Marina. Dietary effect on c-peptide preservation in type 1 diabetic pregnant women. *Gynaecologia et perinatologia*. 2015. 24 (1):31-36

Author of books:

Đelmiš, Josip; Ivanišević, Marina; Orešković, Slavko. *Hitna stanja u ginekologiji, opstetriciji i anesteziologiji*. Zagreb : Josip Đelmiš, 2011 (monografija).

Đelmiš, Josip; Ivanišević, Marina; Metelko, Željko. *Dijabetes u žena*. Zagreb : Medicinska naklada, 2009 (udžbenici).

Đelmiš, Josip; Desoye, Gernot; Ivanišević, Marina (ur.). *Diabetology of Pregnancy* Basel : Karger, 2005 (priručnik).

Đelmiš, Josip; Ivanišević, Marina (ur.). *Dijabetes u trudnoći*. Zagreb : Medias, 2002 (monografija).

Book chapters:

1. Ivanišević, Marina. Fiziologija trudnoće i mehanizam hranjivih tvari // *Fetalna medicina i opstetricija* / Đelmiš, Josip ; Orešković, Slavko (ur.). Zagreb : Medicinska naklada, 2014. Str. 125-131.
2. Ivanišević, Marina. Ultrazvučna prenatalna dijagnostika // *Fetalna medicina i opstetricija* / Đelmiš, Josip ; Orešković, Slavko (ur.). Zagreb : Medicinska naklada, 2014. Str. 167-177.
3. Ivanišević, Marina. Inicijacija porođaja // *Fetalna medicina i opstetricija* / Đelmiš, Josip ; Orešković, Slavko (ur.). Zagreb : Medicinska naklada, 2014. Str. 186-194.
4. Ivanišević, Marina. Pravilni i nepravilni trudovi // *Fetalna medicina i opstetricija* / Đelmiš, Josip ; Orešković, Slavko (ur.). Zagreb : Medicinska naklada, 2014. Str. 202-214.
5. Ivanišević, Marina. Treće porođajno doba i pregled posteljice // *Fetalna medicina i opstetricija* / Đelmiš, Josip ; Orešković, Slavko (ur.). Zagreb : Medicinska naklada, 2014. Str. 240-244.
6. Ivanišević, Marina. Klinički pristup trudnici s gestacijskim dijabetesom // *Gestacijski dijabetes: izazovi novih dijagnostičkih kriterija* / Vučić Lovrenčić, Marijana (ur.). Zagreb : Medicinska naklada ; Hrvatska komora medicinskih biokemičara, 2013. Str. 7-15.
7. Ivanišević, Marina. Ultrazvuk fetalnog srca u trudnice sa šećernom bolešću // *Fetalna i neonatalna kardiologija* / Malčić, Ivan ; Škrablin-Kučić, Snježana (ur.). Zagreb : Medicinska Naklada, 2011. Str. 202-206.
8. Ivanišević, Marina. Prenatalna ultrazvučna dijagnostika i nadzor fetusa u dijabetičnoj trudnoći // *Dijabetes u žena* / Đelmiš, Josip ; Ivanišević, Marina ; Metelko, Željko (ur.). Zagreb : Medicinska Naklada, 2009. Str. 239-258.
9. Ivanišević, Marina. Fiziologija trudnoće i metabolizam hranjivih tvari // *Porodništvo* / Kuvačić, Ivan ; Kurjak, Asim ; Đelmiš, Josip (ur.). Zagreb : Medicinska Naklada, 2009. Str. 68-74.
10. Ivanišević, Marina. Treće porođajno doba i pregled posteljice // *Porodništvo* / Kuvačić, Ivan ; Kurjak, Asim ; Đelmiš, Josip (ur.). Zagreb : Medicinska Naklada, 2009. Str. 210-215.
11. Ivanišević, Marina; Bljajić, Danko. Razvoj fetalnih pluća u dijabetičnoj trudnoći // *Dijabetes u žena* / Đelmiš, Josip ; Ivanišević, Marina ; Metelko, Željko (ur.). Zagreb : Medicinska Naklada, 2009. Str. 297-306.
12. Đelmiš, Josip; Ivanišević, Marina. Suvremeno vođenje porođaja // *Fiziologija trudnoće* / Milašinović, Ljubomir (ur.). Beograd : IP SKK Kosmos, 2005.
13. Ivanišević, Marina. Ultrasonic Surveillance of the Diabetic Fetus // *Diabetology of Pregnancy* / Djelmiš, Josip ; Desoye, Gernot ; Ivanišević, Marina (ur.). Basel : Karger, 2005.
14. Ivanišević, Marina. Fiziologija i biokemija uterusa u trudnoći // *Ginekologija i perinatologija II* / Kurjak, Asim ; Djelmiš, Josip (ur.). Varaždinske Toplice : Tonimir, 2004.
15. Ivanišević, Marina. Inicijacija poroda // *Ginekologija i perinatologija II* / Kurjak, Asim ; Djelmiš, Josip (ur.). Varaždinske Toplice : Tonimir, 2004.
16. Ivanišević, Marina. Pravilni i nepravilni trudovi // *Ginekologija i perinatologija II* / Kurjak, Asim ; Ivanišević, Marina (ur.). Varaždinske Toplice : Tonimir, 2004.
17. Đelmiš, Josip; Ivanišević, Marina; Mayer, Davor; Tuzović, Lea; Starčević, Vito; Ilijić, Marcela.

Placenta growth factor in healthy and diabetic mothers and their fetuses // *Perinatology* 2001 / Cabero, Luis ; Carrera, Jose Ma. (ur.). Bologna : Monduzzi Editore, 2001. Str. 671-674.

18. Ivanišević, Marina. Dijagnoza odumrle trudnoće ; načini evakuacije: mogućnosti, kontraindikacije i komplikacije // *Stručni poslijediplomski studij iz perinatologije-knjiga predavanja* / Kuvačić, Ivan (ur.). Zagreb : Medicinski fakultet u Zagrebu, 1999.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Djelmis J, Ivanišević M, Desoye G, van Poppel M, Berberovic E, Soldo D, Oreskovic S. Higher Cord Blood Levels of Fatty Acids in Pregnant Women With Type 1 Diabetes Mellitus. *J Clin Endocrinol Metab.* 2018 Jul 1;103(7):2620-2629. doi:10.1210/jc.2018-00272. PubMed PMID: 29722816.
2. Sklempe Kokic I, Ivanisevic M, Kokic T, Simunic B, Pisot R. Acute responses to structured aerobic and resistance exercise in women with gestational diabetes mellitus. *Scandinavian Journal of Medicine & Science in Sports.* 2018. 28(7):1793-1800.
3. Sklempe Kokic I, Ivanisevic M, Biolo G, Simunic B, Kokic T, Pisot R. Combination of a structured aerobic and resistance exercise improves glycaemic control in pregnant women diagnosed with gestational diabetes. *Women and Birth.* 2018. 31(4): e232-e238
4. Horvaticek M, Djelmis J, Ivanisevic M, Oreskovic S, Herman M. Effect of eicosapentaenoic acid and docosahexaenoic acid supplementation on C-peptide preservation in pregnant women with type-1 diabetes: randomized placebo controlled clinical trial. *Eur J Clin Nutr.* 2017 Aug;71(8):968-972. doi: 10.1038/ejcn.2017.46. Epub 2017 Apr 5. PubMed PMID: 28378851.
5. Blažević, Sofia Ana; Horvatiček, Marina; Kesić, Maja; Zill, Peter; Hranilović, Dubravka; Ivanišević, Marina; Desoye, Gernot; Štefulj, Jasminka. Epigenetic adaptation of the placental serotonin transporter gene (SLC6A4) to gestational diabetes mellitus. *PLoS One.* 2017. 12 (6):e0179934-e0179934
6. Sklempe Kokic I, Ivanisevic M, Uremović M, Kokic T, Pisot R, Šimunić B. Effect of therapeutic exercises on pregnancy-related low back pain and pelvic girdle pain: Secondary analysis of a randomized controlled trial. *Journal of rehabilitation medicine.* 2017. 49(3):251-257
7. Gauster M, Majali-Martinez A, Maninger S, Gutschi E, Greimel PH, Ivanisevic M, Djelmis J, Desoye G, Hiden U. Maternal Type 1 diabetes activates stress response in early placenta. *Placenta.* 2017 Feb;50:110-116. doi: 10.1016/j.placenta.2017.01.118. Epub 2017 Jan 16. PubMed PMID: 28161055.
8. Djelmis J, Pavić M, Mulliqi Kotori V, Pavlić Renar I, Ivanisevic M, Oreskovic S. Prevalence of gestational diabetes mellitus according to IADPSG and NICE criteria. *Int J Gynaecol Obstet.* 2016 Dec;135(3):250-254. doi: 10.1016/j.ijgo.2016.07.005. Epub 2016 Aug 27. PubMed PMID: 27612531.
9. Hod, Moshe; Mathiesen, Elisabeth R.; Jovanović, Lois; McCance, David R.; Ivanišević, Marina; Durán-García, Santiago; Brøndsted, Lise; Nazeri, Avidah; Damm, Peter. A randomized trial comparing perinatal outcomes using insulin detemir or neutral protamine Hagedorn in type 1 diabetes. *Journal of maternal-fetal & neonatal medicine.* 2104. 27(1):7-13.
10. Berberovic E, Ivanisevic M, Juras J, Horvaticek M, Delas I, Djelmis J. Arachidonic and docosahexaenoic acid in the blood of a mother and umbilical vein in diabetic pregnant women. *J Matern Fetal Neonatal Med.* 2013 Sep;26(13):1287-91. doi: 10.3109/14767058.2013.783800. Epub 2013 Apr 12. PubMed PMID: 23480524.
11. Lovrenčić MV, Honović L, Kralik S, Matica J, Prasek M, Pape-Medvidović E, Ivanisević M, Delmis J. Redefinition of gestational diabetes mellitus: implications for laboratory practice in Croatia. *Biochem Med (Zagreb).* 2013;23(1):7-11.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Project leader in Croatian Science Foundation: „Prevention of hypoglycemia in pregnant women with type 1 diabetes“, (IP-01-2018)

Collaborator: "Influence of maternal metabolic state on placental and neonatal serotonin system: from DNA methylation to protein function ", Croatian Science Foundation (IP-01-2018), PI Jasminka Štefulj, PhD

Project leader in Croatian Ministry of Science, Education and Sports projects:

2009-2014: "Diabetes and metabolic syndrome after previous gestational diabetes"

2002-2006: "Hypertension and pregnancy"

Collaborator in Croatian Ministry of Science, Education and Sports projects:

2007-2013: "Metabolic and endocrine changes in diabetic pregnant women (PI: prof. Josip Đelmiš, PhD)

1997-2006: "Diabetes and pregnancy" (PI: prof. Josip Đelmiš, PhD)

Collaborator in Catholic University of Croatia projects:

2017. Association of maternal emotional state in pregnancy and placental DNA methylation of serotonin-related genes (PI J. Štefulj, PhD)

2016. Serotonin transporter gene regulation in human placenta and establishment of a biobank for further research (PI J. Štefulj, PhD)

Project leader of Support for scientific research (University of Zagreb):

2018. „Prevention of hypoglycemia in pregnant women and puerpera with type 1 diabetes"

2017. "Prevention of hypoglycemia in pregnant women and puerperas with diabetes type 1"

2016. "The effect of diet on lipid content and adipokines concentration in placental tissue"

2015. "The effect of diet on lipid content in placental tissue"

Project investigator and principal investigator in Clinical trials Novonordisk A/S:

2013-2018. EVOLVE study Birth registry of diabetic women – non interventional study NN340-4016.

2007-2010: A randomised, parallel-group, open-labeled, multinational trial comparing the efficacy and safety of insulin Detemir (Levemir®), versus human insulin (NPH insulin), used in combination with insulin Aspart as bolus insulin in the treatment of pregnant women with type 1 diabetes.

Project co-investigator in Clinical trials Novonordisk A/S:

2002-2006: A randomised, parallel-group, open-label, multinational trial comparing the safety and efficacy and insulin Aspart (NovoRapid®) versus Human Insulin (Actrapid®) used in a multiple injection regimen in the treatment of pregnant women with type 1 diabetes focusing on maternal hypoglycemia and pregnancy outcome.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Project leader in Croatian Science Foundation: „Prevention of hypoglycemia in pregnant women with type 1 diabetes“, (IP-01-2018)



Collaborator: "Influence of maternal metabolic state on placental and neonatal serotonin system: from DNA methylation to protein function ", Croatian Science Foundation (IP-01-2018), PI Jasminka Štefulj, PhD

Project leader in Croatian Ministry of Science, Education and Sports projects:

2009-2014: "Diabetes and metabolic syndrome after previous gestational diabetes"

Collaborator in Catholic University of Croatia projects:

2017. Association of maternal emotional state in pregnancy and placental DNA methylation of serotonin-related genes (PI J. Štefulj, PhD)

2016. Serotonin transporter gene regulation in human placenta and establishment of a biobank for further research (PI J. Štefulj, PhD)

Project leader of Support for scientific research (University of Zagreb):

2018. „Prevention of hypoglycemia in pregnant women and puerpera with type 1 diabetes"

2017. "Prevention of hypoglycemia in pregnant women and puerperas with diabetes type 1"

2016. "The effect of diet on lipid content and adipokines concentration in placental tissue"

2015. "The effect of diet on lipid content in placental tissue"

Project investigator and principal investigator in Clinical trials Novonordisk A/S:

2013-2018. EVOLVE study Birth registry of diabetic women – non interventional study NN340-4016.

t of pregnant women with type 1 diabetes focusing on maternal hypoglycemia and pregnancy outcome.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 6

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Davor Ivanković, MD, PhD, Professor (retired)

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Retired professor

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: 1. Statistical Analysis of Medical Data 1

2. Medical Statistics 2.1: Statistical tools for medical data analysis in planned experimental study design

3. Medical Statistics 2.2: Statistical tools for medical data analysis in quasi-experimental study design

4. Medical Statistics 2.3: Statistical tools for medical data analysis in observational study design with large samples

5. Medical Statistics 2.4: Statistical tools for medical data analysis in observational study design with small samples

BIOGRAPHY

Born in Sisak, 1945. Retired professor-reelected of Medical statistics in the Department for medical statistics, epidemiology and medical informatics, A. Stampar School of Public Health, Medical School, University of Zagreb. Education and training:

Medical School, University of Zagreb, 1969. WHO Workshop on educational issues for teachers of health statistics and related subjects, University of Cardiff, Wales, UK, 1978. Specialty: Epidemiology 1979.

Methodology of Quality Assessment & Quality Assurance in Health Care fellowship (mentor Professor J.W. Williamson): Johns Hopkins School of Public Health, Baltimore, Md. 1982.

First WHO Training Course in Quality Assurance, Barcelona, Spain

Third WHO Training Course in Quality Assurance, Aranđelovac

Professional experience: Since 1971 affiliated with Andrija Stampar School of Public Health, Medical School, University of Zagreb as Assistant, Senior lecturer, Associate Professor (1987), Professor (1997) and Professor-reelected (2003) of Medical Statistics. Temporary adviser to WHO-Euro 1983-1986.

Research activities: MSc 1976 . PhD 1986. Over first 35 professional years co-investigator and principal investigator in numerous research programmes financed from local or foreign funds and since 2006 co-investigator in research project “How to measure health?” and “Regionalism of behavioral cardiovascular risks – intervention model”, financed by the Ministry of science, technology and education, RH. Mentored more than 10 PhD Theses.

Publications: 46 papers in CC indexed journals, 35 u other index publications, 18 other papers, 42 congress reports, 6 professional projects, 1 textbook, 1 textbook for PhD students (5 eds.), 12 teaching materials. Over 160 independent citations.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2003.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Franic M, Kujundzic Tiljak M, Pozar M, Romic D, Mimica M, Petrak J, Ivankovic D, Pecina M. Anterior versus posterior approach in 3D correction of adolescent idiopathic thoracic scoliosis: a meta-analysis. Orthop Traumatol Surg Res. 2012 Nov;98(7):795-802.

- Juresa V, Musil V, Majer M, Ivanković D, Petrović D. Behavioral pattern of overweight and obese school children. Coll Antropol. 2012 Jan;36 Suppl 1:139-46.
- Milanović SM, Ivanković D, Fister K, Poljicanin T, Brečić P, Vuletić S. Social conditioning of health behaviors among adults in Croatia: the CroHort study. Coll Antropol. 2012 Jan;36 Suppl 1:117-23.
- Milanović SM, Ivanković D, Uherik AI, Fister K, Peternel R, Vuletić S. Obesity--new threat to Croatian longevity. Coll Antropol. 2012 Jan;36 Suppl 1:113-6.
- Fister K, Ivanković D, Korsić M, Pavleković G, Milanović SM, Vuletić S, Kern J. Prevalence and five-year cumulative incidence of abdominal obesity in Croatian women of childbearing age: the CroHort study. Coll Antropol. 2012 Jan;36 Suppl 1:77-81.
- Milanović SM, Uherik AI, Fister K, Mihel S, Kovac A, Ivanković D. Five-year cumulative incidence of obesity in adults in Croatia: the CroHort study. Coll Antropol. 2012 Jan;36 Suppl 1:71-6.
- Poljicanin T, Dzakula A, Milanović SM, Sekerija M, Ivanković D, Vuletić S. The changing pattern of cardiovascular risk factors: the CroHort study. Coll Antropol. 2012 Jan;36 Suppl 1:9-13.
- Skrtić A, Korać P, Krišto DR, Ajduković Stojisavljević R, Ivanković D, Dominis M. Immunohistochemical analysis of NOTCH1 and JAGGED1 expression in multiple myeloma and monoclonal gammopathy of undetermined significance. Hum Pathol. 2010 Dec;41(12):1702-10.
- Miskovic B, Vasilj O, Stanojevic M, Ivanković D, Kerner M, Tikvica A. The comparison of fetal behavior in high risk and normal pregnancies assessed by four dimensional ultrasound. J Matern Fetal Neonatal Med. 2010 Dec;23(12):1461-7.
- Meniga IN, Tiljak MK, Ivankovic D, Aleric I, Zekan M, Hrabac P, Mazuranic I, Puljic I. Prognostic value of computed tomography morphologic characteristics in stage I non-small-cell lung cancer. Clin Lung Cancer. 2010 Mar 1;11(2):98-104.
- Benjak T, Jezic A, Janicar Z, Ivankovic D, Vuletic Mavrinac G. Potential problems in building social model of disability. Croat Med J. 2009 Dec;50(6):594-5.
- Kern J, Polasek O, Milanović SM, Dzakula A, Fister K, Strnad M, Ivanković D, Vuletić S. Regional pattern of cardiovascular risk burden in Croatia. Coll Antropol. 2009 Apr;33 Suppl 1:11-7.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Siniša Ivanković, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Laboratory animals in biomedical research

BIOGRAPHY

Personal data

Address: Odakova 7, Zagreb

Date and place of birth: July 7, 1964, Virovitica, Hrvatska

Nationality: Croatian

Education

- Doctor of Veterinary Medicine (DMV), University of Zagreb, Faculty of Veterinary Medicine, 1993
- MSc in Natural Sciences – Biology-Biomedicine, University of Zagreb, Faculty of Science, 1999
- PhD in Biomedical Sciences – University of Zagreb, Faculty of Veterinary Medicine, 2006
- Certification for work with experimental animals: LabAnim 3 – Laboratory Animal Science Course, FELASA cat. C equivalent, 2012

Employment

- Ruđer Bošković Institute, Division of Molecular Medicine, research assistant, 1999 – 2001
- Ruđer Bošković Institute, Division of Molecular Medicine, research assistant (scientific novice), 2002 – 2006
- Ruđer Bošković Institute, Division of Molecular Medicine, senior research assistant, 2006 – 2009
- Ruđer Bošković Institute, Division of Molecular Medicine, Senior adviser in science – research associate 2009, senior research associate 2011, senior scientist in biomedicine 2013

Research activities

Mr.sc. - Antitumoral effects of Newcastle disease virus: Faculty of Science, Division of Biology, University of Zagreb, 1999.

PhD - Antitumoral effects of lentogenic strains of Newcastle disease virus in presence of manganese, dexamethasone and indomethacine: Faculty of Veterinary Medicine, University of Zagreb, 2006.

Publications

- link on CROSBİ profile: <http://bib.irb.hr/lista-radova?autor=243083&lang=EN>

28 publications in peer reviewed journals, of which 18 in journals indexed in Current Contents, 1 conference paper with international peer-review, 14 abstract at international and national conferences

Mentorship

Supervisor of 3 PhD theses and co-supervisor of 5 graduation thesis, 1 master and 1 PhD thesis

Teaching activities

2012- ...” Animal models of rodents in experimental oncology”, collaborator, Postgraduate studies at Faculty of Science, University of Zagreb

2011-... „Laboratory animals in biomedical research“, collaborator, Postgraduate studies at Faculty of Medicine, University of Zagreb

2011-... „Animal models in experimental oncology“, collaborator, Postgraduate studies at Faculty of Medicine, University of Zagreb

2008-... „In vitro and in vivo studies of bioactive substances“, collaborator Postgraduate studies at the School of Dental Medicine, University of Zagreb

2007/2008 „Biology of tumor cells and tumor markers“, Collaborator, Undergraduate studies at Faculty of Pharmacy and Biochemistry, University of Zagreb

2001-2003 „Experimental oncology“, Collaborator, postgraduate studies, Faculty of Medicine, University of Osijek

Awards

Award of RBI for published scientific paper: PloS ONE 7(6): e39030. doi:10.1371/journal.pone.0039030 (2012); cover sheet of CC journals: Collection of Czechoslovak Chemical Communications 74 (2009)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2013

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Marasovic M, Ivankovic S, Stojkovic R, Djermic D, Galic B, Milos M (2017) In vitro and in vivo antitumour effects of phenylboronic acid against mouse mammary adenocarcinoma 4T1 and squamous carcinoma SCCVII cells. *Journal of Enzyme Inhibition and Medicinal Chemistry*. 32: 1299-1304.
- Ivanković S, Stojković R, Maksimović M, Borivoj G, Miloš M (2016) Impact of calcium ion on cytotoxic effect of the boroxine derivative, K₂[B₃O₃F₄OH]. *Journal of enzyme inhibition and medicinal chemistry*. 3, S3; 70-74.
- Jurin Martić A, Ivanković S, Antica M, Hiršl N, Jukić T, Jurin M (2015) Transplanted Tumor Growth and the Incidence of T-Lymphocyte Populations in the Spleen of Newcastle Virus-Treated Mice. *Cancer Biotherapy and Radiopharmaceuticals*. 30: 182-186.
- Misir Krpan A, Ivanković S, Krajina Z, Ivanković D, Stojković R (2012) The use of tamoxifen in trimodal therapy with anticancer drugs and induced hyperthermia can enhance therapeutic efficacy against melanoma B16-F10 in vivo. *Tumori*, 98: 257-263.
- Dubreta K, Ivanković S, Lovrenčić-Huzjan A, Bosnar-Puretić M, Stojković R, Jurin M (2009): The characterization of blood flow changes in mouse tumor during the Photofrin-based photodynamic therapy by using the color Doppler ultrasonography. *Oncol. Rep.*, 22: 1253-1257.
- Ivanković S, Musić S, Gotić M, Ljubešić N (2006): Cytotoxicity of nanosize V2O₅ particles to selected fibroblast and tumor cells. *Toxicology in Vitro*, 20: 286-294
- Ivanković S, Stojković R, Jukić M, Miloš M, Miloš M, M. Jurin (2006): The antitumour activity of thymoquinone and thymohydroquinone in vitro and in vivo. *Exp. Oncol.*, 28, 220-224.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Grienke U, Radić Brkanac S, Vujčić V, Urban E, Ivanković S, Stojković R, Rollinger JM, Kralj J, Brozović A, Radić Stojković M (2018): Biological activity of flavonoids and rare sesquiterpene lactones isolated from *Centaurea ragusina* L.. *Frontiers in Pharmacology*. 9.

- Feliciello I, Zahradka D, Zahradka K, Ivanković S, Puc N, Đermić D (2018) RecF, UvrD, RecX and RecN proteins suppress DNA degradation at DNA double-strand breaks in *Escherichia coli*. *Biochimie*. 148: 116-126.
- Marasovic M, Ivankovic S, Stojkovic R, Djermic D, Galic B, Milos M (2017) In vitro and in vivo antitumour effects of phenylboronic acid against mouse mammary adenocarcinoma 4T1 and squamous carcinoma SCCVII cells. *Journal of Enzyme Inhibition and Medicinal Chemistry*. 32: 1299-1304.
- Ivanković S, Vujaklija D, Đermić D (2017) Nucleolytic degradation of 3'-ending overhangs is essential for DNA-end resection in RecA-loading deficient recB mutants of *Escherichia coli*. *DNA repair*. 57: 56-65.
- Vujčić V, Radić Brkanac S, Radojčić Redovniković I, Ivanković S, Stojković R, Žilić I, Radić Stojković M (2017) Phytochemical and bioactive potential of in vivo and in vitro grown plants of *Centaurea ragusina* L. – Detection of DNA/RNA active compounds in plant extracts via thermal enaturation and circular dichroism. *Phytochemical analysis*. 28: 584-592.
- Đermić E, Zahradka D, Vujaklija D, Ivanković S, Đermić D (2017): 3'-terminated Overhangs Regulate DNA Double-Strand Break Processing in *Escherichia coli*. *G3-Genes Genomes Genetics*. 7: 3091-3102.
- Ivanković S, Stojković R, Maksimović M, Borivoj G, Miloš M (2016) Impact of calcium ion on cytotoxic effect of the boroxine derivative, K₂[B₃O₃F₄OH]. *Journal of enzyme inhibition and medicinal chemistry*. 3, S3; 70-74.
- Ivanković S, Stojković R, Galić Z, Galić B, Ostojić J, Marasović M, Miloš M (2015) In vitro and in vivo antitumor activity of the halogenated boroxine dipotassium- trioxohydroxytetrafluorotriborate (K₂[B₃O₃F₄OH]). *Journal of enzyme inhibition and medicinal chemistry*. 30: 354-359.
- Jurin Martić A, Ivanković S, Antica M, Hiršl N, Jukić T, Jurin M (2015) Transplanted Tumor Growth and the Incidence of T-Lymphocyte Populations in the Spleen of Newcastle Virus-Treated Mice. *Cancer Biotherapy and Radiopharmaceuticals*. 30: 182-186.
- Stojković R, Ivanković S, Ivanković D, Attias L, Mantovani A, Fučić A (2015) Testosterone-induced micronuclei and increased nuclear division rate in L929 cell line expressing the androgen receptor. *Toxicology in Vitro*. 29: 1021-1025.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- New therapeutic models in the treatment of malignant diseases
- Therapeutic effects of mushroom extracts, 2006-2009
- Antitumorous effects of viruses and oncolytic viral vaccines, 2002-2006
- 90 Day Oral Toxicity Study in Mice - performed for Medigence LLC, Chapel Hill, U.S.A., 2003
- Antitumorous effects of Newcastle disease virus, 1999-2001

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

New therapeutic models in the treatment of malignant diseases

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assistant Professor Alan Ivković

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of Molecular Biology in Medicine

BIOGRAPHY

Dr. Ivković graduated from the School of Medicine in Zagreb in 1999. His residency in orthopaedic surgery started in 2002, and he passed specialist exam in 2007. He obtained PhD degree in biomedical sciences in 2009, and the topic of his thesis was application of gene therapy in articular cartilage repair. Currently he is a consultant orthopedic surgeon at the University Hospital Sveti Duh in Zagreb. He is also assistant professor at the Department of Biotechnology University of Rijeka where he teaches regenerative medicine and tissue engineering. He also has academic affiliations with School of Medicine University of Zagreb and with faculty of Health Sciences in Zagreb. He authored numerous scientific articles published in peer-reviewed journals, as well as numerous chapters in books and encyclopedias. As an International Fulbright Fellow he spent academic year 2007/2008 in the Center for Molecular Orthopaedics at Harvard University in Boston, USA. He is a recipient of numerous domestic and international fellowships and awards. During his career he visited numerous international teaching institutions and participated in various courses, including those in Boston, Chicago, Amsterdam, Freiburg, Munich and Basel. His professional focus is adult lower extremity reconstructive surgery (including joint replacement and soft tissue surgery), as well as bone and cartilage tissue engineering. He is a team leader of the Croatian partner in the international consortium within EU FP7 project BIO-COMET (Bioreactor-based, clinically oriented engineering of tissues) and HORIZON 2020 project BIO-CHIP (Bioengineered grafts for cartilage healing in patients). He is a board member of the Croatian Orthopaedic Society and the national EBOT (European Board of Orthopaedic Surgery) delegate. As an official physician of the Croatian Water Polo Federation he participated in 2012 London Olympic Games (gold medalist), European Championships in Zagreb 2010 (gold medalist) and World Championships in Melbourne 2007 (gold medalist).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: April 7th 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Pećina M, Jelić M, Ivković A, Hudetz D. Gene therapy application in orthopaedics. *Int Orthop* 2006; 30(3): 215-216.
2. Ivković A, Pascher A, Hudetz D, Jelić M, Dickinson S, Matičić D, Hašpl M, Windhager R, Pećina M. Articular Cartilage Repair by Genetically Modified Bone Marrow Aspirate in Sheep. *Gene Therapy*, 2010; 17:779–789.
3. Ivkovic A, Marijanovic I, Hudetz D, Porter RM, Pecina M, Evans CH. Regenerative medicine and tissue engineering in orthopaedic surgery. *Front Biosci (Elite Ed)* 2011; 3:923-44.
4. Glatt V, Miller M, Ivkovic A, Liu F, Parry N, Griffin D, Vrahas M, Evans C. Improved Healing of Large Segmental Defects in the Rat Femur by Reverse Dynamization in the Presence of Bone Morphogenetic Protein-2. *J Bone Joint Surg Am.* 2012 Nov 21;94(22):2063-2073.
5. Gusic N, Ivkovic A, VaFaye J, Vukasovic A, Ivkovic J, Hudetz D, Jankovic S. Nanobiotechnology and bone regeneration: a mini-review. *Int Orthop* 2014; 38(9):1877-1884.

6. Panek M, Marijanovic I, Ivkovic A. Stem cells in bone regeneration. *Period Biolog* 2015; 1: 177-184.
7. Matic I, Antunovic M, Brkic S, Josipovic P, Caput Mihalic K, Karlak I, Ivkovic A, Marijanovic I. Expression of OCT-4 and SOX-2 in Bone Marrow-Derived Human Mesenchymal Stem Cells during Osteogenic Differentiation. *OAMJMS* 2016; 2016 Mar 15;4(1):9-16. doi: 10.3889/oamjms.2016.008
8. Liu F, Wells JW, Porter RM, Glatt V, Shen Z, Schinhan M, Ivkovic A, Vrahas MS, Evans CH, Ferreira E. Interaction between living bone particles and rhBMP-2 in large segmental defect healing in the rat femur. *J Orthop Res*. 2016 Dec;34(12):2137-2145. doi: 10.1002/jor.23255.
9. Naranda J, Sušec M, Maver U, Gradišnik L, Gorenjak M, Vukasović A, Ivković A, Rupnik MS, Vogrin M, Krajnc P. Polyester type polyHIPE scaffolds with an interconnected porous structure for cartilage regeneration. *Sci Rep*. 2016 Jun 24;6:28695. doi: 10.1038/srep28695.
10. Ćuti T, Antunović M, Marijanović I, Ivković A, Vukasović A, Matić I, Pećina M, Hudetz D. Capacity of muscle derived stem cells and pericytes to promote tendon graft integration and ligamentization following anterior cruciate ligament reconstruction. *Int Orthop*. 2017 Mar 15. doi: 10.1007/s00264-017-3437-y.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Ivkovic A, Hudetz D, Pecina M. Articular cartilage repair in athletes. Current concepts and future treatment. *Aspetar Sports Medicine Journal* 2013, 2: 256-261.
2. Rod E, Ivkovic A, Boric I, Jankovic S, Radic A, Hudetz D. Acute hyperextension/valgus trauma to the elbow in top-level adult male water polo goalkeepers: A cause of osteochondritis disicans of the capitellum? *Injury, Int J Care Injured* 2013; 44 Suppl: S46-8.
3. Pecina M, Ivkovic J, Cicvara-Pecina T, Ivkovic A. Orthogeriatrics – considerations in caring for older orthopaedic patient. *Period Biolog* 2013; 4: 527-533. (SCI-EXP)
4. Primorac D, Anticević D, Barisić I, Hudetz D, Ivković A. Osteogenesis imperfecta--multi-systemic and life-long disease that affects whole family. *Coll Antropol*. 2014 Jun;38(2):767-72.
5. Gusic N, Ivkovic A, VaFaye J, Vukasovic A, Ivkovic J, Hudetz D, Jankovic S. Nanobiotechnology and bone regeneration: a mini-review. *Int Orthop* 2014; 38(9):1877-1884. (CC)
6. Gusic N, Sabalic S, Pavic A, Ivkovic A, Sotosek-Tokmadzic A, Cicvaric T. Rationale for more consistent choice of surgical approaches for acetabular fractures. *Injury* 2015 Nov;46 Suppl 6:S78-86. doi: 10.1016/j.injury.2015.10.045.
7. Panek M, Marijanovic I, Ivkovic A. Stem cells in bone regeneration. *Period Biolog* 2015; 1: 177-184.
8. Matic I, Antunovic M, Brkic S, Josipovic P, Caput Mihalic K, Karlak I, Ivkovic A, Marijanovic I. Expression of OCT-4 and SOX-2 in Bone Marrow-Derived Human Mesenchymal Stem Cells during Osteogenic Differentiation. *OAMJMS* 2016; 2016 Mar 15;4(1):9-16. doi: 10.3889/oamjms.2016.008
9. Liu F, Wells JW, Porter RM, Glatt V, Shen Z, Schinhan M, Ivkovic A, Vrahas MS, Evans CH, Ferreira E. Interaction between living bone particles and rhBMP-2 in large segmental defect healing in the rat femur. *J Orthop Res*. 2016 Dec;34(12):2137-2145. doi: 10.1002/jor.23255.
10. Naranda J, Sušec M, Maver U, Gradišnik L, Gorenjak M, Vukasović A, Ivković A, Rupnik MS, Vogrin M, Krajnc P. Polyester type polyHIPE scaffolds with an interconnected porous structure for cartilage regeneration. *Sci Rep*. 2016 Jun 24;6:28695. doi: 10.1038/srep28695.
11. Ćuti T, Antunović M, Marijanović I, Ivković A, Vukasović A, Matić I, Pećina M, Hudetz D. Capacity of muscle derived stem cells and pericytes to promote tendon graft integration and ligamentization



following anterior cruciate ligament reconstruction. Int Orthop. 2017 Mar 15. doi: 10.1007/s00264-017-3437-y. (CC)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2005 – PRESENT (ASSOCIATE RESEARCHER): TREATMENT OF LARGE JOINT DEFECTS AND DISEASES, PROF. MIROSLAV HASPL (LEADER)

2004 – PRESENT (ASSOCIATE RESEARCHER): GENE THERAPY OF THE MINERALIZED TISSUES, ACADEMICIAN MARKO PECINA (LEADER)

2011 –PRESENT (LEADER OF THE GROUP): FP7 PROJECT - Bioreactor-based, Clinically Oriented Manufacturing of Engineered Tissues”

2015–PRESENT (LEADER OF THE GROUP): H2020 PROJECT „BIOengineered grafts for Cartilage Healing In Patients”

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2011 –PRESENT (LEADER OF THE GROUP): FP7 PROJECT - Bioreactor-based, Clinically Oriented Manufacturing of Engineered Tissues”

2015–PRESENT (LEADER OF THE GROUP): H2020 PROJECT „BIOengineered grafts for Cartilage Healing In Patients”

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Oleg Jadrešin, MD, MSc

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Children's Hospital Zagreb, Klaićeva 16, Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical nutrition

BIOGRAPHY

Date of birth: 1st February 1969

Nationality: Croat

Address: Ladučka 33, 10000 Zagreb, Croatia

Phone: + 385 91 8853265

E-mail: oleg.jadresin@gmail.com

Current position: Pediatric Gastroenterologist, Referral Center for Pediatric Gastroenterology and Nutrition, Children's Hospital Zagreb, Klaićeva 16, 10000 Zagreb, Croatia

EDUCATION

1975-1983 Primary school, Zadar, Croatia

1983-1987 Secondary school, Zadar, Croatia

1988-1994 Medical School University of Zagreb

1997 State Exam, Ministry of Health, Republic of Croatia

2000-2003 Residentsip in Pediatrics

2005-2007 Pediatric gastroenterology

FOREIGN LANGUAGES: English, German

WORKING EXPERIENCE

1995-1997 Internship

1997-1998 Health Care Centers, Emergency and Family Medicine Departments

1998-2000 Research Fellow, scientific project "Coeliac disease in children", Referral

Center for Paediatric Gastroenterology and Nutrition, Children's Hospital
Zagreb

2000-2003 Pediatric resident, Children's Hospital Zagreb

2003-2007 Pediatrician, Children's Hospital Zagreb

2007- Pediatric Gastroenterologist, Children's Hospital Zagreb

POSTGRADUATE EDUCATION

- Postgraduate Study „Health Care of Mother and Child“, Medical School, University of Zagreb (1998-1999)

- Postgraduate study "Medical Sciences", Medical School, University of Zagreb (2000-2001)

- Deutscher Akademischer Austauschdienst (DAAD), grant, „Dr. von Haunersches Kinderklinik und Kinderpoliklinik“, Ludwig Maximilians Universität, München, Abteilung für Gastroenterologie und Hepatologie (10/8/2009 – 31/1/2010), menthor: Professor Sibylle Koletzko

Postgraduate courses (main)

- International Seminars in Pediatric Gastroenterology, Hepatology and Nutrition, Salzburg (2000)
- European Society for Parenteral and Enteral Nutrition (ESPEN) - Basic Course of Parenteral and Enteral Nutrition, Budapest (2000)
- ESPGHAN Summer School “Advances in Pediatric Gastroenterology, Hepatology and Nutrition”, Zagreb (2001)
- ESPGHAN Summer School “«From Bench to Bedside in Pediatric Gastroenterology», Helsingør (2005)
- ESPGHAN Summer School “Nutrition and Immunity”, Cavtat (2007)
- Nestle Nutrition Institute Clinical Nutrition Course, Lausanne (2008)
- Pediatric Esophageal Diseases School, Children's Hospital, University Hospital Center Ljubljana, Slovenia (2010)
- APLS – Advanced Pediatric Life Support Course, Zagreb, 2010.
- High Resolution Manometry and Impedance-pH MMS Pediatric Training Course, Enschede, Netherlands 2011.
- ESPGHAN Pediatric Hepatology Summer School, Salerno, 2014.
- Metabolic Liver Disease 2014, Birmingham, 2014.
- Ultrasound in Gastroenterology, Medical School University of Zagreb, Zagreb, 2014.

Membership: Croatian Medical Association, Croatian Medical Chamber, Croatian Pediatric Society, Croatian Society for Pediatric Gastroenterology, Hepatology and Nutrition, European Society for Pediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN)

Reviewer: Journal of Pediatric Gastroenterology and Nutrition, Paediatrica Croatica

Main interest: cystic fibrosis, pancreatology, pediatric hepatology

Skills: upper gastrointestinal endoscopy, esophageal dilatation, percutaneous endoscopic gastrostomy, percutaneous liver biopsy, esophageal multichannel intraluminal impedance

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Original papers

1. Jadrešin O, Gjurić G. Intravenska primjena imunoglobulina G i prevencija sepe u zrelije novorođenčadi. *Gynecol Perinatol* 1996;5(1):31-33.
2. Percl M, Kolaček S, Jadrešin O, Boričević A, Kapitanović H, Grgurić J. Percl M, Kolaček S, Jadrešin O, Boričević A, Kapitanović H, Grgurić J. *Helicobacter pylori* i gastroduodenalne bolesti u naših bolesnika: 9-godišnje iskustvo. *Paediatr Croat* 1998;42:173-176.
3. Čačić M, Percl M, Jadrešin O, Kolaček S. Uloga cinka u inicijalnom liječenju Wilsonove bolesti u djece. The role of zinc as the initial treatment of Wilson's disease in children. *Liječ Vjesn* 2000;122(3-4):77-81.
4. Jadrešin O, Kolaček S, Percl M, Tambić A, Dasović I, Grgurić J. Jadrešin O, Kolaček S, Percl M, Tambić A, Dasović I, Grgurić J. Određivanje antigena *Helicobacter pylori* u stolici – nova metoda u dijagnostici infekcije HP u djece. *Paediatr Croat* 2000;44:141-144.

5. Kolaček S, Jadrešin O, Petkovic I, Mišak Z, Sonicki Z, Booth IW. Gluten-free diet has a beneficial effect on chromosome instability in lymphocytes of children with celiac disease. *J Pediatr Gastroenterol Nutr* 2004;38:177-80.
6. Čuković-Čavka S, Vermeire S, Hrštic I, Claessens G, Kolaček S, Jakić-Razumović J, Krznarić Z, Grubelić K, Radić D, Mišak Z, Jadrešin O, Rutgeerts P, Vucelić B. NOD2/CARD15 mutations in Croatian patients with Crohn's disease: prevalence and genotype-phenotype relationship. *Eur J Gastroenterol Hepatol* 2006;18(8):895-9.
7. Jadrešin O, Hojsak I. Akutni i kronični pankreatitis. *Paediatr Croat* 2006; 50 (Supl 1): 60-67.
8. Jadrešin O, Kolaček S. Specifičnosti gastroezogealnog refluksa u djece. *Medix* 2007; 70:93-97.
9. Jadrešin O, Mišak Z, Kolaček S, et al. Compliance with gluten-free diet in children with Coeliac disease. *J Pediatr Gastroenterol Nutr* 2008;47:344-48.
10. Pustišek N, Jaklin-Kekez A, Frkanec R, Sikanić-Dugić N, Mišak Z, Jadrešin O, Kolaček S. Our experiences with the use of atopy patch test in the diagnosis of cow's milk hypersensitivity. *Acta dermatovenerol Croat*. 2010; 18: 14-20.
11. Hojsak I, Kos T, Dumančić J, Mišak Z, Jadrešin O, Jaklin Kekez A, Lukić Grlić A, Kolaček S. Antibiotic resistance of *Helicobacter pylori* in pediatric patients - 10 years' experience. *Eur J Pediatr* 2012; 171 (9): 1325-30.
12. Mišak Z Hojsak I, Jadrešin O, Jaklin Kekez A, Abdović S, Kolaček S.
Diagnosis of coeliac disease in children younger than 2 years. *J Pediatr Gastroenterol Nutr* 2013; 56: 201-5.
13. Leniček Krleža J, Mišak Z, Jadrešin O, Škaric I. Refeeding syndrome in children with different clinical aetiology. *Eur J Clin Nutr* 2013;67(8):883-6.
14. Hojsak I, Mišak Z, Jadrešin O, Močić Pavić A, Kolaček S. Methotrexate is an efficient therapeutic alternative in children with thiopurine-resistant Crohn's disease. *Scand J Gastroenterol* 2015;15:1-6.
15. Hojsak I, Ivković L, Trbojević T, Pavić I, Jadrešin O, Mišak Z, Kolaček S. The role of combined 24-h multichannel intraluminal impedance-pH monitoring in the evaluation of children with gastrointestinal symptoms suggesting gastro-esophageal reflux disease. *Neurogastroenterol Motil*. 2016;28(10):1488-93.
16. Jadrešin O, Hojsak I, Mišak Z, Kekez AJ, Trbojević T, Ivković L, Kolaček S. *Lactobacillus reuteri* DS; 17938 in the treatment of functional abdominal pain in children: RCT study. *J Pediatr Gastroenterol Nutr* 2017;64:925-29.
17. Kifer T, Misak Z, Jadresin O, Hojsak I. Anterior Cutaneous Nerve Entrapment Syndrome in Children - Prospective Observational Study. *Clin J Pain* 2018;34(7): 670-3
18. Kovačić M, Unić J, Mišak Z, Jadrešin O, Konjik V, Kolaček S, Hojsak I. One-year outcomes in children with eosinophilic esophagitis. *Esophagus*. 2018 Oct 19. doi: 10.1007/s10388-018-0647-3
19. Jadrešin O, Pavić I. Postupnik za evaluaciju i liječenje gastroezofagusne refluksne bolesti u dječjoj dobi. *Paediatr Croat* 2018(Suppl 2);40-8.
20. Jadrešin O, Sila S, Trivić I, Mišak Z, Hojsak I, Kolaček S. Lack of Benefit of *Lactobacillus Reuteri* DSM 17938 as an Addition to the Treatment of Functional Constipation. *J Pediatr Gastroenterol Nutr* 2018;67(6):763-766.

Published poster presentations

1. Jadrešin O, Kolaček S, Percl M, Tambić A. Detection of *Helicobacter pylori* (HP) antigen in stool: a new diagnostic method ideal for children? *J Pediatr Gastroenterol Nutr* 1999;28:559
2. Jadrešin O, Matek Z, Percl M, Grgurić J, Grgić D, Žižić V, Kolaček S. Long-term influence of gluten-free diet on physical and psychological development of children with coeliac disease. *J Pediatr Gastroenterol Nutr* 2000;31(suppl 2):S65
3. Mičetić-Turk D, Kolaček S, Percl M, Dasović I, Jadrešin O, Lukić A. Randomized study of two tripple therapies in the eradication of *Helicobacter pylori* (HP) in children. *J Pediatr Gastroenterol Nutr* 2000;31(suppl 2):S149
4. Kolaček S, Petković I, Jadrešin O, Matek Z, Booth IW. Chromosomal aberrations in children with coeliac disease (CD): results of the follow-up study after a gluten-free diet. *J Pediatr Gastroenterol Nutr* 2001;32:360
5. Gjergja R, Barišić I, Jadrešin O, Fumić K. Early white matter lesions in Menkes disease. *Eur J Hum Genet* 2002;10 (suppl 1):208
6. Mišak Z, Jadrešin O, Hrštic I, Čuković-Čavka S, Kolaček S, Vucelić B. NOD2/CARD15 mutation in Croatian children with Crohn's disease. *J Pediatr Gastroenterol Nutr* 2003;36(4):567
7. Barišić I, Jadrešin O, Fumić K, Ligutić I. Two siblings with sialidosis type II: clinical, biochemical and neuroradiological study. *Neuropediatrics* 2003; 33: A67.
8. Mišak Z, Kolaček S, Percl M, Jadrešin O, Jaklin Kekez A. Primary antimicrobial resistance of *Helicobacter pylori* in children in Croatia. *J Pediatr Gastroenterol Nutr* 2004;39(Suppl I):S266
9. Hojsak I, Mišak Z, Jadrešin O, Kolaček S. Elective surgery in children with localized Crohn's disease proves to be highly successful treatment for improvement of growth and for prevention of relapse. *J Pediatr Gastroenterol Nutr* 2007;44:S47
10. Hojsak I, Mišak Z, Jadrešin O, Jaklin Kekez A, Abdović S, Kolaček S. Elective surgery in children with localized Crohn's disease is highly successful treatment. *Gut* 2008;57(Suppl II):A80
11. Mišak Z, Jadrešin O, Jaklin Kekez A, Hojsak I, Abdović S, Kolaček S. Characteristics of coeliac disease in children older than two years of age. *Gut* 2008;57(Suppl II):A226
12. Linarić I, Obuljen J, Žižić V, Leniček Krleža J, Grzunov A, Pejnović L, Nakić M, Jadrešin O. Fecal Elastase-1 Concentration in Pediatric Patients - First Experience. *Clinical Chemistry and Laboratory Medicine*. Berlin-New York : Walter de Gruyter, 2008. W116
13. Đuranović V, Mejaški-Bošnjak V, Lujić L, Krakar G, Gojmerac T, Jadrešin O, Mišak Z, Jaklin A, Lončarević D. Gastroezofagusni refluks - paroksizmalni neepileptički oštećenje u novorođenčadi i dojenčadi. *Neurologia Croatica*, 2008; 57 (Supl. 6):33-34.
14. Hojsak I, Mišak Z, Abdović S, Jaklin Kekez A, Jadrešin O, Kolaček S. Factors associated with failing of enteral nutrition in treatment of active paediatric Crohn's disease. *J Crohn's Colitis*.2009;3:S56.
15. Hojsak I, Mišak Z, Abdović S, Jaklin Kekez A, Jadrešin O, Kolaček S. Enteral nutrition versus corticosteroids in paediatric patients with Crohn's disease. *J Crohn's Colitis*.2009;3:S61.
16. Mišak Z, Jaklin Kekez A, Jadrešin O, Hojsak I, Percl M, Kolaček S. Combination of Marsh IIIc mucosal lesion on the first small bowel biopsy and positive antiendomysium antibodies is sufficient for the diagnosis of celiac disease in patients younger than age 2 years. *J Pediatr Gastroenterol Nutr* 2010;50: E70-71.

17. Jaklin Kekez A, Hojsak I, Pustišek N, Mišak Z, Jadrešin O, Kolaček S. Atopy patch test in children with cow`s milks protein allergy. *J Pediatr Gastroenterol Nutr* 2010;50: E84.
18. Jaklin Kekez A, Pustišek N, Mišak Z, Jadrešin O, Hojsak I, Kolaček S. Atopy patch test u djece s alergijom na kravlje mlijeko. *Paediatr Croat* 2010;54(Suppl 2):93.
19. Mišak Z, Jaklin Kekez A, Jadrešin O, Hojsak I, Abdović S, Percl M, Kolaček S. Kombinacija nalaza prve biopsije sluznice tankog crijeva Marsh IIC i pozitivnih endomizijskih protutijela dovoljna je za dijagnozu celijakije u bolesnika mlađih od 2 godine. *Paediatr Croat* 2010;54(Suppl 2):98.
20. Mrkić I, Mišak Z, Jaklin Kekez A, Jadrešin O, Kolaček S. Fetalni ascites i rani dojenački generalizirani edemi uzrokovani primarnim crijevnim limfangiektazijama. *Paediatr Croat* 2010;54(Suppl 2):96-97.
21. Hojsak I, Mišak Z, Jadrešin O, Jaklin Kekez A, Lukić Grlić A, Kolaček S. Incidence of *C. difficile* infection in IBD patients compared to oncology and immunocompetent patients. *Gut* 2011; 60 (Suppl 3) A418.
22. Kladnički T, Jadrešin O, Hojsak I, Mišak Z, Jaklin Kekez A, Močić Pavić A, Kolaček S. Dispepsija u djece – etiologija i primjena Rimskih kriterija. *Paediatr Croat* 2012; 56 (Suppl 2):77.
23. Hojsak I, Kos T, Dumančić J, Mišak Z, Jadrešin O, Jaklin Kekez A, Lukić Grlić A, Kolaček S. Rezistencija *Helicobacter pylori* na antibiotike – desetogodišnje iskustvo. *Paediatr Croat* 2012; 56 (Suppl 2):77-78.
24. Jadrešin O, Jaklin Kekez A, Jakovljević G, Lohse P, Mišak Z, Hojsak I, Barišić I, Kolaček S. Sindrom Shwachmann-Diamond - serija slučajeva. *Paediatr Croat* 2012; 56 (Suppl 2): 97.
25. Mišak Z, Jaklin Kekez A, Jadrešin O, Abdović S, Močić Pavić A, Kolaček S. Duljina opterećenja glutenom prije potvrde dijagnoze celijakije. *Paediatr Croat* 2012; 56 (Suppl 2):108.
26. Mišak Z, Jadrešin O, Jaklin Kekez A, Hojsak I, Močić Pavić A, Leniček Krleža J, Kolaček S. Sindrom "refeeding"- prikaz dvaju bolesnika. *Paediatr Croat* 2012; 56 (Suppl 2): 111.
27. Hojsak I, Strizić H, Mišak Z, Rimac I, Bukovina G, Prlić H, Jadrešin O, Jaklin Kekez A, Kolaček S. Sepse uzrokovane centralnim venskim kateteterom u djece na dugotrajnoj parenteralnoj prehrani. *Paediatr Croat* 2012; 56 (Suppl 2):112.
28. Jaklin Kekez A, Jadrešin O, Mišak Z, Hojsak I, Kolaček S, Marjanović J, Stipančić G, Marjanović J, Luetić T. Gastrinom - prikaz bolesnika. *Paediatr Croat* 2012; 56 (Suppl 2):113.
29. Jaklin Kekez A, Hojsak I, Mišak Z, Jadrešin O, Močić Pavić A, Abdović S, Kolaček S. Kronična bolest jetre udružena s upalnom bolesti crijeva. *Paediatr Croat* 2012; 56 (Suppl 2):113-114.
30. Močić Pavić A, Hojsak I, Mišak Z, Jaklin Kekez A, Jadrešin O, Kolaček S. Kronične upalne bolesti crijeva kod djece: izvještaj tercijarnog referentnog centra. *Paediatr Croat* 2012; 56 (Suppl 2):114.
31. Močić Pavić A, Jadrešin O, Hojsak I, Mišak Z, Jaklin Kekez A, Linarić I, Kolaček S. Određivanje fekalne elastaze u procjeni egzokrine funkcije pankreasa. *Paediatr Croat* 2012; 56 (Suppl 2): 115-116.
32. Kovačić M, Unić J, Mišak Z, Jadrešin O, Kolaček S, Hojsak I. Long-term follow up of children with eosinophilic esophagitis. *J Pediatr Gastroenterol Nutr* 2018;66(S2):366
33. Hojsak I, Kifer T, Mišak Z, Jadrešin O. Anterior cutaneous nerve entrapment syndrome in children - prospective observational study. *J Pediatr Gastroenterol Nutr* 2018;66(S2):435
34. Trivić I, Mišak Z, Jadrešin O, Kolaček S, Hojsak I. Initial diagnosis of functional gastrointestinal disorders in children increases a chance for resolution of symptoms. *J Pediatr Gastroenterol Nutr* 2018;66(S2):473-4

35. Bahtijarević Z, Štampalija F, Mesić M, Lesjak N, Petračić I, Kolaček S, Jadrešin O, Hojsak I. Treatment of achalasia using laparoscopic Heller method in Children's Hospital Zagreb. *Paediatr Croat* 2018(Suppl 2);114
36. Lesjak N, Bahtijarević Z, Štampalija F, Mesić M, Petračić I, Kolaček S, Jadrešin O, Hojsak I. Challenges of laparoscopic treatment of gastroesophageal reflux disease in children – experience from Children's Hospital Zagreb. *Paediatr Croat* 2018(Suppl 2);115
37. Trivić I, Mišak Z, Jadrešin O, Kolaček S, Hojsak I. Rano postavljanje dijagnoze funkcijskog gastrointestinalnog poremećaja u djece povećava vjerojatnost rezolucije simptoma. *Paediatr Croat* 2018(Suppl 2);133
38. Hojsak I, Kifer T, Jadrešin O, Mišak Z. Sindrom uklještenja živca u prednjoj trbušnoj stijenci (ACNES) – prospektivna promatrajna studija. *Paediatr Croat* 2018(Suppl 2);136
39. Trivić I, Mišak Z, Hojsak I, Jadrešin O, Kolaček S. Karakteristike akutnog pankreatitisa u djece: 10-godišnje iskustvo tercijarnog centra. *Paediatr Croat* 2018(Suppl 2);138
40. Unić J, Kovačić M, Jadrešin O, Mišak Z, Kolaček S, Hojsak I. Dugotrajno praćenje djece s eozinofilnim ezofagitisom. *Paediatr Croat* 2018(Suppl 2);139
41. Mazalin A, Jadrešin O, Hojsak I, Kolaček S, Mišak Z. Određivanje genske predispozicije za celijakiju članovima uže obitelji oboljele djece. *Paediatr Croat* 2018(Suppl 2);140
42. Pek S, Geljić A, Jadrešin O, Hojsak I, Mišak Z, Mesić M, Rustemović N, Roić G, Kolaček S. Konzervativno liječenje postraumatskih pseudocista pankreasa. *Paediatr Croat* 2018(Suppl 2);140-141
43. Trivić I, Jadrešin O, Jaklin Kekez A, Mišak Z, Hojsak I, Kolaček S. Wilsonova bolesti tijekom 10-godišnjeg razdoblja rada tercijarnog centra. *Paediatr Croat* 2018(Suppl 2);142-143
44. Trivić I, Badurina M, Jadrešin O, Omerza L, Kranjčec I, Hojsak I, Mišak Z, Vuković J, Kolaček S. Od pancitopenije do kongenitalne hepatalne fibroze – prikaz slučaja. *Paediatr Croat* 2018(Suppl 2);143
45. Mašić M, Jadrešin O, Milić N. Herpetični ezofagitis u dvogodišnjeg djeteta. *Paediatr Croat* 2018(Suppl 2);146
46. Zrinušić D, Kokić M, Hojsak I, Jadrešin O, Kolaček S, Mišak Z. Klinička prezentacija i endoskopski nalaz kod djece s infekcijom *Helicobacter pylori*. *Paediatr Croat* 2018(Suppl 2);148-149
47. Zrinušić D, Kokić M, Hojsak I, Jadrešin O, Kolaček S, Lukić-Grić A, Mišak Z. Učestalost antibiotske rezistencije u infekciji s *Helicobacter pylori*. *Paediatr Croat* 2018(Suppl 2);149
48. Badurina M, Trivić I, Jadrešin O, Hojsak I, Mišak Z, Guerin F, Franchi-Abella S, Roić G, Stepan Giljević J, Čizmić A, Vidjak V, Kolaček S. Prirođeni portokavalni šant – prikaz slučaja. *Paediatr Croat* 2018(Suppl 2);150
49. Melša M, Jadrešin O, Hojsak I, Kolaček S, Mišak Z. Celijakija i pridružene bolesti – retrospektivno istraživanje u Klinici za dječje bolesti Zagreb 2003-2018. *Paediatr Croat* 2018(Suppl 2);150-151
50. Badurina M, Mišak Z, Hojsak I, Jadrešin O, Kolaček S. Endoskopsko vađenje stranih tijela iz gornjeg dijela probavnog trakta – 10-godišnje iskustvo. *Paediatr Croat* 2018(Suppl 2);154-155
51. Badurina M, Jadrešin O, Mišak Z, Hojsak I, Mesić M, Kolaček S. Kolelitijaza u djece u tercijarnom centru – analiza desetogodišnjeg razdoblja. *Paediatr Croat* 2018(Suppl 2);157

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Mišak Z Hojsak I, Jadrešin O, Jaklin Kekez A, Abdović S, Kolaček S.

Diagnosis of coeliac disease in children younger than 2 years. *J Pediatr Gastroenterol Nutr* 2013; 56: 201-5.

2. Leniček Krleža J, Mišak Z, Jadrešin O, Škaric I. Refeeding syndrome in children with different clinical aetiology. *Eur J Clin Nutr* 2013;67(8):883-6.

3. Hojsak I, Mišak Z, Jadrešin O, Močić Pavić A, Kolaček S. Methotrexate is an efficient therapeutic alternative in children with thiopurine-resistant Crohn's disease. *Scand J Gastroenterol* 2015;15:1-6.

3. Hojsak I, Ivković L, Trbojević T, Pavić I, Jadrešin O, Mišak Z, Kolaček S. The role of combined 24-h multichannel intraluminal impedance-pH monitoring in the evaluation of children with gastrointestinal symptoms suggesting gastro-esophageal reflux disease. *Neurogastroenterol Motil.* 2016;28(10):1488-93.

4. Jadrešin O, Hojsak I, Mišak Z, Kekez AJ, Trbojević T, Ivković L, Kolaček S. *Lactobacillus reuteri* DS; 17938 in the treatment of functional abdominal pain in children: RCT study. *J Pediatr Gastroenterol Nutr* 2017;64:925-29.

5. Kifer T, Misak Z, Jadresin O, Hojsak I. Anterior Cutaneous Nerve Entrapment Syndrome in Children - Prospective Observational Study. *Clin J Pain* 2018;34(7): 670-3

6. Kovačić M, Unić J, Mišak Z, Jadrešin O, Konjik V, Kolaček S, Hojsak I. One-year outcomes in children with eosinophilic esophagitis. *Esophagus*. 2018 Oct 19. doi: 10.1007/s10388-018-0647-3

7. Jadrešin O, Pavić I. Postupnik za evaluaciju i liječenje gastroezofagusne refluksne bolesti u dječjoj dobi. *Paediatr Croat* 2018(Suppl 2);40-8.

8. Jadrešin O, Sila S, Trivić I, Mišak Z, Hojsak I, Kolaček S. Lack of Benefit of *Lactobacillus Reuteri* DSM 17938 as an Addition to the Treatment of Functional Constipation. *J Pediatr Gastroenterol Nutr* 2018;67(6):763-766.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME AND THE TITLE OF THE TEACHER: INES JAJIĆ, MD, PHD, scientific associate

NAME OF THE COURSE/MODULE THAT SHE TEACHES AT THE DOCTORAL PROGRAMME: Multiresistant bacteria associated with nosocomial infections

BIOGRAPHY

PERSONAL INFORMATION:

Vinogradska 29

10000 Zagreb

Tel.

Mob. 099/378 7026

e-mail adrese: ines.jajic@kbcsm.hr

EDUCATION

1987 School of Medicine, University of Zagreb

1988 Postgraduate Education course in epidemiology, School of Medicine, University of Zagreb

1990 Postgraduate Education course in Medical microbiology and parasitology, School of Medicine, University of Zagreb

1992 specialization in Medical microbiology and parasitology

ACADEMIC DEGREES

1987 MEDICAL DOCTOR, School of Medicine, University of Zagreb

2008 PhD School of Medicine, University of Zagreb

EMPLOYMENT

1993-1998 MD, microbiologist at the Department for Microbiology, Parasitology and Hospital infections at KBC Sestre Milosrdnice, Zagreb

1998-today Head of the Department for Microbiology, Parasitology and Hospital infections at KBC Sestre Milosrdnice, Zagreb

2011-today lecturer at the University of Applied Health Sciences, Zagreb

STUDY VISITS ABROAD

1991 Research Laboratory Microbiology Dept in Glasgow Royal Infirmary, Glasgow, Scotland

DATE OF LAST APOINTMENT TO THE RESEARCH AND TEACHING RANK: 2009

LIST OF PUBLISHED WORK WHICH QUALIFIES HER FOR THE IMPLEMENTATION OF THE PROGRAMME AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Jajić, Ines; Benčić, Ana; Siroglavić, Marko; Zarfel, Gernot; Ružić, Boris; Pezelj, Ivan; Bedenić, Branka.
Klebsiella pneumoniae OXA 48 in an urology patients: Case report. // Acta clinica Croatica. 56 (2017), 1; 166-171

- Jelić, Marko; Butić, Iva; Plečko, Vanda; Cipriš, Ivan; Jajić, Ines; Bejuk, Danijela; Koščak, Iva Marinković, Sonja; Payerl-Pal, Marina; Andrašević-Tambić, Arjana. KPC-Producing *Klebsiella pneumoniae* Isolates in Croatia: A Nationwide Survey. // *Microbial drug resistance-mechanisms epidemiology and disease*. 22 (2016) , 8; 662-667
- Bedenić, Branka; Zujic-Atalić, Vlasta; Jajić, Ines; Godić-Torkar, Karmen; Vraneš, Jasmina; Zarfel, Gernot; Grisold, Andrea. Clonal spread of *Klebsiella pneumoniae* producing KPC-2 beta-lactamase in Croatian. University Hospital. // *Journal of chemotherapy*. 27 (2014), 4; 241-245
- Zujic Atalić, Vlasta; Bedenić, Branka; Koczis, Erika, Mazzariol, Annarita; Sardelić, Sandra; Barišić, Marko; Plečko, Vanda; Bošnjak, Zrinka; Mijač, Maja; Jajić, Ines; Vranić-Ladavac, Mirna; Cornaglia, Giuseppe. Diversity of carbapenemases in clinical isolates of Enterobacteriaceae in Croatia-the result of a multicentre study. // *Clinical microbiology and infection*. 20 (2014) , 11; O895-O903
- Bago Rožanković, Petra; Lovrenčić Huzjan, Arijana; Čupić, Hrvoje; Jajić Benčić, Ines; Bašić, Silvio; Demarin, Vida. Influence of CagA-positive *Helicobacter pylori* strains on atherosclerotic carotid disease. // *Journal of neurology*. 258 (2011), 5; 753-761
- Jajić-Benčić, Ines; Bedenić, Branka; Mikoč, Andreja. Characterization of Extended-spectrum β -lactamases in Enterobacteriaceae Causing Nosocomial Infections. // *Journal of Chemotherapy*. 21 (2009), 3; 282-289
- Literacka, Elsbietta; Bedenić, Branka; Fiett, Janusz; Baraniak, Anna; Tonkić, Marija; Jajić-Benčić, Ines; Gniadkowski, Marek. bla(CTX-M) Genes in *Escherichia coli* Strains from Croatian Hospitals Are Located in New (bla(CTX-M-3a)) and Widely Spread (bla(CTX-M-3a) and bla(CTX-M-15)) Genetic Structures. // *Antimicrobial agents and chemotherapy*. 53 (2009), 4; 1630-1635
- Bedenić, Branka; Vraneš, Jasmina; Beader, Nataša; Jajić-Benčić, Ines; Plečko, Vanda; Uzunović-Kamberović, Selma; Kalenić, Smilja. Effect of inoculum size of enterobacteriaceae producing SHV and CTX-M extended spectrum β - lactamases on the susceptibility to β -lactam combinations with inhibitors and carbapene. // *Medicinski glasnik Ljekarske komore Zeničko- dobojskog kantona*. 6 (2009), 2; 166-172
- Vučičević, Željko; Jajić-Benčić, Ines; Krušlin, Božo; Degoricija, Vesna. Toxic shock syndrome due to group A streptococcal pharyngitis and bacteremia in adults. // *Journal of microbiology immunology and infection*. 42 (2009), 3; 276-279
- Jajić-Benčić, Ines; Bedenić, Branka; Đuras-Cuculić, Branka; Benčić, Ivan. Extended-spectrum beta-lactamase producing isolates of Enterobacteriaceae in a University Hospital, Zagreb, Croatia. // *Clinical Microbiology and Infection*. 12 (2006), Supplement 4; R1933
- Jajić-Benčić, Ines; Gaćina, Petar; Katalinić-Janković, Vera; Benčić, Ivan. *Nocardia asteroides* Pulmonary Infection: A Case Report. // *Acta clinica Croatica*. 41 (2002), 3; 259-262
- Jajić Benčić, Ines; Benčić, Ivan. Antibiotic resistance of gram-positive bacteria at the Sestre Milosrdnice University Hospital. // *Acta clinica Croatica*. 40 (2001); 15-19
- Jajić Benčić, Ines; Benčić, Ivan; Vukičević-Baudoin, Dina. Imipenem consumption and gram-negative pathogen resistance to imipenem at Sestre milosrdnice University Hospital. // *Acta clinica Croatica*. 40 (2001); 185-189
- Jajić Benčić, Ines. 9th European Congress of Clinical Microbiology and Infectious Diseases. // *Acta clinica Croatica*. 38 (1999), 3; 217-217
- Jajić-Benčić, Ines; Benčić, Ivan. Vancomycin-resistant enterococci. // *Acta clinica Croatica*. 38 (1999), 1; 33-37

Vukadinović, Marija-Vesna; Kiš, Marina; Jajić-Benčić, Ines. Needlestick and sharp injuries and recommended protective measures. // *Acta clinica Croatica*. 38 (1999); 131-136

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Jajić, Ines; Benčić, Ana; Siroglavić, Marko; Zarfel, Gernot; Ružić, Boris; Pezelj, Ivan; Bedenić, Branka. *Klebsiella pneumoniae* OXA 48 in an urology patients: Case report. // *Acta clinica Croatica*. 56 (2017), 1; 166-171

Jelić, Marko; Butić, Iva; Plečko, Vanda; Cipriš, Ivan; Jajić, Ines; Bejuk, Danijela; Koščak, Iva Marinković, Sonja; Payerl-Pal, Marina; Andrašević-Tambić, Arjana. KPC-Producing *Klebsiella pneumoniae* Isolates in Croatia: A Nationwide Survey. // *Microbial drug resistance-mechanisms epidemiology and disease*. 22 (2016) , 8; 662-667

Bedenić, Branka; Zujic-Atalić, Vlasta; Jajić, Ines; Godić-Torkar, Karmen; Vraneš, Jasmina; Zarfel, Gernot; Grisold, Andrea. Clonal spread of *Klebsiella pneumoniae* producing KPC-2 beta-lactamase in Croatian. University Hospital. // *Journal of chemotherapy*. 27 (2014), 4; 241-245

Zujic Atalić, Vlasta; Bedenić, Branka; Koczis, Erika, Mazzariol, Annarita; Sardelić, Sandra; Barišić, Marko; Plečko, Vanda; Bošnjak, Zrinka; Mijač, Maja; Jajić, Ines; Vranić-Ladavac, Mirna; Cornaglia, Giuseppe. Diversity of carbapenemases in clinical isolates of Enterobacteriaceae in Croatia-the result of a multicentre study. // *Clinical microbiology and infection*. 20 (2014) , 11; O895-O903

LIST OF SCIENTIFIC PROJECT IN WHICH SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2002-2006 collaborator on the project “Effect of subinhibitory concentrations of antibiotics” (Project no. 0219-281)

LIST OF PROJECT IN WHICH SHE PARTICIPATED IN THE LAST FIVE YEARS

UNIVERSITY GRANTS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Miro Jakovljević, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical psychopharmacology

BIOGRAPHY

Miro Jakovljević was born on January 27 1954, in Sarajevo , Bosnia and Herzegovina (B&H), graduated from the School of Medicine, University of Sarajevo in 1977. Since 1979, he is employed at the Department of Psychiatry, University Hospital Center (UHC) Zagreb, Croatia. He passed specialistic exam in 1983, got master's degree in 1984, after the postgraduate study of clinical pharmacology, and achieved PhD degree in 1989. In 1990 he became assistant professor, in 1993 higher scientific collaborator, in 1996 extraordinary, in 2003 full professor of psychiatry, and is a distinguished professor since 2007. He is a subspecialist in biological and social psychiatry. From 1998 to 2007 he was the head of the Ward for Biological Psychiatry, and from 2007 to 2015 the head of the Department of Psychiatry, UHC, Zagreb. He headed the Chair for Psychiatry, (2001-2013) and was the vice-dean for science of the School of Medicine, University of Mostar, B&H (2007-2013). From 2010-2012 he was the head of the Chair for Psychiatry and Psychological Medicine, School of Medicine, University of Zagreb. He is the editor-in-chief of the international journal "Psychiatria Danubina" (IF 1.232), cited in several indexing publications (Index Medicus/MEDLINE, SCIE, CC) and the journal "Socijalna psihijatrija". He is the member of many professional societies, Member of the Croatian Academy of Medical Sciences (AMZH), foreign member of the Academy of Sciences and Arts of Bosnia and Herzegovina (ANUBIH), the president of the Croatian Society for Psychopharmacotherapy and Biological Psychiatry, and from 2018 the president of Danubian Psychiatric Association. He published over 20 books and more than 200 scientific and professional papers, also having 28 chapters in the books of other authors. Also, he is the peer reviewer in many distinguished journals worldwide in the field of psychiatry and related disciplines. He passed the education in transactional analysis, NLP, hypnotherapy. His special interest is in clinical psychopharmacology and creative person-centered psychopharmacotherapy, biological psychiatry and transdisciplinary integrative psychiatry.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 12.04.2007.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Martinac M, Babić D, Bevanda M, Vasilj I, Glibo DB, Karlović D, Jakovljević M. Activity of the hypothalamic-pituitary-adrenal axis and inflammatory mediators in major depressive disorder with or without metabolic syndrome. *Psychiatr Danub*. 2017 Mar;29(1):39-50.

Jakovljević M, Ostojić L. Science and Pseudoscience in Medicine: Evidence-Based vs. Evidence-Biased Medicine. *Psychiatr Danub*. 2016;28:186-190.

Potočnjak I, Degoricija V, Vukičević Baudoin D, Čulig J, Jakovljević M. Cardiovascular side effects of psychopharmacologic therapy. *Int J Cardiol*. 2016;219:367-72.

Milicevic R, Jaksic N, Aukst-Margetic B, Jakovljevic M. Personality traits and treatment compliance in patients with type 2 diabetes mellitus. *Psychiatr Danub*. 2015;27:586-9.

Jaksic N, Aukst-Margetic B, Rózsa S, Brajkovic L, Jovanovic N, Vuksan-Cusa B, Grubisin J, Kudlek-Mikulic S, Jevtovic S, Marcinko D, Svrakic DM, Jakovljevic M. Psychometric properties and factor structure of the

Temperament and Character Inventory-Revised (TCI-R) in a Croatian psychiatric outpatient sample. *Compr Psychiatry*. 2015;57:177-86.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Jakovljevic M, Masic I, Ostojic L, Bevanda M, Begic E. Medical Hodegetics - Almost Forgotten Art and Science of Upbringing Medical Doctors.. *Psychiatr Danub*. 2019;31:2-8.

Jakovljevic M, Borovecki F. Epigenetics, Resilience, Comorbidity and Treatment Outcome. *Psychiatr Danub*. 2018;30:242-253..

Ziegler C, Wolf C, Schiele MA, Feric Bojic E, Kucukalic S, Sabic Dzananovic E, Goci Uka A, Hoxha B, Haxhibeqiri V, Haxhibeqiri S, Kravic N, Muminovic Umihanic M, Cima Franc A, Jaksic N, Babic R, Pavlovic M, Warrings B, Bravo Mehmedbasic A, Rudan D, Aukst-Margetic B, Kucukalic A, Marjanovic D, Babic D, Bozina N, Jakovljevic M, Sinanovic O, Avdibegovic E, Agani F, Dzibur-Kulenovic A, Deckert J, Domschke K. Monoamine Oxidase A Gene Methylation and Its Role in Posttraumatic Stress Disorder: First Evidence from the South Eastern Europe (SEE)-PTSD Study. *Int J Neuropsychopharmacol*. 2018;21:423-432.

Jakovljevic M. Resilience, Psychiatry and Religion from Public and Global Mental Health Perspective - Dialogue and Cooperation in the Search for Humanistic Self, Compassionate Society and Empathic Civilization. *Psychiatr Danub*. 2017;29:238-244.

Filipic I, Simunovic Filipic I, Ivezic E, Matic K, Tunjic Vukadinovic N, Vuk Pisk S, Bodor D, Bajic Z, Jakovljevic M, Sartorius N. Chronic physical illnesses in patients with schizophrenia spectrum disorders are independently associated with higher rates of psychiatric rehospitalization; a cross-sectional study in Croatia. *Eur Psychiatry*. 2017;43:73-80.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1985-1987: Coordinator of Project: "Biochemical Aspects of Mental Disorders" - School of Medicine, University of Zagreb

1987: Coordinator of Integrative Research Project: "Biological Markers in the Diagnosis and Treatment of Mental Disorders" - School of Medicine, University of Zagreb (Investigation of platelet 5-HT, serum GABA, gangliosides, the free radicals, endocrine and immune parameters)

1985-1987: One of the Coordinators of the WHO Study: "Chronobiology of Depression" in the WHO Collaborating Centre for Research and Training in Mental Health for Former Yugoslavia, Zagreb

1986: One of the Coordinators of the WHO Study: "Misuse of Psychotropic Substances in Traffic Conditions" in the WHO Collaborating Centre for Research and Training in Mental Health for Former Yugoslavia, Zagreb

1989-1994: Coordinator of the study "Lithium Every Second Day"

1993: The head of project "Long Term Treatment of Schizophrenia: An Integrative Biopsychosocial Research" within Croatian Brain Research Institute

1993-1998: Coordinator of Croatian "Leponex Safety Programme"

1993: Coordinator of the Project "Drug Treatment of Depression in Primary Care"

1996-2002 collaborator on Project "Neuropharmacology of GABA and 5-HT system", Ministry of Science and Education of the Republic of Croatia

2002-2006 Principal investigator of Project "Biological indicators of mental disorders", Ministry of Science and Education of the Republic of Croatia



2007-2011 Collaborator on Project “Pharmacogenetic variability of psychiatric patients”, Ministry of Science and Education of the Republic of Croatia

2007-2011 Principal Investigator of Project “Multidimensional analysis of biological markers in mental disorders”, Ministry of Science and Education of the Republic of Croatia

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2011-2017 Principal Investigator in Croatia of Project “Molecular mechanisms of posttraumatic stress disorder (PTSD)” - Deutscher Akademischer Austauschdienst (DAAD), Stability Pact for South Eastern Europe, Principal partner: Professor Juergen Deckert, MD (Wuerzburg, Germany)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

7

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Anamarija Jazbec, PhD, Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Faculty of Forestry, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: 1. Statistical Analysis of Medical Data 1

2. Medical Statistics 2.1: Statistical tools for medical data analysis in planned experimental study design

3. Medical Statistics 2.2: Statistical tools for medical data analysis in quasi-experimental study design

4. Medical Statistics 2.3: Statistical tools for medical data analysis in observational study design with large samples

5. Medical Statistics 2.3: Statistical tools for medical data analysis in observational study design with small samples

BIOGRAPHY

Born April 10th 1964. in Zagreb. Graduated from Faculty of Science, University of Zagreb, Statistics and Informatics 1988. Master degree from Faculty of Science, University of Zagreb, Biomathematics, 1995. PhD from Medical School, University of Zagreb, Public Health, 2001. Teaching courses Statistics for Engineers, Basics of Informatics, Biometrics, Basic Statistics, Applied Statistics, Statistical methods and models in forestry for undergraduate and graduate studies at the Faculty of Forestry, University of Zagreb, and Mathematical models in research and Statistical methods in research on postgraduate courses at Faculty of Forestry. At the graduate study of Mathematical Statistics, at Faculty of Science holds course in Statistical methods in biomedicine. From 2010-2016 president of Croatian biometric society. Author of 34 scientific papers (CC base), 36 scientific papers in SCI-based, 19 papers at international conferences and 44 abstracts at international conferences. h-index-11. She won Conference Award for Scientists at the 21st Conference of the International Society for Clinical Biostatistics at Trento, Italy 4-8.9.2000.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 17.1.2017. full professor tenure

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Pavlović M, Jazbec A, Šimić D, Čorović N, Malinar M, Mimica M. Variation in survival in coastal and continental regions of Croatia-Results of a longitudinal study. *European Journal of Epidemiology* 2001, 16: 1061-1068.
2. Jazbec A, Šimić D, Čorović N, Duraković Z, Pavlović M. Impact of coffee and other selected factors on general mortality and mortality due to cardiovascular disease in Croatia. *Journal of Health, Population and Nutrition* 2003, 21(4): 332-340.
3. Jazbec A, Delimar M, Slavić-Vrzić V. Simulation model of rubella –the effects of vaccination strategies. *Applied Mathematics and Computing* 2004,153(1): 75-96.
4. Fucic A, Znaor A, Strnad M, van der Hel O, Aleksandrov A, Miskov S, Grah J, Sedlar M, Jazbec AM, Ceppi M, Vermeulen R, Boffetta P, Norppa H, Bonassi S. Chromosome damage and cancer risk in the workplace: The example of cytogenetic surveillance in Croatia. [Article] *Toxicology Letters*. 172(1-2):4-11, 2007 Jul 30.

5. Ljubić S, Boras J, Jazbec A, Lučić Lovrenčić M., Vidjak V, Jurišić Erzen D, Mileta D. Adiponectin has different mechanisms in type1 and type 2 diabetes with C-peptide link. *Clin Invest Med* 2009. 32(4):E271-279.
6. Fučić A., Stojković R., Katić J., Marković D., Ferencić Z, Korišić M, Jazbec AM, Gamulin M Animal model for age- and seks- related genotoxicity of diethylstilbestrol, *Braz J Med Biol Res* 2009; 42(11),1090:1096.
7. Fučić A, Stojković R, Miškov S, Željezić D, Marković D, Gjergja R, Katić J, Jazbec AM, Bakulić TI, Demarin V. Transplacental genotoxicity of antiepileptic drugs: animal model and pilot study on mother/newborn cohort, *Reproductive Toxicology* (2010) 30(4), 613:618.
8. Bošnjak Ujević M, Capak K, Jazbec A, Casiot C, Sipos L, Poljak V, Dadić Ž (2012) Hydrochemical characterization of arsenic contaminated alluvial aquifers in Eastern Croatia using multivariate statistical techniques and arsenic risk assessment, *Science of the Total Environment* , 420,100:110.
9. Kašuba V, Rozgaj R, Milić M, Željezić D, Kopjar N, Pizent A, Kljaković-Gašpić Z, Jazbec A (2012) Evaluation of genotoxic effects of lead in pottery-glaze workers using micronucleus assay, alkaline comet assay and DNA diffusion assay. *International Archives of Occupational and Environmental Health*, 85(7), 807:818.
10. Nemčić-Jurec J, Konjačić M, Jazbec A (2013) Monitoring of nitrates in drinking water from agricultural and residential areas of Podravina and Prigorje (Croatia). *Environmental Monitoring and Assessment* , 185(11); 9509-9520
11. Tomić M, Ljubić S, Kaštelan S, Gverovic Antunica A, Jazbec A, Poljičanin T (2013) "Inflammation, Haemostatic Disturbance and Obesity: possible link to Pathogenesis of Diabetic Retinopathy in Type 2 Diabetes" , *Mediators of Inflammation*,(2013) ID 818671, 10 pages. (IF 3,882)
12. Ljubić S, Jazbec A, Tomić M, Piljac A, Jurišić Erzen D, Novak B, Kaštelan S, Vicić Lovrenčić M, Brkljačić N (2015) Inverse Levels of Adiponectin in Type 1 and Type 2 Diabetes Are in Accordance with the State of Albuminuria, *International Journal of Endocrinology*, Vol. 2015 , Article ID 372796, 8 pages, 2015. doi:10.1155/2015/372796 (IF=1.515)
13. Ankica Sekovanić, Jasna Jurasović, Martina Piasek, Daria Pašalić, Tatjana Orct, Antonija Sulimanec Grgec, Sandra Stasenko, Karmen Branović Čakanić, Anamarija Jazbec (2018) "Metallothionein 2A gene polymorphism and trace elements in mother-newborn pairs in the Croatian population", *Journal of Trace Elements in Medicine and Biology* 45; 163-170.
14. Mandić, J.J., Kozmar, A., Kusačić-Kuna, S., Jazbec A., Mandić K., Mrazovac D., Vukojević N.(2018) The levels of 12 cytokines and growth factors in tears: hyperthyreosis vs euthyreosis, *Graefes Arch Clin Exp Ophthalmol* <https://doi.org/10.1007/s00417-017-3892-6>

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

CC

1. Nemčić-Jurec J, Konjačić M, Jazbec A (2013) Monitoring of nitrates in drinking water from agricultural and residential areas of Podravina and Prigorje (Croatia). *Environmental Monitoring and Assessment* , 185(11); 9509-9520
2. Tomić M, Ljubić S, Kaštelan S, Gverovic Antunica A, Jazbec A, Poljičanin T (2013) "Inflammation, Haemostatic Disturbance and Obesity: possible link to Pathogenesis of Diabetic Retinopathy in Type 2 Diabetes" , *Mediators of Inflammation*,(2013) ID 818671, 10 pages. (IF 3,882)

3. Balenović Ivan, Jazbec Anamarija, Marjanović Hrvoje, Paladinić Elvis, Vuletić Dijana (2015) „Modelling Tree Characteristics of Individual Black Pine (*Pinus nigra* Arn.) Trees for Use in Remote Sensing-Based Inventory“, *Forests* ,6, 492-509.
 4. Balenovic I, Seletkovic A, Pernar R, Jazbec A (2015) Estimation of the mean tree height of forest stands by photogrammetric measurement using digital aerial images of high spatial resolution; *Annals of Forest Research*; 58(1): 125-143. (IF=0,444)
 5. Ljubić S, Jazbec A, Tomić M, Piljac A, Jurišić Erzen D, Novak B, Kaštelan S, Vicić Lovrenčić M, Brkljačić N (2015) Inverse Levels of Adiponectin in Type 1 and Type 2 Diabetes Are in Accordance with the State of Albuminuria, *International Journal of Endocrinology*, Vol. 2015 , Article ID 372796, 8 pages, 2015. doi:10.1155/2015/372796 (IF=1.515)
 6. Ostrogović M.Z., Marjanović H., Balenović I, Sever K., Jazbec A. (2015) Decomposition of fine woody debris from main tree species in lowland oak forests, *Pol. J. Ecol.* 63: 247-259. (IF=0.567)
 7. Faletar, J., Jelačić, D., Sedliačiková, M., Jazbec, A., and Hajdúchová, I. (2016). Motivating employees in a wood processing company before and after restructuring, *BioRes.* 11(1), 2504-2515. (IF=1.425)
 8. Bakšić N, Bakšić D, Jazbec A (2017) Hourly fine fuel moisture model for *Pinus halepensis* (Mill.) litter, *Agricultural and Forest Meteorology*. Volume 243, 15 September 2017, 93-99.
 9. Radunić M, Jazbec A, Čmelik Z, (2017)'Pollen-pistil interaction influence on the fruit set of sweet cherry' *Scientia Horticulturae*, 224C; pp. 358-366.
 10. Ankica Sekovanić, Jasna Jurasović, Martina Piasek, Daria Pašalić, Tatjana Orct, Antonija Sulimanec Grgec, Sandra Stasenکو, Karmen Branović Čakanić, Anamarija Jazbec (2018) "Metallothionein 2A gene polymorphism and trace elements in mother-newborn pairs in the Croatian population", *Journal of Trace Elements in Medicine and Biology* 45; 163-170.
 11. Mandić, J.J., Kozmar, A., Kusačić-Kuna, S., Jazbec A., Mandić K., Mrazovac D., Vukojević N. (2018) The levels of 12 cytokines and growth factors in tears: hyperthyreosis vs euthyreosis, *Graefes Arch Clin Exp Ophthalmol* <https://doi.org/10.1007/s00417-017-3892-6>
- SCI
1. Novotny Vladimir; Dekanić Stjepan; Božić Mario; Jazbec Anamarija; Dubravac Tomislav; Durbešić Anamarija (2013) Current state and the structural analysis of the mixed even-aged pedunculate oak and common hornbeam forests in Croatia; *Periodicum Bilogorum*; 115(3); 409-420.
 2. Goran JELIĆ, Vlado TOPIĆ, Lukrecija BUTORAC, Anamarija JAZBEC, Milan ORŠANIĆ (2014) CONTAINER SIZE AND SOIL PREPARATION EFFECTS ON AFFORESTATION SUCCESS OF ONE YEAR OLD STONE PINE (*Pinus pinea* L.) SEEDLINGS IN CROATIAN MEDITERRANEAN AREA , *Šumarski list*, 138 (5-6); 463-475(IF= 0.281)
 3. Krpina, Vesna; Spanjol, Zeljko; Jazbec, Anamarija (2014) THE ROLE OF FORESTS AND FORESTRY IN TOURISM AND NATURE PROTECTION IN THE ZADAR COUNTY AREA, *Šumarski list*, 138 (5-6); 271-281(IF= 0.281)
 4. Radunić, Mira; Goreta Ban, Smiljana; Vuletin Selak, Gabriela; Jazbec, Anamarija; Čmelik, Zlatko. Fruit Set of Sweet Cherry "Gomilička" is Influenced by Pollen Donor Genotype. // *Acta Horticulturae* 1020. 1 (2014) ; 65-69

5. Mirta Milić, Ružica Rozgaj, Vilena Kašuba, Ana-Marija Jazbec, Boris Starčević, Barnaba Lyzbicki, Gloria Ravegnini, Corrado Zenesini, Muriel Musti, Patrizia Hrelia, Sabrina Angelini (2015) Polymorphisms in DNA repair genes: link with biomarkers of the CBMN cytome assay in hospital workers chronically exposed to low doses of ionising radiation, *Arh Hig Rada Toksikol*; (66):109-120.
6. Goran JELIĆ, Vlado TOPIĆ, Lukrecija BUTORAC, Anamarija JAZBEC, Milan ORŠANIĆ Zoran Đurđević (2016) The impact of the container size and soil preparation on afforestation success of one year old holm oak (*Quercus ilex*) seedlings in Croatian Mediterranean area, *PERIODICUM BIOLOGORUM*, 117(4): 493-503
7. Kasumović Luka, Hrašovec B, Jazbec A (2016) UČINKOVITOST SUHIH I MOKRIH NALETNO BARIJERNIH THEYSOHN® FEROMONSKIH KLOPKI U LOVU SMREKOVIH POTKORNJAKA *Ips typographus* L. i *Pityogenes chalcographus* L., *Šumarski list*, 9-10, 477-484.
8. Jasna Nemčić Jurec, Sudhir Kumar Singh, Anamarija Jazbec, Sandeep Kumar Gautam, Ivan Kovac (2017) "Hydrochemical Investigations of Groundwater Quality for Drinking and Irrigational Purposes: Two Case Studies of Koprivnica-krizevci county (Croatia) and district Allahabad (India)" *Sustainable Water Resources Management* in press DOI 10.1007/s40899-017-0200-x
9. Nemcic-Jurec, Jasna; Jazbec, Anamarija (2017) Point source pollution and variability of nitrate concentrations in water from shallow aquifers *APPLIED WATER SCIENCE* Volume: 7 Issue: 3 Pages: 1337-1348 Published: JUN 2017
10. Andrić I, Jazbec A, Pintar V, Kajba D (2018) Modelling the timing of leaf unfolding in Pedunculate oak (*Quercus robur* L.) clonal seed orchard, *Šumarski list*, V142(3-4):137-148.

International Conferences

1. Tom Levanič, Nenad Potočić, Ivan Seletković, Anamarija Jazbec, Damir Ugarković, Krunoslav Indir (2013) Direct and indirect influence of climate on radial increment of beech (*Fagus sylvatica* L.) International Symposium on Wood Structure in Plant Biology and Ecology 17-20 April 2013 Napoli, Italy
2. Tom Levanič, Nenad Potočić, Ivan Seletković, Anamarija Jazbec, Damir Ugarković, Krunoslav Indir (2014) Comparison of various descriptors of tree vitality-A case study of a beech intensive monitoring plot in Croatia. 3rd ICP Forests Scientific Conference, 26-28.5.2014. Athens, Greece.
3. Jelić G, Topić V, Butorac L, Jazbec A (2014) Influence of Container Size on Quantitative Morphological Indicators of Aleppo pine (*Pinus halepensis* Mill.) One Year Old Seedlings. *Natural Resources, Green Technology and Sustainable Development*, 26-28 November, Zagreb, Croatia. Poster
4. Balenović I, Marjanović H, Jazbec A, Paladinić E, Indir K, Ivanković D, Vuletić D (2014) Modelling tree characteristics of individual Black pine trees for use in remote sensing based inventory, *Natural Resources, Green Technology and Sustainable Development*, 26-28 November, Zagreb, Croatia. Poster
5. Anamarija Jazbec, Damir Ugarkovic, Mislav Vedriš (2014) ANALYSIS OF DEFOLIATION USING LOGISTIC REGRESSION MODEL WITH ORDINAL RESPONSE in Jazbec A, Pecina M, Sonicki Z, Šimić D, Vedriš M, eds. (2014) *Book of Abstracts BIOSTAT 2014 – 21st International Scientific Symposium on Biometrics*, Dubrovnik 11-14 June 2014. Zagreb: Croatian Biometric Society. ISSN 1849-434X oral
6. Ljubic, S.; Tomic, M.; Piljac, A, Milotic DM, Duvnjak LS, Bulum T, Jazbec A (2014). Increased inflammatory and procoagulant state are responsible for vascular complications in diabetic patients with albuminuria accompanied by fatty liver, *DIABETOLOGIA* Volume: 57 Supplement: 1 Pages: S520-S520 Meeting Abstract: 1281 Published: SEP 2014

7. Ljubic, Spomenka; Jazbec, Anamarija; Tomic, Martina, Cuca JK, Piljac A, Milotic DM, Lovrencic MV(2014) Hypoglycaemia Could Be Accompanied with Autoimmunity and the Sign of Glucose Intolerance Development ,DIABETES Volume: 63 Supplement: 1 Pages: A649-A649 Meeting Abstract: 2563-PO Published: JUN 2014
8. Ljubic, Spomenka; Tomic, Martina; Jazbec, Anamarija, Milotic DM, Piljac A, Lovrencic MV(2014) Fatty Liver Additionally Increases Cardiovascular Risk in Diabetic Patients with Albuminuria DIABETES Volume: 63 Supplement: 1 Pages: A566-A566 Meeting Abstract: 2228-PO Published: JUN 2014
9. Bojan Basrak, Miljenko Huzak, Anamarija Jazbec(2015) The Cohort Mortality Tables for Croatian Population in Jazbec A, Pecina M, Sonicki Z, Šimic D, Vedriš M, eds. (2015) Book of Abstracts BIOSTAT 2015 – 22nd International Scientific Symposium on Biometrics, Dubrovnik, 28 June – 1 July 2015. Zagreb: Croatian Biometric Society. ISSN 1849-434X
10. Mislav Vedriš, Anamarija Jazbec(2015) Discrete choice analysis of forest inventory plot types in Croatian uneven-aged forests in Jazbec A, Pecina M, Sonicki Z, Šimic D, Vedriš M, eds. (2015) Book of Abstracts BIOSTAT 2015 – 22nd International Scientific Symposium on Biometrics, Dubrovnik, 28 June – 1 July 2015. Zagreb: Croatian Biometric Society. ISSN 1849-434X
11. Anamarija Jazbec, Ksenija Šegotić, Darko Motik (2015) Decision making on product line in furniture industry using survey results, correspondence analysis and AHP, at International Conference on Business and Economic Development (ICBED), New York, 30-31 March 2015. ISSN 2047-2854oral
12. Vesna Špac, Anamarija Jazbec (2016) Qualitative and quantitative changes of Croatian forestry journals-Results of link and correspondence analysis, International Statistical Conference in Croatia (ISCCRO 2016), Zagreb, 5-6 May 2016. P. 74; ISSN 1849-9864 oral
13. Vedriš M, Jazbec A, Šegotić K (2016) Choice of sample plot types by forest inventory experts in Croatian uneven-aged forests. In Book of Abstracts of 16th International Conference on Operation Research KOI2016, Osijek, Croatia, 27-29 September, 2016. P.58 oral
14. Ljubic, Spomenka; Piljac, Ante; Novak, Branko, Jazbec A(2015) Postprandial Hypoglycaemia May Reveal Patients with an Increased Risk for Diabetes Conference: 75th Scientific Sessions of the American-Diabetes-Association Location: Boston, MA Date: JUN 05-09, 2015 Sponsor(s): Amer Diabet Assoc DIABETES Volume: 64 Supplement: 1 Pages: A106-A106 Meeting Abstract: 406-P Published: JUN 2015
15. Ljubic, Spomenka; Jazbec, Anamarija; Piljac, Ante, Liraglutide's Impact on Inflammation Might Be Superior in Angio-protection Compared with Linagliptin and Vildagliptin Conference: 76th Scientific Sessions of the American-Diabetes-Association Location: New Orleans, LA Date: JUN 10-14, 2016 Sponsor(s): Amer Diabet Assoc DIABETES Volume: 65 Supplement: 1 Pages: A580-A580 Meeting Abstract: 2299-PUB Published: JUN 2016
16. Ljubic, Spomenka; Antal, Ivana; Jazbec, Anamarija, Tomic M, Piljac A, Smircic_Duvnjak L (2016) Patients with Elevated Homocysteine and Decreased Renal Function Showed an Increased Risk for Cerebrovascular Insult Conference: 76th Scientific Sessions of the American-Diabetes-Association Location: New Orleans, LA Date: JUN 10-14, 2016 Sponsor(s): Amer Diabet Assoc DIABETES Volume: 65 Supplement: 1 Pages: A115-A115 Meeting Abstract: 435-P Published: JUN 2016
17. Ljubic, Spomenka; Antal, Ivana; Jazbec, Anamarija, Tomic M, Smircic_Duvnjak L (2016) Uric Acid Is a Strong Predictor of Myocardial Infarction in Men with Decreased Renal Function Conference: 77th Scientific Sessions of the American-Diabetes-Association Location: San Diego, CA Date: JUN 09-13, 2017

Sponsor(s): Amer Diabet Assoc DIABETES Volume: 66 Supplement: 1 Pages: A115-A115 Meeting Abstract: 433-P Published: JUN 1 2017

18. Jazbec A, Vedriš M, Šegotić K (2017) Shorter study duration - better academic performance or not? Analysis of the duration of undergraduate studies at the Faculty of Forestry, University of Zagreb, 8th World Conference on Learning, Teaching and Educational Leadership, 26-28.10.2017.

19. Piljac, A.; Jazbec, A.; Duvnjak, L, Ljubic S(2018) .Liraglutide with an effect on asymmetric dimethylarginine might be superior in nephroprotection compared to linagliptin and vildagliptin Conference: 54th Annual Meeting of the European-Association-for-the-Study-of-Diabetes (EASD) Location: Berlin, GERMANY Date: OCT 01-05, 2018 Sponsor(s): European Assoc Study Diabetes DIABETOLOGIA Volume: 61 Supplement: 1 Pages: S356-S356 Meeting Abstract: 732 Published: OCT 2018

20. Ljubic, S.; Piljac, A.; Antal, I., Jazbec A, Duvnjak L(2018) HIGH-DENSITY LIPOPROTEIN BEHAVIOUR, AS AN ADIPONECTIN PREDICTOR, IMPLIES THE RISK OF TYPE 2 DIABETES Conference: 86th Congress of the European-Atherosclerosis-Society (EAS) Location: Lisbon, PORTUGAL Date: MAY 05-08, 2018 Sponsor(s): European Atherosclerosis Soc ATHEROSCLEROSIS Volume: 275 Pages: E194-E195 Meeting Abstract: P4.3.312 Published: AUG 2018

21. Piljac, A.; Ljubic, S.; Jazbec, A., Lovrencic MV, Duvnjak LSADIPONECTIN AND HIGH-DENSITY LIPOPROTEIN ARE CLOSELY RELATED TO FATTY LIVER, YET CYSTATIN C EMERGES AS AN IMPORTANT FACTOR IN THE PREDICTION OF DIABETIC NEPHROPATHY Conference: 86th Congress of the European-Atherosclerosis-Society (EAS) Location: Lisbon, PORTUGAL Date: MAY 05-08, 2018 Sponsor(s): European Atherosclerosis Soc ATHEROSCLEROSIS Volume: 275 Pages: E201-E202 Meeting Abstract: P4.4.337 Published: AUG 2018

22. Jazbec Anamarija, Vedriš Mislav, Šegotić Ksenija (2018) Analysis of the duration of undergraduate studies at the Faculty of Forestry University of Zagreb. International Scientific Conference „Forestry Science: Reflecting on the Past, Anticipating the Future“ 9.2.2018 Jastrebarsko, Croatia. Book of abstract:86-87.oral

23. Jazbec Anamarija, Kolić-Vehovec Svjetlana, Sladoljev-Agejev Tamara(2018) Analysing regression methods:the case of predicting text comprehension“ International Statistical Conference in Croatia. Opatija, Croatia10-11, May 2018. Book of abstract :11.oral

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Modelling interactions in estimation of survival 0022372 Project leader Ministry of science and technology RH 1997-2001
2. Mathematical and statistical models of hematological diseases 3-01-526 Project Associate Ministry of science and technology RH1991.-1996.
3. Stochastic-deterministic models in biomedicine 3-01-136 Project Associate Ministry of science and technology H 1991.-1996.
4. Estimation of mortality risks in different ecological biotopes 00220307 Project Associate Ministry of science and technology RH 1996.–2001.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mislav Jelić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Orthopaedic Clinic, Clinical Hospital Center Zagreb and University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Bone morphogenetic proteins in regeneration of bone and cartilage

BIOGRAPHY

Prof. Mislav Jelic graduated from the School of Medicine, University of Zagreb, Croatia, where he obtained his PhD in 2001. Between 1996 and 1999, he was a postdoctoral associate at the Laboratory for Mineralized Tissues, and a teaching assistant at Department of Anatomy, School of Medicine, University of Zagreb.

He finished his residency in orthopaedic surgery at the Department of Orthopaedic Surgery, University of Zagreb, in 2003 where he works as a staff member since.

He obtained an Assistant Professor title in 2009 and Associate Professor title in 2015. His research interest is related to biological reconstruction of the bone and articular cartilage.

He published some of the first clinical cases of the biological reconstruction of the skeleton with BMPs. He received several awards in the field including the ESSKA Best Poster Award in 1994 and the Hughston Award in 2009 together with a group of authors.

His clinical interest includes knee surgery with the greatest scientific interest in the regeneration of the articular cartilage. Prof. Jelic is the head of the biological reconstruction unit at the Department of Orthopaedic Surgery, University of Zagreb. He was also selected for four travelling fellowships: EFORT in 2001, ICRS in 2004, ESSKA-AOSSM in 2011 and Knee Society Insall TF in 2014.

His publications have been cited more than 2,000 times. As a part of his scientific work, he has been or currently is a leader of several projects mostly focusing on ACL reconstruction and articular cartilage repair for which he has received grants such as the Croatian Institute of Technology Grant, FP-7, etc. He is a co-inventor on four patent applications.

Publications: 80 scientific publications

Citations: More than 1600

Reviewer for medical journals:

International Orthopaedics; KSSTA (Knee Surgery Sports Traumatology and Arthroscopy); Journal of Orthopedics; Collegium Anthropologicum; Biotechnology and Bioengineering; American Journal of Sports Medicine.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Grgurevic L, Macek B, Mercep M, Jelic M, Smoljanovic T, Erjavec I, Dumic-Cule I, Prgommet S, Durdevic D, Vnuk D, Lipar M, Stejskal M, Kufner V, Brkljacic J, Maticic D, Vukicevic S. Bone morphogenetic protein (BMP)1-3 enhances bone repair. Biochemical and Biophysical Research Communications 408:25-31, 2011.
2. Anticevic D, Jelic M, Vukicevic S. Treatment of a congenital pseudarthrosis of the tibia by osteogenic protein-1 (bone morphogenetic protein-7): a case report. Journal of Pediatric Orthopaedics B 15:220-1, 2006.

3. Bilic R, Simic P, Jelic M, Stern-Padovan R, Dodig D, Pompe H, Martinovic S, Ivankovic D, Pecina M, Vukicevic S. Osteogenic protein-1 (BMP-7) accelerates healing of scaphoid non-union with proximal pole sclerosis. *International Orthopaedics* 30:128-34, 2006.
4. Mihelic R, Pecina M, Jelic M, Zoricic S, Kusec V, Simic P, Bobinac D, Lah B, Legovic D, Vukicevic S. BMP-7 (OP-1) promotes tendon graft integration in anterior cruciate ligament reconstruction in sheep. *American Journal of Sports Medicine* 32:1619-1625, 2004.
5. Pecina M, Jelic M, Martinovic S, Haspl M, Vukicevic S. Articular cartilage repair: the role of bone morphogenetic proteins. *International Orthopaedics (SICOT)* 26:131-136, 2002.
6. Jelic M, Pecina M, Haspl M, Brkic A, Vukicevic S. BMPs in articular cartilage repair. In: *Bone Morphogenetic Proteins: From Laboratory to Clinical Practice* (Editors: Vukicevic S, Sampath TK), PIR Series, Birkhauser Verlag AG, Basel, Boston, Berlin, pp 249-262, 2002.
7. Jelic M, Pecina M, Haspl M, Kos J, Taylor K, Maticic D, McCartney J, Yin S, Rueger D, Vukicevic S. Regeneration of articular cartilage chondral defects by osteogenic protein-1 (bone morphogenetic protein-7) in sheep. *Growth Factors* 19:101-113, 2001.
8. Russo A, Bianchi M, Sartori M, Boi M, Giavaresi G, Salter DM, Jelic M, Maltarello MC, Ortolani A, Sprio S, Fini M, Tampieri A, Marcacci M. Bone regeneration in a rabbit critical femoral defect by means of magnetic hydroxyapatite macroporous scaffolds. *J Biomed Mater Res B Appl Biomater.* 106(2):546-554, 2018.
9. Šimunović M, Nizić D, Pervan M, Radoš M, Jelić M, Kovačević B. The physiological range of the Böhler's angle in the adult Croatian population. *Foot Ankle Surg.* pii: S1268-7731(17)31307-3, 2017.
10. Dumić-Cule I, Pecina M, Jelic M, Jankolija M, Popek I, Grgurevic L, Vukicevic S. Biological aspects of segmental bone defects management. *Int Orthop.* 39(5):1005-11, 2015.
11. Jelic M, Grgurevic L, Vukicevic S. Scaffold-free Endogenous Healing of the Articular Cartilage Lesion. In: *Sports Injuries*, Springer Verlag, 2015.
12. Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, Pauk M, Erjavec I, Francetic I, Dumić-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikic-Topic S, Peric M, Pecina M, Grgurevic L. The clinical use of bone morphogenetic proteins revisited: a novel biocompatible carrier device OSTEOGROW for bone healing. *Int Orthop.* 38(3):635-47, 2014.

LIST OF SELECTED PUBLISHED WORK IN THE LAST FIVE YEARS

1. Russo A, Bianchi M, Sartori M, Boi M, Giavaresi G, Salter DM, Jelic M, Maltarello MC, Ortolani A, Sprio S, Fini M, Tampieri A, Marcacci M. Bone regeneration in a rabbit critical femoral defect by means of magnetic hydroxyapatite macroporous scaffolds. *J Biomed Mater Res B Appl Biomater.* 106(2):546-554, 2018.
2. Šimunović M, Nizić D, Pervan M, Radoš M, Jelić M, Kovačević B. The physiological range of the Böhler's angle in the adult Croatian population. *Foot Ankle Surg.* pii: S1268-7731(17)31307-3, 2017.
3. Dumić-Cule I, Pecina M, Jelic M, Jankolija M, Popek I, Grgurevic L, Vukicevic S. Biological aspects of segmental bone defects management. *Int Orthop.* 39(5):1005-11, 2015.
4. Jelic M, Grgurevic L, Vukicevic S. Scaffold-free Endogenous Healing of the Articular Cartilage Lesion. In: *Sports Injuries*, Springer Verlag, 2015.
5. Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, Pauk M, Erjavec I, Francetic I, Dumić-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikic-Topic S, Peric M, Pecina M, Grgurevic L. The clinical use of bone morphogenetic proteins revisited: a novel biocompatible carrier device OSTEOGROW for bone healing. *Int Orthop.* 38(3):635-47, 2014.



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

„Possible treatments of joint cartilage injuries and damage“ Croatian Ministry of Science, Education and Sport. Code: 0161

„Regeneration of knee cartilage damage“ Croatian Ministry of Science, Education and Sport. Code: TP06 0098-52

FP-7 project “Magnetic Scaffolds for in vivo tissue engineering”, acronym “MAGISTER”. Grant agreement No: NMP3-LA-2008-214685

“Reproductive and regenerative medicine – research of new platforms and potentials” part of the Croatian Scientific Center of Excellence in Regenerative Medicine, 2017-2022 (European Union through the European Regional Development Fund)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

“Reproductive and regenerative medicine – research of new platforms and potentials” part of the Croatian Scientific Center of Excellence in Regenerative Medicine, 2017-2022 (European Union through the European Regional Development Fund)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ana Branka Jerbić, PhD, dipl. ing. EE

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Electrophysiological methods in medical research

BIOGRAPHY

Ana Branka Jerbić (ex. Šefer) obtained a dipl. ing. degree in 2008 and a doctoral degree in 2015 from the Faculty of Electrical Engineering and Computing (FER) of the University of Zagreb (UniZg). Since 2009 she has been a research assistant at UniZg. She was involved in research and teaching activities at the laboratory POLIN, UniZg, and research activities of students enrolled at FER and at the interdisciplinary scientific postdoctoral study Language and Cognitive Neuroscience, UniZg. From April 2009 till December 2011 she participated in the work of the Laboratory for Cognitive and Experimental Neurophysiology, KBC Zagreb, and the Referral Centre for Epilepsy of Croatian Ministry of Health. During 2012 she spent three months in the Laboratory of Brain Computer Interfaces, Institute for Knowledge Discovery, Graz University of Technology. Since 2015 she has been a technology transfer associate at the Technology Transfer Office of the University of Zagreb where she is involved in technology transfer from academia to industry, primarily in the field of electrical engineering and medicine (projects: System for telemetric temperature measurement for rotational drivetrain elements (RotoTemp); Human Powered Electronic Transmission (HuPowET); Spatial orientation testing for early detection of Alzheimer disease (SPOT-ALZ); Genomic Tests for Diagnosis of Neurorasive Diseases (GENOMA-TEH)). Her scientific interests include the analysis of biomedical signals and machine learning applied to brain computer interfaces. She is a member of Croatian Biomedical Engineering and Medical Physics Society.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 29.04.2015.
postdoc at the University of Zagreb

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Krbot Skorić, I. Adamec, A.B. Jerbić, T. Gabelić, S. Hajnšek, and M. Habek, “Electroencephalographic Response to Different Odors in Healthy Individuals: A Promising Tool for Objective Assessment of Olfactory Disorders“, Clinical EEG and Neuroscience, Nov 2014, doi:10.1177/1550059414545649

Jerbic, AB, Horki, P, Sovilj, S, Isgum, V, Cifrek, M. Hilbert-Huang time-frequency analysis of motor imagery EEG data for brain-computer interfaces. 6th European Conference of the International Federation for Medical and Biological Engineering: IFMBE Proceedings. 2014; 45: 62 5.

Krbot Skoric M, Jerbic AB, Krois I, Cifrek M, Isgum V. Vibratory evoked potentials. 6th European Conference of the International Federation for Medical and Biological Engineering: IFMBE Proceedings. 2014; 45: 505-508.

Jerbić AB, Lučev Vasić Ž, Jurić-Kavelj S, Melinščak F, Lončar J, Štogl, D, Cifrek M, Petrović I. Concept of an intrabody networked brain-computer interface controlled assistive robotic system: 22nd International Workshop on Robotics in Alpe-Adria-Danube Region, 2013; 197 203.

Melinščak F, Jerbić AB, Cifrek M. A P300–Based Brain–Computer Interface: Towards a Simpler Approach. Proceedings of the 36th International Convention on Information and Communication Technology, Electronics and Microelectronics, 2013; 1321-24.M.



Gabelic T, Krbot M, Sefer AB, Isgum V, Adamec I, Habek M. Ocular and Cervical Vestibular Evoked Myogenic Potentials in Patients With Multiple Sclerosis. *J Clin Neurophysiol*. 2013; 30 (1): 86-91

Krbot M, Sefer AB, Cifrek M, Mitrovic Z, Krois I, Isgum V. Somatosensory vibratory evoked potentials: Stimulation Parameters. *Automatika*. 2011; 52: 31-38.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Krbot Skorić, I. Adamec, A.B. Jerbić, T. Gabelić, S. Hajnšek, and M. Habek, “Electroencephalographic Response to Different Odors in Healthy Individuals: A Promising Tool for Objective Assessment of Olfactory Disorders”, *Clinical EEG and Neuroscience*, Nov 2014, doi:10.1177/1550059414545649

Jerbic, AB, Horki, P, Sovilj, S, Isgum, V, Cifrek, M. Hilbert-Huang time-frequency analysis of motor imagery EEG data for brain-computer interfaces. 6th European Conference of the International Federation for Medical and Biological Engineering: IFMBE Proceedings. 2014; 45: 62 5.

Krbot Skoric M, Jerbic AB, Krois I, Cifrek M, Isgum V. Vibratory evoked potentials. 6th European Conference of the International Federation for Medical and Biological Engineering: IFMBE Proceedings. 2014; 45: 505-508

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2008.-2014. Research of the Neurophysiology of the Movement using the Evoked Potentials Method, Ministry of Science and Education Republic of Croatia, no. 312-0362979- 3258, research assistant

2008.-2011. Vagueness, Approximation, and Granularity, EuroCORES program LogICCC European Scientific foundation, research assistant

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Davor Ježek, Prof. Dr.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb, School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Reproduction and workplace;
Human reproduction; Methods of molecular biology in medicine

BIOGRAPHY

1982 – medical student, University of Zagreb, School of Medicine

1988 – medical doctor, University of Zagreb, School of Medicine

1989 – passed state exam; assistant, Institute of Histology and Embryology, University of Zagreb, School of Medicine

1990 – postgraduate studies in Oncology, University of Zagreb, School of Medicine

1991 – postgraduate studies in Medical Cytology, University of Zagreb, School of Medicine

1991-1994 - postgraduate education for Ph.D. thesis, University of Innsbruck (Dept. of Pathology) and University of Hamburg (Dept. of Andrology)

1995-current – permanent education at domestic and international meetings, conferences and congresses; invited speaker at more than 20 international meetings

Scientific and professional career:

1988- graduation paper: Sertoli Cells (mentor: As. Prof. Ljerka Banek, University of Zagreb, School of Medicine)

1991 – M. Sc. Thesis: “Influence of high doses of testosterone on the rat testis” (mentor: As. Prof. Ljerka Banek, University of Zagreb, School of Medicine)

1994 – Ph.D. Thesis: “Influence of orchiectomy on the rat parotid gland” (mentor: As. Prof. Ljerka Banek, University of Zagreb, School of Medicine)

Scientific and teaching occupation:

1989- assistant, Institute of Histology and Embryology, University of Zagreb, School of Medicine

1991 – scientific assistant, University of Zagreb, School of Medicine

1994 – senior assistant, University of Zagreb, School of Medicine

1999 – assistant professor, University of Zagreb, School of Medicine

2005 – associate professor, University of Zagreb, School of Medicine

2011- full professor, University of Zagreb, School of Medicine

Areas of research: histology and embryology, in vitro cell & tissue cultivation, andrology, biobanking, cell and tissue freezing, testis, testosterone, human reproduction, cryptorchidism, male infertility, testicular sperm extraction (TESE), genital ridge development, testis-distant organs interactions.

Techniques: light microscopy, fluorescent microscopy, electron microscopy, stereology, image analysis, immunohistochemistry, genital ridge isolation and micromanipulation, cells and tissue freezing, tissue banking

Other:

Current Projects: Co-chair, Center for Excellence in Reproductive and Regenerative Medicine at the School of Medicine of the University of Zagreb (EU K.K. 01.1.1.01.008); Project Leader, Internationalization of Higher Education EXPPAND (Experimental Pharmacology and Pathology and Summer School Organization Clinical Nutrition and Diet Therapy - EXPPAND ", European Social Fund / UP.03.1.1.02 /); project partner, ODISSeA (Organ Donation Innovative Strategies for South East Asia, Erasmus +); project partner, BIOCHIP (Bioengineered grafts for cartilage healing in patients, Horizon 2020 / No. 681103 /); project leader, EPISEM (Epigenetic biomarkers in blood and ejaculate of testicular semen, HRZZ / 3692 /); project leader of several domestic and international projects, collaborative project and translation program in biomedicine. Author of numerous publications in internationally indexed journals. Mentor 2 master's and 5 Ph. Theses. The bearer of multiple awards and awards. Currently Vice-Dean for International Cooperation and Head of Medical Studies in English, School of Medicine, University of Zagreb.

Knowledge of foreign languages:

English, German

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 19/04/2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Ježek D., Banek Lj. New in vitro systems for analysis of Sertoli cells. *Period. Biol.* 1990; 92:329-333. (CC, SCI)

Ježek D., Šimunić-Banek Lj., Pezerović-Panijan R. Effects of high doses of testosterone propionate and testosterone enanthate on rat seminiferous tubules - a stereological and cytological study. *Arch Toxicol* 1993; 67:131-140. (CC, SCI)

Ježek D., Banek Lj., Banek T. Effects of orchiectomy on the rat parotid gland - an ultrastructural and stereological study. *Acta Anatomica (Basel)* 1996; 155:172-183. (CC, SCI)

Ježek D., Hittmair T., Rogatsch H., Kos M. Lamina propria of sex cords in human fetal testis - an immunohistological and stereological study. *Anat. Embryol.* 1996; 193 (2): 181-190. (CC, SCI)

Rogatsch H., Ježek D., Hittmair A., Mikuz G., Feichtinger H. Expression of vimentin, cytokeratin, and desmin in Sertoli cells of human, fetal, cryptorchid, and tumour-adjacent testicular tissue. *Virchow's Arch Pathol* 1996;427 (5): 497-502. (CC, SCI)

Ježek D., Rogatsch H., Hittmair A., Schulze W. Structure of small blood vessels in human infertile testes - immunohistochemical and ultrastructural study. *Int J Androl* 1996; 19:299-306 (CC, SCI)

Ježek D., Knuth U. A., Schulze W. Successful testicular spermatozoa extraction (TESE) in spite of high serum FSH and azoospermia: correlation between testicular morphology, TESE results, semen analysis and serum hormone values in 103 infertile men. *Hum Reprod* 1998; 13 (5): 1230-1234 (CC, SCI)

Ježek D., Banek Lj., Hittmair A., Pezerović-Panijan R., Goluža T., Schulze W.: Mast cells in testicular biopsies of infertile men with "mixed atrophy" of seminiferous tubules. *Andrologia* (1999): 31(4) 203-210 (CC, SCI)

Pezerović-Panijan R., Grbeša Đ., Banek Lj., Ježek D., Relja Z., Puljiz M., Banek T., Čavčić J., Pezerović Dž.: Anthropological Measurements of the Skeleton and Parathyroid Glands Growth During Fetal Development. *Coll. Antropol.* (1999) 2: 737-744. (CC)

Bulić-Jakuš F., Strahinić-Belovari T., Marić S., Ježek D., Jurić-Lekić G., Vlahović M., Šerman D. Chemically defined protein-free in vitro culture of mammalian embryo does not restrict its developmental potential for differentiation of skin appendages. *Cells Tissues Organs.* 2001;169(2):134-43. (CC, SCI)

- Pezerović-Panijan R., Grbeša D., Banek L., Ježek D., Pezerović D., Čavčić J., Čanic R. The development of blood and lymph vessels of human parathyroid glands in embryonal, fetal and postnatal period. *Coll Antropol.* (2001); 25(1):333-40. (CC)
- Ježek D., Schulze W., Kalanj-Bognar S., Vukelić Ž., Milavec-Puretić V., Krhen I. Effects of various cryopreservation media and freezing-thawing on the morphology of the rat testicular biopsy. *Andrologia.* (2001); 33(6):368-78. (CC)
- Belovari T., Bulić-Jakuš F., Jurić-Lekić G., Marić S., Ježek D., Vlahović M. Differentiation of Rat Neural Tissue in a Serum-free Embryo Culture Model Followed by In Vivo Transplantation. *Croat Med J.* (2001) 42(6):611-617. (CC)
- Cotman M., Rozman D., Banek L., Ježek D. Localisation of lanosterol 14alpha-demethylase in round and elongated spermatids of the mouse testis: an immunoelectron microscopic and stereological study. *Pflugers Arch.* 2001;442(6 Suppl 1):R167-8. (CC)
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- Davidoff M.S., Middendorff R., Köföncü E., Müller D., Ježek D., Holstein A.F.: Leydig cells of the human testis possess astrocyte and oligodendrocyte marker molecules. *Acta Histochem.* 2002; 104 (1) 39-49. (CC, SCI)
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- Muller D., Davidoff M.S., Bargheer O., Paust H.J., Pusch W., Koeva Y., Jezek D., Holstein A.F., Middendorff R. The expression of neurotrophins and their receptors in the prenatal and adult human testis: evidence for functions in Leydig cells. *Histochem Cell Biol.* 2006 Feb 7;1-13 (CC)
- Pezerović-Panijan R., Grbesa D., Mederal P., Jezek D., Cavić A., Gorsić I. Do parathyroid glands from individuals of different age and gender contain lymph vessels? *Coll Antropol.* 2006 Jun;30(2):369-73. (CC)
- Barcot O., Balarin M., Gamulin O., Jezek D., Romac P., Brnjas-Kraljević J. Investigation of spermatozoa and seminal plasma by fourier transform infrared spectroscopy. *Appl Spectrosc.* 2007 Mar;61(3):309-13. (CC)
- Fucic A., Brunborg G., Lasan R., Jezek D., Knudsen L.E., Merlo D.F. Genomic damage in children accidentally exposed to ionizing radiation: A review of the literature. *Mutat Res.* 2008 Jan-Feb;658(1-2):111-23. Epub 2007 Nov 12. (CC)
- Šklebar D., Šemanjski K., Kos M., Šklebar I., Ježek D. Foetal Leydig cells and the neuroendocrine system. *Coll. Antopol.* 2008, 32, Suppl. 1: 149-153. (CC)
- Kalanj-Bognar S., Foretić B., Vukelić Ž., Gulin T., Ježek D. Cytotoxicity of selected pyridinium oximes in human SH-SY5Y neuroblastoma line. *Croatica Chemica Acta* 2008, 81 (1): 67-71. (CC)
- Romac P., Žanić-Grubišić T., Ježek D., Vučić M., Čulić O. Hydrolysis of extracellular adenine nucleotides by human spermatozoa: regulatory role of ectonucleotidases in sperm function. *Croatica Chemica Acta* 2008, 81 (1): 67-71. (CC)
- Katušić A., Jurić-Lekić G., Jovanov-Milošević N., Vlahović M., Ježek D., Šerman L., Sinčić N., Veljanovska B., Bulić-Jakuš F. Development of the fetal neural retina in vitro and in ectopic transplants in vivo. *Coll Antropol.* 2008 Mar; 32(1):201-7. (CC)

- Büdefeld T, Ježek D, Rozman D, Majdič G. Initiation of steroidogenesis precedes expression of cholesterogenic enzymes in the fetal mouse testes. *Anat Histol Embryol*. 2009 Nov; 38 (6):461-6. (CC)
- von Kopylow K, Kirchhoff C, Jezek D, Schulze W, Feig C, Primig M, Steinkraus V, Spiess AN. Screening for biomarkers of spermatogonia within the human testis: a whole genome approach. *Hum Reprod*. 2010 May;25(5):1104-12. doi: 10.1093/humrep/deq053. (CC)
- Kozina V, Geist D, Kubinová L, Bilić E, Karntaler HP, Waitz T, Janáček J, Chernyavskiy O, Krhen I, Ježek D. Visualization of Reinke's crystals in normal and cryptorchid testis. *Histochem Cell Biol*. 2011 Feb;135(2):215-28. doi: 10.1007/s00418-011-0782-6. (CC)
- Ježek D. (ed.): Atlas on the human testis: Normal morphology and pathology. Springer Verlag London, 285 pgs., London, 2013 (ISBN 987-1-4471-2763-5; DOI 10.1007/978-1-4471-2763-5) (>40.000 downloads)
- Kozina V, Banek Lj, Knezevic N, Geist D, Kubinova L, Kosovic M, Rentenberger, C, Vukasovic A, Jezek D. Reinke's Crystals in Perivascular and Peritubular Leydig Cells. *CROATICA CHEMICA ACTA*, 84 (2): 159-167.
- Kasum M, Oresković S, Ježek D. Spontaneous ovarian hyperstimulation syndrome. *Coll Antropol*. 2013 Jun;37(2):653-6. (CC)
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- Kasum M, Vrčić H, Stanić P, Ježek D, Orešković S, Beketić-Orešković L, Pekez M. Dopamine agonists in prevention of ovarian hyperstimulation syndrome. *Gynecol Endocrinol*. 2014 Aug 5:1-5
- Borovečki A, Caenazzo L, Ježek D, Karija-Vlahović M, Golubić B. Croatian National Centre for Biobanking - a new perspective in biobanks governance? *Croat Med J*. 2014 Aug 28;55(4):416-22
- Goluža T, Boscanin A, Cvetko J, Kozina V, Kosović M, Bernat MM, Kasum M, Kaštelan Z, Ježek D. Macrophages and Leydig cells in testicular biopsies of azoospermic men. *Biomed Res Int*. 2014;2014:828697.
- Borovečki A, Caenazzo L, Ježek D, Karija-Vlahović M, Golubić B. Croatian National Centre for Biobanking--a new perspective in biobanks governance? *Croat Med J*. 2014 Aug 28;55(4):416-22.
- Buljubašić R, Buljubašić M, Bojanac AK, Ulamec M, Vlahović M, Ježek D, Bulić-Jakuš F, Sinčić N. Epigenetics and testicular germ cell tumors. *Gene*. 2018 Jun 30;661:22-33. doi: 10.1016/j.gene.2018.03.072
- Katusic Bojanac A, Rogosic S, Sincic N, Juric-Lekic G, Vlahovic M, Serman L, Jezek D, Bulic-Jakus F. Influence of hyperthermal regimes on experimental teratoma development in vitro. *Int J Exp Pathol*. 2018 Jun;99(3):131-144. doi: 10.1111/iep.12273.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- Ježek D. (ed.): Atlas on the human testis: Normal morphology and pathology. Springer Verlag London, 285 pgs., London, 2013 (ISBN 987-1-4471-2763-5; DOI 10.1007/978-1-4471-2763-5) (>40.000 downloads)
- Kozina V, Banek Lj, Knezevic N, Geist D, Kubinova L, Kosovic M, Rentenberger, C, Vukasovic A, Jezek D. Reinke's Crystals in Perivascular and Peritubular Leydig Cells. *CROATICA CHEMICA ACTA*, 84 (2): 159-167.
- Kasum M, Oresković S, Ježek D. Spontaneous ovarian hyperstimulation syndrome. *Coll Antropol*. 2013 Jun;37(2):653-6. (CC)
- Kasum M, Danolić D, Orešković S, Ježek D, Beketić-Orešković L, Pekez M. Thrombosis following ovarian hyperstimulation syndrome. *Gynecol Endocrinol*. 2014 Jul 11:1-5.

Kasum M, Vrčić H, Stanić P, Ježek D, Orešković S, Beketić-Orešković L, Pekez M. Dopamine agonists in prevention of ovarian hyperstimulation syndrome. *Gynecol Endocrinol*. 2014 Aug 5:1-5

Borovečki A, Caenazzo L, Ježek D, Karija-Vlahović M, Golubić B. Croatian National Centre for Biobanking - a new perspective in biobanks governance? *Croat Med J*. 2014 Aug 28;55(4):416-22

Goluža T, Boscanin A, Cvetko J, Kozina V, Kosović M, Bernat MM, Kasum M, Kaštelan Z, Ježek D. Macrophages and Leydig cells in testicular biopsies of azoospermic men. *Biomed Res Int*. 2014;2014:828697.

Borovečki A, Caenazzo L, Ježek D, Karija-Vlahović M, Golubić B. Croatian National Centre for Biobanking--a new perspective in biobanks governance? *Croat Med J*. 2014 Aug 28;55(4):416-22.

Buljubašić R, Buljubašić M, Bojanac AK, Ulamec M, Vlahović M, Ježek D, Bulić-Jakuš F, Sinčić N. Epigenetics and testicular germ cell tumors. *Gene*. 2018 Jun 30;661:22-33. doi: 10.1016/j.gene.2018.03.072

Katusic Bojanac A, Rogosic S, Sincic N, Juric-Lekic G, Vlahovic M, Serman L, Jezek D, Bulic-Jakus F. Influence of hyperthermal regimes on experimental teratoma development in vitro. *Int J Exp Pathol*. 2018 Jun;99(3):131-144. doi: 10.1111/iep.12273

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 2019- Erasmus + project ODISSeA (Organ Donation Innovative Strategies for South-East Asia)
- 2018- Internationalisation in the area of higher education: EXPPAND – Introducing experimental pharmacology and pathology and organisation of summer schools Clinical nutrition and diet therapy (supported by European Social Fund, UP.03.1.1.02)
- 2018- Alliance4Life EU Horizon 2020 project, partner, member of the Steering Committee
- 2015- EU Horizon 2020 project BIOCHIP (BIOengineered grafts for Cartilage Healing In Patients)
- 2014-present co-ordinator, University of Zagreb, School of Medicine, Centre of Excellence for Reproductive and Regenerative Medicine; research unit: Biomedical investigation of reproduction and development
- 2002-2006: bilateral Croatian-Slovenian project “Histophysiological regulation of Leydig cells”
- 1995: grant, Austrian Ministry of Science and Research, Institute of Pathology, University of Innsbruck (Austria)
- 1994: NATO/FEBS grant for the postgraduate molecular biology course “Organisation of Early Vertebrate Embryo” (Spetsai, Greece)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 2019- Erasmus + project ODISSeA (Organ Donation Innovative Strategies for South-East Asia)
- 2018- Internationalisation in the area of higher education: EXPPAND – Introducing experimental pharmacology and pathology and organisation of summer schools Clinical nutrition and diet therapy (supported by European Social Fund, UP.03.1.1.02)
- 2018- Alliance4Life EU Horizon 2020 project, partner, member of the Steering Committee
- 2015-EU Horizon 2020 project BIOCHIP (BIOengineered grafts for Cartilage Healing In Patients)



- 2014-co-ordinator, University of Zagreb, School of Medicine, Centre of Excellence for Reproductive and Regenerative Medicine; research unit: Biomedical investigation of reproduction and development.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Nataša Jovanov Milošević, DVM, MSc, DSc

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb Medical School

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Neurobiology of aging; Methods of investigation in vivo and in vitro; Morphological research methods in biomedical sciences; Human developmental neurobiology;

BIOGRAPHY

Nataša Jovanov Milošević is a tenured Professor (first election) of Medical Biology and Neuroscience, and the Head of Laboratory for immunohistochemistry at the Croatian Institute for Brain Research of the University of Zagreb Medical School. At the Croatian Institute for Brain Research, prof. Jovanov Milošević also leads the Section for laboratory animals. She graduated from the University of Zagreb (School for Veterinary Medicine), in 1995; received MSc at Faculty for Natural Sciences in 2001, and Doctorate of biomedical sciences at School of Medicine in 2005. She has extensive expertise in the brain development and developmental disorders and has established international cooperation related to markers of brain extracellular matrix in development and collaboration on malformation of cortical development. Prof. Jovanov Milošević is deputy head of the DS Neuroscience and president of the Ethical Committee for the use of Animals in Research and Education at the School of Medicine University of Zagreb.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 14. 03. 2017..

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Ilić, K., Mlinac-Jerković, K., Jovanov-Milošević, N., Šimić, G., Habek, N., Bogdanović, N., Kalanj-Bognar, S. Hippocampal expression of cell-adhesion glycoprotein neuroplastin is altered in Alzheimer's disease (2018) Journal of Cellular and Molecular Medicine doi: 10.1111/jcmm.13998. [Epub ahead of print]
2. Molina-Herrera, R., Mlinac Jerković, K., Ilić, K., Stöber F., Vemula S.K., Sandoval M., Jovanov Milošević N., Šimić, G., Smalla K-H., Goldschmidt J., Kalanj Bognar S., Montag D. Neuroplastin deletion in glutamatergic neurons impairs selective brain functions and calcium regulation: implication for cognitive deterioration (2017) Scientific Reports 7 (1): 7273.
3. Šimić, G., Babić Leko, M., Wray, S., Harrington, C., Delalle, I., Jovanov-Milošević, N., Bažadona, D., Buée, L., de Silva, R., Di Giovanni, G., Wischik, C., Hof, P.R. Monoaminergic neuropathology in Alzheimer's disease (2017) Progress in Neurobiology, 151: 101-138.
4. Šimić, G., Babić Leko, M., Wray, S., Harrington, C., Delalle, I., Jovanov-Milošević, N., Bažadona, D., Buée, L., de Silva, R., Di Giovanni, G., Wischik, C., Hof, P.R. Tau protein hyperphosphorylation and aggregation in Alzheimer's disease and other tauopathies, and possible neuroprotective strategies (2016) Biomolecules, 6(1), E6.
5. Fuller, H.R., Slade, R., Jovanov-Milošević, N., Babić, M., Sedmak, G., Šimić, G., Fuszard, M.A., Shirran, S.L., Botting, C.H., Gates, M.A. Stathmin is enriched in the developing corticospinal tract (2015) Molecular and Cellular Neuroscience, 69: 12-21.
6. Jovanov Milošević, N., Petrović, D., Sedmak, G., Vukšić, M., Hof, P.R., Šimić, G. Human fetal tau protein isoform: possibilities for Alzheimer's disease treatment (2012) International Journal of Biochemistry and Cell Biology, 44 (8), pp. 1290-1294.

7. Judaš, M., Šimić, G., Petanjek, Z., Jovanov Milošević, N., Pletikos, M., Vasung, L., Vukšić, M., Kostović, I. The Zagreb Collection of human brains: a unique, versatile, but underexploited resource for the neuroscience community (2011) *Annals of the New York Academy of Sciences*, 1225 (SUPPL. 1), pp. E105-E130.
8. Šimić, G., Stanić, G., Mladinov, M., Jovanov Milošević, N., Kostović, I., Hof, P.R. Does Alzheimer's disease begin in the brainstem? Annotation (2009) *Neuropathology and Applied Neurobiology*, 35 (6), pp. 532-554.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Ilić, K., Mlinac-Jerković, K., Jovanov-Milošević, N., Šimić, G., Habek, N., Bogdanović, N., Kalanj-Bognar, S. Hippocampal expression of cell-adhesion glycoprotein neuropilin is altered in Alzheimer's disease (2018) *Journal of Cellular and Molecular Medicine* doi: 10.1111/jcmm.13998. [Epub ahead of print]
2. Molina-Herrera, R., Mlinac Jerković, K., Ilić, K., Stöber F., Vemula S.K., Sandoval M., Jovanov Milošević N., Šimić, G., Smalla K-H., Goldschmidt J., Kalanj Bognar S., Montag D. Neuropilin deletion in glutamatergic neurons impairs selective brain functions and calcium regulation: implication for cognitive deterioration (2017) *Scientific Reports* 7 (1): 7273.
3. Šimić, G., Babić Leko, M., Wray, S., Harrington, C., Delalle, I., Jovanov-Milošević, N., Bažadona, D., Buée, L., de Silva, R., Di Giovanni, G., Wischik, C., Hof, P.R. Monoaminergic neuropathology in Alzheimer's disease (2017) *Progress in Neurobiology*, 151: 101-138.
4. Šimić, G., Babić Leko, M., Wray, S., Harrington, C., Delalle, I., Jovanov-Milošević, N., Bažadona, D., Buée, L., de Silva, R., Di Giovanni, G., Wischik, C., Hof, P.R. Tau protein hyperphosphorylation and aggregation in Alzheimer's disease and other tauopathies, and possible neuroprotective strategies (2016) *Biomolecules*, 6(1), E6.
5. Sedmak G, Jovanov-Milošević N, Puskarjov M, Ulamec M, Krušlin B, Kaila K, Judaš M. (2016) Developmental Expression Patterns of KCC2 and Functionally Associated Molecules in the Human Brain. *Cereb Cortex* 26 (12), 4574-4589, (Q1)
6. Fuller HR, Slade R, Jovanov-Milošević N, Babić M, Sedmak G, Šimić G, Fuszard MA, Shirran SL, Botting CH, Gates MA. Stathmin is enriched in the developing corticospinal tract. *Mol Cell Neurosci*. 2015 Nov;69:12-21, (Q2)
7. Kosi N, Alic I, Kolacevic M, Vrsaljko N, Jovanov Milošević N, Sobol M, Philimonenko A, Hozák P, Gajović S, Pochet R, Mitrečić D. (2015) Nop2 is expressed during proliferation of neural stem cells and in adult mouse and human brain. *Brain Research* 1597: 65-76, (Q3)
8. Jovanov-Milosevic N, Judas M, Aronica E, Kostovic I. (2014) Neural ECM in laminar organization and connectivity development in healthy and diseased human brain. *Brain Extracellular Matrix in Health and Disease* 214: 159-78, (Q1)
9. Kostovic I, Jovanov-Milosevic N, Rados M, Sedmak G, Benjak V, Kostović-Srzić M, Vasung L, Čuljat M, Radoš M, Hüppi P, Judaš M. 2014. Perinatal and early postnatal reorganization of the subplate and related cellular compartments in the human cerebral wall as revealed by histological and MRI approaches. *Brain Structure & Function* 219: 231-53, (Q1)
10. Hladnik A, Dzaja D, Darmopil S, Jovanov-Milosevic N, Petanjek Z. (2014) Spatio-temporal extension in site of origin for cortical calretinin neurons in primates. *Frontiers in Neuroanatomy* 8, (Q1)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2017-2022: The European Union through the European Regional Development Fund, Operational Programme Competitiveness and Cohesion, grant agreement no. KK.01.1.1.01.0007, CoRE – Neuro, Scientific Centre for Excellence in Basic, Clinical and Translational Neuroscience,
<http://zci.hiim.hr/index.php/en/zci-neuro>

2018: University of Zagreb project BM054/2018 „Reorganization of the extracellular matrix in the development of human brain in health and disease“

2017: University of Zagreb project BM054/2017 „Reorganization of the extracellular matrix in the development of frontal lobe of human brain“

2016: University of Zagreb project BM054/2016 „Reorganization of the extracellular matrix in the development of human brain“

2014-2017 HIUMRICO-(Histological/MRI COmparative research approach for perinatal diagnostic improvement)

2017-2020 European Network on Brain Malformations, CA16118

<https://www.cost.eu>; www.neuro-mig.org/

2014-2018 Brain Extracellular Matrix in Health and Disease (ECMNet), BM1001

<https://www.cost.eu>; www.costbm1001.eu/

2007-2012: „Phosphorylation of tau proteins in development and Alzheimer's disease“, Croatian Ministry of Science, Education and Sports, grant no. 108-1081870-1942

2002-2006: „Reactivation of fetal plasticity in Alzheimer's disease“, Croatian Ministry of Science, Education and Sports, grant no. 108-258

2001-2003: „Abnormal polysialylation in spinal muscular atrophy: clues for possible new role of survival motor neuron protein“, Academic links and interchange scheme, British Council grant no. 220

1997-2001: „Tau and neurofilament proteins, and nitric oxide synthetase, as markers of hippocampal neurons' vulnerability in Alzheimer's disease“, Croatian Ministry of Science and Technology, grant no. 108-503

1997-2001: Croatian Ministry of Science and Technology: „Development of the human cerebral cortex of the frontal lobe“

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2017-2022: The European Union through the European Regional Development Fund, Operational Programme Competitiveness and Cohesion, grant agreement no. KK.01.1.1.01.0007, CoRE – Neuro, Scientific Centre for Excellence in Basic, Clinical and Translational Neuroscience,
<http://zci.hiim.hr/index.php/en/zci-neuro>

2018: University of Zagreb project BM054/2018 „Reorganization of the extracellular matrix in the development of human brain in health and disease“

2017: University of Zagreb project BM054/2017 „Reorganization of the extracellular matrix in the development of frontal lobe of human brain“

2016: University of Zagreb project BM054/2016 „Reorganization of the extracellular matrix in the development of human brain“



2014-2017 HIUMRICO-(HIsTological/MRI COmparative research approach for perinatal diagnostic improvement)

2017-2020 European Network on Brain Malformations, CA16118

<https://www.cost.eu>; www.neuro-mig.org/

2014-2018 Brain Extracellular Matrix in Health and Disease (ECMNet), BM1001

<https://www.cost.eu>; www.costbm1001.eu/

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Miloš Judaš, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine, Croatian Institute for Brain Research

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Human developmental neurobiology; Synaptic plasticity and mind

BIOGRAPHY

Miloš Judaš was born on May 1, 1961 in Petrinja, Republic of Croatia. He graduated from the University of Zagreb School of Medicine in 1984, where he has been employed since 1985 - now as a full time tenured professor for Neuroscience and Anatomy. He is also the director of the Croatian Brain Research Institute and Head of Centre of excellence in research for basic, clinical and translational neuroscience. He has been a member of the Department of Medical Sciences of the Croatian Academy of Sciences from 2008. At the University of Zagreb School of Medicine he was a Dean of Science for five mandates (1998-2000, 2005-2014), Chairman of the Committee for PhDs (2005- 2014), and a member of numerous other faculty committees and boards. He was member of the Editorial Board of the University Publications (2000-2003), Member of the Council of Biomedicine and Health (2005-2014), Member of the Project Office (2007-2012), President of the Commission for the Rector Awards (2007-2014) and member of the University Senate (2009-2014). He is a member of the administrative and organizational bodies of leading European and international neuroscience organizations (member of the International Brain Research Organization (IBRO) - Central and Eastern European Regional Committee 1999-2012, member of the IBRO PanEuropean Regional Committee 2012-2017, member of Federation of European Neuroscience Societies (FENS) Council 2012 - today, member of the IBRO Council 2012.- today). In January 2014, he was also chairman of the panel for evaluation of 27 competitive projects within the EU's Flagship Project "Human Brain Project".

His research focus is on the developmental neuroscience and neuroanatomy of the human brain, the developmental and evolutionary neurobiology of cognitive functions and languages, and the history of neuroscience. He has published 169 papers, which have been quoted so far: WoS 2.025 times (h-index 22), Scopus 2,332 times (h-index 22) and Google Scholar 3,104 times (h-index 24). Over the past five years, 1,827 new Google Scholar-based quotes have been made, while the cumulative IF for 10 of his most significant works is over 100. He also published two single-author books, 12 chapters in foreign books and monographs, and 30 chapters in domestic books. The papers are quoted in the leading world textbooks and manuals (eg Nelson CA, Luciana M, eds (2001) Handbook of Developmental Cognitive Neuroscience, The MIT Press - Bradford Book, Paxinos G, Mai JK, eds (2004) The Human Nervous System , 2nd Ed., Amsterdam: Elsevier, O'Rahilly R, Mueller F (1999), The Embryonic Human Brain, An Atlas of Developmental Stages, 2nd Ed., New York: John Wiley & Sons, Barkovich AJ (2005), Pediatric Neuroimaging, Philadelphia: Lippincott Williams & Wilkins, Johnson MH et al (2002) Brain Development and Cognition: A Reader, Oxford: Blackwell, Eliot L (2001) Early Intelligence: How Brain and Mind Develop in the First Five Years of Life. London: Penguin Books). He was an invited speaker at a number of renowned international congresses and schools (Innsbruck, Graz, Wien, Jena, London, Oxford, Helsinki, Turku, Osaka, New Haven, Cold Spring Harbor). In addition to academician Ivica Kostović, he is the most responsible for the founding of the Croatian Brain Research Institute and the Croatian Society for Neuroscience, the founding of neuroscience and the doctoral study of neuroscience. He is the winner of the annual State Prize for Science for 2011, the Academy of Science Award for Exceptional Scientific Productivity (2011) and Mentor of the Most Productive Ph.D. (2012); He is also the recipient of

recognition for a special contribution to the Homeland War: Monument to the Homeland War (1994), special praise of the President of the Republic of Croatia (1994) and the Order of the Croatian Trefoil (1997).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 13.03.2012

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Sedmak G, Jovanov-Milošević N, Puskarjov M, Ulamec M, Krušlin B, Kaila K, Judaš M (2015)
Developmental expression patterns of KCC2 and functionally associated molecules in the human brain.
Cereb Cortex doi:10.1093/cercor/bhv218.

Jovanov-Milosevic, N., Z. Petanjek, D. Petrovic, M. Judas and I. Kostovic; (2010); "Morphology, molecular phenotypes and distribution of neurons in developing human corpus callosum." *European Journal of Neuroscience*32(9): 1423-1432;

Judas, M., G. Sedmak and I. Kostovic; (2013); "The significance of the subplate for evolution and developmental plasticity of the human brain." *Frontiers in Human Neuroscience*7: 9;

Judas, M., G. Sedmak and M. Pletikos; (2010); "Early history of subplate and interstitial neurons: from Theodor Meynert (1867) to the discovery of the subplate zone (1974)." *Journal of Anatomy*217(4): 344-367;

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Judas, M., G. Simic, Z. Petanjek, N. Jovanov-Milosevic, M. Pletikos, L. Vasung, M. Vuksic and I. Kostovic; (2011); "The Zagreb Collection of human brains: a unique, versatile, but underexploited resource for the neuroscience community." *Resources and Technological Advances for Studies of Neurobehavioral Evolution*1225(S1): E105-E130;

Kostovic, I., N. Jovanov-Milosevic, M. Rados, G. Sedmak, V. Benjak, M. Kostovic-Srzentic, L. Vasung, M. Culjat, M. Rados, P. Huppi and M. Judas; (2014); "Perinatal and early postnatal reorganization of the subplate and related cellular compartments in the human cerebral wall as revealed by histological and MRI approaches." *Brain Structure & Function*219(1): 231-253;

Kostovic, I. and M. Judas; (2010); "The development of the subplate and thalamocortical connections in the human foetal brain." *Acta Paediatrica*99(8): 1119-1127;

Kostovic, I., M. Judas and G. Sedmak; (2011); "Developmental history of the subplate zone, subplate neurons and interstitial white matter neurons: relevance for schizophrenia." *International Journal of Developmental Neuroscience*29(3): 193-205;

Kostovic, I., G. Sedmak, M. Vuksic and M. Judas; (2015); "The Relevance of Human Fetal Subplate Zone for Developmental Neuropathology of Neuronal Migration Disorders and Cortical Dysplasia." *CNS Neuroscience & Therapeutics*21(2): 74-82;

Kwan, K. Y., M. M. S. Lam, M. B. Johnson, U. Dube, S. Shim, M. R. Rasin, A. M. M. Sousa, S. Fertuzinhos, J. G. Chen, J. I. Arellano, D. W. Chan, M. Pletikos, L. Vasung, D. H. Rowitch, E. J. Huang, M. L. Schwartz, R. Willemsen, B. A. Oostra, P. Rakic, M. Heffer, I. Kostovic, M. Judas and N. Sestan; (2012); "Species-Dependent Posttranscriptional Regulation of NOS1 by FMRP in the Developing Cerebral Cortex." *Cell*149(4): 899-911;

- Milosevic, N. J., M. Judas, E. Aronica and I. Kostovic; (2014); "Neural ECM in laminar organization and connectivity development in healthy and diseased human brain." *Brain Extracellular Matrix in Health and Disease*214: 159-178;
- Petanjek, Z., M. Judas, G. Simic, M. R. Rasin, H. B. M. Uylings, P. Rakic and I. Kostovic; (2011); "Extraordinary neoteny of synaptic spines in the human prefrontal cortex." *Proceedings of the National Academy of Sciences of the United States of America*108(32): 13281-13286;
- Vasung, L., N. Jovanov-Milosevic, M. Pletikos, S. Mori, M. Judas and I. Kostovic; (2011); "Prominent periventricular fiber system related to ganglionic eminence and striatum in the human fetal cerebrum." *Brain Structure & Function*215(3-4): 237-253;
- Fertuzinhos, S., Z. Krsnik, Y. I. Kawasaki, M. R. Rasin, K. Y. Kwan, J. G. Chen, M. Judas, M. Hayashi and N. Sestan; (2009); "Selective Depletion of Molecularly Defined Cortical Interneurons in Human Holoprosencephaly with Severe Striatal Hypoplasia." *Cerebral Cortex*19(9): 2196-2207;
- Judas, M., M. Rados, N. Jovanov-Milosevic, P. Hrabac, R. Stern-Padovan and I. Kostovic; (2005); "Structural, immunocytochemical, and MR imaging properties of periventricular crossroads of growing cortical pathways in preterm infants." *American Journal of Neuroradiology*26(10): 2671-2684;
- Judas, M., M. R. Rasin, B. Kruslin, K. Kostovic, D. Jukic, Z. Petanjek and I. Kostovic; (2003); "Dendritic overgrowth and alterations in laminar phenotypes of neocortical neurons in the newborn with semilobar holoprosencephaly." *Brain & Development*25(1): 32-39;
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- Kostovic, I., N. Lukinovic, M. Judas, N. Bogdanovic, L. Mrzljak, N. Zecevic and M. Kubat; (1989); "STRUCTURAL BASIS OF THE DEVELOPMENTAL PLASTICITY IN THE HUMAN CEREBRAL-CORTEX - THE ROLE OF THE TRANSIENT SUBPLATE ZONE." *Metabolic Brain Disease*4(1): 17-23;
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- Kostovic, I., L. Seress, L. Mrzljak and M. Judas; (1989); "EARLY ONSET OF SYNAPSE FORMATION IN THE HUMAN HIPPOCAMPUS - A CORRELATION WITH NISSL-GOLGI ARCHITECTONICS IN 15-WEEK-OLD AND 16.5-WEEK-OLD FETUSES." *Neuroscience*30(1): 105-116;

Mrzljak, L., H. B. M. Uylings, C. G. Vaneden and M. Judas; (1990); "NEURONAL DEVELOPMENT IN HUMAN PREFRONTAL CORTEX IN PRENATAL AND POSTNATAL STAGES." *Progress in Brain Research*85: 185-222;

Petanjek, Z., M. Judas, I. Kostovic and H. B. M. Uylings; (2008); "Lifespan alterations of basal dendritic trees of pyramidal neurons in the human prefrontal cortex: A layer-specific pattern." *Cerebral Cortex*18(4): 915-929;

Rados, M., M. Judas and I. Kostovic; (2006); "In vitro MRI of brain development." *European Journal of Radiology*57(2): 187-198;

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Kostović I, Sedmak G, Judaš M. Neural histology and neurogenesis of the human fetal and infant brain. *Neuroimage*. 2019 Mar;188:743-773. doi: 10.1016/j.neuroimage.2018.12.043. Epub 2018 Dec 27. Review. PubMed PMID: 30594683.

Hrabač P, Bosak A, Vukšić M, Judaš M, Kostović I, Krsnik Ž. The Zagreb Collection of human brains: entering the virtual world. *Croat Med J*. 2018 Dec 31;59(6):283-287. PubMed PMID: 30610769; PubMed Central PMCID: PMC6330769.

Sedmak G, Jovanov-Milošević N, Puskarjov M, Ulamec M, Krušlin B, Kaila K, Judaš M. Developmental Expression Patterns of KCC2 and Functionally Associated Molecules in the Human Brain. *Cereb Cortex*. 2016 Dec;26(12):4574-4589. doi: 10.1093/cercor/bhv218. Epub 2015 Oct 1. PubMed PMID: 26428952.

Font-I-Furnols M, Čandek-Potokar M, Daumas G, Gispert M, Judas M, Seynaeve M. Comparison of national ZP equations for lean meat percentage assessment in SEUROP pig classification. *Meat Sci*. 2016 Mar;113:1-8. doi: 10.1016/j.meatsci.2015.11.004. Epub 2015 Nov 10. PubMed PMID: 26580006.

Kostović I, Sedmak G, Vukšić M, Judaš M. The relevance of human fetal subplate zone for developmental neuropathology of neuronal migration disorders and cortical dysplasia. *CNS Neurosci Ther*. 2015 Feb;21(2):74-82. doi: 10.1111/cns.12333. Epub 2014 Oct 14. Review. PubMed PMID: 25312583.

Kostović I, Jovanov-Milošević N, Radoš M, Sedmak G, Benjak V, Kostović-Srzentić M, Vasung L, Čuljat M, Radoš M, Hüppi P, Judaš M. Perinatal and early postnatal reorganization of the subplate and related cellular compartments in the human cerebral wall as revealed by histological and MRI approaches. *Brain Struct Funct*. 2014 Jan;219(1):231-53. doi: 10.1007/s00429-012-0496-0. Epub 2012 Dec 19. PubMed PMID: 23250390.

Jovanov Milošević N, Judaš M, Aronica E, Kostovic I. Neural ECM in laminar organization and connectivity development in healthy and diseased human brain. *Prog Brain Res*. 2014;214:159-78. doi: 10.1016/B978-0-444-63486-3.00007-4. Review. PubMed PMID: 25410357.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

The role of transient foetal neurons in cerebral cortex disorders

Development of cortical pathways in humans

Ways of Migration of Hippocampal GABA-ergic Neurons in Monkeys and Man

Cognitive and linguistic development in children with neuro-developmental risk

Adaptive scenario management in VR therapy of PTSD



Developmental neuropathology of genetic malformations of human brain cortex

4D ultrasound behavioural parameters in normal and disturbed foetal development

Phosphorylation of Protein in Development and Alzheimer's Disease

Interaction of Doctoral Study and Scientific Productivity in Biomedicine

The inherited metabolic and other monogenic diseases of children

Influence of organized education on quality of work in outpatient care

Research Centre for Excellence in Reproductive and Regenerative Medicine (CERRM)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Josip Juras, MD. PhD.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine Zagreb, Clinical Hospital Centre Zagreb, Department of Obstetrics and Gynecology

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: "Diabetes and Pregnancy",
"Physiology and biochemistry of uterus in pregnancy and labour"

BIOGRAPHY

WORK EXPERIENCE

14.07.2015.- Postdoctorant, Faculty of Medicine, University of Zagreb, Salata 3, Zagreb 10 000, HR

09.01.2012.- Resident of gynaecology and obstetrics, Clinical Hospital Centre Zagreb, Department of Obstetrics and Gynaecology, Petrova 13, Zagreb, 10 000, HR

01.09.2009.- Scientific fellow – assistant, Faculty of Medicine, University of Zagreb, Salata 3, Zagreb 10 000, HR

01.09.2008. – 01.09.2009. Intern, Clinical Hospital Centre Zagreb, Kispaticeva 12, Zagreb 10 000, HR

EDUCATION AND TRAINING

Nov. 2014. – Dec. 2014. Ian Donald Inter-University School for Medical Ultrasound, Department of Obstetrics and Gynaecology, General Hospital "Sveti Duh", Sveti Duh 64, Zagreb, 10 000, HR

09.01.2012.- Resident of gynaecology and obstetrics, Clinical Hospital Centre Zagreb, Department of Obstetrics and Gynaecology, Petrova 13, Zagreb, 10 000, HR

01.09.2009.- Scientific fellow – assistant, Faculty of Medicine, University of Zagreb, Salata 3, Zagreb 10 000, HR

2009. – 2015. PhD degree (the thesis called: "Diabetes and metabolic syndrome after gestational diabetes")

PhD Programme in Biomedicine and Health Sciences, Faculty of Medicine, University of Zagreb, Salata 3, Zagreb 10 000, HR

2002. – 2008. Doctor of Medicine, Faculty of Medicine, University of Zagreb, Salata 3, Zagreb 10 000, HR

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 14.07.2015.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Kasum M, von Wolff M, Franulić D, Čehić E, Klepac-Pulanić T, Orešković S, Juras J. Fertility preservation options in breast cancer patients. Gynecol Endocrinol. 2015 Sep 15:1-6.

- Kasum M, Pavicic-Baldani D, Stanic P, Oreskovic S, Saric JM, Blajic J, Juras J. Importance of macroprolactinemia in hyperprolactinemia. Eur J Obstet Gynecol Reprod Biol 2014;183:28-32. doi: 10.1016/j.ejogrb.2014.10.013.

- Juras J, Ivanisevic M, Oreskovic S, Mihaljevic S, Vujic G, Delmis J. Successful delivery of fetus with fetal inherited thrombophilia after two fetal deaths. *Coll Antropol* 2013;37:1353-5.
- Berberovic E, Ivanisevic M, Juras J, Horvaticek M, Delas I, Djelmis J. Arachidonic and docosaehaenoic acid in the blood of a mother and umbilical vein in diabetic pregnant women. *J Matern Fetal Neonatal Med* 2013;26:1287-91. doi: 10.3109/14767058.2013.783800.
- Dika Z, Juras J, Kos J, Edwards K, Fistrek M, Premuzic V, Laganovic M, Abramovic-Baric M, Cvitkovic A, Vukovic Lela I, Karanovic S, Juric D, Bitunjac M, Teskera T, Jelakovic B. Prevalence, treatment and control of hypertension in a Croatian endemic nephropathy area. *Kidney Blood Press Res* 2012;35:678-86. doi: 10.1159/000338956.
- Oberhofer D, Juras J, Pavicic AM, Rancic Zuric I, Rumenjak V. Comparison of C-reactive protein and procalcitonin as predictors of postoperative infectious complications after elective colorectal surgery. *Croat Med J* 2012;53:612-9.
- Marijic V, Bukovic D, Mihaljevic S, Oreskovic S, Persec J, Zupic T, Juras J, Milinovic D. Intermittent epidural TOP-UPS vs. patient control epidural analgesia during labor. *Coll Antropol* 2013;37:1339-41.
- Bjelanovic V, Babic D, Oreskovic S, Tomic V, Martinac M, Juras J. Pathological pregnancy and psychological symptoms in women. *Coll Antropol* 2012;36:847-52.
- Coric M, Goluzza T, Juras J. Inhibin B for assessment of ovarian reserve after laparoscopic treatment of ovarian endometriomas. *Int J Gynaecol Obstet* 2012;116:169-70. doi: 10.1016/j.ijgo.2011.09.014.
- Ejubović E, Kasum M, Stanić P, Juras J, Čehić E, Orešković S. Current preventive strategies for preovulatory progesterone elevation during ovarian stimulation for in vitro fertilization. *Acta Clin Croat*. 2016;55(3):453-8.
- Kasum M, Anić-Jurica S, Čehić E, Klepac-Pulanić T, Juras J, Žužul K. Influence of male obesity on fertility. *Acta Clin Croat*. 2016;55(2):301-8.
- Rodin U, Filipović-Grčić B, Đelmiš J, Glivetić T, Juras J, Mustapić Ž, Grizelj R. Perinatal Health Statistics as the Basis for Perinatal Quality Assessment in Croatia. *Biomed Res Int*. 2015;2015:537318.
- Josip Đelmiš, Marina Ivanišević, Slavko Orešković, Josip Juras, Mislav Herman. Hyperthyroidism in pregnant women. *Gynaecol Perinatol* 2015;24(4):150–6.
- Miro Kasum, Ermin Čehić, Slavko Orešković, Josip Juras, Mario Kordić, Emina Ejubović, Albert Lila. Sexuality and fecundity in men with spinal cord injury. *Gynaecol Perinatol* 2016;25(3):120–6.
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- Rodin U, Filipovic-Grcic B, Coric T, Juras J. Perinatal death's causes in Croatia in the year 2013. *GynaecolPerinatol* 2014;23(Supl1):S19-S24.
- Đelmić J, Juras J, Rodin U. Perinatal mortality in Republic of Croatia in the year 2013. *GynaecolPerinatol* 2014;23(Supl1):S3-S18.
- Berberovic E, Ivanisevic M, Juras J, Horvaticek M, Kralik-Oguic S, Berberovic B, Djelmić J. Leptin, Adiponektin, inzulin i glukoza u trudnica sa secernom bolesti tipa 1. *GynaecolPerinatol* 2013;22(2):93-7.
- Starcevic V, Herman M, Horvaticek M, Juras J, Ivanisevic M. Rizicni cimbenici i dijagnoza prijevremenog prsnuca plodovih ovoja. *GynaecolPerinatol* 2012;21(4):141-5.
- Ivanisevic M, Oreskovic S, Juras J, Djelmić J. Osvrt na smjernice europskog perinatoloskog drustva: Novosti u dijagnozi prijevremenog prsnuca plodovih ovoja. *GynaecolPerinatol* 2012;21(2):73-7.
- Ivanisevic M, Oreskovic S, Juras J, Djelmić J. Hipotireoza u trudnica. *GynaecolPerinatol* 2012;21(2):68-72.
- Djelmić J, Juras J, Drazncic A, Rodin U. Perinatalni mortalitet u Republici Hrvatskoj u 2011. godini. *GynaecolPerinatol* 2012;21(Supl1):S129-S144.
- Ivanisevic M, Juras J. Probir na dijabetes i metabolički sindrom u žena s gestacijskim dijabetesom. *GynaecolPerinatol* 2012;21(Supl1):S9-S12.
- Djelmić J, Juras J, Drazncic A, Rodin U. Perinatalni mortalitet u Republici Hrvatskoj u 2011. godini. *GynaecolPerinatol* 2012;21(Supl1):S129-S144.
- Juras J, Ivanisevic M, Blajic J, Blajic D, Starcevic V, Djelmić J. Utjecaj tjelesne težine prije trudnoce i porasta u trudnoći na perinatalni ishod. *GynaecolPerinatol* 2011;20(4):179-86.
- Krpan Ilijic M, Juretic E, Juras J, Vukelic V, Anzulovic D, Kulis I, Rukavina I, Cima K. Ishod novorođencadi u trudnoći kompliciranih gestacijskim dijabetesom. *GynaecolPerinatol* 2011;20(4):178-91.
- Blajic D, Ivanisevic M, Juras J, Djelmić J. Adipokini i trudnoća. *GynaecolPerinatol* 2011;20(2):85-9.
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- Corusic A, Karadza M, Planinic P, Skrgatic L, Ljubojevic-Grgec D, Juras J, Blajic J. Farmakoekonomska analiza isplativosti cijepljenja adolescentica Cervarixom. *GynaecolPerinatol* 2011;20(1):21-9.
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- Juras J, Ivanisevic M, Horvaticek M. Visoke doze kortikosteroida i imunoglobulina u idiopatskoj trombocitopenijskoj purpuri trudnoće - prikaz trudnoće. *GynaecolPerinatol* 2010;19(4):273-5.
- Djelmić J, Ivanisevic M, Juras J, Herman M. Dijagnoza hiperglikemije u trudnoći. *GynaecolPerinatol* 2010;19(2):86-9.
- Blajic J, Djakovic A, Ivanisevic M, Juras J, Djelmić J, Zupic T. Placental growth factor in mother's and umbilical cord blood in pregnant women suffering from type-1 diabetes mellitus. *GynaecolPerinatol* 2010;19(1):10-5.

- Dijakovic A, Oreskovic S, Ivanisevic M, Juras J, Djelmis J. Rizicni cimbenici za nastanak ostecenja dna zdjelice i mokracne inkontinencije u zena. *GynaecolPerinatol* 2009;18(4):183-7.
- Bljajic D, Juras J, Ivanisevic M, Djelmis J. Ucestalost metaboličkog sindroma u zena s prethodnim gestacijskim dijabetesom. *GynaecolPerinatol* 2009;18(2):61-5.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- Kasum M, von Wolff M, Franulić D, Čehić E, Klepac-Pulanić T, Orešković S, Juras J. Fertility preservation options in breast cancer patients. *Gynecol Endocrinol*. 2015 Sep 15:1-6.
- Kasum M, Pavicic-Baldani D, Stanic P, Oreskovic S, Saric JM, Blajic J, Juras J. Importance of macroprolactinemia in hyperprolactinemia. *Eur J Obstet Gynecol Reprod Biol* 2014;183:28-32. doi: 10.1016/j.ejogrb.2014.10.013.
- Juras J, Ivanisevic M, Oreskovic S, Mihaljevic S, Vujic G, Delmis J. Successful delivery of fetus with fetal inherited thrombophilia after two fetal deaths. *Coll Antropol* 2013;37:1353-5.
- Berberovic E, Ivanisevic M, Juras J, Horvaticek M, Delas I, Djelmis J. Arachidonic and docosahexaenoic acid in the blood of a mother and umbilical vein in diabetic pregnant women. *J Matern Fetal Neonatal Med* 2013;26:1287-91. doi: 10.3109/14767058.2013.783800.
- Ejubović E, Kasum M, Stanić P, Juras J, Čehić E, Orešković S. Current preventive strategies for preovulatory progesterone elevation during ovarian stimulation for in vitro fertilization. *Acta Clin Croat*. 2016;55(3):453-8.
- Kasum M, Anić-Jurica S, Čehić E, Klepac-Pulanić T, Juras J, Žužul K. Influence of male obesity on fertility. *Acta Clin Croat*. 2016;55(2):301-8.
- Josip Đelmiš, Marina Ivanišević, Slavko Orešković, Josip Juras, Mislav Herman. Hyperthyroidism in pregnant women. *Gynaecol Perinatol* 2015;24(4):150–6.
- Miro Kasum, Ermin Čehić, Slavko Orešković, Josip Juras, Mario Kordić, Emina Ejubović, Albert Lila. Sexuality and fecundity in men with spinal cord injury. *Gynaecol Perinatol* 2016;25(3):120–6.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Diabetes and Metabolic Syndrome After Previous Gestational Diabetes (108-1080401-0385)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Diabetes and Metabolic Syndrome After Previous Gestational Diabetes (108-1080401-0385)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Emilja Juretić, MD, PhD, Associate Professor of Pediatrics

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Clinical Hospital Center, Department of Obstetrics and Gynecology, Division of Neonatology

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: "Diabetes and Pregnancy"

BIOGRAPHY

Education

MD: Medical School, University of Zagreb, 1978.

Postgraduate study in clinical pediatrics, 1982.

Postgraduate study in perinatology and neonatology, 1987.

Specialist in pediatrics, 1986.

Subspecialist in neonatology, 2005.

Work experience

University Hospital «Dr. M. Stojanović» internship, 1980.

Clinical Hospital Center Zagreb, Department of Pediatrics Rebro, specialization in pediatrics, 1980 – 1986.

Staff neonatologist at Division of Neonatology, Department of Obstetrics and Gynecology from 1986.

Primarius, 2002.

Senior assistant, chair of Obstetrics and Gynecology, Medical School, University of Zagreb, 2004.

Senior scientific associate, 2006.

Head of Division of Neonatology, 2006.

Assistant Professor, 2008.

Associate Professor, 2013.

Research activities

PhD – Neonatal lymphocyte subpopulations in relation to gestational age and infection, Medical School, University of Zagreb, 1997.

Principal investigator on Ministry of Science project Analysis of lymphocyte subpopulations in newborns and parturients, 2002.

Investigator on 3 other Ministry of Science projects

Publications

9 papers in CC indexed journals, 8 kongress abstracts in CC indexed journals, and 30 other kongress abstracts, 20 papers in elsewhere indexed journals, 10 book chapters

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2013.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Juretić E. Novorođenče dijabetične majke. U: Đelmiš J, Ivanišević M, Metelko Ž (ur). Dijabetes u žena. Zagreb: Medicinska naklada, 2009; 380-389.
2. Juretić E. Postnatalne komplikacije i zbrinjavanje novorođenčeta dijabetične majke, s posebnim osvrtom na prenatalne i postnatalne promjene na srcu. U: Malčić I, Škrablin-Kučić S i sur. (ur). Zagreb: Medicinska naklada, 2011; 207-217.
3. Ilijić Krpan M, Juretić E, Juras J, Vukelić V, Anzulović D, Kuliš I, Rukavina I, Čima K. Novorođenački ishod trudnoća kompliciranih gestacijskim dijabetesom. Gynaecol Perinatol 2011; 20 (4): 187-191.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Juretić E, Lončarević D. Perinatalna asfiksija. Medix 2013; 19; 163-171
2. Stimac M, Juretić E, Vukelić V, Matasić NP, Kos M, Babić D. Effect of chorioamnionitis on mortality, early onset neonatal sepsis and bronchopulmonary dysplasia in preterm neonates with birth weight of < 1,500 grams. Coll Antropol. 2014;38(1):167-71.
3. Juretić E, Guszak V. Nove smjernice u prehrani prematurusa. Paediatr Croat. 2014;58 (supl 1):221-7
4. Juretić E. Bolesti štitnjače u novorođenačkoj dobi. Gynaecol Perinatol 2014; 23 (Suppl. 2): S36-S41.
5. Fucic A, Guszak V, Keser T, Wagner J, Juretić E, Plavec D, Stojković R, Gornik O, Lauc G. Micronucleus, cell-free DNA, and plasma glycan composition in the newborns of healthy and diabetic mothers. Mutat Res. 2017;815:6-15.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Gordana Jurić-Lekić, tenure full professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Isotransplantation of Mammalian Organ Primordia, Methods of investigation in vivo and in vitro

BIOGRAPHY

Born in Kneževo 1953. Education: 1978 MD Medical Faculty, Zagreb; 1979 – MD state examination – qualified MD; 1983 Master of sciences – Faculty of Sciences University of Zagreb, 1987 PhD – Medical Faculty, Zagreb. Employment: 1978 – 1979. GP; 1980 to date – Department of Histology and Embryology, Medical Faculty, Zagreb. University career: 1994 assistant professor, 2003 associate professor, 2012 full professor, 2017 tenure full professor. Scientific education: Department of Histology and Embryology, Department of Biology, Medical Faculty, Zagreb; Zagreb School of Embryology (mentor Anton Švajger) – microsurgery of embryos, transplantation to ectopic sites, classical histology, immunohistochemistry; 1987 - scientific visit – Wenner-Green Institute, Stockholm. Scientific projects: from 1981. participation in national and international projects (NIH, Bethesda, USA; WHO, Geneva, Switzerland; Austrian – Croatian project). Mentor: 12 Graduation Thesis, 2 Master of Science Thesis, 2 PhD thesis. Publications: 179 scientific publications. Teaching: Undergraduate courses – from 1980/81; Postgraduate courses from 1987; Instructor on EMBO course from 2002. Membership: Croatian Medical Association, Croatian Society of Anatomists, Histologists and Embryologists, Croatia Society for Electron Microscopy and European Developmental Biology Organization (EDBO). Awards: 2006, 2008. ARCA Zagreb.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2017 tenure full professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1.Švajger A., Levak-Švajger B., Jurić-Lekić G.: Origin of lentoids in experimental teratomas derived from early postimplantation rat embryos. Roux's Arch Dev Biol, 1987,196:385- 387.
- 2.Jurić-Lekić G., Švajger A.: Lentoid formation in ectopic grafts of lentectomized eyes of rat fetuses. Cell Differ Develop, 1989, 27:225-232.
- 3.Jurić-Lekić G., Trošić A., Švajger A.: Lentoids within sacrococcygeal teratoma: origin by transdifferentiation? Hum Pathol, 1993, 24(2):227-229.
- 4.Belovari T., Bulić-Jakuš F., Jurić-Lekić G., Marić S., Ježek D., Vlahović M.: Differentiation of Rat Neural Tissue in a Serum-Free Embryo Culture Model Followed by in vivo Transplantation. Croat Med J, 2001, 42:401-405.
- 5.Bulić-Jakuš F., Strahinić-Belovari T., Marić S., Ježek D., Jurić-Lekić G., Vlahović M., Šerman D.: Chemically defined protein-free in vitro culture of mammalian embryo does not restrict its developmental potential for differentiation of skin appendages. Cells Tissues Organs in vivo, in vitro. 2001, 169:134-143.
- 6.Bulić-Jakuš F., Ulamec M., Vlahović M., Sinčić N., Katušić A., Jurić-Lekić G., Šerman LJ., Krušlin B., Belicza M.: Of Mice and Men: Teratomas and Teratocarcinomas. Coll. Antropol, 2006, 30(4):921-924.
- 7.Šerman LJ., Vlahović M., Šijan M., Bulić-Jakuš F., Šerman A., Sinčić N., Matijević R., Jurić-Lekić G., Katušić A.: The Impact of 5-azacytidine on Placental Weight, Glycoprotein Pattern and Proliferating Cell Nuclear Antigen Expression in Rat Placenta. Placenta, 2007, 28:803-811.

8. Katušić A., Jurić-Lekić G., Jovanov-Milošević N., Vlahović M., Ježek D., Šerman LJ., Sinčić N., Veljanovska B., Bulić-Jakuš F.: Development of the Fetal Neural Retina in Vitro and in Ectopic Transplants in Vivo. Coll. Antropol, 2008, 32 (1):315-319.
9. Jurić-Lekić G., Radujković V., Kancijan V., Bulić-Jakuš F., Lokošek V., Katušić A., Vlahović M., Šerman LJ.: Differentiation of Epiglottal Epithelia during Prenatal and Postnatal Human Development. Coll. Antropol, 2008, 32 (4):1115-1120.
10. Marinović Kulišić S., Jurić-Lekić G., Vikić-Topić M., Lokošek V., Radujković V., Bulić-Jakuš F., Katušić A., Vlahović M., Šerman LJ., Sinčić N.: 5-Azacytidine enhances proliferation in transplanted rat fetal epiglottis. Frontiers in Bioscience, 2011, E3. 581-590.
11. Mužić V., Katušić Bojanac A., Jurić-Lekić G., Himelreich M., Tupek K., Šerman LJ., Marn N., Sinčić N., Vlahović M., Bulić-Jakuš F.: Epigenetic drug 5-azacytidine impairs proliferation of rat limb buds in an organotypic model-system in vitro. Croat Med J, 2013, 54: 489-495..

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Mužić V., Katušić Bojanac A., Jurić-Lekić G., Himelreich M., Tupek K., Šerman LJ., Marn N., Sinčić N., Vlahović M., Bulić-Jakuš F.: Epigenetic drug 5-azacytidine impairs proliferation of rat limb buds in an organotypic model-system in vitro. Croat Med J. 54: 489-495, 2013.
2. Fabijanović D., Šerman A., Ježić M., Katušić A., Sinčić N., Čurković-Perica M., Bulić-Jakuš F., Vlahović M., Jurić-Lekić G., Šerman LJ.: Impact of 5-Azacytidine on the rat decidual cell proliferation. Int J Exp Pathol. 1365-2613, 2014.
3. Bulic-Jakus F., Katusic Bojanac A., Juric-Lekic G., Vlahovic M., Sincic N.: Teratoma: from spontaneous tumors to the pluripotency/malignancy assay. Wiley Interdiscip Rev Dev Biol. 2016. 5(2):186-209. doi: 10.1002/wdev.219. Epub 2015 Dec 23.
4. Katusic Bojanac A., Rogosic S., Sincic N., Juric-Lekic G., Vlahovic M., Serman L., Jezek D., Bulic-Jakus F.: Influence of hyperthermal regimes on experimental teratoma development in vitro. Int J Exp Pathol. 99(3): 131-144 2018., doi: 10.1111/iep.12273. Epub 2018 Aug 1
5. Jurić-Lekić G., Bedrica LJ., Lončar D. Interscapular brown adipose tissue recruitment is hindered by a thermoneutral environment of 33°C: Uncoupling protein-1 underexpression is not associated with obesity development in rats. Archives of Biological Sciences. 70(3): 567-579, 2018.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

from 1983.-2002 participation in projects: NIH, Bethesda, USA; WHO Geneva, Switzerland; Cancerfonden; UNESCO, MZOŠ

2002-2006 participation in project "The experimental approach to reproductive health in mammals" MZOŠ,

2006-2013 participation in project "Experimental embryonal tumors and the development of mammals in vivo and in vitro" MZOŠ;

2014.-to date participation in Scientific Center of Excellence for reproductive and regenerative medicine, research unit for biomedical research reproduction and development.

2013-2018 participation in UNIZG projects.

- 2017-2022 participation in "Reproductive and Regenerative Medicine - Exploring New Platforms and Potentials" The European Union through the European Regional Development Fund, Operational Programme Competitiveness and Cohesion, under grant agreement No. KK.01.1.1.01.0008, within the Center of Excellence for Reproductive and Regenerative Medicine (CERRM). School of Medicine, University of Zagreb.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

-2017-2022 participation in "Reproductive and Regenerative Medicine - Exploring New Platforms and Potentials" The European Union through the European Regional Development Fund, Operational Programme Competitiveness and Cohesion, under grant agreement No. KK.01.1.1.01.0008, within the Center of Excellence for Reproductive and Regenerative Medicine (CERRM). School of Medicine, University of Zagreb.

- 2014. to date participation in Scientific Center of Excellence for reproductive and regenerative medicine, research unit for biomedical research reproduction and development

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 2

1. Belovari T.: Utjecaj transferina na diferencijaciju štakorskog zametka u kulturi in vitro bez seruma i u transplantatu in vivo. Medicinski fakultet Sveučilišta u Zagrebu, Doctoral thesis, Zagreb, 1999., 108 p.
2. Mužić V.: Utjecaj promjene temperature i epigenetskih lijekova na razvoj pupoljaka udova štakora ex vivo. Medicinski fakultet Sveučilišta u Zagrebu, Doctoral thesis, Zagreb, 2015., 155 p.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ivana Jurjević, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of neurology, Clinical Hospital Centre Zagreb, and Department of Pharmacology, University of Zagreb Medical School

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: 1.Clinical Neuropharmacology
2.Movement Disorders; Pathophysiology of the brain and CSF

BIOGRAPHY

Ivana Jurjević was born on November the 14th, 1982. in Karlovac, Croatia. She finished elementary school in Zaprešić, and X. gymnasium in Zagreb with excellent grades. Ivana started attending University of Zagreb School of Medicine in the year 2001. and graduated from it in 2007. Then she worked as an intern for a year at the Clinical Hospital Centre Zagreb, and passed the State exam for medical doctors in the year 2008. Shortly after graduation she also started her scientific work as a research fellow at the Department of Pharmacology. Concurrently she worked as a resident at the Department of neurology of the University hospital centre Zagreb showing special interest in movement disorders, as well as teaching medical students neurology and pharmacology. In 2014. she finished her PhD thesis in the field of CSF pathophysiology and hydrocephalus, which was followed by successfully passing her residency exam in neurology in 2015. Shortly after, she proceeded with her education in sensory evoked potentials at the University hospital centre Zagreb, and additionally her scientific work which has led her to Juntendo University Medical School, Tokyo, Japan where she spent 6 months researching microRNA in NPH and other movement disorders together with education in deep brain stimulation. At the moment she works at the Department of pharmacology of Medical school University of Zagreb, and is in the process of being elected for assistant professor. She is a part of two scientific projects: „Pathophysiology of the cerebrospinal fluid and intracranial pressure“, under the mentorship of the lead investigator, prof. Marijan Klarica, and the project “Mystery of subthalamus – anatomic division of the subthalamic nucleus - 3STAN” with the lead investigator assistant professor Goran Sedmak. She teaches Pharmacology for graduate students in english and croatian language at the University of Zagreb Medical School, and also participates in the postgraduate doctoral studies „Biomedicine and Health“ as well as „Neuroscience“ at the University of Zagreb School of Medicine, in the class called „Pathophysiology of the brain and CSF“ under prof. Marijan Klarica. She is the author or co-author of 13 scientific papers (9 CC papers), and she is an active member of the Croatian society of pharmacologists, Croatian society for neuroscience, IBRO, FENS, IUPHAR, EPHAR, Croatian Neurological Society and of University of Zagreb Medical School College Council. She participated in many domestic and international scientific meetings. She is active in english and german, and passive in spanish language.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2019

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Adamec I, Krbot Skorić M, Gabelić T, Barun B, Ljevak J, Bujan Kovač A, Jurjević I, Habek M. Intravenous dexamethasone in acute management of vestibular neuritis: a randomized, placebo-controlled, single-blind trial. Eur J Emerg Med. 2016 Oct;23(5):363-9. doi: 10.1097/MEJ.0000000000000275.

Jurjević I, Miyajima M, Ogino I, Akiba C, Nakajima M, Kondo A, Kikkawa M, Kanai M, Hattori N, Arai H. Decreased Expression of hsa-miR-4274 in Cerebrospinal Fluid of Normal Pressure Hydrocephalus Mimics with Parkinsonian Syndromes. J Alzheimers Dis. 2017;56(1):317-325. doi: 10.3233/JAD-160848.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Radoš M, Orešković D, Radoš M, Jurjević I, Klarica M. Long lasting near-obstruction stenosis of mesencephalic aqueduct without development of hydrocephalus--case report. *Croat Med J*. 2014 Aug 28;55(4):394-8.

Klarica M, Radoš M, Erceg G, Petošić A, Jurjević I, Orešković D. The influence of body position on cerebrospinal fluid pressure gradient and movement in cats with normal and impaired craniospinal communication. *PLoS One*. 2014 Apr 18;9(4):e95229. doi: 10.1371/journal.pone.0095229. eCollection 2014.

Adamec I, Krbot Skorić M, Gabelić T, Barun B, Ljevak J, Bujan Kovač A, Jurjević I, Habek M. Intravenous dexamethasone in acute management of vestibular neuritis: a randomized, placebo-controlled, single-blind trial. *Eur J Emerg Med*. 2016 Oct;23(5):363-9. doi: 10.1097/MEJ.0000000000000275.

Relja M, Jurjevic I, Blazina K, Miletić V, Klepac N. Clinical presentation and genetic characteristics of Huntingtons disease in Croatia: Thirty years of experience. *Movement Disorders* 2016;31 (Suppl 2):3665-365.

Klarica M, Kuzman T, Jurjević I, Radoš M, Tvrdeić A, Orešković D. The Effect of Body Position on Intraocular and Intracranial Pressure in Rabbits. *Acta Neurochir Suppl*. 2016;122:279-82. doi: 10.1007/978-3-319-22533-3_55.

Jurjević I, Miyajima M, Ogino I, Akiba C, Nakajima M, Kondo A, Kikkawa M, Kanai M, Hattori N, Arai H. Decreased Expression of hsa-miR-4274 in Cerebrospinal Fluid of Normal Pressure Hydrocephalus Mimics with Parkinsonian Syndromes. *J Alzheimers Dis*. 2017;56(1):317-325. doi: 10.3233/JAD-160848.

New Insight into the Mechanism of Mannitol Effects on Cerebrospinal Fluid

Pressure Decrease and Craniospinal Fluid Redistribution. Orešković D, Maraković J,

Varda R, Radoš M, Jurjević I, Klarica M. *Neuroscience*. 2018 Nov 10;392:164-171.

doi: 10.1016/j.neuroscience.2018.09.029. Epub 2018 Sep 29.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Project „Mystery of subthalamus – anatomical division of the subthalamic nucleus - 3STAN“, lead investigator assistant professor Goran Sedmak

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Project „Pathophysiology of cerebrospinal fluid and intracranial pressure“ , lead investigator professor Marijan Klarica

Project „Mystery of subthalamus – anatomical division of the subthalamic nucleus - 3STAN“, lead investigator assistant professor Goran Sedmak

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Anja Kafka, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Genome instability

BIOGRAPHY

Anja Kafka was born on December 1st 1986 in Pakrac, Croatia. She graduated at the Faculty of Science University of Zagreb in 2011. In 2010 she begun to volunteer at Croatian Institute for Brain Research. In 2012. she started to work as research assistant at Department of Biology School of Medicine, University of Zagreb and Laboratory of Neurooncology at Croatian Institute for Brain Research. In 2012 she enrolled PhD program in the field of Biomedicine and Health Sciences at the School of medicine, University of Zagreb. In October 2017 she defended her PhD thesis entitled „Changes in gene structure and protein expression of DVL1, DVL2, DVL3 and transcription factors TCF1 and LEF1 in astrocytic brain tumors“.

Education:

2005-2008 Faculty of Science University of Zagreb, Bachelor of science, BS

2008-2011 Faculty of Science University of Zagreb, Master of science, MS in Experimental Biology

2012-2017 School of Medicine University of Zagreb, PhD Biomedicine and Health Sciences

Work experience:

2010-2012 volunteer at Croatian Institute for Brain Research

2012-2018 research assistant at Department of Biology School of Medicine, University of Zagreb and Laboratory of Neurooncology at Croatian Institute for Brain Research

2018-present postdoctoral research assistant at Department of Biology School of Medicine, University of Zagreb and Laboratory of Neurooncology at Croatian Institute for Brain Research

Participation in scientific projects:

Researcher at 10 scientific projects

Publications:

Author of 16 published scientific papers (+ 2 in process of peer review) and coauthor of 35 congress abstracts.

Teaching:

Participate in courses within undergraduate study: Medical Biology (Medical study in Croatian and English), Eucaryotic genome and Medical genetics. She is also involved in courses on doctoral studies Biomedicine and Health Sciencies (Genome instability) and Neuroscience (Genetic basis of brain tumors).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: -

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Kafka A, Tomas D, Beroš V, Pećina H, Zeljko M, Pećina-Šlaus N. Brain metastases from lung cancer show increased expression of DVL1, DVL3 and beta-catenin and down regulation of E-cadherin. Int J Mol Sci 2014;15(6):10635-51, doi:10.3390/ijms150610635

Pećina-Šlaus N, Kafka A, Tomas D, Marković L, Okštajner PK, Sukser V, Krušlin B. Wnt signaling transcription factors TCF-1 and LEF-1 are upregulated in malignant astrocytic brain tumors. *Histol Histopathol* 2014;29:1557-64.

Pećina-Šlaus N, Gotovac K, Kafka A, Tomas D, Borovečki F. Genetic changes observed in a case of adult pilocytic astrocytoma revealed by array CGH analysis. *Mol Cytogenet* 2014;7(1):95. doi: 10.1186/s13039-014-0095-2.

Pećina-Šlaus N, Kafka A, Vladušić T, Pećina HI, Hrašćan R. AXIN1's expression and localization in meningiomas and association to changes of APC and E-cadherin. *Anticancer Res* 2016;36:4583-94. doi:10.21873/anticancer.11007

Pećina-Šlaus N, Kafka A, Bukovac A, Vladušić T, Tomas D, Hrašćan R. Genetic changes of MLH1 and MSH2 genes could explain constant findings on microsatellite instability in intracranial meningioma. *Tumor Biol* 2017;39(7); doi: 10.1177/1010428317705791

Pećina-Šlaus N, Bukovac A, Salomon I, Kafka A. Microsatellite instability as a driving force for cancer progression. *Cancer Hypotheses* 2017;1(6);1-16

Kafka A, Tomas D, Lechpammer M, Gabud T, Pecina-Slaus N. The relationship of expression levels and localizations of DVL3 and sFRP3 in glioblastoma. *Dis Markers* 2017. <https://doi.org/10.1155/2017/9253495>

Kafka A, Karin V, Šerman Lj, Bukovac A, Njirić N, Jakovčević A, Pećina-Šlaus N. Hypermethylation of Secreted Frizzled Related Protein 1 gene promoter in different astrocytoma grades. *Cro Med J* 2018;59(5):213-23. doi: 10.3325/cmj.2018.59.213

Kafka A, Bačić M, Tomas D, Žarković K, Bukovac A, Njirić N, Mrak G, Krsnik Ž, Pećina-Šlaus N. Different behaviour of DVL1, DVL2, DVL3 in astrocytoma malignancy grades and their association to TCF1 and LEF1 upregulation. *J Cell Mol Med*. 2018:1-15. doi: 10.1111/jcmm.13969.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Kafka A, Tomas D, Beroš V, Pećina HI, Zeljko M, Pećina-Šlaus N. Brain metastases from lung cancer show increased expression of DVL1, DVL3 and beta-catenin and down regulation of E-cadherin. *Int J Mol Sci* 2014;15(6):10635-51, doi:10.3390/ijms150610635

Pećina-Šlaus N, Kafka A, Tomas D, Marković L, Okštajner PK, Sukser V, Krušlin B. Wnt signaling transcription factors TCF-1 and LEF-1 are upregulated in malignant astrocytic brain tumors. *Histol Histopathol* 2014;29:1557-64.

Kafka A, Musani V, Pećina-Šlaus N. Optimal amplification conditions for D16S3399 polymorphic STS Axin-1 gene marker. *Period Biol* 2014;116(2):197-9.

Kafka A, Bačić-Kinda S, Pećina-Šlaus N. The cellular story of Dishevelleds. *Croat Med J* 2014; 55:459-67. doi: 10.3325/cmj.2014.55.459

Pećina-Šlaus N, Gotovac K, Kafka A, Tomas D, Borovečki F. Genetic changes observed in a case of adult pilocytic astrocytoma revealed by array CGH analysis. *Mol Cytogenet* 2014;7(1):95. doi: 10.1186/s13039-014-0095-2.

Pećina-Šlaus N, Kafka A. Wnt signaling and astrocytic brain tumor. *CNS Oncology* 2015;4(6):369-70. doi:10.2217/cns.15.24

Pećina-Šlaus N, Kafka A, Varošaneć AM, Marković L, Krsnik Ž, Njirić N, Mrak G. Expression patterns of Wnt signaling component sFRP3 in astrocytoma and glioblastoma. *Mol Med Rep* 2016;13:4245-51. doi: 10.3892/mmr.2016.5061

Pećina-Šlaus N, Kafka A, Vladušić T, Tomas D, Logara M, Skoko J, Hrašćan R. Loss of p53 expression is accompanied with upregulation of beta-catenin in meningiomas: a concomitant reciprocal expression. *Int J Exp Pathol* 2016;97:159-69. doi: 10.1111/iep.12186

Pećina-Šlaus N, Kafka A, Lechpammer M. Molecular genetics of intracranial meningiomas with emphasis on canonical Wnt signalling. *Cancers* 2016;8:67-88. doi:10.3390/

Pećina-Šlaus N, Kafka A, Vladušić T, Pećina HI, Hrašćan R. AXIN1's expression and localization in meningiomas and association to changes of APC and E-cadherin. *Anticancer Res* 2016;36:4583-94. doi:10.21873/anticancer.11007

Pećina-Šlaus N, Kafka A, Bukovac A, Vladušić T, Tomas D, Hrašćan R. Genetic changes of MLH1 and MSH2 genes could explain constant findings on microsatellite instability in intracranial meningioma. *Tumor Biol* 2017;39(7); doi: 10.1177/1010428317705791

Pećina-Šlaus N, Bukovac A, Salomon I, Kafka A. Microsatellite instability as a driving force for cancer progression. *Cancer Hypotheses* 2017;1(6);1-16

Kafka A, Tomas D, Lechpammer M, Gabud T, Pecina-Slaus N. The relationship of expression levels and localizations of DVL3 and sFRP3 in glioblastoma. *Dis Markers* 2017. <https://doi.org/10.1155/2017/9253495>

Kafka A, Karin V, Šerman LJ, Bukovac A, Njirić N, Jakovčević A, Pećina-Šlaus N. Hypermethylation of Secreted Frizzled Related Protein 1 gene promoter in different astrocytoma grades. *Cro Med J* 2018;59(5):213-23. doi: 10.3325/cmj.2018.59.213

Kafka A, Bačić M, Tomas D, Žarković K, Bukovac A, Njirić N, Mrak G, Krsnik Ž, Pećina-Šlaus N. Different behaviour of DVL1, DVL2, DVL3 in astrocytoma malignancy grades and their association to TCF1 and LEF1 upregulation. *J Cell Mol Med*. 2018:1-15. doi: 10.1111/jcmm.13969.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2013-2014 Researcher at University of Zagreb research project „Wnt signaling pathway from membrane to nucleus of tumor cells“

2014-2015 Researcher at University of Zagreb research project „Wnt signaling in placentation and tumorigenesis“

2014-2018 Researcher at the Croatian Science Foundation research project „The role of Wnt signaling in epithelial to mesenchymal transition“ (WNT4EMT)

2017-present Researcher at Research Centre of Excellence, of Fundamental Clinical and Translational Neuroscience

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2013-2014 Researcher at University of Zagreb research project „Wnt signaling pathway from membrane to nucleus of tumor cells“

2014-2015 Researcher at University of Zagreb research project „Wnt signaling in placentation and tumorigenesis“



2014-2018 Researcher at the Croatian Science Foundation research project „The role of Wnt signaling in epithelial to mesenchymal transition“ (WNT4EMT)

2015-2016 Researcher at University of Zagreb research project „Gap43 as marker of regeneration of brain tissue after ischemic injury“

2015-2016 Researcher at project MladiMozak (YoungBrain) financed with EU funds, which provides support to young researchers

2017-present Researcher at Croatian Science Foundation research project „Stem cells from human oral mucosa for treatment of brain ischemia“ (ORASTEM)

2017-present Researcher at University of Zagreb research project „The influence of ischemia on the emergence, migration and differentiation of nervous system cells“.

2017-present Researcher at Research Centre of Excellence, of Fundamental Clinical and Translational Neuroscience

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Držislav Kalafatić, MD, PhD, Assistant professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of Obstetrics and Gynaecology, School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Diagnostics and treatment of female urinary incontinence

BIOGRAPHY

Born 29th January 1970, Split, Croatia.

Education:

1989-1995. School of Medicine, University of Zagreb, undergraduate study.

1997-2000. School of Medicine, University of Zagreb – Postgraduate study “Biomedicine”

January 2001. Master degree

March 2011. PhD degree

Work experience

1995-1997. Internship - Clinical Hospital "Sestre milosrdnice", Zagreb.

1997-2001. Research fellow in Obstetrics and Gynaecology, School of Medicine, University of Zagreb

2001-2005. Clinical hospital centre Zagreb / Department of Obstetrics and Gynaecology - specialization in gynaecology and obstetrics

April 2005 - present: Clinical hospital centre Zagreb / Department of Obstetrics and Gynaecology, gyn&obs specialist;

2014 – present - Head of the Transvaginal Surgery Ward, Department of Obstetrics and Gynaecology

2011 - subspecialist of urogynecology

2011 – 2015 – Clinical assistant in Obstetrics&Gynaecology

May 2015 – present – Assistant Professor of Obstetrics&Gynecology, University of Zagreb

Additional information

Co-author of 20 original scientific publications indexed in Current Contents.

Member of the Croatian Medical Association, Secretary of the Croatian Society of Gynaecology and Obstetrics (HDGO), member of the European Urogynaecology Association (EUGA) and Croatian Society for Cancer Research (HDIR).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: May 2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Šprem M, Miličić D, Orešković S, Ljubojević N, Kalafatić D. Intravesically administered ketoprofen in a treatment of detrusor instability: cross-over study. Croat Med J. 2000;41:423-7.

Orešković S, Kalafatić D, Lovrić H, Župić T, Gojević A, Banović M. Cystocele repair by syntetic mesh secured through the obturator foramen (Perigee System). *Gynaecol Perinatol* 2008; 17:29-32

Orešković S, Kalafatić D, Lovrić-Gršić H, Gojević A, Gregov M, Babić I. Operative complications and results of the „SPARC“ procedure for stress urinary incontinence. *Coll Antropol* 2009;33:201-4.

Grgić O, Orešković S, Gršić H, Kalafatić D, Župić T, Maurac I. Outcome and efficacy of a transoburator polypropylene mesh kit in the treatment of anterior pelvic organ prolapse. *Int J Gynaecol Obstet* 2012;116:72-5.

Kalafatić D. Dijagnostika inkontinencije mokraće i defekata dna zdjelice u žena. Šesti hrvatski kongres ginekologa i opstetričara s međunarodnim sudjelovanjem, Split, 2011. *Gynecol Perinatol* 2011 (suppl.1).

Kalafatić D. Kirurške metode u uroginekologiji. Četvrti hrvatski kongres o urogenitalnim i spolno prenosivim infekcijama s međunarodnim sudjelovanjem. Opatija, 2012. Knjiga sažetaka, 42.

Kalafatić D. Kirurški zahvati u liječenju genitalnog prolapsa i statičke inkontinencije mokraće. Peti hrvatski kongres o urogenitalnim i spolno prenosivim infekcijama s međunarodnim sudjelovanjem. Opatija, 2013. Knjiga sažetaka, 24.

Kalafatić D. Konzervativno liječenje statičke inkontinencije mokraće i defekata dna zdjelice. Šesti hrvatski kongres o urogenitalnim i spolno prenosivim infekcijama s međunarodnim sudjelovanjem. Opatija, 2014. Knjiga sažetaka, 24.

Kalafatić D. Classification of LUT dysfunction and pelvic organ prolapse. 2nd Top 40 Regional Leading Lights in Urogynecology and Female Urology. Plitvička jezera, 2014, Book of Abstracts;16-19.

Kalafatić D. SUI and POP: nonsurgical management. 2nd Top 40 Regional Leading Lights in Urogynecology and Female Urology. Plitvička jezera, 2014, Book of Abstracts;32-5.

Kalafatić D. Medical therapy of overactive bladder. 5th Top 40 Regional Leading Lights in Urogynecology and Female Urology. Bohinj, Slovenija, 2017, Book of Abstracts.

Kalafatić D, Orešković S. Vaginal POP Procedures Using Native Tissue. 5th Top 40 Regional Leading Lights in Urogynecology and Female Urology. Bohinj, Slovenija, 2017, Book of Abstracts.

Kalafatić D. Vanjska magnetska intervencija zdjelice u liječenju inkontinencije mokraće. U: *Suvremeni pristup u liječenju žena s inkontinencijom mokraće i defektima dna zdjelice*. Orešković S, Barišić D. (ur.), Medicinska naklada, 2006;52-55.

Kalafatić D. Izvantjelesna magnetska intervencija zdjelice u liječenju inkontinencije mokraće. U: *Suvremeni pristup u liječenju žena s inkontinencijom mokraće i defektima dna zdjelice*. Orešković S, Barišić D. (ur.), Medicinska naklada, 2008;63-67.

Kalafatić D. Kirurško liječenje statičke inkontinencije mokraće i defekata dna zdjelice. U: *Uroginekologija*. Orešković S, Barišić D. (ur.), Medicinska naklada, 2010; 57-64.

Kalafatić D, Banović V. Vanjska magnetska intervencija zdjelice u liječenju inkontinencije mokraće. U: *Uroginekologija*. Orešković S, Barišić D. (ur.), Medicinska naklada, 2010; 65-70.

Kalafatić D. Prekomjerno aktivni mokraćni mjehur – principi konzervativnog liječenja. U: *Suvremeni pristup u liječenju žena s inkontinencijom mokraće i defektima dna zdjelice*. Orešković S, Kalafatić D. (ur.), Medicinska naklada, 2018.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Kalafatić D. Kirurški zahvati u liječenju genitalnog prolapsa i statičke inkontinencije mokraće. Peti hrvatski kongres o urogenitalnim i spolno prenosivim infekcijama s međunarodnim sudjelovanjem. Opatija, 2013. Knjiga sažetaka, 24.

Kalafatić D. Konzervativno liječenje statičke inkontinencije mokraće i defekata dna zdjelice. Šesti hrvatski kongres o urogenitalnim i spolno prenosivim infekcijama s međunarodnim sudjelovanjem. Opatija, 2014. Knjiga sažetaka, 24.

Kalafatić D. Classification of LUT dysfunction and pelvic organ prolapse. 2nd Top 40 Regional Leading Lights in Urogynecology and Female Urology. Plitvička jezera, 2014, Book od Abstracts;16-19.

Kalafatić D. SUI and POP: nonsurgical management. 2nd Top 40 Regional Leading Lights in Urogynecology and Female Urology. Plitvička jezera, 2014, Book od Abstracts;32-5.

Kalafatić D. In the clinic: interactive case studies – the typical and atypical OAB patients. 1st Scientific Round Table „Management of overactive bladder – past, present and future“, Beč, Austrija, 2014.

Kalafatić D. Prekomjerno aktivan mokraćni mjehur: preporuke u liječenju žena u postmenopauzi. Prvi hrvatski kongres menopauzalne medicine s međunarodnim sudjelovanjem, Zagreb, 2014, zbornik radova.

Kalafatić D. Diagnostic and treatment algorithm of urinary incontinence. 3rd Top 40 Regional Leading Lights in Urogynecology and Female Urology. Laško, Slovenija, 2015, Book od Abstracts.

Kalafatić D. Osobitosti liječenja prekomjerno aktivnog mokraćnog mjehura u poslijemenopauzi. 10. hrvatski kongres o ginekološkoj endokrinologiji, humanoј reprodukciji i menopauzi. Brijuni, 2015.

Kalafatić D. Diagnosing the patient with OAB. 2nd Scientific Round Table „Management of overactive bladder – past, present and future“, Beč, Austrija, 2016.

Kalafatić D. Hrvatske smjernice za liječenje inkontinencije u žena. Osmi hrvatski kongres o urogenitalnim i spolno prenosivim infekcijama s međunarodnim sudjelovanjem. Opatija, 2016. Knjiga sažetaka.

Kalafatić D. Minimalno invazivne operacije u uroginekologiji. Sedmi hrvatski kongres ginekologa i opstetričara, Osijek, 2016.

Kalafatić D. Bulking agents in the management of female urinary incontinence. 4th Top 40 Regional Leading Lights in Urogynecology and Female Urology. Gospić, 2016, Book od Abstracts.

Kalafatić D. Povijesni pregled kirurškog liječenja inkontinencije mokraće. Deveti hrvatski kongres o urogenitalnim i spolno prenosivim infekcijama s međunarodnim sudjelovanjem. Opatija, 2017. Knjiga sažetaka.

Kalafatić D. Medical therapy of overactive bladder. 5th Top 40 Regional Leading Lights in Urogynecology and Female Urology. Bohinj, Slovenija, 2017, Book od Abstracts.

Kalafatić D, Orešković S. Vaginal POP Procedures Using Native Tissue. 5th Top 40 Regional Leading Lights in Urogynecology and Female Urology. Bohinj, Slovenija, 2017, Book od Abstracts.

Šarić MJ, Kalafatić D. Clinical experience in the treatment of overactive bladder. 1st Mediterranean Meeting on Pelvic Surgery and Pelvip erineology. Zagreb, 2017, Book of Abstracts.

Kalafatić D. Prekomjerno aktivni mokraćni mjehur – principi konzervativnog liječenja. U: U: Suvremeni pristup u liječenju žena s inkontinencijom mokraće i defektima dna zdjelice. Orešković S, Kalafatić D. (ur.), Medicinska naklada, 2018.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- Croatian Ministry of Science project No. 134-001 „Etiologic factors of goiter in Croatia“, project leader prof. Zvonko Kusić, 1996-2002
- Croatian Ministry of Science project No. 108-032 „Etiologic factors of preterm delivery“, project leader professor Ivana Kuvačić, 1997-2001
- Croatian Ministry of Science project No. 108-261 „The influence of antenatal factors on long-term outcome“, project leader professor Snježane Škrablin, 2002-2005
- Croatian Ministry of Science project No. 117010 “Clinical significance of tumor hypoxia in patients with solid tumors”, project leader professor Lidija Beketić-Orešković, 2011-present
- Croatian Science Foundation project „Novel molecular mechanisms as targeted therapy: Interactions of mRNA molecules and Hedgehog-Gli signal pathway in serous ovarian carcinoma (MIRnaGli)“, project leader dr. Sonja Levanat, 2017-present

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Svjetlana, Kalanj Bognar, Prof. dr.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, Zagreb University

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research methods in vivo and in vitro

BIOGRAPHY

I was born in Zagreb, where I graduated at Classical Gymnasium in 1983. I studied medicine at School of Medicine, Zagreb University, and obtained University degree of Doctor of medicine in 1989. I did my 1-year internship as an employee of the Psychiatric hospital Vrapce, and obtained the licence for general practitioners in 1990. I defended PhD thesis in the field of Biomedicine and health (basic medical science, medical biochemistry) in 1998, at School of Medicine, Zagreb University. From 1992. to 2004., I participated in research and teaching at Department for Chemistry and Biochemistry - first as a young researcher and afterwards as a postdoctoral fellow. I obtained a title of Assistant Professor in 2004, and since 2007. became a member of teaching staff of Department for Chemistry and Biochemistry. In 2009, I obtained a title of Associate Professor, and in 2016. a title of Professor. Since foundation of Croatian Institute for Brain Research I have been participating in research activities of Laboratory for molecular neurobiology and neurochemistry; since 2007., I've been a head of the Laboratory. My scientific training includes study visits and research in Germany (Technical Faculty, Bielefeld), Slovenia (School of Medicine, Ljubljana University), and France (Centre de Génétique Moléculaire du CNRS, Gif-sur-Yvette). Since 2010., I have established scientific collaboration with colleagues from Leibniz Institute for Neurobiology (Magdeburg, Germany), and recently I have started to collaborate with several other scientific institutions in United Kingdom, Romania and Sweden. I was a researcher collaborating in more than 10 national and international scientific projects, and leader of two national and two bilateral international projects financed by Croatian Ministry of science, education and technology. In the project period 2017.-2021. I am a principal investigator of a research project supported by Croatian Science Foundation. My scientific interests refer to molecular neurobiology and neurochemistry, particularly to research of membrane lipids and their role in molecular pathogenesis of neurodegeneration. I published more than 30 scientific and popular papers, coauthored more than 50 conference abstracts, and was invited lecturer at international conferences. I mentored scientific work of students - 2 of the student projects were awarded by Rector of Zagreb University. I was mentor of 5 diploma works, 1 MSc thesis, 3 PhD theses. I am active member of Croatian Society for biochemistry and molecular biology, Croatian Society for Neuroscience, Federation of European Neuroscience Societies (FENS) and Society for Neuroscience (SfN).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 19.01.2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Ježek D, Schulze W, Kalanj Bognar S, Vukelić Ž, Milavec-Puretić V, Krhen I: Effects of various cryopreservation media and freezing-thawing on the morphology of the rat testicular biopsy. *Andrologia*, 33:368-378, 2001. (IF=1,546 ; Q3 andrology)
2. Vukelić Ž, Kalanj Bognar S: Cell density-dependent changes of glycosphingolipid biosynthesis in cultured human skin fibroblasts. *Glycoconjugate J*, 18:429-437, 2001.(IF=2,1; Q3 biochem/mol.biol.)
3. Kalanj Bognar S. Ganglioside catabolism is altered in fibroblasts and leukocytes from Alzheimer's disease patients. *Neurobiol Aging*. 27(9):1354-6, Sep 2006. (IF=5,8; Q1 neurosciences)

4. Kalanj Bogнар S, Foretić B, Vukelić Ž, Gulin T, Ježek D. Cytotoxicity of Selected Pyridinium Oximes in Human SH-SY5Y Neuroblastoma Cell Line. *Croatica chemica acta* 81 (1):67-71, 2008. (IF=0,76; Q3 chemistry, multidisciplinary)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Mlinac K, Fabris D, Vukelić Ž, Rožman M, Heffer M, Kalanj Bogнар S. Structural analysis of brain ganglioside acetylation patterns in mice with altered ganglioside biosynthesis *Carbohydrate Research*. 382;1-8, 2013. (2,15; Q2 chemistry applied)
2. Bačić Baronica K, Mlinac K, Petlevski R, Ozretić D, Vladić A, Kalanj Bogнар S. Žuntar I. Progression of multiple sclerosis is associated with gender differences in glutathione S-transferase P1 detoxification pathway. *Acta neurobiologiae experimentalis*. 74 (3):257-265, 2014. (IF=2,24; Q3 neurosciences)
3. Herrera-Molina R; Mlinac Jerković K; Ilić K; Stöber F; Kumar VS; Sandoval M; Jovanov Milošević N; Šimić G; Smalla K-H, Goldschmidt J, Kalanj Bogнар S, Montag D. (2017) Neuroplastin deletion in glutamatergic neurons impairs selective brain functions and calcium regulation: implication for cognitive deterioration. *Scientific Reports*. 7 Article number: 7273. (Nature Publishing Group, IF=4,6; Q1)
4. Ilić K, Mlinac-Jerković K, Jovanov-Milosević N, Simić G, Habek N, Bogdanović N, Kalanj-Bognar S. (2018) Hippocampal expression of cell-adhesion glycoprotein neuroplastin is altered in Alzheimer's disease. *J Cell Mol Med*. Nov 28. doi: 10.1111/jcmm.13998. [Epub ahead of print] (IF=4,3; Q1)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1) 1992.-1998., project "Human brain gangliosides" (P.I.- I. Kračun; Croatian Ministry of Science and Technology, 108136); 2) 1998.-2002., project "Sphingolipids of hippocampal neurons in Alzheimer's disease" (P.I.-Č. Čosović; Croatian Ministry of Science and Technology, 108121); 3) 1999-2002., bilateral Croatian-Slovenian project "Lanosterol 14alpha-demethylase (CYP51) and related genetic factors of cholesterol late-phase synthesis during spermatogenesis" (P.I.s - Lj. Banek and D. Rozman), ; 4) 2002., NATO project "Expression of cholesterol homeostasis genes analyzed by DNA microarray technology", P.I.s-D. Rozman (Ljubljana University) and D. Pompon (Centre de Génétique Moléculaire du CNRS, Gif-sur-Yvette, France); 5) 2002.-2006., project leader - "Glycosphingolipids in brain development, aging and neurodegeneration" (Croatian Ministry of Science, Technology and Sport, 108120, project within collaborative programme "Brain development, plasticity and regeneration following perinatal lesion", Croatian Institute for Brain Research); 6) 2003-2004., Bilateral project leader - "Genetic regulation of cholesterol metabolism in murine brain" (co-leader: D. Rozman), 7) 2007.-2014., project leader - "Role of membrane lipids in brain development, aging and neurodegeneration"(Croatian Ministry of Science, Technology and Sport); 8) 2007.-2008., bilateral project leader - "Expression of genes involved in cholesterol homeostasis in murine brain" (co-leader: M. Fink).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1) 2013.-2015., GlowBrain (P.I.-S. Gajović); 2) 2014., bilateral German/DAAD-Croatian project "Gangliosides and neuroplastin in organization of synaptic membrane" (P.I.-K. Mlinac); 3) 2014., Project leader - "Expression of neuroplastin in human hippocampus" (Zagreb University); 4) 2015., project "Characterisation of gangliosides and neuroplastin as potential markers of human brain tumors" (P.I.-Ž. Vukelić; Zagreb University); 5) 2015.-2019., project "Pathophysiological consequences of changed composition of lipid rafts" (P.I.- M. Heffer; Croatian Science Foundation); 6) 2017., Project leader - "Influence of cellular differentiation and lipid environment on neuroplastin expression and positioning-



studying membrane dynamics in vitro" (Zagreb University); 7) 2018., Project leader - "Influence of cellular differentiation and lipid environment on neuroplastin expression and positioning-continuation of studying membrane dynamics in vitro" (Zagreb University); 8) 2017.-2021., Project leader - "Molecular markers of neuronal vulnerability, adaptation and plasticity in acute and chronic brain lesion", NeuroReact (Croatian Science Foundation).

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

3

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Smilja Kalenic, MD, PhD – tenured professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb, Croatia
– retired from 2013

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pathogenesis of infectious diseases, Biomaterial infections

Address: Opatijski trg 6, 10000 Zagreb; Mobile phone: +385 98 301 443; E-mail: smilja.kalenic@mef.hr

Born 23.03.1945., Zagreb, Classic High School, Zagreb 1964, School of Medicine, University of Zagreb 1969, Specialist in Medical Microbiology and Parasitology 1977, Master of Sciences 1982, Philosophy Doctor degree in 1983. Scientific and academic ranks: 1987 scientific collaborator, 1992-1997 assistant professor of Medical Microbiology, 1997-2002 associate professor of Medical Microbiology, 2002-2008 full professor of Medical Microbiology, 2008 tenured professor of Medical Microbiology. Jobs: Institute for Public Health of Zagreb 1971-1985, Clinical Hospital Centre Zagreb, Dpt. for Clinical and Molecular Microbiology, Zagreb 1985-2010 - retired 1.10.2010. Institute for Medical Microbiology and Parasitology and Chair of Department for Medical Microbiology and Parasitology, School of Medicine, University of Zagreb 1993-2013 - retired 1.10.2013.

Articles in journals cited in PubMed: 117 articles from 1981. till 2016. Cited (WoS: 82 articles 1996-2019): 1281(without self citations 1253), <https://www.ncbi.nlm.nih.gov/pubmed/?term=Kalenic+S>

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2008 (retired tenured professor since 2013)

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Jandrić M, Kalenić S, Labar B, Nemet D, Jakić-Razumović J, Mrsić M, Plečko V. An autopsy study of systemic fungal infections in patients with hematologic malignancies. *Eur J Clin Microbiol Infect Dis* 1995;14:768-774.
2. Kalenic S, Jandric M, Vegar V, Zuech N, Sekulic A, Mlinaric-Missoni E. Hansenula anomala outbreak at a surgical intensive care unit: a search for risk factors. *Eur J Epidemiol* 2001;17:491-6.
3. Zupanić-Krmek D, Nemet D, Mrsić M, Bogdanić V, Labar B, Jandrić M, Kalenić S [Risk factors for invasive fungal infections during intensive chemotherapy of acute leukemia--retrospective study]. *Acta Med Croatica*. 2004;58(4):275-84.
4. Missoni EM, Rade D, Nederal S, Kalenic S, Kern J, Babic VV. Differentiation between Candida species isolated from diabetic foot by fatty acid methyl ester analysis using gas chromatography. *J Chromatogr B Analyt Technol Biomed Life Sci*. 2005 Aug 5;822(1-2):118-23.
5. Mlinarić-Missoni E, Kalenić S, Vazić-Babić V. Species distribution and frequency of isolation of yeasts and dermatophytes from toe webs of diabetic patients. *Acta Dermatovenerol Croat*. 2005;13(2):85-92.
6. Vazić-Babić V, Mlinarić-Missoni E, Kalenić S. Biotypes of Candida albicans isolated from cardiovascular system and skin surveillance cultures of hospitalized patients. *Acta Dermatovenerol Croat*. 2006;14(4):219-24.
7. Missoni EM, Kalenić S, Vukelić M, De Syo D, Belicza M, Kern J, Babić VV. Role of yeasts in diabetic foot ulcer infection]. *Acta Med Croatica*. 2006;60(1):43-50.

8. Zarb P, Coignard B, Griskeviciene J, Muller A, Vankerckhoven V, Weist K, Goossens M, Vaerenberg S, Hopkins S, Catry B, Monnet D, Goossens H, Suetens C; National Contact Points for the ECDC pilot point prevalence survey; Hospital Contact Points for the ECDC pilot point prevalence survey. The European Centre for Disease Prevention and Control (ECDC) pilot point prevalence survey of healthcare-associated infections and antimicrobial use. *Euro Surveill.* 2012 Nov 15;17(46).
9. S. Kalenić, P. Senji, L. Žele-Starčević, N. Jarža-Davila, D. Nemet. *Mikrobiologija sepse*, Medicinski fakultet Sveučilišta u Zagrebu, Biblioteka Priručnici za nastavu izbornih predmeta, Zagreb 1992. Drugo izdanje (Kalenić, S, Plečko V i Nemet D.) 2003. godine.
- 10 S. Kalenić. *Mikrobiologija*, u: B. Vrhovac i suradnici, ur.: *Interna medicina*, Naprijed, Zagreb 1991:243-256. i 1998.
11. S. Kalenić, *Mikrobiologija*, u: Lj. Zergolern i suradnici, ur.: *Pedijatrija*, Naprijed, Zagreb, 1994: 2055-2067.
12. Smilja Kalenić i Emilija Mlinarić Missoni, i sur.: *Medicinska bakteriologija i mikologija*. PTI, Zagreb, 1995.; drugo izdanje 2000.
13. Smilja Kalenić i suradnici. *Medicinska mikrobiologija*, Medicinska naklada, Zagreb 2013., 2. izd 2019.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Budimir A, Tićac B, Rukavina T, Farkaš M, Kalenić S. First report on PVL-positive methicillin-resistant *Staphylococcus aureus* of SCCmec type V, spa type T441 in Croatia. *Coll Antropol.* 2016 Jun;40(2):133-7.
2. Aanensen DM, Feil EJ, Holden MT, Dordel J, Yeats CA, Fedosejev A, Goater R, Castillo-Ramírez S, Corander J, Colijn C, Chlebowicz MA, Schouls L, Heck M, Pluister G, Ruimy R, Kahlmeter G, Åhman J, Matuschek E, Friedrich AW, Parkhill J, Bentley SD, Spratt BG, Grundmann H; European SRL Working Group. Whole-Genome Sequencing for Routine Pathogen Surveillance in Public Health: a Population Snapshot of Invasive *Staphylococcus aureus* in Europe. *MBio.* 2016 May 5;7(3). pii: e00444-16. doi: 10.1128/mBio.00444-16.
3. Fiolić Z, Bosnjak Z, Bedenić B, Budimir A, Mareković I, Cetkovic H, Kalenić S. Nationwide Survey of *Klebsiella Pneumoniae* Strains Producing CTX-M Extended-spectrum β -lactamases in Croatia. *Coll Antropol.* 2015 Dec;39(4):947-51.
4. Brusaferro S, Arnoldo L, Cattani G, Fabbro E, Cookson B, Gallagher R, Hartemann P, Holt J, Kalenic S, Popp W, Privitera G, Prikazsky V, Velasco C, Suetens C, Varela Santos C. Harmonizing and supporting infection control training in Europe. *J Hosp Infect.* 2015 Apr;89(4):351-6. doi: 10.1016/j.jhin.2014.12.005. Epub 2015 Jan 7. Review.
5. Brusaferro S, Cookson B, Kalenic S, Cooper T, Fabry J, Gallagher R, Hartemann P, Mannerquist K, Popp W, Privitera G, Ruef C, Viale P, Coiz F, Fabbro E, Suetens C, Varela Santos C; National representatives of the Training in Infection Control in Europe (TRICE) project. Training infection control and hospital hygiene professionals in Europe, 2010: agreed core competencies among 33 European countries. *Euro Surveill.* 2014 Dec 11;19(49).
6. Budimir A, Payerl Pal M, Bošnjak Z, Mareković I, Vuković D, Roksandić Križan I, Milas J, Plečko V, Kalenić S. Prevalence and molecular characteristics of methicillin-resistant *Staphylococcus aureus* strains isolated in a multicenter study of nursing home residents in Croatia. *Am J Infect Control.* 2014 Nov;42(11):1197-202. doi: 10.1016/j.ajic.2014.07.032. Epub 2014 Sep 17.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



1. 1986-1990, Croatian Ministry of Science, collaborator, project task no. 1.08.08.00.22 “ The role of *Campylobacter pylori* in patients with gastritis and peptic ulcer” – project leader B. Vrhovac,
2. 1992, War project: “Designation of empirical therapy in intensive care units”,
3. 2002-2006, MZOS project (No. 108 121) entitled: “Genotyping of hospital infection agents” - project leader,
4. 2007-20013, MZOS project (No. 108-1080114-0017) entitled: “Genotypes and virulence factors of agents causing hospital infections” – project leader.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS /

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 7

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Sanja Kapitanović, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Rudjer Boskovic Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Molecular genetics of gastrointestinal tumors, Endocrine tumors of gastrointestinal tract and the pancreas

BIOGRAPHY

Prof. Sanja Kapitanović, , MD, PhD

Identification number of the scientist:200570

Senior Research Scientist permanent position

Laboratory for personalized medicine, Division of Molecular Medicine, RBI, Bijenička c. 54, Zagreb, Croatia; e-mail: kapitan@irb.hr

EDUCATION:

1997, Ph.D., School of Medicine, University of Zagreb

1992, M.Sc., School of Medicine, University of Zagreb

1988, MD, School of Medicine, University of Zagreb

WORK EXPERIENCE:

2011 - today, Senior Research Scientist permanent position, Head of Laboratory for Personalized Medicine, Division of Molecular Medicine, Ruđer Bošković Institute, Zagreb

2009 - 2011, Senior Research Scientist, Head of Laboratory for Personalized Medicine, Division of Molecular Medicine, Ruđer Bošković Institute, Zagreb

2005 - 2008, Senior Research Scientist, Laboratory of Molecular Oncology, Division of Molecular Medicine, Ruđer Bošković Institute, Zagreb

2002 - 2005, Senior Research Associate, Laboratory of Molecular Oncology, Division of Molecular Medicine, Ruđer Bošković Institute, Zagreb

1998 - 2002, Research Associate, Laboratory of Molecular Oncology, Division of Molecular Medicine, Ruđer Bošković Institute, Zagreb

1997 - 1998, Postdoctoral Researcher, Laboratory of Molecular Oncology, Division of Molecular Medicine, Ruđer Bošković Institute, Zagreb

1993 - 1997, Research Assistant, Laboratory of Molecular Oncology, Division of Molecular Medicine, Ruđer Bošković Institute, Zagreb

1990 - 1993, MD, Department of Transfusiology and Immunohematology, County Hospital Šibenik

1988 - 1989, MD, Transfusiology Institute of Croatia, Zagreb

SCIENTIFIC GRANTS

1999-2002, principal investigator of MZOS grant for young scientists: Molecular genetics of colon tumors.

2002–2006, principal investigator of MZOS scientific project: Molecular genetics of gastrointestinal tumors.

2002-2006, collaborator of MZOS scientific project: Cyclooxygenase-2: new target for chemoprevention and treatment of colon tumors.

2007-2014, principal investigator of MZOS scientific project: Molecular genetics and pharmacogenetics of gastrointestinal tumors.

2007-2014, collaborator of MZOS scientific project: Neuroendocrine tumors of gastrointestinal tract and pancreas.

2017-2021, principal investigator of Croatian Science Foundation scientific project: Microsatellite instability (MSI and EMT) in molecular profiling of sporadic colon cancer

AWARDS

2006 National Award for Science in Biomedicine

1994 Croatian Academy of Sciences and Arts Award for Special Achievements in Science

SUPERVISION OF DOCTORAL AND POSTDOCTORAL STUDENTS

8 graduate /3 master of science /5 doctoral, Faculty of Science, University of Zagreb

TEACHING ACTIVITIES

2003 - present Course Leader: Molecular genetics of gastrointestinal tumors, Doctoral Study in Biomedicine and Health Sciences School of Medicine, University of Zagreb

2007 - present Course Leader: Personalized medicine – predictive medicine and pharmacogenetics, Doctoral Study in Molecular Biosciences, University of Osijek/Ruđer Bošković Institute

2009 – 2015 Course Leader: Molecular diagnostics, Graduate Study, Faculty of Science, University of Zagreb

SCIENTIFIC PUBLICATIONS:

87 (70 indexed in Current Contents, JCR Q1:23, Q2:25)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

28.11.2005. Senior Research Scientist

8.9.2011. Senior Research Scientist permanent position

29.11.2017. Full Professor permanent position University of Osijek

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Kapitanović S, Radošević S, Kapitanović M, Anđelinović Š, Ferenčić Ž, Tavassoli M, Primorac D, Sonicki Z, Spaventi Š, Pavelić K, Spaventi R. The expression of p185HER-2/neu correlates with the stage of disease and survival in colorectal cancer. *Gastroenterology* 1997; 112: 1103-1113.

Šturlan S, Kapitanović S, Kovačević D, Lukač J, Spaventi Š, Spaventi R, Pavelić K. Loss of heterozygosity of APC and DCC tumor suppressor genes in human sporadic colon cancer. *J Mol Med* 1999; 77: 316-321.

Kapitanović S, Radošević S, Slade N, Kapitanović M, Anđelinović Š, Ferenčić Ž, Tavassoli M, Spaventi Š, Pavelić K, Spaventi R. Expression of erbB-3 protein in colorectal adenocarcinoma: correlation with poor survival. *J Cancer Res Clin Oncol* 2000; 126: 205-211.

Popović Hadžija M, Kapitanović S, Radošević S, Čačev T, Mirt M, Kovačević D, Lukač J, Hadžija M, Spaventi R, Pavelić K. Loss of heterozygosity of DPC4 tumor suppressor gene in human sporadic colon cancer. *J Mol Med* 2001; 79: 128-132.

Kapitanović S, Čačev T, Spaventi R, Pavelić K. Submerged gel electrophoresis on Spreadex gels – a new method for APC gene mutation detection. *J Mol Med* 2001; 79: 333-337.

- Pavelić K, Kolak T, Kapitanović S, Radošević S, Spaventi Š, Krušlin B, Pavelić J. Gastric cancer: the role of insulin-like growth factor 2 (IGF2) and its receptors (IGF1R and M6-P/IGF2R). *J Pathology* 2003; 201: 430-438.
- Popović Hadžija M, Radošević S, Kovačević D, Lukač J, Hadžija M, Spaventi R, Pavelić K, Kapitanović S. Status of the DPC4 tumor suppressor gene in sporadic colon adenocarcinoma of Croatian patients: identification of a novel somatic mutation. *Mutat Res* 2004; 548: 61-73.
- Kapitanović S, Čačev T, Berković M, Popović Hadžija M, Radošević S, Seiwerth S, Spaventi Š, Pavelić K, Spaventi R. Nm23-H1 expression and loss of heterozygosity in colon adenocarcinoma. *J Clinical Pathology* 2004; 57: 1312-1318.
- Čačev T, Radošević S, Spaventi R, Pavelić K, Kapitanović S. NF1 gene loss of heterozygosity and expression analysis in sporadic colon cancer. *Gut* 2005; 54(8): 1129-1135.
- Kapitanović S, Čačev T, Antica M, Kralj M, Cavrić G, Pavelić K, Spaventi R. Effect of indomethacin on E-cadherin and beta-catenin expression in HT-29 colon cancer cells. *Exp Mol Pathol* 2006; 80(1): 91-96.
- Berković M, Čačev T, Zjačić-Rotkvić V, Kapitanović S. TNF-alpha promoter single nucleotide polymorphisms in gastroenteropancreatic neuroendocrine tumors. *Neuroendocrinology* 2006; 84: 346-352.
- Cigrovski Berković M, Jokić M, Marout J, Radošević S, Zjačić-Rotkvić V, Kapitanović S. IL-6 -174 C/G polymorphism in gastroenteropancreatic neuroendocrine tumors (GEP-NETs). *Exp Mol Pathol* 2007; 83: 474-479.
- Čačev T, Radošević S, Križanac Š, Kapitanović S. Influence of interleukin-8 and interleukin-10 on sporadic colon cancer development and progression. *Carcinogenesis* 2008; 29: 1572-1580.
- Catela Ivković T, Lončar B, Spaventi R, Kapitanović S. Association of H-ras polymorphisms and susceptibility to sporadic colon cancer. *Int J Oncol* 2009; 35: 1169-1173.
- Cigrovski Berković M, Jokić M, Marout J, Radošević S, Zjačić-Rotkvić V, Kapitanović S. IL-2 -330 T/G SNP and serum values – potential new tumor markers in neuroendocrine tumors of gastrointestinal tract and pancreas (GEP-NETs). *J Mol Med* 2010; 88: 423-429.
- Catela Ivković T, Aralica G, Čačev T, Lončar B, Kapitanović S. miR-106a overexpression and pRB downregulation in sporadic colorectal cancer. *Exp Mol Pathol* 2013; 93(1): 148-154.
- Čačev T, Aralica G, Lončar B, Kapitanović S. Loss of NF2/merlin expression in advanced sporadic colorectal cancer. *Cell Oncol* 2013; 37(1): 69-77.
- Kapitanović S, Čačev T, Lončar B, Catela Ivković T, Križanac Š, Pavelić K. Reduced FHIT expression is associated with tumor progression in sporadic adenocarcinoma. *Exp Mol Pathol* 2014; 96: 92-97.
- Cigrovski Berković M, Čačev T, Catela Ivković T, Zjačić-Rotkvić V, Kapitanović S. New insights into the role of chronic inflammation and cytokines in etiopathogenesis of GEP-NETs. *Neuroendocrinology* 2014; 99: 75-84.
- Kapitanović S, Čačev T, Catela Ivković T, Lončar B, Aralica G. TNFα gene/protein in tumorigenesis of sporadic colon adenocarcinoma. *Exp Mol Pathol* 2014; 97: 285-291.
- Nikolić A, Čačev T, Aralica G, Popović Hadžija M, Kapitanović S, Radojković D. Mononucleotide repeats in the SMAD4 gene promoter in colon carcinoma tissue of Croatian patients. *Experimental and molecular pathology* 2015;98(2):133-5.

Cigrovski Berković M, Čačev T, Catela Ivković T, Marout J, Ulamec M, Zjačić-Rotkvić V, Kapitanović S. High VEGF serum values are associated with locoregional spread of gastroenteropancreatic neuroendocrine tumors (GEP-NETs). *Molecular and cellular endocrinology* 2016; 425:61-8.

Čačev T, Zapletal E, Musani V, Rako I, Lončar B, Aralica G, Kapitanović S. Analysis of MSH2 loss of heterozygosity, expression, and IVS10+12G>A polymorphism in sporadic colon cancer. *Anticancer Res.* 2018;38(5):2841-2848.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Kapitanović S, Čačev T, Lončar B, Catela Ivković T, Križanac Š, Pavelić K. Reduced FHIT expression is associated with tumor progression in sporadic adenocarcinoma. *Exp Mol Pathol* 2014; 96: 92-97.

Cigrovski Berković M, Čačev T, Catela Ivković T, Zjačić-Rotkvić V, Kapitanović S. New Insights into the Role of Chronic Inflammation and Cytokines in Etiopathogenesis of GEP-NETs. *Neuroendocrinology* 2014;99:75-84.

Čačev T, Aralica G, Lončar B, Kapitanović S. Loss of NF2/Merlin expression in advanced sporadic colorectal cancer. *Cellular Oncology* 2014;37:69-77.

Nikolić A, Čačev T, Aralica G, Popović Hadžija M, Kapitanović S, Radojković D. Mononucleotide repeats in the SMAD4 gene promoter in colon carcinoma tissue of Croatian patients. *Experimental and molecular pathology* 2015;98(2):133-5.

Kapitanović S. Molecular stratification of colorectal cancer. *Rad 522. Medical Sciences*, 41(2015): 107-115.

Cigrovski Berković M, Čačev T, Catela Ivković T, Marout J, Ulamec M, Zjačić-Rotkvić V, Kapitanović S. High VEGF serum values are associated with locoregional spread of gastroenteropancreatic neuroendocrine tumors (GEP-NETs). *Molecular and cellular endocrinology* 2016;425:61-68.

Kapitanović S. Molecular stratification of sporadic and hereditary colorectal cancer. *Rad. 530. Medical Sciences*, 44(2017): 73-79.

Čačev T, Zapletal E, Musani V, Rako I, Lončar B, Aralica G, Kapitanović S. Analysis of MSH2 loss of heterozygosity, expression, and IVS10+12G>A polymorphism in sporadic colon cancer. *Anticancer Res.* 2018;38(5):2841-2848.

Kapitanović S. Molecular subtypes of colorectal cancer. *Rad. 533. Medical Sciences*, 45(2018): 105-112.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1999-2002, principal investigator of MZOS grant for young scientists: Molecular genetics of colon tumors.

2002–2006, principal investigator of MZOS scientific project: Molecular genetics of gastrointestinal tumors.

2002-2006, collaborator of MZOS scientific project: Cyclooxygenase-2: new target for chemoprevention and treatment of colon tumors.

2007-2014, principal investigator of MZOS scientific project: Molecular genetics and pharmacogenetics of gastrointestinal tumors.



2007-2014, collaborator of MZOS scientific project: Neuroendocrine tumors of gastrointestinal tract and pancreas.

2014 -2017, MC member in COST Action BM1206: Cooperation Studies on Inherited Susceptibility to Colorectal Cancer.

2017-2021, principal investigator of Croatian Science Foundation scientific project: Microsatellite instability (MSI and EMAST) in molecular profiling of sporadic colon cancer

2018 -2021, MC member in COST Action CA17118: Identifying Biomarkers Through Translational Research for Prevention and Stratification of Colorectal cancer.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2007-2014, principal investigator of MZOS scientific project: Molecular genetics and pharmacogenetics of gastrointestinal tumors.

2007-2014, collaborator of MZOS scientific project: Neuroendocrine tumors of gastrointestinal tract and pancreas.

2014 -2017, MC member in COST Action BM1206: Cooperation Studies on Inherited Susceptibility to Colorectal Cancer.

2017-2021, principal investigator of Croatian Science Foundation scientific project: Microsatellite instability (MSI and EMAST) in molecular profiling of sporadic colon cancer

2018 -2021, MC member in COST Action CA17118: Identifying Biomarkers Through Translational Research for Prevention and Stratification of Colorectal cancer.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assistant Professor Ivana Karmelić, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical methods in biomedical research

BIOGRAPHY

EDUCATION AND TRAINING: 1991.-1995. Gymnasium in Supetar; 1995.-2001. Faculty of Food Technology and Biotechnology (Bsc/M Food Engin., Biotechnology) 2003.-2007. and 2007.-2012. Doctoral studies in Biochemistry at Department of Chemistry, Faculty of Science, University of Zagreb (degree obtained: PhD).

Training: 2003. International Summer School on Biophysics 'Supramolecular Structure and Function', Rovinj; 2005. HPLC Method Development Course, Poreč; 2007. HPLC Troubleshooting Workshop, Pula; 2015. HPLC i UPLC: Troubleshooting Workshop + DSP Workshop, Zagreb; 2015. New Column Technologies and Application Possibilities from Waters, Zagreb; 2015. Symposium & Workshop on Microscale Thermophoresis; 2016. Columns and preparation of samples for liquid chromatography 2016. Breaking bad chromatography habits, Zagreb.

WORK EXPERIENCE: 2003.-2009. PhD student – young teaching assistant; 2010.-2012. PhD student-teaching assistant, 2012.-2017. postdoctoral researcher-senior-teaching assistant and 2018.- current Assistant Professor at Department of Chemistry and Biochemistry, School of Medicine, University of Zagreb.

Actively involved in teaching several classes at undergraduate level for students studying Medicine and Dental medicine in Croatian and English curriculum at University of Zagreb (Medical Chemistry and Biochemistry I and II; Clinical Chemistry, Inorganic substances in biological processes, Dental Chemistry, Dental Biochemistry). Participating in teaching at PhD program in Biomedicine and Health Sciences and Postgraduate specialist studies in Clinical microbiology.

SCIENTIFIC ACTIVITY: Scientific activity focused on topics in the field of sphingolipids, using advanced methods of HPLC analysis and complementary techniques for biomolecule analyses with emphasis on sphingolipid metabolites analysis in biological samples.

PRESENTATION OF WORK AT SCIENTIFIC MEETINGS: Co-author of 15 congress summaries - posters, of which 4 published in journals indexed in the CC base, 3 published in other journals and 8 published in the conference proceedings.

OTHER SCIENTIFIC ACTIVITY: Reviewer for scientific journals.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:
10.04.2018.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Beluhan S, **Karmelić I**, Novak S, Marić V. Partial purification and biochemical characterization of alkaline 5'-phosphodiesterase from barley malt sprouts. *Biotechnology Letters*. 25 (13): 1099-1103, 2003.
2. Ribar S, Feher-Turkovi L, **Karmelić I**, Mesarić M. Sphingoid bases in infant formulas. *Food Chemistry*. 103 (1): 173-180, 2007. 3. Ribar S, **Karmelić I**, Mesarić M. Sphingoid bases in dairy products. *Food research international*. 40 (7): 848-854, 2007.

4. **Karmelić I**, Ivušić F, Potočki S, Mesarić M. Influence of growth phase and zeolite clinoptilolite on the concentration of sphingoid bases in *Saccharomyces uvarum* brewer's yeast. *World journal of microbiology & biotechnology*. 27 (1): 2969-2979, 2011.
5. **Karmelić I**, Lovrić J, Božina T, Ljubić H, Vogrinc Ž, Božina N, Sertić J. Adiponectin level and gene variability are obesity and metabolic syndrome markers in young population. *Archives of medical research*. 43 (2): 145-153, 2012.
6. **Karmelić I**, Lovrić J, Božina T, Merkel A, Božina N, Sertić J. Is there any association of apolipoprotein E gene polymorphisms with metabolic syndrome in a young population of Croatian origin? *Annals of Human Biology* 7:1-8, 2016.
7. Ribar S, **Karmelić I**, Mesarić M. Sphingoid bases in milk. *Mljekarstvo*. 56 (3) , 3; 255-268, 2006.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Karmelić I, Lovrić J, Božina T, Merkel A, Božina N, Sertić J. Is there any association of apolipoprotein E gene polymorphisms with metabolic syndrome in a young population of Croatian origin? *Annals of Human Biology* 7:1-8, 2016

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2003. – 2009: "Sphingolipids - biologically active compounds"; 2010. – 2013 "Functional genomics and proteomics risk factors for atherosclerosis"; 2016 - 2020: "Isolation, quantification and kinetics of salivary Ap4A, SCCA and TROP2 in patients with oral cancer and potentially malignant oral disorders"; 2017: "Characterization of glycolipid and sphingolipid metabolites as a marker of human tumors"; 2017 - 2018: "Glycosphingolipids and Sphingolipid Metabolites as Glioblastoma Markers"; 2018: "Further characterization of glycolipid and sphingolipid metabolites composition as human tumor markers".

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2016 - 2020: "Isolation, quantification and kinetics of salivary Ap4A, SCCA and TROP2 in patients with oral cancer and potentially malignant oral disorders"; 2017: "Characterization of glycolipid and sphingolipid metabolites as a marker of human tumors"; 2017 - 2018: "Glycosphingolipids and Sphingolipid Metabolites as Glioblastoma Markers" 2018: "Further characterization of glycolipid and sphingolipid metabolites composition as a marker of human tumors".

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Darko Kastelan, MD PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Surgical treatment of pituitary tumours; Disorders of adrenal gland

BIOGRAPHY

Education

School of Medicine, University of Zagreb 1994. Specialist in Internal medicine 2001. Consultant endocrinologist 2008. PhD degree in endocrinology, University of Zagreb 2007.

Position

Head of Department of Endocrinology and Diabetes, University Hospital Zagreb.

Head of the Croatian Referral Centre for adrenal gland disorders

Chairman of the Postgraduate education program in Endocrinology and Diabetology, School of Medicine, University of Zagreb

Director of Croatian training program in Endocrinology and Diabetology

President of the Croatian Society for Endocrinology and Diabetology

Member of the Education Committee of the European Society of Endocrinology

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2019, Full Professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Valassi E, Franz H, Brue T, Feelders RA, Netea-Maier RT, Tsagarakis S, Webb SM, Yaneva MK, Reincke M, Droste M, Komerduš I, Maiter D, **Kastelan D**, Chanson P, Pfeifer M, Strasburger CJ, Toth M, Chabre O, Krsek M, Montañana CF, Bolanowski M, Santos A, Trainer PJ, Wass JAH, Tabarin A. Preoperative medical treatment in Cushing's syndrome. Frequency of use and its impact on postoperative assessment. Data from ERCUSYN. Eur J Endocrinol 2018;178:399-409.

Zibar Tomsic K, Dusek T, Kraljevic I, Heinrich Z, Solak M, Vucinovic A, Ozretic D, Mihailovic Marasanov S, Hrsak H, **Kastelan D**. Hypopituitarism after gamma knife radiosurgery for pituitary adenoma. Endocr Res 2017;24:1-7.

Valassi E, Franz H, Brue T, Feelders RA, Netea-Maier R, Tsagarakis S, Webb SM, Yaneva M, Reincke M, Droste M, Komerduš I, Maiter D, **Kastelan D**, Chanson P, Pfeifer M, Strasburger CJ, Tóth M, Chabre O, Tabarin A, Krsek M, Fajardo C, Bolanowski M, Santos A, Wass JA, Trainer PJ; ERCUSYN Study Group. Diagnostic tests for Cushing's syndrome differ from published guidelines: data from ERCUSYN. Eur J Endocrinol 2017;176:613-24.

Solak M, Kraljevic I, Dusek T, Melada A, Kavanagh MM, Peterkovic V, Ozretic D, **Kastelan D**. Management of Cushing's disease: a single-center experience. Endocrine 2016;51:517-23.

Kastelan D, Dusek T, Kraljevic I, Aganovic I. Hypercoagulable state in Cushing's syndrome is reversible following remission. Clin Endocrinol 2013;78:102-6.

Zgaga L, Vitart V, Hayward C, **Kastelan D**, Polasek O, Jakovljevic M, Kolcic I, Biloglav Z, Wright AF, Campbell H, Walker BR, Rudan I. Individual multi-locus heterozygosity is associated with lower morning plasma cortisol concentration. Eur J Endocrinol 2013;169:59-64.

Dusek T, Melada A, Paladino K, **Kastelan D**. Transsphenoidal surgery for pituitary adenoma. indications and outcomes. Croat Med J 2012; 53:639-41.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Valassi E, Franz H, Brue T, Feelders RA, Netea-Maier RT, Tsagarakis S, Webb SM, Yaneva MK, Reincke M, Droste M, Komerduš I, Maiter D, **Kastelan D**, Chanson P, Pfeifer M, Strasburger CJ, Toth M, Chabre O, Krsek M, Montañana CF, Bolanowski M, Santos A, Trainer PJ, Wass JAH, Tabarin A. Preoperative medical treatment in Cushing's syndrome. Frequency of use and its impact on postoperative assessment. Data from ERCUSYN. Eur J Endocrinol 2018;178:399-409.

Zibar Tomsic K, Dusek T, Kraljevic I, Heinrich Z, Solak M, Vucinovic A, Ozretic D, Mihailovic Marasanov S, Hrsak H, **Kastelan D**. Hypopituitarism after gamma knife radiosurgery for pituitary adenoma. Endocr Res 2017;24:1-7.

Valassi E, Franz H, Brue T, Feelders RA, Netea-Maier R, Tsagarakis S, Webb SM, Yaneva M, Reincke M, Droste M, Komerduš I, Maiter D, **Kastelan D**, Chanson P, Pfeifer M, Strasburger CJ, Tóth M, Chabre O, Tabarin A, Krsek M, Fajardo C, Bolanowski M, Santos A, Wass JA, Trainer PJ; ERCUSYN Study Group. Diagnostic tests for Cushing's syndrome differ from published guidelines: data from ERCUSYN. Eur J Endocrinol 2017;176:613-24.

Solak M, Kraljevic I, Dusek T, Melada A, Kavanagh MM, Peterkovic V, Ozretic D, **Kastelan D**. Management of Cushing's disease: a single-center experience. Endocrine 2016;51:517-23.

Kastelan D, Dusek T, Kraljevic I, Aganovic I. Hypercoagulable state in Cushing's syndrome is reversible following remission. Clin Endocrinol 2013;78:102-6.

Zgaga L, Vitart V, Hayward C, **Kastelan D**, Polasek O, Jakovljevic M, Kolcic I, Biloglav Z, Wright AF, Campbell H, Walker BR, Rudan I. Individual multi-locus heterozygosity is associated with lower morning plasma cortisol concentration. Eur J Endocrinol 2013;169:59-64.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Clinical, biochemical and genetic analyses in childhood-adolescent and adult craniopharyngioma'

Genetics of endocrine tumours, FIPA.

ERCUSYN – European registry of patients with Cushing's syndrome (EU project)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Clinical, biochemical and genetic analyses in childhood-adolescent and adult craniopharyngioma'

Genetics of endocrine tumours, FIPA.

ERCUSYN – European registry of patients with Cushing's syndrome (EU project)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Vedran Katavić, MD PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Understanding bone metabolism – basic science in clinical practice; Methods of investigation in vivo and in vitro

BIOGRAPHY

I am a Professor of Human Anatomy at the University of Zagreb School of Medicine, where he finished his PhD in 2001. My scientific background is in the fields of bone biology and immunology. I have extensive experience in teaching in the graduate courses of Anatomy (gross and clinical); postgraduate teaching in Bone biology and Molecular biology; postgraduate teaching and courses for the continuing education of M.D.s in "Writing and publishing a scientific paper"; and graduate and postgraduate courses on Responsible Conduct of Research (RCR) for both the Croatian and English programs of his School.

I am or have been a Member and President of the Croatian national Committee for Ethics in Science and higher education (2006-11); Member of the European Network of Research Integrity Offices (2006-11); Section head at the 1st World Conference on Research Integrity, Tampa (FL); Research Integrity Editor at the Croatian Medical Journal (2001-10); expert for scientific and ethics assessment for projects funded by the European Commission (FP7, H2020, MSCA, EASME...) proposals (since 2015); and Member of the Research Integrity Committee of the Luxembourg Agency for Research Integrity (LARI) (since 2017).

I have published greater than 30 papers in indexed journals with greater than 1000 independent citations and an h-index of 15.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: November 13, 2018

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Cvija H, Kovacic N, Katavic V, Ivcevic S, Aguila HL, Marusic A, Grcevic D. Chemotactic and Immunoregulatory Properties of Bone Cells are Modulated by Endotoxin-Stimulated Lymphocytes. Inflammation. 2012;35(5):1618-31.
2. Kovacic N, Grcevic D, Katavic V, Lukic IK, Grubisic V, Mihovilovic K, Cvija H, Croucher PJ, Marusic A. Fas receptor is required for estrogen deficiency-induced bone loss in mice. Lab Invest 2010;90:402-13.
3. Salopek D, Grčević D, Katavić V, Kovačić N, Lukić IK, Marušić A. Increased bone resorption and osteopenia are a part of the lymphoproliferative phenotype of mice with systemic over-expression of interleukin-7 gene driven by MHC class II promoter. Immunol Lett 2008;121:134-9.
4. Kovačić N, Lukić IK, Grčević D, Katavić V, Croucher P, Marušić A. The Fas/Fas Ligand System Inhibits Differentiation of Murine Osteoblasts but Has a Limited Role in Osteoblast and Osteoclast Apoptosis. J Immunol 2007;178(6):3379-89.
5. Grčević D, Lukić IK, Kovačić N, Ivčević S, Katavić V, Marušić A. Activated T lymphocytes suppress osteoclastogenesis by diverting early monocyte/macrophage progenitor lineage commitment towards dendritic cell differentiation through down-regulation of receptor activator of nuclear factor-kappaB and c-Fos. Clin Exp Immunol 2006;146(1):146-58.
6. Chikazu D, Li X, Kawaguchi H, Sakuma Y, Voznesensky OS, Adams DJ, Xu M, Hoshi K, Katavic V, Herschman HR, Raisz LG, Pilbeam CC. Bone morphogenetic protein 2 induces cyclo-oxygenase 2 in

- osteoblasts via a Cbfa1 binding site: role in effects of bone morphogenetic protein 2 in vitro and in vivo. 2002. *J Bone Miner Res* 2005;20(10):1888-98. Reprinted as JBMR Anniversary Classic
7. Lukić IK, Kovačić N, Katavić V, Grčević D, Ivčević S, Marušić A. Shared circulation in parabiosis leads to the transfer of bone phenotype from gld to the wild-type mice. *Cell Immunol* 2005;233(2):133-9.
8. Lukić IK, Grčević D, Kovačić N, Katavić V, Ivčević S, Kalajzić I, Marušić A. Alteration of newly induced endochondral bone formation in adult mice without tumour necrosis factor receptor 1. *Clin Exp Immunol* 2005;139(2):236-44.
9. Višnjić D, Kalajzić Z, Rowe D, Katavić V, Lorenzo JA, Aguila HL. Hematopoiesis is severely altered in mice with an induced osteoblast deficiency. *Blood* 2004;103(9):3258-64.
10. Katavić V, Grčević D, Lukić IK, Vučenik V, Kovačić N, Kalajzić I, Marušić A. Non-functional Fas ligand increases the formation of cartilage early in the endochondral bone induction by rhBMP-2. *Life Sciences* 2003;74(1):13-28.
11. Katavić V, Grčević D, Lee SK, Kalinowski J, Jastrzebski S, Dougall W, Anderson D, Puddington L, Aguila HL, Lorenzo JA. The surface antigen CD45R identifies a population of estrogen-regulated murine marrow cells that contain osteoclast precursors. *Bone* 2003;32:581-90.
12. Katavić V, Lukić IK, Kovačić N, Grčević D, Lorenzo JA, Marušić A. Increased Bone Mass Is a Part of the Generalized Lymphoproliferative Disorder Phenotype in the Mouse. *J Immunol* 2003;170:1540-7.
13. Marušić A, Grčević D, Katavić V, Lukić IK, Kalajzić I, Lorenzo J. Role of B lymphocytes in new bone formation. *Lab Invest* 2000;80:1761-74.
14. Marušić A, Katavić V, Grčević D, Lukić IK. Genetic variability of new bone induction in mice. *Bone* 1999;25:25-32.
15. Marušić A, Grčević D, Katavić V. New bone induction by bone matrix and recombinant human bone morphogenetic protein-2 in the mouse. *Croat Med J* 1996;37:237-244.
16. Marušić A, Katavić V, Štimac D, Kušec V, Jonjić S. Bone turnover in homozygous beta2-microglobulin knock-out mice does not differ from that of their heterozygous littermates. *Eur J Clin Chem Clin Biochem* 1995;33:915-8.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Lazić Mosler E, Lukač N, Flegar D, Fadljević M, Radanović I, Cvija H, Kelava T, Ivčević S, Šučur A, Markotić A, Katavić V, Marušić A, Grčević D, Kovačić N. Fas receptor induces apoptosis of synovial bone and cartilage progenitor populations and promotes bone loss in antigen-induced arthritis FASEB J 2018; in print.
2. Grčević D, Sironi M, Valentino S, Deban L, Cvija H, Inforzato A, Kovačić N, Katavić V, Kelava T, Kalajzić I, Mantovani A, Bottazzi B. The Long Pentraxin 3 Plays a Role in Bone Turnover and Repair. *Frontiers in Immunology* 2018;9:417-. doi:10.3389/fimmu.2018.00417
3. Šučur A, Jajić Z, Artuković M, Ikić Matijašević M, Anić B, Flegar D, Markotić A, Kelava T, Ivčević S, Kovačić N, Katavić V, Grčević D. Chemokine signals are crucial for enhanced homing and differentiation of circulating osteoclast progenitor cells. *Arthritis Res Ther* 2017;19(1):142. doi: 10.1186/s13075-017-1337-6.
4. Ikić Matijašević M, Flegar D, Kovačić N, Katavić V, Kelava T, Šučur A, Ivčević S, Cvija H, Lazić Mosler E, Kalajzić I, Marušić A, Grčević D. Increased chemotaxis and activity of circulatory myeloid progenitor cells

may contribute to enhanced osteoclastogenesis and bone loss in the C57BL/6 mouse model of collagen-induced arthritis. Clin Exp Immunol 2016;186(3):321-35.

5. Kuzmac S, Grčević D, Šućur A, Ivčević S, Katavić V. Acute hematopoietic stress in mice is followed by enhanced osteoclast maturation in the bone marrow microenvironment. Exp Hematol 2014;42(11):966-75. DOI: 10.1016/j.exphem.2014.07.262

6. Šućur A, Katavić V, Kelava T, Jajić Z, Kovačić N, Grčević D. Induction of osteoclast progenitors in inflammatory conditions: key to bone destruction in arthritis. Int Orthop 2014;38(9):1893-903. DOI 10.1007/s00264-014-2386-y.

7. Kelava T, Šućur A, Kuzmac S, Katavić V. Interactions between bone and immune systems: A focus on the role of inflammation in bone resorption and fracture healing. Period Biol 2014;116(1):45-52.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Researcher: HRZZ “Characterization of osteoclast progenitor responses to arthritis” (PI – Prof. Danka Grčević, MD PhD), 2014-2017;
2. Researcher: Croatian Ministry of Science and Technology research grant “Inflammation in the Central Nervous System: Role of Cytokines and Chemokines” as a part of the research program “Neurobiology of Cognitive Development and Cognitive Disturbances”, Institute for Brain Research and Medical Sciences, 1997-2001;
3. Researcher: Croatian Ministry of Science and Technology research grant “Osteoinduction in Immunosuppressed Mice”, 1996-1998; and
4. Researcher: US-Croatian Research Grant JF199 “Immune System and New Bone Formation”, 1995-1998 (US Collaborator: Dr. Joseph A. Lorenzo, VAMC; Newington, CT);
5. PI: Croatian Ministry of Science Education and Sports research grant “B lymphocytes, macrophages and the origin of osteoclasts”, 2007-2014;
6. PI: Croatian Ministry of Science and Technology research grant “Common precursor of the B-lymphocyte and osteoclast lineage”, 2002-2007.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. Researcher: HRZZ 402-08/13-03/37, No. 1.2.1.5 (PI – Prof. Danka Grčević, MD PhD), 2011-2014;
2. Researcher: HRZZ “Characterization of osteoclast progenitor responses to arthritis” (PI – Prof. Danka Grčević, MD PhD), 2014-2017
3. Researcher: HRZZ “Evolution of inflammatory arthritis in children” (PI: Prof. Miroslav Harjaček), 2017-

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ana Katušić Bojanac, asst. professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of Medical Biology, School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Epigenetics, Methods of investigation in vivo and in vitro; Methods of molecular biology in medicine

BIOGRAPHY

Year and place of birth: Split, 1978. Education: Diploma in Molecular Biology, Faculty of Science, University of Zagreb (1996-2001), Postgraduate Doctoral Program in Biology, Faculty of Science, Zagreb (2004-2010). Work experience and academic degrees: Department of Biology, Faculty of Medicine in Zagreb (since 2004), M.Sc, PMF, Zagreb (2008), Ph.D., PMF, Zagreb (2010), Assistant Professor at the Faculty of Medicine in Zagreb (2015). Teaching: 2017/2018. Course leader substitute, PMF, Zagreb (course Developmental Biology); 2017-present - Course co-leader Molecular Biology in Medicine, MEF Zagreb; 2008.-present Postgraduate study in Biomedicine and Health (courses Methods of Molecular Biology in Medicine, Epigenetics); 2005-today. Faculty of Dental Medicine Cell Biology with Genetics course; 2004.-today MEF Zagreb (courses Medical Biology, Medical Genetics, Medical and molecular biology); 2002n-2008. Instructor at EMBO Course "Anatomy and Embryology of the Mouse", Zagreb. Scientific projects: Active participation in scientific projects (2004 - 12 projects, 4 ongoing), scientific associate of the Center for Excellence for Biomedical Research of Reproduction and Development (since 2014). Publications: 18 scientific articles (9 CC, 4 SCI and 5 other), 64 conference papers, 106 citations. Education (6): 2016. FEBS scholarship for FEBS course "Workshop on education in molecular life sciences", Oslo, Norway; 2015 COST Action Academy FA1201 Epigenetics and Periconception Environment (2013-2016), "Training School on Epigenetics in Reproductive Biology", Murcia, Spain; 2012 Scholarship of the University of Zagreb and short study room, Laboratory for Electronic Microscopy, Faculty of Medicine, University of Pécs, Hungary; 2007-2008: NoE 3DEM (LSHG-CT-2004-502828) scholarship for doctoral dissertation project, Faculty of Natural Sciences, Department of Cell Biology and Electron Microscopy, University of Utrecht, The Netherlands; 2006. Scholarship - EMBO course, "Electron microscopy and stereology in cell biology", Oslo, Norway; 2004. Scholarship - CSHL course „Molecular Embryology of the Mouse“, Cold Spring Harbour Laboratory, USA. Awards (8): 2006, 2008 and 2011 Best Poster Award at Ljudevit Jurak International Symposium on Comparative Pathology, Zagreb (co-author); 2008 plaque at the 6th International Fair of Innovation, New Ideas, Products and Technology ARCA, Zagreb; 2006. 4 awards at 4. ARCA, Zagreb. Mentoring Awarded Student Works (4): Dean Award (2) (Martinović and Novak, 2018; Rogošić Srđan, 2010); Silver plaque at the 8th International Exhibition of Innovation, New Ideas, Product Technologies ARCA 2010, Zagreb; IFIA LADY PRIZE, Award for Best Work of Female Innovators at ARCA 2010. Membership in Faculty Commissions: Since 2007. member of the Faculty Committee for e-Education; 2008-present. LMS System Coordinator at the Faculty of Medicine. Professional organizational skills: Member of the founder team of the laboratory for monitoring the oncological drugs activity at the Department for pediatric hematology and oncology at the Children Hospital Zagreb. Organization of International Conferences (1): 2018. COST CellFit Annual Meeting, Hvar, 01-04.10 2018 (local organizer / 100 participants). Memberships in professional societies (5): Croatian Andrology Society, Croatian Microscopic Society, Croatian Society for Biochemistry and Molecular Biology, Croatian Society for Clinical Genetics of Croatia, Croatian Biological Society. Invited lectures (12): Local meetings (5): 2018. Nikola Škreb Symposium, Zagreb, Croatia; 2016. Round Table on Apoptosis, HAZU, Zagreb; Round Table on Apoptosis, HAZU Zagreb; 2010. Meeting of high school biology teachers; 2009 Meeting of the Croatian

Microscopic Society, Zagreb; International meetings (7): 2017. Andrology mini-symposium; COST Action FA1201 Epiconcept Annual Meeting; 2013 Nikola Škreb Symposium; Development and stem cells at the beginning of the new millennium, Zagreb; 2014. IV. MoodleMoot Croatia- IV. Western Balkans MoodleMoot, Zagreb; 2009. 20th Ljudevit Jurak International Symposium on Comparative Pathology, Zagreb; 2008. Epigenetics in ART, ESCHRE Symposium, Lisbon, Portugal; 2004. 15th Ljudevit Jurak International Symposium on Comparative Pathology, Zagreb; Scientific interest: epigenetics of male infertility, biology of male germ cells, mammalian development and teratogenesis, in vitro organ culture.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: assistant professor, 18.5.2015.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Buljubašić R, Buljubašić M, Bojanac AK, Ulamec M, Vlahović M, Ježek D, Bulić-Jakuš F, Sinčić N. Epigenetics and testicular germ cell tumors. *Gene*. 2018;661:22-33. (IF 2.498, Q3)
- Bulic-Jakus F, Katusic Bojanac A, Juric-Lekic G, Vlahovic M, Sincic N. Teratoma: from spontaneous tumors to the pluripotency/malignancy assay. *Wiley Interdiscip Rev Dev Biol*. 2016 Mar-Apr;5(2):186-209. (IF2015=4.711, Q1)
- Fabijanovic D, Serman A, Jezic M, Katusic A, Sincic N, Curkovic-Perica M, Bulic-Jakus F, Vlahovic M, Juric-Lekic G, Serman L. Impact of 5-azacytidine on rat decidual cell proliferation. *Int J Exp Pathol*. 95(4):238-43, 2014. (IF2013=2.052, Q3)
- Mužić V, Katušić Bojanac A, Jurić-Lekić G, Himelreich M, Tupek K, Šerman LJ, Sinčić N, Marn N, Vlahović M, Bulić-Jakuš F. Epigenetic drug 5-azacytidine impairs proliferation of rat limb buds in an organotypic model system in vitro. *CMJ* 54 (5): 489-495, 2013. (IF2013=1.373, Q2)
- Katušić A, Jurić-Lekić G, Jovanov-Milošević N, Vlahović M, Ježek D, Šerman LJ, Sinčić N, Veljanovska B, Bulić-Jakuš F. Development of the Fetal Neural Retina in Vitro and in Ectopic Transplants in Vivo. *Coll. Antropol*. 32:315-319, 2008. (IF2008=0.687, Q2)
- Šerman L, Vlahović M, Šijan M, Bulić-Jakuš F, Šerman A, Sinčić N, Matijević R, Jurić-Lekić G, Katušić A. The Impact of 5-azacytidine on Placental Weight, Glycoprotein Pattern and Proliferating Cell Nuclear Antigen Expression in Rat Placenta. *Placenta*. 28:803-811, 2007. (IF2007=3.238, Q1)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- Katusic Bojanac A, Rogosic S, Sincic N, Juric-Lekic G, Vlahovic M, Serman LJ, Jezek D, Bulic-Jakus F. Influence of hyperthermal regimes on development of the experimental teratoma in vitro. *International Journal of Experimental Pathology*. 2018. (prihvaćeno, u tisku) (IF=1.938, Q3)
- Buljubašić R, Buljubašić M, Bojanac AK, Ulamec M, Vlahović M, Ježek D, Bulić-Jakuš F, Sinčić N. Epigenetics and testicular germ cell tumors. *Gene*. 2018;661:22-33. (IF2017 2.498, Q3)
- Bulic-Jakus F, Katusic Bojanac A, Juric-Lekic G, Vlahovic M, Sincic N. Teratoma: from spontaneous tumors to the pluripotency/malignancy assay. *Wiley Interdiscip Rev Dev Biol*. 2016;5:186-209. (IF2016 4.185, Q1)
- Fabijanovic D, Serman A, Jezic M, Katusic A, Sincic N, Curkovic-Perica M, Bulic-Jakus F, Vlahovic M, Juric-Lekic G, Serman L. Impact of 5-azacytidine on rat decidual cell proliferation. *Int J Exp Pathol*. 95(4):238-43, 2014. (IF2013=2.168, Q3)

- Mužić V, Katušić Bojanac A, Jurić-Lekić G, Himmelreich M, Tupek K, Šerman LJ, Sinčić N, Marn N, Vlahović M, Bulić-Jakuš F. Epigenetic drug 5-azacytidine impairs proliferation of rat limb buds in an organotypic model system in vitro. CMJ 54 (5): 489-495, 2013. (IF2013=1.373, Q2)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018. Leader, Scientific Research Support of the University of Zagreb.

- 2017-2022. Team member, Leader of 2 scientific activities on the project of the Scientific Center of Excellence "Reproductive and Regenerative Medicine - Research of New Platforms and Potentials", funded by the EU Regional Development Fund, Operational Program "Competitiveness and Cohesion" (2014-2020)
- 2017-2021. Team member, HRZZ project IP-2016-06-3692 "Epigenetic biomarkers in blood and ejaculate of testicular semen"
- 2017-2020. Member of the Steering Committee, COST Action project OC-2016-1-20687 "In vitro 3-D total cell guidance and fitness", funded by COST (European Cooperation in Science and Technology).
- 2015-2017. Team member, a project for the establishment of the Centers of Excellence for Reproductive and Regenerative Medicine, Biomedical Research Reproduction and Development Unit financed by the annual financial support of the Croatian Ministry of Science

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

.2018. Leader, Scientific Research Support, University of Zagreb. The project explores epigenetic changes of genital genes in male infertility and validates them as risk markers for the development of testicular tumors.

- 2017-2022. Team member, Leader of 2 scientific activities on the project of the Scientific Center of Excellence "Reproductive and Regenerative Medicine - Research of New Platforms and Potentials", funded by the EU Regional Development Fund, Operational Program "Competitiveness and Cohesion" (2014-2020)
- 2017-2021. Team member, HRZZ project IP-2016-06-3692 "Epigenetic biomarkers in blood and ejaculate of testicular semen"
- 2017-2020. Member of the Steering Committee, COST Action project OC-2016-1-20687 "In vitro 3-D total cell guidance and fitness", funded by COST (European Cooperation in Science and Technology).
- 2015-2017. Team member, a project for the establishment of the Centers of Excellence for Reproductive and Regenerative Medicine, Biomedical Research Reproduction and Development Unit financed by the annual financial support of the Croatian Ministry of Science.
- 2017. Team member, Scientific Research Support of the University of Zagreb. Br. 2.1.17
- 2016. Team member, Scientific Research Support of the University of Zagreb.1101310
- 2015. Scientific Research Support of the University of Zagreb. BM049
- 2014. Team member, Scientific Research Support of the University of Zagreb BM1.22

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assistant Prof. Silva Katušić Hećimović, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute, Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Genomic approaches in biomedical and translational research

BIOGRAPHY

Docent Silva Katušić Hećimović was born in Dubrovnik, Croatia, where she gained her elementary and secondary school education. She graduated in 1991 at the Faculty of Food Technology and Biotechnology, University of Zagreb, Croatia and attained her M.Sc. degree in 1995 from the Faculty of Sciences. Docent Katušić Hećimović gained her PhD degree in 2000 at the Faculty of Food Technology and Biotechnology, University of Zagreb, Croatia. From 2001 - 2004 she was a postdoctoral Research Assistant at the Washington University School of Medicine, St. Louis, MO, USA. After her return to the Ruđer Bošković Institute (RBI), as a Research Associate, she worked to establish herself as an independent scientist and introduced a new field of research on neurodegenerative diseases within the Division of Molecular Medicine, RBI. From 2009 - 2016 Docent Katušić Hećimović was a head of the Laboratory of Molecular Neuropharmacology and from 2016 a head of the Laboratory for Neurodegenerative Disease Research (LAND). In 2017 Doc. Silva Katušić Hećimović was appointed to a research rank of the senior scientist and since 2018 she has been employed as a senior scientist, laboratory head at the Ruđer Bošković Institute. Doc. Katušić's area of scientific interest is biology of neurodegenerative diseases. She has published 40 scientific papers indexed in Web of Science Core Collection (WoSCC) database which have been cited 800 times according to the Scopus database, published 18 book chapters, 1 editor book and has held more than 20 invited lectures at national and international scientific conferences/institutions. Doc. Katušić Hećimović is the recipient of the Dean's Award for the academic year 1990/91, the Fulbright Scholarship, The John Douglas French Alzheimer's postdoctoral fellowship, NIH Fogarty International Collaboration Award and the award „Josip Juraj Strossmayer“ (HAZU/ Zagrebački velesajam) for the best publisher enterprise in 2008: book "Metode u molekularnoj biologiji".

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 7.12.2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Hecimovic S, Klepac N, Vlašić J, Vojta A, Janko D, Škarpa-Prpić I, Canki-Klain N, Marković D, Božikov J, Relja M, Pavelić K. (2002) Genetic background of Huntington's disease in Croatia: molecular analysis of CAG, CCG and 2642 polymorphisms. Human Mutation. 20: 233.

Schroeter EH, Ilagan MXG, Brunkan AL, **Hecimovic S**, Li Y-M, Xu M, Lewis HD, Saxena MT, De Strooper B, Coonrod A, Tomita T, Iwatsubo T, Moore CL, Shearman M, Goate A, Wolfe MS, Kopan R. (2003) A presenilin dimer at the core of the gamma-secretase enzyme: insights from parallel analysis of Notch 1 and APP proteolysis. Proceedings of the National Academy of Sciences U S A. 100: 13075-80.

Hecimovic S, Wang J, Martinez M, Goate A. (2004) Mutations in APP have independent effects on A β and CTF β generation. Neurobiology of Disease. 17: 205-218. IF: 5.121

Kosicek M, Kirsch S, Bene R, Trkanjec Z, Titlic M, Bindila L, Peter-Katalinic J, **Hecimovic S**. (2010) Nano-HPLC-MS analysis of phospholipids in cerebrospinal fluid of Alzheimer's disease patients-a pilot study. Analytical and Bioanalytical Chemistry. 98: 2929-37.

Malnar M, Kosicek M, Mitterreiter S, Omerbasic D, Lichtenthaler SF, Goate A, **Hecimovic S**. (2010) Niemann Pick type C cells show cholesterol dependent decrease of APP expression at the cell surface its

increased processing through the β -secretase pathway. *Biochimica et Biophysica Acta (BBA) – Molecular Basis of Disease*. 1802: 682-91.

Malnar M, Kosicek M, Lisica A, Posavec M, Krolo A, Njavro J, Omerbasic D, Tahirovic S, **Hecimovic S.** (2012) Cholesterol-depletion corrects APP and BACE1 mistrafficking in NPC1-deficient cells. *Biochimica et Biophysica Acta (BBA) – Molecular Basis of Disease*. 1822:1270-83.

Malnar M, **Hecimovic S.**, Mattsson M, Zetterberg H. (2014) Bidirectional links between Alzheimer's disease and Niemann-Pick type C disease. *Neurobiology of Disease*. 72 Pt A: 37

Cermak S, Kosicek M, Mladenovic-Djordjevic A, Smiljanic K, Kanazir S, **Hecimovic S.** (2016) Loss of Cathepsin B and L Leads to Lysosomal Dysfunction, NPC-Like Cholesterol Sequestration and Accumulation of the Key Alzheimer's Proteins. *PLoS One*. 11(11):e0167428. doi: 10.1371/journal.pone.0167428.

Kosicek M, Gudelj I, Horvatic A, Jovic T, Vuckovic F, Lauc G, **Hecimovic S.** (2018) N-glycome of the lysosomal glycocalyx is altered in Niemann-Pick Type C disease model cells. *Mol Cell Proteomics*. pii: mcp.RA117.000129. doi: 10.1074/mcp.RA117.000129.

Causevic M, Dominko K, Malnar M, Vidatic L, Cermak S, Pigoni M, Kuhn PH, Colombo A, Havas D, Flunkert S, McDonald J, Gunnersen JM, Hutter-Paier B, Tahirovic S, Windisch M, Krainc D, Lichtenthaler SF, **Hecimovic S.** (2018) BACE1-cleavage of Sez6 and Sez6L is elevated in Niemann-Pick type C disease mouse brains. *PLoS One*. 13(7):e0200344. doi: 10.1371/journal.pone.0200344.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Dominko K, Dikic D, **Hecimovic S.** (2018) Enhanced activity of superoxide dismutase is a common response to dietary and genetically induced increased cholesterol levels. *Nutr Neurosci*. 1-13. doi: 10.1080/1028415X.2018.1511027.

Causevic M, Dominko K, Malnar M, Vidatic L, Cermak S, Pigoni M, Kuhn PH, Colombo A, Havas D, Flunkert S, McDonald J, Gunnersen JM, Hutter-Paier B, Tahirovic S, Windisch M, Krainc D, Lichtenthaler SF, **Hecimovic S.** (2018) BACE1-cleavage of Sez6 and Sez6L is elevated in Niemann-Pick type C disease mouse brains. *PLoS One*. 13(7):e0200344. doi: 10.1371/journal.pone.0200344.

Kosicek M, Gudelj I, Horvatic A, Jovic T, Vuckovic F, Lauc G, **Hecimovic S.** (2018) N-glycome of the lysosomal glycocalyx is altered in Niemann-Pick Type C disease model cells. *Mol Cell Proteomics*. pii: mcp.RA117.000129. doi: 10.1074/mcp.RA117.000129.

Cermak S, Kosicek M, Mladenovic-Djordjevic A, Smiljanic K, Kanazir S, **Hecimovic S.** (2016) Loss of Cathepsin B and L Leads to Lysosomal Dysfunction, NPC-Like Cholesterol Sequestration and Accumulation of the Key Alzheimer's Proteins. *PLoS One*. 11(11):e0167428. doi: 10.1371/journal.pone.0167428.

Drechsler S, Lynch MA, Novella S, González-Navarro H, **Hecimovic S.**, Barini E, Tucci V, Castro RE, Vandenbroucke RE, Osuchowski M, Potter PK. (2016) With mouse age comes wisdom: A review and suggestions of relevant mouse models for age-related conditions. *Mechanisms of Ageing and Development*. 160:54-68. doi: 10.1016/j.mad.2016.07.005.

Malnar M, **Hecimovic S.**, Mattsson M, Zetterberg H. (2014) Bidirectional links between Alzheimer's disease and Niemann-Pick type C disease. *Neurobiology of Disease*. 72 Pt A: 37.

Kosicek M, Wunderlich P, Walter J, **Hecimovic S.** (2014) GGA1 overexpression attenuates amyloidogenic processing of APP in NPC1-null cells. Biochemical and Biophysical Research Communications. 450: 160-5.

Ting SK, Benzinger T, Kepe V, Fagan A, Coppola G, Porter V, **Hecimovic S**, Chakraverty S, Alvarez-Retuerto AI, Goate A, Ringman JM. (2014) A novel PSEN1 mutation (I238M) associated with early-onset Alzheimer's disease in an African-American woman. Journal of Alzheimers Disease. 40: 271-5.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

RESEARCH PROJECTS (in the past 5-years)

PI Projects

COGITO programme, Croatian-French research project (2019-2021)

Title: The molecular links between lipidome, brain vulnerability and apolipoprotein E

Croatian Science Foundation (CSF) – IP-2016-06-2799 (2017-2021)

Title: Molecular mechanism(s) of neurodegeneration in Niemann-Pick type C disease

Croatian Science Foundation (HRZZ) - “PhD mentorship project” (2015-2018)

Croatia-Serbia Cooperation in Science and Technology (2016-2018)

Title: Elucidating BACE1-substrate processing and distribution in a transgenic mouse model of Alzheimer's disease and their potential role in the disease pathogenesis

International bilateral project between DAAD (Germany) and the Ministry of Science, Education and Sports of the Republic of Croatia (2016-2018)

Title: Elucidating BACE1 as a potential target for treating Niemann-Pick type C disease

FP7-PEOPLE-2013-IEF (Marie Curie) (2014-2016), Coordinator/Mentor

Title: Presenilin 2 - a protector against Alzheimer's disease

Swiss National Science Foundation - SCOPES: Joint Research Project (2014-2016)

Title: The molecular links between cholesterol homeostasis, membrane trafficking and Alzheimer's disease

Unity Through Knowledge Fund – UKF (2013-2015)

Title: Lysosomal dysfunction as a common mechanism of neurodegenerative diseases

Collaborative Projects

Croatian Science Foundation (CSF) - #9386 (2014-2018)

Title: Genetic mechanisms of lysosomal dysfunction in Parkinson's disease

Principal Investigator: dr. Fran Borovečki (Medical School, University of Zagreb)

EU – COST Action – BM1202 - European Network on Microvesicles and Exosomes in Health and Disease (ME-HAD) (2015.-2017.)

EU – COST Action – BM1402 - Development of a European network for preclinical testing of interventions in mouse models of age and age-related diseases (MouseAGE) (2015.-2017.)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE 4

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assistant Professor Tomislav Kelava

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Selected topics in transplantation immunology, Immunocytokines

BIOGRAPHY

Assistant Professor, Tomislav Kelava: Born in Zagreb Croatia, 11.08.1981. Education: 2005. – MD – Zagreb University School of medicine, Zagreb Croatia. 2010 – defended PhD thesis at Zagreb University school of medicine. 2013- Finished Laboratory Animal Science Course – category C. Employments: 2006 – 2010 - PhD student at the Department of Physiology and Immunology, Zagreb University school of medicine, Croatia, 2011- 2013 postdoctoral student at the Laboratory for molecular immunology, Zagreb University school of medicine. 2013- Assistant professor at the Department of Physiology and Immunology, Zagreb University school of medicine. Teaching and mentoring: Since 2007 participates in teaching at medical schools in Zagreb and Mostar, Bosnia and Herzegovina. Coordinator for collegium Physiology. Mentor of 1 defended PhD thesis and 2 PhD thesis in preparation. Research activity: Principal investigator on the project funded by Croatian Science Foundation „The Role of Notch Signalling Pathway in Pathogenesis of Hepatic Fibrosis“ (Project duration; 2018-2023, 40000 Eur/year.) and on 1 colaboratory project between the Zagreb School of medicine and company CaRafe Drug Innovation, LLC (Norristown, Philadelphia, USA). Co-investigator on 2 research projects funded by Croatian Ministry of Science Education and Sport and on 1 project funded by Ministry of Science of Federation of Bosnia and Herzegovina. Invited lecturer at 1. Regional Congress of the Physiological Societies and 3. Congress of Croatian Physiological Society 13 - 15. 09. 2013. in Rijeka. Memberships: member of Croatian Immunological Society and I Croatian Physiological Society. Publications: 20 original scientific papers, cited 140 times.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 22 APR 2013

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Kelava T, Čavar I, Vukojevic K, Saraga-Babic M, Culo F. The effect of glucagon and cyclic adenosine monophosphate on acute liver damage induced by acetaminophen. *Histol Histopathol.* 2013 Feb;28(2):245-55.
2. Mitrović S, Kelava T (corresponding author), Sućur A, Grčević D. Levels of Selected Aqueous Humor Mediators (IL-10, IL-17, CCL2, VEGF, FasL) in Diabetic Cataract. *Ocul Immunol Inflamm.* 2014 Oct 14:1-8.
3. Kelava T, Sucur A, Kuzmac S, Katavic V. Interactions between bone and immune systems: A focus on the role of inflammation in bone resorption and fracture healing. *Periodicum Biologorum.* 2014 Mar;116(1):45-52.
4. Kelava T, Cavar I. Hepatoprotective action of Panaxatriol saponins against acetaminophen-induced liver injury: what is the mechanism? *Liver Int.* 2014 Apr;34(4):644-5.
5. Šućur A, Katavić V, Kelava T, Jajić Z, Kovačić N, Grčević D. Induction of osteoclast progenitors in inflammatory conditions: key to bone destruction in arthritis. *Int Orthop.* 2014 Sep;38(9):1893-903.
6. Cavar I, Kelava T, Vukojević K, Saraga-Babić M, Culo F. The role of prostaglandin E2 in acute acetaminophen hepatotoxicity in mice. *Histol Histopathol.* 2010 Jul;25(7):819-30.

7. Ikić Matijašević M, Flegar D, Kovačić N, Katavić V, Kelava T, Šućur A, Ivčević S, Cvija H, Lazić Mosler E, Kalajzić I, Marušić A, Grčević D. Increased chemotaxis and activity of circulatory myeloid progenitor cells may contribute to enhanced osteoclastogenesis and bone loss in the C57BL/6 mouse model of collagen-induced arthritis. *Clin Exp Immunol*. 2016 Dec;186(3):321-335.
8. Cavar I, Kelava T, Heinzel R, Culo F. The role of prostacyclin in modifying acute hepatotoxicity of acetaminophen in mice. *Coll Antropol*. 2009 Dec;33 Suppl2:25-9.
9. Sucur A, Jajic Z, Artukovic M, Matijasevic MI, Anic B, Flegar D, Markotic A, Kelava T, Ivcevic S, Kovacic N, Katavic V, Grcevic D. Chemokine signals are crucial for enhanced homing and differentiation of circulating osteoclast progenitor cells. *Arthritis Res Ther*. 2017 Jun 15;19(1):142.
10. Grčević D, Sironi M, Valentino S, Deban L, Cvija H, Inforzato A, Kovačić N, Katavić V, Kelava T, Kalajzić I, Mantovani A, Bottazzi B. The Long Pentraxin 3 Plays a Role in Bone Turnover and Repair. *Front Immunol*. 2018 Mar 5;9:417.
11. Lazić Mosler E, Lukač N, Flegar D, Fadljević M, Radanović I, Cvija H, Kelava T, Ivčević S, Šućur A, Markotić A, Katavić V, Marušić A, Grčević D, Kovačić N. Fas receptor induces apoptosis of synovial bone and cartilage progenitor populations and promotes bone loss in antigen-induced arthritis. *FASEB J*. 2018 Nov 1:fj201801426R. doi: 10.1096/fj.201801426R. [Epub ahead of print]
12. Cavar I, Kelava T, Pravdic D, Culo F. Anti-thromboxane B-2 antibodies protect against acetaminophen-induced liver injury in mice. *Journal of xenobiotics*. 2011 1(1); 38-44

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Kelava T, Čavar I, Vukojevic K, Saraga-Babic M, Culo F. The effect of glucagon and cyclic adenosine monophosphate on acute liver damage induced by acetaminophen. *Histol Histopathol*. 2013 Feb;28(2):245-55.
2. Tomasic I, Tomasic N, Trobec R, Krpan M, Kelava T. Continuous remote monitoring of COPD patients-justification and explanation of the requirements and a survey of the available technologies. *Med Biol Eng Comput*. 2018 Apr;56(4):547-569.
3. Mitrović S, Kelava T (corresponding author), Sućur A, Grčević D. Levels of Selected Aqueous Humor Mediators (IL-10, IL-17, CCL2, VEGF, FasL) in Diabetic Cataract. *Ocul Immunol Inflamm*. 2014 Oct 14:1-8.
4. Kelava T, Sucur A, Kuzmac S, Katavic V. Interactions between bone and immune systems: A focus on the role of inflammation in bone resorption and fracture healing. *Periodicum Biologorum*. 2014 Mar;116(1):45-52.
5. Kelava T, Cavar I. Hepatoprotective action of Panaxatriol saponins against acetaminophen-induced liver injury: what is the mechanism? *Liver Int*. 2014 Apr;34(4):644-5.
6. Turcic P, Stambuk N, Konjevoda P, Kelava T, Gabricevic M, Stojkovic R, Aralica G. Modulation of γ 2-MSH Hepatoprotection by Antisense Peptides and Melanocortin Subtype 3 and 4 Receptor Antagonists. *Med Chem*. 2015;11(3):286-95.
7. Šućur A, Katavić V, Kelava T, Jajić Z, Kovačić N, Grčević D. Induction of osteoclast progenitors in inflammatory conditions: key to bone destruction in arthritis. *Int Orthop*. 2014 Sep;38(9):1893-903.
8. Ikić Matijašević M, Flegar D, Kovačić N, Katavić V, Kelava T, Šućur A, Ivčević S, Cvija H, Lazić Mosler E, Kalajzić I, Marušić A, Grčević D. Increased chemotaxis and activity of circulatory myeloid progenitor cells may contribute to enhanced osteoclastogenesis and bone loss in the C57BL/6 mouse model of collagen-induced arthritis. *Clin Exp Immunol*. 2016 Dec;186(3):321-335.

9. Džoić Dominković M, Ivanac G, Kelava T, Brkljačić B. Elastographic features of triple negative breast cancers. *Eur Radiol.* 2016 Apr;26(4):1090-7.
10. Sucur A, Jajic Z, Artukovic M, Matijasevic MI, Anic B, Flegar D, Markotic A, Kelava T, Ivcevic S, Kovacic N, Katavic V, Grcevic D. Chemokine signals are crucial for enhanced homing and differentiation of circulating osteoclast progenitor cells. *Arthritis Res Ther.* 2017 Jun 15;19(1):142.
11. Grčević D, Sironi M, Valentino S, Deban L, Cvija H, Inforzato A, Kovačić N, Katavić V, Kelava T, Kalajzić I, Mantovani A, Bottazzi B. The Long Pentraxin 3 Plays a Role in Bone Turnover and Repair. *Front Immunol.* 2018 Mar 5;9:417.
12. Lazić Mosler E, Lukač N, Flegar D, Fadljević M, Radanović I, Cvija H, Kelava T, Ivčević S, Šućur A, Markotić A, Katavić V, Marušić A, Grčević D, Kovačić N. Fas receptor induces apoptosis of synovial bone and cartilage progenitor populations and promotes bone loss in antigen-induced arthritis. *FASEB J.* 2018 Nov 1;32(11):1426R. doi: 10.1096/fj.201801426R. [Epub ahead of print]1

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Croatian science foundation „The Role of Notch Signalling Pathway in Pathogenesis of Hepatic Fibrosis” 2018-2023, 40000 Eur/year, role: Principal Investigator)

- Croatian science foundation “Molecular mediators of Fas-driven osteoresorption in arthritis” (2015-2019, 30000 EUR/year headed by Prof Natasa Kovacic, role: co-investigator).
- Croatian Ministry of Science, Education and Sports research grant: „Molecular mechanisms of the effects of immune disorders on bone” (No. 108-1080229-0142), (2010-2013, 15000 EUR/year, headed by Prof Danka Grcevic, role: co-investigator).
- Croatian Ministry of Science, Education and Sports research grant “The role of proinflammatory cytokines and prostaglandins in acute liver injury (2007-2013, 12000 EUR/year, headed by Prof Filip Culo, role: co-investigator).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Croatian science foundation „The Role of Notch Signalling Pathway in Pathogenesis of Hepatic Fibrosis” 2018-2023, 40000 Eur/year, role: Principal Investigator)

- Croatian science foundation “Molecular mediators of Fas-driven osteoresorption in arthritis” (2015-2019, 30000 EUR/year headed by Prof Natasa Kovacic, role: co-investigator).

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: PETAR KES, professor (full professor in permanent occupation)

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: a full professor in permanent occupation (retired); Chair of the ERA-EDTA Activation Committee for Southern Europe and Mediterranean countries - responsible for coordination and education in nephrology, dialysis and kidney transplants (on a voluntary basis)

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY:
KIDNEY TRANSPLANTATION

BIOGRAPHY:

Professor **Petar Kes**, born April 15, 1950 in Osijek, Croatia. Specialist of internal medicine and nephrology. Former head of Department of Dialysis and Transplantation in University Hospital Centre Zagreb, consultant-nephrologists, and professor of internal medicine and nephrology at School of Medicine University of Zagreb and visiting professor at School of Medicine University of J. J. Strossmayer in Osijek/Croatia.

Functions and obligations

Professor Petar Kes is a regular member the Croatian Academy of Medical Sciences (since 2000) and member of the Senate of the Croatian Academy of Medical Sciences (since 2016), past president (two mandates) of the Croatian Society of Nephrology, Dialysis and Transplantation, former governor (two mandates) of European Society of Artificial Organs; former president (2015 to 2017) of Balkan Association for Nephrology, Transplantation and Artificial Intelligence (BANTAO) organization and member of the management board of BANTAO (since 2009 until today); member of the Danube Association of Nephrology (DAN) board of directors from 2008 until today; Vice-President of ISN-GO for Central and Eastern Europe (The International Society of Nephrology - Global Outreach) since 2012; Council member of the Mediterranean Kidney Society; Delegate of the Croatian Medical Chamber and Croatian Society for Nephrology, Dialysis and Transplantation in UEMS; National representative in KDIGO; Chair of the ERA-EDTA Activation Committee for Southern Europe and Mediterranean countries.

Other duties

Member of the Commission for Awarding and Recognition of the Croatian Academy of Medical Sciences; former president of the Dialysis Commission of the Ministry of Health and Social Welfare of the Republic of Croatia from 2001 to 2004; Member of the National Board of the Republic of Croatia for Diagnosis, Prevention and Treatment of Hepatitis Patients; the head of a committees led by the Ministry of Health to address the problems of heavy aluminum intoxication in hemodialysis patients Sisak, an epidemic of hepatitis C in hemodialysis center in Slavonski Brod and in 2001, "Baxter affair", a tragic event when 23 patients died during dialysis in Zagreb, Pula, Dubrovnik, Požega, Karlovac and Rijeka. All three problems have been successfully solved in a very short time and without further consequences for dialysis patients.

Membership in professional medical societies: Croatian Medical Association, Croatian Society for Nephrology, Dialysis, and Transplantation, EDTA/ERCA, NKF, ISN, ASAO, DGN, ASN, ISAO, ISPD, ISA/JSA, BANTAO and ESAO.

Organizing activities: President of 3rd, 4th, and 5th Croatian Congress of Nephrology, Dialysis, and Transplantation; president of 12th BANTAO Congress; organizer and head of about 50 CME courses in nephrology, dialysis and renal transplantation at School of Medicine University of Zagreb; organizer of more than 60 national and international symposiums in the field of nephrology, dialysis, plasmapheresis and apheresis, kidney transplantation; co-founder of Croatian registry for renal replacement therapy; founder of the Croatian School of Kidney Transplantation in the Inter-University Centre in Dubrovnik.

Publications: 594 scientific, professional and review articles, 52 manuals in the field of nephrology, dialysis, kidney transplantation and therapeutic apheresis; three books, 41 chapters; > 400 peer reviewed; SCI citations > 2000.

Invited speaker: > 250 times on international meetings.

Membership in editorial board: Kidney and Blood Pressure Research, BANTAO Journal, Acta Clinica Croatica, Contributions, and Acta Medica Croatica (since 2017 Editor-in-Chief).

Scientific projects: principal investigator in 2 and co-investigator in 4 projects of Croatian Grant Agency of Ministry of Health; principal investigator in eight international projects.

Honors: More rewards for the most successful posters at international congresses; Award of capital of Zagreb for kidney transplantation; Award of Croatian Medical Association; Award of the Croatian Society of Nephrology, Dialysis and Transplantation; the Status of ERA-EDTA Distinguished Fellow for actively helping the Association in pursuing its goals

Special field of interest: haemodialysis, peritoneal dialysis, kidney transplantation, uraemic toxicity, intensive care nephrology, clinical nephrology, therapeutic apheresis, multio organ failure and artificial organs.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: Professor with tenure in the area of Biomedicine and Health Sciences, field of Clinical Medical Science - Internal Medicine – elected: 11 July 2013.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME:

Kes P i sur. Akutno oštećenje bubrega. Medicinska naklada, Zagreb 2018, str. 1-1450.

Kes P, Bašić-Jukić N, Katalinć L. Srčano-krvožilne bolesti u kroničnih bubrežnih bolesnika koji se liječe peritonealnom dijalizom. U: Peritonealna dijaliza. Bašić-Jukić N, Rački S, ur. Medicinska naklada, Zagreb 2017, str. 185-212.

Kes P, Reiner Ž. Srčanokrvožilne bolesti u kroničnih bubrežnih bolesnika prije i nakon transplantacije bubrega. U: Transplantacija bubrega, Bašić Jukić N, Kaštelan Ž, ur. Medicinska knjiga, Zagreb str. 306-367.

Kes P, Mesar I, Bašić-Jukić N. Liječenje dislipidemije u kroničnih bubrežnih bolesnika, dijaliziranih bolesnika i bolesnika s funkcionalnim presatkom bubrega. U: Prevencija ateroskleroze. Kronična bubrežna bolest kao čimbenik rizika, ur. Reiner Ž. HAZU i Hrvatsko društvo za aterosklerozu Zagreb 2013, str.1-9.

Kes P, Rački S, Bašić-Jukić N. Darivanje i presađivanje organa. Acta Med Croatica 66:151-152,2012.

Bašić-Jukić N, Kes P. Novi imunosupresivi u transplantaciji bubrega. Acta Med Croatica 2011; 65: 361-364.

Meier-Kriesche HU, Merville P, Tedesco-Silva H, Heemann U, Kes P, Haller H, Rostaing L, Gafner N, Bernasconi C. Mycophenolate mofetil initiation in renal transplant patients at different times posttransplantation: TranCept Switch Study. Transplantation 2011; May 15;91(9):984-990.

Kes P, Bašić-Jukić N, Furić-Čurko V. Bubrežna insuficijencija u onkoloških bolesnika. U: Šamija M, Nemet D i sur. Potporno i palijativno liječenje onkoloških bolesnika, Medicinska naklada Zagreb 2010, str.194-202.

Mokos I, Bašić-Jukić N, Kaštelan Ž, Kes P, Pasini J. Influence of long-term dialysis on operative complications after renal transplantation. Transplant Proc 2010; 42: 2531-3. Bašić-Jukić N, Jurić I, Rački S, Kes P. Spontaneous tendon ruptures in patients with end-stage renal disease. Kidney Blood Press Res. 2009; 32:32-6.

Kes P, Bašić-Jukić N, Jurić I. Kronično zatajivanje bubrega nakon transplantacije srca, pluća, jetre ili tankog crijeva. Acta Med Croatica 2008; 62(Suppl 1): 60-68.

Kes P., Bašić Jukić N. Akutno zatajenje bubrega: patofiziologija, dijagnoza, prevencija i liječenje. Šoša T. i sur., izd. Kirurgija. Medicinska naklada, Zagreb 2007, str. 173 – 192.

Kes P, Bašić Jukić N, Jurić I, Ratković-Gusić I. Anemija nakon transplantacije bubrega. Liječ Vjesn 2007; 129: 101-102.

Meier-Kriesche U, Kes P, Gracida C, Holm A, Haller H, Rostaing L, Heemann U, Merville P, Tedesco H. TranCept – A prospective observational global clinical study of patients switched to MMF at least 6 months after renal transplantation. J Am Soc Nephrol 2006; 17:69A-70A. Županić D, Vlašić-Tanasković J, Šmalcelj R, Kes P, Kušec V. Biokemijski pokazatelji koštane pregradnje u poremećaju koštanog metabolizma bolesnika na kroničnom liječenju dijalizom i onih s presatkom bubrega. Biochemia Medica 2006; 16(2): 137-149.

Kes P, Bruna Brunetta, Bašić-Jukić N. Srčanožilne bolesti nakon transplantacije bubrega. Liječ Vjesn 2006; 128(7-8): 228-232. Nacionalna Radna grupa za transplantaciju bubrega (Bašić-Jukić N, Bubić-Filipi Lj, Kerhin-Brklijačić V, Kes P, Knotek M, Pasini J, Puretić J, Matovinović-Sabljar M, Zelić M, Živčić-Ćosić S). Nacionalne smjernice za obradu, odabir i pripremu mogućih primatelja bubrežnog presatka 2006, Ministarstvo zdravstva i socijalne skrbi, Logopress d.o.o., Zagreb, srpanj 2006, str. 1-32.

Kes P, Bašić-Jukić N. Suvremeni pristup imunosupresiji u bolesnika s presatkom bubrega – minimizacija kortikosteroida ili inhibitora kalcineurina. Acta Med Croatica 2006; 60: 223-229.

Kes P, Brunetta B, Bašić-Jukić N. Određivanje srčanožilnog rizika prije transplantacije bubrega. Liječ Vjesn 2005; 127: 330-332.

Kes P. Zatajenje bubrežne funkcije. U: Klinička transfuzijska praksa. Sustav kvalitete. Ur. Skodlar J, Majerić-Kogler V. FotoSoft & FS digitalni tisak, Zagreb 2002; str. 57-67.

Kes P. Kontinuirano nadomještanje bubrežne funkcije. TIPKO Zagreb 2002; str. 1-63. (knjiga).

Kes P, Brunetta B. Poremećaji lipida u kroničnom zatajenju bubrega, nefrotskom sindromu i dijalizi. U: Prevencija ateroskleroze. Novi čimbenici rizika. Ur. Reiner Ž. HAZU, Z i B Mladost d.o.o., Zagreb 2002; str. 57-71.

Kes P. Hemodijaliza: prošlost i sadašnjost. Medicus 2001;10(1):269-282.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS:

A total: 49 articles and chapters in books for a period of 5 years

Bašić-Jukić N, Kes P. Fabryjeva bolest. U: Bolesti glomerula, primarne i sekundarne. Ur. Galešić K i sur. Medicinska naklada Zagreb, 2014, str. 279-284.

Bašić-Jukić N, Novosel D, Ivanac I, Danić-Hadžibegović A, Kes P. Pain in the left ear as the presenting symptom of acute myocardial infarction in a renal transplant recipient. Transplant Proc 2014 Jan-Feb;46(1):284-285.

Kes P. Što znamo o kroničnoj bolesti bubrega početkom 21. stoljeća? Acta Med Croatica 2014;68(2):75-77.

Katalinić L, Blaslov K, Pasini E, Kes P, Bašić-Jukić N. Acidobazni status u bolesnika liječenih metodom peritonejske dijalize. Acta Med Croatica 2014;68(2):85-90.

Kes P, Bašić-Kes V, Furić-Čurko V, Mesar I, Bašić-Jukić N. Dislipidemija i moždani udar u kroničnih bubrežnih bolesnika. Acta Med Croatica 2014;68(2):141-149.

Premužić V, Tomašević B, Eržen G, Makar K, Brunetta-Gavranić B, Francetić I, Bašić-Jukić N, Kes P, Jelaković B. Primjena trajnih i privremenih centralnih venskih katetera za hemodijalizu. Acta Med Croatica 2014;68(2):167-174.

Bašić-Jukić N, Rački S, Kes P, Ljutić D, Vujičić B, Lovčić V, Orlić L, Prkačin I, Radić J, Jakić M, Klarić D, Gulin M. Kako prevenirati i liječiti proteinsko-energetsku pothranjenost u bolesnika s kroničnom bolešću bubrega – Osvrt Hrvatskog društva za nefrologiju, dijalizu i transplantaciju na preporuke Međunarodnog društva za prehranu bubrežnih bolesnika. Acta Med Croatica 2014;68(2):191-199.

Kes P, Mesar I, Bašić-Jukić N, Rački S. Što bi liječnici trebali znati o biološki sličnim lijekovima? Acta Med Croatica 2014;68(2):201-205.

Bašić-Jukić N, Rački S, Knotek M, Bubić-Filipi Lj, Bubić I, Zibar L, Kes P. Stav Hrvatskog društva za nefrologiju, dijalizu i transplantaciju bubrega prema uporabi generičkih imunosupresiva u transplantaciji bubrega. Acta Med Croatica 2014;68(2):211-214.

Rački S, Bašić-Jukić N, Kes P, Ljurić D, Lovčić V, Prkačin I, Radić J, Vujičić B, Bubić I, Jakić M, Belavić Ž, Šefer S, Pehar M, Klarić D, Gulin M. Liječenje anemije u kroničnoj bubrežnoj bolesti – Stav Hrvatskog društva za nefrologiju, dijalizu i transplantaciju i osvrt na preporuke KDIGO i ERBP. Acta Med Croatica 2014;68(2):215-221.

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Kes P. Sindromi trombotične mikroangiopatije. TIPKO, Zagreb 2016, str. 1-57. (knjiga)

Kes P, Reiner Ž. Srčanokrvožilne bolesti u kroničnih bubrežnih bolesnika prije i nakon transplantacije bubrega. U: Transplantacija bubrega, Bašić Jukić N, Kaštelan Ž, ur. Medicinska knjiga, Zagreb str. 306-367.

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LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

a) Scientific researcher:

1983th to 1987th Scientific-research project "Hormonal receptors in patients with cancer of larynx, hypopharynx and nasopharynx", within the framework of program V-62/0134 financed by SIZ V for the scientific work of the Republic of Croatia.

1987th to 1991st Scientific and research project "Hormone and metabolic factors in chronic neendocrine diseases", No. 1.08.03.08.10, bounded by the SIZ of Science of the Republic of Croatia.

1991th to 1996th Scientific project "Metabolic and Hormone Factors in the Development of Atherosclerosis" - no. 3-01-034, funded by the Ministry of Science and Technology of the Republic of Croatia.

1996 - Scientific project "Metabolic and Hormonal Risk factors for atherosclerosis" - no. 108187 - funded by the Ministry of Science and Technology of the Republic of Croatia, which was rated by the Ministry one of the highest marks (107.6 points).

2005 - 2009 Principal Investigator: "Influence of HMG-CoA reductase inhibitors on inflammation in chronic kidney failure" (No. 0214216), Ministry of Health, Education and Sports.

2009 - 2016. Principal Investigator: "Prevention, Early Recognition and Treatment of Chronic Renal Failure" (108-0000000-3499), Faculty of Medicine, Zagreb. It is rated with the highest rating.

b) Professional projects

2003 - 2004 Principal Investigator. The project "Multicenter, double-blind, randomized, parallel testing of the efficacy and safety of epoetin alfa (Pliva) and epoetin alfa (Janssen-Cilag) in the treatment of hemodialysis patients with chronic kidney failure" - financed by Pliva d.d., Croatia.

2004 - 2006 Researcher. Project Gain Effectiveness in Anaemia Treatment with NeoRecormon (MA 17501). International, multicentre study. Hoffmann La-Roche, Switzerland.

2003 to 2006 Researcher. Project: Observation, nonintervention, global study of clinical outcome in one group of renal transplant recipients who started at least six months after kidney transplantation with long-acting immunosuppressive therapy with CellCept. (M 55025). Hoffmann La-Roche, Switzerland.

2009 to 2016 Chief Researcher. Parallel study of the efficacy of different epoetin at correction of renal anemia in chronic renal disease patients treated with hemodialysis. F.Hoffman-La Roche Clinical Study Protocol BH21260 RO0503821 Mircera®

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2009 - 2016. Principal Investigator: "Prevention, Early Recognition and Treatment of Chronic Renal Failure" (108-0000000-3499), Faculty of Medicine, Zagreb. It is rated with the highest rating.

2009 to 2016 Chief Researcher. Parallel study of the efficacy of different epoetin at correction of renal anemia in chronic renal disease patients treated with hemodialysis. F.Hoffman-La Roche Clinical Study Protocol BH21260 RO0503821 Mircera®

Researcher / Educator / Signatory of EMEA Opinion. Epoetin theta: efficacy and safety of IV administration in anemic hemodialysis patients in the maintenance phase compared to epoetin beta. Curr Med Res Opin. 2010 Oct; 26 (10): 2393-402. doi: 10.1185 / 03007995.2010.511084. CLINICAL TRIAL REGISTRATION: EudraCT No. 2005-000143-28.

Researcher / Educator / Signatory of EMEA Opinion. [Epoetin theta: efficacy and safety of subcutaneous administration in anemic pre-dialysis patients in the maintenance phase in comparison to epoetin beta.](#) Current Medical Research and Opinion 04/2012; 28(7):1101-10. DOI:10.1185/03007995.2012.688736 · 2.37 Impact Factor

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

Magisterium (3), Doctorates (10)



ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Yacoub A. Khalaf, MB BCh MSc MD FRCOG

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Consultant and Senior Lecturer in Reproductive Medicine, King's College London, UK

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Human Reproduction

BIOGRAPH

EDUCATION

1984 MB, BCh (Hons)

1988 MSc (Hons)

1994 MD

CERTIFICATION

1995 MRCOG

1995 MFFP

2000 CCST Specialist Training Authority, London, UK

2000 Certificate of Completion of Subspecialty Training (SST) in Reproductive Medicine Specialist Training Authority, London, UK

REGISTRATION AND ACCREDITATION

Full General Medical Council registration (4228291)

CCST (Obstetrics and Gynaecology) and SST accreditation, (May 2000)

GMC Specialist Register, with sub-specialisation in Reproductive Medicine.

PRESENT POST

2002 → Consultant in Reproductive Medicine and Surgery, Guy's & St. Thomas' NHS Foundation Trust, Department of Women's Health,

2004 → Medical Director and HFEA Person Responsible, Assisted Conception Unit,

2011 → Director of the Pre-implantation Genetic Diagnosis Programme at Guy's & St. Thomas' NHS Foundation Trust, Department of Women's Health

PREVIOUS HOSPITAL APPOINTMENTS

2000→ Subspecialty Fellow in Reproductive Medicine (Honorary Senior Registrar), Guy's & St. Thomas's Hospital

1998→ RCOG Subspecialty Trainee in Reproductive Medicine (Honorary Senior Registrar), Guy's & St. Thomas's Hospitals

1997→ Clinical Research Fellow in Reproductive Medicine (Honorary Senior Registrar), Guy's & St. Thomas's Hospitals

1996→ Lecturer in Obstetrics & Gynaecology (Honorary Senior Registrar), Guy's & St. Thomas's Hospitals, 1st October 1996 to 28th February 1997

1995→ Clinical Research Fellow in Reproductive Medicine (Honorary Senior Registrar), St. Thomas' Hospital

1994 Lecturer in Obstetrics & Gynaecology, Assiut University, Assiut, Egypt.

ACADEMIC APPOINTMENTS

2003→ Honorary Senior Lecturer in *Reproductive Medicine and Surgery*, King's College, London

2014→ Visiting Professor University of South Valley, Qena, Egypt

2015→ Visiting Professor University of Aswan, Egypt

OTHER APPOINTMENTS

HFEA Authority Board Member, 2014-

Executive Officer of the British Fertility Society, 2014-

Chair of the Scientific and Clinical Advances Committee of the HFEA 2016-

Chair of the RCOG National Clinical Studies group in Reproductive Medicine & Surgery 2015-

Member of the RCOG Research Committee 2015-

Expert advisor to the National Institute for Health Care & Clinical Excellence (NICE) 2014-

Associate Editor of the RBM online Journal 2012-

Grant Reviewer for the National Institute for Health Research in the UK 2009-

TEACHING

Undergraduate MBBS (Lectures, seminars, tutorials)

BSc reproductive and sexual health

MSc in clinical biochemistry

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Marta N. Shahbazi, Agnieszka Jedrusik, Sanna Vuoristo, Gaelle Recher, Anna Hupalowska, Virginia Bolton, Norah M. E. Fogarty, Alison Campbell, Liani G. Devito, Dusko Ilic, **Yakoub Khalaf**, Kathy K. Niakan, Simon Fisheland Magdalena Zernicka-Goetz: Self-organization of the human embryo in the absence of maternal tissues. *Nat Cell Biol.* 2016 Jun;18(6):700-8.

Tarek El-Toukhy, Rudi Campo, **Yakoub Khalaf**, Carla Tabanelli, Luca Gianaroli, Sylvie S Gordts, Stephan Gordts, Greet Mestdagh, Tonko Mardesic, Jan Voboril, Gian L Marchino, Chiara Benedetto, Talha Al-Shawaf, Luca Sabatini, Paul T Seed, Marco Gergolet, Grigoris Grimbizis, Hoda Harb, Arri Coomarasamy Hysteroscopy in recurrent in-vitro fertilisation failure (TROPHY): a multicentre, randomised controlled trial *Lancet.* 2016 Jun 25;387(10038):2614-21.

Arri Coomarasamy, Helen Williams, Ewa Truchanowicz, Paul T Seed, Rachel Small, Siobhan Quenby, Pratima Gupta, Feroza Dawood, Yvonne E.M. Koot, Ruth Bender Atik, Kitty W.M. Bloemenkamp, Rebecca Brady, Annette L Briley, Rebecca Cavallaro, Ying C Cheong, Justin J Chu, Abey Eapen, Ayman Ewies, Annemieke Hoek, Eugenie M Kaaijk, Carolien A.M. Koks, Tin-Chiu Li, Marjory MacLean, Ben W Mol, Judith Moore, Jackie A Ross, Lisa Sharpe, Jane Stewart, Nirmala Vaithilingam, Roy G Farquharson, Mark D Kilby, **Yakoub Khalaf**, Mariette Goddijn, Lesley Regan, Rajendra Rai: A Randomized Trial of Progesterone in Women with Recurrent Miscarriages. *New England Journal of Medicine* 11/2015; 373(22):2141-2148.

Laila Noli, Antonio Capalbo, Caroline Ogilvie, **Yakoub Khalaf**, Dusko Ilic: Discordant Growth of Monozygotic Twins Starts at the Blastocyst Stage: A Case Study. *Stem Cell Reports* 11/2015; 5(6).

Laila Noli, Yaser Dajani, Antonio Capalbo, Jean Bvumbe, Laura Rienzi, Filippo Maria Ubaldi, Caroline Ogilvie, **Yakoub Khalaf**, Dusko Ilic: Developmental clock compromises human twin model created by embryo splitting. *Human Reproduction* 10/2015; 30(12).

Antonio Capalbo, Maria Ubaldi Filippo, Danilo Cimadomo, Laila Noli, **Yakoub Khalaf**, Alessio Farcomeni, Dusko Ilic, Laura Rienzi: MicroRNAs in spent blastocyst culture medium are derived from trophectoderm cells and can be explored for human embryo reproductive competence assessment. *Fertility and sterility* 10/2015; 105(1).

H Hamoda, L Pepas, F Tasker, J Reidy, **Y Khalaf**: Intermediate and long-term outcomes following uterine artery fibroid embolization. *European journal of obstetrics, gynecology, and reproductive biology* 05/2015; 191.

Sesh Kamal Sunkara, Antonio La Marca, Paul T Seed, **Yakoub Khalaf**: Increased risk of preterm birth and low birthweight with very high number of oocytes following IVF: An analysis of 65 868 singleton live birth outcomes. *Human Reproduction* 04/2015; 30(6).

M. Rettenbacher, A.N. Andersen, J.A. Garcia-Velasco, M. Sator, P. Barri, S. Lindenberg, K. van der Ven, **Y. Khalaf**, U. Bentin-Ley, A. Obruca, G. Tews, M. Schenk, T. Strowitzki, N. Narvekar, K. Sator, B. Imthurn: A multi-centre phase 3 study comparing efficacy and safety of Bemfola® versus Gonal-f in women

undergoing ovarian stimulation for IVF. Reproductive biomedicine online 01/2015; 30(5). DOI:10.1016/j.rbmo.2015.01.005

Julia Kopeika, Alan Thornhill, **Yacoub Khalaf**: The effect of cryopreservation on the genome of gametes and embryos: Principles of cryobiology and critical appraisal of the evidence. Human Reproduction Update 12/2014; 21(2). DOI:10.1093/humupd/dmu063

S Seshadri, T El-Toukhy, A Douiri, K Jayaprakasan, **Y Khalaf**: Diagnostic accuracy of saline infusion sonography in the evaluation of uterine cavity abnormalities prior to assisted reproductive techniques: A systematic review and meta-analyses. Human Reproduction Update 12/2014; 21(2). DOI:10.1093/humupd/dmu057

S Seshadri, M Khalil, A Osman, A Clough, K Jayaprakasan, **Y Khalaf**: The evolving role of saline infusion sonography (SIS) in infertility. European Journal of Obstetrics & Gynecology and Reproductive Biology 12/2014; 185C:66-73. DOI:10.1016/j.ejogrb.2014.11.037

Osman, H. Alsomait, S. Seshadri, T. El-Toukhy, **Y. Khalaf**: The effect of sperm DNA fragmentation on live birth rate after IVF or ICSI: A systematic review and meta-analysis. Reproductive biomedicine online 11/2014; 30(2). DOI:10.1016/j.rbmo.2014.10.018

Liani Devito, Heba Badraiq, Antonio Galleu, Dheraj K Taheem, Stefano Codognotto, Richard Siow, **Yacoub Khalaf**, Annette Briley, Andrew Shennan, Lucilla Poston, John McGrath, Eileen Gentleman, Francesco Dazzi, Dusko Ilic: Wharton's jelly mesenchymal stromal/stem cells derived under chemically defined animal product-free low oxygen conditions are rich in MSCA-1 + subpopulation. Regenerative Medicine 11/2014; 9(6):723-732.

Liani Devito, Anastasia Petrova, Cristian Miere, Stefano Codognotto, Nicola Blakely, Archie Lovatt, Caroline Ogilvie, **Yacoub Khalaf**, Dusko Ilic: Cost-Effective Master Cell Bank Validation of Multiple Clinical-Grade Human Pluripotent Stem Cell Lines From a Single Donor. STEM CELLS TRANSLATIONAL MEDICINE 08/2014; 3(10).

J Pundir, J Kopeika, L Harris, N Krishnan, C Uwins, A Siozos, **Y Khalaf**, T El-Toukhy: Reproductive outcome following abdominal myomectomy for a very large fibroid uterus. Journal of Obstetrics and Gynaecology 06/2014; 35(1):1-5.

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Pundir J, Pundir V, Omanwa K, **Khalaf Y**, El-Toukhy T. Hysteroscopy prior to the first IVF cycle; a systematic review and meta-analysis. Reproductive Biomedical Online 2014 Feb;28(2):151-61.

Sunkara SK, Coomarasamy A, Faris R, Braude P, **Khalaf Y**. Long gonadotropin-releasing hormone agonist versus short agonist versus antagonist regimens in poor responders undergoing in vitro fertilization: a randomized controlled trial. Fertility and Sterility. 2014 Jan;101(1):147-53

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Braude P, Khalaf Y Evidence-based medicine and the role of the private sector in assisted reproduction: a response to Dr Fishel's commentary 'Evidenced-based medicine and the role of the National Health Service in assisted reproduction'. *Reproductive Biomedicine Online* 2013 Nov;27(5):570-2

Pundir J, Walawalkar R, Seshadri S, Khalaf Y, El-Toukhy T. Perioperative morbidity associated with abdominal myomectomy compared with total abdominal hysterectomy for uterine fibroids. *Journal of Obstetrics and Gynaecology* 2013 Oct;33(7):655-62

Scriven PN, Flinter FA, Khalaf Y, Lashwood A, Mackie Ogilvie C. Benefits and drawbacks of preimplantation genetic diagnosis (PGD) for reciprocal translocations: lessons from a prospective cohort study. *European Journal of Human Genetics*. 2013 Oct;21(10):1035-41

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Pundir J, Krishnan N, Siozos A, Uwins C, Kopeika J, Khalaf Y, El-Toukhy T. Peri-operative morbidity associated with abdominal myomectomy for very large fibroid uteri. *European Journal of Obstetrics, Gynaecology and Reproductive Biology*. 2013 Apr;167(2):219-24

Khalaf Y, Cohen J. Introduction to evidence-based reproductive medicine symposium. *Reproductive Biomedicine Online*. 2013 Mar;26(3):199-200

Seshadri S, Sunkara SK, Khalaf Y, El-Toukhy T, Hamoda H. Effect of heparin on the outcome of IVF treatment: a systematic review and meta-analysis. *Reproductive Biomedicine Online* 2012 Dec;25(6):572-84

El-Toukhy T, Sunkara S, Khalaf Y. Local endometrial injury and IVF outcome: a systematic review and meta-analysis. *Reproductive Biomedicine Online* 2012 Oct;25(4):345-54

Scriven PN, Ogilvie CM, Khalaf Y. Embryo selection in IVF: is polar body array comparative genomic hybridization accurate enough? *Human Reproduction*. 2012 Apr;27(4):951-3

Pundir J, Sunkara SK, El-Toukhy T, Khalaf Y. Meta-analysis of GnRH antagonist protocols: do they reduce the risk of OHSS in PCOS? *Reproductive Biomedicine Online*. 2012 Jan;24(1):6-22

Khalaf Y, El-Toukhy T. The search for a practice model to reduce miscarriage after assisted reproduction. *Reprod Biomed Online*. *Reproductive Biomedicine Online*. 2011 Dec;23(6):695-6

Pundir J, Sunkara SK, El-Toukhy T, Khalaf Y. Meta-analysis of GnRH antagonist protocols: do they reduce the risk of OHSS in PCOS? *Reprod Biomed Online*. 2011 Oct 13.

Pepas L, Macmahon E, El Toukhy T, Khalaf Y, Braude P. Viral screening before each cycle of assisted conception treatment is expensive and unnecessary: a survey of results from a UK inner city clinic. *Hum Fertil (Camb)*. 2011 Dec;14(4):224-9. doi:10.3109/14647273.2011.627624.

Hamoda H, Pepas L, Freed C, Grace J, Khalaf Y, Braude P, El-Toukhy T. Outcomes of ovarian stimulation in a two-day oocyte collection week with PGD cycles compared to a five-day oocyte collection week with

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BOOK CHAPTERS

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1 Chapter in *RIZK: Ultrasonography in Reproductive Medicine & Infertility*

3 Chapters in Sharif and Coomarasmay. *Challenges in ART and management*

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LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Marta N. Shahbazi, Agnieszka Jedrusik, Sanna Vuoristo, Gaelle Recher, Anna Hupalowska, Virginia Bolton, Norah M. E. Fogarty, Alison Campbell, Liani G. Devito, Dusko Ilic, **Yakoub Khalaf**, Kathy K. Niakan, Simon

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LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Ongoing Research Support

HABselect (Hyaluronan Acid Binding Sperm selection): Selection of sperm for Assisted Reproductive Treatment by prior hyaluronic acid binding: increasing live birth outcomes and reducing miscarriage rates – multicentre randomised controlled, blinded trial. Sponsor: Leeds pragmatic trials unit. Role: Principal investigator.

TABLET Study: a randomised controlled trial of the Efficacy and Mechanism of Levothyroxine Treatment on Pregnancy and Neonatal Outcomes in Women with Thyroid Antibodies. Sponsor: Birmingham Clinical Trials Unit. Role: Principal investigator

TRUST – IVF study: A randomised controlled trial comparing Transvaginal Ultrasonography versus Saline Sonography Trial in patients having their IVF treatment. Sponsor: Guy's ACU. Role: PI

ESPART study: A Phase III, Randomized, Controlled, Single-Blind, Multicentre, Parallel Arm Trial to Assess the Efficacy and Safety of Pergoveris® (follitropin alfa and lutropin alfa) and GONAL-f® (follitropin alfa) for Multifollicular Development as part of an Assisted Reproductive Technology Treatment Cycle in Poor Ovarian Responders, as defined by the European Society of Human Reproduction and Embryology Criteria. Sponser: Merck Serono. Role: PI

HTA project reference number: 08/38/01 First trimester progesterone therapy in women with a history of unexplained recurrent miscarriages: A randomised, double-blind, placebo-controlled, multi-centre trial [The PROMISE (PROgesterone in recurrent MIScarriage) Trial] HTA project reference number: 08/38/01. Role: PI

ESHRE/European Academy sponsored project A multi-centre randomised controlled study of pre-IVF outpatient hysteroscopy in women with recurrent IVF implantation failure: Trial of Outpatient Hysteroscopy - [TROPHY] in IVF. Role: Investigator /Trial Advisor



Efficacy and Tolerability of Subcutaneous Progesterone (IBSA) versus Vaginal Progesterone Gel (Crinone®) for Luteal Phase Support in Patients Undergoing In-Vitro Fertilization (IVF). A multi-centre international randomised clinical trial. EUDRACT number 2007-006595-11 Sponsored by IBSA, Institut Biochimique S.A. Via del Piano - 6915 Pambio-Noranco (CH). Role: Chief Investigator

A Phase III assessor-blinded randomised parallel group multi-centre study to compare efficacy and safety of two r-hFSH formulations (AFOLIA vs Gonal-f®) in women for assisted reproductive treatment. EUDRACT No: 2010-019287-37. Role: PI

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Same as above.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor, IVICA KLAPAN

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine J.J. Strossmayer University in Osijek

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Telemedicine

BIOGRAPHY

Degree, Vocation and Occupation:

Professor, MD, PhD, Scientific adviser; Professor of Otorhinolaryngology, Head and Neck Plastic Surgery, School of Medicine, University of Zagreb, School of Medicine J.J. Strossmayer University in Osijek, and Faculty of Dental Medicine and Health J.J. Strossmayer University in Osijek, Republic of Croatia, EU
Surgical and Scientific Fields of Interest: rhinosinusology, functional endoscopic sinus surgery (FESS), plastic and reconstructive surgery of the head and neck, 3D navigation-computer assisted FES-surgery (3D-CA-NESS), telesurgery (tele-3D-CA-NESS), virtual endoscopy and surgery (VE, VS) of the head and neck, chronic sinusitis – immunobiochemical characteristics, rhinophotodynamic therapy (RPDT) of sinonasal polyposis

Fields of Expert Activities: rhino surgery (nose/sinuses/skull base), plastic and reconstructive surgery of the head and neck, functional endoscopic sinus surgery (FESS), 3D-navigation-computer assisted FES-surgery (3D-CA-NESS), computerized plastic reconstructive surgery (C-FPS)

1978-1983 Medical School, University of Zagreb, Croatia, EU

1983 Thesis "*Conversion of solid neoplasms into ascites tumors*", Department of Physiology and Immunology, School of Medicine, University of Zagreb, Croatia (mentor: Prof. Dr. Filip Čulo)

1983-1986 Postgraduate Study "*Clinical Immunology and Allergology*", School of Medicine, University of Zagreb, Croatia, EU

1986 Master's Degree (MMS) "*The influence of cyclophosphamide on tumor-specific immunity. Induction of antitumor immunity in mice bearing advanced tumor*", Department of Physiology and Immunology, School of Medicine, University of Zagreb, Croatia, EU (mentor: Prof. Dr. Filip Čulo)

1986-1989 Residency Department of Otorhinolaryngology, Head and Neck Surgery, School of Medicine, University of Zagreb/Zagreb University Clinical Hospital Center

1989-1990 Eye and Ear Institute, Department of Otorhinolaryngology–Head & Neck Surgery, University of Pittsburgh, Pittsburgh, PA, USA

1987-1989 Postgraduate Study "*Otorhinolaryngology, Head and Neck Surgery*", School of Medicine, University of Zagreb

1990 (May) Doctor's Degree (PhD), "*Prognostic significance of in vivo and in vitro prostaglandin E2 production by squamous cell carcinoma of the head and neck*", Department of Otorhinolaryngology–Head and Neck Surgery, School of Medicine, University of Zagreb, Croatia

1990 (Dec.) Specialization, Otorhinolaryngology- Head and Neck Surgery, Department of ENT, Head and Neck Surgery, University Clinical Hospital Center "Sisters of Charity", Zagreb, Croatia, EU

1990-1992 Sub-residency, Head and Neck Plastic Surgery, Department of ENT, Head and Neck Surgery, School of Medicine, University of Zagreb, and Zagreb University Clinical Hospital Center

Education/Training at a Number of Renowned International Departments and Institutes:

1989-1990 Eye & Ear Institute, Department of Otorhinolaryngology–Head & Neck Surgery, University of Pittsburgh, Pittsburgh, PA, USA

1989-1990 Division of Head and Neck Oncology and Immunology, and Immunologic Monitoring and Diagnostic Laboratory, Pittsburgh Cancer Institute, University of Pittsburgh, Pittsburgh, PA, USA

1993 University ENT-Clinic, LKH Graz, Austria, EU

1994 The Institute of Laryngology and Otology With the Ferens, London, Great Britain, EU

1997 Cottle International Rhinology Centennial, Philadelphia, PA, USA

Professional Positions, Employment After Residency:

1990 Assistant, cumulative employment, clinical-scientific field of ENT, Head and Neck Surgery, Zagreb University School of Medicine, and Department of Otorhinolaryngology, H&N Surgery, University Clinical Hospital Center Zagreb

1996 Assistant Professor, cumulative employment, clinical-scientific field of ENT, head and neck surgery; Zagreb University School of Medicine, and Department of Otorhinolaryngology, H&N Surgery, University Clinical Hospital Center Zagreb

2000 Associate Professor, cumulative employment, clinical-scientific field of ENT, head and neck surgery; Zagreb University School of Medicine, and Department of Otorhinolaryngology, H&N Surgery, University Clinical Hospital Center Zagreb

2000 Visiting Professor, Eye and Ear Institute, Department of Otorhinolaryngology, Head and Neck Surgery, University of Pittsburgh, Pittsburgh, PA, USA

2000 Distinguished Faculty, Mayo Clinic, and American Rhinologic Society, Washington, D.C., USA

2004 Professor, cumulative employment, clinical-scientific field of ENT, head and neck Surgery; Zagreb University School of Medicine, and Department of Otorhinolaryngology, H&N Surgery, University Clinical Hospital Center Zagreb

2004 Visiting Professor, Department of Cranio-Maxillo-Facial Surgery, Bavarian Julius Maximilian University, Würzburg, Germany

2009 Professor, cumulative employment, clinical-scientific field of Otorhinolaryngology, head and neck surgery; Josip Juraj Strossmayer University School of Medicine in Osijek

2017 Professor, cumulative employment, clinical-scientific field of Otorhinolaryngology, head and neck surgery; Faculty of Dental Medicine and Health, Josip Juraj Strossmayer University in Osijek, Republic of Croatia, EU

Duties, Selected Administrative, Advisory, and Honorary Posts:

1998-2009 Head, Reference Center of Computerized Surgery & Telesurgery, Ministry of Health and Social Welfare, Republic of Croatia, EU

2000-2017 Head, Course on Telemedicine, Scientific Postgraduate Study at School of Medicine, University of Zagreb, Zagreb

2000-2009 Chairman, Croatian Society of Telemedicine, Croatian Medical Association (CMA)

2004-2007 Chairman, Commission on Telemedicine, Ministry of Health and Social Welfare, Republic of Croatia

2006-2009 President, Section of Rhinology, Croatian Medical Association (CMA)

2007 Chair, Department of Otorhinolaryngology, Head and Neck Surgery, Šalata 4, School of Medicine, University of Zagreb

2007-2017 Head, Course on Telemedicine, scientific postgraduate study at School of Medicine, J. J. Strossmayer University, Osijek

2015-2017 Secretary, Croatian Rhinology Society (CRS)

2017 Editorial Board Member, IL Journal of Otolaryngology and Rhinology, Wilmington, DE, USA

2017 Editorial Board Member, Frontiers in Otolaryngology-Head and Neck Surgery (FOHNS) Applis Publishers, Scottsdale, AZ, USA.

Professional Success in Medical Practice:

1992 Klapan I et al. *Prognostic significance of plasma PGE concentration in patients with head and neck cancer. J Cancer Res Clin Oncol* 1992;118:308-13, chosen by the Editorial Department of Clinical Digest Series – Oncology Digest, Northbrook, IL, USA, have been published in an abridged form as being highly relevant for the scientific field of ENT

1994 The first 3D-navigation-computer assisted functional endoscopic nose and sinus operation (3D-CANES) in Croatian medicine, as one of the first operations of this type in the world (June 3rd)

1994 Klapan I et al. *Acute upper respiratory tract infections and indications for tonsillectomy in children. I. Immunoglobulin synthesis in the palatine tonsil tissue. Int J Pediatr Otolaryngol* 1994;29:169-78, chosen by the Editorial Department of Clinical Digest Series – Oncology Digest, Northbrook, IL, USA, have been published in an abridged form as being highly relevant for the scientific field of ENT

1995 The set hypothesis on the possible effect of AAm leukotriene C4 (LTC4) on creating conditions for

the development of paranasal sinus mucosa lesions, and thus for the onset of sinonasal polyps (SNp), was subsequently fully confirmed; published in the leading medical periodicals (Am J Otolaryngol, 1995; CC) **1996** The first formal telemedicine (tele-radiology-otorhinolaryngology) video conference in Croatia (May) **1998** The first Tele-3D-navigation-computerized-endoscopic operations of the nose, sinuses and skull base (Tele-3D-CA-NES), for the first time in the world medicine, thus initiating a completely new era in the development of 21st century medicine worldwide. This achievement has been acknowledged by a special note in the American Academy of Otolaryngology – Head & Neck Surgery Monograph, **1999** Klapan I et al. *Azithromycin and amoxicillin/clavulanic acid in the treatment of acute sinusitis*. *Am J Otolaryngol* 1999;20:7-11 has been chosen by Pfizer, Inc., USA and Grupo Editorial Moreira and Journal Revista Brasileira de Medicina, Brazil, for special issuing and use in the USA and Brazil for its high relevance for the scientific field of ENT

Admitted as Full Member to the Most Prestigious International Medical Academies/ Commissions/Societies:

Collegium Otorhinolaryngologicum Amicitiae Sacrum (CORLAS)
Royal Society of Medicine of Great Britain (London)
Board, International Society for Telemedicine and e-Health (ISfTeH; Luxembourg)
International Confederation for Plastic Reconstructive and Aesthetic Surgery
European Academy of ORL and Head & Neck Surgery (EAORL-HNS)

Membership in the Most Prestigious Croatian National University Boards:

2004-2007 National Board for University Education of the Republic of Croatia
2009-2010 Accreditation Board of the Agency for Science and University Education of the Republic of Croatia

Scientific Projects:

4 (four) Croatian Projects; Team member, 10 (ten) Croatian Projects; Principal Investigator, launched by the Ministry of Science, Croatia, and 2 (two) USA Projects; Team member

Invited Lectures:

>450 lectures (invited lecturer, moderator, president), held at numerous universities, academies, international congresses, symposia and surgical courses in the USA, EU, Asia and Australia, organized by International Federation of ORL Societies (IFOS), European Federation of ORL Societies (EUFOS), European Rhinologic Society (ERS), American Rhinologic Society (ARS), and European Academy of ORL and Head & Neck Surgery (EAORL-HNS).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Klapan I, Čulo F, Marić M. The influence of cyclophosphamide on tumor-specific immunity. Induction of antitumor immunity in mice bearing advanced tumor. *Period Biologorum*, 1986, 88:526-527.

Sacchi M, Klapan I, Johnson JT, Whiteside TL. Antiproliferative effects of cytokines on squamous cell carcinoma. *Arch Otolaryngol Head Neck Surg*, 1991, 117:321-326.

Čulo, F; Klapan, I; Katić, V; Kolak, T; Bakula, B. Production of prostaglandin E by squamous carcinoma of the head and neck and adenocarcinoma of gastrointestinal tissue. // *Medical oncology and tumor pharmacotherapy*. 9 (1992) , 1; 35-39

Klapan I, Katić V, Čulo F, Ćuk V. Prognostic significance of plasma prostaglandin E concentration in patients with head and neck cancer. // *Cancer Res Clin Oncol*, 1992, 118:308-313.

Klapan I, Katić V, Čulo F, Sabolović D, Ćuk V, Fumić K, Simović S. Lipid bound sialic acid, PGE and histamine in head and neck cancer. // *Eur J Cancer*, 1993, 29A(6):839-845.

Čulo F, Klapan I, Kolak T. The influence of cyclophosphamide on anti-tumor immunity in mice bearing late stage tumors. I. Induction of anti-tumor immunity demonstrable upon local but not systemic transfer of spleen cells. *Cancer Immunol Immunother*, 1993, 36:115-122.

Snyderman CH, Klapan I, Milanovich M, Heo DS, Wagner R, Schwartz D, Johnson JT, Whiteside TL. Comparison of in vivo and in vitro prostaglandin E2 production by squamous cell carcinoma of the head and neck. *Otolaryngol Head Neck Surg*, 1994, 111:189-196.

Klapan I, Čulo F, Čulig J, Bukovec Ž, Simović S, Ćuk V, Rišavi R, Bumber Ž, Šprem N, Vukoja M. Arachidonic acid metabolites and sinonasal polyposis. I. Possible prognostic value. *Am J Otolaryngol*, 1995, 16(6):396-402.

Klapan I, Matrapazovski M, Orešković K, Čulig J. Azithromycin and amoxicillin/calvulanic acid in the treatment of acute sinusitis. *Am J Otolaryngol*, 1999, 20:7-11.

Klapan I, Šimičić Lj, Rišavi R, Bešenski N, Bumber Ž, Stiglmaier N, Janjanin S. Dynamic 3D computer-assisted reconstruction of metallic retrobulbar foreign body for diagnostic and surgical purposes. Case report: orbital injury with ethmoid bone involvement. . // *Orbit*, 2001, 20(1):35-49.

Klapan I, Šimičić Lj, Bešenski N, Bumber Ž, Janjanin S, Rišavi R, Mladina R. Application of 3D Computer - Assisted Techniques to Sinonasal Pathology-Case Report: War Wounds of Paranasal Sinuses Caused by Metallic Foreign Bodies . *Am J Otolaryngol*, 2002, 23(1):27-34.

Klapan I, Šimičić Lj, Rišavi R, Pasarić K, Sruck V, Schwarz D, Barišić J. Real time transfer of live video images in parallel with three-dimensional modeling of the surgical field in computer-assisted telesurgery. . // *Telemed Telecare*, 2002, 8:125-130.

Klapan I, Šimičić Lj, Rišavi R, Bešenski N, Pasarić K, Gortan D, Janjanin S, Pavić D, Vranješ Ž. Tele-3D-Computer Assisted Functional Endoscopic Sinus Surgery: new dimension in the surgery of the nose and paranasal sinuses.. // *Otolaryngology Head Neck Surg*, 2002, 127:549-557.

Klapan I, Vranješ Ž, Rišavi R, Šimičić Lj, Prgomet D, Glušac B. Computer assisted surgery and computer-assisted telesurgery in otorhinolaryngology. *Ear Nose Throat J*, 2006, 85(5):318-321.

Klapan I, Vranješ Ž, Prgomet D, Lukinović J. Application of advanced virtual reality and 3D computer assisted technologies in tele-3D-computer assisted surgery in rhinology. // *Coll Antropol*, 2008, 32(1):217-219.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Raos P, Klapan I, Galeta T. Additive Manufacturing of Medical Models – Applications in Rhinology. *Collegium Antropol*, 2015; 39(3):667-73.

Klapan I, Raos P, Galeta T, Kubat G. Virtual reality in rhinology-a new experience of clinical experience. *Ear Nose Throat*, 2016; 95(7): 23-28.



Klapan I, Duspara A, Majhen Z, Benić I, Kostelac M. What is the future of minimally invasive sinus surgery: computer assisted navigation, 3D-surgical planner or augmented reality in the operating room with contactless 'in the air' surgeon's commands? *IL Journal of Otolaryngology and Rhinology*, **2017**;1(1):1-7.

Klapan I, Duspara A, Majhen Z, Benić I, Kostelac M, Kubat G, Berlengi N. What is the future of minimally invasive surgery in rhinology: marker-based virtual reality simulation with touch free surgeon's commands, 3D-surgical navigation with additional remote visualization in the operating room, or ...? *Frontiers in Otolaryngology-Head and Neck Surgery (FOHNS)*. **2017**; 1(1): 1-7.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Marijan Klarica, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pathophysiology of the brain and the CSF; Methods of investigation in vivo and in vitro

BIOGRAPHY

Marijan Klarica was born on August 21, 1960 in Benkovac, Croatia. He is a citizen of Croatia, married with two children. From 1979 to 1984 he studied and graduated from the School of Medicine in Zagreb and from 1985 to 1986 he finished his medical practice and passed a medical exam. In 1986 - 87 he served his military term, 1985 - 1988 he attended postgraduate studies in Preclinical Experimental Pharmacology at the Medical Pharmacology in Zagreb and defended his master's thesis entitled "Role of Osmotic Active Substances in Intracranial Pressure Control". In 1992 he defended the dissertation "The role of osmolality of liquor in the pathophysiology of intracranial pressure" at the School of Medicine in Zagreb.

In 1985 he was appointed as an associate professor at the Department of Pharmacology. In 1988 he was appointed Scientific Assistant at the Department of Pharmacology and after his defence in 1992, he was elected as Senior Assistant at the same Institute. From 1991 to 1993 he worked at the Main Medical Department of the Republic of Croatia (organizes collection and distribution of medicines and sanitary materials according to needs). From 1994 to 1995 he was in postdoctoral training at Synthelabo Recherche in France (Paris). He was an assistant professor at the Department of Pharmacology of the Faculty of Medicine in Zagreb from 1997-2002. From 2002 to 2007 he was associate professor at the Department of Pharmacology of the Faculty of Medicine in Zagreb. Since 2007, he has been a full professor (since 2012 in permanent vocation) at the Department of Pharmacology of the Faculty of Medicine in Zagreb. From 1998 to 2000 he was appointed by the dean as acting director of the Center for Clinical Application of Neuroscience, Zagreb. Since 2000 he has been appointed Director of the Center for Clinical Application of Neuroscience and has been performing this function until 2009. Since 2009 he has been elected as a vice-dean for finances and operations of the School of Medicine, University of Zagreb. From the academic year 2012/13, he is the head of the Department of Pharmacology at the School of Medicine University of Zagreb. In the mandate period from 2015/2016 to 2017/2018 he was dean of the Faculty of Medicine of the University of Zagreb and has been re-elected for the second term in the period 2018/2019 – 2020/2021.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 15th May 2012.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Strikić N, Klarica M, Vladić A, Bulat M. Effect of active transport on distribution and concentration gradients of 3H-benzylpenicillin in the cerebrospinal fluid. Neuroscience Letters 169: 159-162; 1994

Orešković D, Sanković M, Frobe A, Klarica M. Physiological characteristics of some monoamine metabolites in cat cerebrospinal fluid. Croatica Chemica Acta 68 (3): 511-520; 1995

Klarica M, Fage D, Carter C. The pharmacology of N-methyl-D-aspartate-evoked 3H noradrenaline release in adult rat spinal cord. Eur J Pharm 308:135-144; 1996

Miše B, Klarica M, Seiwert S, Bulat M. Experimental hydrocephalus and hydromyelia: a new insight in mechanism of their development. Acta Neurochirurgica - Wien 138: 862-869; 1996

- Nankai M, Klarica M, Fage D, Carter C. Evidence for native NMDA receptor subtype pharmacology as revealed by differential effects on the NMDA-evoked release of striatal neuromodulators: eliprodil, ifenprodil, and other native NMDA receptor subtype selective compounds. *Neurochem Int* 29 (5): 529-542; 1996
- Nankai M, Klarica M, Fage D, Carter C. The pharmacology of native N-methyl-D-aspartate receptor subtypes: different receptors control the release of different striatal and spinal transmitters. *Progress in Neuropsychopharmacology and Biological Psychiatry* 22: 35-64; 1998
- Vladić A, Strkić N, Jurčić D, Zmajević M, Klarica M, Bulat M. Homeostatic role of the active transport in elimination of [^{3} H] benzylpenicillin out of the cerebrospinal fluid system. *Life Sciences* 67 (19): 2375-2385; 2000
- Orešković D, Klarica M, Lupret V, Vukić M. The character of the cerebrospinal fluid production. *Neurosci Res Comm* 26 (2): 69-76; 2000
- Orešković D, Klarica M, Vukić M. Does the secretion and circulation of the cerebrospinal fluid really exist? *Medical Hypotheses* 56 (5) 622-624; 2001
- Zmajević M, Klarica M, Varda R, Kudelić N, Bulat M. Elimination of phenolsulfonphthalein from the cerebrospinal fluid via capillaries in central nervous system by active transport. *Neuroscience Letters* 321: 123-125; 2002
- Orešković D, Klarica M, Vukić M. The formation and circulation of cerebrospinal fluid inside the cat brain ventricles: a fact or an illusion. *Neuroscience Letters* 327: 103-106; 2002
- Orešković D, Klarica M, Vukić M, Maraković J. Evaluation of ventriculo-cisternal perfusion model as a method to study cerebrospinal fluid formation. *Croat Med J* 44 (2): 161-164; 2003
- Klarica M, Varda R, Vukić M, Orešković D, Radoš M, Bulat M. Spinal contribution to CSF pressure lowering effect of mannitol in cats. *Acta Neurochir* 95: 407-410; 2005
- Orešković D, Vukić M, Klarica M, Bulat M. The investigation of cerebrospinal fluid formation by ventriculo-aqueductal perfusion method in cats. *Acta Neurochir* 95: 433-436; 2005
- Klarica M, Radoš M, Draganić P, Erceg G, Orešković D, Maraković J, Bulat M. Effect of head position on cerebrospinal fluid pressure in cats: comparison with artificial model. *Croat Med J* 47: 233-238; 2006
- Bulat M, Lupret V, Orešković D, Klarica M. Transventricular and transpial absorption of cerebrospinal fluid into cerebral microvessels. *Coll Antropol* 31: (suppl 3) 43-50, 2008.
- Orešković D, Maraković J, Vukić M, Radoš M, Klarica M. Fluid perfusion as a method of cerebrospinal fluid formation rate - Critical appraisal. *Coll Antropol* 32: 133-137, 2008.
- Vladić A, Klarica M, Bulat M. Dynamics of distribution of ^{3} H-inulin between the cerebrospinal fluid compartments. *Brain Res* 1248: 127-135, 2009.
- Klarica M, Orešković D, Božić B, Vukić M, Butković V, Bulat M. New experimental model of acute aqueductal blockade in cats: Effects on cerebrospinal fluid pressure and the size of brain ventricles. *Neuroscience* 158: 1397-1405, 2009.
- Orešković D, Klarica M. The formation of cerebrospinal fluid: nearly a hundred years of interpretations and misinterpretations. *Brain Res Rev* 64: 241-262, 2010

- Maraković J, Orešković D, radoš M, Vukić M, Jurjević I, Chudy D, Klarica M. Effect of osmolarity on CSF volume during ventriculo-aqueductal and ventriculo-cisternal perfusions in cats. *Neurosci Lett* 484: 93-97, 2010.
- Bulat M, Klarica M. Recent insights into a new hydrodynamics of the cerebrospinal fluid. *Brain Res Rev* 65: 99-112, 2011.
- Jednačak H, Paladino J, Miklič P, Mrak G, Vukić M, Štimac T, Klarica M. The application of ultrasound in neuroendoscopic procedures: first results with the new tool “NECUP-2” *Coll Antropol* 35: 45-49, 2011.
- Jurjević I, Radoš M, Orešković J, Prijić R, Tvrdeić A, Klarica M. Physical characteristics in the new model of the cerebrospinal fluid system. *Coll Antropol* 35: 51-56, 2011.
- Maraković J, Orešković D, Jurjević I, radoš M, Chudy D, Klarica M. Potential error in ventriculocisternal perfusion method for determination of cerebrospinal fluid formation rate in cats. *Coll Antropol* 35: 73-77, 2011.
- Petošić A, Ivančević B, Svilar D, Štimac T, Paladino J, Orešković D, Jurjević I, Klarica M. Methods for measuring acoustic power of an ultrasonic neurosurgical device. *Coll Antropol* 35: 107-113, 2011.
- Orešković D, Klarica M. Development of hydrocephalus and classical hypothesis of cerebrospinal fluid hydrodynamics: facts and illusions. *Progress in Neurobiology* 94: 238-258, 2011.
- Klarica M, Miše B, Vladić A, Radoš M, Orešković D. “Compensated hyperosmolarity” of cerebrospinal fluid and the development of hydrocephalus. *Neuroscience* 248: 278-289, 2013. Klarica M, Miše B, Vladić A, Radoš M, Orešković D. “Compensated hyperosmolarity” of cerebrospinal fluid and the development of hydrocephalus. *Neuroscience* 248: 278-289, 2013.
- Klarica M, Orešković D. Enigma of cerebrospinal fluid dynamics. *Croat Med J* 55: 287-298, 2014.
- Radoš M, Klarica M, Mučić-Pucić B, Nikić I, Raguž M, Galowski V, Mandić D, Orešković D. Volumetric analysis of brain parenchyma in a patient with hydranencephaly and macrocephaly – case report. *Croat Med J* 55: 388-393, 2014.
- Radoš M, Orešković D, Radoš M, Jurjević I, Klarica M. Long lasting near-obstruction stenosis of mesencephalic aqueduct without development of hydrocephalus – case report. *Croat Med J* 55: 394-398, 2014.
- Darko Orešković, Marijan Klarica. Measurement of Cerebrospinal Fluid Formation and Absorption by Ventriculo-Cisternal Perfusion: What is Really Measured? *Croat Med J* 55: 317-327, 2014.
- Klarica M, Jukić T, Miše B, Kudelić N, Radoš M, Orešković D. Experimental spinal stenosis in cats: new insight in mechanisms of hydrocephalus development. *Brain Pathology* 2015; doi:10.1111/bpa.12337
- Orešković D, Klarica M. The controversy on choroid plexus function in cerebrospinal fluid production in humans: how long could different views be neglected? *Croat Med J* 56 (3): 306-310, 2015.
- Orešković D, Radoš M, Klarica M. Cerebrospinal fluid secretion by the choroid plexus? *Physiological Reviews* 96: 1661-1662, 2016.
- Nikić I, Radoš M, Frobe A, Vukić M, Orešković D, Klarica M. The effects of lumboperitoneal and ventriculoperitoneal shunts on the cranial and spinal cerebrospinal fluid volume in a patient with idiopathic intracranial hypertension. *Croatian Med J* 57(3): 293-297, 2016.
- Orešković D, Radoš M, Klarica M. New Concepts of Cerebrospinal Fluid Physiology and Development of Hydrocephalus. *Pediatric Neurosurgery* 52: 417-425, 2017; doi: 10.1159/000452169

Orešković D, Radoš M, Klarica M. Role of choroid plexus in cerebrospinal fluid hydrodynamics. *Neuroscience* 354: 69-87, 2017. doi: 10.1016/j.neuroscience. 2017. 04.025

Orešković D, Radoš M, Klarica M. The recent state of a hundred years old classic hypothesis of the cerebrospinal fluid physiology. *Croat Med J* 58: 381-383, 2017.7. Darko Orešković, Marijan Klarica. A new look at cerebrospinal fluid movement. *Fluids and Barriers of the CNS* 2014, 11:16

Klarica M, Radoš M, Erceg G, Petošić A, Jurjević I, Orešković D. The influence of body position on cerebrospinal fluid pressure gradient and movement in cats with normal and impaired craniocervical communication. *PLoS ONE* 2014; 9(4): e95229. doi:10.1371/journal.pone. 0095229

Klarica M, Kuzman T, Jurjević I, Radoš M, Tvrdić A, Orešković D. The effect of body position on intraocular and intracranial pressure in rabbits. *Acta Neurochirurgica, Suppl* 122: 279-282, 2016.

Maraković J, Vukić M, Radoš M, Chudy D, Klarica M, Orešković D. Monoamine neurotransmitter metabolite concentration as a marker of cerebrospinal fluid volume changes. *Acta Neurochirurgica, Suppl* 122: 283-286, 2016.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Klarica M, Orešković D. Enigma of cerebrospinal fluid dynamics. *Croat Med J* 55: 287-298, 2014.

Radoš M, Klarica M, Mučić-Pucić B, Nikić I, Raguž M, Galowski V, Mandić D, Orešković D. Volumetric analysis of brain parenchyma in a patient with hydranencephaly and macrocephaly – case report. *Croat Med J* 55: 388-393, 2014.

Radoš M, Orešković D, Radoš M, Jurjević I, Klarica M. Long lasting near-obstruction stenosis of mesencephalic aqueduct without development of hydrocephalus – case report. *Croat Med J* 55: 394-398, 2014.

Darko Orešković, Marijan Klarica. Measurement of Cerebrospinal Fluid Formation and Absorption by Ventriculo-Cisternal Perfusion: What is Really Measured? *Croat Med J* 55: 317-327, 2014.

Klarica M, Jukić T, Miše B, Kudelić N, Radoš M, Orešković D. Experimental spinal stenosis in cats: new insight in mechanisms of hydrocephalus development. *Brain Pathology* 2015; doi:10.1111/bpa.12337

Orešković D, Klarica M. The controversy on choroid plexus function in cerebrospinal fluid production in humans: how long could different views be neglected? *Croat Med J* 56 (3): 306-310, 2015.

Orešković D, Radoš M, Klarica M. Cerebrospinal fluid secretion by the choroid plexus? *Physiological Reviews* 96: 1661-1662, 2016.

Nikić I, Radoš M, Frobe A, Vukić M, Orešković D, Klarica M. The effects of lumboperitoneal and ventriculoperitoneal shunts on the cranial and spinal cerebrospinal fluid volume in a patient with idiopathic intracranial hypertension. *Croatian Med J* 57(3): 293-297, 2016.

Orešković D, Radoš M, Klarica M. New Concepts of Cerebrospinal Fluid Physiology and Development of Hydrocephalus. *Pediatric Neurosurgery* 52: 417-425, 2017; doi: 10.1159/000452169

Orešković D, Radoš M, Klarica M. Role of choroid plexus in cerebrospinal fluid hydrodynamics. *Neuroscience* 354: 69-87, 2017. doi: 10.1016/j.neuroscience. 2017. 04.025

Orešković D, Radoš M, Klarica M. The recent state of a hundred years old classic hypothesis of the cerebrospinal fluid physiology. *Croat Med J* 58: 381-383, 2017.7. Darko Orešković, Marijan Klarica. A new look at cerebrospinal fluid movement. *Fluids and Barriers of the CNS* 2014, 11:16

Klarica M, Radoš M, Erceg G, Petošić A, Jurjević I, Orešković D. The influence of body position on cerebrospinal fluid pressure gradient and movement in cats with normal and impaired craniospinal communication. PLoS ONE 2014; 9(4): e95229. doi:10.1371/journal.pone.0095229

Klarica M, Kuzman T, Jurjević I, Radoš M, Tvrdeić A, Orešković D. The effect of body position on intraocular and intracranial pressure in rabbits. Acta Neurochirurgica, Suppl 122: 279-282, 2016.

Maraković J, Vukić M, Radoš M, Chudy D, Klarica M, Orešković D. Monoamine neurotransmitter metabolite concentration as a marker of cerebrospinal fluid volume changes. Acta Neurochirurgica, Suppl 122: 283-286, 2016.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

a) Scientific projects - associate in projects prof. M. Bullata "Pathophysiology of cerebrospinal fluid" from 1986 to 2001, financed by the Ministry of Science and Technology of the Republic of Croatia and on M. Bulata's project "Biochemical dynamics of cerebrospinal fluid" 1987-1990. which was funded by the US-Yugoslav Joint Board.

Principal investigator of the project "Pathophysiology of cerebrospinal fluid and intracranial pressure" (2002-2006). He was also a rector of projects reported to the Croatian Ministry of Education. The implemented projects have had a significant impact on the development of the scientific area that the gateway deals with.

The main researcher of the project entitled "Pathophysiology of cerebrospinal fluid and intracranial pressure" (project was co-ordinated by the Ministry of Science and Technology 2007-2014). This project was part of the program "Cerebrospinal Pathophysiology and Ultrasound" (2007-2014), which was contracted with the Ministry of Science and Education, and Marijan Klarica is the head of the program (consisting of 7 projects).

He is a co-author of a project derived from a scientific program funded by the Croatian Foundation for Science (HRZZ project 4996 "Ultrasound system for complex material parameters determination in nonlinear working conditions", from 01.09.2014 to 31.08.2017).

Head of Department and five university projects for 2013, 2014, 2015, 2016 and 2017 (title: "Pathophysiology of cerebrospinal fluid and intracranial pressure"). He is now an associate and research team leader on the Project of the Research Center of Excellence from Basic Trending and Clinical Neuroscience "Hypoxic Ischemic Brain Damage Research" (2017-2021).

b) Technological projects

The principal investigator of the two technology projects "Neurosurgical Endoscopic Contact Ultrasonic Probe - Knife" of the Ministry of Science and Education (2002-2004), and "Technological Development and Development of Microsurgical Ultrasonic Probe-Blade Prototype Prototypes", 2006-2007, which resulted in four prototypes new ultrasound devices (NECUP-2 and UMPROMS-1) for use in endoscopic neurosurgery and in various microsurgical operations.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Head of Department and five university projects for 2013, 2014, 2015, 2016 and 2017 (title: "Pathophysiology of cerebrospinal fluid and intracranial pressure"). He is now an associate and research team leader on the Project of the Research Center of Excellence from Basic Trending and Clinical Neuroscience "Hypoxic Ischemic Brain Damage Research" (2017-2021).



He is a co-author of a project derived from a scientific program funded by the Croatian Foundation for Science (HRZZ project 4996 "Ultrasound system for complex material parameters determination in nonlinear working conditions", from 01.09.2014 to 31.08.2017).

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

4

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: NATASA KLEPAC

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: CLINICAL UNIVERSITY HOSPITAL ZAGREB

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: 1.Clinical Neuropharmacology, 2. Movement Disorders

BIOGRAPHY

Identification number from Records of Scientific Workers 278762

WORK EXPERIENCE

- Dates (from – to) 1997-1998, Clinical hospital Merkur, traineeship
- Dates (from – to) 2000-2002, Medical School, University of Zagreb, Department of Neurology , Research fellow
- Dates (from – to) 2002 until know, University Hospital Centre Zagreb, Clinical neurologist

EDUCATION

Date 1997, Medical School University of Zagreb, MD

TRAINING

- Year 2002 until 2007, Medical School University of Zagreb, Residence in neurology
- Year 2004, Medical School University of Zagreb, Master of science (Oxidative stress in Huntington's disease)
- Year 2009, Medical School University of Split, Doctoral dissertation (PhD)

ORGANIZATION

Member, Organizing Committee for “3 th Dilemmas in Neurology”, Šibenik October 17 - 21, 2012

President, Organizing Committee for “A practical approach to patients with dementia”, Zagreb, June 07, 2013

President, Organizing Committee for “A practical approach to patients with dementia (Alzheimer's disease)”, Zagreb, May 23, 2014

Member, Organizing Committee for “4 th Dilemmas in Neurology”, Rovinj September 30 - October 05, 2014

Secretary, Organizing Committee for Croatian Congress on Alzheimer's disease, Brela October 01-04, 2014

President, Organizing Committee for “A practical approach to patients with dementia (Alzheimer's and Parkinson's disease, Lewy body disorder)”, Zagreb, May 22, 2015

MEMBERSHIPS

2014-present Member of the Supervisory Board, Croatian Association for Alzheimer's disease

2013 –present Vice- president, Croatian Medical Association for Alzheimer's disease

2015-present Member of the Steering Committee, Center for palliative medicine, medical ethics and communication skills

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2013

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Babić Leko M, Willumsen N, Nikolac Perković M, Klepac N, Borovečki F, Hof PR, Sonicki Z, Pivac N, de Silva R, Šimić G. Association of MAPT haplotype-tagging polymorphisms with cerebrospinal fluid biomarkers of Alzheimer's disease: A preliminary study in a Croatian cohort. *Brain Behav.* 2018 Nov;8(11):e01128. doi: 10.1002/brb3.1128. Epub 2018 Oct 17.

Babić Leko M, Krbot Skorić M, Klepac N, Borovečki F, Langer Horvat L, Vogrinc Ž, Sonicki Z, Hof PR, Šimić G. Event-related Potentials Improve the Efficiency of Cerebrospinal Fluid Biomarkers for Differential Diagnosis of Alzheimer's Disease. *Curr Alzheimer Res.* 2018;15(13):1244-1260. doi: 10.2174/1567205015666180911151116.

Kidemet-Piskač S, Babić Leko M, Blažeković A, Langer Horvat L, Klepac N, Sonicki Z, Kolenc D, Hof PR, Boban M, Mimica N, Borovečki F, Šimić G. Evaluation of cerebrospinal fluid phosphorylated tau231 as a biomarker in the differential diagnosis of Alzheimer's disease and vascular dementia. *CNS Neurosci Ther.* 2018 Aug;24(8):734-740. doi: 10.1111/cns.12814. Epub 2018 Feb 17.

Vuksan Ćusa B, Klepac N, Jakšić N, Bradaš Z, Božičević M, Palac N, Šagud M. The Effects of Electroconvulsive Therapy Augmentation of Antipsychotic Treatment on Cognitive Functions in Patients With Treatment-Resistant Schizophrenia. *J ECT.* 2018 Mar;34(1):31-34. doi: 10.1097/YCT.0000000000000463.

Britvić D, Antičević V, Klepac N. Comparison of Sleep Disturbances in Post-Traumatic Stress Disorder and Depression Patients. *Acta Clin Croat.* 2016 Sep;55(3):396-401. doi: 10.20471/acc.2016.55.03.07.

Tomasović S, Sremec J, Koščak J, Klepac N, Draganić P, Bielen I. Epidemiological Characteristics of Dementia Treatment in Croatia. *Psychiatr Danub.* 2016 Jun;28(2):170-5. Klepac N, Trkulja V, Relja M. Nondemented Parkinson's disease patients: Is cognitive performance associated with depressive difficulties. *Cogn Behav Neurol* 2008;21:87-91

Klepac N, Relja M, Klepac R, Hecimovic S, Babic T, Trkulja V. Oxidative stress parameters in plasma of Huntington's disease patients, asymptomatic Huntington's disease patients, asymptomatic Huntington's disease gene carriers and healthy subjects. *J Neurol* 2007;254:1676-1683.

Relja M, Klepac N. A dopamine agonist, pramipexole, and cognitive functions in Parkinson's disease. *J Neurol Sci.* 2006 25;248(1-2):251-4.

Relja M, Klepac N. A dopamine agonist, pramipexole, and cognitive functions in Parkinson's disease. *J Neurol Sci.* 2006 25;248(1-2):251-4.

Relja M, Klepac N. From gene to therapy-Chorea Huntington. *Biochem Medica* 2002 12:35-41 Relja M.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Babić Leko M, Willumsen N, Nikolac Perković M, Klepac N, Borovečki F, Hof PR, Sonicki Z, Pivac N, de Silva R, Šimić G. Association of MAPT haplotype-tagging polymorphisms with cerebrospinal fluid biomarkers of Alzheimer's disease: A preliminary study in a Croatian cohort. *Brain Behav.* 2018 Nov;8(11):e01128. doi: 10.1002/brb3.1128. Epub 2018 Oct 17.

Babić Leko M, Krbot Skorić M, Klepac N, Borovečki F, Langer Horvat L, Vogrinc Ž, Sonicki Z, Hof PR, Šimić G. Event-related Potentials Improve the Efficiency of Cerebrospinal Fluid Biomarkers for Differential Diagnosis of Alzheimer's Disease. *Curr Alzheimer Res.* 2018;15(13):1244-1260. doi: 10.2174/1567205015666180911151116.

Kiđemet-Piskač S, Babić Leko M, Blažeković A, Langer Horvat L, Klepac N, Sonicki Z, Kolenc D, Hof PR, Boban M, Mimica N, Borovečki F, Šimić G. Evaluation of cerebrospinal fluid phosphorylated tau231 as a biomarker in the differential diagnosis of Alzheimer's disease and vascular dementia. *CNS Neurosci Ther*. 2018 Aug;24(8):734-740. doi: 10.1111/cns.12814. Epub 2018 Feb 17.

Vuksan Ćusa B, Klepac N, Jakšić N, Bradaš Z, Božičević M, Palac N, Šagud M. The Effects of Electroconvulsive Therapy Augmentation of Antipsychotic Treatment on Cognitive Functions in Patients With Treatment-Resistant Schizophrenia. *J ECT*. 2018 Mar;34(1):31-34. doi: 10.1097/YCT.0000000000000463.

Britvić D, Antičević V, Klepac N. Comparison of Sleep Disturbances in Post-Traumatic Stress Disorder and Depression Patients. *Acta Clin Croat*. 2016 Sep;55(3):396-401. doi: 10.20471/acc.2016.55.03.07.

Tomasović S, Sremec J, Koščak J, Klepac N, Draganić P, Bielen I. Epidemiological Characteristics of Dementia Treatment in Croatia. *Psychiatr Danub*. 2016 Jun;28(2):170-5.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Klinička farmakologija poremećaja, Klostridijski neurotoksini i mozak, Sustava poremećaja kortikalnih funkcija u neurološkim bolestima

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Klinička farmakologija poremećaja, Klostridijski neurotoksini i mozak, Sustava poremećaja kortikalnih funkcija u neurološkim bolestima

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: dr.sc. Ana Knezović

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of investigation in vivo and in vitro

BIOGRAPHY

dr.sc. Ana Knezović, dipl.ing.biol.

Department of pharmacology, School of Medicine University of Zagreb, Šalata 11 (ana.knezovic@mef.hr)

EDUCATION: dipl. ing. molecular biology (2008; Faculty of Science, Zagreb), PhD (2015; School of Medicine, Zagreb). EMPLOYMENT: PhD student - assistant (2009), Post Doc - assistant (2015). SCIENTIFIC RESEARCH EXPERIENCE: Department of Psychiatry, Psychosomatics and Psychotherapy, University Clinic Würzburg, Germany (2009, 2010, 2012, 2013, 2017); University of Texas Medical Branch, Galveston, USA (2011). ASSOCIATE ON PROJECTS: 2x HRZZ, 1xMZOS, 1xUKF, 4xDAAD, 6x University of Zagreb. SUPERVISOR: 1x diploma thesis. awards of supervised students: 1x rector's award. SCIENTIFIC PRODUCTIVITY: 9 research articles, >40 congress abstracts, 167 heterocitation (WoS), h-index 6. AWARDS: National science award for 2015 (for PhD students); 6 travel grants for international conferences and schools; 2 awards for the best poster at congress. SCIENTIFIC INTEREST: neuroscience, neuropharmacology, experimental Alzheimer's disease. TEACHING ACTIVITIES: integrated study; Pharmacology course/studies in medicine in Croatian and English; Doctoral study Biomedicine and health: course - In vitro and in vivo research methods; doctoral study Neuroscience: course - Principles of hormone receptor intracellular signaling in central nervous system. MEMBERSHIPS: member of Croatian Pharmacological society and Croatian society for Neuroscience.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: July 2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Babic Perhoc A, Osmanovic Barilar J, Knezovic A, Farkas V, Bagaric R, Svarc A, Grünblatt E, Riederer P, Salkovic-Petrisic M. Cognitive, behavioral and metabolic effects of oral galactose treatment in the transgenic Tg2576 mice. *Neuropharmacology* 2018;148:50-67. doi: 10.1016/j.neuropharm.2018.12.018. [Epub ahead of print] (Q1)
2. Knezovic A, Osmanovic Barilar J, Babic A, Bagaric R, Farkas V, Riederer P, Salkovic-Petrisic M. Glucagon-like peptide-1 mediates effects of oral galactose in streptozotocin-induced rat model of sporadic Alzheimer's disease. *Neuropharmacology* 2018 Jun;135:48-62. (Q1)
3. Grünblatt E, Bartl J, Iuhos DI, Knezovic A, Trkulja V, Riederer P, Walitza S, Salkovic-Petrisic M. Characterization of cognitive deficits in spontaneously hypertensive rats, accompanied by brain insulin receptor dysfunction. *J Mol Psychiatry*. 2015;3:6.
4. Barilar JO, Knezovic A, Grünblatt E, Riederer P, Salkovic-Petrisic M. Nine-month follow-up of the insulin receptor signalling cascade in the brain of streptozotocin rat model of sporadic Alzheimer's disease. *cj Neural Transm (Vienna)*. 2015;122:565-76. (Q2)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Salkovic-Petrisic M, Knezovic A, Osmanovic-Barilar J, Smailovic U, Trkulja V, Riederer P, Amit T, Mandel S, Youdim MB. Multi-target iron-chelators improve memory loss in a rat model of sporadic Alzheimer's disease. *Life Sci.* 2015;136:108-19. (Q2)
2. Sun P, Knezovic A, Parlak M, Cuber J, Karabeg MM, Deckert J, Riederer P, Hua Q, Salkovic-Petrisic M, Schmitt AG. Long-Term Effects of Intracerebroventricular Streptozotocin Treatment on Adult Neurogenesis in the Rat Hippocampus. *Curr Alzheimer Res.* 2015;12:772-84. (Q1)
3. Knezovic A, Osmanovic-Barilar J, Curlin M, Hof PR, Simic G, Riederer P, Salkovic-Petrisic M. Staging of cognitive deficits and neuropathological and ultrastructural changes in streptozotocin-induced rat model of Alzheimer's disease. *J Neural Transm* 2015;122:577-92. (Q2)
4. Salkovic-Petrisic M, Osmanovic-Barilar, Knezovic A, Hoyer S, Mosetter K, Reutter W. Long-term oral galactose treatment prevents cognitive deficits in male wistar rats treated intracerebroventricularly with streptozotocin. *Neuropharmacology* 2014;77:68-80. (Q1)
5. Salkovic-Petrisic M, Knezovic A, Hoyer S, Riederer P. What have we learned from the streptozotocin-induced animal model of sporadic Alzheimer's disease, about the therapeutic strategies in Alzheimer's research. *J Neural Transm* 2013;120:233-252. (Q2)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1) CSF research projects (associate) 2018 – 2022 „Mechanisms of nutrient-mediated effects of endogenous glucagon-like peptide -1 on cognitive and metabolic alterations in experimental models of neurodegenerative disorders (NutrientGLP-1)“; 2015 - 2018 „THERAPEUTIC POTENTIAL OF ORAL GALACTOSE IN EXPERIMENTAL ALZHEIMER'S DISEASE (GALAD)“ (PI prof. Šalković-Petrišić)
- 2) DAAD/MZOŠ bilateral project (associate) 2017 – 2018 „Molecular characterization of the therapeutic galactose potential as a new strategy in Alzheimer's disease treatment“ (PI prof. Šalković-Petrišić)
- 3) Scientific center for excellence (ZCI) in basic, clinical and translational neuroscience (associate) 2017 – 2022 (HIIM, PI prof. dr. s.c M. Judaš), associate in research group 2 „New biomarkers of aging, Alzheimer's disease, vascular dementia and other brain disorders with insulin resistance“ (PI prof. dr. sc. G. Šimić)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 1) UKF research project (associate) 2010-2012 „Cytopathological characterization of the brain in a rat model of sporadic Alzheimer's disease“
- 2) University of Zagreb projects (associate) 2013 – 2018

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Jelena Knežević, PhD, senior research associate

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Institut Ruđer Bošković

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Translational medicine - from disease to gene

BIOGRAPHY

EDUCATION:

- 2008. PhD: Faculty of Natural Science, University Zagreb, Croatia
- 2004 Master degree: Faculty of Natural Science, University Zagreb, Croatia
- 1995 Diploma degree: Faculty for food biotechnology, University of Osijek, Croatia

POSITIONS:

- 2018. - Senior Research Associate; Ruđer Bošković Institute, Zagreb, Croatia
- 2011 – 2018. Research Associate; Ruđer Bošković Institute, Zagreb, Croatia
- 2008 – 2011 Postdoctoral position; Ruđer Bošković Institute, Zagreb, Croatia
- 2002 – 2008 PhD position; Ruđer Bošković Institute, Zagreb, Croatia
- 2001 – 2002 PhD student; School of Medicine, University of Zagreb, Croatia

FELLOWSHIPS:

- 2009 – 2011 German Cancer Research Center (DKFZ), Heidelberg, Germany; Fellowship for Guest scientists, postdoctoral position
- 2012 – 2016 Institute for Human Genetics, Univerzitats Medicine, Mainz, Germany; visiting scientist

TEACHING ACTIVITIES:

A) Graduate courses

- 1. Faculty of Natural Science, University of Zagreb; Methods in molecular biology: 2002., 2003., 2004., 2005., 2006., 2007. i 2008.

B) Post-graduate courses

- 1. School of Medicine, University in Zagreb, Zagreb; Gene therapy: experimental and clinical aspects: 2004., 2005., 2006. i 2007.
- 2. Faculty of Natural Science, University of Zagreb; Translational Medicine
- 3. School of Medicine, University in Zagreb, Zagreb – Translational Medicine – from disease to gene

ORGANISATION OF SCIENTIFIC MEETINGS:

- Games of Epigenomics (2016), organizing committee, Croatia
- 2nd Conference of Croatian Society of Cancer Research (2012), organizing committee, Croatia
- 3rd Conference of Croatian Human Genetics (2003), organizing committee, Croatia

MEMBERSHIPS:

- Croatian Society for Cancer research (European Association for Cancer Research)
- Croatian Society for Human Genetics
- Croatian Society for Clinical Genetics
- Croatian Thoracic Society

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 28.02. 2018.
teaching rank: senior research associate (znanstveno zvanje viši znanstveni suradnik)

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1. Knežević Teofilović N, Bihi M, Radić Stojković M, Tumir LM, Ester K, Kralj M, Majhen M, Oršolić N, Lepur A, Vrbanc D, Markotić A, Dembić Z, Weber ANR, Piantanida I, Vugrek O, Diken M, Knežević J. 1-ethyl-3-

- (6-methylphenanthridine-8-yl) urea modulates TLR3/9 activation and induces selective pro-inflammatory cytokine expression in vitro. *Bioorg Med Chem Lett*. 2017. DOI: 10.1016/j.bmcl.2017.02.048. IF=2,486; Q2
2. Motzek A, Knežević J, Switzeny OJ, Cooper A, Barić I, Beluzić R, Strauss KA, Puffenberger EG, Mudd SH, Vugrek O, Zechner U. Abnormal Hypermethylation at Imprinting Control Regions in Patients with S-Adenosylhomocysteine Hydrolase (AHCY) Deficiency. *PLoS One*. 2016 14;11(3):e0151261. IF=3,057; Q1
3. Sveinbjornsson G, Gudbjartsson DF, Halldorsson BV, Kristinsson KG, Gottfredsson M, Barrett JC, Gudmundsson LJ, Blondal K, Gylfason A, Gudjonsson SA, Helgadóttir HT, Jonasdóttir A, Jonasdóttir A, Karason A, Kardum LB, Knežević J, Kristjansson H, Kristjansson M, Love A, Luo Y, Magnusson OT, Sulem P, Kong A, Masson G, Thorsteinsdóttir U, Dembic Z, Nejentsev S, Blondal T, Jonsdóttir I, Stefansson K. HLA class II sequence variants influence tuberculosis risk in populations of European ancestry. *Nat Genet*. 2016 48(3):318-22. IF=31,616; Q1
4. George J, Lim JS, Jang SJ, Cun Y, Ozretić L, Kong G, Leenders F, Lu X, Fernández-Cuesta L, Bosco G, Müller C, Dahmen I, Jahchan NS, Park KS, Yang D, Karnezis AN, Vaka D, Torres A, Wang MS, Korbel JO, Menon R, Chun SM, Kim D, Wilkerson M, Hayes N, Engelmann D, Pützer B, Bos M, Michels S, Vlasic I, Seidel D, Pinther B, Schaub P, Becker C, Altmüller J, Yokota J, Kohno T, Iwakawa R, Tsuta K, Noguchi M, Muley T, Hoffmann H, Schnabel PA, Petersen I, Chen Y, Soltermann A, Tischler V, Choi CM, Kim YH, Massion PP, Zou Y, Jovanovic D, Kontic M, Wright GM, Russell PA, Solomon B, Koch I, Lindner M, Muscarella LA, la Torre A, Field JK, Jakopovic M, Knezevic J, Castañós-Vélez E, Roz L, Pastorino U, Brustugun OT, Lund-Iversen M, Thunnissen E, Köhler J, Schuler M, Botling J, Sandelin M, Sanchez-Cespedes M, Salvesen HB, Achter V, Lang U, Bogus M, Schneider PM, Zander T, Ansén S, Hallek M, Wolf J, Vingron M, Yatabe Y, Travis WD, Nürnberg P, Reinhardt C, Perner S, Heukamp L, Büttner R, Haas SA, Brambilla E, Peifer M, Sage J, Thomas RK. Comprehensive genomic profiles of small cell lung cancer. *Nature*. 2015 6;524(7563):47-53. IF=38,138; Q1
5. Klimosch SN, Försti A, Eckert J, Knezevic J, Bevier M, von Schönfels W, Heits N, Walter J, Hinz S, Lascorz J, Hampe J, Hartl D, Frick JS, Hemminki K, Schafmayer C, Weber AN. Functional TLR5 genetic variants affect human colorectal cancer survival. *Cancer Res*. 2013 15;73(24):7232-42. IF=8,556; Q1
6. Kaarvatn MH, Vrbanc J, Kulic A, Knezevic J, Petricevic B, Balen S, Vrbanc D, Dembic Z. Single nucleotide polymorphism in the interleukin 12B gene is associated with risk for breast cancer development. *Scand J Immunol*. 2012 76(3):329-35. IF=2,27; Q3
7. Knežević J, Pavlinić D, Rose WA 2nd, Leifer CA, Bendelja K, Gabrilovac J, Parcina M, Lauc G, Kubarenko AV, Petricevic B, Vrbanc D, Bulat-Kardum L, Bekeredjian-Ding I, Pavelić J, Dembić Z, Weber AN. Heterozygous carriage of a dysfunctional Toll-like receptor 9 allele affects CpG oligonucleotide responses in B cells. *J Biol Chem*. 2012 13;287(29):24544-53. (Glavni autor) IF=4,258; Q1
8. Etokebe GE, Skjeldal F, Nilsen N, Rodionov D, Knezevic J, Bulat-Kardum L, Espevik T, Bakke O, Dembic Z. Toll-like receptor 2 (P631H) mutant impairs membrane internalization and is a dominant negative allele. *Scand J Immunol*. 2010 71(5):369-81. IF=2,27; Q3
9. Sansović I, Knežević J, Musani V, Seeman P, Barisić I, Pavelić J. GJB2 mutations in patients with nonsyndromic hearing loss from Croatia. *Genet Test Mol Biomarkers*. 2009 13(5):693-9. IF=1,297; Q4
10. Etokebe GE, Knežević J, Petricević B, Pavelić J, Vrbanc D, Dembić Z. Single-nucleotide polymorphisms in genes encoding toll-like receptor -2, -3, -4, and -9 in case-control study with breast cancer. *Genet Test Mol Biomarkers*. 2009 13(6):729-34. doi: 10.1089/gtmb.2009.0045. (jedna od glavnih autor) IF=1,297; Q4

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Knežević Teofilović N, Bihi M, Radić Stojković M, Tumir LM, Ester K, Kralj M, Majhen M, Oršolić N, Lepur A, Vrbanc D, Markotić A, Dembić Z, Weber ANR, Piantanida I, Vugrek O, Diken M, Knežević J. 1-ethyl-3-(6-methylphenanthridine-8-yl) urea modulates TLR3/9 activation and induces selective pro-inflammatory cytokine expression in vitro. *Bioorg Med Chem Lett*. 2017. DOI: 10.1016/j.bmcl.2017.02.048. IF=2,486; Q2
2. Motzek A, Knežević J, Switzeny OJ, Cooper A, Barić I, Beluzić R, Strauss KA, Puffenberger EG, Mudd SH, Vugrek O, Zechner U. Abnormal Hypermethylation at Imprinting Control Regions in Patients with S-Adenosylhomocysteine Hydrolase (AHCY) Deficiency. *PLoS One*. 2016 14;11(3):e0151261. IF=3,057; Q1
3. Sveinbjornsson G, Gudbjartsson DF, Halldorsson BV, Kristinsson KG, Gottfredsson M, Barrett JC, Gudmundsson LJ, Blondal K, Gylfason A, Gudjonsson SA, Helgadóttir HT, Jonasdóttir A, Jonasdóttir A, Karason A, Kardum LB, Knežević J, Kristjansson H, Kristjansson M, Love A, Luo Y, Magnusson OT, Sulem P, Kong A, Masson G, Thorsteinsdóttir U, Dembić Z, Nejentsev S, Blondal T, Jónsdóttir I, Stefansson K. HLA class II sequence variants influence tuberculosis risk in populations of European ancestry. *Nat Genet*. 2016 48(3):318-22. IF=31,616; Q1
4. George J, Lim JS, Jang SJ, Cun Y, Ozretić L, Kong G, Leenders F, Lu X, Fernández-Cuesta L, Bosco G, Müller C, Dahmen I, Jahchan NS, Park KS, Yang D, Karnezis AN, Vaka D, Torres A, Wang MS, Korbel JO, Menon R, Chun SM, Kim D, Wilkerson M, Hayes N, Engelmann D, Pützer B, Bos M, Michels S, Vlasic I, Seidel D, Pinther B, Schaub P, Becker C, Altmüller J, Yokota J, Kohno T, Iwakawa R, Tsuta K, Noguchi M, Muley T, Hoffmann H, Schnabel PA, Petersen I, Chen Y, Soltermann A, Tischler V, Choi CM, Kim YH, Massion PP, Zou Y, Jovanovic D, Kontić M, Wright GM, Russell PA, Solomon B, Koch I, Lindner M, Muscarella LA, la Torre A, Field JK, Jakopovic M, Knezevic J, Castaños-Vélez E, Roz L, Pastorino U, Brustugun OT, Lund-Iversen M, Thunnissen E, Köhler J, Schuler M, Botling J, Sandelin M, Sanchez-Cespedes M, Salvesen HB, Achter V, Lang U, Bogus M, Schneider PM, Zander T, Ansén S, Hallek M, Wolf J, Vingron M, Yatabe Y, Travis WD, Nürnberg P, Reinhardt C, Perner S, Heukamp L, Büttner R, Haas SA, Brambilla E, Peifer M, Sage J, Thomas RK. Comprehensive genomic profiles of small cell lung cancer. *Nature*. 2015 6;524(7563):47-53. IF=38,138; Q1

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Genetički i epigenetički biomarkeri urođene imunosti u KOPB-u i karcinomu pluća (Glavni istraživač); HRZZ 2017-2021 (993.000,00 KN)
2. Genetička podloga kronične obstruktivne plućne bolesti (KOPB); regulacija upale plućnog epitela putem receptora urođene imunosti (Glavni istraživač); DAAD-MZOS bilateralni projekt; 2013-2015 (13.000,00 EUR)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Sanja Kolaček, prof.dr.sc.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Children's Hospita Zagreb, Zagreb Medical School

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical nutrition

BIOGRAPHY

Education & degrees

- 2008 • Professorship, (The Medical University of Zagreb)
- 1999 • Specialist in Pediatric gastroenterology
- 1995 • Habilitation (The Medical University of Zagreb)
- 1991 • Doctorate dissertation (The Medical University of Zagreb)
- 1985 - 1989 • Specialist in pediatrics
- 1984 • MSc thesis (The Medical University of Zagreb)
- 1983 – 1984 • Research fellow, Institute for Mother and Child, Zagreb
- 1976 – 1981 • Medical training, The Medical University Zagreb

Major training in gastro-enterology & nutrition

- 1987-1988 • Birmingham Children's Hospital, Dept. for gastroenterology (prof. IW Booth)
- King's College Hospital London, Dept for pediatric hepatology (prof. A. Mowat) training in pediatric gastroenterology, hepatology, nutrition
- 1993, 2001 • Dept for Pediatric Gastroenterology, Academish Medisch Centrum Amsterdam (J. Taminiau), training in ped.endoscopy, Dept for Gastroenterology / Endoscopy Unit, Academish Medisch Centrum Amst. (G. Tytgat), training in therapeutic endoscopy

Major functions in scientific societies

- ESPGHAN President Elect from 2018
- General Secretary, ESPGHAN (European Society for Pediatric Gastroenterology, Hepatology and Nutrition) (2012 – 2015)
- UEG General Assembly Member (United European Gastroenterology)(2005 –present)
- ESPGHAN Committee of Nutrition member (2005-2009)
- ESPGHAN Council Member (2001-2004)
- ESPGHAN IBD working group (2002- present)
- Chair of LLL n Pediatric Nutrition of ESPEN (Eur Society for Parent & Enteral Nutrition)
- President of Croatian Society for Ped. Gastro & Hepato & Nutrition(1999-2004)
- Vice-president of Croatian Pediatric Society (2009 – 2016)

Editorial & reviewer expertise • Journal of Paediatric Gastroenterology and Nutrition, Associate Editor (2008 – present)

- Paediatrica Croatica, President of Advisory Board (2009 - present)
- Journal of Crohn's & Colitis, Member of the International Advisory Board (2007 – present)
- Nutrition, Member of the Advisory Board (2000 – 2008)
- Serving as a reviewer in: Journal for Pediatric Gastroenterology & Nutrition, Clinical Nutrition, Journal of Crohn's and Colitis, Archives of disease in Childhood, Nutrition, Liječnički vjesnik

Publications

* ISI Web of Science Papers in peer-reviewed journals Over 200

Papers Scopus* 139

PUBMED (abstracts excluded) 110

Book Editor (Croatian editions) 5

Book chapters / international editions 31/8

Citations (Scopus)* 4998

Citations (Scopus) – without self citations* 4313

h-index 31

Invited speaker –international events only • Over 250, including major European congresses such as UEG, ESPGHAN, ESPEN, ECCO, EPA, and World Congress of PGHN

Chairing, moderator, organiser, co-organiser • Over 150, including major world and European annual congresses such as UEG, ESPGHAN, ESPEN, ECCO and World Congress of PGHN

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 19.5.2016 A
PERMANENT POSITION OF THE PROFESSORSHIP ON THE MEDICAL SCHOOL UNIVERSITY OF ZAGREB

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Szajewska H, Guarino A, Hojsak I, Indrio F, Kolacek S, Shamir R, et al. Use of probiotics for management of acute gastroenteritis: a position paper by the ESPGHAN Working Group for Probiotics and Prebiotics. *J Pediatr Gastroenterol Nutr* 2014;58(4):531-9.
2. Romanos J, Rosén A, Kumar V, Trynka G, Franke L, Szperl A, Gutierrez-Achury J, van Diemen CC, Kanninga R, Jankipersadsing SA, Steck A, Eisenbarth G, van Heel DA, Cukrowska B, Bruno V, Mazzilli MC, Núñez C, Bilbao JR, Mearin ML, Barisani D, Rewers M, Norris JM, Ivarsson A, Boezen HM, Liu E, Wijmenga C; PreventCD Group. Improving coeliac disease risk prediction by testing non-HLA variants additional to HLA variants. *Gut* 2014;63:415-22.
3. de Bie CI, Paerregaard A, Kolacek S, Ruemmele FM, Koletzko S, Fell JM, Escher JC; the EUROKIDS Porto IBD Working Group of ESPGHAN (see Appendix). Disease phenotype at diagnosis in pediatric Crohn's disease: 5-year analyses of the EUROKIDS registry. *Inflamm Bowel Dis* 2013;19:378-85.
4. Levine A, de Bie CI, Turner C, Cucciara S, Sladek M, Murohy MS, Escher JC; EUROKIDS Porto IBD Working Group of ESPGHAN. Atypical disease phenotypes in pediatric ulcerative colitis: 5-year analyses of the EUROKIDS Registry. *Inflamm Bowel Dis* 2013;19:370-7.

5. Tucci F, Astarita L, Abkari A, Abu-Zekry M, Attard T, Ben Hariz M, Bilbao JR, Boudra G, Boukthir S, Costa S, Djuric V, Hugot JP, Irastorza I, Kansu A, Kolaček S, et al. Celiac disease in the Mediterranean area. *BMC Gastroenterology* 2014;14:24-30.
6. Hojsak I, Tokic Pivac V, Mocic Pavic A, Pasini AM, Kolacek S. Bifidobacterium animalis subsp. lactis fails to prevent common infections in hospitalized children: a randomized, double-blind, placebo-controlled study. *Am J Clin Nutr* 2015;101(3):680-4.
7. Hojsak I, Mocic Pavic A, Kos T, Dumancic J, Kolacek S. Bifidobacterium animalis subsp. lactis in prevention of common infections in healthy children attending day care centers - Randomized, double blind, placebo-controlled study. *Clin Nutr* 2016;35(3):587-91.
8. Szajewska H, Canani RB, Guarino A, Hojsak I, Indrio F, Kolacek S, et al. Probiotics for the Prevention of Antibiotic-Associated Diarrhea in Children. *J Pediatr Gastroenterol Nutr* 2016;62(3):495-506.
10. Hojsak I, Szajewska H, Canani RB, Guarino A, Indrio F, Kolacek S, et al. Probiotics for the Prevention of Nosocomial Diarrhea in Children. *J Pediatr Gastroenterol Nutr* 2017;
11. Kolacek S, Hojsak I, Canani RB, Guarino A, Indrio F, Orel R, et al. Commercial probiotic products: A call for improved quality control. A Position Paper by the ESPGHAN Working Group for Probiotics and Prebiotics. *J Pediatr Gastroenterol Nutr* 2017;
10. Mihatsch WA, Braegger CP, Decsi T, Kolacek S, Lanzinger H, Mayer B, et al. Critical systematic review of the level of evidence for routine use of probiotics for reduction of mortality and prevention of necrotizing enterocolitis and sepsis in preterm infants. *Clin Nutr* 2012;31(1):6-15.
12. Winter HS, Krzeski P...Kolaček S, et al. High- and low-dose oral delayed-release mesalamin in children with mild-to-moderately active ulcerative colitis. *JPGN* 2015;59:767-72.
13. LacailleF, ...Hojsak I, Kolaček S, et al. Intestinal failure-associated liver disease: a position paper of the ESPGHAN Working Group of Intestinal failure and Intestinal Transplantation. *JPGN* 2015;60:272-83
14. Van der Woude J,...Kolacek S, et al. The second European evidence-based consensus on reproduction and pregnancy in inflammatory bowel disease. *J Crohns Colitis* 2015;9:107-24.
15. Winter DA, Karolewska-Bochenek K, Lazowska-Przeorek I, Lionetti P, et al; pediatric IBD Porto Group of ESPGHAN. Pediatric IBD-unclassified is less common than previously reported; results of an 8-year audit of the EUROKIDS registry. *Inflamm Bowel Dis* 2015;21:2145-53.
16. Vandenplas Y, Alarcon P, Fleischer D, Hernell O, Kolacek S, et al. Should partial hydrolysates be used as starter infant formula? A Working Group Consensus. *J Pediatr Gastroenterol Nutr* 2016;62:22-35.
17. Crespo-Escobar P, Mearin ML; Hervas D, Auricchio R, Castillejo G, Gyimesi J, Martinez-Ojinaga E, Werkstetter K, Vrienzinga SL, Korponay-Szabo IR, Polanco I, Troncone R, Stoopman E, Kolaček S, Shamir R, Szajewska H, KOletzko S, Ribes-Koninckx C. The role of gluten consumption at an early age in celiac disease development: a further analysis of the prospective PreventCD cohort study. *Am J Clin Nutr* 2017;105:890-96.
18. Amil-Dias J, Kolacek S, Turner D, Paerregaard A, Rintala R, Afzal NA, et al. Surgical management of Crohn's Disease in Children: Guidelines from the Paediatric IBD Porto Group of ESPGHAN. *J Pediatr Gastroenterol Nutr* 2017;64:818-35.
19. Pavić I, Kolaček S. Growth of children with food allergy. *Horm Res Paediatr* 2017;88:91-100

- 20 Kolaček S, Hojsak I, Canani RB, Guarino A, Indrio F, Orel R, Pot B, Shamir R, Szajewska H, Vandenplas Y, van Goudoever J. Commercial probiotic products: A call for improved quality control. A Position Paper by the ESPGHAN Working Group for Probiotics and Prebiotics. *J Pediatr Gastroenterol Nutr* 2017; 65:117-124
21. Scarpato E, Quitadamo P, Roman E, Jojkic-Pavkov D, Kolacek S, et al. Functional gastrointestinal disorders in children: a survey on clinical approach in the Mediterranean area. *J Pediatr Gastroenterol Nutr* 2017;64:e142-e14620

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

59. Hojsak I, Kolacek S. Fat Overload Syndrome After the Rapid Infusion of SMOFlipid Emulsion. *JPEN* 2014;38:119-21
60. Romanos J, Rosén A, Kumar V, Trynka G, Franke L, Szperl A, Gutierrez-Achury J, van Diemen CC, Kanninga R, Jankipersadsing SA, Steck A, Eisenbarth G, van Heel DA, Cukrowska B, Bruno V, Mazzilli MC, Núñez C, Bilbao JR, Mearin ML, Barisani D, Rewers M, Norris JM, Ivarsson A, Boezen HM, Liu E, Wijmenga C; PreventCD Group. Improving coeliac disease risk prediction by testing non-HLA variants additional to HLA variants. *Gut* 2014;63:415-22.
61. Tucci F, Astarita L, Abkari A, Abu-Zekry M, Attard T, Ben Hariz M, Bilbao JR, Boudra G, Boukthir S, Costa S, Djuric V, Hugot JP, Irastorza I, Kansu A, Kolaček S, et al. Celiac disease in the Mediterranean area. *BMC Gastroenterology* 2014;14:24-30.
62. Hojsak I, Pavić AM, Mišak Z, Kolaček S. Risk factors for relapse and surgery rate in children with Crohn's disease. *Eur J Pediatr* 2014; 173:617-21
63. Hecht C, Weber M, Grote V, Daskalou E, Dell'Era L, Flynn D, Gerasimidis K, Gottrand F, Hartman C, Hulst J, Joosten K, Koetse HA, Kolaček S et al. Disease associated malnutrition correlates with length of hospital stay in children. *Clin Nutr* 2015;34:53-59
64. Szajewska H, Ruszczynski M, Kolaček S. Meta-analysis shows limited evidence for using lactobacillus acidophilus LB to treat acute gastroenteritis in children. *Acta Paediatr* 2014;103:249-55.
65. Koletzko B, Beninnga M, Godfrey KM, Hornnes PJ, Kolaček S, et al. Public private collaboration in clinical research during pregnancy, lactation and childhood. Joint Position Statement of the Early Nutrition Academy and the European Society for Paediatric Gastroenterology, Hepatology and Nutrition: *J pediatr Gastroenterol Nutr* 2014;58:515-30.
66. Szajewska H, Guarino A, Hojsak I, Indrio F, Kolacek S, Shamir R, Vandenplas Y, Weitzman Z. The use of probiotics for the management of acute gastroenteritis: A position paper by the ESPGHAN Working Group for Probiotics. *JPGN* 2014;58:531-9.
67. Hojsak I, Kolaček S. Is *Helicobacter pylori* always a “Bad Guy”. *Curr Pharm Des* 2014; 28:4517-20
68. Vriezinga SL, Auricchio R, Bravi E... Kolaček S..et al. Randomized feeding intervention in infants at high risk for celiac disease. *N Engl J Med* 2014;371:1304-15
69. Lacaille F, Gupte G, Colomb V, D'Antiga L, Hartman C, Hojsak I, Kolacek S, Puntis J, Shamir R. Intestinal Failure - Associated Liver Disease. A Position Paper By The ESPGHAN Working Group of Intestinal Failure and Intestinal Transplantation. *J Pediatr Gastroenterol Nutr* 2015;60:272-83
70. Hojsak I, Pavić AM, Kolaček S. Mesalamine treatment mimicking relapse in a child with ulcerative colitis. *World J Pediatr* 2014;10:371-3.

71. Szajewska H, Guarino A, Hojsak I, Indrio F, Kolacek S, Shamir R, Vandenplas Y, Weizman Z. Use of probiotics for management of acute gastroenteritis: a position paper by the ESPGHAN Working Group for Probiotics and Prebiotics. *J Pediatr Gastroenterol Nutr* 2014 Apr;58(4):531-9.
72. Hojsak I, Pavić AM, Mišak Z, Kolaček S. Risk factors for relapse and surgery rate in children with Crohn's disease. *Eur J Pediatr* 2014;173(5):617-21.
73. Koletzko B, Kolaček S, Phillips A, Troncone R, Vandenplas Y, Baumann U, van Goudoever J, de Swarte C, Benninga M, Mearin L. Research and the promotion of child health: a position paper of the European Society for Pediatric Gastroenterology, Hepatology, and Nutrition. *J Pediatr Gastroenterol Nutr* 2014;59:274-8.
74. Vriezinga SL, Auricchio R, Bravi E, Castillejo G, Chmielewska A, Crespo Escobar P, Kolaček S, Koletzko S, Korponay-Szabo IR, Mummert E, Polanco I, Putter H, Ribes-Koninckx C, Shamir R, Szajewska H, Werkstetter K, Greco L, Gyimesi J, Hartman C, Hogen Esch C, Hopman E, Ivarsson A, Koltai T, Koning F, Martinez-Ojinaga E, te Marvelde C, Pavić A, Romanos J, Stoopman E, Villanacci V, Wijmenga C, Troncone R, Mearin ML. Randomized feeding intervention in infants at high risk for celiac disease. *N Engl J Med* 2014;71:1304-15
75. Ruemmele FM, Veres G, Kolho KL, Griffiths A, Levine A, Escher JC, Amil Dias J, Barabino A, Braegger CP, Bronsky J, Buderus S, Martín-de-Carpi J, De Ridder L, Fagerberg UL, Hugot JP, Kierkus J, Kolaček S, Koletzko S, Lionetti P, Miele E, Navas López VM, Paerregaard A, Russell RK, Serban DE, Shaoul R, Van Rheenen P, Veereman G, Weiss B, Wilson D, Dignass A, Eliakim A, Winter H, Turner D. Consensus guidelines of ECCO/ESPGHAN on the medical management of pediatric Crohn's disease. *J Crohns Colitis* 2014;8:1179-209
76. Hojsak I, Tokić Pivac V, Močić Pavić A, Pasini AM, Kolaček S. Bifidobacterium animalis subsp. lactis fails to prevent common infections in hospitalized children: a randomized, double-blind, placebo-controlled study. *Am J Clin Nutr* 2015;101(3):680-4.
77. Abdovic S, Pavić AM, Milosevic M, Persic M, Senecic-Cala I, Kolacek S. Short Health Scale: A Valid, Reliable, and Responsive Measure of Health-related Quality of Life in Children with Inflammatory Bowel Disease. *Inflamm Bowel Dis* 2015;21(4):818-23.
78. Hechts C...Kolaček S, et al. Disease associated malnutrition correlates with length of hospital stay in children. *Clin Nutr* 2015;34:53-9
79. Szajewska H, Guarino A, Hojsak I, Indrio F, Kolacek S, et al.. Response to comment on the safety of Enterococcus Faecium. *JPGN* 2016;62:12-13
80. Hojsak I, Močić-Pavić A, Kos T, Dumančić J, Kolaček S. Bifidobacterium animalis subsp. lactis in prevention of common infections in healthy children attending day care centers – randomized, double blind, placebo-controlled study. *Clin Nutr* 2016;35:587-91
81. Hojsak I, Kolacek S, Hansen LF, Bronsky J, Piekkala M, Lionetti P, Skaba R, Kolho KL. Long-term outcome after elective ileocecal resection in children with active localized Crohn's disease; a multicenter European study. *J Pediatr Surg* 2015;50:1630-5.
82. Szajewska H, Shamir R, ..S. Kolacek, et al. Systematic review with meta-analysis: early infant feeding and coeliac disease – update 2015. *Aliment Pharmacol Ther* 2015;41:1038-54
83. Kolaček S. Enteral nutrition support. *World Rev Nutr Diet* 2015;113:152-7.
84. Hojsak I, Mišak Z, Jadrešin O, Močić Pavić A, Kolaček S. Methotrexate is an efficient therapeutic alternative in children with thiopurine-resistant Crohn's disease. *Scand J Gastroenterol* 2015;50:1208-13.

85. Winter HS, Krzeski P...Kolaček S, et al. High- and low-dose oral delayed-release mesalamin in children with mild-to-moderately active ulcerative colitis. *JPGN* 2015;59:767-72.
86. Lacaille F, ...Hojsak I, Kolaček S, et al. Intestinal failure-associated liver disease: a position paper of the ESPGHAN Working Group of Intestinal failure and Intestinal Transplantation. *JPGN* 2015;60:272-83
87. Van der Woude J, ...Kolacek S, et al. The second European evidence-based consensus on reproduction and pregnancy in inflammatory bowel disease. *J Crohns Colitis* 2015;9:107-24.
88. Winter DA, Karolewska-Bochenek K, Lazowska-Przeorek I, Lionetti P, et al; pediatric IBD Porto Group of ESPGHAN. Pediatric IBD-unclassified is less common than previously reported; results of an 8-year audit of the EUROKIDS registry. *Inflamm Bowel Dis* 2015;21:2145-53.
89. Vandenplas Y, Alarcon P, Fleischer D, Hernell O, Kolacek S, et al. Should partial hydrolysates be used as starter infant formula? A Working Group Consensus. *J Pediatr Gastroenterol Nutr* 2016;62:22-35.
90. Szajewska H, Canani RB, Guarino A, Hojsak I, Indrio F, Kolacek S et al. Probiotics for the prevention of antibiotic associated diarrhoea in children. *J Pediatr Gastroenterol Nutr* 2016;62:495-506.
91. Szajewska H, ...Kolacek S et al. Gluten introduction and the risk of Coeliac Disease: A Position Paper by the European Society for Pediatric Gastroenterology, Hepatology and Nutrition. *J Pediatr Gastroenterol Nutr* 2016;62:507-13
92. Grizelj R, Bojanić K, Vuković J, Novak M, Rodin U..... Croatian Diaphragmatic Hernia Study Group. Epidemiology and outcomes of congenital diaphragmatic hernia in Croatia: A population-based study. *Paediatr Perinat Epidemiol* 2016;30:336-45
93. Hojsak I, Ivković L, Trbojević T, Pavić I, Jadrešin O, Mišak Z, Kolaček S. The role of combined 24-h multichannel intraluminal impedance-pH monitoring in the evaluation of children with gastrointestinal symptoms suggesting gastroesophageal reflux disease. *Neurogastroenterol Motil* 2016;28:1488-93.
94. Jadrešin O, Hojsak I, Mišak Z, Kekez AJ, Trbojević T, Ivković L, Kolaček S. Lactobacillus reuteri DS; 17938 in the treatment of functional abdominal pain in children: RCT study. *J Pediatr Gastroenterol Nutr* 2017;64:925-29.
95. Crespo-Escobar P, Mearin ML; Hervas D, Auricchio R, Castillejo G, Gyimesi J, Martinez-Ojinaga E, Werkstetter K, Vrienzinga SL, Korponay-Szabo IR, Polanco I, Troncone R, Stoopman E, Kolaček S, Shamir R, Szajewska H, KOletzko S, Ribes-Koninckx C. The role of gluten consumption at an early age in celiac disease development: a further analysis of the prospective PreventCD cohort study. *Am J Clin Nutr* 2017;105:890-96.
96. Amil-Dias J, Kolacek S, Turner D, Paerregaard A, Rintala R, Afzal NA, et al. Surgical management of Crohn's Disease in Children: Guidelines from the Paediatric IBD Porto Group of ESPGHAN. *J Pediatr Gastroenterol Nutr* 2017;64:818-35.
97. Pavić I, Kolaček S. Growth of children with food allergy. *Horm Res Paediatr* 2017;88:91-100
98. Kolaček S. Hojsak I, Canani RB Guarino A, Indrio F, Orel R, Pot B, Shamir R, Szajewska H, Vandenplas Y, van Goudoever J. Commercial probiotic products: A call for improved quality control. A Position Paper by the ESPGHAN Working Group for Probiotics and Prebiotics. *J Pediatr Gastroenterol Nutr* 2017; 65:117-124
99. Birimberg-Schwartz L, Wucker DM, Akiv A, Cucchiara S, Cameron FL, Wilson DC, Lazowska I, Yianni L, Paul SP, Romano C, Kolacek S, et al. Development and validation of diagnostic criteria for IBD

subtypes with an emphasis on IBD-Unclassified in children: a multicenter study from the Pediatric IBD Porto group of ESPGHAN: *J Crohns Colitis* 2017; 11: 1078-84

100. Bemelman WA, Warusavitarne J, Sampietro GM, Serclova Z, Zmora O, Luglio G, ... Kolacek S, Kierkus J, Kolho KL et al. ECCO-ESCP Consensus on surgery for Crohn's Disease. *J Crohns Colitis* 2018;12:1-16.
101. Scarpato E, Quitadamo P, Roman E, Jojkic-Pavkov D, Kolacek S, et al. Functional gastrointestinal disorders in children: a survey on clinical approach in the Mediterranean area. *J Pediatr Gastroenterol Nutr* 2017;64:e142-e146
102. Hojsak I, Szajewska H, Canani RB, Guarino A, Indrio F, Kolacek S, et al. Probiotics for the prevention of nosocomial diarrhoea in children. *J Pediatr Gastroenterol Nutr* 2018; 66:3-9.
103. Diamanti A, Puntis J, Kolacek S, et al. Parenteral nutriion and home parenteral nutrition changed the face of pediatric gastroenterology. *JPGN* 2018; 66; Suppl 1:S82-S87
104. Goulet O, Finkel Y, Kolacek S, Puntis J. Short bowel syndrome: half a century of progress. *JPGN* 2018;66:Suppl 1: S71-S76
105. Goulet O...Kolacek S.. et al. Fifty years of Pediatric Gastroenterology. *JPGN* 2018; 66: Supple 1 (S54)
106. Oliva S, Thompson M...Kolacek S, et al. Endoscopy in Pediatric Inflammatory bowel disease: A position paper on behalf of the Porto IBD Group of the European Society for Pediatric Gastroenterology, hepatology and Nutrition. *JPGN* 2018;67:414-30.
107. Vugrinec Mamić M, Hojsak I, Mišak Z, Kerman V, Kolaček S. Treatment in a Tertiary Intestinal Rehabilitation Center Improves Outcome for Children with Short Bowel Syndrome. *Gastroenterol Nurs* 2018 (epub)
108. Miele E,...Hojsak I,...Kolaček S, et al. Nutrition in Pediatric Inflammatory Bowell Disease: A Position paper on behalf of the Porto Inflammatory Bowel Disease Group of ESPGHAN. *JPGN* 2018; 66:687-708
109. Bemelman Wa,...Kolacek S..et al. ECCO-ESCP Consensus on Surgery for Crohn's Disease. *JCC* 2018;12:1-16.
110. Van den Akker CHP..Hojsak I, et al. Probiotics for preterm infants: A strain-specific systematic review and network meta-analysis. *JPGN* 2018;76:103-122
111. Kolaček S, Puntis J, Hojsak I. ESPGHAN/ESPEN/ESPR guidelines on pediatric parenteral nutrition. Venous access. *Clin Nutr* 2018 (epub)
112. Hojsak I,...Kolaček S. Guidance on the use of probiotics in clinical practice with selected clinical conditions and in specific vulnerable groups. *Acta Paediatr* 2018;107:927-37.
113. Scarpato E, Kolacek S, et al. Prevalence of functional gastrointestinal disorders in children and adolescents in the Mediterranean region of Europe. *Clini Gastroenterol Hepatol* 2018;16:870-6.
114. Birimberg-Schwartz L,...Kolaček S, et al. Development and validation of diagnostic criteria for IBD subtypes including IBD-unclassified in children: a multicentre study from the pediatric IBD Porto group of ESPGHAN. *JCC* 2017;11:1078-1084.
115. Hojsak I, ...Kolacek S et al. Probiotics for the prevention of nosocomial diarrhoea in children. *JPGN* 2018;66:3-9.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2006-2013 • EU FUNDED Project (FP6-205-FOOD-4-B) „PREVENTCD“ - Influence of the dietary history in the prevention of celiac disease: possibilities of induction of tolerance for gluten in genetic predisposed children - partner

2010-2012 • ESPEN Network Grant project „Malnutrition and outcome in hospitalized children in Europe“ – partner (ESPEN – European Society for Parenteral and Enteral Nutrition)

Scientific Research Multicenter European Studies

2004-2016 EUROKIDS IBD registry. Roles: recruitment of newly diagnosed children with IBD, investigating phenotype of the disease, determining natural history of IBD in children - partner

Chr. Hansen Research Grant 2010-2012 PROBBIC 1 & PROBBIC 2: role of probiotic strain Bb12 in prevention of nosocomial infection & prevention of acute respir. and GIT infections in day care centres - principal investigator

Croatian Institute of Science 2015- IBD in children: effect of enteral nutrition on the microbiom & Croatian registry for children with IBD

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- “Lactobacillus reuteri u terapiji funkcijskih abdominalnih bolova i opstipacije u djece - randomizirana, dvostruko- slijepa, placebo kontrolirana studija”; voditelj: Kolaček S, istraživači: Hojsak I, Jadrešin O; suradnici: Mišak Z

- 2004-2016 EUROKIDS IBD registry. Roles: recruitment of newly diagnosed children with IBD, investigating phenotype of the disease, determining natural history of IBD in children - partner

- Multicentrični projekt ESPGHAN IBD Working Group „Outcome of pouch surgery in pediatric patients with ulcerative colitis“. Istraživači / suradnik u Hrvatskoj: Kolaček S, Močić Pavić A

- Croatian Institute of Science 2015- IBD in children: effect of enteral nutrition on the microbiom & Croatian registry for children with IBD

- Uloga tranzicijske skrbi u zdravstvenoj zaštiti djece sa kroničnm upalnim bolestima crijeva
Voditelj Kolaček S; suradnik Hojsak I; doktorand Trbojević T

- Multicentrična europska studija „Effects of oral nutrition supplements in children with disease associated underweight“. Suradnici u Hrvatskoj: Kolaček S, Niseteo T.

- TISKIDS, Top-down liječenje Crohnove bolesti. Istraživači: Kolaček S, Hojsak I

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

6

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ivica Kostović, professor emeritus

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Fetal and Neonatal Neurophysiology, Fetal Behavior; Human developmental neurobiology; Synaptic plasticity and mind

BIOGRAPHY

Education and training

1967- graduate of the School of Medicine University of Zagreb (SMZ); 1970th master's degree at a graduate School of Science in Zagreb; In 1972. Ph.D. at SMZ; 1972 to 1974. postdoctoral training in the field of neuroanatomy at the Johns Hopkins University School of Medicine (USA).

Professional experience

1965-1967 Research Associate of the Institute of Anatomy, School of Medicine University of Zagreb; 1968 -1972 Assistant, Department of Anatomy SMZ; 1975-1977 Assistant Professor for Anatomy, Department of Anatomy SMZ; in 1976. Visiting Assistant Professor of Neuropathology and Research Fellow, Department of Neuroscience, Harvard Medical School; 1978-1980 Associate Professor of Anatomy, SMZ; 1979-1989 Study visit to Yale University; 1981-2014 - Professor of Anatomy and Neuroscience, SMZ. 2014- today – professor emeritus, University of Zagreb. 2000-2013 Director of Croatian Institute for Brain Research. 2013-present Honorary Director of CIBR

Research activity

Principal Investigator on five international (a joint project of the American Board NIH institutes - DHHS) and nine local research projects.

A regular member of the Croatian Academy of Sciences and Arts since 2006.

President of Croatian Society for Neuroscience.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2014

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Molliver ME, Kostović I, Van der Loos H (1973) The development of synapses in cerebral cortex of the human fetus. Brain Res 50:403-407
2. Kostović I, Goldman-Rakic PS (1983) Transient cholinesterase staining in the mediodorsal nucleus of the thalamus and its connections in the developing human and monkey brain. J Comp Neurol 219:431-447.
3. Kostović I, Rakic P (1984) Development of prestriate visual projections in the monkey and human fetal cerebrum revealed by transient cholinesterase staining. J Neurosci 4:25-42.
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5. Kostović I, Seress L, Mrzljak L, Judaš M (1989) Early onset of synapse formation in the human hippocampus: a correlation with Nissl-Golgi architectonics in 15- and 16.5-week-old fetuses. Neuroscience 30:105-116.

6. Kostović I, Rakic P (1990) Developmental history of the transient subplate zone in the visual and somatosensory cortex of the macaque monkey and human brain. *J Comp Neurol* 297:441-470.
7. Kostović I, Petanjek Z, Judaš M (1993) Early areal differentiation of the human cerebral cortex: entorhinal area. *Hippocampus* 3:447-458.
8. Kostović I, Judaš M (2002) Correlation between the sequential ingrowth of afferents and transient patterns of cortical lamination in preterm infants. *The Anatomical Record* 267:1-6.
9. Kostović I, Judaš M, Radoš M, Hrabač P (2002) Laminar organization of the human fetal cerebrum revealed by histochemical markers and magnetic resonance imaging. *Cerebral Cortex* 12:536-544.
10. Kostović I, Judaš M (2006) Prolonged coexistence of transient and permanent circuitry elements in the developing cerebral cortex of fetuses and preterm infants, *DCMN Developmental Medicine and Child Neurology* vol 48: 388-393
11. Kostovic I, Jovanov-Milosevic N (2006) The development of cerebral connections during the first 20-45 weeks' gestation. *Seminars in Fetal & Neonatal Medicine* 11(6):415-22
12. Petanjek Z, Judas M, Kostovic I, Uylings HB. (2007) Lifespan Alterations of Basal Dendritic Trees of Pyramidal Neurons in the Human Prefrontal Cortex: A Layer-Specific Pattern. *Cereb Cortex*.
13. Kostovic I, Judas M (2007) Transient patterns of cortical lamination during prenatal life: Do they have implications for treatment?, *Neuroscience and Biobehavioral Reviews* 31(8): 1156-1168
14. Ayoub AE, Kostovic I. (2009) New horizons for the subplate zone and its pioneering neurons. *Cereb Cortex* 19(8):1705-7
15. Jovanov-Milosević N, Culjat M, Kostović I (2009). Growth of the human corpus callosum: modular and laminar morphogenetic zones. *Front Neuroanat.* 2009 Jun 9;3:6. doi: 10.3389/neuro.05.006.2009. eCollection 2009.
16. Kostović I, Vasung L (2009) Insights from in vitro fetal magnetic resonance imaging of cerebral development. *Semin Perinatol* 33:220-33
17. Kostović I, Judaš M, Sedmak G. (2010) Developmental history of the subplate zone, subplate neurons and interstitial white matter neurons: relevance for schizophrenia. *Int J Dev Neurosci.* 2011 May;29(3):193-205
18. Kostovic I, Judas M (2010) The development of the subplate and thalamocortical connections in the human fetal brain. *Acta Paediatr.* 99(8):1119-27
19. Vasung L, Huang H, Jovanov-Milosevic N, Pletikos M, Mori S, Kostovic I (2010) Development of axonal pathways in the human fetal fronto-limbic brain: histochemical characterization and diffusion tensor imaging. *J Anat* 217:400-417
20. Jovanov-Milosevic N, Petanjek Z, Petrovic D, Judas M, Kostovic I (2010) Morphology, molecular phenotypes and distribution of neurons in developing human corpus callosum. *E J Neurosci* 32: 1423-1432
21. Vasung L, Jovanov-Milošević N, Pletikos M, Mori S, Judaš M, Kostović I. (2010) Prominent periventricular fibre system related to ganglionic eminence and striatum in the human fetal cerebrum. *Brain Struct Funct.* 2011 Jan;215(3-4):237-53. doi: 10.1007/s00429-010-0279-4. Epub 2010 Oct 15.
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24. Huang H, Jeon T, Sedmak G, Pletikos M, Vasung L, Xu X, Yarowsky P, Richards LJ, Kostovic I, Sestan N, Mori S. (2012) Coupling Diffusion Imaging with Histological and Gene Expression Analysis to Examine the Dynamics of Cortical Areas across the Fetal Period of Human Brain Development. *Cereb Cortex*. 2013 Nov; 23(11):2620-31. doi: 10.1093/cercor/bhs241
25. Petanjek Z, Kostović I.(2012) Epigenetic regulation of fetal brain development and neurocognitive outcome. *Proc Natl Acad Sci U S A.*; 109(28):11062-3. doi: 10.1073/pnas.1208085109.
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28. Bregant T, Rados M, Vasung L, Derganc M, Evans AC, Neubauer D, Kostovic I.(2013) Region-specific reduction in brain volume in young adults with perinatal hypoxic-ischaemic encephalopathy. *Eur J Paediatr Neurol*. 2013 Nov;17(6):608-14. doi: 10.1016/j.ejpn.2013.05.005.
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33. Duque A, Krsnik Z, Kostović I, Rakic P. (2016) Secondary expansion of the transient subplate zone in the developing cerebrum of human and nonhuman primates. *Proc Natl Acad Sci U S A*. 2016 Aug 8. doi: 10.1073/pnas.1610078113. Epub 2016 Aug 8.
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39. Kostović I, Išasegi IŽ, Krsnik Ž. (2018) Sublaminar organization of the human subplate: developmental changes in the distribution of neurons, glia, growing axons and extracellular matrix. *J Anat*. 2018 Dec 13. doi: 10.1111/joa.12920. [Epub ahead of print]

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- Kostović I, Kostović-Srzić M, Benjak V, Jovanov-Milošević N, Radoš M. (2014) Developmental dynamics of radial vulnerability in the cerebral compartments in preterm infants and neonates. *Front Neurol*. 2014 Jul 29;5:139. doi: 10.3389/fneur.2014.00139. eCollection 2014
- Slade N, Zorić A, Horvat B, Vukšić M, Kostović I, Poljak L.(2014) Suppression of Smad-1 mRNA expression level by Smad-2 likely control dichotomy of NF-κB and Smads mediated activation. *Immunobiology*. 2015 Jan;220(1):48-53. doi: 10.1016/j.imbio.2014.09.003. Epub 2014 Sep 16.
- Kostović I, Sedmak G, Vukšić M, Judaš M.(2015) The Relevance of Human Fetal Subplate Zone for Developmental Neuropathology of Neuronal Migration Disorders and Cortical Dysplasia. *CNS Neurosci Ther*. 2015 Feb;21(2):74-82. doi: 10.1111/cns.12333
- Jovanov Milošević N, Judaš M, Aronica E, Kostovic I. (2014) Neural ECM in laminar organization and connectivity development in healthy and diseased human brain. *Prog Brain Res*. 2014;214:159-78. doi: 10.1016/B978-0-444-63486-3.00007-4. Review
- Vasung L, Lepage C, Radoš M, Pletikos M, Goldman JS, Richiardi J, Raguž M, Fisch-Gómez E, Karama S, Huppi PS, Evans AC, Kostovic I. (2016) Quantitative and Qualitative Analysis of Transient Fetal Compartments during Prenatal Human Brain Development. *Front Neuroanat*. 2016 Feb 24;10:11. doi: 10.3389/fnana.2016.00011. eCollection 2016
- Duque A, Krsnik Z, Kostović I, Rakic P. (2016) Secondary expansion of the transient subplate zone in the developing cerebrum of human and nonhuman primates. *Proc Natl Acad Sci U S A*. 2016 Aug 30;113(35):9892-7. doi: 10.1073/pnas.1610078113. Epub 2016 Aug 8.
- Krsnik Ž, Majić V, Vasung L, Huang H, Kostović I. (2017) Growth of Thalamocortical Fibers to the Somatosensory Cortex in the Human Fetal Brain. *Front Neurosci*. 2017 Apr 27;11:233. doi: 10.3389/fnins.2017.00233. eCollection 2017

Vasung L, Raguz M, Kostovic I, Takahashi E. (2017) Spatiotemporal Relationship of Brain Pathways during Human Fetal Development Using High-Angular Resolution Diffusion MR Imaging and Histology. *Front Neurosci.* 2017 Jul 11;11:348. doi: 10.3389/fnins.2017.00348. eCollection 2017.

Charvet CJ, Šimić G, Kostović I, Knezović V, Vukšić M, Babić Leko M, Takahashi E, Sherwood CC, Wolfe MD, Finlay BL. (2017) Coevolution in the timing of GABAergic and pyramidal neuron maturation in primates. *Proc Biol Sci.* 2017 Aug 30;284(1861). pii: 20171169. doi: 10.1098/rspb.2017.1169

Žunić Išasegi I, Radoš M, Krsnik Ž, Radoš M, Benjak V, Kostović I. (2018) Interactive histogenesis of axonal strata and proliferative zones in the human fetal cerebral wall. *Brain Struct Funct.* 2018 Dec;223(9):3919-3943. doi: 10.1007/s00429-018-1721-2. Epub 2018 Aug 9

Kostović I, Išasegi IŽ, Krsnik Ž. (2018) Sublaminar organization of the human subplate: developmental changes in the distribution of neurons, glia, growing axons and extracellular matrix. *J Anat.* 2018 Dec 13. doi: 10.1111/joa.12920. [Epub ahead of print]

Kostović I, Sedmak G, Judaš M. (2018) Neural histology and neurogenesis of the human fetal and infant brain. *Neuroimage.* 2018 Dec 27. pii: S1053-8119(18)32187-6. doi: 10.1016/j.neuroimage.2018.12.043. [Epub ahead of print] Review

Hrabač P, Bosak A, Vukšić M, Judaš M, Kostović I, Krsnik Ž. (2018) The Zagreb Collection of human brains: entering the virtual world. *Croat Med J.* 2018 Dec 31;59(6):283-287

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1982-1985 U.S. Joint Board Project 02-091-N «Histogenesis and differentiation of the cerebral cortex in the human fetus» (P.I. Dr. I. Kostović; U.S. Collaborator Dr. Pasko Rakic)

1986-1989 U.S. Joint Board Project PN 698 «Perinatal development of the human frontal lobe» (P.I. Dr. I. Kostović; U.S. Collaborator Dr. Pasko Rakic)

1990-1992 «Developmental neurobiology of schizophrenia» - the joint project of the Section of Neuroanatomy (School of Medicine Zagreb – I. Kostović) and Section of Neurobiology (Yale University School of Medicine – Dr. Patricia S. Goldman-Rakic)

1990 «Perinatal reorganization of the cortical circuitry during formation of cerebral convolutions in the human frontal lobe» - collaborative project with The Netherlands Institute for Brain Research, Amsterdam (P.I. Dr. I. Kostović, Dutch collaborators Dr. H.B.M. Uylings and Dr. D.F. Swaab)

1997-2006 Research program of the Croatian Institute for Brain Research “Neurobiology of cognitive development and cognitive disorders”, continued since 2006 as NEUROKOD program
“Neurodevelopmental Basis of Cognitive, Mental and Neurological Disorders” joining 27 projects

2007- 2010 Head coordinator of project „Neuroimaging, neurogenomics and pharmacogenomics of the frontal lobe connectivity: normal development and abnormalities in developmental and cognitive disorders“(Research Co-operability Program - Crossing border project, Unity through Knowledge Fund)

2007 -2013 Head coordinator of scientific project “Development of cortical pathways in human” (Ministry of Science, Education and Sport)

2015-present Principal Investigator, project funded by National Science Foundation “Subplate zone of the human brain: unsolved problems”



2015-present Scientific Coordinator and Group Leader in Centre of Excellence “Croatian Institute for Brain Research - Centre for basic, clinical and translational neuroscience”

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2015-present Principal Investigator, project funded by National Science Foundation “Subplate zone of the human brain: unsolved problems”

2015-present Scientific Coordinator and Group Leader in Centre of Excellence “Croatian Institute for Brain Research - Centre for basic, clinical and translational neuroscience”

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

20

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Associate Professor Nataša Kovačić

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Selected topics in transplantation immunology

BIOGRAPHY

Associate Professor, Nataša Kovačić: Born in Zagreb Croatia, 23.03.1971. Education: 1995. – MD – Zagreb University School of medicine, Zagreb Croatia. 2005 – defended PhD thesis at Zagreb University school of medicine. 2015- Finished Laboratory Animal Science Course – category C. Employments: 1997 – 2000 - Master student at the Department of Anatomy, Zagreb University school of medicine, Croatia, 2001- 2005 PhD student at the Laboratory for molecular immunology, Zagreb University school of medicine. 2008 - 2012 Assistant professor at the Department of Anatomy, Zagreb University school of medicine. Teaching and mentoring: Since 1998 participates in teaching at medical schools in Zagreb. Mentor of 1 defended PhD thesis and 3 PhD thesis in preparation. Research activity: Principal investigator on the project funded by Croatian Science Foundation „Molecular mediators of Fas-driven osteoresorption“ (Project duration; 2015-2019, 30000 Eur/year). Co-investigator on several research domestic and international research projects projects. Publications: 40 papers, cited 512 times (WoS).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 11 JAN 2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Lazic Mosler E, Lukac N, Flegar D, Fadljevic M, Radanovic I, Cvija H, Kelava T, Ivcevic S, Sucur A, Markotic A, Katavic V, Marusic A, Grcevic D, Kovacic N (2018). Fas receptor induces apoptosis of synovial bone and cartilage progenitor populations and promotes bone loss in antigen-induced arthritis. *FASEB J*. Nov 1:fj201801426R. doi: 10.1096/fj.201801426R.
2. Grcevic D, Sironi M, Valentino S, Deban L, Cvija H, Inforzato A, Kovacic N, Katavic V, Kelava T, Kalajzic I, Mantovani A, Bottazzi B (2018). The Long Pentraxin 3 Plays a Role in Bone Turnover and Repair. *Front Immunol*. 9:417. doi: 10.3389/fimmu.2018.00417
3. Chai R, McDonald M, Terry R, Kovacic N, Down J, Pettitt J, Mohanty S, Shah S, Haffari G, Xu J, Gillespie M, Rogers M, Price J, Quinn J, Croucher P (2017). Melphalan modifies the bone microenvironment by enhancing osteoclast formation. *Oncotarget*, advance publications, July 2017.
4. Sucur A, Jajic Z, Artukovic M, Ikic Matijasevic M, Anic B, Flegar D, Markotic A, Kelava T, Ivcevic S, Kovacic N, Katavic V, Grcevic D (2017). Chemokine signals are crucial for enhanced homing and differentiation of circulating osteoclast progenitor cells. *Arthritis Res Ther* 19:142.
5. Ikic Matijasevic M, Flegar D, Kovacic N, Katavic V, Kelava T, Šucur A, Ivcevic S, Cvija H, Lazic Mosler E, Kalajzic I, Marusic A, Grcevic D (2016). Increased chemotaxis and activity of circulatory myeloid progenitor cells may contribute to enhanced osteoclastogenesis and bone loss in C57BL/6 mouse model of collagen-induced arthritis. *Clin Exp Immunol* 186:321-335.
6. Khor EC, Yulyaningsih E, Driessler F, Kovacic N, Wee NK, Kulkarni RN, Lee NJ, Enriquez RF, Xu J, Zhang L, Herzog H, Baldock PA. Bone (2016). The y6 receptor suppresses bone resorption and stimulates bone formation in mice via a suprachiasmatic nucleus relay. *Bone* 84:139-47.
7. Lawson MA, McDonald MM, Kovacic N, Hua Khoo W, Terry RL, Down J, Kaplan W, Paton-Hough J, Fellows C, Pettitt JA, Neil Dear T, Van Valckenborgh E, Baldock PA, Rogers MJ, Eaton CL, Vanderkerken K,

- Pettit AR, Quinn JM, Zannettino AC, Phan TG, Croucher PI (2015). Osteoclasts control reactivation of dormant myeloma cells by remodelling the endosteal niche. *Nat Commun* 6:8983.
8. Bobek D, Grcevic D, Kovacic N, Lukic IK, Jelusic M (2014). The presence of high mobility group box-1 and soluble receptor for advanced glycation end-products in juvenile idiopathic arthritis and juvenile systemic lupus erythematosus. *Pediatr Rheumatol Online J* 12:50.
 9. Sucur A, Katavic V, Kelava T, Jajic Z, Kovacic N, Grcevic D (2014). Induction of osteoclast progenitors in inflammatory conditions: key to bone destruction in arthritis. *Int Orthop* 38:1893-903.
 10. Ikic M, Jajic Z, Lazic E, Ivcevic S, Grubisic F, Marusic A, Kovacic N, Grcevic D (2013). Association of systemic and intra-articular osteoclastogenic potential, pro-inflammatory mediators and disease activity with the form of inflammatory arthritis. *Int Orthop* 38:183-92.
 11. Kovacic N, Croucher PI, McDonald MM (2013). Signaling between tumor cells and the host bone marrow microenvironment. *Calcif Tissue Int* 94:125-39.
 12. Topic I, Ikic M, Ivcevic S, Kovacic N, Marusic A, Kusec R, Grcevic D (2012). Bone morphogenetic proteins regulate differentiation of human promyelocytic leukemia cells. *Leuk Res* 37:705-12.
 13. Cvija H, Kovacic N, Katavic V, Ivcevic S, Aguila HL, Marusic A, Grcevic D (2012). Chemotactic and immunoregulatory properties of bone cells are modulated by endotoxin-stimulated lymphocytes. *Inflammation* 35:1618-31.
 14. Lazic E, Jelusic M, Grcevic D, Marusic A, Kovacic N (2012). Osteoblastogenesis from synovial fluid-derived cells is related to the type and severity of juvenile idiopathic arthritis. *Arthritis Res Ther* 14:R139.
 15. Kovacic N, Grcevic D, Katavic V, Lukic IK, Marusic A. (2010) Targeting Fas in osteoresorptive disorders. *Expert Opin Ther Targets* 2010;14:1121-34.
 16. Kovacic N, Grcevic D, Katavic V, Lukic IK, Grubisic V, Mihovilovic K, Cvija H, Croucher PI, Marusic A (2010). Fas receptor is required for estrogen deficiency-induced bone loss in mice. *Lab Invest* 90:402-13.
 17. Grcevic D, Jajic Z, Kovacic N, Lukic IK, Velagic V, Grubisic F, Ivcevic S, Marusic A (2010). Peripheral blood expression profiles of bone morphogenetic proteins, tumor necrosis factor-superfamily molecules, and transcription factor Runx2 could be used as markers of the form of arthritis, disease activity, and therapeutic responsiveness. *J Rheumatol* 37:246-56.
 18. Grcevic D, Kusec R, Kovacic N, Lukic A, Lukic IK, Ivcevic S, Nemet D, Seiwerth RS, Ostojic SK, Croucher PI, Marusic A (2009). Bone morphogenetic proteins and receptors are over-expressed in bone-marrow cells of multiple myeloma patients and support myeloma cells by inducing ID genes. *Leuk Res* 34:742-51.
 19. Lukic IK, Jelusic-Drazic M, Kovacic N, Grcevic D (2009). Damage-associated molecular patterns--emerging targets for biologic therapy of childhood arthritides. *Inflamm Allergy Drug Targets* 8:139-45.
 20. Salopek D, Grcevic D, Katavic V, Kovacic N, Lukic IK, Marusic A (2008). Increased bone resorption and osteopenia are a part of the lymphoproliferative phenotype of mice with systemic over-expression of interleukin-7 gene driven by MHC class II promoter. *Immunol Lett* 121:134-9.
 21. Kovacic N, Lukic IK, Grcevic D, Katavic V, Croucher P, Marusic A (2007). Fas/Fas ligand system inhibits differentiation of murine osteoblasts but has a limited role in osteoblast and osteoclast apoptosis. *J Immunol* 178:3379-89.
 22. Grcevic D, Lukic IK, Kovacic N, Ivcevic S, Katavic V, Marusic A (2006). Activated T lymphocytes suppress osteoclastogenesis by diverting early monocyte/macrophage progenitor lineage commitment

towards dendritic cell differentiation through down-regulation of receptor activator of nuclear factor- κ B and c-Fos. *Clin Exp Immunol* 146:146-58.

23. Lukic IK, Grcevic D, Kovacic N, Katavic V, Ivcevic S, Kalajzic I, Marusic A (2005). Alteration of newly induced endochondral bone formation in adult mice without tumour necrosis factor receptor 1. *Clin Exp Immunol* 139:236-44.
24. Lukic IK, Kovacic N, Katavic V, Grcevic D, Ivcevic S, Marusic A (2005). Shared circulation in parabiosis leads to the transfer of bone phenotype from gld to the wild-type mice. *Cell Immunol* 233:133-9.
25. Marusic A, Markotic A, Kovacic N, Muthing J (2004). Expression of glycosphingolipids in lymph nodes of mice lacking TNF receptor 1: biochemical and flow cytometry analysis. *Carbohydrate Res* 339:77-86.
26. Katavic V, Grcevic D, Lukic IK, Vucenic V, Kovacic N, Kalajzic I, Marusic A (2003). Non-functional Fas ligand increases the formation of cartilage early in the endochondral bone induction by rhBMP-2. *Life Sci* 74:13-28.
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29. Kovacic N, Muthing J and Marusic A (2000). Immunohistochemical and flow cytometric analysis of glycosphingolipid expression in mouse lymphoid tissues. *J Histochem Cytochem* 48:1677-89.
30. Marusic A, Grcevic D, Katavic V, Kovacic N, Lukic IK, Kalajzic I, Lorenzo JA (2000). Role of B lymphocytes in new bone formation. *Lab Invest* 80:1761-74.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Lazic Mosler E, Lukac N, Flegar D, Fadljevic M, Radanovic I, Cvija H, Kelava T, Ivcevic S, Sucur A, Markotic A, Katavic V, Marusic A, Grcevic D, Kovacic N (2018). Fas receptor induces apoptosis of synovial bone and cartilage progenitor populations and promotes bone loss in antigen-induced arthritis. *FASEB J*. Nov 1:fj201801426R. doi: 10.1096/fj.201801426R.
2. Grcevic D, Sironi M, Valentino S, Deban L, Cvija H, Inforzato A, Kovacic N, Katavic V, Kelava T, Kalajzic I, Mantovani A, Bottazzi B (2018). The Long Pentraxin 3 Plays a Role in Bone Turnover and Repair. *Front Immunol*. 9:417. doi: 10.3389/fimmu.2018.00417
3. Chai R, McDonald M, Terry R, Kovacic N, Down J, Pettitt J, Mohanty S, Shah S, Haffari G, Xu J, Gillespie M, Rogers M, Price J, Quinn J, Croucher P (2017). Melphalan modifies the bone microenvironment by enhancing osteoclast formation. *Oncotarget*, advance publications, July 2017.
4. Sucur A, Jajic Z, Artukovic M, Ikic Matijasevic M, Anic B, Flegar D, Markotic A, Kelava T, Ivcevic S, Kovacic N, Katavic V, Grcevic D (2017). Chemokine signals are crucial for enhanced homing and differentiation of circulating osteoclast progenitor cells. *Arthritis Res Ther* 19:142.
5. Raguz M, Hrabac P, Sedmak D, Gjurasin M, Kovacic N (2017). Diameters and bone thickness at the margin of the foramen magnum in dry skulls from pediatric population: a cross-sectional anatomical study. *Childs Nerv Syst* 33:819-823.

6. Ikić Matijasević M, Flegar D, Kovacic N, Katavic V, Kelava T, Šćur A, Ivčević S, Cvija H, Lazic Mosler E, Kalajzić I, Marusić A, Grčević D (2016). Increased chemotaxis and activity of circulatory myeloid progenitor cells may contribute to enhanced osteoclastogenesis and bone loss in C57BL/6 mouse model of collagen-induced arthritis. *Clin Exp Immunol* 186:321-335.
7. Khor EC, Yulyaningsih E, Driessler F, Kovacic N, Wee NK, Kulkarni RN, Lee NJ, Enriquez RF, Xu J, Zhang L, Herzog H, Baldock PA. *Bone* (2016). The $\gamma 6$ receptor suppresses bone resorption and stimulates bone formation in mice via a suprachiasmatic nucleus relay. *Bone* 84:139-47.
8. Lawson MA, McDonald MM, Kovacic N, Hua Khoo W, Terry RL, Down J, Kaplan W, Paton-Hough J, Fellows C, Pettitt JA, Neil Dear T, Van Valckenborgh E, Baldock PA, Rogers MJ, Eaton CL, Vanderkerken K, Pettitt AR, Quinn JM, Zannettino AC, Phan TG, Croucher PJ (2015). Osteoclasts control reactivation of dormant myeloma cells by remodelling the endosteal niche. *Nat Commun* 6:8983.
9. Bobek D, Grčević D, Kovacic N, Lukić IK, Jelusić M (2014). The presence of high mobility group box-1 and soluble receptor for advanced glycation end-products in juvenile idiopathic arthritis and juvenile systemic lupus erythematosus. *Pediatr Rheumatol Online J* 12:50.
10. Šćur A, Katavic V, Kelava T, Jajić Z, Kovacic N, Grčević D (2014). Induction of osteoclast progenitors in inflammatory conditions: key to bone destruction in arthritis. *Int Orthop* 38:1893-903.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 2014-2019 Croatian Science Foundation, Molecular mediators of Fas-driven osteoresorption in arthritis, principal investigator N. Kovacic (budget 130.000,00 €)
- 2017-2022 Scientific Center of Excellence for Reproductive and Regenerative Medicine (Project “Reproductive and Regenerative Medicine – Exploration of New Platforms and Potentials”) Grant KK01.1.1.01.0008, funded by the European Union through the European Regional Development Fund, principal investigator S. Vukicević.
- 2013-2017 Croatian Science Foundation, Characterization of osteoclast progenitor responses to arthritis, principal investigator Danka Grčević, Croatian Science Foundation (budget 100.000,00 €)
- 2012-2014 Wellcome Trust, “New gene targets for anabolic therapy in osteoporosis”, principal investigator Peter Croucher
- 2012-2014, Defining the ‘myeloma niche’: New opportunities for therapeutic intervention, Ernest Heine Foundation, principal investigator Peter Croucher
- 2007-2012, Croatian Ministry of Science and Technology, 108-1080229-0140, "Molecular interactions between bone and the immune System", principal investigator Ana Marusić.
- 2007-2012, Croatian Ministry of Science and Technology, 108-1080229-0142, Molecular mechanisms of bone effects of immune disorders, principal investigator Danka Grčević.
- 2004-2006, CRIGS 073828/Z/03/Z, The Wellcome Trust Collaborative Research Initiative Grant: “Interactions between bone and the immune system: A role for Fas-mediated apoptosis”; principal investigator Ana Marusić.
- 2002-2007, Croatian Ministry of Science and Technology, “Molecular Interactions between bone and bone marrow”, principal investigator Ana Marusić.
- 2004-2007, Ministry of Science and Technology, „Development of a diagnostic procedure: quantitative PCR for cytokines in small samples”, principal investigator Ana Marusić.



1999-2001, Bilateral cooperation between Croatia and Germany: “Glycosphingolipid phenotype of mice with immunological gene knockouts”, principal investigator Ana Marusic.

1997-2002, Ministry of Science and Technology programme „Neurobiology of the cognitive development and cognitive disorders”. “Inflammation in the central nervous system: the role of cytokines and chemokines”, principal investigator Ana Marusic.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2014-2019 Croatian Science Foundation, Molecular mediators of Fas-driven osteoresorption in arthritis, principal investigator N. Kovacic (budget 130.000,00 €)

2017-2022 Scientific Center of Excellence for Reproductive and Regenerative Medicine (Project “Reproductive and Regenerative Medicine – Exploration of New Platforms and Potentials”) Grant KK01.1.1.01.0008, funded by the European Union through the European Regional Development Fund, principal investigator S. Vukicevic.

2013-2017 Croatian Science Foundation, Characterization of osteoclast progenitor responses to arthritis, principal investigator Danka Grcevic, Croatian Science Foundation (budget 100.000,00 €)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ana Kozmar PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical methods in biomedical research

BIOGRAPHY

Education

2007-2008, visiting scholar Department of Biological Sciences, University of Notre Dame and Department of Microbiology and Immunology, Indiana University School of Medicine, USA

1999-2006, Specialist of medical biochemistry (3 years programme)

1991-2001, Postgraduate study at Faculty of Pharmacy and Biochemistry, University of Zagreb, M.sc. in medical biochemistry

1986-1991, Faculty of Pharmacy and Biochemistry, University of Zagreb, Study of medical biochemistry, dipl.ing.

1982-1986, Secondary Linguistic school/Classical Gimnasium in Zagreb

Work experience

2012- lecturer at University of Applied Health Sciences in Zagreb

2007-2008, visiting scholar, University of Notre Dame, South Bend, SAD

2006- Specialist of medical biochemistry, University Hospital Centre Zagreb, Department of Laboratory Diagnostics, Department of Laboratory Immunology, Autoimmunity division

1995-2006, clinical biochemist in the University Hospital Centre Zagreb, Department of Laboratory Diagnostics, Division of Immunology

1991-1995, clinical biochemist in the biochemical laboratory of the Clinical Hospital Centre Zagreb, University clinic for gynecology and obstetric

Teaching activities

Graduate studies: School of Medicine, University of Zagreb – associate at courses of Klinička biokemija, Clinical Biochemistry and Immunology

Faculty of Pharmacy and Biochemistry, University of Zagreb – associate at course Imunokemija

University of Applied Health Sciences in Zagreb – associate at course Imunologija

Postgraduate studies: School of Medicine, University of Zagreb – associate at courses Biokemijske metode u biomedicinskim istraživanjima; Laboratorijska imunodijagnostika i testovi in vivo; Alergologija i klinička imunologija

Faculty of Pharmacy and Biochemistry, University of Zagreb – associate at course Imunopatogeneza i imunodijagnostika autoimunih (autoagresivnih) bolesti

Master thesis

Antineutrofilna citoplazmatska autoantitijela u bolesnika s autoimunim hepatitisom. Faculty of Pharmacy and Biochemistry, University of Zagreb, Zagreb 2002.

Doctoral thesis

Mouse bone marrow derived macrophage response to apoptotic cells. Faculty of Pharmacy and Biochemistry, University of Zagreb, Zagreb 2011.

Scientific activities

Immunodiagnostics of systemic autoimmune diseases, antineutrophil cytoplasmic antibodies in autoimmune hepatitis, diagnosis of primary biliary cirrhosis, primary membrane glomerulonephritis

Publications

6 in CC, 3 in SCI, Co-authored four textbooks and several manuals

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: /

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Mandić JJ, Kozmar A, Kusačić-Kuna S, Jazbec A, Mandić K, Mrazovac D, Vukojević N. The levels of 12 cytokines and growth factors in tears: hyperthyreosis vs euthyreosis. *Graefes Arch Clin Exp Ophthalmol*. 2018 Jan 14. doi: 10.1007/s00417-017-3892-6. [Epub ahead of print]
2. Kuna AT, Đerek L, Kozmar A, Drvar V. Current practice in laboratory diagnostics of autoimmune diseases in Croatia. Survey of the Working group for laboratory diagnostics of autoimmune diseases of the Croatian Society of Medical Biochemistry and Laboratory Medicine. *Biochem Med* 2016;26(3):376-94.
3. Hadzibegović AD, Danić D, Prgomet D, Tićac R, Kozmar A. Analysis of saliva pepsin level in patients with tracheoesophageal fistula and voice prosthesis complications. *Coll Antropol*. 2012;36 Suppl 2:93-7.
4. Bradamante M, Turčić P, Stambuk N, Konjevoda P, Aralica G, Alerić I, Kozmar A. Cytoprotective effects of β -melanocortin in the rat gastrointestinal tract. *Molecules*. 2012;17:11680-92..
5. Žura M, Kozmar A, Šakić K, Malenica B, Hrgovic Z. Effect of spinal and general anesthesia on serum concentration of pro-inflammatory and anti-inflammatory cytokines. *Immunobiology*. 2012;217(6):622-7.
6. Kozmar A, Grenlee-Wacker MC, Bohlsen SS. Macrophage response to apoptotic cells varies with the apoptotic trigger and is not altered by a deficiency in LRP expression. *J Innate Immunity* 2010;2:248-59.
7. Kozmar A, Rudolf M, Ostojić R, Krznarić Ž, Vucelić B, Malenica B. Antineutrophil cytoplasmic antibodies (ANCA) target antigens in patients with autoimmune hepatitis. *Current Studies of Biotechnology-volume IV-Immunomodulation*; 2005.
8. Klinička kemija i molekularna dijagnostika u kliničkoj praksi, ur. Jadranka Sertić. Zagreb: Medicinska naklada; 2015. Poglavlje 23. Laboratorijska imunodijagnostika autoupalnih i autoimunskih bolesti – Branko Malenica i Ana Kozmar
9. Pedijatrijska reumatologija, ur. Marija Jelušić, Ivan Malčić. Zagreb: Medicinska naklada; 2014. Poglavlje 7. Laboratorijska dijagnostika autoinflamatornih i autoimunskih (reumatskih) bolesti - Branko Malenica i Ana Kozmar
10. Lung in non-pulmonary and systemic disease, ur. Tatjana Peroš-Golubičić. Zagreb: Medicinska naklada; 2013. Poglavlje 30. Clinical and pathophysiological significance of antineutrophil cytoplasmic autoantibodies (ANCA) in vasculitis - Ana Kozmar i Branko Malenica
11. Malenica B, Rudolf M, Kozmar A, Batinić D. In vitro laboratorijska dijagnostika alergijskih bolesti. In: Alergijske i imunosne bolesti. Lipozenčić J, ed. Zagreb: Medicinska naklada; 2011.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS



1. Mandić JJ, Kozmar A, Kusačić-Kuna S, Jazbec A, Mandić K, Mrazovac D, Vukojević N. The levels of 12 cytokines and growth factors in tears: hyperthyreosis vs euthyreosis. *Graefes Arch Clin Exp Ophthalmol* 2018;256(4):845-852.
2. Kuna AT, Đerek L, Kozmar A, Drvar V. Current practice in laboratory diagnostics of autoimmune diseases in Croatia. Survey of the Working group for laboratory diagnostics of autoimmune diseases of the Croatian Society of Medical Biochemistry and Laboratory Medicine. *Biochem Med* 2016;26(3):376-94.
3. Klinička kemija i molekularna dijagnostika u kliničkoj praksi, ur. Jadranka Sertić. Zagreb: Medicinska naklada; 2015. Poglavlje 23. Laboratorijska imunodijagnostika autoupalnih i autoimunskih bolesti – Branko Malenica i Ana Kozmar
4. Pedijatrijska reumatologija, ur. Marija Jelušić, Ivan Malčić. Zagreb: Medicinska naklada; 2014. Poglavlje 7. Laboratorijska dijagnostika autoinflamatornih i autoimunskih (reumatskih) bolesti - Branko Malenica i Ana Kozmar

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Regulacijski limfociti u sistemskim autoimunim bolestima. Project within the program “Epidemiološka i patogenetska obilježja autoimunih bolesti u Hrvatskoj”, project leader: prof.dr. Branko Malenica, project code: 214-1081874-1068 MZOŠ

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

/

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Saša Kralik, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Clinical Hospital Centre Zagreb,
Department of Laboratory Diagnostics

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: "Physiology and biochemistry of uterus in pregnancy and labour"

BIOGRAPHY

Current position

University Clinical Hospital Centre Zagreb, Department of Laboratory Diagnostics - head of the Unit for Laboratory Endocrinology

Education

2011: DSc in Medical biochemistry, Faculty of Pharmacy and Biochemistry, University of Zagreb

1995: Msc in Medical biochemistry, Faculty of Pharmacy and Biochemistry, University of Zagreb

1988: BSc in Medical biochemistry, Faculty of Pharmacy and Biochemistry, University of Zagreb

Teaching activity

Physiology and biochemistry of the uterus during pregnancy and delivery (postgraduate course in Biomedicine and Health Sciences, University of Zagreb, School of Medicine), assistant

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2011

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Pavicic Baldani D, Skrgatic L, Kasum M, Zlopasa G, Kralik Oguic S, Herman M. Altered leptin, adiponectin, resistin and ghrelin secretion may represent an intrinsic polycystic ovary syndrome abnormality. *Gynecological Endocrinology* 2019; 35:

Dumic M, Duspara V, Grubic Z, Kralik Oguic S, Skrabic V, Kusec V. Testicular adrenal rest tumors in congenital adrenal hyperplasia-cross-sectional study of 51 Croatian male patients. *Eur J Ped* 2017 176(10):1393-1404.

Mikolic A, Piasek M, Sulimanec Grgec A, Varnai V, Stasenکو S, Kralik Oguic S. Oral cadmium exposure during rat pregnancy: Assessment of transplacental micronutrient transport and steroidogenesis at term. *JAT* 2015 (35); 508-519.

Pavicic Baldani D, Skrgatic L, Ziva Cerne J, Kralik Oguic S, Gersak BM, Gersak K. Assotiation between serum levels and pentanucleotide polymorphism in the sex hormone binding globulin gene and cardiovascular risk factors in females with polycystic ovary syndrome. *Mol Med Reports* 2014 (10); 3941-3947.

Berberović E, Ivanišević M, Juras J, Horvatiček M, Kralik-Oguić S, Đelmiš J. (2014) Utjecaj glukoze i adipokina na porođajnu težinu kod trudnica sa šećernom bolesti tipa 1. // *Gynaecol perinatol.* 23; 116-120.

Berberović E, Ivanišević M, Juras J, Horvatiček M, Kralik S, Berberović B, Đelmiš J. (2013) Leptin, adiponektin, inzulin i glukoza u trudnica sa šećernom bolesti tipa 1. *Gynaecol perinatol.* 22; 93-97.

Pavičić Baldani D, Šprem Goldštajn M, Škrgatić L, Zlopaša G, Kralik Oguić S, Čanić T, Pifek AN. Clinical and biochemical characteristics of polycystic ovarian syndrome in Croatian population. *Coll Antropol* 2012;4: 1413-1418.

Skrablin S, Lovric H, Banovic V, Kralik S, Dijakovic A, Kalafatic D. Maternal plasma interleukin-6, interleukin-1beta and C-reactive protein as indicators of tocolysis failure and neonatal outcome after preterm delivery. *J Matern Fetal Neonatal Med* 2007; 20(4):335-41.

Janković Đ, Bernt T, Latin V, Kralik S, Viceić M, Veček N. Secretory immunoglobulin A in the amniotic fluid and placenta. *Period Biol* 1992;94(1):41-45.

Vučić Lovrenčić M, Honović L, Kralik S, Matica J, Prašek M, Pape-Medvidović E, Ivanišević M, Đelmiš J. Redefinition of gestational diabetes mellitus: implications for laboratory practice in Croatia. *Biochemia Medica* 2013;23(1):7-11.

Tišlarić-Medenjak D, Zec I, Košec V, Ivičević-Bakulić T, Kuna K, Herman R, Butorac D, Bolanča I, Ujević M, Radončić E, Boras-Slivar S, Šemnički N, Tonković-Đurišević I, Lovrić B, Kralik-Oguić S. Primjena kombiniranog ultrazvučno-biokemijskog probira fetalnih trisomija u prvom i dvostrukog biokemijskog probira u drugom tromjesečju u neugroženim trudnoćama. *Gynaecologia et perinatologia : journal for gynaecology, perinatology, reproductive medicine and ultrasonic diagnostics*. 18 (2009) , 3; 123-131 (članak, znanstveni). Indeksirano u: EMBASE (Excerpta Medica)

Tišlarić-Medenjak D, Košec V, Kos M, Latin V, Harni V, Lovrić B, Tučkar N, Sabolović-Rudman S, Herman R, Končar M, Duić Ž, Podobnik M, Ljubojević-Grgec D, Soljačić-Vraneš H, Tonković-Đurišević I, Gudelj M, Marton U, Lončar M, Rajhvajn B, Majnarić D, Hafner T, Kralik-Oguić S, Kovačević Lj, Franičević F, El-Kawam W, Stipoljev F. Kombinirani ultrazvučno-biokemijski probir fetalnih aneuploidija od 10. – 14. tjedna trudnoće: prvi rezultati primjene testa u Hrvatskoj. *Gynaecologia et perinatologia : journal for gynaecology, perinatology, reproductive medicine and ultrasonic diagnostics*. 17 (2008) , 4; 195-200.

Ivanišević M, Berberović E, Horvatiček M, Kralik-Oguić S, Đelmiš J. (2014) THE RELATION OF GLUCOSE AND ADIPOKINES TO BIRTH WEIGHT IN TYPE 1 DIABETIC PREGNANCY // XXIV European Congress of Perinatal Medicine

Pavicic Baldani D, Skrgatic L, Zlopasa G, Kralik Oguic S, Gersak K, Simunic V. Disturbed serum adipokines level in normal weight, normoinsulinemic four phenotypes of polycystic ovary syndrome. *Hum Reprod* 2014 (29) Suppl 1.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Pavicic Baldani D, Skrgatic L, Kasum M, Zlopasa G, Kralik Oguic S, Herman M. Altered leptin, adiponectin, resistin and ghrelin secretion may represent an intrinsic polycystic ovary syndrome abnormality. *Gynecological Endocrinology* 2019; 35:

Dumic M, Duspara V, Grubic Z, Kralik Oguic S, Skrabic V, Kusec V. Testicular adrenal rest tumors in congenital adrenal hyperplasia-cross-sectional study of 51 Croatian male patients. *Eur J Ped* 2017 176(10):1393-1404.

Mikolic A, Piasek M, Sulimanec Grgec A, Varnai V, Stasenکو S, Kralik Oguić S. Oral cadmium exposure during rat pregnancy: Assessment of transplacental micronutrient transport and steroidogenesis at term. *JAT* 2015 (35); 508-519.

Pavicic Baldani D, Skrgatic L, Ziva Cerne J, Kralik Oguic S, Gersak BM, Gersak K. Assotiation between serum levels and pentanucleotide polymorphism in the sex hormone binding globulin gene and cardiovascular risk factors in females with polycystic ovary syndrome. *Mol Med Reports* 2014 (10); 3941-3947.

Berberović E, Ivanišević M, Juras J, Horvatiček M, Kralik-Oguić S, Đelmiš J. (2014) Utjecaj glukoze i adipokina na porođajnu težinu kod trudnica sa šećernom bolesti tipa 1. // Gynaecol perinatol. 23; 116-120.

Berberović E, Ivanišević M, Juras J, Horvatiček M, Kralik S, Berberović B, Đelmiš J. (2013) Leptin, adiponektin, inzulin i glukoza u trudnica sa šećernom bolesti tipa 1. Gynaecol perinatol. 22; 93-97.

Ivanišević M, Berberović E, Horvatiček M, Kralik-Oguić S, Đelmiš J. (2014) THE RELATION OF GLUCOSE AND ADIPOKINES TO BIRTH WEIGHT IN TYPE 1 DIABETIC PREGNANCY // XXIV European Congress of Perinatal Medicine

Pavicic Baldani D, Skrgatic L, Zlopasa G, Kralik Oguic S, Gersak K, Simunic V. Disturbed serum adipokines level in normal weight, normoinsulinemic four phenotypes of polycystic ovary syndrome. Hum Reprod 2014 (29) Suppl 1.

Book chapters:

Kralik-Oguić S, Vučić Lovrenčić M. Laboratorijska dijagnostika gestacijskog dijabetesa - poslijeanalitička faza // Gestacijski dijabetes : izazovi novih dijagnostičkih kriterija: trajno usavršavanje medicinskih biokemičara: priručnik / Vučić Lovrenčić, Marijana (ur.).

Zagreb: Medicinska naklada : Hrvatska komora medicinskih biokemičara, 2013. Str. 59-64.

Textbook:

Kralik Oguić S, Kušec V. Primjena hormonskih pretraga u kliničkoj praksi. 347-358. u Sertić J i sur. Klinička kemija i molekularna dijagnostika u kliničkoj praksi. 2015. Medicinska naklada, Zagreb

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2009-2013: Diabetes and Metabolic Syndrome After Previous Gestational Diabetes (108-1080401-0385, leader: M. Ivanišević)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2009-2013: Diabetes and Metabolic Syndrome After Previous Gestational Diabetes (108-1080401-0385, leader: M. Ivanišević)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist. Prof. Magdalena Krbot Skorić, PhD, MSc EE

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Center Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Electrophysiological methods in medical research, Medical-informatics methods

BIOGRAPHY

Magdalena Krbot Skorić was born in Varaždin in 1984. She graduated from the Faculty of Electrical Engineering and Computing, University of Zagreb in 2008, and in 2015 she received a PhD title at the same Faculty. Since 2012 she has worked as a medical engineer at the Department of Neurology, University Hospital Centre Zagreb, where she is a head of the Laboratory for Cognitive and Experimental Neurophysiology. She is actively involved in work with patients and performs diagnostic methods in her daily clinical routine (different modalities of evoked potentials, electroencephalography and polysomnography, preoperative invasive EEG monitoring and functional brain mapping). She is involved in scientific projects, whose results are presented in numerous national and international scientific journals. She is a reviewer for internationally recognized journals. In 2018 she became an assistant professor at the Faculty of Electrical Engineering and Computing at the University of Zagreb, and a lecturer at the graduate and postgraduate study at the School of Medicine, University of Zagreb. Magdalena Krbot Skorić is a member of the Croatian Society for Medical and Biological Engineering, the Croatian Medical Association, member of the Croatian Federation for EEG and Clinical Neurophysiology of the Croatian Medical Association and chairwoman of Engineering in Medicine and Biology chapter of Croatian section of IEEE.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 09.04.2018.

Assistant Professor at the Faculty of Electrical Engineering and Computing, University of Zagreb

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Krbot Skorić M, Crnošija L, Adamec I, Barun B, Gabelić T, Smoljo T, Stanić I, Pavičić T, Pavlović I, Drulović J, Pekmezović T, Habek M. Autonomic symptom burden is an independent contributor to multiple sclerosis related fatigue. Clin Auton Res 2018, doi: 10.1007/s10286-018-0563-6.

Krbot Skoric M, Crnosija L, Gabelic T, Adamec I, Habek M. Relationship Between Sensory Dysfunction and Walking Speed in Patients With Clinically Isolated Syndrome. J Clin Neurophysiol 2018;35(1):65-70.

Habek M, Adamec I, Barun B, Crnosija L, Gabelic T, Krbot Skoric M. Clinical Neurophysiology of Multiple Sclerosis. Adv Exp Med Biol 2017;958:129-139.

Skoric MK, Adamec I, Pavicic T, Pavlovic I, Ruska B, Crnosija L, Habek M. Vestibular evoked myogenic potentials and video head impulse test in patients with vertigo, dizziness and imbalance. J Clin Neurosci 2017;39:216-220.

M. Krbot Skorić, I. Adamec, L. Crnošija, T. Gabelić, B. Barun, I. Zadro, S. Butković Soldo, M. Habek, “Tongue somatosensory evoked potentials reflect midbrain involvement in patients with clinically isolated syndrome”, Croatian Medical Journal, 2016 Dec 31;57(6):558-565

Gabelic T, Krbot Skoric M, Adamec I, Barun B, Zadro I, Habek M. The vestibular evoked myogenic potentials (VEMP) score: a promising tool for evaluation of brainstem involvement in multiple sclerosis. Eur J Neurol 2015;22:261-9, e21.

M. Krbot Skorić, I. Adamec, A.B. Jerbić, T. Gabelić, S. Hajnšek, and M. Habek, “Electroencephalographic Response to Different Odors in Healthy Individuals: A Promising Tool for Objective Assessment of Olfactory Disorders“, *Clinical EEG and Neuroscience*, Nov 2014, doi:10.1177/1550059414545649

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Habek M, Mutak T, Nevajdić B, Pucić D, Crnošija L, Krbot Skorić M. Adrenergic hyperactivity: a missing link between multiple sclerosis and cardiovascular comorbidities? *Acta Neurol Belg* 2018, doi: 10.1007/s13760-018-1051-4.

Ruška B, Pavičić T, Pavlović I, Junaković A, Adamec I, Crnošija L, Krbot Skorić M, Habek M. Performance of the COMPASS-31 questionnaire with regard to autonomic nervous system testing results and medication use: a prospective study in a real-life setting. *Neurol Sci* 2018, doi: 10.1007/s10072-018-3542-8

Habek M, Pavičić T, Ruška B, Pavlović I, Gabelić T, Barun B, Adamec I, Crnošija L, Krbot Skorić M. Establishing the diagnosis of multiple sclerosis in Croatian patients with clinically isolated syndrome: 2010 versus 2017 McDonald criteria. *Mult Scler Relat Disord* 2018;25:99-103.

Adamec I, Crnosija L, Junakovic A, Krbot Skoric M, Habek M. Progressive multiple sclerosis patients have a higher burden of autonomic dysfunction compared to relapsing remitting phenotype. *Clin Neurophysiol* 2018;129(8):1588-1594.

Crnosija L, Krbot Skoric M, Lovric M, Junakovic A, Miletic V, Alfired RS, Pavelic A, Adamec I, Habek M. Differences in neurohumoral and hemodynamic response to prolonged head-up tilt between patients with high and normal standing norepinephrine forms of postural orthostatic tachycardia syndrome. *Auton Neurosci* 2017;205:110-114.

J. Drušević, A. Gavrilović, L. Crnošija, D. Kisić-Tepavčević, M. Krbot Skorić, I. Ivanović, I. Adamec, I. Dujmović, A. Junaković, G. Marić, V. Martinović, T. Pekmezović, M. Habek, “Validation and cross-cultural adaptation of the COMPASS-31 in Croatian and Serbian patients with multiple sclerosis“, *Croatian Medical Journal*, 2017 Oct 31;58(5):342-348.

A. Pavelić, M. Krbot Skorić, L. Crnošija, M. Habek, “Postprandial hypotension in neurological disorders: systematic review and meta-analysis“, *Clinical Autonomic Research*, 2017 Aug;27(4):263-271. doi: 10.1007/s10286-017-0440-8. Epub 2017 Jun 24

Habek M, Krbot Skoric M, Crnosija L, Gabelic T, Barun B, Adamec I. Postural Orthostatic Tachycardia Predicts Early Conversion to Multiple Sclerosis after Clinically Isolated Syndrome. *Eur Neurol* 2017;77(5-6):253-257.

Habek M, Krbot Skoric M, Crnosija L, Adamec I. Brainstem dysfunction protects against syncope in multiple sclerosis. *J Neurol Sci* 2015;357:69-74.

Gabelic T, Krbot Skoric M, Adamec I, Barun B, Zadro I, Habek M. The vestibular evoked myogenic potentials (VEMP) score: a promising tool for evaluation of brainstem involvement in multiple sclerosis. *Eur J Neurol* 2015;22:261-9, e21.

Skoric MK, Adamec I, Madaric VN, Habek M. Evaluation of brainstem involvement in multiple sclerosis. *Can J Neurol Sci* 2014;41:346-9.

Adamec I, Grahovac G, Krbot Skoric M, Chudy D, Hajnsek S, Habek M. Tongue somatosensory-evoked potentials in microvascular decompression treated trigeminal neuralgia. *Acta Neurol Belg* 2014;114:55-8.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



2014.-2017. Brainstem Evoked Potentials Score and Composite Autonomic Scoring Scale as a Predictors of Disease Progression in Clinically Isolated Syndrome, Croatian Science Foundation; UIP-11-2013-2622, University of Zagreb, School of Medicine, researcher

2014.-2017. Adult Language Processing, Croatian Science Foundation; UIP-11-2013-2421, University of Zagreb, Faculty of Education and Rehabilitation Sciences, researcher

2008.-2014. Research of the Neurophysiology of the Movement using the Evoked Potentials Method, Ministry of Science and Education Republic of Croatia, no. 312-0362979- 3258, research assistant

2008.-2011. Vagueness, Approximation, and Granularity, EuroCORES program LogICCC European Scientific foundation, research assistant

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2014.-2017. Brainstem Evoked Potentials Score and Composite Autonomic Scoring Scale as a Predictors of Disease Progression in Clinically Isolated Syndrome, Croatian Science Foundation; UIP-11-2013-2622, University of Zagreb, School of Medicine, researcher

2014.-2017. Adult Language Processing, Croatian Science Foundation; UIP-11-2013-2421, University of Zagreb, Faculty of Education and Rehabilitation Sciences, researcher

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Dalibor Krpan, professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: General Hospital Sv. Duh

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Understanding bone metabolism – basic science in clinical practice

BIOGRAPHY

Affiliation: Physician, Specialist-Consultant in Internal Medicine, Endocrinology and Nephrology, Primarius, Head of the Center for mineral metabolism and calcified tissue disease, General Hospital "Sveti Duh", Internal Clinic Zagreb, Professor on Medical School of Osijek University, Head of the Polyclinic K-center, Zagreb

Medical Licence No. 4443

Education: 1973. -1978: Medical School, University of Zagreb

1979. -1981. Postgraduate study in Biomedicine, University of Zagreb

1982. -1986. Fellowship (Specialization) in Internal Medicine

1987-1988. Specialization in Nephrology and mineral bone metabolism, Hospital Necker, Paris, France.

1995.and 1998. Several visits to Dartmouth Hitchcock Medical Center (DHMC),New Hampshire, USA, as a coordinator for nephrology in Partnership project; Education in the health sciences, Dartmouth-Hitchcock Medical Center-The Center for Continuing Education in Health Sciences, Dartmouth University, New Hampshire, USA

Academic Degrees: 1978. M.D., 1985. M.Sc., 1991. Ph.D.

Professional Appointments:

1986. Specialist-Consultant in Internal Medicine and Nephrology

1988. -Present Founder and Chief of the Clinical laboratory for metabolic bone disease

1992. -96. Principal investigator of the scientific project "Influence of mineral metabolism disturbance in uremia on heart morphology and function"

1994. – 1998. Editor in Chief of "Dialyze Journal, Croatian edition" and member of editorial board of "Dialyze Journal"-German edition and Czech edition,

1995. - 98. Coordinator for nephrology in the partnership project with Dartmouth-Hitchcock Medical Center, New Hampshire, USA.

1997. -Present Primarius

1999. -Present Head of the Center for mineral metabolism and calcified tissue disease, General Hospital "Sveti Duh", Internal Clinic Zagreb,

2000. – 2005. Head of the General Hospital "Sveti Duh", Zagreb

2006. Professor on Medical School of Osijek University

2006. – present Head of the Polyclinic K-center, Zagreb

Main Research Topics: Osteoporosis, Renal osteodystrophy, Bone metabolic disease,

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2006

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Goldstein SR, Neven P, Cummings S, Colgan T, Runowicz CD, Krpan D, Proulx J, Johnson M, Thompson D, Thompson J, Sriram U. Postmenopausal Evaluation and Risk Reduction With Lasofoxifene (PEARL) trial: 5-year gynecological outcomes. *Menopause*. 2011 Jan;18(1):17-22.

1. Galic E, Krpan D, Mirat J, Kusec V. Diversity of bone cell activity as a histomorphometric feature of idiopathic osteoporosis in men. *Aging Male*. 2010 Mar;13(1):18-24.

2. Lozo P, Krpan D, Krvavica A, Vukelić Baturić T, Fistonić I, Kusec V. Bone histology in postmenopausal osteoporosis--variations in cellular activity. *Acta Med Croatica*. 2004;58(1):5-11. Croatian.

3. Osteosclerosis and periosteal new bone formation during indinavir therapy. Begovac J, Bayer K, Krpan D, Kusec V. *AIDS*. 2002 Mar 29;16(5):803-4.

4. Patients with analgetic nephropathy on chronic hemodialysis have a high incidence of severe secondary hyperparathyroidism. Pecovnik Balon B, Krpan D. *Clin Nephrol*. 1998 Dec;50(6):347-51.

5. Oxalosis associated with aluminum bone disease: a new type of mixed renal osteodystrophy. Krpan D, Milutinovic S, Nikolic V, Tomicic D, Lajtman Z, Prot F.

6. *Nephron*. 1994;66(1):99-101.

7. Measurement of blood flow through AV-fistulae by means of Doppler sonography in regularly haemodialysed patients. Krpan D, Demarin V, Prot F, Milutinovic S, Molnar V, Milutinovic E. *Int J Artif Organs*. 1991 Feb;14(2):78-82.

Clinical use of photon absorptiometry in the follow-up of changes in bone mineralization. Krpan D, Milutinović S, Molnar V, Pavlović D. *Lijec Vjesn*. 1988 May;110(5):156-9. Croatian.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Goldstein SR, Neven P, Cummings S, Colgan T, Runowicz CD, Krpan D, Proulx J, Johnson M, Thompson D, Thompson J, Sriram U. Postmenopausal Evaluation and Risk Reduction With Lasofoxifene (PEARL) trial: 5-year gynecological outcomes. *Menopause*. 2011 Jan;18(1):17-22.

8. Galic E, Krpan D, Mirat J, Kusec V. Diversity of bone cell activity as a histomorphometric feature of idiopathic osteoporosis in men. *Aging Male*. 2010 Mar;13(1):18-24.

9. Lozo P, Krpan D, Krvavica A, Vukelić Baturić T, Fistonić I, Kusec V. Bone histology in postmenopausal osteoporosis--variations in cellular activity. *Acta Med Croatica*. 2004;58(1):5-11. Croatian.

10. Osteosclerosis and periosteal new bone formation during indinavir therapy. Begovac J, Bayer K, Krpan D, Kusec V. *AIDS*. 2002 Mar 29;16(5):803-4.

11. Patients with analgetic nephropathy on chronic hemodialysis have a high incidence of severe secondary hyperparathyroidism. Pecovnik Balon B, Krpan D. *Clin Nephrol*. 1998 Dec;50(6):347-51.

12. Oxalosis associated with aluminum bone disease: a new type of mixed renal osteodystrophy. Krpan D, Milutinovic S, Nikolic V, Tomicic D, Lajtman Z, Prot F.

13. *Nephron*. 1994;66(1):99-101.



14. Measurement of blood flow through AV-fistulae by means of Doppler sonography in regularly haemodialysed patients. Krpan D, Demarin V, Prot F, Milutinovic S, Molnar V, Milutinovic E. Int J Artif Organs. 1991 Feb;14(2):78-82.

Clinical use of photon absorptiometry in the follow-up of changes in bone mineralization. Krpan D, Milutinović S, Molnar V, Pavlović D. Lijec Vjesn. 1988 May;110(5):156-9. Croatian.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Željka Krsnik, PhD, Assistant Professor of Neuroscience

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Neurobiology of aging; Human developmental neurobiology

BIOGRAPHY

Željka Krsnik is appointed as an Assistant Professor of Neuroscience at the Department of Neuroscience University of Zagreb. She got Master and PhD degree in Molecular and Cellular Biology at the Faculty of Natural Sciences University of Zagreb. As a PhD student, she spent several months of education at University of Freiburg, Germany and San Raffaele Institute in Milan, Italy. She was on a postdoc at Yale University from 2006-2011 where she worked on several NIH and NIMH grants and was a member of BrainSpan Consortium. Currently, she is a Head of the Laboratory for neurogenomics and in situ hybridization and Laboratory for Digitalization of the Zagreb Brain Collection, as well as Assistant Director of CIBR. In 2013 she was awarded with the International Brain Research Organization (IBRO) Return Home Fellowship Award. In 2018 she was appointed as a Chair of the IBRO Alumni Committee and currently she chairs Young IBRO Committee and is a member of FENS Alba Steering Committee. She is a member of the panel at the Croatian Scientific Foundation and Committee member at the Croatian Academy of Sciences and Arts for “Neuroscience and Brain Disease”.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

2013 Assistant Professor of Neuroscience

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Krsnik Ž, Popovitchenko T, Rasin MR (2019) Transcriptional and Post-Transcriptional Mechanisms of Neuronal Migration // Comprehensive Developmental Neuroscience: Cellular Migration and formation of neuronal connections, 2nd edition, Vol 1, Rubenstein, JLR and Rakic, P (ed), Elsevier (in press)

Kostović I, Išasegi IŽ, **Krsnik Ž** (2019) Neurogenetic processes in the lateral telencephalon during intrauterine development of the human embryo // Embryo as a person and as a patient. Kurjak, A. and Chervenak, F (ed.) Jaypee Brothers, Medical Publishers. New Delhi-Panama-London (in press)

Kostović I, Išasegi IŽ, **Krsnik Ž** (2018) Sublaminar organization of the human subplate: developmental changes in the distribution of neurons, glia, growing axons and extracellular matrix. J Anat. 2018 Dec 13. doi: 10.1111/joa.12920.

Li M, et al (2018) Integrative functional genomic analysis of human brain development and neuropsychiatric risks. Science. 362(6420). pii: eaat7615. doi: 10.1126/science.aat7615.

Išasegi IŽ, Radoš M, **Krsnik Ž**, Radoš M, Benjak V, Kostović I (2018) Interactive histogenesis of the axonal strata and proliferative zones of the human fetal cerebral wall. Brain Structure and Function doi: 10.1007/s00429-018-1721-2.

Krsnik Ž*, Majić V, Vasung, Huang H, Kostović I (2017) Growth of thalamocortical fibers to somatosensory cortex in the human fetal brain. Front. Neurosci. 11:233. doi: 10.3389/fnins.2017.00233 *corresponding author

Krsnik Ž* & Sedmak G. (2017) Gene expression in the frontal lobe // Executive Functions in Health and Disease, Elkhonon Goldberg (ur.) Elsevier. Academic Press. London, str. 42-69 *corresponding author

Duque A, **Krsnik Ž**, Kostović I, Rakic (2016) Secondary expansion of the transient subplate zone in the developing cerebrum of human and nonhuman primates. PNAS USA 113(35):9892-7.

Kang H., Kawasawa Y., Cheng F., Zhu Y., Xu, X., Li M., Sousa A., Pletikos M., Meyer K., Sedmak G., Guennel T., Shin Y., Johnson M.B., **Krsnik Z.**, Mayer S., Fertuzinhos S., Umlauf S., Lisgo S.N., Vortmeyer A., Weinberger D., Mane, S., Hyde T.M., Huttner A., Reimers M., Kleinmann J., Sestan N. (2011): Spatiotemporal transcriptome of the human brain. Nature 478(7370):483-9.

Johnson MB, Kawasawa YI, Mason CE, **Krsnik Z**, Coppola G, Bogdanovic D, Geschwind DH, Mane SM, State M, Sestan N (2009) Genetic complexity of human brain development and evolution revealed through global exon usage analysis. Neuron 62: 494-509.

Fertuzinhos S, **Krsnik Z**, Kawasawa YI, Rasin MR, Kwan KY, Chen JG, Judas M, Hayashi M., Sestan N (2009) Selective loss of cortical interneurons in human holoprosencephaly with striatal hypoplasia. Cerebral Cortex 19: 2196-207

Stillman A*, **Krsnik Z***, Sun J, Rasin MR, State M, Sestan N, Louvi A (2009) Developmentally regulated and evolutionarily conserved expression of SLITRK1 in brain circuits implicated in Tourette syndrome. Journal of Comparative Neurology 513: 21- 37 ***equal contribution**

Kwan KY, Lam MM, **Krsnik Z**, Kawasawa YI, Lefebvre V, Sestan N. (2008) SOX5 postmitotically regulates migration, postmigratory differentiation, and projections of subplate and deep-layer neocortical neurons. PNAS USA 105: 16021-6

Simic G, Lucassen PJ, **Krsnik Z**, Kruslin B, Kostovic I, Winblad B, Bogdanovic N (2000) nNOS expression in reactive astrocytes correlates with increased cell death related DNA damage in the hippocampus and entorhinal cortex in Alzheimer's disease. Experimental Neurology 165: 12-26

Simic G, Seso-Simic D, Lucassen PJ, Islam A, **Krsnik Z**, Cvilko A, Jelasic D, Barisic N, Winblad B, Kostovic I, Kruslin B (2000) Ultrastructural analysis and TUNEL demonstrate motor neuron apoptosis in Werdnig-Hoffmann disease. Journal of Neuropathology and Experimental Neurology 59: 398-407

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Krsnik Ž, Popovitchenko T, Rasin MR (2019) Transcriptional and Post-Transcriptional Mechanisms of Neuronal Migration // Comprehensive Developmental Neuroscience: Cellular Migration and formation of neuronal connections, 2nd edition, Vol 1, Rubenstein, JLR and Rakic, P (ur.), Elsevier (in press)

Kostović I, Išasegi IŽ, **Krsnik Ž** (2019) Neurogenetic processes in the lateral telencephalon during intrauterine development of the human embryo // EMBRYO AS A PERSON AND AS A PATIENT Kurjak A., and Chervenak F (ur.) Jaypee Brothers, Medical Publishers. New Delhi-Panama-London (in press)

Kostović I, Išasegi IŽ, **Krsnik Ž** (2018) Sublaminar organization of the human subplate: developmental changes in the distribution of neurons, glia, growing axons and extracellular matrix. J Anat. 2018 Dec 13. doi: 10.1111/joa.12920.

Li M, et al (2018) Integrative functional genomic analysis of human brain development and neuropsychiatric risks. Science. 362(6420). pii: eaat7615. doi: 10.1126/science.aat7615.

Hrbač P, Bosak A, Vukšić M, Judaš M, Kostović I, **Krsnik Ž** (2018) The Zagreb Collection of human brains: entering the virtual world. Croat Med J. 31;59(6):283-287.

Žunić Išasegi I, Radoš M, **Krsnik Ž**, Radoš M, Benjak V, Kostović I (2018) Interactive histogenesis of the axonal strata and proliferative zones of the human fetal cerebral wall. Brain Structure and Function doi: 10.1007/s00429-018-1721-2.

Kafka A, Bačić M, Tomas D, Žarković K, Bukovac A, Njirić N, Mrak G, **Krsnik Ž**, Pećina-Šlaus N. Different behaviour of DVL1, DVL2, DVL3 in astrocytoma malignancy grades and their association to TCF1 and LEF1 upregulation. J Cell Mol Med. 2019 Jan;23(1):641-655. doi: 10.1111/jcmm.13969.

Krsnik Ž*, Majić V, Vasung, Huang H, Kostović I (2017) Growth of thalamocortical fibers to somatosensory cortex in the human fetal brain. Front. Neurosci. 11:233. doi: 10.3389/fnins.2017.00233 *dopisni autor

Krsnik Ž* & Sedmak G. (2017) Gene expression in the frontal lobe // Executive Functions in Health and Disease, Elkhonon Goldberg (ur.) Elsevier. Academic Press. London, str. 42-69 *dopisni autor

Svob Strac, D; Samardzic, J; Erhardt, J; **Krsnik, Ž**; Martinovic, J; Drakulic, D; Tudor, L; Nikolac Perkovic, M; Nedic Erjavec, G; Pivac, N. (2017) In Vitro and In Vivo Studies of Prolonged DHEA(S) Treatment // Advances in Medicine and Biology / Berhardt, Leon V. (ur.). New York: NOVA Science Publishers, 2017. str. 69-98

Duque A, **Krsnik Ž**, Kostović I, Rakic (2016) Secondary expansion of the transient subplate zone in the developing cerebrum of human and nonhuman primates. PNAS USA 113(35):9892-7.

Pećina-Šlaus N, Kafka A, Varošaneć AM, Marković L, **Krsnik Ž**, Njirić N, Mrak G. (2016) Expression patterns of Wnt signaling component, secreted frizzled-related protein 3 in astrocytoma and glioblastoma. Mol Med Rep 13(5):4245-4251

Svob Strac D, Vlajinac J, Samardzic J, Erhardt J, **Krsnik Ž**. (2016) Effects of acute and chronic administration of neurosteroid dehydroepiandrosterone sulfate on neuronal excitability in mice. Drug Des Devel Ther. 10:1201-15.

Rincic M, Rados M, **Krsnik Ž**, Gotovac K, Borovecki F, Liehr T, Brecevic L. (2016) Complex intrachromosomal rearrangement in 1q leading to 1q32.2 microdeletion: a potential role of SRGAP2 in the gyrification of cerebral cortex. Mol Cytogenet. 9:19. doi: 10.1186/s13039-016-0221-4.

Sobočanec S, Filić V, Matovina M, Majhen D, Šafranko ŽM, Hadžija MP, **Krsnik Ž**, Kurilj AG, Šarić A, Abramić M, Balog T. (2016) Prominent role of exopeptidase DPP III in estrogen-mediated protection against hyperoxia in vivo. Redox Biol. 8:149-159.

Brecevic L, Rincic M, **Krsnik Ž**, Sedmak G, Hamid AB, Kosyakova N, Galic I, Borovecki F, Liehr T, (2015) New microdeletion / microduplication region at chromosome 1p21 is associated with intellectual disability, severe speech delay/deficit and autism disorder spectrum-like behavior. Translational Neuroscience 6(1):59-86

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

International grants:

“Transcriptional Atlas Of Human Brain Development”: National Institute of Mental Health (NIH/NIMH) 2009/11

“Development And Organization Of The Human Frontal Cortex”: National Institute of Mental Health (NIMH) 2009

“Molecular Control Of Cortical Projection Neuron Identity And Connectivity”: National Institute of Neurological Disorders and Stroke (NINDS) 2009

“Neurobiology Of Speech And Language Development”: National Institute of Neurological Disorders and Stroke (NINDS) 2005 – 2008

“Molecular Control Of Cortical Neural Stem Cells” National Institute of Child Health & Human Development (NICHD) 2005 - 2009

“The Role of Slitrk1 in Tourette Syndrome and Related Disorders”: National Institute of Neurological Disorders and Stroke (NINDS) 2006

Croatian Scientific Foundation grants:

“Histological, MRI and gene expression analysis of the reorganizational processes in the medial wall of developing human cerebrum” 2014/18 HRZZ (PI prof. M. Vukšić)

“Development of cell-type specific expression of human transcriptome in language- and mirror neuron system related cortical network” 2012 HRZZ (PI prof. M. Judaš)

Subplate zone of the human brain: unsolved problems” 2016/20 (PI prof. I. Kostovic)

Principle Investigator:

Foundation Adris “Mystery of exosomes: from alarming the cell to signaling” 2017/2019

University of Zagreb research support 2015, 2016, 2017, 2018

IBRO International Brain Research Organization RHP 2013/2016 “Perinatal reorganization of the connectivity elements in the marginal zone of the human neocortex”

Croatian Academy of Sciences Foundation “Digitalization of The Zagreb Neuroembryological Collection” 2014/2015

WWS/IBRO (Women in World Neuroscience of the International Brain Research Organization (IBRO) collaborative research network program 2015 “Neurosteroids as therapeutic opportunities in ischemic brain injury”

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

“Transcriptional Atlas Of Human Brain Development”: National Institute of Mental Health (NIH/NIMH) 2009/11

Croatian Scientific Foundation:

“Histological, MRI and gene expression analysis of the reorganizational processes in the medial wall of developing human cerebrum” 2014/18 HRZZ (PI prof. M. Vukšić)

“Development of cell-type specific expression of human transcriptome in language- and mirror neuron system related cortical network” 2012 HRZZ (PI prof. M. Judaš)

“Subplate zone of the human brain: unsolved problems” 2016/20 (PI prof. I. Kostovic)

Principle Investigator:

Foundation Adris “Mystery of exosomes: from alarming the cell to signaling” 2017/2019

University of Zagreb research support 2015, 2016, 2017, 2018

IBRO International Brain Research Organization RHP 2013/2016 “Perinatal reorganization of the connectivity elements in the marginal zone of the human neocortex”

Croatian Academy of Sciences Foundation “Digitalization of The Zagreb Neuroembryological Collection” 2014/2015

WWS/IBRO (Women in World Neuroscience of the International Brain Research Organization (IBRO) collaborative research network program 2015 “Neurosteroids as therapeutic opportunities in ischemic brain injury”



NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

-

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Božo Krušlin, Professor of Pathology

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Dpt of Pathology, School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Endocrine tumors of gastrointestinal tract and the pancreas

BIOGRAPHY

PERSONAL INFORMATION

Surname(s) / First name(s) Božo Krušlin

Address(es) Work: Department of Pathology, School of Medicine, University of Zagreb, Salata 10, 10000 Zagreb, Croatia

Telephone(s) ++385 14566868, Fax(es) ++385 14566977

E-mail(s), Web address(s) bozo.kruslin@mef.hr

Nationality(-ies) Croatian

Date of birth June 9th, 1960

Identification number from Records of Scientific Workers 177914

WORK EXPERIENCE

SCHOOL OF MEDICINE

• Dates (from – to) 2015 to date

Name of employer Department of Pathology, School of Medicine, University of Zagreb,

Occupation or position held Full Professor

WORK EXPERIENCE

OTHER

• Dates (from – to) 2007 to date

Name of employer Clinical Department of Pathology and Cytology Ljudevit Jurak, Clinical Hospital Centre Sestre milosrdnice, Zagreb

Occupation or position held Pathologist

Type of business or sector Head of Clinical Department of Pathology and Cytology Ljudevit Jurak, Clinical Hospital Centre Sestre milosrdnice, Zagreb

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 12/08/2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Terlević R, Perić Balja M, Tomas D, Skenderi F, Krušlin B, Vranic S, Demirović A.

Somatostatin receptor SSTR2A and SSTR5 expression in neuroendocrine breast cancer. Ann Diagn Pathol 2018 Nov 20;38:62-66. doi: 10.1016/j.anndiagnpath.2018.11.002.

2. Radulović P, Krušlin B. Immunohistochemical expression of NEDD-9, e-cadherin and gamma-catenin and their prognostic significance in pancreatic ductal adenocarcinoma (PDAC). *Bosn J Basic Med Sci* 2018;18:246-51 (SCI) doi: 10.17305/bjbms.2018.2378.
3. Jurić B, Šojat J, Brnadić I, Krušlin B. Mixed adenoneuroendocrine carcinoma (collision tumor) of the gastrointestinal tract: A case report. *Endocr Oncol Metab* 2018;4:30-3.
4. Radulović P, Krušlin B. Immunohistochemical expression of PD-L1 in solid tumors. *Lib Oncol* 2017;45:43-5.
5. Jurčić P, Krušlin B, Gatalica Z, Sanati S, Vranić S. Breast carcinoma with neuroendocrine features: a brief review. *Endocr Oncol Metabol* 2016;2:138-45.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Demirović A, Cesarec S, Marušić Z, Tomas D, Milošević M, Hudolin T, Krušlin B. TGF- β expression in chromophobe renal cell carcinoma and renal oncocytoma. *Eur J Histochem* 2014;58:2265 (CC) doi: 10.4081/ejh.2014.2265.
2. Demirović A, Tomas D, Spajić B, Ibukić A, Čupić H, Krušlin B. Correlation of vascular endothelial growth factor and hypoxia-inducible factor-1 α expression with pathological renal artery changes in patients with renal cell carcinoma. *Scand J Urol* 2014;48:34-40 (CC) doi: 10.3109/21681805.2013.828319.
3. Džombeta T, Kapuralin K, Ulamec M, Tomas D, Gajovic S, Krušlin B. Immunohistochemical expression of STAM2 in gastrointestinal stromal tumors. *Anticancer Res* 2014;34:22911-6 (CC)
4. Novak Kujundžić R, Grbeša I, Ivkić M, Krušlin B, Konjevoda P, Gall Trošelj K. Possible Prognostic Value of BORIS Transcript Variants Ratio in Laryngeal Squamous Cell Carcinomas - a Pilot Study. *Pathol Oncol Res.* 2014;20:687-95. doi: 10.1007/s12253-014-9749-y. (CC)
5. Petersson F, Branzovsky J, , Martinek P, Korabecna M, Krušlin B, Hora M, Peckova K, Bauleth K, Pivovarcikova K, Michal M, Svajdler M, Sperga M, Bulimbasic S, Leroy X, Rychly B, Trivunic S, Kokoskova B, Rotterova P, Podhola M, Suster S, Hes O. The leiomyomatous stroma in renal cell carcinomas is polyclonal and not part of the neoplastic process. *Virchows Arch* 2014;465:89-96 (CC) doi: 10.1007/s00428-014-1591-9.
6. Štajduhar E, Sedić M, Leniček T, Radulović P, Kerenji A, Krušlin B, Pavelić K, Kraljević-Pavelić S. Expression of growth hormone receptor, plakoglobin and NEDD9 protein in association with tumour progression and metastasis in human breast cancer. *Tumour Biol* 2014;35:6425-34 (CC). doi: 10.1007/s13277-014-1827-y.
7. Vladušić T, Hrašćan R, Krušlin B, Pećina-Šlaus N, Perica K, Bićanić A, Vrhovac I, Gamulin M, Franekić J. Histological groups of human postpubertal testicular germ cell tumours harbour different genetic alterations *Anticancer Res* 2014;34:4005-12 (CC).
8. Ulamec M, Krušlin B. Colorectal cancer; novel biomarkers and immunohistochemistry, an overview. *Rad HAZU. Medicinske znanosti* (1330-5301); 520 (2014) 40;41-9.
9. Pećina-Šlaus N, Kafka A, Tomas D, Marković L, Okštajner PK, Sukser V, Krušlin B. Wnt signalling transcription factors TCF-1 and LEF-1 are upregulated in malignant astrocytic brain tumors: LEF-1 as a potential marker for malignant transformation. *Histol Histopathol* 2014;29:1557-64 (CC) doi: 10.14670/HH-29.1557.
10. Malčić Ivanišević A, Breen L, Josić Dj, Jukić Krmek S, Džombeta T, Matijević J, Grgurević L, Pavelić K, Krušlin B, Kraljević Pavelić S. Proteomics profiling of keratocystic odontogenic tumor reveals AIDA as a novel biomarker candidate. *J Oral Pathol Med* 2015;44:367-77 (CC) doi: 10.1111/jop.12239.

11. Vrsalovic M, Zeljkovic I; Vrsalovic Presecki A; Pintaric H, Kruslin B. C-reactive protein, not cardiac troponin T, improves risk prediction in hypertensives with type A acute aortic dissection. *Blood Pressure* 2015;24:212-6 (CC) doi: 10.3109/08037051.2015.1025607.
12. Krušlin B, Ulamec M, Tomas D. Prostate cancer stroma: an important factor in cancer growth and progression. *Bosn J Basic Med Sci* 2015;15(2):1-7 (IM, Medline) doi: 10.17305/bjbms.2015.449.
13. Tomašković I, Ulamec M, Tomić M, Pezelj I, Grubišić I, Krušlin B. Validation of Epstein biopsy criteria for insignificant prostate cancer in contemporary cohort of Croatian patients. *Coll Antropol* 2015;39:709-11 (SCI)
14. Ulamec M, Tomas D, Džombeta T, Tomašković I, Spajić B, Krušlin B. Expression of extracellular matrix proteins; tenascin-C, fibronectin, and galectin-3 in prostatic adenocarcinoma. *J Health Sci* 2016;5:1-5.
15. Ulamec M, Krušlin B. Neuroendocrine tumors in the urinary bladder: a literature review. *Endocr Oncol Metab* 2016;2:42-9.
16. Radić J, Krušlin B, Šamija M, Ulamec M, Milošević M, Jazvić M, Šamija I, Grah JJ, Bolanča A, Kusić Z. Connexin 43 expression in primary colorectal carcinomas in patients with Stage III and IV Disease. *Anticancer Res.* 2016 May;36(5):2189-96. (CC)
17. Demirović A, Čupić H, Krušlin B. Patološke promjene bubrežnih arterija u bolesnika s karcinomom bubrežnih stanica. *Liječ Vjesn* 2016;138:133-7 (IM)
18. Ulamec M, Skenderi F, Trpkov K, Kruslin B, Vranic S, Bulimbasic S, Trivunic S, Perez-Montiel D, Peckova K, Pivovarcikova K, Ondic O, Daum O, Rotterova P, Dusek M, Hora M, Michal M, Hes O: Solid papillary renal cell carcinoma: Clinicopathologic, morphologic and immunohistochemical analysis of 10 cases and review of the literature. *Ann Diagn Pathol* 2016;23:51-7. (CC) doi: 10.1016/j.anndiagpath.2016.04.008.
19. Ulamec M, Skenderi F, Zhou M, Krušlin B, Martínek P, Grossmann P, Peckova K, I Alvarado-Cabrero I, Kalusova K, Kokoskova B, Rotterova P, Hora M, Daum O, Dubova M, Bauleth K, Slouka D, Sperga M, Michal M, Hes O. Molecular-genetic alterations in renal cell carcinomas with tubulocystic pattern: Tubulocystic renal cell carcinoma, tubulocystic renal cell carcinoma with heterogeneous component and familiar leiomyomatosis associated renal cell carcinoma. *Clinicopathological and molecular genetic analysis of 15 cases. Appl Immunohist Mol Morph* 2016;24:521-30 (CC) doi: 10.1097/PAI.0000000000000213.
20. Stojković R, Fučić A, Ivanković D, Jukić Z, Radulović P, Grah J, Kovačević N, Barišić L, Krušlin B. Age and sex differences in genome damage between prepubertal and adult mice after exposure to ionising radiation. *Arh Hig Rada Toksikol* 2016;67:297-303 (IM) doi: 10.1515/aiht-2016-67-2882.
21. Sedmak G, Jovanov-Milošević N, Puskarjov M, Ulamec M, Krušlin B, Kaila K, Judaš M. Developmental Expression Patterns of KCC2 and Functionally Associated Molecules in the Human Brain. *Cereb Cortex.* 2016;26:4574-89 (CC) doi: 10.1093/cercor/bhv218.
22. Leci-Tahiri L, Krušlin B, Vučić M, Sonicki Z, Lovričević I. Assessment of apoptosis in the native vein used for dialysis access. *Croatian Med J* 2016;57:540-7 (CC)
23. Jukic Z, Radulovic P, Stojković R, Mijic A, Grah J, Kruslin B, Ferencic Z, Fucic A. Gender Difference in Distribution of Estrogen and Androgen Receptors in Intestinal-type Gastric Cancer. *Anticancer Res.* 2017;37(1):197-202.

24. Krušlin B, Tomas D, Džombeta T, Milković-Periša M, Ulamec M. Inflammation in prostatic hyperplasia and carcinoma – basic scientific approach. *Front Oncol* 2017;7:77 (doi: 10.3389/fonc.2017.00077)
25. Demirović A, Krušlin B. Recommendations for histopathology report of colorectal carcinoma specimens. *RAD Hazu* 2017;44:67-72 (doi.org/10.21857/vgjwrc642y))
26. Jukić Z, Bacalja J, Mijić A, Kristek J, Krušlin B. Extremely well-differentiated gastric adenocarcinoma with minor diffuse adenocarcinoma component. *Int J Gastrointest Cancer* 2018;49:77-9. doi: 10.1007/s12029-016-9851-3.
27. Lončar-Brzak B, Klobučar M, Veliki-Dalić I, Sabol I, Kraljević Pavelić S, Krušlin B, Mravak-Stipetić M. Small leucine rich extracellular matrix proteoglycans biglycan and lumican expression reveal oral lichen planus malignant potential. *Clin Oral Investig.* 2018 Mar;22(2):1071-1082. doi: 10.1007/s00784-017-2190-3. (CC)
28. Džombeta T, Krušlin B. High grade T1 papillary urothelial bladder cancer shows prominent peritumoral retraction clefting. *Pathol Oncol Res* 2018;24:567-74. DOI10.1007/s12253-017-0279-2 (CC)
29. Mašić S, Brčić L, Krušlin B, Sepac A, Pigac B, Stančić- Rokotov D, Jakopović M, Seiwerth S. Expression of plakophilin 3 in diffuse malignant mesothelioma. *Histol Histopathol* 2018;33:995-1004 (CC) doi: 10.14670/HH-11-996.
30. Krištić A, Aralica G, Demirović A, Krušlin B. Pathohistologic prognostic and predictive parameters in colorectal cancer - tumor budding. *Rad HAZU 533, Medical Sciences* 2018;45:113-26. doi.org/10.21857/yvjrdcqpk
31. Krušlin B, Vučić M, Mašić S, Kruljac I, Lež C, Ružić B, Spajić B, Ulamec M. Expression of LMO2 in prostate carcinoma and adjacent parenchyma. *Acta clin Croat (Suppl 1)* 2018;57:56-60 (SCI Exp).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Voditelj: prof. dr. Božo Krušlin

1. "Razvojna neuropatologija genetičkih malformacija moždane kore čovjeka"

Broj projekta: 108-1081870-1884.

Ministarstvo znanosti, obrazovanja i športa

od 02. siječnja 2007. do 31. Ožujka 2013.

2. Voditelj: doc. dr. Hrvoje Čupić

"Promjene bubrežne arterije u bolesnika s karcinomom bubrega"

Broj projekta: 134-0000000-3381

Ministarstvo znanosti, obrazovanja i športa

od 01. ožujka 2008.

3. Međunarodni projekt: "Archive's tissues: Improving molecular medicine research and clinical practice"

Akronim: IMPACTS

Broj ugovora: LSHG-CT-2007-037211

Koordinator projekta: prof. Giorgio Stanta

od 1. ožujka 2007.



voditelj: prof. dr. Mladen Belicza do 30.09.2007. te prof. dr. Božo Krušlin od 01.10.2007.

Hrvatska zaklada za znanost

Voditelj: prof. dr. Miloš Judaš

Development of cell-type specific expression of human transcriptome in language- and mirror neuron-system related cortical network. 09.01/414 do 2016

Voditelj: prof. dr. Koraljka Gall-Trošelj

"NRF2 na raskrižju epigenetičkog modeliranja, metabolizma i proliferacije stanice raka". (2016-06-IP-4404)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Hrvatska zaklada za znanost

Voditelj: prof. dr. Miloš Judaš

Development of cell-type specific expression of human transcriptome in language- and mirror neuron-system related cortical network. 09.01/414 do 2016

Voditelj: prof. dr. Koraljka Gall-Trošelj

"NRF2 na raskrižju epigenetičkog modeliranja, metabolizma i proliferacije stanice raka". (2016-06-IP-4404)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

19

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Željko Krznarić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine and
University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical nutrition

BIOGRAPHY

Education

1984 graduated from the School of Medicine of the University of Zagreb

1984 to 1985 internship, KBC Zagreb

1988 to 1992 residency, KBC Zagreb

1999 to 2001 Subspecialist training in gastroenterology

1984. Postgraduate study in biomedicine, Faculty of Natural Sciences and Mathematics in Zagreb

Postgraduate study in Gastrointestinal and Hepatology at the Faculty of Medicine in Zagreb

May 1990, defense of the Master's thesis "The level of acute blood mediator mediator as an indicator of inflammation of the intestine"

June 1997, defense of the doctoral thesis "Value of Continuous Monitoring of Serum Concentrations of Acute Phase Proteins and Oligoelements in Crohn's Disease"

Work experience

1984th to 1985th internship, KBC Zagreb

1,992th to 2,001th a specialist in internal medicine at the Department of Internal Diseases, KBC Zagreb

2001- Today, the subspecijalist of gastroenterology and hepatology at the Institute for Gastroenterology and Hepatology, Internal Medicine Clinic, KBC Zagreb

Teaching activity

1999 Associate Professor of Senior Assistant, Faculty of Medicine, Zagreb

27.05. 2003. Scientific Assistant professor, Faculty of Medicine, Zagreb

19:10. 2009 Scientific and Academic Professorship in Cumulative Work in the Department of Internal Medicine, Scientific Area of Biomedicine and Health, Scientific Field of Clinical Medical Science, Branch of Internal Medicine, for Internal Medicine with Workplace at the Clinic for Internal Diseases, KBC Zagreb

05/29/2014. Scientific Advisor for Biomedical Sciences, Faculty of Medicine, Zagreb

Head of Module "Dietotherapy" and "Parenteral and Enteral Diet", Faculty of Food Technology and Biotechnology, University of Zagreb; Head of the module "Clinical judgment", Faculty of Medicine, University of Zagreb.

Deputy Head of School of Medicine in English at the Faculty of Medicine of the University of Zagreb

Dissertation (title and year of defense)

"Value of Continuous Monitoring of Serum Concentrations of Acute Phase Proteins and Oligoelements in Crohn's Disease", 1997, Faculty of Medicine, University of Zagreb

Scientific activity

Project Associate:

IP-11-2013: HRZZ: Assessment of Microbiota, Inflammatory Markers, Nutritional and Endocrinological Status in IBD Patients (Minute for IBD)

Petica - obesity prevention program for school children

Publications (total number by categories)

81 professional and scientific papers in indexed journals, of which 29 in journals indexed in the Current Contents, 8 papers indexed in SCI-Exshanded, 44 papers in journals indexed in Medline, Scopus, PsycInfo or other international index publications. Abbreviations and other works about 200. Editor 5 books, and a larger number of book chapters. Papers quoted 320 times.

Member of editorial boards and reviewers of scientific and professional journals at home and abroad (Nutrition (USA), Clinical Nutrition (EU), Clinical Nutrition & Metabolism (Italy), Nutrition & Metabolic Therapy (Poland), Pharmaca, Croatian Medical Journal, KBC Zagreb Bulletin).

Personal data

Born in 1960, married, father of two children

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 13.10.2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Klek S, Krznaric Z, Gundogdu RH, Chourdakis M, Kekstas G, Jakobson T, Paluszkiwicz P, Vranesic Bender D, Uyar M, Demirag K, Poulia KA, Klimasauskas A, Starkopf J, Galas A. The Prevalence of Malnutrition in Various Political, Economic, and Geographic Settings. JPEN J Parenter Enteral Nutr. 2013

Benković V, Kolčić I, Ivičević Uhernik A, Vranešić Bender D, Oreb I, Stevanović R, Krznarić Z. The economic burden of disease-related undernutrition in selected chronic diseases. Clin Nutr. 2013 doi: 10.1016/j.clnu.2013.09.006.

Vranešić Bender D, Krznarić Z. Nutritional and behavioral modification therapies of obesity: facts and fiction. Dig Dis 2012;30(2):163-7

Z. Krznaric, D. Ljubas Kelecic, N. Rustemovic, D. Vranesic Bender, R. Ostojic, P. Markos, C. Scarpignato. Pharmaceutical principles of acid inhibitors: unmet needs. Dig Dis. 2011;29(5):469-75.

Mihaljević S, Katicić M, Krznarić Z, Dmitrović B, Karner I, Stefanić M, Pinotić L, Samardžija M, Bensić M. The influence of the different morphological changes on gastric mucosa on somatostatin cell number in antrum mucosa and serum somatostatin. Coll Antropol. 2011 Mar;35(1):5-8

Zeljko Krznaric, Darija Vranesic Bender, Dina Ljubas Kelečić, Marko Brinar. Wernicke's encephalopathy during parenteral nutrition in a Crohn's disease patient. Nutrition. 2011 Apr;27(4):503-4.

Muacević-Katanec D, Kekez T, Fumić K, Barić I, Merkler M, Jakić-Razumović J, Krznarić Z, Zadro R, Katanec D, Reiner Z. Spontaneous perforation of the small intestine, a novel manifestation of classical homocystinuria in an adult with new cystathionine beta-synthetase gene mutations. Coll Antropol. 2011 Mar;35(1):181-5.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1: Majerović M, Jelaković M, Premužić M, Štromar IK, Radić D, Mance M, Pleština S, Ostojić R, Rustemović N, Krznarić Z. Hepatocellular Carcinoma Surveillance-Experience from Croatian Referral Centre for Chronic Liver Diseases. J Gastrointest Cancer. 2019 Mar;50(1):48-53. doi: 10.1007/s12029-017-0011-1. PubMed PMID: 29127665.

2: Cuerda C, Muscaritoli M, Donini LM, Baqué P, Barazzoni R, Gaudio E, Jezek D, Krznaric Z, Pirlich M, Schetgen M, Schneider S, Vargas JA, Van Gossum A. Nutrition education in medical schools (NEMS). An ESPEN position paper. Clin Nutr. 2019 Feb 7. pii: S0261-5614(19)30050-0.

3: Forbes A, Escher J, Hébuterne X, Kłęk S, Krznaric Z, Schneider S, Shamir R, Stadelova K, Wierdsma N, Wiskin AE, Bischoff SC. Corrigendum to "ESPEN guideline: Clinical nutrition in inflammatory bowel disease" [Clinical Nutrition 36 (2017) 321-347]. Clin Nutr. 2019 Jan 28. pii: S0261-5614(19)30035-4. doi: 10.1016/j.clnu.2019.01.017. [Epub ahead of print] PubMed PMID: 30704889.

4: Reintam Blaser A, Ploegmakers I, Benoit M, Holst M, Rasmussen HH, Burgos R, Forbes A, Shaffer J, Gabe S, Irtun O, Thibault R, Klek S, Olde Damink SW, van de Poll M, Panisic-Sekeljic M, Wanten G, Pironi L; AIF study group. Acute intestinal failure: International multicenter point-of-prevalence study. Clin Nutr. 2019 Jan 15. pii: S0261-5614(19)30007-X. doi: 10.1016/j.clnu.2019.01.005. [Epub ahead of print] PubMed PMID: 30683610.

5: Leskovaar D, Meštrović T, Barešić A, Kraljević I, Panek M, Čipčić Paljetak H, Perić M, Matijašić M, Rogić D, Barišić A, Ljubas Kelečić D, Vranešić Bender D, Krznarić Ž, Verbanac D. The Role of Vitamin D in

Inflammatory Bowel Disease - Assessing Therapeutic and Preventive Potential of Supplementation and Food Fortification. *Food Technol Biotechnol*. 2018 Dec;56(4):455-463.

6: Grubelic Ravić K, Paić F, Vucelić B, Brinar M, Čuković-Čavka S, Božina N, Krznarić Ž, Kalauz M, Bešić D, Nikuševa Martić T. Association of polymorphic variants in serotonin re-uptake transporter gene with Crohn's disease: a retrospective case-control study. *Croat Med J*. 2018 Oct 31;59(5):232-243. PubMed PMID: 30394015; PubMed Central PMCID: PMC6240826.

7: Prijić R, Premužić V, Brinar M, Krznarić Ž, Jelaković B, Čuković-Čavka S. Increased arterial stiffness - similar findings in patients with inflammatory bowel disease without prior hypertension or diabetes and in patients with well-controlled hypertension. *Blood Press*. 2018 Aug;27(4):240-246.

8: Pironi L, Konrad D, Brandt C, Joly F, Wanten G, Agostini F, Chambrier C, Aimasso U, Zeraschi S, Kelly D, Szczepanek K, Jukes A, Di Caro S, Theilla M, Kunecki M, Daniels J, Serlie M, Poullenot F, Wu J, Cooper SC, Rasmussen HH, Compher C, Seguy D, Crivelli A, Pagano MC, Hughes SJ, Guglielmi FW, Kozjek NR, Schneider SM, Gillanders L, Ellegard L, Thibault R, Matras P, Zmarzly A, Matysiak K, Van Gossum A, Forbes A, Wyer N, Taus M, Virgili NM, O'Callaghan M, Chapman B, Osland E, Cuerda C, Sahin P, Jones L, Lee ADW, Bertasi V, Orlandoni P, Izbéki F, Spaggiari C, Díez MB, Doitchinova-Simeonova M, Garde C, Serralde-Zúñiga AE, Oliveira G, Krznaric Z, Czako L, Kekstas G, Sanz-Paris A, Jáuregui EP, Murillo AZ, Schafer E, Arends J, Suárez-Llanos JP, Shaffer J, Lal S. Clinical classification of adult patients with chronic intestinal failure due to benign disease: An international multicenter cross-sectional survey. *Clin Nutr*. 2018 Apr;37(2):728-738. doi: 10.1016/j.clnu.2017.04.013. Epub 2017 Apr 19. PubMed PMID: 28483328.

9: Panek M, Čipčić Paljetak H, Barešić A, Perić M, Matijašić M, Lojkić I, Vranešić Bender D, Krznarić Ž, Verbanac D. Methodology challenges in studying human gut microbiota - effects of collection, storage, DNA extraction and next generation sequencing technologies. *Sci Rep*. 2018 Mar 23;8(1):5143.

10: Vranešić Bender D, Kovačević M, Hanževački M, Vrabec B, Benković V, Domislović V, Krznarić Ž. Nutritional Issues and Nutrition Support in Older Home Care Patients in the City of Zagreb. *Acta Clin Croat*. 2017 Dec;56(4):689-697. doi: 10.20471/acc.2017.56.04.17. PubMed PMID: 29590725.

11: Vranešić Bender D, Nutrizio M, Jošić M, Ljubas Kelečić D, Karas I, Premužić M, Domislović V, Rotim C, Krznarić Ž. Nutritional Status and Nutrition Quality in Patients with Non-Alcoholic Fatty Liver Disease. *Acta Clin Croat*. 2017 Dec;56(4):625-634. doi: 10.20471/acc.2017.56.04.07. PubMed PMID: 29590715.

12: Muscaritoli M, Krznarić Z, Singer P, Barazzoni R, Cederholm T, Golay A, Van Gossum A, Kennedy N, Kreymann G, Laviano A, Pavić T, Puljak L, Sambunjak D, Utrobičić A, Schneider SM. Effectiveness and efficacy of nutritional therapy: A systematic review following Cochrane methodology. *Clin Nutr*. 2017 Aug;36(4):939-957. doi: 10.1016/j.clnu.2016.06.022. Epub 2016 Jul 12. Review. PubMed PMID: 27448948.

13: Letilovic T, Vrhovac R, Krznarić Ž. Anthropometric and Laboratory Variables Related to Weight Loss- Comparison of Heart Failure Patients with Tumor Patients and Control Population. *Front Nutr*. 2017 May 11;4:18. doi: 10.3389/fnut.2017.00018. eCollection 2017. PubMed PMID: 28553637; PubMed Central PMCID: PMC5425464.

14: Forbes A, Escher J, Hébuterne X, Kłęk S, Krznaric Z, Schneider S, Shamir R, Stardelova K, Wierdsma N, Wiskin AE, Bischoff SC. ESPEN guideline: Clinical nutrition in inflammatory bowel disease. *Clin Nutr*. 2017 Apr;36(2):321-347. doi: 10.1016/j.clnu.2016.12.027. Epub 2016 Dec 31. Review. Erratum in: *Clin Nutr*. 2019 Jan 28;:. PubMed PMID: 28131521.

15: Klek S, Chourdakis M, Abosaleh DA, Amestoy A, Baik HW, Baptista G, Barazzoni R, Fukushima R, Hartono J, Jayawardena R, Garcia RJ, Krznaric Z, Nyulasi I, Parallada G, Francisco EM, Panisic-Sekeljic M, Perman M, Prins A, Del Rio Requejo IM, Reddy R, Singer P, Sioson M, Ukleja A, Vartanian C, Fuentes NV,

Waitzberg DL, Zoungrana SL, Galas A. Health insurance or subsidy has universal advantage for management of hospital malnutrition unrelated to GDP. *Asia Pac J Clin Nutr.* 2017 Mar;26(2):247-254. doi: 10.6133/apjcn.122015.07. PubMed PMID: 28244702.

16: Arends J, Bachmann P, Baracos V, Barthelemy N, Bertz H, Bozzetti F, Fearon K, Hütterer E, Isenring E, Kaasa S, Krznaric Z, Laird B, Larsson M, Laviano A, Mühlebach S, Muscaritoli M, Oldervoll L, Ravasco P, Solheim T, Strasser F, de van der Schueren M, Preiser JC. ESPEN guidelines on nutrition in cancer patients. *Clin Nutr.* 2017 Feb;36(1):11-48. doi: 10.1016/j.clnu.2016.07.015. Epub 2016 Aug 6. PubMed PMID: 27637832.

17: Klek S, Chourdakis M, Bischoff S, Dubrov S, Forbes A, Galas A, Genton L, Gundogdu HR, Irtun O, Jagmane I, Jakobson-Forbes T, Jirka A, Kennedy N, Klimasauskas A, Khoroshilov I, Leon-Sanz M, Muscaritoli M, Panisic-Sekeljic M, Poulia KA, Schneider S, Siljamäki-Ojansuu U, Uyar M, Wanten G, Krznaric Z. Economy matters to fight against malnutrition: Results from a multicenter survey. *Clin Nutr.* 2017 Feb;36(1):162-169. doi: 10.1016/j.clnu.2015.10.010. Epub 2015 Oct 30. PubMed PMID: 26586302.

18: Thibault R, Makhlouf AM, Mulliez A, Cristina Gonzalez M, Kekstas G, Kozjek NR, Preiser JC, Rozalen IC, Dadet S, Krznaric Z, Kupczyk K, Tamion F, Cano N, Pichard C; Phase Angle Project Investigators. Fat-free mass at admission predicts 28-day mortality in intensive care unit patients: the international prospective observational study Phase Angle Project. *Intensive Care Med.* 2016 Sep;42(9):1445-53. doi: 10.1007/s00134-016-4468-3. Epub 2016 Aug 11. PubMed PMID: 27515162.

19: Majerović M, Boban A, Premužić M, Radić D, Knežević-Štromar I, Ladić A, Krznarić Ž, Rustemović N, Ostojić R. [ABNORMALITIES OF HEMOSTASIS IN PATIENTS WITH LIVER CIRRHOSIS]. *Lijec Vjesn.* 2016 Sep-Oct;138(9-10):272-81. Review. Croatian. PubMed PMID: 30148556.

20: Vranešić Bender D, Giljević Z, Kušec V, Laktašić Žerjavić N, Bošnjak Pašić M, Vrdoljak E, Lkinas Kelečić Dina, Reiner Ž, Anić B, Krznarić Ž. GUIDELINES FOR THE PREVENTION, DETECTION AND THERAPY OF VITAMIN D DEFICIENCY IN ADULTS. *Lijec Vjesn.* 2016 May;138(5-6):121-132. PubMed PMID: 29182823.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Inflammatory bowel disease (Crohn's disease and ulcerative colitis)

Determination of intestinal microbiota, inflammatory markers, nutritional and endocrine status in patients with inflammatory bowel disease

HELICOBACTER PYLOR INFECTION - EVOLUTION OF DIABETES AND NEW THERAPY PROCEDURES

DOUBLE-MOLECULAR, GENETIC AND CLINICAL CHARACTERISTICS OF CARCINOMA

Complex characteristics and health of the population from childhood to deep age

Molecular markers in solid tumors - predictive and prognostic significance

C-reactive protein and gastroduodenal damage in coronary patients

Perception and prevention of risk factors for atherosclerosis in Croatia

IP-11-2013: HRZZ: Assessment of Microbiota, Inflammatory Markers, Nutritional and Endocrinological Status in IBD Patients (Minute for IBD)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Inflammatory bowel disease (Crohn's disease and ulcerative colitis)



Determination of intestinal microbiota, inflammatory markers, nutritional and endocrine status in patients with inflammatory bowel disease

HELICOBACTER PYLOR INFECTION - EVOLUTION OF DIABETES AND NEW THERAPY PROCEDURES

DOUBLE-MOLECULAR, GENETIC AND CLINICAL CHARACTERISTICS OF CARCINOMA

Complex characteristics and health of the population from childhood to deep age

Molecular markers in solid tumors - predictive and prognostic significance

C-reactive protein and gastroduodenal damage in coronary patients

Perception and prevention of risk factors for atherosclerosis in Croatia

IP-11-2013: HRZZ: Assessment of Microbiota, Inflammatory Markers, Nutritional and Endocrinological Status in IBD Patients (Minute for IBD)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mirjana Kujudžić Tiljak, MD, PhD, Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: 1. Statistical Analysis of Medical Data

2. Medical Statistics 2.1: Statistical tools for medical data analysis in planned experimental study design

3. Medical Statistics 2.2: Statistical tools for medical data analysis in quasi-experimental study design

4. Medical Statistics 2.3: Statistical tools for medical data analysis in observational study design with large samples

5. Medical Statistics 2.4: Statistical tools for medical data analysis in observational study design with large samples

BIOGRAPHY

Employment and Functions:

2017 - Director - Andrija Stampar School of Public Health, School of Medicine, University of Zagreb

2017 - President of the Biomedical Area Council and Member of the Senate, University of Zagreb

2015 - full professor - Department of Medical Statistics, Epidemiology and Medical Informatics, Andrija Stampar School of Public Health, School of Medicine, University of Zagreb

2013 - Head of Department for Medical Statistics, Epidemiology and Medical Informatics, Andrija Stampar School of Public Health, School of Medicine, University of Zagreb

Previous employment

2016-2017 acting director - Andrija Stampar School of Public Health, School of Med., Univ. of Zagreb

2004-2015th Assistant Professor, Associate Professor - Department of Medical Statistics, Epidemiology and Medical Informatics, Andrija Stampar School of PH, School of Med., Univ. of Zag. 1996-2000 Advisor to the Minister of Science and Vice Prime Minister of the Croatian Government

1994-1996. Head of Department for Refugees and Displaced Persons in the Ministry of Development and Reconstruction of the Republic of Croatia

1993-1994 Assistant to the Chief of Staff, Office of the President of the Republic of Croatia

1992-1993. Adviser to Vice Prime Minister of the Government of the Republic of Croatia

1991-1992 Head of Department for Inter. coop., Office for refugees and displaced persons in Croatian Government

1990-2004 assistant, senior assistant - Department of Hygiene, Social Medicine and General Epidemiology . Andrija Stampar School of Public Health, School of Medicine, University of Zagreb

Education and qualifications:

2000. Ph.D. (Genealogical structure of population in mortality rate estimation, Institution: School of Medicine, University of Zagreb)

1995. Mr.sc. (Genealogical model of analysis for epidemiology data) Institution: School of Medicine, University of Zagreb)

1990th to 1993rd Specialization - social medicine and health care organization

1988- 1990 Postgraduate study "Health Information Systems" (School of Med., Univ. of Zag.)

1983-1988 M.D. (School of Medicine, University of Zagreb)

Teaching activities:

2014.- Head - General competence of doctors specialists in all specialist postgraduate studies

2004 - Participation in graduate teaching in graduate medical study in Croatian and English, nursing studies, postgraduate professional studies, doctoral studies in biomedicine and health care - subjects in the field of medical statistics, data analysis and application of research

1990- 2004 participation in graduate and postgraduate studies in subjects of social medicine, health care organization, medical statistics

Reviews: Reviewer in several scientific journals and one university textbook. Statistical Reviewer CMJ.

Publications: 38 original scientific papers indexed in the Web of Science Core Collection, h-index 9, number of citations 300; 40 original scientific papers indexed in Scopus, h-index 9, number of citation 273; 89 papers in Google Scholar, h-index 13, number of citations 547.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2015, professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. FIŠTER K, PLEŠE B, PRISTAŠ I, KURTH T, KUJUNDŽIĆ TILJAK M. Setting up research infrastructure for secondary use of routinely collected health care data in Croatia. *Croat Med J.* 2017 Oct 31;58(5):327-329.
2. ŽAJA O, TILJAK MK, ŠTEFANOVIĆ M, TUMBRIJ J, JURIČIĆ Z. Correlation of UGT1A1 TATA-box polymorphism and jaundice in breastfed newborns-early presentation of Gilbert's syndrome. *J Matern Fetal Neonatal Med.* 2014 May;27(8):844-50.
3. FRANIĆ M, KUJUNDŽIĆ TILJAK M, POŽAR M, ROMIĆ D, MIMICA M, PETRAK J, IVANKOVIĆ D, PEĆINA M. Anterior versus posterior approach in 3D correction of adolescent idiopathic thoracic scoliosis: a meta-analysis. *Orthop Traumatol Surg Res.* 2012 Nov; 98 (7) 795-802.
4. VUKOVIĆ J, GRIZELJ R, BOJANIĆ K, ČORIĆ M, LUETIĆ T, BATINICA S, KUJUNDŽIĆ TILJAK M, SCHROEDER DR, SPRUNG J. Ductal plate malformation in patients with biliary atresia. *Eur J Pediatr.* 2012 Dec 141 (12):1799-804.
5. ĐAKOVIĆ RODE O, MARKOTIĆ A, KUJUNDŽIĆ TILJAK M, ŽIDOVEC LEPEJ S, BEGOVAC J. Serum apoptosis markers in HIV-infected patients with human herpesvirus type 8 and herpes simplex virus type 2 co-infection. *Eur J Clin Microbiol Infect Dis* 2012 Dec 31 (12)3303-8.
6. STIPANČIĆ G, LA GRASTA SABOLIC L, POŽGAJ SEPEC M, RADICA A, ŠKRABIĆ V, SEVERINSKI S, KUJUNDŽIĆ TILJAK M. Regional differences in incidence and clinical presentation of type 1 diabetes in children aged under 15 years in Croatia. *Croat Med J.* 2012. Apr; 45(2):141-8.
7. JUREŠA V, MUSIL V, TILJAK MK. Growth Charts for Croatian school children and secular trends in past twenty years. *Coll Antropol.* 2012 Jan, 36 Suppl 1: 47-57.
8. STIPANČIĆ G, SEPEC MP, SABOLIĆ LL, RADICA A, ŠKRABIĆ V, SEVERINSKI S, TILJAK MK. Clinical characteristics at presentation of type 1 diabetes mellitus in children younger than 15 years in Croatia. *J Pediatr Endocrinol Metab.* 2011; 24 (9-10):665-70.

9. MENIGA I, TILJAK MK, IVANKOVIĆ D, ALERIĆ I, ZEKAN M, HRABAC P, MAŽURANIĆ I, PULJIĆ I. Prognostic value of computed tomography morphologic characteristics in stage I non-small-cell cancer. *Clin Lung Cancer* 2010 Mar 1, 11 (2) 98-104.
10. BAUDOIN T, KALOGJERA L, GEBER G, GRGIĆ M, ČUPIĆ H, TILJAK MK. Correlation of histopathology and symptoms in allergic and non-allergic patients with chronic rhinosinusitis. [Article] *European Archives of Oto-Rhino-Laryngology*. 265(6):657-661, 2008 Jun.
11. STIPANČIĆ G, LA GRASTA SABOLIĆ L, MALENICA M, RADICA A, ŠKRABIĆ V, KUJUNDŽIĆ TILJAK M. Incidence and trends of childhood Type 1 diabetes in Croatia from 1995 to 2003. *Diabetes Res Clin Pract*. 2008 Apr;80(1):122-7.
12. RUDAN I, BILOGLAV Z, VORKO-JOVIĆ A, KUJUNDŽIĆ TILJAK M, STEVANOVIĆ R, ROPAC D, PUNTARIĆ D, ČUČEVIĆ B, SALZER B, CAMPBELL H. Effects of inbreeding, endogamy, genetic admixture, and outbreeding on human health: a (1001 Dalmatians) study. *CMJ* 2006; 47:601-10.
13. KAŠTELAN D, KUJUNDŽIĆ TILJAK M, KRALJEVIĆ I, KARDUM I, GILJEVIĆ Z, KORŠIĆ M. Calcaneus ultrasound in males: Normative data in the Croatian population (ECUM study). *J Endocrinol Invest* 2006; 29:221-5.
14. BANDIĆ D, JURETIĆ A, SARAČEVIĆ B, ŠEPAROVIĆ V, TILJAK MK, HUDOLIN T, SPAGNOLI GC, ČOVIĆ D, ŠAMIJA M. Expression and possible prognostic role of MAGE-A4, NY-ESO-1, and HER-2 antigens in women with relapsing invasive ductal breast cancer: Retrospective immunohistochemical study. *CMJ* 2006; 47:32-41.
15. VRCA BOTICA M, KOVAČIĆ L, KUJUNDŽIĆ TILJAK M, KATIĆ M, BOTICA I, RAPIĆ M, NOVAKOVIĆ D, LOVASIĆ S. Frequent attenders in Family practica in Croatia: Retrospective Study. *CMJ* 2004; 45:620-624.
16. KUJUNDŽIĆ TILJAK M, KERN J, IVANKOVIĆ D, TILJAK H, VULETIĆ S. Genealogical Structuring of a Population. *Coll Antropol* 2001; 25:127-140.
17. KUJUNDŽIĆ M, KERN J, IVANKOVIĆ D, VULTEIĆ S. Epidemiological Data Analysis - Genealogical Approach. *Coll Antropol* 1996; 20:237-249.
18. VRDOLJAK O, KUJUNDŽIĆ TILJAK M, ČIMIĆ M. Anthropometric measurements of foot length and shape in children 2 to 7 years of age. *Period Biol* 2017; 119 (2):1 25-9.c
19. SMOLKOVIĆ L, KUJUNDŽIĆ-TILJAK M, TILJAK H. Trends in general practitioners/family doctors workload in Croatia in period 1995-2012. *Coll Antropol*. 2014 Dec; 38 Suppl 2:19-24.
20. IVANKOVIĆ D, TILJAK MK. Comparison of two or more samples of quantitative data. *Acta Med Croatica* 2006; 60 Suppl 1:37-46.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Fišter K, Pleše B, Pristaš I, Kurth T, Kujundžić Tiljak M. Setting up research infrastructure for secondary use of routinely collected health care data in Croatia. *Croat Med J*. 2017 Oct 31;58(5):327-329.
2. Čuković-Bagić I, Hrvatin S, Jeličić J, Negovetić Vranić D, Kujundžić Tiljak M, Pezo H, Marks L. General dentists' awareness of how to cope with medical emergencies in paediatric dental patients. *Int Dent J*. 2017 Aug;67(4):238-243.
3. Cukovic-Bagic I, Dumancic J, Kujundzic Tiljak M, Drvaric I, Boric B, Kopic V, et al. Croatian dentists' knowledge, experience, and attitudes in regard to child abuse and neglect. *Int J Paediatr Dent*. 2015 Nov ;25(6):444–50.

4. Žaja O, Tiljak MK, Štefanović M, Tumbri J, Jurčić Z. Correlation of UGT1A1 TATA-box polymorphism and jaundice in breastfed newborns-early presentation of Gilbert's syndrome. J Matern Fetal Neonatal Med. 2014 May;27(8):844-50.
5. Vrdoljak O, Kujundžić Tiljak M, Čimić M. Anthropometric measurements of foot length and shape in children 2 to 7 years of age. Periodicum Biologorum. 2017;119(2):125-129.
- 6.. Hafner D, Zivkovic SV, Bauman R, Tiljak K, Papić N, Lepej SZ. Follicular fluid vascular endothelial growth factor is associated with type of infertility and interferon alpha correlates with endometrial thickness in natural cycle in vitro fertilization. Reprod Biol. 2018 Sep;18(3):289-294.
7. Smolković L, Kujundžić-Tiljak M, Tiljak H. Trends in general practitioners/family doctors workload in Croatia in period 1995-2012. Coll Antropol. 2014 Dec;38 Suppl 2:19-24.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 2018.-2023. "Dangers and benefits of social networks: E-Professionalism of healthcare professionals (SMePROF)", associate
- 2017.-2018. "Significance of body mass index and blood pressure index in risk assessment for metabolic syndrome", associate
2016. "Adiponectin values and persistence of body mass index and arterial pressure in risk assessment for metabolic syndrome in adolescents", associate
2015. "The significance of adiponectin in assessing the risk for metabolic syndrome in adolescents", associate
2014. "Predictive Value of Life Habits and Anthropometric Characteristics in Early Detection of Cardiovascular Disease in Adolescents", associate
- 2007- 2013 "How to measure health?" , head
- 2002-2007 "Genetic Socioeconomic and Behavioral determinants of health and diseases", associate
- 2002.-2006 "Scientific basis of quality health care", consultant
- 2002.-2006. "Water, food, environment - determinants of health, consultant
- 1998-2002 "Transition of the Health System", associate
- 1996-1999 "Information Technology and Decision Making in Medicine" , associate
- 1991-1995“ Aging Without Impairment and Disease", associate

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 2018.-2023. "Dangers and benefits of social networks: E-Professionalism of healthcare professionals (SMePROF)", associate
- 2017.-2018. "Significance of body mass index and blood pressure index in risk assessment for metabolic syndrome", associate
2016. "Adiponectin values and persistence of body mass index and arterial pressure in risk assessment for metabolic syndrome in adolescents", associate
2015. "The significance of adiponectin in assessing the risk for metabolic syndrome in adolescents", associate



2014. "Predictive Value of Life Habits and Anthropometric Characteristics in Early Detection of Cardiovascular Disease in Adolescents", associate

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Dr. sc. Ivan Kurelac, dr. med.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital for Infectious Diseases
"Dr.Fran Mihaljević" in Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Virusni hepatitis

BIOGRAPHY

Dr. Ivan Kurelac was born in 1961 in Zagreb. In 1988 he graduated from the School of Medicine, University of Zagreb and in 1996 he passed his specialist exam in infectious diseases. Since then he has been working at the University Hospital for Infectious Diseases „Dr. Fran Mihaljević“ in Zagreb, at the Department for infectious diseases of the liver, which later on became the Reference centre for diagnostics and treatment of viral hepatitis. He also works at the Outpatient Department for chronic viral hepatitis. In 1997, he participated in an educational study visit to the Mary Hitchcock Hospital in New Hampshire and Boston, USA. In 1998 he enrolled and completed a professional postgraduate study of ultrasound in gastroenterology and hepatology. In 2005 he enrolled at the postgraduate doctoral study in Biomedicine and health. In 2012 he defended doctoral thesis “Cellular immunity during therapy of chronic HCV infection”.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Kurelac I. Prediktori odgovora na terapiju interferonom $\alpha 2$ u bolesnika s kroničnim hepatitisom C - Abstract. 1. hrvatski kongres o infektivnim bolestima s međunarodnim sudjelovanjem; 1998 Oct 1-1998 Oct 3; Dubrovnik Hrvatski liječnički zbor, Hrvatsko društvo infektologa, Akademija medicinskih znanosti Hrvatske; 1998. p 76, No 62.
2. Lukas D, Palmović D, Maček P, Kurelac I. Bolesti putnika - Knjiga sažetaka. 62. znanstveno stručni sastanak s međunarodnim sudjelovanjem; 1999 Dec 8-1999 Dec 10; Zagreb, Klinika za infektivne bolesti "Dr Fran Mihaljević". Zagreb: HLZ, HDI, HDK, AMZH; 1999. p 11, No S21.
3. Palmović D, Kurelac I, Vince A. Acute hepatitis B in the Zagreb region between 1991 to 1999. Acta Dermatovenerol Croat 1999;7(4):200.
4. Vince A, Kurelac I. Uloga spolnog prijenosa u infekciji virusima hepatitisa B i C. Simpozij o spolno prenosivim bolestima s međunarodnim sudjelovanjem; 1999 Apr 26-1999 Apr 28; Dubrovnik. Zagreb: Hrvatsko društvo infektologa; 1999. p No 25.
5. Kurelac I, Palmović D. Rezultati liječenja kroničnog hepatitisa C interferonom alfa nakon pola godine po prekidu terapije. 63. znanstveno-stručni sastanak - Knjiga sažetaka; 2000 Jun 15-2000 Jun 17; Split. Zagreb: HLZ, HDI, Hrvatsko društvo za kemoterapiju, Odjel za zarazne bolesti KB Split, Klinika za infektivne bolesti Zagreb; 2000. p 8, No 13.
6. Kurelac I, Palmović D, Lukas D. Acute viral hepatitis with severe cholestasis. 2nd Croatian Congress on Infectious Diseases with International Participation - Abstract book; 2000 Sep 24-2000 Sep 27; Dubrovnik, Croatia. Zagreb: HLZ, AMZH, HDI, HDK; 2000. p 20, No 46.
7. Kurelac I, Palmović D, Lukas D. Seksualno ponašanje bolesnika s kroničnim hepatitisom C. 2. simpozij o spolno prenosivim bolestima s međunarodnim sudjelovanjem - Knjiga sažetaka; 2000 May 16-2000 May 18; Dubrovnik. Zagreb: HLZ, AMZH; 2000. p No 21.
8. Lukas D, Palmović D, Kurelac I. Hepatitis E. 63. znanstveno-stručni sastanak - Knjiga sažetaka; 2000

- Jun 15-2000 Jun 17; Split. Zagreb: HLZ, HDI, Hrvatsko društvo za kemoterapiju, Odjel za zarazne bolesti KB Split, Klinika za infektivne bolesti Zagreb; 2000. p 7, No 10.
9. Vince A, Lukas D, Kurelac I. HCV infekcija u trudnoći. 3. simpozij o spolno prenosivim bolestima s međunarodnim sudjelovanjem - Knjiga sažetaka; 2001 May 14-2001 May 16; Dubrovnik. Zagreb: HLZ, AMZH; 2001. p No 20.
 10. Kurelac I, Vince A, Palmović D, Lukas D. Exacerbation of chronic liver disease during the interferon alpha & ribavirin therapy with development of LKM II antibodies. 3rd Croatian Congress on Infectious Diseases with International Participation-Abstract Book; 2002 Oct 12-2002 Oct 15; Dubrovnik. Zagreb: Croatian medical association, Croatian Society of Infectious Diseases, Croatian Society of Chemotherapy, Academy of Medical Sciences of Croatia; 2002. p 89, No 141.
 11. Palmović D, Lukas D, Vince A, Kurelac I. Hepatitis E kod putnika u Indiju. Liječ Vjesn 2002;124(10):313-4.
 12. Vince A, Kurelac I. Virusni hepatitis B i C kao spolno prenosiva bolest. 4. simpozij o spolno prenosivim bolestima s međunarodnim sudjelovanjem - Knjiga sažetaka; 2002 Apr 15-2002 Apr 17; Dubrovnik. Zagreb: HLZ, AMZH; 2002. p No 3.
 13. Kurelac I. Klinički i epidemiološki aspekti bolesnika s akutnim hepatitisom B i C hospitaliziranih u Klinici za infektivne bolesti u Zagrebu u posljednjih 10 godina. 5. simpozij o spolno prenosivim bolestima s međunarodnim sudjelovanjem; 2003 Apr 14-2003 Apr 16; Opatija. Zagreb: Hrvatsko društvo za kemoterapiju HLZ-a, Klinika za infektivne bolesti "Dr. Fran Mihaljević"; 2003. p No 12.
 14. Crnjaković-Palmović J, Palmović D, Vince A, Kurelac I. Terapija akutnog hepatitisa C. Infektol Glasn 2004;24(1):11-4.
 15. Kurelac I. Klinički i epidemiološki pregled bolesnika oboljelih od akutnog hepatitisa B s osvrtom na cijepljenje. 6. simpozij o spolno prenosivim bolestima i urogenitalnim infekcijama, Simpozij Slavka Schönwalda s međunarodnim sudjelovanjem; 2004 Apr 18-2004 Apr 21; Opatija. Zagreb: Hrvatsko društvo za urogenitalne infekcije HLZ-a; 2004. p No 49.
 16. Palmović D, Vince A, Kurelac I, Crnjaković-Palmović J. Akutni hepatitis C - nerazjašnjena pitanja. Acta Med Croat 2004;58(4):335-9.
 17. Vince A, Kurelac I, Palmović D, Čajić V. Lamivudin u liječenju imunokompromitiranih bolesnika s akutnim hepatitisom B: naša iskustva. 6. simpozij o spolno prenosivim bolestima i urogenitalnim infekcijama, Simpozij Slavka Schönwalda s međunarodnim sudjelovanjem; 2004 Apr 18-2004 Apr 21; Opatija. Zagreb: Hrvatsko društvo za urogenitalne infekcije HLZ-a; 2004. p No 51.
 18. Vince A, Palmović D, Kurelac I. Mogućnost liječenja virusnih hepatitisa. 68. znanstveno-stručni simpozij Suvremeno liječenje infektivnih bolesti; 2005 Jun 8-2005 Jun 11; Osijek. Samobor: INTERGRAF-BI; 2005. p 39-40, No 40.
 19. Gregurević I, Vince A, Kurelac I. Utjecaj značajki domaćina na progresiju jetrene fibroze kod kroničnog hepatitisa C. Infektol Glasn 2006;26(2):61-6.
 20. Kurelac I, Vince A, Palmović D. Rezultati liječenja bolesnika s kroničnim hepatitisom C Pegiliranim interferonom i Ribavirinom. 70. znanstveno-stručni simpozij s međunarodnim sudjelovanjem Virusni hepatitis i infekt u imunokompromitiranih; 2006 May 26-2006 May 27; Dubrovnik. Zagreb: HLZ; HDIB; AMZH; 2006. p 45-6, No 38.
 21. Vince A, Iščić-Beš J, Židovec-Lepej S, Baća-Vrakela I, Bradarić N, Kurelac I, Vince DB. Distribution of hepatitis C virus genotypes in Croatia - A 10 year retrospective study of four geographic regions. Coll Antropol 2006;30(Suppl.2):139-43.
 22. Vince A, Kurelac I, Palmović D. Treatment of patients with chronic hepatitis C in Croatia. 5th Croatian Congress on Infectious Diseases with International Participation; 2006 Sep 23-2006 Sep 27; Zadar. Zagreb: Croatian Society of Infectious Diseases; 2006. p 26, No 34.

23. Kurelac I. Virusni hepatitis Duraković Z, i sur. Gerijatrija - medicina starije dobi. Zagreb: C.T.-Poslovne informacije d.o.o.; 2007. p 144-9.
24. Vince A, Iščić-Beš J, Židovec-Lepej S, Baća-Vrakela I, Bradarić N, Kurelac I, Vince DB. Distribucija genotipova hepatitis C virusa u Hrvatskoj: desetogodišnje retrospektivno istraživanje u četiri regije. 9. simpozij o spolno prenosivim bolestima i urogenitalnim infekcijama, Simpozij Slavka Schönwalda s međunarodnim sudjelovanjem; 2007 Mar 17-2007 Mar 19; Opatija. Zagreb: HDUGI; Klinika za infektivne bolesti "Dr. Fran Mihaljević"; 2007. p 82, No 59.
25. Vince A, Židovec-Lepej S, Kurelac I, Baršić B, Kozić S, Klinar I, Žarković K. Virological and immunological characteristics of fatal Epstein-Barr virus mononucleosis in a 17-year-old Caucasian male presenting with meningoencephalitis and hemophagocytic syndrome. J Neurovirol 2007;13(4):389-96.
26. Vince A, Kurelac I. Liječenje virusnih hepatitis u Hrvatskoj. Simpozij u povodu Svjetskog dana svjesnosti o virusnim hepatitisima "World Hepatitis Day"; 2008 May 16; Zagreb 2008.
27. Vince A, Kurelac I, Čajić V, Dušek D. Nove mogućnosti u liječenju kroničnog hepatitis C. 74. znanstveno-stručni simpozij s međunarodnim sudjelovanjem "Nove spoznaje na području infektivnih bolesti" uz 80. obljetnicu Odjela za infektivne bolesti OB Šibenik; 2008 Apr 10-2008 Apr 12; Šibenik. Zagreb: HDIB HLZ-a; 2008. p 21, No 1.
28. Budimir J, Iščić-Beš J, Planinić A, Dušek D, Kurelac I, Vince A, Židovec-Lepej S. Resistance of hepatitis B virus to lamivudine and adefovir in patients with chronic hepatitis B treated at the University Hospital for Infectious Diseases "Dr. Fran Mihaljević" during 2008 and 2009. 6th Croatian Congress on Infectious Diseases with International Participation; 2009 Oct 24-2009 Oct 27; Šibenik. Samobor: HDI; 2009. p 49, No 53.
29. Čajić V, Budimir J, Kurelac I, Dušek D, Židovec-Lepej S, Vince A. Treatment of chronic hepatitis C in complex patients - a case report. 6th Croatian Congress on Infectious Diseases with International Participation; 2009 Oct 24-2009 Oct 27; Šibenik. Samobor: HDI; 2009. p 51, No 55.
30. Vince A, Kurelac I, Budimir J, Dušek D, Čajić V, Židovec-Lepej S. Treatment of hepatitis C in a real-life setting in Croatia: observational study on a cohort of 318 patients. 6th Croatian Congress on Infectious Diseases with International Participation; 2009 Oct 24-2009 Oct 27; Šibenik. Samobor: HDI; 2009. p 24, No 21.
31. Vince A, Židovec-Lepej S, Kurelac I, Čajić V, Burek V, Dušek D, Budimir J. Suvremena dijagnostika i liječenje hepatitis C. Infektol Glasn 2009;29(2):49-56.
32. Kurelac I, Židovec-Lepej S. Naša iskustva u liječenju bolesnika s kroničnim B hepatitisom lamivudinom - osvrt na klinički tijek i razvoj rezistencije. Simpozij u povodu Svjetskog dana hepatitis; 2010 May 19; Zagreb 2010.
33. Vince A, Kurelac I, Čajić V, Dušek D, Budimir J. Treatment of chronic hepatitis C in a real-life setting. 2. hrvatski kongres o urogenitalnim i spolno prenosivim infekcijama s međunarodnim sudjelovanjem; 2010 May 14-2010 May 16; Opatija. Zagreb: HDUGI; 2010. p 33, No 26.
34. Kurelac I, Papić N, Sakoman S, Orban M, Dušek D, Čorić M, Vince A. Intravenous Drug Users Can Achieve a High Sustained Virological Response Rate: experience From Croatian Reference Center for Viral Hepatitis. Hepat Mon 2011;11(12):986-92.
35. Papić N, Židovec-Lepej S, Kurelac I, Čajić V, Budimi J, Dušek D, Vince A. Treatment of chronic hepatitis C in Croatian war veterans: experiences from Croatian reference center for viral hepatitis. Croat Med J 2011;50(1):35-40.
36. Vince A, Kurelac I. Hepatitis C – suvremene mogućnosti liječenja uz osvrt na liječenje u Hrvatskoj. MEDIX 2011;17(96):178-82.
37. Vince A, Kurelac I. Naša iskustva u liječenju bolesnika s kroničnim B hepatitisom telbivudinom. 79.

znanstveno-stručni simpozij s međunarodnim sudjelovanjem: Novosti u infektologiji; 2011 Jun 9-2011 Jun 11; Trogir. Samobor: HDIB; 2011.

38. Kurelac I, Židovec Lepej S, Grgić I, Gorenc L, Papić N, Dusek D, Baršić B, Vince A, Chemokine CXCL10 at week 4 of treatment predicts sustained virological response in patients with chronic hepatitis C, *Journal of Interferon & Cytokine research*, 2012, acceptance letter, decision on manuscript ID JICR-2012-0006.R1

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Distribution of hepatitis C virus genotypes and subtypes in Croatia: 2008-2015. Vince A, Židovec Lepej S, Bingulac-Popović J, Miletić M, Kuret S, Sardelić S, Vrakela IB, Kurelac I. *Cent Eur J Public Health*. 2018 Sep;26(3):159-163. doi: 10.21101/cejph.a5021.

Treatment of Elderly Patients with Chronic Hepatitis C: A Retrospective Cohort Study. Papić N, Budimir J, Kurelac I, Dušek D, Jugović D, Krajcar N, Vince A. *Acta Clin Croat*. 2018 Mar;57(1):61-70. doi: 10.20471/acc.2018.57.01.07.

[Treatment guidelines for patients with genotype 1 chronic hepatitis C infection]. Vince A, Duvnjak M, Kurelac I. *Acta Med Croatica*. 2013 Oct;67(4):329-38. Review. Croatian.

[Viral hepatitis. Croatian Consensus Statement 2013]. Vince A, Hrštic I, Begovac J, Bradarić N, Colić-Cvrlje V, Duvnjak M, Rode OD, Kanizaj TF, Grgurević I, Kekez AJ, Kaić B, Kes P, Kurelac I, Milić S, Morović M, Mrzljak A, Ostojić R, Poljak M, Slavicek J, Smolić M, Stimac D, Vcev A, Vucelić B, Lepej SZ. *Acta Med Croatica*. 2013 Oct;67(4):263-72. Croatian.

Interleukin-1 β gene promoter polymorphism is associated with higher liver fibrosis progression rate in Croatian patients with biochemically active chronic hepatitis C Grgurević, Ivica; Kozić Dokmanović, Sanja; Šćukanec-Špoljar, Mira; Kurelac, Ivan; Sonicki, Zdenko; Kirin, Marijan; Štoković, Nikola; Židovec Lepej, Snježana; Vince, Adriana // *Medica Jadertina*, 47 (2017), 1-2; 13-21

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2014-2019 "Infectomics study of human liver non-parenchymal cells in chronic hepatitis C, Croatian Science Foundation, investigator

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Associate Profesor Sanja Kusačić Kuna, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Clinical Department of Nuclear Medicine and Radiation Protection, University Hospital Centre Zagreb, Medical School University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Medical image analysis

BIOGRAPHY:

EDUCATION: Medical School University of Zagreb, 1989: Residency in Nuclear Medicine, 1992-1995: Specialty Board, 1995

Postgraduate study: Ultrasound in Clinical medicine- gastroenterology direction- University of Zagreb, 1995-1997

WORK EXPERIENCE: Clinical Department of Nuclear Medicine and Radiation Protection, University Hospital Centre Zagreb, since 1991: Head of Clinical Department for Radionuclide Therapy since 2012

SCIENTIFIC ACTIVITY:

MASTER DEGREE -Ultrasonographic differentiation of benign from malignant lymphadenopathy in patients with thyroid cancer. Zagreb, Medical School University of Zagreb, 2002.

DISSERTATION- Comparison of different doses of iodine-131 in the thyroid remnant ablation due to papillary carcinoma, and the role of recombinant human thyrotropin (rhTSH) in ablation" Medical School University of Zagreb, 2010

Since 1991 **participated in several scientific research projects.**

Organisational skills and competencies- extensive experience in organising daily assignments and everyday clinical routine work, actively involved in organising scientific and professional congresses

Publications: 12 articles indexed in CC (number of citations according to SCI more than 100), 4 articles in other bibliographic databases, 3 book chapter, more than 90 summaries

Personal Information: Born in Split, Croatia on 08.11.1964.

Election in scientific and teaching position:

30.10.2012, research associate in the scientific field of biomedicine and health, a branch of nuclear medicine.

02.04.2014 scientific title of **senior research associate**

15.12.2014 associate title of **senior assistant (scientific teaching position)**

03.02.2017 Associate Profesor title (scientific teaching position)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

03.02.2017 Associate Profesor title (scientific teaching position)

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Kusačić Kuna S, Samardžić T, Tešić V, Medvedec M, Kuna K, Bračić I, Despot M, Dodig D. Thyroid remnant ablation in patients with papillary cancer: a comparison of low, moderate and high activities of radioiodine. Nucl Med Commun 2009; 30 (4): 263-269.
2. Kusačić Kuna S, Bračić I, Tešić V, Kuna K, Horvatić Herceg G, Dodig D. Ultrasonographic differentiation of benign from malignant neck lymphadenopathy in thyroid cancer. J Ultrasound Med 2006; 25: 1531-1537.

3. Stipčević T, Kusačić Kuna S, Deželjin M, Dodig D, Koršić M, Pivac N, Muck-Šeler D. Platelet serotonin concentration and monoamine oxidase activity in hypothyroid patients. *Hormone Research* 2009; 71 (4): 207-212.
4. Herceg D, Kusačić Kuna S, Dotlić S, Petrović R, Bračić I, Horvatić Herceg G, Pleština S. F-18 FDG evaluation of rapidly growing extraocular sebaceous carcinoma. *Clinical Nuclear Medicine* 2009; 34(11):798-801.
5. Horvatić Herceg G, Bračić I, Koršić M, Herceg D, Petrović R, Kusačić Kuna S, Dodig D. "Sand-storm" image: bone scintigraphy in pulmonary alveolar microlithiasis. *Eur J of Nucl Med Imaging* 2009; 36(8): 1353.
6. Tešić V, Kolarić B, Znaor A, Kusačić Kuna S, Brkljačić B. Mammographic Density and Estimation of Breast Cancer Risk in Intermediate Risk Population. *The Breast Journal* 2013; 19 (1): 71-78.
7. Vukasović A, Kusačić Kuna S, Trutin Ostović K, Prgomet D, Banek T. Diffuse Sclerosing Variant of Thyroid Carcinoma Presenting as Hashimoto Thyroiditis: a Case Report. *Coll Antropol* 2012; 36 (Supl 2): 219-221.
8. Horvatić Herceg G, Herceg D, Kralik M, Kulić A, Bence Žigman Z, Tomić Brzac H, Bračić I, Kusačić Kuna S, Prgomet D. Urokinase Plasminogen Activator and Its Inhibitor Type-1 as Prognostic Factors in Differentiated Thyroid Carcinoma Patients. *Otolaryngology– Head and Neck Surgery* 2013; 149 (4) 533-540.
1. Rubić M, Kusačić Kuna S, Tešić V, Samardžić T, Despot M, Huić D. The most common factors influencing on quality of life of thyroid cancer patients after thyroid hormone withdrawal. *Psychiatria Danubina*, 2014; 26 (3): 520-527.
1. Kusačić Kuna S, Bračić I, Tešić V, Kuna K, Horvatić Herceg G, Dodig D. Rôle de l'échographie devant un ganglion cervical. *Journal d'Echographie en Radiologie*, 2007.
2. Kusačić Kuna S, Samardžić T, Tešić V, Medvedec M, Kuna K, Bračić I, Despot M, Dodig D. The best results for remnant ablation is achieved with 50 mCi of I-131 in almost 90 % of patients with papillary thyroid cancer. *Clinical Thyroidology* 2009; 21 (4): 10-12.
3. Juretić Kuščić Lj, Klančnik M, Paladin I, Kusačić Kuna S. Obstructive nephropathy caused by renal metastasis of papillary thyroid carcinoma: a case report. *Endocr oncol metab* 2016; 2(1): 94-98. Doi number 10.21040/eom/2016.2.11
1. Tomić Brzac H, Kusačić Kuna S. Bolesti štitnjače i trudnoća. U: Kurjak A, ur. *Ginekologija i perinatologija* II. Varaždinske Toplice: Tonimir, 2003; 537-544.
2. Kusić Z, Bence Žigman Z, Franceschi M, Jukić T, Mateša N, Lukinac Lj, Kusačić Kuna S, Horvatić Herceg G. Dijagnostika i liječenje bolesti štitnjače. U: Dodig D, Kusić Z, ur. *Klinička nuklearna medicina*. Zagreb: Medicinska naklada, 2012; 53-109.
3. Kusačić Kuna S, Huić D. Gravesova bolest. U: Kusić Z i sur, ur: *Hipertireoza*. Zagreb: Medicinska naklada, 2016; 7-19.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS



1. Huić D, Grošev D, **Kusačić Kuna S**, Mutvar A, Golubić AT. Highlights of the Eighth International Congress of the Croatian Society of Nuclear Medicine, Sibenik, May 9–12, 2014. Nuklearmedizin 2014; 53 (2): A 128-A136.
2. Huić D, **Kusačić Kuna S**, Golubić AT. The ninth international congress of the Croatian Society of Nuclear Medicine, Rovinj, May 04–07, 2017. Eur J Nucl Med Mol Imaging, DOI 10.1007/s00259-017-3768-3
3. Golubić AT, Pasini Nemir E, Žuvić M, Mutvar A, **Kusačić Kuna S**, Despot M, et al. The value of 18 F-DOPA PET/CT in patients with medullary thyroid carcinoma and increased calcitonin values. Nucl Med Commun 2017; 38: 636-641.
4. Juri Mandić J, Kozmar, A, **Kusačić Kuna S**, Jazbec A, Mandić K, Mrazovac D, Vukojević N. The levels of 12 cytokines and growth factors in tears: hyperthyreosis vs euthyreosis. Graefes Arch Clin Exp Ophthalmol 2018; <https://doi.org/10.1007/s00417-017-3892-6>

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Rajko Kušec, full professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Zagreb School of Medicine University of Zagreb and Dubrava University hospital

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Understanding bone metabolism – basic science in clinical practice; Genomic approaches in biomedical and translational research; Molecular hematology; Methods of investigation in vivo and in vitro

BIOGRAPHY

1982-1983 Univ Hospital Centre Zagreb

1983-1985 Zagreb School of medicine

1985-1994 Merkur University hospital

1995-1997 University of Oxford

1998- 2001 Ruđer Bošković Institute- Department of molecular medicine

2001- 2005 Merkur University hospital

2005 – Zagreb School of medicine University of Zagreb and Dubrava University hospital

1982 University of Zagreb School of medicine

1984 MSc, 1998 PhD

Training 1991 Leiden Medical centre / Erasmus Medical centre Rotterdam Departments of haematology Leiden/Rotterdam, Netherlands; 1992.-1994 Univerisitaet Wien, Klinik fuer Innere Medizin I- Haematologie und Haemostaseologie; 1994- 1997 University of Oxford, Nuffield department of internal medicine - Molecular haematology unit Oxford, Great Britain

Principal investigator 2002-2006 Ministry of science, education and sports, Republic of Croatia; “Cloning of novel genes from chromosomal translocations in hemoblastoses” (2001-2006); 2002-2003 Croatian and Austrian programme of bilateral scientific collaboration “Molecular diagnostics of malignant lymphoma” (2002-2003); 2001-2003 British Council and Croatian Ministry of science and technology; “Molecular characterization of critical deleted region of chromosome 5q in MDS” (2001-2003); 2002-2005 EU FWP5 initiative: EUMNET- European concerted action on myelofibrosis (2002-2005)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2018

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Korac P, Jones M, Dominis M, Kusec R, Mason DY, Banham AH Ventura RA. Application of the FICTION technique to simultaneously detect both immunophenotype and chromosomal abnormalities in routinely fixed paraffin wax-embedded bone marrow trephines. J Clin Path 2005; 58:1336-1338.

Barosi G, Bordesoule D, Briere J, Cervantes F, Demory JL, Dupriez B, Gisslinger H, Griesshammer M, Hasselbalch H, Kusec R, Le Bousse-Kerdiles MC, Liberato NL, Marchetti M, Reilly J, Thiele J. Response Criteria for Myelofibrosis with Myeloid Metaplasia: Results of an Initiative of the European Myelofibrosis Network (EUMNET). Blood 2005; 106: 2849-2853.

Marusic Vrsalovic M, Korac P, Dominis M, Ostojic S, Mannhalter C, Kusec R. T and B-cell clonality and frequency of human herpesviruses-6, -8 and Epstein Barr virus in angioimmunoblastic T-cell lymphoma. *Hematological Oncology* 2005; 22:169-177.

Campbell PJ, Griesshammer M, Döhner K, Döhner H, Kusec R, Hasselbalch HC, Stauffer Larsen T, Pallisgaard N, Giraudier S, Le Bousse-Kerdilès MC, Desterke Ch, Guerton B, Dupriez B, Bordessoule D, Fenaux P, Kiladjian JJ, Viallard JF, Brière J, Harrison CN, Green AR, Reilly JT. The V617F mutation in JAK2 is associated with poorer survival in idiopathic myelofibrosis. *Blood* 2005; 107:2098-2100.

Turk N, Kusec R, Jaksic B, Turk Z. Humoral SPARC/osteonectin protein in plasma cell dyscrasias. *Ann Hematol.* 2005; 84:304-310.

Dominis M, Pesut A, Borovecki A, Marusic-Vrsalovic M, Kusec R. Bone marrow lymphoid aggregates in malignant lymphomas. *Croat Med J.* 2005; 46:410-416.

Ait-Tahar K, Cerundolo V, Banham A, Hatton C, Blanchard T, Kusec R, Smith G, Pulford K. B and CTL responses to the ALK protein in patients with ALK-positive ALCL (pNA). *Int J Cancer.* 2006;118: 688-695.

Campbell LJ, Fidler C, Eagleton H, Peniket A, Kusec R, Gal S, Littlewood TJ, Wainscoat JS, Boulton J. hTERT, the catalytic component of telomerase, is downregulated in the haematopoietic stem cells of patients with chronic myeloid leukaemia. *Leukemia* 2006 ; 20:671-679.

Kolonic Ostojic S, Dzebro S, Kusec R, Planinc-Peraica A, Dominis M, Jaksic B. Primary mediastinal large B-cell lymphoma: a single-center study of clinicopathologic characteristics.

Int J Hematol. 2006;83:331-336.

Kusec R, Jaksic O, Ostojic S, Kardum-Skelin I, Vrhovac R, Jaksic B. More on prognostic significance of FLT3/ITD size in acute myeloid leukemia (AML) *Blood* 2006;108:405-406.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

"International external quality assurance of JAK2 V617F quantification. Asp J, Skov V, Bellosillo B, Kristensen T, Lippert E, Dicker F, Schwarz J, Wojtaszewska M, Palmqvist L, Akiki S, Aggerholm A, Tolstrup Andersen M, Girodon F, Kjær L, Oppliger Leibundgut E, Pancrazzi A, Vorland M, Andrikovics H, Kralovics R, Cassinat B, Coucelo M, Eftimov A, Haslam K, Kusec R, Link-Lenczowska D, Lodé L, Matiakowska K, Naguib D, Navaglia F, Novotny GW, Percy MJ, Sudarikov A, Hermouet S, Pallisgaard N. *Ann Hematol.* 2018 Dec 8. doi: 10.1007/s00277-018-3570-8. [Epub ahead of print]

Recommendations for the diagnosis and treatment of patients with polycythaemia vera. Hatalova A, Schwarz J, Gotic M, Penka M, Hrubisko M, Kusec R, Egyed M, Griesshammer M, Podolak-Dawidziak M, Hellmann A, Klymenko S, Niculescu-Mizil E, Petrides PE, Grosicki S, Sever M, Cantoni N, Thiele J, Wolf D, Gisslinger H. *Eur J Haematol.* 2018 Jul 30. doi: 10.1111/ejh.13156. [Epub ahead of print]

L-leucine increases translation of RPS14 and LARP1 in erythroblasts from del(5q) myelodysplastic syndrome patients. Bello E, Kerry J, Singh S, Yip BH, Kušec R, Killick S, Raynaud S, Boulton J, Pellagatti A. *Haematologica.* 2018 Nov;103(11):e496-e500. doi: 10.3324/haematol.2018.190447. Epub 2018 Jun 14. No abstract available.

Combining information on C reactive protein and serum albumin into the Glasgow Prognostic Score strongly discriminates survival of myelofibrosis patients. Lucijanec M, Cicic D, Stoos-Veic T, Pejisa V, Rahelic D, Lucijanec T, Vasilj T, Ivic M, Sedinic M, Kusec R. *Blood Cells Mol Dis.* 2018 Sep;72:14-16. doi: 10.1016/j.bcmd.2018.06.001. Epub 2018 Jun 6. No abstract available.

- "Elevated Neutrophil-to-Lymphocyte-ratio and Platelet-to-Lymphocyte Ratio in Myelofibrosis: Inflammatory Biomarkers or Representatives of Myeloproliferation Itself? Lucijanic M, Cicic D, Stoos-Veic T, Pejša V, Lucijanic J, Fazlic Dzankic A, Vlasac Glasnovic J, Soric E, Skelin M, Kusec R. *Anticancer Res.* 2018 May;38(5):3157-3163.
- "Higher Sclerostin/SOST expression is associated with lower percentage of circulatory blasts and better prognosis in patients with myelofibrosis. Lucijanic M, Livun A, Tupek KM, Stoos-Veic T, Pejša V, Kusec R. *Ann Hematol.* 2018 Jul;97(7):1293-1294. doi: 10.1007/s00277-018-3294-9. Epub 2018 Mar
- "Neck adipose tissue - tying ties in metabolic disorders. Pandzic Jaksic V, Grizelj D, Livun A, Boscic D, Ajduk M, Kusec R, Jaksic O. *Horm Mol Biol Clin Investig.* 2018 Feb 9;33(2). pii: /j/hmbci.2018.33.issue-2/hmbci-2017-0075/hmbci-2017-0075.xml. doi: 10.1515/hmbci-2017-0075. Review.
- "Prognostic implications of low transferrin saturation in patients with primary myelofibrosis. Lucijanic M, Prka Z, Pejša V, Stoos-Veic T, Lucijanic J, Kusec R. *Leuk Res.* 2018 Mar;66:89-95. doi: 10.1016/j.leukres.2018.01.017. Epub 2018 Feb 3.
- "Assessing serum albumin concentration, lymphocyte count and prognostic nutritional index might improve prognostication in patients with myelofibrosis. Lucijanic M, Veletic I, Rahelic D, Pejša V, Cicic D, Skelin M, Livun A, Tupek KM, Stoos-Veic T, Lucijanic T, Maglicic A, Kusec R. *Wien Klin Wochenschr.* 2018 Feb;130(3-4):126-133. doi: 10.1007/s00508-018-1318-z. Epub 2018 Jan 25.
- "Increased mean platelet volume (MPV) is an independent predictor of inferior survival in patients with primary and secondary myelofibrosis. Lucijanic M, Mitrovic Z, Cicic D, Prka Z, Pejša V, Livun A, Stoos-Veic T, Romic Z, Zivkovic M, Lucijanic I, Fabris Z, Kusec R. *Int J Hematol.* 2018 Feb;107(2):166-172. doi: 10.1007/s12185-017-2348-4. Epub 2017 Oct 11.
- "High absolute basophil count is a powerful independent predictor of inferior overall survival in patients with primary myelofibrosis. Lucijanic M, Livun A, Stoos-Veic T, Pejša V, Jaksic O, Cicic D, Lucijanic J, Romic Z, Orehovec B, Aralica G, Miletic M, Kusec R. *Hematology.* 2018 May;23(4):201-207. doi: 10.1080/10245332.2017.1376843. Epub 2017 Sep 14.
- "Heat shock protein 27 (HSP27/HSPB1) expression is increased in patients with primary and secondary myelofibrosis and may be affecting their survival. Lucijanic M, Livun A, Tupek KM, Stoos-Veic T, Aralica G, Gecek I, Pejša V, Kusec R. *Leuk Lymphoma.* 2017 Oct;58(10):2497-2500. doi: 10.1080/10428194.2017.1296146. Epub 2017 Feb 28. No abstract available.
- "Rituximab with dose-adjusted EPOCH as first-line treatment in patients with highly aggressive diffuse large B-cell lymphoma and autologous stem cell transplantation in selected patients. Pejša V, Prka Ž, Lucijanić M, Mitrović Z, Piršić M, Jakšić O, Ajduković R, Kušec R. *Croat Med J.* 2017 Feb 28;58(1):40-
- "Canonical Wnt/ β -Catenin Signaling Pathway Is Dysregulated in Patients With Primary and Secondary Myelofibrosis. Lucijanic M, Livun A, Tomasovic-Loncaric C, Stoos-Veic T, Pejša V, Jaksic O, Prka Z, Kusec R. *Clin Lymphoma Myeloma Leuk.* 2016 Sep;16(9):523-526. doi: 10.1016/j.clml.2016.06.004. Epub 2016 Jun 8.
- "Cryptic splicing events in the iron transporter ABCB7 and other key target genes in SF3B1-mutant myelodysplastic syndromes. Dolatshad H, Pellagatti A, Liberante FG, Llorian M, Repapi E, Steeples V, Roy S, Scifo L, Armstrong RN, Shaw J, Yip BH, Killick S, Kušec R, Taylor S, Mills KI, Savage KI, Smith CW, Boultonwood J. *Leukemia.* 2016 Dec;30(12):2322-2331. doi: 10.1038/leu.2016.149. Epub 2016 May 23.

The Degree of Anisocytosis Predicts Survival in Patients with Primary Myelofibrosis. Lucijanic M, Pejsa V, Jaksic O, Mitrovic Z, Tomasovic-Loncaric C, Stoos-Veic T, Prka Z, Pirsic M, Haris V, Vasilj T, Kusec R. *Acta Haematol.* 2016;136(2):98-100. doi: 10.1159/000445247. Epub 2016 May 18.

"Hemochromatosis gene mutations may affect the survival of patients with myelodysplastic syndrome. Lucijanić M, Pejša V, Mitrović Z, Štoos-Veić T, Livun A, Jakšić O, Vasilj T, Piršić M, Hariš V, Prka Ž, Kušec R. *Hematology.* 2016 Apr;21(3):170-4. doi: 10.1080/10245332.2015.1101964. Epub 2016 Mar 30.

"Subtypes and clinical significance of common bile duct varices in portal vein thrombosis: diagnosis and follow-up by Doppler US and EUS. Grgurevic I, Kujundzic M, Banic M, Kusec R, Bokun T, Vukelic-Markovic M, Bogdanovic Z, Lukic A, Tsochatzis E, Brkljacic B. *Abdom Radiol (NY).* 2016 Mar;41(3):476-84. doi: 10.1007/s00261-015-0596-4.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Principal investigator 2002-2006 Ministry of science, education and sports, Republic of Croatia; "Cloning of novel genes from chromosomal translocations in hemoblastoses" (2001-2006); 2002-2003 Croatian and Austrian programme of bilateral scientific collaboration "Molecular diagnostics of malignant lymphoma" (2002-2003); 2001-2003 British Council and Croatian Ministry of science and technology; "Molecular characterization of critical deleted region of chromosome 5q in MDS" (2001-2003); 2002-2005 EU FWP5 initiative: EUMNET- European concerted action on myelofibrosis (2002-2005)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Vesna Kušec, full professor, MD PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Clinical Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Understanding bone metabolism – basic science in clinical practice; Biochemical methods in biomedical research

BIOGRAPHY

Born 1958 in Zagreb, MD 1982, mr sci 1984 Faculty of natural sciences and mathematics University of Zagreb, PhD 1988 Zagreb School of Medicine, assistant professor 2004 Zagreb School of Medicine. Affiliation 1984-1990 Institute for Medical Research and Occupational Health, since 1991 Clinical Hospital Centre Zagreb (head Laboratory for biochemistry of vitamins and Endocrinological laboratory). 1992-1993 Ludwig Boltzmann Institute for Osteology, University of Vienna, Austria, 1994-1996 Medical Research Council Bone Research Laboratory, University of Oxford, UK, 1994-1995 Girdlestone Memorial Scholarship, 2002 Course on Bone Histomorphometry organized by European Calcified Tissue Society, Aarhus, Denmark.

Principal investigator for project “Common molecular basis for bone disorders in humans” at the Ministry of Sciences and Technology Republic of Croatia, “Osteoprotegerin in the postmenopause and osteoporosis – clinical significance”, Croatian-Austrian scientific project “Evaluation of osteoprotegerin in the assessment of bone turnover in metabolic bone disorder”. Collaborator in under- and postgraduate teaching at the Zagreb School of Medicine; Course leader for undergraduate medical students for elective subject “Bone: molecular biology at the bedside”, mentor for 2 MrSc and mentor and co-mentor for 6 PhD thesis, 46 CC publications, >700 citations.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Marušić A., Katavić V., Štimac D., Kušec V., Jonjić S: Bone turnover in homozygous beta2-microglobulin knock-out mice does not differ from that of their heterozygous littermates. Eur J Clin Chem Biochem 33: 915-918, 1995.

Kušec V., Stavljenić Rukavina A, Čubrilo Turek M. Biochemical markers of bone metabolism in postmenopausal women - the effect of hormonal replacement therapy and smoking. Croatian Medical Journal 1998; 39(1): 23-27

Šmalcelj, Kušec V., Z Puretić, Z Mareković. Biochemical parameters of bone turnover in kidney transplant recipients. Wiener Klinische Wochenschrift 1998;110/9:326-330

Kušec V., Kramarić M, Barić I, Stavljenić Rukavina A. Osteocalcin and other serum bone biochemical markers in healthy population. Clinical Laboratory 1998;44: 277-283

Abu EO, Horner A, Kusec V., Triffitt JT, Compston JE. The localisation of androgen receptors in human bone. J Clin Endocrinol Metab 82:3493-3497, 1997.

Kušec V., Kramarić M, Stavljenić Rukavina A. Changes in skeletal metabolism in pubertal girls can be revealed by biochemical parameters of calcium metabolism and bone turnover. Acta med. Croatica 1998;52:215-218

Kusec V, Viridi AS, Prince R, Triffitt JT. Estrogen receptor localisation in human and rabbit skeletal tissue. *J Clin Endocrinol Metab* 83: 2421-2428, 1998

Oreffo RO, Kusec V, Viridi AS, Flanagan AM, Grano M, Zambonin-Zallone A, Triffitt JT Expression of estrogen receptor-alpha in cells of the osteoclastic lineage. *Histochem Cell Biol* 1999;111(2):125-33

Kušec V, Vrbanec D, Juričić M, Jusufhodžić L, Belev B, Unušić J. Evidence of Increased Bone Turnover in Breast Cancer Patients with Bone Metastases in a Retrospective Study. *J Tumor Marker Oncology*, 1999;14 (3) :25-33

Čubrilo-Turek M, Stavljenić-Rukavina A, Turek S, Kušec V, Duraković Z. The usefulness of biochemical bone markers in predicting the response of hormone replacement therapy in perimenopausal cigarette smoking healthy women. *Coll Antropol* 23:195-201, 1999.

Oreffo ROC, Kusec V, Romberg S, Triffitt JT. Human bone marrow osteoprogenitors express estrogen receptor-alpha and bone morphogenetic proteins 2 and 4 mRNA during osteoblastic differentiation. *J Cell Biochem* 75(3): 382-392, 1999.

Kušec V, Šmalcelj R, Glavaš-Boras S, Slaviček J. Disorder of bone metabolism after kidney transplantation - Assessment by bone markers. *Periodicum Biologorum* 102(1): 51-54, 2000.

Šmalcelj R, Kušec V, Slaviček J, Barišić I, Glavaš-Boras S. Biochemical markers of bone metabolism in patients on chronic dialysis. *Periodicum Biologorum* 102(1): 55-58, 2000

Kušec V, Šmalcelj R, Cvijetić C, Rožman R, Škreb F. Determinants of reduced bone mineral density and increased bone turnover after kidney transplantation. *Croatian Medical Journal* 2000; 41 (4): 396-400

Abu EO, Horner A, Kusec V, Triffitt JT, Compston JE. The localisation of functional glucocorticoid receptor alpha in human bone. *J Clin Endocrinol Metab* 85(2):883-839, 2000.

Primorac D, Rowe DW, Mottes M, Barišić I, Antičević D, Mirandola S, Gomez Lira M, Kalajuzić I, Kušec V, Glorieux FH. Osteogenesis imperfecta at the beginning of bone and joint decade. *Croatian Medical Journal* 42 (4): 393-415, 2001

Kusec V, Jelic M, F. Borovecki, Kos J. Vukicevic S, Korzinek K. Distraction Osteogenesis By Ilizarov And Unilateral External Fixators In Dogs - Model Evaluation. *International Orthopaedics* 2003; 27(1): 47-52

Kušec V, Šmalcelj R, Cvijetić S. Parathyroid hormone and bone mass after kidney transplantation. *Acta med. Croatica* 56:17-20, 2002.

Begovac J, Bayer K, Krpan D, Kusec V. Osteosclerosis and periosteal new bone formation during indinavir therapy. *AIDS* 2002; 16(5):803-4.

Kušec V, Potočki K, Šmalcelj R, Purić Z, Kes P, Gašparov S, Krpan D, Dedić I, Ribičić-Goreat N, Pasini J, Kaštelan Ž, Derežić D, Koršić M, Cassidy M, Hosking D, Mareković Z. Praćenje poremećaja metabolizma kosti nakon transplantacije bubrega. *Documenta urologica* 2001-2002; 1: 3-7.

Djapic T, Kusec V, Jelic M, Vukicevic S, Pecina M. Compressed homologous bone and bone morphogenetic protein (BMP-7) or bone marrow accelerate healing of long-bone critical defects. *Int Orthop*. 27:326-330, 2003

Kusec V, Smalcelj R, Puretic Z, Szekeres T. Interleukin-6, transforming growth factor-beta 1, and bone markers after kidney transplantation. *Calcif Tiss Int* 75(1): 1-6, 2004.

Lozo P, Krpan D, Krvavica A, Vukelić Baturić T, Fističić I, Kušec V. Histologija kosti u postmenopauzalnoj osteoporozi – različitosti staničnih zbijanja. *Acta Med Croat* 58: 5-11, 2004

Mihelic R, Pecina M, Jelic M, Zoricic S, Kusec V, Simic P, Bobinac D, Lah B, Legovic D, Vukicevic S. BMP-7 (OP-1) promotes tendon graft integration in anterior cruciate ligament reconstruction in sheep. *Am J Sports Medicine* 2004 32(7):1619-1625

Kusec R, Kusec V, Gisslinger B, Wolosczyk W, Gisslinger H. Bone metabolism during interferon-alpha treatment of essential thrombocythemia. *Wien Klin Wochenschr* 116/1-2: 37-41, 2004

Kušec V, Šmalcelj R. Značenje biokemijskih pokazatelja koštane pregradnje u bolesnika na kroničnoj dijalizi i nakon transplantacije bubrega. *Acta Med Croat* 58: 51-57, 2004

Filipovic N, Stojevic Z, Zdelar-Tuk M, Kusec V. Plasma parathyroid hormone-related peptide and bone metabolism in periparturient dairy cows. *Acta Veterinaria Hungarica* 52(2): 235-44, 2008.

Stojevic Z, Filipovic N, Zdelar-Tuk M, Kusec V, Prvanovic N. Bone metabolism in dairy cows in three lactations during dry period and early lactation. (German) *Tierarztliche Umschau* 2009; 64(4): 175-180.

Galic E, Krpan D, Mirat J, Kusec V. Diversity of bone cell activity is a histomorphometric feature of idiopathic osteoporosis in men. *The aging male*, 2010; 13 (1): 18-24.

Belić M, Svetina A, Kušec V, Rakočević S, Grizelj J, Robić M, Turk R. Bone alkaline phosphatase, osteocalcin and C-terminal telopeptide as bone turnover markers in canine bitches. *Veterinarski arhiv* 80(6);705-13, 2010.

Smalcelj R, Kusec V. Impaired regulation of calcium excretion in kidney transplant recipients. *Wien Klin Wochenschr.* 2011 Jun;123(11-12):334-9.

Belić M, Kušec V, Svetina A, Grizelj J, Robić M, Vrbanac Z, Benić M, Turk R. The influence of sex on biochemical markers of bone turnover in dogs. *Res Vet Sci.* 2012

Dumic M, Putarek NR, **Kusec V**, Barisic N, Koehler K, Huebner A. Low bone mineral density for age/osteoporosis in triple A syndrome-an overlooked symptom of unexplained etiology. *Osteoporos Int.* 2016 Feb;27(2):521-6. doi: 10.1007/s00198-015-3265-0.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

FORMTEXT Spehar Uroić A, Mulliqi Kotori V, Rojnić Putarek N, Kušec V, Dumić M. Primary hypothyroidism and nipple hypoplasia in a girl with Wolcott-Rallison syndrome. *Eur J Pediatr.* 2014 Apr;173(4):529-31. doi: 10.1007/s00431-013-2189-y.

Dumic K, Yuen T, Grubic Z, Kusec V, Barisic I, New MI. Two Novel CYP11B1 Gene Mutations in Patients from Two Croatian Families with 11 β -Hydroxylase Deficiency. *Int J Endocrinol.* 2014:185974. doi: 10.1155/2014/185974

Koršić M, Kušec V. Serum Leptin and Skeletal Differences between Obese and Non-Obese Patients with Chronic Obstructive Pulmonary Disease. *Obes Facts.* 2014;7(6):399-407. doi: 10.1159/000369990. Epub 2014 Nov 26.

Vukasovic A, Grbesa D, Nikuseva Martic T, Kusec V, Miskovic B, Serman A, Soken N, Serman L.

Glycosylation pattern and axin expression in normal and IUGR placentae. *J Matern Fetal Neonatal Med.* 2014 Jun 18:1-6.

Dumic M, Putarek NR, **Kusec V**, Barisic N, Koehler K, Huebner A. Low bone mineral density for age/osteoporosis in triple A syndrome-an overlooked symptom of unexplained etiology. *Osteoporos Int.* 2016 Feb;27(2):521-6. doi: 10.1007/s00198-015-3265-0.

Dumic M, Duspara V, Grubic Z, Oguic SK, Skrabic V, Kusec V. Testicular adrenal rest tumors in congenital adrenal hyperglycemia-cross-sectional study of 51 Croatian male patients. *Eur J Pediatr.* 2017 Oct;176(10):1393-1404. doi: 10.1007/s00431-017-3008-7.

Grubic Z, Maskalan M, Stingl Jankovic K, Zvecic S, Dumic Kubat K, Krnic N, Zunec R, Ille J, Kusec V, Dumic M. Association of HLA alleles and haplotypes with CYP21A2 gene p. V282L mutation in the Croatian population. *HLA.* 2016 Nov;88(5):239-244. doi: 10.1111/tan.12907.

Ninković D, Sarnavka V, Bašnec A, Ćuk M, Ramadža DP, Fumić K, Kušec V, Santer R, Barić I. Hyperinsulinism-hyperammonemia syndrome: a de novo mutation of the GLUD1 gene in twins and a review of the literature. *J Pediatr Endocrinol Metab.* 2016 Sep 1;29(9):1083-8. doi: 10.1515/jpem-2016-0086. Review.

Duraković N, Krečak I, Perić Z, Milošević M, Desnica L, Pulanić D, Pusic I, Kušec V, Vrhovac R, Pavletic SZ, Nemet D. Glycoprotein YKL-40: a novel biomarker of chronic graft-vs-host disease activity and severity? *Croat Med J.* 2016 Jun 30;57(3):239-46.

Dumic KK, Grubic Z, Yuen T, Wilson RC, Kusec V, Barisic I, Stingl K, Sansovic I, Skrabic V, Dumic M, New MI. Molecular genetic analysis in 93 patients and 193 family members with classical congenital adrenal hyperplasia due to 21-hydroxylase deficiency in Croatia. *J Steroid Biochem Mol Biol.* 2017 Jan;165(Pt A):51-56. doi: 10.1016/j.jsbmb.2016.03.035.

Dumic M, Duspara V, Grubic Z, Oguic SK, Skrabic V, Kusec V. Testicular adrenal rest tumors in congenital adrenal hyperplasia-cross-sectional study of 51 Croatian male patients. *Eur J Pediatr.* 2017 Oct;176(10):1393-1404. doi: 10.1007/s00431-017-3008-7. Epub 2017 Sep 6.

Orth M, Averina M, Chatzipanagiotou S, Faure G, Haushofer A, Kusec V, Machado A, Misbah SA, Oosterhuis W, Pulkki K, Twomey PJ, Wieland E. Opinion: redefining the role of the physician in laboratory medicine in the context of emerging technologies, personalised medicine and patient autonomy ('4P medicine'). *J Clin Pathol.* 2017 Dec 22. pii: jclinpath-2017-204734. doi: 10.1136/jclinpath-2017-204734. Review.

Baretić M, Kušec V, Pavlić-Renar I. Glucagon-Like Peptide-1 Infusion Suppresses Aldosterone Levels in Healthy Normal-Weight Individuals: Double-Blind, Placebo-Controlled Crossover Study. *Diabetes Ther.* 2018 Oct 8. doi: 10.1007/s13300-018-0517-y. [Epub ahead of print]

Vučinić M, Kušec V, Dundović S, Ille J, Dumić M. The effect of 17 years of increased salt iodization on the prevalence and nature of goiter in Croatian schoolchildren. *J Pediatr Endocrinol Metab.* 2018 Jul 28. pii: /j/jpem.ahead-of-print/jpem-2018-0129/jpem-2018-0129.xml. doi: 10.1515/jpem-2018-0129. [Epub ahead of print]



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Principal investigator for project “Common molecular basis for bone disorders in humans” at the Ministry of Sciences and Technology Republic of Croatia, “Osteoprotegerin in the postmenopause and osteoporosis – clinical significance”, Croatian-Austrian scientific project “Evaluation of osteoprotegerin in the assessment of bone turnover in metabolic bone disorder”. Collaborator in under- and postgraduate teaching at the Zagreb School of Medicine; Course leader for undergraduate medical students for elective subject “Bone: molecular biology at the bedside”,

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2 Ms sc, 4 PhD theses, co-mentor in 2 PhD theses

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Zdravko Lackovic, MD, PhD, tenured professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical Neuropharmacology, Movement disorders, Structure, methodology and functioning of scientific work 1, Structure, methodology and functioning of scientific work 2; Clinical psychopharmacology

BIOGRAPHY

Education and academic degrees

- 1971. MD University of Zagreb School of Medicine. • 1975. Mr. Sc, (research degree: Magistar bioloških znanosti, Postgraduate Study in Experimental Biology and Medicine, University of Zagreb Postdiplomski studij eksperimentalne biologije, Sveučilište u Zagrebu: Msc Thesis: Lacković Z. Značenje 5-hidroksiindolactone kiseline u lumbalnom likvoru kod oštećenja kralješničke moždine. Medicinski fakultet Sveučilišta u Zagrebu, Zagreb, 1974.
- 1976. PhD (Doktor of Medical Sciences; Dr. sc.) University of Zagreb School of Medicine. PhD Thesis: Lacković Z. Određivanje metabolita biogenih amina u likvoru kao istraživački i dijagnostički pristup središnjem živčanom sustavu. Disertacija, Medicinski fakultet Sveučilišta u Zagrebu, Zagreb, 1976

Teaching Experience/Degrees

- 1979. Docent, University of Zagreb School of Medicine
- 1983. Professor (full professor) farmakologije, University of Zagreb School of Medicine
- 1998. Professor with tenure (permanent position) University of Zagreb School of Medicine

Chronology of Employment

- 1971.-72. Internship , Psychiatric hospital Vrapče, Zagreb
- 1972.-74. Post Doc (Scholarship Ministry of Science Croatia), Institut "Ruđer Bošković", Zagreb
- 1974.-1979. Scientific Assistant , Department of Pharmacology, University of Zagreb School of Medicine
- 1979.-1981. Visiting Scientist, Laboratory of Preclinical Pharmacology, National Institute for Mental Health, Washington DC, USA
- 1981.-1983. Docent, Department of Pharmacology, Medicinski fakultet Sveučilišta u Zagrebu
- 1983.-1998. Redovni profesor, Department of Pharmacology, University of Zagreb School of Medicine
- 1998. Professor with tenure (permanent position) University of Zagreb School of Medicine
- From 30. 10. 2017 retired

Professional/ Scientific Societies:

- Hrvatsko društvo farmakologa, Croatian Pharmacological Society (President 2000-2002)
- Hrvatsko društvo za neuroznanost (Croatian Neuroscience Society)
- European Society for Neurochemistry
- Society for Neuroscience (USA)

- American Academy of Neurology
- International Brain Research Organization
- New York Academy of Science

International Neurotoxin Association

Supervision (mentorship) of PhD Thesis

1. Darko Zdilar, PhD 1988 (now specialist in Psychiatry, US)
2. Melita Šalković, PhD 1992.(now Professor in Pharmacology)
2. Vladimir Trkulja. PhD 1997.(now Professor in Pharmacology)
3. Lidija Bach-Rojecky, dr sc. 2006.(now Asoc Professor in Pharmacology, chief dept Phar, Facutly Pharmacy and Biochemistry)
5. Ivica Matak, PhD 2015.
6. Boris Filipović, PhD 2016.
7. Višnja Drinovac Vlah, PhD 2017. (cosupervisor at Scool of Farmacy and Biochemisry- Zagreb University)

- Mentor in the development of 12 graduate theses, 14 master's and doctoral degrees
- Organizer of CME courses for MDs: Drugs of abuse 2001 and 2002, and Antioxidants 2002.
-

Teaching experience:

Teching experience /courses

- Undergraduate studies at the Faculty of Medicine, University of Zagreb, sometime in Split and Osijek (while these faculties did not train their own teachers)
- One of the editors (Bulat M, Lackovic Z, Geber J) of the Croatian Pharmacology Textbook: Medical Pharmacology, Medicinska Naklada 1999 and 2001.
- Author (initiator, director and camera) 5 VHS tapes on practical in Pharmacology; used in Zagreb during the Homeland War, especially at the faculties of Osijek and Split, while not being able to hold practical
- Professional (specialist) postgraduate program in neurology, Neuropharmacology course leader
- While there was a Postgraduate Study in Biomedicine: Psychopharmacology
- Course leader in Pharmacodynamics at Postgraduate Study in Clinical Pharmacology (since the beginning of the study 1984-)
- Course leader on Neuropharmacology, postgraduate program (MSc and PhD) Faculty of Natural Sciences - PMF (1987-2004)
- Lecturer in Postgraduate Degree in Gastroenterology and Dermatovenerology (1986-2004)
- At the Doctoral School of Medicine Faculty Course leader. Structure of methodology and functioning of scientific work
- Ph.D. School of Biomedicine and Health at the Faculty of Medicine: Neurotransmitters

- Ph.D. School of Biomedicine and Health at the Faculty of Medicine Pharmacodynamic Course Principal:
Molecular Mechanism of Drug Action

Invited lectures and organization of symposia or workshops outside the country and at international conferences, with original research as a topic

1. 1980. -A.H.Robins Co., Richmond, USA
2. Laboratory of Preclinical Pharmacology, NIMH, Washington, DC, USA
3. 1981 -Blood and Lung Institute, NIH, Bethesda, USA
4. 1981.-Symposium "Dynamics of Neurotransmitter Function, Washington DC, USA
5. 1982.-Symposium "Is dopamine a peripheral neurotransmitter, American Society for Pharmacology and Experimental Therapeutics, 66th FASEB, New Orleans,
6. 1985. Department of Pharmacology, McGill University, Montreal, Canada
7. 1985. Department of Pharmacology, Ohio State University, Columbus, USA
8. 1985. Department of Pharmacology, Iowa State University, Iowa City, USA
9. Institute for Mental Health, Ann Arbor, USA
10. 1987. -Peripheral Actions of Dopamine: Satellite Meeting of the 10th International Congress of Pharmacology, Melbourne, Australia
11. 1993. -LEK Pharmaceutical Work, Ljubljana, Slovenia
12. 1994. -Hudinge Hospital, Karolinska Institutet, Stockholm, Sweden
13. 1994. -BioCyty, Abo Akademi University, Turku, Finland
14. 1999.-Life Sciences conference, Slovenian Pharmacological Society,
15. 2002 Symposium on Movement Disorders: 4th Alpine Basal Ganglia Club & Selected Topics in Neuropharmacology, Zagreb
16. 2004. - Klinik und Poliklinik für Psychiatrie und Psychotherapie, University of Wuerzburg
17. 2007 -39th International Danube Symposium and 1st International Congress on ADHD, Wuerzburg 2007
18. 2007. -10. Central European Neuropsychopharmacological Symposium, Sarajevo
19. 2007. -Neurology Clinic, Medical School, University of Olmouc
20. 2010. -Zagreb, Workshop organization and lecture "Botulinum toxin A in experimental migraine" at The 42nd International Danube Neurology Symposium
21. 2010. -Zagreb, The 42nd International Danube Neurology Symposium: Invited lecture: Central Effects Of Botulinum Toxin-Type A
22. 2010. -Pula: Plenary lecture Botulinum Toxin A in Experimental Migraine 50th International Neuropsychiatric Congress
23. 2012. -Granada (Spain): Workshop organization "Botulinum Toxin and Pain" and lecture at the 6th European Congress on Pharmacology EPHAR 2012
24. 2013. Hannover (Germany): invited lecture Mechanism of Botulinum Toxin A in Migraine. Department of Neurology University of Hannover

25. 2013. -Ljubljana; Organization of the workshop "Botulinum toxin and Pain" and lecture on SiNAPSA Neuroscience Conference '13 (SNC'13)
26. 2013. -Zagreb; Plenary lecture at the 7th Croatian Congress of Pharmacology
27. 2016. -Istanbul, Lecture at the workshop on pharmacology of pain organized by Hungarian Pharmacological Society; 7th European Congress of Pharmacology; EPHAR 2016.
28. 2016. -Hanover; Invited lectures: 3rd International Congress on Treatment of Dystonia, Hannover, 2016.
29. 2017. -Pariz invited lectures with Skype transmission to Oxford; IPSEN Innovation, 5 avenue du Canada; 91940 Les Ulis

Invited lectures and organization of symposia or workshops on doctoral studies:

1. 2004. Zagreb. Introductory lectures and organization of the First European Conference on Harmonization of PhD Studies in Biomedicine and Health
2. 2005. Zagreb Introductory lecture and organization of the 2nd European Conference on the Harmonization of Ph.D. in Biomedicine and Health
3. 2005. Workshop of Croatian Academy of Science and Arts: Harmonization of Doctoral Theses in Biomedicine and Health in the Republic of Croatia
4. 2007. Helsinki. Introductory lecture. ORPHEUS conference
5. 2009. Aarhus. Introductory lecture. 4. ORPHEUS conference
6. 2010. Beć. Introductory lecture. 5. ORPHEUS conference
7. 2011. Izmir. Introductory lecture. 6. ORPHEUS conference
8. 2012. Bergen. Introductory lecture 7. ORPHEUS conference
9. 2013. Prag. Introductory lecture. 9. ORPHEUS conference
10. 2009 Standards of doctoral studies, Turkish Pharmacologist Congress, Antalya
11. 2010 Copenhagen: Workshop Organization PhD in Pharmacology and lecture at XIth World Conference on Basic and Clinical Pharmacology 2010: WorldPharma 2010 (IUPHAR)
12. 2010 Cluj Napoca (Romania) University of Medicine and Pharmacy "Iuliu Hatiegan": Plenary lecture: "The Need for International Evaluation of PhD Programs: The Role of ORPHEUS" at National Conference: "Comprehensive PhD Programs in Biomedical Sciences; steps towards better training and higher scientific achievements of young researchers ":
13. 2010 Frankfurt (Germany) Invited lecture at the European Science Foundation EMRC meeting published on May 2007 ESF project Medical Research in Europe
14. 2010. Belgrade (Serbia) Medical School University of Belgrade: invited lecture on the symposium: Current trends in the organization of PhD programs in Medical Science.
15. Stockholm Stockholm (Sweden) Royal Swedish Academy of Science: Announced discussion (short lecture) at the workshop: "How increased interaction between basic biomedical research and Pharmaceutical Industry will make Sweden more competitive".
16. 2011. Vienna (Austria). Workshop organization and lecture on doctoral studies in biomedicine and healthcare at AMEE Annual Conferences

17. 2011. Lausanne (Švicarska) Invited lecture at the Annual General Meeting Network of European Neuroscience Schools (NENS)
18. 2011. London (UK) invited lectures at a workshop organized by the British Pharmacological Society: "PhD standards in Pharmacology"
19. 2011. Leioa (Spain) University of the Basque Country, Faculty of Medicine: Invited lecture Improving the Quality of Phd Studies in Biomedicine Through International Cooperation was held at Leioa, Spain
20. 2012. Martin (Slovakia) Invited lecture at the Jessenius Faculty of Medicine in Martin, Comenius University, University of Martin (ORPHEUS Workshop: "PhD Study from the Student's View")
21. 2012. Wuerzburg (Germany) Plenary lecture on DAAD project supported international workshop on PhD program, Wurzburg
22. 2012. Istanbul (Turkey) Marmara University; PhD workshop and lecture on Vision of ORPHEUS in PhD Education: Towards European Standards,
23. 2012. Glasgow: Invited lecture "ORPHEUS Standards as a Tool for Improving the Quality of PhD Programs" ORPHEUS-EFIS Workshop - "PhD in Immunology", European Congress of Immunology
24. 2012. Granada (Spain): Workshop Organization PhD in Pharmacology and lecture at 6th European Congress on Pharmacology EPHAR 2012
25. 2012 Lyon (France) organization of ORPEHUS Workshop: Towards Global Standards for PhD Programs in Medical Education and its lecture: Globalization of PhD standards. AMEE Conference
26. 2013 Beijing (China) invited lectures at "Beijing University Health Science Center Beijing University"
27. 2013. Krakow (Poland): Organization and Workshop in Krakow (Jagellonian University) ORPHEUS Workshop on Clinical PhD, Research at the Bed Side, Jagellonian University, Krakow, Poland 2013,
28. 2013 in Dubrovnik (IUC) Orpheus Workshop and Educational Package "Responsible Conduct in Research"
29. 2013. Karachi (Pakistan): Invited to study at the University of Karachi, Pakistan 2013.
30. 2013. Pécs (Hungary): Invited lecture at the Interdisciplinary Doctoral Conference - IDK2013 organized by the Doctoral Student Association of the University of Pécs,
31. 2013. Karaganda (Kazakhstan): Invited lecture at The 2nd Central Asian Medical Education Conference
32. 2013. Zagreb: Organization of ORPHEUS Workshop and lecture at the 7th Croatian Congress of Pharmacology
33. 2014. Tbilisi (Georgia): Organization of PhD programs in biomedicine and health sciences. Invited lectures at D.Tvildiani Medical University and at a meeting of all medical faculty of Georgia,
34. 2014. Almaty (Kazakhstan). "Organization of PhD programs in biomedicine and health sciences". Invited lecture at Kazakh National Medical University (KazNMU) named after S.D.Asfendiyarov
35. 2014. Izmir (Dokuz Eylil University): invited lecture at the 7th EUA-CDE Thematic Workshop: Outcomes of Doctoral Education - Mindset, Research, Innovation
36. 2014. Cape Town (South Africa): Workshop organization and lecture at the 17th World Congress of Basic and Clinical Pharmacology 2014
37. 2016. Istanbul: Workshop organization and lecture at the 7th European Congress of Pharmacology; EPHAR 2016.

Research Project Principal Investigator

- 1975-1985 Biogenic amines and nervous system, SIZ Croatia
- 1985-1990 Neurotransmitter: physiological and pathophysiological significance, SIZ for Scientific Work of Croatia
- 1983-1985. Neurotransmitters and their Metabolites: Biochemical Approach to Neuropsychiatric Disorders, (Project 02-288-A) Supported by US-Yugoslav Joint Board on Scientific and Technological Cooperation
- 1983-1985. Peripheral Dopaminergic Neuronal System (Project 02-289-A) Supported by US-Yugoslav Joint Board on Scientific and Technological Cooperation
- 1985-1990 Indicators of science and social change (one of the main researchers), SIZ science
- 1991-1994 Dopamine and other neurotransmitters in the health of the disease, Ministry of Science of the Republic of Croatia
- 1994-2000 Mitogen neurotransmitters in vivo, Ministry of Science, Education and Sport of the Republic of Croatia
- 2005-2013 Antinociceptive activity of botulinum toxin type a new mechanism of action, new indications? DAAD (Deutsche Akademischer Austausch Dienst) Collaborative Project. Würzburg-Zagreb-Sarajevo-Mostar, Stability Pact for South Eastern Europe
- 2007- Neurotransmitters and new mechanisms for drug and poisoning (108-1080003-0001), Ministry of Science, Education and Sport of the Republic of Croatia
- 2007- Program: Neurotransmitters in Health and Disease. Ministry of Science, Education and Sport of the Republic of Croatia (program coordinator)
- 2005-2006 National Foundation for Science, Higher Education and Technological Development. 2005. Postgraduate study program Biomedicine and Health: Establishment of Network of Related Studies in Croatia and Europe and Development of Quality Improvement System
- 2015- 2017. Clostridial neurotoxins and brain; Brain Tox. Croatian Foundation for Science
- 2017- Collaborative Project with IPSEN INNOVATION 5, avenue du Canada, 91940 LES ULIS (Paris)

Other professional activities:

- 1976) Founder and leader of the Laboratory for Molecular Neuropharmacology, Department of Pharmacology
- One of the organizers (along with I. Kostović, N. Bohaček, M. Relja, I Kračun) of the First Yugoslav Congress on Neurotransmitter in Health and Disease, Zagreb 1986.
- 1984-1991) Vice Dean for Science, Faculty of Medicine (1984-1991)
- 1985-1990) Member of the Central Medicine Committee (Matična komisija)
- 1993-1996) Expert in the "Ad hoc Working Group for Neuroscience Coordination in Europe"
- 2001 Organizer II. of the Croatian Congress of Pharmacology with International Participation (Zagreb,)
- 2001-2004 Member of the National Bioethics Committee of the Government of the Republic of Croatia

- Founder and Head of Ph.D. Program: Biomedicine and Health Sciences, Faculty of Medicine 1998 - 2017
- 2006 – 2017 Member of the Executive Committee of the Association of Medical Schools of Europe
- Member of the Permanent Curatorium of Neuropsychiatric Pula Congress (since 2000 Member of the Scientific Committee and since 2006 of Bord of Trusties).
- 2010 - 2014 Member of the Board of Doctoral Studies of the University of Zagreb (before the 2009 member of the Working Group for the Development of the Regulation of Doctoral Studies)
- 2012.-2014. Member of the Committee for Science and Technology Development at the University of Zagreb
- 2009v- President of the Committee for the Supplementation of Narcotic Drugs and Psychotropic Substances by the Ministry of Health of the Republic of Croatia
- 2012v- today. Member of Croatian Body for Monitoring of New Drugs at the Office for Suppression of Drug Abuse of the Government of the Republic of Croatia
- 2004-2014v Founder and First President of the European Association of PhD Programs in Biomedicine and Health: ORPHEUS (Organization for PhD Education in Biomedicine and Health Sciences in European System)

Editorial Boards of Scientific Journals:

- Member of the editorial board Croatian Medical Journal (1991-1992)
- Member of the editorial board editorial office "Liječnički Vjesnik" (1985-1991)
- Member of the editorial board "Medicus" (1991)
- Member of the editorial board "Neurochemical Research" (2018-)

Reviewer in Research Journal, evaluator of resesech projects and doctoral programs

- Ad hoc reviewer in Pain, Brit J Pharmacol, J Neurochem, Life Sci, Toxicon, J Neural Transmission and others.
- Evaluation of scientific projects in the field of biomedicine of the MZOŠ, the Republic of Slovenia's Research Agency, the Bulgarian Science Foundation, the Portuguese Agency for Science and Technology (FCT)
- Evaluator of Doctoral Studies in Stokholm (Karolinska), Reykjavik and Ankara (Hacettepe)

Evaluation of Reseach projects:

MZOŠ, Croatia

Agencije za raziskovanje Republike Slovenije,

Resech Funds of Bulgaria,

Agency for science and technology (FCT) Portugal.

Ministry of Science Italy

Scientific interest

- Pain
- Botulinum Toxin
- Dopamine and its receptors in the peripheral nervous system
- Neurochemical changes in Diabetes Mellitus
- Neurochemical changes in growth and regeneration
- Neurotransmitters in peripheral endocrine tissues
- Different aspects of Pharmacology

Scientific achievements

In numbers

Publications: One independent book (Neurotransmitter in Health and Disease), co-author and / or editor of 16 monographs. Published about 200 publications, indexed in PubMed 81, in Web of Science (All) 139, in other journals and monographs 40, in professional and textbooks chapters 65, congress abstracts over 122 (January 2018)

Citations:

Web of Science All: 1417 (without self-citation 1245) (139 papers), (January 2018)

Web of Science Core Collection: 1351 (without self-citations 1189) (98 papers), H index: 22 (Jan 2019), ResearchGate: 128 articles, citations 1676, index H 24 (without self-citations 24) (Jan 2018)

Other:

Since 1975 he has been running domestic or international projects. Mentor in the design of 14 doctoral and / or master's degrees (Ph.D. Ivica Matak received the State Prize for Science for Young Scientists).

ResearchGate: 128 članaka, citatati 1800, H indeks 26 (bez samocitata 24) (prosinca 2018.)

Descriptive

Initially worked with M. Bulat on issues of CSF dynamics (work in Science from 1974, see list of publications).

First investigated the presence of monoamines in the spinal cord of man. Monoamines in the brain of patients with diabetes mellitus. Developed a HPLC method for measuring serotonin and its metabolites in biological material. Discovered that compensatory growth, after the removal of one of the parental organs: the adrenal glands or ovaries mediated by nervous innervation, resulting in a change in the signaling of specific receptors. The phenomenon has not been sufficiently explained to date.

The most important discoveries are the following:

- First discovered the degradation of dopamine in peripheral tissues and dopaminergic receptors in some peripheral tissues. The finding that dopamine does not meet the conditions for peripheral hormone is mentioned today (more without citation of authors) in the most well-known internal medicine books, eg Harrison, and finding that for different biochemical tests should be taken different lumbar fluid fraction is present in many specialized laboratory medicine. These findings are so widely accepted that authors are no longer quoted today (which is a normal consequence of the cumulative character of medical sciences).

- Together with his associates, he first discovered that botulinum toxin type A after peripheral administration by axonal transport come to in the central nervous system. The toxin that comes with sensory neurons in the central nervous system mediates the antinociceptive / analgesic action of botulinum toxins.
- Together with his associates, he first discovered that neurogenic inflammation of the brain envelope is not only part of the pathophysiology of migraine, which is generally accepted, but is a reaction to various types of pain in the area of the head and neck, ie in the area innervated by trigeminal nerve.

Other Achievements

At the time of the Homeland War, he independently encouraged the collection of photographic documentation and recording of data on the destruction of Croatian hospitals, with which he published several articles in the Croatian Medical Journal, Medicine and War, Medical Journal, etc., with doctors from these hospitals (Vukovar, Osijek, Vinkovci, Lipik) (modestly but very much appreciated for this is the "Diploma of a Summoning Member of Doctors Association of Slavonia").

Additional interest: Science Research: As a Dean for Science, first explored in detail the international position and impact of medical research from Croatia and the former SFRY, using scientometric approach and thus started research at the Faculty of Medicine (the first publication, together with dean Lj. Čečuk in the papers of the Faculty of Medicine 1984). Related to this he led the project "Indicators of Science and Social Change" and was the mentor of the first master's degree in this area (Buneta Z.1988.). "Discovered" the meaning of some in our history of forgotten scientists (Vladimir Sertić, who discovered a number of bacteriophages), instigated and edited the book "Measures for Science". Based on these studies, the minimum criteria for scientific advancement at the Faculty of Medicine included internationally visible publications (CCs) and gradually became the official criteria of the Republic of Croatia. (until 1986 the mention of Current Contents and so was almost forbidden at Croatian medical schools).

As a leader and founder (1987/88) of the Ph.D. programme in Biomedicine and Health, he was the first president of the Association of European PhD Studies (ORPHEUS), which today has more than 100 medical universities / faculties mostly from Europe but also from the USA, Canada. Within this activity, he initiated the process of harmonization of doctoral research in Croatia and introduced the European dissertation criteria (they are currently stopped but due to the growing criticism and external influences we will soon be "returned to Europe"). Acknowledgment for international co-operation has been received by the Faculty of Medicine in Riga, a series of plaques, and an award from the International Co-operation Committee of the University of Zagreb for the promotion of doctoral studies.

As a researcher of neurotransmitters acting as addictive drugs, and as chairman of the Croatian Society of Pharmacologists, he launched a public education action on drug neurotoxicity, which included a large number of schools and so on, and received acknowledgment by the Ministry of Education and Sports of the Republic of Croatia in 2003.

Prizes and awards

- Acknowledgment of the Ministry of Science, Education and Sport of the Republic of Croatia 2003 (for the organization of educational actions in schools of drug damage by the Pharmacologist Society)
- Regular member of the Academy of Medical Sciences of Croatia (2004-)
- Annual State Award for Science, in the field of biomedical sciences, "for a scientifically significant discovery of axonal transport and central action of botulinum toxins on pain", (Croatian Parliament, Zagreb 2013)
- Honorary Professor of State Medical University of Karaganda (Honorary Professor, Upon the Decisions of Academic Board of Karaganda State Medical University, Karaganda 2013)
- Honorary Member of ORPHEUS (ORPEHUS: Organization for PhD Education in Biomedicine and Health)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 1998

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

MONOGRAPHS

1. Lacković Z: Neurotransmitori u zdravlju i bolesti, Medicinski fakultet Sveučilišta u Zagrebu, Zagreb, 1994. (samostalna monografija 295 stranica)

Suautorstva, uredništvo

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3. Lacković Z. (Ed): Nova saznanja o farmakologiji droga, Medicinska naklada, Zagreb 2002. (285 pp)
12. Faber, B; Folnegović-Šmalc, V; Gotovac, K; Heningsberg, N; Hercigonja-Novković, V; Kocijan-Hercigonja, D; Lacković, Z; Matijević, Lj; Šimić, G. Biologijske osnove i terapija ponašanja / Kocijan-Hercigonja, Dubravka (Ed) . Zagreb : Školska knjiga, 2006.
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36. Lacković Z. Patofiziologija živčanog prijenosa. U: *Patofiziologija* (ur. S. Gamulin. M. Marušić, S. Krvavica), JUMENA, Zagreb, 1988. str . 1047-1053.
37. Zudenigo D, Lacković Z: Vazoaktivni intestinalni polipeptid: potencijalni neurotransmitor, *Liječ Vjesn* 1989;111: 354-359 .
38. Lacković Z. Molekularni mehanizam djelovanja lijekova. U: *Farmakologija za medicinare* (ur. E. Kunec-Vajić, M. Bulat, V. Gjuriš), Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 1989. str. 36-50
39. Lacković Z. Sredstva ovisnosti. U: *Farmakologija za medicinare* (ur. E. Kunec-Vajić, M. Bulat, V. Gjuriš), Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 1989. str. 401-407.
32. Lacković Z, Šalković-Petrišić M, Mitrović N, Horvat A. Bojni otrovi, *Liječ Vjesn* 1991;7-8; 247-256.
33. Trkulja V, Lacković Z. Ecstasy. *Liječnički vjesnik*. 119 (1997), 5-6; 158-165 (pregledni rad).
34. Lacković Z; Trkulja V: Genetics and alcoholism: An example of multiple interactions of a drug and heredity. *Biochemia Medica*. 9 (1999), 3-4; 115-122
35. Lacković Z. Farmakodinamika: Molekularni mehanizam djelovanja lijekova. U: *Medicinska farmakologija* (ur. M. Bulat, J. Geber, Z. Lacković), Medicinska naklada Zagreb, Prvo izdanje 1999, drugo dotiskano I ispravljeno izdanje 2001.
36. Lacković Z. Sredstva ovisnosti. U: *Medicinska farmakologija* (ur. M. Bulat, J. Geber, Z. Lacković), Medicinska naklada Zagreb, Prvo izdanje 1999, drugo dotiskano I ispravljeno izdanje 2001.
37. Lacković, Z, Vitale B: Krešimir Krnjević - discovery of GABA and glutamate as the chief neurotransmitters in the brain. *Periodicum Biologorum*. 103 (2001), 4; 281-284

38. Šalković-Petrišić M, Trkulja V, Lacković Z. Postupci istraživanja receptora vezanih uz G-proteine. Biokemijske metode u biomedicinskim znanostima. / Stavljenić A (ur.) . Zagreb, Medicinska naklada, 2000. 2001, 2002, 2003 (kontinuirano izdavanje) Priručnik znanstvenog poslijediplomskog studija Medicinskog fakulteta u Zagrebu
39. Lacković Z. Neurotransmitters and their Receptors, U: New Trends in Classification and Management of Neurological Diseases, Inter-University Centre, Dubrovnik 2003, str. 31-41.
40. Lacković Z, Bach-Rojecky L. Neurotransmitori, prolaktin i mogućnosti farmakološke manipulacije // Prolaktinomi - medikamentozno ili kirurško liječenje / Gnjidić, Živko (ur.) . Zagreb: Hrvatska akademija znanosti i umjetnosti i Klinička bolnica "Sestre milosrdnice", 2010. str. 39-63.
41. Lackovic Z, Relja M: Analgesic effects of botulinum toxin. U.: Treatment of Distonia, (ur.: Dressler D, Altenmuller E, Krauss JK). Cambridge University Press 2018; Chapter: 25; 115-

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Matak I, Rosetto O, Lacković Z. Botulinum toxin type A selectivity for certain types of pain is associated with capsaicin-sensitive neurons. Botulinum toxin type A selectivity for certain types of pain is associated with capsaicin-sensitive neurons. Pain. 2014 May 2. pii: S0304-3959(14)00206-1. doi: 10. 1016/j. pain. 2014. 04. 027.
2. Drinovac V, Bach-Rojecky L, Lacković Z. Association of antinociceptive action of botulinum toxin type A with GABA-A receptor. J Neural Transm. 2014; 121:665-9. doi: 10. 1007/s00702-013-1150-6.
3. Drinovac V, Bach-Rojecky L, Babić A, Lacković Z. 2014. Antinociceptive effect of botulinum toxin type A on experimental abdominal pain. Eur J Pharmacol. 745:190-5.
4. Filipović B, Matak I, Lacković Z. Dural neurogenic inflammation induced by neuropathic pain is specific to cranial region. J Neural Transm. 2014 May;121(5):555-63. doi: 10. 1007/s00702-013-1144-4.
5. Matak I, Rossetto O, Lacković, Z. 2014 Botulinum toxin type A selectivity for certain types of pain is associated with capsaicin-sensitive neurons. Pain. 155, 1516-1526.
6. Matak, I. Lacković, Z. 2014 Botulinum toxin A, brain and pain. Prog Neurobiol. 119-120, 39-59
7. Matak I, Lacković Z. 2015. Botulinum neurotoxin type A: Actions beyond SNAP-25? Toxicology. 335:79-84. Review
8. Lacković Z, Filipović B, Matak I, Helyes Z. 2016. Botulinum toxin type A activity in cranial dura: implications for treatment of migraine and other headaches. Br J Pharmacol. doi: 10. 1111/bph. 13366.
9. Matak I, Lacković Z, Relja M. Botulinum toxin type A in motor nervous system: unexplained observations and new challenges. J Neural Transm (Vienna). 2016 Dec;123(12):1415-1421.
10. Drinovac Vlah V, Bach-Rojecky L, Lacković Z. Antinociceptive action of botulinum toxin type A in carrageenan-induced mirror pain. J Neural Transm (Vienna). 2016;123(12):1403-1413.
11. Ibragić S, Matak I, Dračić A, Smajlović A, Muminović M, Proft F, Sofić E, Lacković Z, Riederer P. Effects of botulinum toxin type A facial injection on monoamines and their metabolites in sensory, limbic and motor brain regions in rats. Neurosci Lett. 2016 23;617:213-7. doi: 10. 1016/j. neurolet. 2016. 02. 020.
12. Matak I, Tékus V, Bölcskei K, Lacković Z, Helyes Z. Involvement of substance P in the antinociceptive effect of botulinum toxin type A: Evidence from knockout mice. Neuroscience. 2017;358:137-145. doi: 10. 1016/j. neuroscience. 2017. 06. 040.

13. Filipović B, de Ru JA, van de Langenberg R, Borggreven PA, Lacković Z, Lohuis PJFM. Decompression endoscopic surgery for frontal secondary headache attributed to supraorbital and supratrochlear nerve entrapment: a comprehensive review. *Eur Arch Otorhinolaryngol*. 2017 May;274(5):2093-2106. doi: 10.1007/s00405-017-4450-x.
14. Lacković Z. "Bunanje": XX Century Abuse of Atropa Belladonna Halucinogenic Berries in Continental Croatia. *Psychiatr Danub*. 2017 Sep;29(3):379-382. doi: 10.24869/psyd.2017.379.
15. Drinovac Vlah V, Filipović B, Bach-Rojecky L, Lacković Z. Role of central versus peripheral opioid system in antinociceptive and anti-inflammatory effect of botulinum toxin type A in trigeminal region. *Eur J Pain*. 2018;22(3):583-591. doi: 10.1002/ejp.1146.
16. Caleo M, Spinelli M, Colosimo F, Matak I, Rossetto O, Lackovic Z, Restani L. Transynaptic Action of Botulinum Neurotoxin Type A at Central Cholinergic Boutons. *J Neurosci*. 38(48):10329-10337. doi: 10.1523/JNEUROSCI.0294-18.2018. •
17. Lackovic Z, Relja M: Analgesic effects of botulinum toxin. U.: Treatment of Distonia, (ur.: Dressler D, Altenmuller E, Krauss JK). Cambridge University Press 2018; Chapter: 25; 115-119
18. Mulvany MJ, Roland R, Lackovic Z: European PhD education - a tale of two cultures. Conference on Developments in Doctoral Education (ur. Halliday D). UK Council for Graduate Education and Training, 2014, pp 43-53
19. Mulvany MJ, Lackovic Z, Jonsson R. PhD students should be managers, not technicians. *University World News*, Issue 00487, Jan 13, 2017.
20. Lacković Z. Doktorski studij biomedicine u zdravstvo. U Sveučilište u Zagrebu Medicinski fakultet 1907. -2017. (ur Pećina M, Klarica M), Zagreb 2017.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2005 -2006. National Foundation for Science, Higher Education and Technological Development of the Republic of Croatia:

Project: Doctoral Postgraduate Study of Biomedicine and Health: establishment of network of related studies in Croatia and Europe and development of quality improvement system. Head Zdravko Lackovic. Documentation: Monograph: National Foundation for Science, Higher Education and Technological Development of the Republic of Croatia; Doctoral studies (Editor Pero Lučin). Rijeka, September 2006 <http://www.hrzz.hr/UserDocsImages/pdf/Publikacije/doktorski%20studij-za%20web.pdf>

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2016. - ORPHEUS PhD Oath of Responsible Conduct in Reseach. Creating an oath for responsible behavior of young researchers by conducting workshops with doctoral candidates or individually in several universities and countries (current participants: Izmir, Zagreb, Moscow, Karaganda, Sao Paulo, Hong Kong and others, about 300 PhD students)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 7

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Sonja Levanat, Prof., Ph.D.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute (external associate)

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods in molecular oncology; Clinical laboratory diagnostics of malignant melanoma with special reference to molecular-biological diagnosis assesment

BIOGRAPHY

Prof. Sonja Levanat, senior scientist and full professor, graduated organic chemistry and biochemistry (1978), obtained master's degree in medical biochemistry (1984) and PhD in experimental oncology (1988) at the Ruđer Bošković Institute (RBI), in natural sciences from the University of Zagreb. She did her postdoctoral training at the Institute of Physiological Chemistry, University of Hamburg, Germany (1989-1990) and Yale University, School of Medicine, USA (1993-1995), and then returned back to her home institution RBI. From 1996-2013 she has been a project leader of several scientific projects funded by Croatian Ministry for Science, Education and Sports, several bilateral projects: Croatian-Slovenian bilateral grant (1997-1999), Croatian-Austrian bilateral grant (2002-2004), "Cogito" Croatian-French bilateral grant (2003-2005), Croatian-Hungarian bilateral grant (2007-2009), several Terry Fox Run projects funded by Terry Fox Foundation and Canadian Embassy donations (2009, 2012, 2014, 2016, 2017, 2018), one project funded by Croatian Science Foundation (2017-2019) and on one she was a collaborator (2014-2018). She was also a collaborator on one international grant (2013-2016, FP7-REGPOT).

Prof. Levanat was a member of the Board for Biomedicine and Health at the Ministry of Science, Education and Sport Republic of Croatia (2013-2017), member of the Scientific Board of RBI (2007-2016), vice president of the Scientific Board of Biomedicine at RBI (2008-2016), member of the Library Board of RBI (2001-2006), and a director of spin-off company Rudjer Medikol Diagnostics Ltd (2007-2013).

Prof. Levanat was a founder and head of the Laboratory for Hereditary Cancer (2008-2019).

She is a member of the European Association for Cancer Research (EACR) (from 1988), a Honorary Member of the EACR (from 2010), was member of the EACR Council (2006-2016), and from 2009 she is a representative of the national society (Croatian Association for Cancer Research) in the EACR. She is a founder of the Croatian Association for Cancer Research (Hrvatsko društvo za istraživanje raka, HDIR) and its President from 2009. She is a member of the Croatian Society of Biochemistry and Molecular Biology (CSBMB) from 1986, was member of the Presidency of CSBMB (2003-2014), and from 2014 she is a member of the Council CSBMB. She is also a member of the Society for Clinical Genetics of Croatia (from 2015), the Croatian Society for Human Genetics, and member of the Committee on oncogenes and growth factors and the Committee on genomics and proteomics in oncology in the Department of Medical Sciences of the Croatian Academy of Science and Art (HAZU).

Prof. Levanat was member of the Editorial Board of Periodicum Biolorum (2009-2015), guest editor for 1998, vol 100 (No3), 2012 Supplement vol 114 (No 4) and 2014 vol 116 (No 4), and is a member of the Editorial Council of Libri Oncologici (from 2016).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 29/11/2017 - full professor, reappointment

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Sabol M, Trnski D, Musani V, Ozretić, Levanat L (2018) Role of GLI Transcription Factors in Pathogenesis and Their Potential as New Therapeutic Targets *Int. J. Mol. Sci.* 19(9):E2562.
2. Cretnik M, Poje G, Musani V, Kruslin B, Ozretic P, Tomas D, Situm M, Levanat S (2009) Involvement of p16 and PTCH in pathogenesis of melanoma and basal cell carcinoma *Int J Oncol* 34: 1045-1050.
3. Levanat S (2016) Molekularni aspekti u etiologiji i patogenezi melanoma s posebnim naglaskom na obiteljski melanom / Melanom / Šitum M i sur. / HAZU ISBN 987-953-176-734-7; str 15-33.
4. Trnski D, Sabol M, Gojević A, Martinić M, Ozretić P, Musani V, Ramić S, Levanat S (2015) GSK3 β and GLI3 play a role in activation of Hh-Gli pathway in human colon cancer – targeting GSK3 β downregulates the signaling pathway and reduces cell proliferation. *Biochimica et Biophysica Acta (BBA) - Molecular Basis of Disease* 1852:2574-2584.
5. Borovečki A, Braš M, Brkljačić B, Canki-Klein N, Dedić Plavetić N, Grahovac B, Haller H, Jokić Begić N, Kirac I, Levanat S, Matković V, Podolski P, Sušac I, Šekerija M, Šerman Lj, Šprem Goldštajn, Žic R, Žigman T (2017) Smjernice za genetičko savjetovanje i testiranje na nasljedni rak dojke i jajnika. *Liječnički Vjesnik* 139:107–117.
6. Levanat S, Trnski D (2016) [Izazovi u traženju novih lijekova]. *Priroda* 106(1049)42-44; ISSN 0351-0662, HPD

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Levanat S, Sabol M, Musani V, Ozretić P, Trnski D (2017) Hedgehog Signaling Pathway as Genetic and Epigenetic Target in Ovarian Tumors. *Curr Pharm Design* 23;1:73-94.
2. Ozretić P, Trnski D, Musani V, Maurac I, Kalafatić D, Orešković S, Levanat S, Sabol M (2017) Non-canonical Hedgehog signaling activation in ovarian borderline tumors and ovarian carcinomas. *Int J Oncol.* 51(6):1869-77.
3. Trnski D, Sabol M, Gojević A, Martinić M, Ozretić P, Musani V, Ramić S, Levanat S (2015) GSK3 β and GLI3 play a role in activation of Hh-Gli pathway in human colon cancer – targeting GSK3 β downregulates the signaling pathway and reduces cell proliferation. *Biochimica et Biophysica Acta (BBA) - Molecular Basis of Disease* 1852:2574-2584.
4. Ozretić P, Bisio A, Musani V, Trnski D, Sabol M, Levanat S, Inga A (2015) Regulation of human PTCH1b expression by different 5' untranslated region cis-regulatory elements. *RNA Biol* 12:290-304.
5. Sabol M, Trnski D, Uzarevic Z, Ozretic P, Musani V, Rafaj M, Cindric M, Levanat S (2014) Combination of cyclopamine and tamoxifen promotes survival and migration of MCF-7 breast cancer cells - interaction of Hedgehog-Gli and Estrogen receptor signaling pathways. *PLoS One* 9:e114510.
6. Lo Muzio L, Pastorino L, Levanat S, Musani V, Situm M, Ponti G, Bianchi Scarra G (2013) Clinical utility gene card for: Gorlin syndrome. - update 2013. *Eur J Hum Genet* 21;e1-e3.
7. Leović D, Sabol M, Ozretić P, Musani V, Car D, Marjanović K, Zubčić V, Sikora M, Glavaš-Obrovac Lj, Levanat S (2012) Hh-Gli signaling pathway activity in oral and oropharyngeal squamous cell carcinoma *Head Neck* 34(1):104-12.
8. Levanat S, Musani V, Cvok ML, Susac I, Sabol M, Ozretic P, Car D, Eljuga D, Eljuga L, Eljuga D (2012) Three novel BRCA1/BRCA2 mutations in breast/ovarian cancer families in Croatia. *Gene.* 498(2):169-76.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. HrZZ Research project "MIRnaGLI - Novel Molecular Mechanisms for New Therapeutic Approaches: Interactions of microRNAs and Hedgehog-Gli Signaling Pathway in Serous Ovarian Carcinoma" (02/05/2017-02/05/2019) - principal investigator Levanat S
2. HrZZ Research project "ProNetMel - New protein networks for novel therapeutic avenues in human melanoma" (2014-2017) - associate, principal investigator Slade N
3. Research project "Genetic Profile Of Hereditary Breast Cancer" The Terry Fox Run donation, Canadian Embassy) (2017-2018) - principal investigator Levanat S
4. Research project "Apoptotic Pathways and Role of BIRC5 (Survivin) in Breast Cancer Development" (2016-2017) - principal investigator Levanat S
5. Research project of the City of Zagreb "Mechanisms Of Interaction Of Steroids And Signaling Pathways In The Development Of Ovarian Cancer: Looking For Early Indicators Of Ovarian Cancer", (Klasa 500-01/15-01/836, URbroj 251-03-02-15-2) (2015-2018) - principal investigator Levanat S
6. Research project of the City of Zagreb "Discovery Of New Biomarkers For Melanoma Development", (Klasa 500-01/16-01/780, URbroj 251-03-02-16-2) (2016-2018) - principal investigator Levanat S
7. Research project DM-Drogerie markt Ltd. "Interaction Of Hh-Gli Signaling Pathway And Androgen Receptor In Prostate Cancer" (2016-2018) - principal investigator Levanat S
8. MZOŠ scientific project "Signal transduction in tumors: HH-Gli interactions and therapeutic potential" (2006-2013) - principal investigator Levanat S
9. MZT scientific project "The SHH/PTCH/SMO signaling pathway in tumorigenesis and development" (2002-2006) - principal investigator Levanat S
10. MZT scientific project "The role of Gorlin syndrome in malformations and tumor development" (1996-2001) - principal investigator Levanat S

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. HrZZ Research project "MIRnaGLI - Novel Molecular Mechanisms for New Therapeutic Approaches: Interactions of microRNAs and Hedgehog-Gli Signaling Pathway in Serous Ovarian Carcinoma" (02/05/2017-02/05/2019) - principal investigator Levanat S
2. HrZZ Research project "ProNetMel - New protein networks for novel therapeutic avenues in human melanoma" (2014-2017) - associate, principal investigator Slade N
3. Research project "Genetic Profile Of Hereditary Breast Cancer" The Terry Fox Run donation, Canadian Embassy) (2017-2018) - principal investigator Levanat S
4. Research project "Apoptotic Pathways and Role of BIRC5 (Survivin) in Breast Cancer Development" (2016-2017) - principal investigator Levanat S
5. Research project of the City of Zagreb "Mechanisms Of Interaction Of Steroids And Signaling Pathways In The Development Of Ovarian Cancer: Looking For Early Indicators Of Ovarian Cancer", (Klasa 500-01/15-01/836, URbroj 251-03-02-15-2) (2015-2018) - principal investigator Levanat S
6. Research project of the City of Zagreb "Discovery Of New Biomarkers For Melanoma Development", (Klasa 500-01/16-01/780, URbroj 251-03-02-16-2) (2016-2018) - principal investigator Levanat S
7. Research project DM-Drogerie markt Ltd. "Interaction Of Hh-Gli Signaling Pathway And Androgen Receptor In Prostate Cancer" (2016-2018) - principal investigator Levanat S

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Robert Likić, MD, PhD, Associate professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Characteristics of clinical medical research, Evidence based medicine

BIOGRAPHY

Dr Likić qualified in Medicine with honors at the University of Zagreb Medical School in 2001, after receiving the Dean's award for the best student of medicine in 1999. Following internship, he trained in general internal medicine at the University Hospital Centre Zagreb and developed an interest in the effectiveness of problem based learning applied to the teaching of clinical pharmacology. He became board certified in internal medicine in 2007 and was awarded a PhD degree in 2008. He currently holds a tenured position of an associate professor in internal medicine and prescribing at the Zagreb Medical School and also works as a consultant internist and clinical pharmacologist at the University Hospital Centre Zagreb while continuing to have an active research interest into the effectiveness of medical education both at undergraduate and postgraduate levels, pharmacoeconomics, health technology assessment, medical informatics as well as rational use of medicines. Dr. Likić has had significant success in international collaboration with funding secured from the British Council to organize a multinational meeting in Zagreb in 2008 on rational use of medicines and he also received the Matovinovic fellowship award in 2009 which allowed him to spend 6 months working as a visiting scholar at the University of Michigan Medical School (Ann Arbor). So far, Dr. Likić published more than 30 research papers in Current Contents indexed journals and also participated actively in national and international meetings focused on pharmacology, clinical pharmacology and pharmacoeconomics. He is a member of several national drug committees and societies as well as an active board member of a committee for education of the European Association for Clinical Pharmacology and Therapeutics (EACPT) and he is also a councilor and treasurer to the International Union of Basic and Clinical Pharmacology (IUPHAR) education section. He received the "Outstanding Early Educator Award" at the 16th IUPHAR World congress of basic and clinical pharmacology held in 2010 in Copenhagen (Denmark) and in 2015 was instrumental as an advisor for therapeutics to the CEO of the University Hospital Centre Zagreb.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 10.04.2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1: Potočnjak I, Likić R, Degoricija V, Nham E, Wettermark B. The benzodiazepine nation of Croatia: an observational, comparative study of psychotropic drug utilization between Croatia and Sweden 2014-2015. *Expert Rev Pharmacoecon Outcomes Res.* 2018 Dec;18(6):641-646. doi: 10.1080/14737167.2018.1507820. Epub 2018 Aug 13. PubMed PMID: 30073882.
- 2: Bielen L, Likić R, Erdeljić V, Mareković I, Firis N, Grgić-Medić M, Godan A, Tomić I, Hunjak B, Markotić A, Bejuk D, Tičić V, Balzar S, Bedenić B. Activity of fosfomycin against nosocomial multiresistant bacterial pathogens from Croatia: a multicentric study. *Croat Med J.* 2018 Apr 30;59(2):56-64. PubMed PMID: 29740989; PubMed Central PMCID: PMC5941293.
- 3: Hayes K, Shepard A, Cesarec A, Likić R. Cost minimisation analysis of thermometry in two different hospital systems. *Postgrad Med J.* 2017 Oct;93(1104):603-606. doi: 10.1136/postgradmedj-2016-134630. Epub 2017 Jan 18. PubMed PMID: 28100807.

- 4: Cesarec A, Likić R. Budget Impact Analysis of Biosimilar Trastuzumab for the Treatment of Breast Cancer in Croatia. *Appl Health Econ Health Policy*. 2017 Apr;15(2):277-286. doi: 10.1007/s40258-016-0285-7. PubMed PMID: 27730538.
- 5: Kraljic S, Zuvic M, Desa K, Blagaic A, Sotosek V, Antoncic D, Likic R. Evaluation of nurses' workload in intensive care unit of a tertiary care university hospital in relation to the patients' severity of illness: A prospective study. *Int J Nurs Stud*. 2017 Nov;76:100-105. doi: 10.1016/j.ijnurstu.2017.09.004. Epub 2017 Sep 13. PubMed PMID: 28950187.
- 6: Turk VE, Simic I, Likic R, Makar-Ausperger K, Radacic-Aumiler M, Cegec I, Juricic Nahal D, Kraljickovic I. New drugs for bad bugs: what's new and what's in the pipeline? *Clin Ther*. 2016 Oct 6;38(10S):e9. doi: 10.1016/j.clinthera.2016.07.105. PubMed PMID: 27673678.
- 7: Radanović I, Likić R. Opportunities for Use of Blockchain Technology in Medicine. *Appl Health Econ Health Policy*. 2018 Oct;16(5):583-590. doi: 10.1007/s40258-018-0412-8. PubMed PMID: 30022440.
- 8: Likic R, Simic I, Erdeljic Turk V, Makar-Ausperger K, Radacic-Aumiler M, Cegec I, Juricic Nahal D, Kraljickovic I. Outlook For Biosimilar Molecules Entering Croatian Pharmaceutical Market In The Period From 2016 To 2020. *Clin Ther*. 2016 Oct 6;38(10S):e16. doi: 10.1016/j.clinthera.2016.07.123. PubMed PMID: 27673620.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1: Potočnjak I, Likić R, Degoricija V, Nham E, Wettermark B. The benzodiazepine nation of Croatia: an observational, comparative study of psychotropic drug utilization between Croatia and Sweden 2014-2015. *Expert Rev Pharmacoecon Outcomes Res*. 2018 Dec;18(6):641-646.
- 2: Bielen L, Likić R, Erdeljić V, Mareković I, Firis N, Grgić-Medić M, Godan A, Tomić I, Hunjak B, Markotić A, Bejuk D, Tičić V, Balzar S, Bedenić B. Activity of fosfomycin against nosocomial multiresistant bacterial pathogens from Croatia: a multicentric study. *Croat Med J*. 2018 Apr 30;59(2):56-64. PubMed PMID: 29740989; PubMed Central PMCID: PMC5941293.
- 3: Hayes K, Shepard A, Cesarec A, Likić R. Cost minimisation analysis of thermometry in two different hospital systems. *Postgrad Med J*. 2017 Oct;93(1104):603-606. doi: 10.1136/postgradmedj-2016-134630. Epub 2017 Jan 18. PubMed PMID: 28100807.
- 4: Cesarec A, Likić R. Budget Impact Analysis of Biosimilar Trastuzumab for the Treatment of Breast Cancer in Croatia. *Appl Health Econ Health Policy*. 2017 Apr;15(2):277-286. doi: 10.1007/s40258-016-0285-7. PubMed PMID: 27730538.
- 5: Radanović I, Likić R. Opportunities for Use of Blockchain Technology in Medicine. *Appl Health Econ Health Policy*. 2018 Oct;16(5):583-590. doi: 10.1007/s40258-018-0412-8. PubMed PMID: 30022440.
- 6: Brinkman DJ, Tichelaar J, Mokkink LB, Christiaens T, Likic R, Maciulaitis R, Costa J, Sanz EJ, Maxwell SR, Richir MC, van Agtmael MA; Education Working Group of the European Association for Clinical Pharmacology and Therapeutics (EACPT) and its affiliated Network of Teachers in Pharmacotherapy (NOTIP). Key Learning Outcomes for Clinical Pharmacology and Therapeutics Education in Europe: A Modified Delphi Study. *Clin Pharmacol Ther*. 2018 Aug;104(2):317-325. doi: 10.1002/cpt.962. Epub 2018 Jan 30. PubMed PMID: 29205299; PubMed Central PMCID: PMC6099198.
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- 8: Potočnjak I, Likić R, Šimić I, Juričić Nahal D, Čegec I, Ganoci L, Božina N. Dapsone-induced agranulocytosis-possible involvement of low-activity N-acetyltransferase 2. *Fundam Clin Pharmacol*. 2017 Oct;31(5):580-586. doi: 10.1111/fcp.12287. Epub 2017 Apr 26. PubMed PMID: 28322460.
- 9: Brinkman DJ, Tichelaar J, Okorie M, Bissell L, Christiaens T, Likić R, Mačulaitis R, Costa J, Sanz EJ, Tamba BI, Maxwell SR, Richir MC, van Agtmael MA; Education Working Group of the European Association for Clinical Pharmacology and Therapeutics (EACPT). Pharmacology and Therapeutics Education in the European Union Needs Harmonization and Modernization: A Cross-sectional Survey Among 185 Medical Schools in 27 Countries. *Clin Pharmacol Ther*. 2017 Nov;102(5):815-822. doi: 10.1002/cpt.682. Epub 2017 May 30. PubMed PMID: 28295236; PubMed CentralPMCID: PMC5655694.
- 10: Radacic-Aumiler M, Kraljickovic I, Erdeljic-Turk V, Makar-Ausperger K, Likić R, Simić I. No Adverse Effects After Radioiodine Treatment at 3 Weeks of Pregnancy. *Clin Nucl Med*. 2016 Dec;41(12):964-96. PubMed PMID: 27824324.
- 11: Turk VE, Simić I, Likić R, Makar-Ausperger K, Radacic-Aumiler M, Čegec I, Juricic Nahal D, Kraljickovic I. New drugs for bad bugs: what's new and what's in the pipeline? *Clin Ther*. 2016 Oct 6;38(10S):e9. doi: 10.1016/j.clinthera.2016.07.105. PubMed PMID: 27673678.
- 12: Juricic Nahal D, Čegec I, Erdeljic Turk V, Radacic Aumiler M, Makar Ausperger K, Likić R, Kraljickovic I, Simić I. Why Reporting The Iodinated Contrast Media Used During Radiological Procedures Should Be Standard Practice: A Case Report. *Clin Ther*. 2016 Oct 6;38(10S):e31. doi: 10.1016/j.clinthera.2016.07.164. PubMed PMID: 27673662.
- 13: Čegec I, Simić I, Erdeljic Turk V, Makar Ausperger K, Aumiler Radacic M, Kraljickovic I, Juricic Nahal D, Likić R. Pharmacoeconomic Analysis of Antithrombotic Treatment In Coronary Artery Disease (Cad) Patients With Clopidogrel Hypersensitivity After Percutaneous Coronary Intervention (Pci). *Clin Ther*. 2016 Oct 6;38(10S):e28. doi: 10.1016/j.clinthera.2016.07.154. PubMed PMID: 27673652.
- 14: Kraljickovic I, Erdeljic Turk V, Čegec I, Juricic Nahal D, Radacic Aumiler M, Makar Ausperger K, Likić R, Simić I. Testing for Hypersensitivity to Nonsteroidal Anti-Inflammatory Drugs (NSAIDS) At the University Hospital Zagreb. *Clin Ther*. 2016 Oct 6;38(10S):e25. doi: 10.1016/j.clinthera.2016.07.147. PubMed PMID: 27673644.
- 15: Radacic Aumiler M, Erdeljic Turk V, Makar-Ausperger K, Likić R, Bielen L, Simić I. Pregnancy Exposure to Drugs: Role of Clinical Pharmacologist. *Clin Ther*. 2016 Oct 6;38(10S):e21. doi: 10.1016/j.clinthera.2016.07.136. PubMed PMID: 27673634.
- 16: Likić R, Simić I, Erdeljic Turk V, Makar-Ausperger K, Radacic-Aumiler M, Čegec I, Juricic Nahal D, Kraljickovic I. Outlook For Biosimilar Molecules Entering Croatian Pharmaceutical Market In The Period From 2016 To 2020. *Clin Ther*. 2016 Oct 6;38(10S):e16. doi: 10.1016/j.clinthera.2016.07.123. PubMed PMID: 27673620.
- 17: Makar-Ausperger K, Božina N, Erdeljic Turk V, Likić R, Radacic Aumiler M, Ganoci L, Francetic I. Clinically Guided Warfarin Dose Versus Genotyping In Early Achievement Of Stable Anticoagulant Effect Of Warfarin. *Clin Ther*. 2016 Oct 6;38(10S):e10. doi: 10.1016/j.clinthera.2016.07.108. PubMed PMID: 27673603.
- 18: Brinkman DJ, Tichelaar J, Schutte T, Benemei S, Böttiger Y, Chamontin B, Christiaens T, Likić R, Mačulaitis R, Marandi T, Monteiro EC, Papaioannidou P, Pers YM, Pontes C, Raskovic A, Regenthal R, Sanz EJ, Tamba BI, Wilson K, Vries T, Richir MC, Agtmael MV; Working Group Research on CPT Education of the European Association for Clinical Pharmacology and Therapeutics (EACPT). Essential competencies in prescribing: A first european cross-sectional study among 895 final-year medical students. *Clin Pharmacol*

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19: Bojanic A, Bojanic K, Likic R. Brain drain: final year medical students' intentions of training abroad. Postgrad Med J. 2015 Jun;91(1076):315-21. doi: 10.1136/postgradmedj-2014-132908. Epub 2015 May 20. PubMed PMID: 25995369.

20: Kolčić I, Cikeš M, Boban K, Bućan J, Likić R, Curić G, Dogaš Z, Polašek O. Emigration-related attitudes of the final year medical students in Croatia: a cross-sectional study at the dawn of the EU accession. Croat Med J. 2014 Oct;55(5):452-8. PubMed PMID: 25358878; PubMed Central PMCID: PMC4228300.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Sinergies of phosphomycin with other antibiotics against *K. pneumoniae* strains producing carbapenemases

Prospective randomized clinical trial of efficacy of phosphomycin versus ertapenem in the treatment of urinary tract infections caused by *E. coli* strains that produce expanded beta lactamases

Predictive value of serum specific IgE against general, local anesthetics and muscle relaxants in confirming hypersensitivity to these drugs by skin testing

The effect of vitamin C, vitamin B1 and hydrocortisone on clinical course and outcome of treatment in patients with septic shock

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Sinergies of phosphomycin with other antibiotics against *K. pneumoniae* strains producing carbapenemases

Prospective randomized clinical trial of efficacy of phosphomycin versus ertapenem in the treatment of urinary tract infections caused by *E. coli* strains that produce expanded beta lactamases

Predictive value of serum specific IgE against general, local anesthetics and muscle relaxants in confirming hypersensitivity to these drugs by skin testing

The effect of vitamin C, vitamin B1 and hydrocortisone on clinical course and outcome of treatment in patients with septic shock

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Jasna Lovrić, PhD, full professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical methods in biomedical research; Molecular and biochemical approach to genetic disorders; Methods of molecular biology in medicine

BIOGRAPHY

Date of birth: 26/05/1958. Osijek. Education: 1982. the Faculty of Science, University of Zagreb, Department of Chemistry. MSc degree in 1987, in 1995 earned her PhD degree (Chemistry). 1987 was selected as research assistant. 1995 he was elected associate title of assistant, in 1998 scientific assistant, in 2000 scientific assistant professor at the Department of Medical Chemistry, Biochemistry and Clinical Chemistry, 2006, associate professor, and in 2010 the scientific title advisers, and from 12/07/12. full professor.

From 1982 to 1994 employed at the "Ruder Boskovic" in the Department physical chemistry. Since 1994, he worked at the School of Medicine, University of Zagreb in the Department of Chemistry and Biochemistry.

Since 2006 Head of the Insitute of Chemistry and Biochemistry and head of the Department of Medical Chemistry, Biochemistry and Clinical Chemistry at MF. Since 2006 course coordinator Medical Chemistry and Biochemistry 1 and 2 teacher at several courses in graduate and doctoral studies at the Ministry of Finance for students studying medicine in Croatian and English. She has written on several chapters in university textbooks and manuals for students graduate and doctoral studies. One of the results of university textbook editor of Harper's illustrated biochemistry. The editor is in 3 editions university handbook for exercise. Holder is in Chemistry and Biochemistry for students of Dental Medicine.

An active researcher, head of the project, and on several projects funded by the MSES. She actively participated in two international projects. Mentor student works awarded Rector's Prize, graduate theses, 2 doctorates, 3 of which are under construction.

She has published 40 scientific papers, 29 indexed in Current Contents (300 citations). She has participated in 50 scientific meetings most of which are international. A reviewer in several journals, textbooks and manuals.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 13.09.2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Bakač A, Espenson J H, Lovrić J, Orhanović M. (1987) Reduction of Titanium(IV) and Oxidation of Titanium(III) by 1-Hydroxy-1- methylethyl Radicals. Inorg Chem 26:4096-4099.
2. Bakač A, Butković V, Espenson J H, Lovrić J. Orhanović M. (1989) Kinetics of Reduction of a Series of Imidazolium Ions and Cobalt(III)-Imidazol Complexes by 1-Hydroxy-1-methyl Radicals. Inorg Chem 28:4323-4326.
3. Bakač A, Butković V, Espenson J H, Lovrić J. Orhanović M. (1996) Electron Transfer from Aliphatic Radicals to ring-Substituted Pyridine N-Oxides and Their Cobalt-Ammine Complexes in Aqueous Solution. Inorg Chem 35:5168-5172.

4. Bonifačić M, Lovrić J, Orhanović M. (1998) Reaction of Aquachromium(II) Ions with 2,2'-bipyrimidine. A Pulse Radiolysis Study. *J Chem Soc Dalton Trans* 2879-2885.
5. Lovrić J, Burger N, Deljac V, Mihalić Z. (1999) Spectrofotometric Studies of Some Novel Derivatives of Pyridinium Chloride *Croatia Chem Acta* 72:123-133.
6. Škrinjaric-Špoljar M, Burger N, Lovrić J. (1999) Inhibition of Acetylcholinesterase by Three New Pyridinium Compounds and Their Effect on Phosphorylation of the Enzyme. *J Enzyme Inhibition* 14:331-341.
7. Antolić S, Kojić-Prodić B, Lovrić J. (2000) Bis(ethylenediamine-N,N')(pyrimidine-2-carboxylato-N1,O)cobalt(III)bis(trifluoromethanesulfonate) dihydrate. *Acta Cryst C* 56:e51-e52
8. Lovrić J, Krenajz-Sirotković V, Burger N. (2001) Acute Toxicity of Three Novel Derivatives of Pyridinium Chloride to Bacteria, Human Cell Culture and Rodents. *Periodicum Biologorum* 103(4):347-350.
9. Lovrić J, Foretić B, Burger N. (2004) Spectrophotometric Studies of reaction of the Aquapentacyanoferrate(II) Ion with Ketones. Kinetics and Mechanism of the Substitution Reaction of the Aquapentacyanoferrate(II) Ion with 1-Benzoylpyridinium Chloride. *Z Phys Chem* 218:1289-1296.
10. Lucić Vrdoljak A, Lovrić J, Radić B, Žlender V. (2006) Antidotal efficacy of pyridinium chloride derivatives against soman poisoning. *Basic and Clinical Pharmacology & Toxicology* 99:17-21
11. Foretić B, Lovrić J, Burger N. (2006) Reaction of 1-benzoylpyridinium-4-aldoxime chloride with aquapentacyanoferrate(II). *J of Coord Chem* 59(13):1537-1539. Q3, IF=0,978, citata-9
12. Ostojić Lj, Bradarić A, Miše K, Ostojić Z, Lovrić J, Petrović P, Ujević A, Erceg M, Janković S, Tocilj J. (2006) Pulmonary function in persons who are professionally exposed to formaldehyde fumes. *Collegium Antropologicum* 30(3):507-511.
13. Lovrić J, Mesić M, Macan M, Koprivanac M, Kelava M, Bradamante V. (2008) Measurement of malondialdehyde (MDA) level in rat plasma after simvastatin treatment using two different analytical methods. *Periodicum Biologorum* 110(1):63-67.
14. Macan M, Konjevoda P, Lovrić J, Koprivanac M, Kelava M, Vrkić N, Bradamante V. (2011) The influence of gemfibrozil on malondialdehyde level and paraoxonase 1 activity in Wistar and Fisher rats. *Basic & Clin Pharmacol Toxicol* 108(6):428-435.
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16. Karmelić I, Lovrić J, Božina T, Ljubić H, Vogrinc Ž, Božina N, Sertić J. (2012) Adiponectin level and gene variability are obesity and metabolic syndrome markers in young population. *Arch of Med Research* 43:145-153.
17. Sertić J, Božina T, Skorić B, Lovrić J, Slaviček J, Šimičević L, Jelaković B, Božina N, Miličić D, Reiner Ž. (2012) New trends in laboratory diagnostics: biomarkers of atherosclerosis; preventive and personalized medicine. *Neurol Croat* 61(2):137-149.
18. Božina N, Jovanović N, Podlesek A, Rojnić Kuzman M, Kudumija Slijepčević M, Roguljić A, Dimitrović A, Božina T, Lovrić J, Ljubić H, Medved V. (2012) Suicide ideators and attempters with schizophrenia – The role of 5-HTTLPR, rs25531 and 5-HTT VNTR Intron 2 variants. *Journal of Psychiatric Research* 46:767-773.

19. Božina T, Simić I, Lovrić J, Pećin I, Jelaković B, Sertić J, Reiner Ž. (2013) Effects of lipoprotein lipase and peroxisome proliferator-activated receptor-gamma gene variants on metabolic syndrome traits. *Collegium antropologicum* 37(3):801-808.
20. Božina T, Sertić J, Lovrić J, Jelaković B, Simić I, Reiner Ž. (2014) Interaction of Genetic Risk Factors Confers Increased Risk for Metabolic Syndrome: The Role of Peroxisome Proliferator-Activated Receptor γ . *Genetic Testing and Molecular Biomarkers* 18(1):32-40.
21. Macan M, Vukšić A, Žunec S, Konjevoda P, Lovrić J, Kelava M, Štambuk D, Vrkić N, Bradamante V. (2015) Effects of Simvastatin on Malondialdehyde Level and Esterase Activity in Plasma and Tissue of Normolipidemic Rats. *Pharmacological Reports* 67(5):907-913.
22. Karmelić I, Lovrić J, Božina T, Merkel A, Božina N, Sertić J. (2016) Is there any association of apolipoprotein E gene polymorphisms with metabolic syndrome in a young population of Croatian origin? *Annals of Human Biology* 7:1-8.
23. Cindrić M, Bjelopetrović A, Pavlović G, Damjanović V, Lovrić J, Matković-Čalogović D, Vrdoljak V. (2017) Copper(II) complexes with benzhydrazone-related ligands: synthesis, structural studies and cytotoxicity assay. *New Journal of Chemistry*, 41:2425-2435.
24. Pisk J, Hrenar T, Rubčić M, Pavlović G, Damjanović V, Lovrić J, Cindrić M, Vrdoljak V. (2018) Comparative studies on conventional and solvent-free synthesis toward hydrazones: application of PXRD and chemometric data analysis in mechanochemical reaction monitoring. *CrystEngComm*, 20, 1804–1817.
25. Cindrić M, Rubčić M, Hrenar T, Pisk J, Cvijanović D, Lovrić J, Vrdoljak V. (2018) Novel enaminones as non-cytotoxic compounds with mild antibacterial activity: Synthesis and structure-activity correlations. *Journal of Molecular Structure*, 1154, 613-642.
26. Pisk J, Bilić L, Đaković M, Cvijanović D, Damjanović V, Lovrić J, Rubčić M, Vrdoljak V, Cindrić M (2018) Design of mononuclear, binuclear and polynuclear molybdenum(VI) complexes based on ONO benzoylacetone derived enaminones and their in vitro biological activity. *Polyhedron*, 145:70–79.
27. Vrdoljak V, Prugovečki B, Primužić I, Hrenar T, Cvijanović D, Parlov Vuković J, Odžak R, Skočibušić M, Prugovečki S, Lovrić J, Matković-Čalogović D, Cindrić M. (2018) An integrated approach (synthetic, structural and biological) to the study of aroylhydrazone salts. *New J. Chem* 42, 11697-11707.
27. Božina T, Lovrić J, Šimičević L, Merkler A, Božina M, Jelaković B, Sertić J. (2018) Can the choice of diet undermine the potential genetic risk of AT1R 1166A>C gene polymorphism? *Gene* 679, 291-296.
28. Rubčić M, Pisk J, Pičuljan K, Damjanović V, Lovrić J, Vrdoljak V (2019) Symmetrical disubstituted carbohydrazides: From solid-state structures to cytotoxic and antibacterial activity. *Journal of Molecular Structure* 1178, 222-228.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Božina T, Sertić J, Lovrić J, Jelaković B, Simić I, Reiner Ž. (2014) Interaction of Genetic Risk Factors Confers Increased Risk for Metabolic Syndrome: The Role of Peroxisome Proliferator-Activated Receptor γ . *Genetic Testing and Molecular Biomarkers* 18(1):32-40.
2. Macan M, Vukšić A, Žunec S, Konjevoda P, Lovrić J, Kelava M, Štambuk D, Vrkić N, Bradamante V. (2015) Effects of Simvastatin on Malondialdehyde Level and Esterase Activity in Plasma and Tissue of Normolipidemic Rats. *Pharmacological Reports* 67(5):907-913.
3. Karmelić I, Lovrić J, Božina T, Merkel A, Božina N, Sertić J. (2016) Is there any association of apolipoprotein E gene polymorphisms with metabolic syndrome in a young population of Croatian origin? *Annals of Human Biology* 7:1-8.

4. Cindrić M, Bjelopetrović A, Pavlović G, Damjanović V, Lovrić J, Matković-Čalogović D, Vrdoljak V. (2017) Copper(II) complexes with benzhydrazone-related ligands: synthesis, structural studies and cytotoxicity assay. *New Journal of Chemistry*, 41:2425-2435.
5. Pisk J, Hrenar T, Rubčić M, Pavlović G, Damjanović V, Lovrić J, Cindrić M, Vrdoljak V. (2018) Comparative studies on conventional and solvent-free synthesis toward hydrazones: application of PXRD and chemometric data analysis in mechanochemical reaction monitoring. *CrystEngComm*, 20, 1804–1817.
6. Cindrić M, Rubčić M, Hrenar T, Pisk J, Cvijanović D, Lovrić J, Vrdoljak V. (2018) Novel enaminones as non-cytotoxic compounds with mild antibacterial activity: Synthesis and structure-activity correlations. *Journal of Molecular Structure*, 1154, 613-642.
7. Pisk J, Bilić L, Đaković M, Cvijanović D, Damjanović V, Lovrić J, Rubčić M, Vrdoljak V, Cindrić M (2018) Design of mononuclear, binuclear and polynuclear molybdenum(VI) complexes based on ONO benzoylacetone derived enaminones and their in vitro biological activity. *Polyhedron*, 145:70–79.
8. Vrdoljak V, Prugovečki B, Primužić I, Hrenar T, Cvijanović D, Parlov Vuković J, Odžak R, Skočibušić M, Prugovečki S, Lovrić J, Matković-Čalogović D, Cindrić M. (2018) An integrated approach (synthetic, structural and biological) to the study of aroylhydrazone salts. *New J. Chem* 42, 11697-11707.
9. Božina T, Lovrić J, Šimičević L, Merkler A, Božina M, Jelaković B, Sertić J. (2018) Can the choice of diet undermine the potential genetic risk of AT1R 1166A>C gene polymorphism? *Gene* 679, 291-296.
10. Rubčić M, Pisk J, Pičuljan K, Damjanović V, Lovrić J, Vrdoljak V (2019) Symmetrical disubstituted carbohydrazides: From solid-state structures to cytotoxic and antibacterial activity *J of Mol Struct* 1178, 222-228.
11. *Clinical Chemistry and Molecular Diagnosis in Clinical Practice*, co-author of 3 chapters; editor: J. Sertić. Zagreb: Medicinska naklada; 2015.
12. Božina T, Cvijanović D, Delaš I, Damjanović V, Fabris D, Foretić B, Kalanj Bogar S, Karmelić I, Lovrić J, Mlinac Jerković K, Pašalić D, Picek I, Potočki S, Sertić J, Vukelić Ž. *Handbook for Exercises from Medical Chemistry and Biochemistry for Medical Students*, 3rd edition, editor J. Lovrić, Medicinska naklada, Zagreb, 2017.
13. *Biochemical methods in biomedical research*: Lovrić J., Rogić D.– University Postgraduate Doctoral Program in Biomedicine and Health, Medicinska naklada, Zagreb, 2015.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 2016 - 2020: Isolation, quantification and kinetics of salivary Ap4A, SCCA and TROP2 in patients with oral cancer and potentially malignant oral disorders; project leader: full professor Darko Macan
- 2017 – 2021: Metallosupramolecular architectures and inorganic-organic polyoxometalate based hybrids, funded by Croatian Science Foundation (Project leader: full professor Višnja Vrdoljak)
- 2017-2018. Enaminones and their complexes as antibacterial agents, project leader
- 2009-2013. Functional Genomics and Proteomics of Risk Factors of Atherosclerosis, project leader full professor J.Sertić
- EUROTRAC – Tropospheric Ozone Research (TOR) – project leader: full professor T. Cvitaš
- project t JF 943/DOE – Electron Transfer Reactions –project leader J.H. Espenson, Ames Laboratory and Department of Chemistry Iowa State University, Department of Energy (DOE) i IRB



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2016 - 2020. Isolation, quantification and kinetics of salivary Ap4A, SCCA and TROP2 in patients with oral cancer and potentially malignant oral disorders; project leader: full professor Darko Macan; collaborator

2017 – 2021. Metallosupramolecular architectures and inorganic-organic polyoxometalate based hybrids, funded by Croatian Science Foundation, project leader: full professor Višnja Vrdoljak); collaborator

2017-2018. Enaminones and their complexes as antibacterial agents, project leader

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 2 and 3 in process

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mila Lovrić, PhD. assistant professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical methods in biomedical research, Pharmacogenomics; Laboratory approach to transplantation of haematopoietic stem cells

BIOGRAPHY

Born on 7 Dec 1968 in Tijarica. Graduated in 1992 from Faculty of Pharmacy and Biochemistry, Univ of Zagreb. MSc degree (biomedicine) in 2001, in 2010 earned her PhD degree. She passed the specialist exam in analytical toxicology in 2001. Since 1992, she has been employed at University Hospital Centre Zagreb; in 2007 she became head of the Lab. for Chromatography Techniques, and since 2010 she has been the head of the Clinical Unit for Multidisciplinary Application of Chromatography. In 2011, she was appointed to the rank of research associate at the University of Zagreb and promoted to the rank of senior research associate in the field of biomedicine and health in 2013. In 2017, she was elected assist. professor in the field of biomedicine and health, field: pharmacy, branch: medical biochemistry at Faculty of Pharmacy and Biochemistry in Zagreb. She has published 23 scientific papers indexed in Current Contents, 7 indexed in SCI, and 5 other articles, more than 308 CC and SCI citations. Areas of interest: validation of new chromatography methods, therapy individualization and analytical toxicology.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 11 Sept. 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Klarica Domjanović I, **Lovrić M**, Trkulja V, Petelin-Gadže Ž, Ganoci L, Čajić I, Božina N. Interaction between ABCG2 421C>A polymorphism and valproate in their effects on steady-state disposition of lamotrigine in adults with epilepsy. *Br J Clin Pharmacol*. 2018 May 23. doi: 10.1111/bcp.13646. [Epub ahead of print]

Jelić-Knezović N, Galijašević S, **Lovrić M**, Vasilj M, Selak S, Mikulić I. Levels of Nitric Oxide Metabolites and Myeloperoxidase in Subjects with Type 2 Diabetes Mellitus on Metformin Therapy. *Exp Clin Endocrinol Diabetes*. 2018 Mar 12. doi: 10.1055/a-0577-7776. [Epub ahead of print]

Lovrić M, Čajić I, Petelin Gadže Ž, Klarica Domjanović I, Božina N. Effect of antiepileptic drug comedication on lamotrigine concentrations. *Croat Med J* 2018;59:13-19.

Crnošija L, Krbot Skorić M, **Lovrić M**, Junaković A, Miletić V, Alfiev RŠ, Pavelić A, Adamec I, Habek M. Differences in neurohumoral and hemodynamic response to prolonged head-up tilt between patients with high and normal standing norepinephrine forms of postural orthostatic tachycardia syndrome. *Auton Neurosci*. 2017 May 11. [Epub ahead of print]

Šagud M, Vuksan-Ćusa B, Božina N, **Lovrić M**, Mihaljević-Peš A, Kramarić M. Olanzapine Long-Acting Injections After Neuroleptic Malignant Syndrome: Two Case Reports. *J Clin Psychopharmacol*. 2016 36:733-35.

Turudic D, Batinic D, Golubic AT, **Lovric M**, Milosevic D. Calcium oxalate urolithiasis in children: urinary promoters/inhibitors and role of their ratios. *Eur J Pediatr*. 2016;175:1959-65.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Klarica Domjanović I, **Lovrić M**, Trkulja V, Petelin-Gadže Ž, Ganoci L, Čajić I, Božina N. Interaction between ABCG2 421C>A polymorphism and valproate in their effects on steady-state disposition of lamotrigine in adults with epilepsy. *Br J Clin Pharmacol*. 2018 May 23. doi: 10.1111/bcp.13646. [Epub ahead of print]

Jelić-Knezović N, Galijašević S, **Lovrić M**, Vasilj M, Selak S, Mikulić I. Levels of Nitric Oxide Metabolites and Myeloperoxidase in Subjects with Type 2 Diabetes Mellitus on Metformin Therapy. *Exp Clin Endocrinol Diabetes*. 2018 Mar 12. doi: 10.1055/a-0577-7776. [Epub ahead of print]

Lovrić M, Čajić I, Petelin Gadže Ž, Klarica Domjanović I, Božina N. Effect of antiepileptic drug comedication on lamotrigine concentrations. *Croat Med J* 2018;59:13-19.

Crnošija L, Krbot Skorić M, **Lovrić M**, Junaković A, Miletić V, Alfired RŠ, Pavelić A, Adamec I, Habek M. Differences in neurohumoral and hemodynamic response to prolonged head-up tilt between patients with high and normal standing norepinephrine forms of postural orthostatic tachycardia syndrome. *Auton Neurosci*. 2017 May 11. [Epub ahead of print]

Šagud M, Vuksan-Ćusa B, Božina N, **Lovrić M**, Mihaljević-Peleš A, Kramarić M. Olanzapine Long-Acting Injections After Neuroleptic Malignant Syndrome: Two Case Reports. *J Clin Psychopharmacol*. 2016 36:733-35.

Turudic D, Batinic D, Golubic AT, **Lovric M**, Milosevic D. Calcium oxalate urolithiasis in children: urinary promoters/inhibitors and role of their ratios. *Eur J Pediatr*. 2016;175:1959-65.

Habek M, Crnošija L, **Lovrić M**, Junaković A, Krbot Skorić M, Adamec I. Sympathetic cardiovascular and sudomotor functions are frequently affected in early multiple sclerosis. *Clin Auton Res*. 2016;26:385-93.

Adamec I, Bilić E, **Lovrić M**, Habek M. Postural orthostatic tachycardia syndrome (POTS) as presenting symptom of CIDP. *Neurol Sci*. 2016;37:1163-6.

Breljak D, Brzica H, Vrhovac I, Micek V, Karaica D, Ljubojević M, Sekovanić A, Jurasović J, Rašić D, Peraica M, **Lovrić M**, Schnedler N, Henjakovic M, Wegner W, Burckhardt G, Burckhardt BC, Sabolić I. In female rats, ethylene glycol treatment elevates protein expression of hepatic and renal oxalate transporter sat-1 (Slc26a1) without inducing hyperoxaluria. *Croat Med J*. 2015;56:447-59.

Crnošija L, Krbot Skorić M, Adamec I, Lovrić M, Mišmaš A, Miletić V, Šprljan Alfired R, Pavelić A, Habek M. Hemodynamic profile and heart rate variability in hyperadrenergic versus non-hyperadrenergic postural ortostatic tahicardia syndrome. *Clin Neurophysiol*. 2016;127:1639-44.

Crnosija L, Adamec I, Lovric M, Junaković A, Krbot Skorić M, Lušić I, Habek M. Autonomic dysfunction in clinically isolated syndrome suggestive of multiple sclerosis, *Clin Neurophysiol*. 2016;127:864-9.

Herak-Kramberger CM, Breljak D, Ljubojević M, Matokanovic M, Lovric M, Rogic D, Brzica H, Vrhovac I, Karaica D, Micek V, Ivkovic Dupor J, Brown D, Sabolic I. Sex-dependent expression of water channel AQP1 along the rat nephron, *Am J Physiol Renal Physiol*. 2015;308:809-21.

Barun B, Adamec I, Lovrić M, Habek M. Postural orthostatic tachycardia syndrome: additional phenotypic feature of neuromyelitis optica spectrum disorder. *Neurol Sci*. 2014;35:1623-5.

Trkulja V, Lalić Z, Nađ-škegro S, Lebo A, Granić P, Lovrić M, Pasini J, Božina N. Effect of Cyclosporine on Steady-State Pharmacokinetics of MPA in Renal Transplant Recipients Is Not Affected by the MPA Formulation: Analysis Based on Therapeutic Drug Monitoring Data. *Ther Drug Monit*. 2014; 36:456-64.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Co-author of Project: Nada Bozina: Pharmacogenomics and Pharmacovigilance - Preventing Side- Effects in Individualization Therapy; The project is jointly implemented by the University Hospital Center Zagreb, Zagreb University School of Medicine and the Agency for Medicinal Products and Medical Products (HALMED).

Co-author of a Croatian Science Foundation project: Mario Habek. Brainstem Evoked Potentials Score and Composite Autonomic Scoring Scale as Predictors of Disease Progression in Clinically Isolated Syndrome.

Co-author of Project of the Ministry of Science, Education and Sports: Ivo Barić. Inheritance Metabolic and Other Monogenic Diseases of Children (project code 108-1081870-1885).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Co-author of Project: Nada Bozina: Pharmacogenomics and Pharmacovigilance - Preventing Side- Effects in Individualization Therapy; The project is jointly implemented by the University Hospital Center Zagreb, Zagreb University School of Medicine and the Agency for Medicinal Products and Medical Products (HALMED).

Co-author of a Croatian Science Foundation project: Mario Habek. Brainstem Evoked Potentials Score and Composite Autonomic Scoring Scale as Predictors of Disease Progression in Clinically Isolated Syndrome.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof.dr.sc. Martina Lovrić Benčić

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Metabolic Syndrome

BIOGRAPHY

Martina Lovrić Benčić

Laščinska cesta 96, 10000 Zagreb (Croatia)

+385 91 2282240

mlbencic@icloud.com

WORK EXPERIENCE

15/08/1988–01/06/1990 Health Center “Trešnjevka”, Zagreb (1988 – 1990), general practice

01/06/1990–01/11/1992 Clinical Hospital Center “Rebro”, Internal clinic, Department of Endocrinology, scientific novice (Faculty of Medicine at the University of Zagreb)

01/11/1990–Present University Clinic for Cardiovascular Diseases (1992 – present) at the Clinical Hospital Center in Zagreb - 1992-1996 specialisation in internal medicine, 1996-

2000 specialisation in cardiology, since 2000. cardiologist and simultaneously

working at the School of Medicine at the University of Zagreb: full professor of

internal medicine (April 2017), scientific advisor since the October 2013 - associate

professor – since 2010 - assistant professor - 2004 - 2010 - assistant and senior

assistant – 1997 - 2000 . 2003-present Head of Outpatient department, 2003-

2011. Head of Working Group for Cardiac pacing, since 2008. implants

pacemakers and defibrillators.

EDUCATION AND TRAINING

PhD - Faculty of Medicine at the University of Zagreb, completed in

2000, Master's Degree - Faculty of Medicine at the University of

Zagreb, completed in 1992 Graduated from the Faculty of Medicine

at the University of Zagreb in 1983, GPA 5 (out of 5 possible),

“excellent” Graduated from the “Classical Gymnasium” in Zagreb in

1983, GPA 5 (out of 5 possible) Passed specialist examination in

internal medicine in 1996; passed subspecialist examination in

cardiology in 2000. In 2001. I have successfully passed the

prestigious exam, NASPEXam, being the only person in Croatia

who has done so at the time, and I gained the certificate of "Special

Competency in Cardiac Pacing and Defibrillation" • I also

participated in several clinical trials : 2 clinical trials on

antihypertensives, 1 trial on hyperlipidemia (ezetimibe and simvastatin, MSD) "DUAAL study" by Phyzer, ENGAGE TIMI-48 clinical trial of edoxaban efficacy, and Odyssey trial (PCSK9 drug testing).

Now I am leading a University project: Polymorphism -455G / A fibrinogen gene and polymorphism of MTHFR C677T in obese persons.

I participated in national research projects: from 1990 to 1992 and worked on the scientific project "Morphological and functional properties of pituitary adenoma" under the guidance of prof.dr. Mirko Koršić. Since 1996, I have been an active researcher on the project no.108196 "Pentadecapeptide BPC 157 - Further Research" (where I made a dissertation and co-authored on 17 published scientific papers and several congress summaries). Since 1997, I have been working on the CarNET project: Telemedicine in Heart Electrostimulation " In June 1999 I became a member of the team who made the first pacemaker programming via the Internet, as witnessed by congressional presentations and newspaper articles.

From 2002 until present I have been an active researcher in the project: "Tissue Doppler in assessing global and regional diastolic function"(code: 0108255).

From 2006 until 2013 in the project „Doppler of the myocardium in early detection and monitoring of cardiovascular diseases (code: 108-1081875-1991). During 2014 and 2015 I was involved in shortterm projects at the University of Zagreb (academic leader prof. Miličić) - The role of platelet reactivity in cardiovascular patients (code 1101257). 2016: Hypertension and Hyperreninemia Examination on Myocardial Left Ventricular Deformation (code 380-002/081-16-2).

I have been included in the MASTER survey since 2016. (Multicentral, international, controlled, clinical research on hypertension), and in Croatia since 2014. Coordinator of the European Society for Hypertension on sterile blood pressure control in patients with atrial fibrillation.

PERSONAL SKILLS

Mother tongue(s) Croatian

Other language(s) UNDERSTANDING SPEAKING WRITING:

German B2 B2 B2

English B2 B2 B2

French B1 B1 B1

Communication skills A long teaching experience:

Teaching graduate courses: Since 1991 I have been participating in teaching at the Department of Internal Medicine as a conductor of internal medicine examinations. Since 1997, I have regularly participated in the teaching of Internal Medicine and Clinical Propedeutics, and in the elective subject "Myocardium in Physiological and Pathological Conditions". Since 2003, I have also been participating

in modules on the 6th year of medical studies: "Rational approach to drug use" and "Emergency Situations (?)". I am teaching an elective subject that is being held regularly: "Electrostimulation of the Heart in Clinical Practice", and co-leader of the subject 'Heart Disease and Pregnancy'.

Teaching postgraduate courses: In 2000, I have finished a postgraduate course of the 1st category called "The Art of Medical Teaching" in which I have been participating for 16 years as an instructor (27 courses held altogether). I also worked as an instructor of some 1st category courses: „Laboratory and clinic – interface about which we talk too little (we do not talk enough?) (Croatian Chamber of Medical Biotechnicians), postgraduate specialist course – Clinical Pharmacology (as an instructor). I was an instructor of the PhD course called: Arterial Hypertension and Diabetes, and Metabolic Syndrome. I am also an instructor of other postgraduate courses of the 1st category: Heart Arrhythmias – Rational Approach, and The Art of Medical Education, and of a course: 22.-24-5. 2015. The Novelties of Nephrology and Areric Hypertension (Category I).

I was the head of the case "Electrostimulation of Heart" at a postgraduate study.

Organisational / managerial skills Since 2003 I am Head of Outpatient Dpt., University Clinic for CV Diseases, monthly we have 14000 patient visits.

I actively participated in organizing cardiologic congresses - "2nd Alpe Adria Cardiology Meeting" in Brijuni in 1994, and "Second Congress of Croatian Society of Cardiology" in Zagreb, in 1996. I was also in the organizing committee of "The First Croatian Congress on atherosclerosis" in 1997, held in Brijuni. As the Secretary of Congress, I made a significant contribution to the organization of the 5th Croatian Cardiac Congress in Opatija, I have been a member of the organizing committees of the 6th, 7th, 8th and 9th Congress of the Croatian Cardiac Society, and a member of the organizational board "Symposium on Arrhythmias and Cardiac Pacing" every year, for the past 15 years. I was a member of the organizational committee "Dubrovnik Cardiology Highlights" in 2011 and 2013. I was also a member of the organizational board IUPHAR in Novigrad 9-11.6. in 2016, and of the 4th Congress on Hypertension with International Participation in Porec, in 2017.

Job-related skills Member of professional societies:

Secretary of the Croatian Society of Cardiology (since 2003), Treasurer of the Croatian Society for Medical Education (since 2002). A member of the Supervisory Board of the Croatian Society of Cardiology (since 2008). A member of the Directory Board of the Croatian Society for Hypertension and the Croatian Society for Medical Education. An active member of several professional associations: the Croatian Society of Cardiology, the European Society of Cardiology, the Heart Rhythm Society. Before: the North American Society of Cardiac Pacing and Electrophysiology (NASPE) – full-time member, Association for Arrhythmia, Electrostimulation and Electrophysiology of the Heart at the European Cardiac Society, Association for Echocardiography at the European

Cardiac Society,

Croatian Society for Atherosclerosis, Croatian Medical Association, Croatian Medical Chamber,
Croatian Internist Society, Croatian Society for Stroke Prevention and Croatian Society for Medical
Education (a member of the Directory Board and the treasurer since 2002).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 25.4.2017. Full
professor

**LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS,
WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME**

D.Došen, P. Radić, A.Jelaković, G. Eder, A.Legović, M.Lovrić Benčić, M.Nihajlović, V. Premužić, D. Miličić, E.
Agabiti Rosei, B.Jelaković: Characteristics of patients with atrial fibrillation, ESH-FA project - Data on roation
cohort, Journal of Hypertension, Vol 30, e-Suppl.1, June 2018, p e35

M.Lovrić Benčić, L. Bradić, M.Mihajlović, G. Eder, K. Krželj, A. Jelaković, B. Jelaković: Fixed dose
combination therapy decreased prevalence of masked uncontrolled hypertension (MUCH) in very high
risk patients. Journal of Hypertension, Vol 30, e-Suppl.1, June 2018, p e6

B. Radić, D. Došen, G. Eder, E. Čatić Ćuti, A. Jelaković, A. Legović, M. Lovrić Benčić, M. Nihajlović, V.
Premužić, D. Miličić, E. Agabiti Rosei, B. Jelaković: Atrial Fibrillation and chronic kidney disease ESH-FA
project: data on Croatian cohort. Journal of Hypertension, Vol 30, e-Suppl.1, June 2018, p e162-163

Dijabetičari i nekontrolirana arterijska hipertenzija M.Lovrić Benčić, M. Mihajlović, G. Eder, K. Krželj, Tena
Jukić Liječ Vjesn 139, Supl.3, 38

Masked uncontrolled hypertension in cardiology outpatient practice. Martina Lovrić Benčić, Gregor Eder,
Marina Mihajlović *Cardiologia Croatica*, 2017 (10-11); 12:60

Vise od mrsavljenja – smanjenje kardiometaboličkog rizika M. Lovrić Benčić, J. Jelčić, L. Bradić, T.
Simonček, M. Mihajlović, G. Eder *Cardiologia Croatica* 2016;11 (10-11):500

Gašparović, Kristina; Lovrić Benčić, Martina. Epikardijalno masno tkivo u koronarnoj bolesti srca i fibrilaciji
atrija // *Cardiologia Croatica*, 13 (2018), 11-12; 418-418 doi:10.15836/ccar2018.418

Matovinović, Martina; Gašparović, Kristina; Memić, Dubravka; Bradić, Lada; Levicki, Rea; Vukovac Šokec,
Ivana; Lovrić Benčić, Martina Povezanost antropometrijskih i kardiometaboličkih parametara u adipoznih
bolesnika // *Cardiologia Croatica*, 13 (2018), 11-12; 386-386 doi:10.15836/ccar2018.386

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Makar-Aušperger K, Krželj K, , Lovrić Benčić M, Radačić Aumiler M, Erdeljić Turk V, Božina N Warfarin
dosing according to the genotype-guided algorithm is most beneficial in patients with atrial fibrillation: a
randomized parallel group trial. *Ther Drug Monit.* 2018 Feb 27. doi: 10.1097/FTD.0000000000000501. Q2

Strinic D, Belosic Halle Z, Luetic K, Nedic A, Petrovic I, Sucic M, Zivanovic Posilovic G, Balenovic D, Strbe S,
Udovicic M, Drmic D Stupnisek M, Lovric Bencic M, Seiwerth S, Sikiric P BPC 157 counteracts QTc
prolongation induced by haloperidol, fluphenazine, clozapine, olanzapine, quetiapine, sulpiride, and
metoclopramide in rats. *Life Sciences* 2017, 186: 66-79 Q1

Sikiric P, Seiwerth S, Rucman R, Drmic D, Stupnisek M, Kokot A, Sever M, Zoricic I, Zoricic Z, Batelja L, Ziger
T, Vlainic J, Rasic Z, Bencic ML. Stress in gastrointestinal tract and stable gastric pentadecapeptide BPC

157. Finally, do we have a solution? *Curr Pharm Des.* 2017 Feb 20. doi:

10.2174/1381612823666170220163219. [Epub ahead of print] PMID:28228068 Q2

Živanovic-Posilovic G, Balenovic D, Barisic I, Strinic D, Stambolija V, Udovicic M, Uzun S, Drmic D, Vlainic J, Bencic ML, Sindic A, Seiwerth S, Sikiric P. Stable gastric pentadecapeptide BPC 157 and bupivacaine. *Eur J Pharmacol.* 2016 Dec 15;793:56-65. Q2

Skorjanec S, Kokot A, Drmic D, Radic B, Sever M, Klicek R, Kolenc D, Zenko A, Lovric Bencic M, Belosic Halle Z, Situm A, Zivanovic Posilovic G, Masnec S, Suran J, Aralica G, Seiwerth S, Sikiric P. Duodenocutaneous fistula in rats as a model for "wound healing-therapy" in ulcer healing: the effect of pentadecapeptide BPC 157, L-nitro-arginine methyl ester and L-arginine. *J Physiol Pharmacol.* 2015 Aug;66(4):581-90. Q2

Five-year angiographic and clinical follow-up of patients with drug-eluting stent implantation for symptomatic myocardial bridging in absence of coronary atherosclerotic disease. Ernst A, Bulum J, Šeparović Hanževački J, Lovrić Benčić M, Strozzi M. *J Invasive Cardiol.* 2013 Nov;25(11):586-92. Q2

Neda Pjevač, Gordana Pavleković, Mladenka Vrcić-Keglević, Martina Lovrić-Benčić, Anton Šmalcelj, and Tomislav Luetić, Croatian training model for medical teachers *Croat Med J.* 2013 Dec; 54(6): 585–588. Q2

Ivan Barisic, Diana Balenovic, Robert Klicek, Bozo Radic, Bojana Nikitovic, Domagoj Drmic, Mario Udovicic, Dean Strinic, Darija Bardak, Lidija Berkopic, Viktor Djuzel, Marko Sever, Ivan Cvjetko, Zeljko Romic, Aleksandra Sindic, Martina Lovric Bencic, Sven Seiwerth, Predrag Sikiric Mortal hyperkalemia disturbances in rats are NO-system related. The life saving effect of pentadecapeptide BPC 157 *Regulatory Peptides*, Volume 181, 10 February 2013, Pages 50-66 Q2

Martina Lovrić Benčić, Ingrid Prkačin. Myocardial Infarction and Atrial Fibrillation: Are there Differences between Men and Women? *Cardiol Croat.* 2018;13(7-8):234-8.<https://doi.org/10.15836/ccar2018.234>

Ingrid Prkačin, Martina Lovrić Benčić, Domagoj Marković. Unique Characteristics of Hypertension in Women and Association with to Target Organ Damage.*Cardiol Croat.* 2018;13(7-8):239-42.
<https://doi.org/10.15836/ccar2018.239>

Bojan Jelaković, Maja Baretić, Maja Čikeš, Živka Dika, Margareta Fištrek Prlić, Ana Jelaković, Jelena Kos, Ivana Kraljević, Mario Laganović, Robert Likić, Martina Lovrić Benčić, Draško Pavlović, Hrvoje Tiljak, Majda Vrkić Kirhmajer, Tajana Željковиć Vrkić, Željko Reiner, Davor Miličić. Croatian Medical Association and the Working Group on Hypertension of the Croatian Cardiac Society. Practical guidelines for diagnosing arterial hypertension of the Croatian Society of Hypertension of Croatian Medical Association and the Working Group on Hypertension of the Croatian Cardiac Society. *Cardiol Croat.* 2017;12(11-12):413-451.
<https://doi.org/10.15836/ccar2017.413>

M. Jukic, L. Pavic, I. Bitunjac , T. Jukic, M. Milosevic, D. Lovric, M. Lovric Bencic . Myocardial bridging as one of the causes of atypical chest pain in young women, *The Egypt Heart J* (2017),
<http://dx.doi.org/10.1016/j.ehj.2017.03.005> Q4

Sikiric P, Seiwerth S, Rucman R, Kolenc D, Batelja Vuletic L, Drmic D, Grgic T, Strbe S, Zukanovic G, Crvenkovic D, Madzarac G, Rukavina I, Sucic M, Baric M, Starcevic N, Krstonijevic Z, Lovric Bencic M, Filipcic I, Stancic Rokotov D, Vlainic. Brain-gut axis and pentadecapeptide BPC 157. Theoretical and practical implications. *J. Curr Neuropharmacol.* 2016 May 2. Q1

M. Lovrić Benčić. Fibrilacija atrija – najčešća postojana aritmija, *Medicus*, 2016; 25(2) Q4



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2016. Investigation of hypertension and hyperinemic effect on left ventricular myocardial deformation (code 380-002 / 081-16-2). Since 2016. national coordinator in MASTER research (multicentre, internationally, controlled, clinical research on hypertension), and since 2014. Croatian project coordinator of the European Society for Hypertension for investigation of blood pressure control in patients with atrial fibrillation.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Leader: 2017: Linkage of polymorphism -455G / A fibrinogen gene and polymorphism of MTHFR C677T in obese patients with atrial fibrillation and thrombus in left atrial auricles

2018: Linkage of KCNE1 G38S gene polymorphism in patients with atrial fibrillation with -455 G / A gene for fibrinogen and MTHFR C677T gene

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2 doctoral theses, 1 master thesis, and 17 graduation theses

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Marko Lucijanić, MD PhD, research associate

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Dubrava

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Molecular hematology

BIOGRAPHY

Marko Lucijanić graduated from the Zagreb University School of Medicine in 2010 and completed a PhD at the same institution in 2017. He is currently working as a Hematology specialist at the University Hospital Dubrava, Zagreb. His scientific interests are biology of myeloproliferative neoplasms and translation from basic to clinical hematology. He is also interested in biostatistics, particularly survival analysis. He fluently uses English and understands German. Born in Karlovac, father of three sons.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

6.12.2017. research associate

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME:

1. Pejisa V, **Lucijanic M**, Jonjic Z, Prka Z, Vukorepa G. Progressive multifocal leukoencephalopathy developing after obinutuzumab treatment for chronic lymphocytic leukemia. *Ann Hematol.* 2019. doi: 10.1007/s00277-018-3552-x. [Epub ahead of print]
2. **Lucijanic M**, Prka Z, Jaksic O, Mitrovic Z, Vrkljan A, Pejisa V. Bendamustine-based conditioning prior to autologous stem cell transplantation is associated with high rate of febrile neutropenia and higher mortality. *Am J Hematol.* 2019;94(2):E42-E43. doi: 10.1002/ajh.25340.
3. **Lucijanic M**, Cicic D, Stoos-Veic T, Pejisa V, Rahelic D, Lucijanic T, Vasilj T, Ivic M, Sedinic M, Kusec R. Combining information on C reactive protein and serum albumin into the Glasgow Prognostic Score strongly discriminates survival of myelofibrosis patients. *Blood Cells Mol Dis.* 2018;72:14-16. doi: 10.1016/j.bcmd.2018.06.001.
4. **Lucijanic M**, Cicic D, Stoos-Veic T, Pejisa V, Lucijanic J, Fazlic Dzankic A, Vlasac Glasnovic J, Soric E, Skelin M, Kusec R. Elevated Neutrophil-to-lymphocyte-ratio and Platelet-to-lymphocyte-ratio in Myelofibrosis: Inflammatory Biomarkers or Representatives of Myeloproliferation Itself?. *Anticancer Res.* 2018;38(5):3157-3163. doi: 10.21873/anticancer.12579.
5. **Lucijanic M**, Livun A, Tupek KM, Stoos-Veic T, Pejisa V, Kusec R. Higher Sclerostin/SOST expression is associated with lower percentage of circulatory blasts and better prognosis in patients with myelofibrosis. *Ann Hematol.* 2018;97(7):1293-1294. doi: 10.1007/s00277-018-3294-9.
6. **Lucijanic M**, Prka Z, Pejisa V, Stoos-Veic T, Lucijanic J, Kusec R. Prognostic implications of low transferrin saturation in patients with primary myelofibrosis. *Leuk Res.* 2018;66:89–95. doi: 10.1016/j.leukres.2018.01.017.
7. **Lucijanic M**, Veletic I, Rahelic D, Pejisa V, Cicic D, Skelin M, Livun A, Tupek KM, Stoos-Veic T, Lucijanic T, Maglicic A, Kusec R. Assessing serum albumin concentration, lymphocyte count and Prognostic

- Nutritional Index might improve prognostication in patients with myelofibrosis. *Wien Klin Wochenschr.* 2018;130(3):126-33. doi: 10.1007/s00508-018-1318-z.
8. **Lucijanic M**, Mitrovic Z, Cicic D, Prka Z, Pejsa V, Livun A, Stoos-Veic T, Romc Z, Zivkovic M, Lucijanic I, Fabris Z, Kusec R. Increased mean platelet volume (MPV) is an independent predictor of inferior survival in patients with primary and secondary myelofibrosis. *Int J Hematol.* 2018;107(2):166-72. doi: 10.1007/s12185-017-2348-4.
 9. **Lucijanic M**, Livun A, Stoos-Veic T, Pejsa V, Jaksic O, Cicic D, Lucijanic J, Romc Z, Orehovec B, Aralica G, Miletic M, Kusec R. High absolute basophil count is a powerful independent predictor of inferior overall survival in patients with primary myelofibrosis. *Hematology.* 2018;23(4):201-207. doi: 10.1080/10245332.2017.1376843.
 10. **Lucijanic M**, Livun A, Tupek KM, Stoos-Veic T, Aralica G, Gecek I, Pejsa V, Kusec R. Heat shock protein 27 (HSP27/HSPB1) expression is increased in patients with primary and secondary myelofibrosis and may be affecting their survival. *Leuk Lymphoma.* 2017;58(10):2497-500. doi: 10.1080/10428194.2017.1296146.
 11. **Lucijanic M**, Skelin M, Lucijanic T. Survival analysis, more than meets the eye. *Biochem Med.* 2017;27(1):14–8. doi: 10.11613/BM.2017.002.
 12. Pejša V, Prka Ž, **Lucijanić M**, Mitrović Z, Piršić M, Jakšić O, Ajduković R, Kušec R. Rituximab with dose-adjusted EPOCH as first-line treatment in patients with highly aggressive diffuse large B-cell lymphoma and autologous stem cell transplantation in selected patients. *Croat Med J.* 2017;58(1):40-8. doi: 10.3325/cmj.2017.58.40.
 13. Kust D, **Lucijanic M**, Urch K, Samija I, Celap I, Kruljac I, Prpic M, Lucijanic I, Matesa N, Bolanca A. Clinical and prognostic significance of anisocytosis measured as a red cell distribution width in patients with colorectal cancer. *QJM.* 2017;110(6):361-7. doi: 10.1093/qjmed/hcw223.
 14. **Lucijanic M**, Livun A, Tomasovic-Loncaric C, Stoos-Veic T, Pejsa V, Jaksic O, Prka Z, Kusec R. Canonical Wnt/ β -Catenin Signaling Pathway Is Dysregulated in Patients With Primary and Secondary Myelofibrosis. *Clin Lymphoma Myeloma Leuk.* 2016;16(9):523-6. doi: 10.1016/j.clml.2016.06.004.
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17. **Lucijanic M**, Livun A, Tupek KM, Stoos-Veic T, Aralica G, Gecek I, Pejisa V, Kusec R. Heat shock protein 27 (HSP27/HSPB1) expression is increased in patients with primary and secondary myelofibrosis and may be affecting their survival. *Leuk Lymphoma*. 2017;58(10):2497-500. doi: 10.1080/10428194.2017.1296146.
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21. Kust D, **Lucijanić M**, Urch K, Samija I, Celap I, Kruljac I, Prpic M, Lucijanic I, Matesa N, Bolanca A. Clinical and prognostic significance of anisocytosis measured as a red cell distribution width in patients with colorectal cancer. *QJM.* 2017;110(6):361-7. doi: 10.1093/qjmed/hcw223.
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28. Črne Fureš N, **Lucijanić M**, Žabić I, Altabas K, Pavlović D. The Association of Low Triiodothyronine Syndrome, Protein-Energy Wasting and Chronic Inflammation with Mortality in Prevalent Dialysis Patients. *Acta Clin Croat.* 2018;57(3):449-457. doi: 10.20471/acc.2018.57.03.07.
29. Breitenfeld D, Kust D, Breitenfeld T, Prpić M, **Lucijanić M**, Zibar D, Hostić V, Franceschi M, Bolanča A. Neurosyphilis in Anglo-American Composers and Jazz Musicians. *Acta Clin Croat.* 2017;56(3):505-511. doi: 10.20471/acc.2017.56.03.18.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Sklerostin (SOST) gen i protein u kroničnim mijelo i limfoproliferacijama / Sclerostin (SOST) gene and protein in chronic myelo and lymphoproliferations“,University of Zagreb School of Medicine project to Rajko Kušec.



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Sklerostin (SOST) gen i protein u kroničnim mijelo i limfoproliferacijama / Sclerostin (SOST) gene and protein in chronic myelo and lymphoproliferations“,University of Zagreb School of Medicine project to Rajko Kušec.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Tomislav Luetić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine Zagreb, University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Liver transplantation in children

BIOGRAPHY

Prof. Tomislav Luetić is a specialist in pediatric and general surgery. He works at the Department of Pediatric Surgery and Urology at Rebro Clinic for Surgery. Neonatal surgery and the treatment of inherent malformations, education in medicine and the improvement of medical quality are his areas of close scientific and professional interest. He graduated from the University of Munich Children's, Brigham & Women's and Beth Israel in Boston, UCSF in San Francisco, Tufts University Boston Floating Hospital, Sapienza University in Rome and Charite Hospital in Berlin, at the University Children's Surgery Clinic in Munich, Harvard University and Hospitals. He has published over fifty papers indexed in CC, SCI, IM and EM. The aforementioned works have been quoted tens of times. So far, he has actively participated in two scientific projects. He has participated in international and domestic congresses. He successfully participates in full time in undergraduate, postgraduate teaching. In the present term, he is head of the Department of Surgery at the Faculty of Medicine of the University of Zagreb and head of the Institute for Pediatric Surgery and Urology.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2012

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- 4: Grizelj R, Bojanić K, Pritišanac E, Luetić T, Vuković J, Weingarten TN, Schroeder DR, Sprung J. Survival prediction of high-risk outborn neonates with congenital diaphragmatic hernia from capillary blood gases. *BMC Pediatr.* 2016 Jul 29;16:114. doi: 10.1186/s12887-016-0658-y. PubMed PMID: 27473834; PubMed Central PMCID: PMC4966580.
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- 8: Antabak A, Sisko J, Romić I, Papes D, Pasini M, Haluzan D, Bogović M, Medancić SS, Cavar S, Luetić T, Fuchs N, Andabak M, Prlić I, Ćurković S. [FRONTAL, AXILLARY AND TYMPANIC TEMPERATURE MEASUREMENTS IN CHILDREN]. *Lijec Vjesn.* 2016 Jan-Feb;138(1-2):30-3. Croatian. PubMed PMID: 27290811.
- 9: Antabak A, Papes D, Haluzan D, Seiwert S, Fuchs N, Romić I, Davila S, Luetić T. Reducing damage to the periosteal capillary network caused by internal fixation plating: An experimental study. *Injury.* 2015 Nov;46 Suppl 6:S18-20. doi: 10.1016/j.injury.2015.10.037. Epub 2015 Nov 21. PubMed PMID: 26612477.
- 10: Bojanić K, Pritišanac E, Luetić T, Vuković J, Sprung J, Weingarten TN, Schroeder DR, Grizelj R. Malformations associated with congenital diaphragmatic hernia: Impact on survival. *J Pediatr Surg.* 2015 Nov;50(11):1817-22. doi: 10.1016/j.jpedsurg.2015.07.004. Epub 2015 Jul 14. PubMed PMID: 26259558.
- 11: Antabak A, Barišić B, Andabak M, Bradić L, Brajčinović M, Haramina T, Haluzan D, Fuchs N, Ćurković S, Luetić T, Sisko J, Prlić I. [PHYSICAL PROPERTIES OF PLASTER BANDAGES]. *Lijec Vjesn.* 2015 Nov-Dec;137(11-12):372-6. Croatian. PubMed PMID: 26975068.
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- 13: Antabak A, Matković N, Deutsch JA, Papeš D, Karlo R, Romić I, Fuchs N, Luetić T. RESULTS OF CLAVICLE FRACTURE TREATMENT IN CHILDREN. *Acta Clin Croat.* 2015 Sep;54(3):345-50. PubMed PMID: 26666106.
- 14: Antabak A, Barišić B, Andabak M, Papeš D, Romić I, Fuchs N, Luetić T. [HAND FRACTURES IN CHILDREN - CAUSES AND MECHANISMS OF INJURY]. *Lijec Vjesn.* 2015 Sep-Oct;137(9-10):306-10. Croatian. PubMed PMID: 26749954.
- 15: Antabak A, Đapić T, Seiwerth S, Papeš D, Karlo R, Luetić T. [SUBUNGUAL EXOSTOSIS OF THE THUMB - CASE REPORT IN AN EIGHT YEAR OLD GIRL]. *Lijec Vjesn.* 2015 Jul-Aug;137(7-8):233-5. Croatian. PubMed PMID: 26502674.
- 16: Antabak A, Matković N, Papeš D, Karlo R, Romić I, Fuchs N, Madarić M, Stilinović M, Stanić L, Luetić T. [CLAVICLE FRACTURES IN CHILDREN--CIRCUMSTANCES AND CAUSES OF INJURY]. *Lijec Vjesn.* 2015 May-Jun;137(5-6):163-7. Croatian. PubMed PMID: 26380474.
- 17: Antabak A, Stanić L, Matković N, Papeš D, Romić I, Fuchs N, Luetić T. [Radius fractures in children--causes and mechanisms of injury]. *Lijec Vjesn.* 2015 Mar-Apr;137(3-4):76-80. Croatian. PubMed PMID: 26065283.
- 18: Papeš D, Sršen Medančić S, Antabak A, Sjekavica I, Luetić T. What is the acceptable rate of negative appendectomy? Comment on "Prospective evaluation of the added value of imaging within the Dutch National Diagnostic Appendicitis Guideline--do we forget our clinical eye"? *Dig Surg.* 2015;32(3):181-2. doi: 10.1159/000380772. Epub 2015 Mar 28. PubMed PMID: 25833673.
- 19: Antabak A, Luetić T, Caleta D, Romić I. H-type Tracheoesophageal Fistula in a Newborn: Determining the Exact Position of Fistula by Intra-operative Guidewire Placement. *J Neonatal Surg.* 2014 Jul 10;3(3):36. eCollection 2014 Jul-Sep. PubMed PMID: 26023507; PubMed Central PMCID: PMC4420454.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

How to measure health?

Thermal changes in bone healing after fracture

Influence of organized education on quality of work in outpatient care

The inherited metabolic and other monogenic diseases of children

Celiac disease in children: primary prevention and pathogenesis of chromosomal instability

Hepatocellular tumors

New Approaches to Hereditary Disease Diagnosis

A common molecular basis for the etiopathogenesis of bone disorders in humans

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

How to measure health?

Thermal changes in bone healing after fracture

Influence of organized education on quality of work in outpatient care

The inherited metabolic and other monogenic diseases of children

Celiac disease in children: primary prevention and pathogenesis of chromosomal instability

Hepatocellular tumors

New Approaches to Hereditary Disease Diagnosis



A common molecular basis for the etiopathogenesis of bone disorders in humans

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: LIBORIJA LUGOVIĆ MIHIĆ, PROF.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: SCHOOL OF DENTAL MEDICINE, ZAGREB

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical laboratory diagnostics of malignant melanoma with special reference to molecular-biological diagnosis assesment

BIOGRAPHY

Assoc. Prof. Liborija Lugović Mihić, Dermatovenerology Specialist, Associate Professor and recent Head of the Department of Dermatovenerology at the Faculty of Dental Medicine, University of Zagreb (2015-2018); Head of the Polyclinic Department of the Clinical Center for Dermatovenerology at the KBC "Sestre milosrdnice" hospital and Assoc. Prof. at the Faculty of Dentistry, University of Zagreb.

Liborija Lugović Mihić was born in 1968 in Šibenik, where she finished elementary and high school. In 1986 she enrolled at the Faculty of Medicine in Rijeka, graduating in 1992. Her internship started in June 1992 at KBC "Zagreb" in Zagreb, during which she attended postgraduate studies in Clinical Immunology at the Faculty of Medicine, University of Zagreb. During her internship and postgraduate studies, she was involved in scientific projects and research at the KBC "Zagreb" hospital at the Department of Dermatovenerology. From March 1994 to January 2001 she worked at the Health Center Kutina at the emergency center, where she was also the head of the Emergency Medical Service. In December 1995 she defended/submitted her master's thesis, titled "The significance of routine immunological tests in the recognition and monitoring of atopic dermatitis". In December 2002, she defended her doctoral dissertation under the title "The Determination of Immunological Parameters as Confirmation of Disordered Immune System in Atopic Dermatitis". Then, in November 2001, she started specializing in dermatovenerology - she passed her specialization exam in 2005 - at the KBC "Sestre Milosrdnice" hospital in Zagreb, where she is still practicing and is currently Head of the Polyclinic there. In April 2005, she was elected the Senior Assistant at the School of Dental Medicine of the University of Zagreb, then as a Scientific Associate in October 2005, and in November 2007 as a docent at the Department of Dermatovenerology of the School of Dental Medicine, and finally in 2013, as an Assoc. Professor at the same department, where from 2015-2018 she was the Head of Department. She was also a mentor for a series of graduate theses and published papers, and she is currently a mentor to a number of PhD candidates. In addition, between 2010-2013, she was the director of dermatovenerology classes for the high schools of medicine in Bjelovar and Varaždin. She has also participated in several scientific projects with the Ministry of Science and in 2015 was declared the most effective dermatovenerologist by the Ministry of Health of the Republic of Croatia. In 2016, research by her mentees, Dr. Japundžić and Dr. Novak, was rewarded the Rector's Award.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2013, 23rd SEPTEMBER- Assoc. Prof. (2019. Professor)

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Lugović Mihić L, Buljan M, Šitum M, Vrančić D, Duvančić T. The analysis of psychoneuroimmunologic factors in patients with malignant melanoma. EADV Congress, Viena, 2016, September-October.

Lugović-Mihić L, Ljubešić L, Mihić J, Vuković-Cvetković V, Šitum M. Psychoneuroimmunologic aspects of skin diseases. Acta Clin Croat 2013;52(3):337-45.

Lugović L, Šitum M, Vurnek M, Buljan M. Influence of psychoneuroimmunologic factors on patients with malignant skin diseases. Acta Med Croatica 2007;61(4):383-9.

Duvančić T, Lugović Mihić L, Crnarić I, Šitum M. Psychological and neuroimmunological interactions in the development of malignant melanoma. 4th Croatian Congress of Psychodermatology with International Participation; 2016 June 10-12; Zagreb, Croatia. O-46.

Lugović Mihić. Psihoneuroimunološki aspekti bolesti kože. U: Bralić I. Novi izazovi u prevenciji bolesti dječje dobi: koža ogledalo zdravlja i bolesti. Zbornik radova Simpozija, 2018.

Romić Brtan R, Brtan A, Romić I, Cvitanović H, Duvančić, T, Lugović-Mihić, L. Quality of life and perception of disease in patients with chronic leg ulcer. *Acta Clin Croat* 2015; 54 (3) 309-14.

Lugović-Mihić L, Duvančić T, Ferček I, Vuković P, Japundžić I, Česić D. Drug-photosensitivity: a continuing diagnostic challenge. *Acta Clin Croat* 2017; 56: 277-83.

Cvitanović H, Šitum M, Meštrović-Štefekov J, Lugović-Mihić L. Stress and coping in patients with clinical manifestations of human papillomavirus. *Acta Dermatovenerol Croat.* 2017;25(1):32-38.

Mihić J, Rotim K, Vučić M, Novak-Bilić G, Lugović-Mihić L. Značenje angiogeneze i ekspresije CD44 u glioblastomu. *Acta Med Croat* 2017; 71: 201-7.

Lugović-Mihić L, Pilipović-Knežević K, Crnarić I, Šitum M, Duvančić T. Differential diagnostics of cheilitis. How to classify cheilitis? *Acta Clin Croat* 2018 57:1-10.

Meštrović-Štefekov J, Pap N, Lugović-Mihić L, Novak-Bilić G, Kuna M. Psychological stress in atopic dermatitis. *Acta Dermatovenerol Croat.* 2018; 26(4):297-303.

Novak-Bilić G, Stanić Duktaj S, Pap N, Bradamante M, Lugović-Mihić L. How to manage patients with cutaneous pseudolymphoma? *Lib Oncol.* 2018;46(Suppl 1):70.

Lugović Mihić L. Psihoneuroimunoendokrinološki aspekti melanoma. U: Šitum M i sur. *Melanom*, Zagreb: Medicinska naklada; 2016. Str 34-38.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Djaković I, Butorac D, Vučićević Ž, Košec V, Tešija-Kuna A, Lugović-Mihić L. Henoch-Schönlein purpura in the third trimester of pregnancy. *Biochemia Medica* 2018;28(1):010801.<https://doi.org/10.11613/BM.2018.010801>

Japundžić I, Vodanović M, Lugović-Mihić L. An analysis of skin prick tests to latex and patch tests to rubber additives and other causative factors among dental professionals and students with contact dermatoses. *Int Arch Allergy Immunol.* 2018;177(3):238-44.

Budimir J, Mravak-Stipetić M, Bulat V, Ferček I, Japundžić I, Lugović-Mihić L. Allergic reactions in oral and perioral diseases-what do allergy skin test results show? *Oral Surg Oral Med Oral Pathol Oral Radiol.* 2018 Aug 18. pii: S2212-4403(18)31122-2.

Kelava N, Lugović-Mihić L, Duvančić T, Romić R, Šitum M. Oral allergy syndrome--the need of a multidisciplinary approach. *Acta Clin Croat* 2014;53(2):210-9.

Romić Brtan R, Brtan A, Romić I, Cvitanović H, Duvančić, T, Lugović-Mihić, L. Quality of life and perception of disease in patients with chronic leg ulcer. *Acta Clin Croat* 2015; 54 (3) 309-14.

Stipic-Markovic A, Ferček I, Čubela, M, Artuković M, Radončić KM, Lugovic-Mihić L. JAK inhibitor clinical response in polyarthritis: case report. *Acta Clinica Croatica* 2015; 54 (2), 236-242

Lugović-Mihić L, Ferček I, Duvančić T, Bulat V, Ježovita J, Novak-Bilić G, Šitum M. Occupational contact dermatitis amongst dentists and dental technicians. *Acta Clin Croat* 2016; 55:293-300.

Lugović-Mihić L, Duvančić T, Ferček I, Vuković P, Japundžić I, Česić D. Drug-photosensitivity: a continuing diagnostic challenge. *Acta Clin Croat* 2017; 56: 277-83.

Cvitanović H, Šitum M, Meštrović-Štefekov J, Lugović-Mihić L. Stress and coping in patients with clinical manifestations of human papillomavirus. *Acta Dermatovenerol Croat.* 2017;25(1):32-38.

Japundžić I, Lugović-Mihić L. Skin reactions to latex in dental professionals - first croatian data. *Int J Occup Saf Ergon.* 2017; 5:1-20.

Mihić J, Rotim K, Vučić M, Novak-Bilić G, Lugović-Mihić L. Značenje angiogeneze i ekspresije CD44 u glioblastomu. *Acta Med Croat* 2017; 71: 201-7.

Japundžić I, Novak D, Kuna M, Novak-Bilić G, Lugović-Mihić L. Analysis of dental professionals' and dental students' care for their skin. *Acta Stomatol Croat* 2018; 52(1):46-52.

Lugović-Mihić L, Pilipović-Knežević K, Crnaric I, Šitum M, Duvančić T. Differential diagnostics of cheilitis. .How to classify cheilitis? *Acta Clin Croat* 2018 57:1-10.

Mendek S, Lugović-Mihić L, Ferček I, Japundžić I, Šitum M, Abram M. The onychomycoses frequency in the Zagreb area – the role of sabouraud agar without cycloheximide in diagnostics and therapies. *Acta Clin Croat* 2018 (u tisku)

Novak-Bilić G, Vučić M, Japundžić I, Meštrović-Štefekov J, Stanić Duktaj S, Lugović-

Mihić L. Irritant and allergic contact dermatitis-skin lesion characteristic. *Acta Clin Croat.* 2018; (rad prihvaćen, u tisku)

Meštrović-Štefekov J, Pap N, Lugović-Mihić L, Novak-Bilić G, Kuna M. Psychological stress in atopic dermatitis. *Acta Dermatovenerol Croat.* 2018; 26(4):297-303.

Novak-Bilić G, Lugović-Mihić L, Pap N, Vučić M, Stanić Duktaj S. Contact dermatitis as a result of complex pathogenetic pathways. *Lib Oncol.* 2018;46 (Supl 1): 69.

Novak-Bilić G, Stanić Duktaj S, Pap N, Bradamante M, Lugović-Mihić L. How to manage patients with cutaneous pseudolymphoma? *Lib Oncol.* 2018;46(Supl 1):70.

Lugović-Mihić L, Krišto M, Ferček I, Bukvić I, Duvančić T. Primjena omalizumaba kod kronične spontane urtikarije/angioedema: preporuke, iskustva i spoznaje. *Acta Med Croatica* 2018 (rad prihvaćen, u tisku)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

International Project COST 2017., 2018.g. (European Cooperation in Science and Technology): „A European Network for Connective Tissue Calcifying Diseases “(n°CA16115)

Project (2018.) “Utjecaj radnih uvjeta i konstitucijskih čimbenika na nastanak kontaktnog dermatitisa šaka u doktora dentalne medicine i doktora medicine” - Prof. Liborija Lugovic-Mihic

Project (2007.) “Psihološki status bolesnika s različitim dermatozama i zloćudnim bolestima kože” (voditelj prof. dr. sc. Mirna Šitum).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

International Project COST 2017., 2018.g. (European Cooperation in Science and Technology): „A European Network for Connective Tissue Calcifying Diseases “(n°CA16115), uz Ministarstvo znanosti i obrazovanja Republike Hrvatske

Project (2018.g.) “Utjecaj radnih uvjeta i konstitucijskih čimbenika na nastanak kontaktnog dermatitisa šaka u doktora dentalne medicine i doktora medicine” - Prof. Liborija Lugovic-Mihic



NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ljerka Luić, associate professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University North

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Telemedicine

BIOGRAPHY

Ljerka Luić is an Associate Professor at University North. Since the academic year 2001/2002 to date, she has continuously worked as a guest teacher for the Telemedicine course within the Biomedicine and Healthcare University Postgraduate Doctoral Study Program at the School of Medicine of the University of Zagreb with a lecture on the topic *Strategic planning of development of e-health*. She has also lectured for the Information and Communication Science University Postgraduate Doctoral Study Program at the Faculty of Humanities and Social Sciences of the University of Zagreb on the subject of *Designing a Integrated Information System Strategic Planning Model*.

As a scientific researcher, she has actively participated in 3 national scientific projects and 2 international scientific projects, acting as Lead Researcher/Manager on one of them. She was appointed Scientific Adviser on Jun 2016 and Associate Professor on November 2017. All her degrees were obtained in social sciences, field: Information and Communication Sciences.

Ljerka Luić has published a total of 42 scientific papers (29 A1 and 13 A2). She has taken part in 20 international scientific conferences, at 12 of which she personally presented papers authored and/or co-authored by her. She has been mentor for 105 graduate theses and co-authored 10 scientific papers with her students. She has autonomously published 2 textbook, 2 chapters of a book and co-authored 1 manual and.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 15.11.2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Luić, Ljerka; Molnar, Livia: *Impact of Internet on Cytology Information Management* // Proceedings of the 10th International eHealth Conference Health Informatics Meets eHealth / Schreier, Günter; Ammenwerth, Elske; Hörbst, Alexander; Hayn, Dieter (eds.) - IOS Press, Amsterdam, Netherlands, ISSN: 0926-9630, pp. 119-123 / Vienna, Austria, 24-25 May, 2016 **A1**

Galinec, Darko; Luić, Ljerka: *Asynchronous Message-Passing and Inter-Application Communication Software for Process Improvement in Complex Systems* // International Journal of Knowledge-Based Organizations (IJKBO) / Wang, John; Abel, Marie-Helene; Bergman, Jukka-Pekka; Dealtry, Richard; Dvir, Ron; Grosky, William; Karaszewski, Robert; Lam, Wai; Lee, Anthony; Manolopoulos, Yannis; Mentzas, Gregoris; Riss, Uwe; Swart, Juani; Tatoglu, Ekrem; Terenziani, Paolo (eds.) - IGI Global, USA, Vol. 4, No. 4 (2014) pp. 36-50 (ISSN: 2155-6393, DOI: 10.4018/ijkbo.2014100103) **A1**

Končar, Miroslav; Luić, Ljerka: *Privacy and Ethics Requirements with Electronic Healthcare Record Systems Implementations* /// Proceedings of the European Federation for Medical Informatics, Special Topic Conference 'Medical Informatics in Enlarged Europe' // Bryden, Jons.; de Lusignan, Simon; Blobel, Bernd; Petrovečki, Mladen (eds.) // pp 108-113 [ISBN: 978-3-89838-083-6 (Aka), ISBN: 978-1-58603-763-5 (IOS Press)] / Akademische Verlagsgesellschaft Aka GmbH, Berlin, Germany, June, 2007 **A1**

Luić, Ljerka; Striber-Devaja, Dubravka; Schwarz, Dragan: *The Role of Information Standards for Effective Management of Health Information Systems* /// Proceedings of the Brno International Conference on Applied Business Research 2006 // Grega, Libor (ed.) // pp 457-467 [ISBN: 80-7157-985-8] / Mendel University of Agriculture and Forestry in Brno, Brno, Czech Republic, September 25 - October 1, 2006 **A2**

Luić, Ljerka; Striber-Devaja, Dubravka: *The Significant of Information Standards for Development of Integrated Health Information System* /// Archive of Oncology, Vol 14 No. 1-2 // Baltić, Vladimir (ed. in chief) // pp 64-66 [ISSN 0354-7310, UDC 616-006] / Institut of Oncology Sremska Kamenica, Sremska Kamenica, Serbia, June, 2006 **A1**

Luić, Ljerka: *Integrated business-information systems in the construction of e-Health* /// Telemedicine, 552 str // Klapan, Ivica; Čikeš, Ivo (eds.) // str. 92-97 [ISBN: 953-95168-0-3] / Telemedicine Association, Zagreb, Croatia, September, 2005 **knjiga, poglavlje**

Schwarz, Dragan; Luić, Ljerka: *Significance of ICT Standards for eHealth* /// Proceedings of the IADIS International Conference 'e-Society 2005' // Isaias, Pedro; Kommers, Piet; McPherson, Maggie (eds.) // pp 661-665 [ISBN: 972-8939-03-5] / Qawra, Malta, June 27 - 30, 2005 **A1**

Striber-Devaja, Dubravka; Luić, Ljerka; Zdravković, Svetozar: *Standardization – the Important Step in the Process of Development and Implementation of Integrated Health Information System* /// Proceedings of the 2nd International Conference on Information Communication Technologies in Health, ICICTH 2004 Health Informatics & Health Telematics Foundations for High Quality of Care // Mantas, John (ed.) // pp 173-179 [ISBN: 960-8313-84-8] / Samos, Greece, July 8 - 10, 2004 **A1**

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Luić, Ljerka: *Strateško planiranje i upravljanje školom* // Dumančić Poljski, Štefica (ur.) // priručnik / 70 stranica / Hrvatska akademska i istraživačka mreža – CARNet, Zagreb, 2018 **knjiga, priručnik**

Špacir, Josipa; Jurčić, Anja; Veršić, Roman, Luić, Ljerka: *The Influence of Computer and Mobile Ergonomics on Working Efficiency* // Book of Proceedings of the 6th International Scientific and Professional Conference Occupational Safety and Health / Kirin, Snježana (ed.) - Karlovac University of Applied Science, Karlovac, Croatia, ISSN: 1848-5731, pp. 479-484 / Zadar, Croatia 21-24 September, 2016 **A2**

Luić, Ljerka; Molnar, Livia: *Impact of Internet on Cytology Information Management* // Proceedings of the 10th International eHealth Conference Health Informatics Meets eHealth / Schreier, Günter; Ammenwerth, Elske; Hörbst, Alexander; Hayn, Dieter (eds.) - IOS Press, Amsterdam, Netherlands, ISSN: 0926-9630, pp. 119-123 / Vienna, Austria, 24-25 May, 2016 **A1**

Luić, Ljerka; Fudurić, Ana: *Nucleus of the Strategic Planning of an Integrated University Information System* // Proceedings of the 5th International Conference The Future of Information Sciences, INFUTURE2015: e-Institutions – Openness, Accessibility, and Preservation / Anderson, Karen; Duranti, Luciana; Jaworski, Rafal; Stančić, Hrvoje; Seljan, Sanja; Mateljan, Vladimir (eds.) - Department of Information and Communication Sciences, Faculty of Humanities and Social Sciences, University of Zagreb, Croatia, ISSN: 1847-8220, pp. 153-162 / Zagreb, Croatia, 11-13 November, 2015 **A1**

Luić, Ljerka: *Communicational modalities of Integrated Information Systems* // Proceedings of the 4th International Scientific Conference Change Leadership: Key to Successful Growth / Rosić, Vladimir;

Karanović, Bisera (eds.) - Iacocca Institute, Lehigh University and Business School PAR, Rijeka, Croatia, ISBN: 978-953-57258-6-2, pp. 239-246 / Opatija, Croatia, 13-14 March, 2015 **A1**

Luić, Ljerka; Galinec, Darko: *Social Dimension of Short-term and Long-term Alignment in the Strategic Planning of an Integrated Higher Education Information System* // International Journal of Society Systems Science (IJSSS) / Wang, John; Anjomani, Ardeshir; Hua, Zhongsheng; Moitra, Soumyo; Prosperi, David; Ragsdale, Cliff; Schniederjans, Marc (eds.) - Inderscience Enterprises Ltd., Switzerland, Vol. 7, No. 4 (2015) pp. 299-313 (ISSN: 1756-2511) **A1**

Luić, Ljerka: *Komunikacijski modaliteti integriranih informacijskih sustava* // Zbornik radova Četvrte međunarodne znanstveno-stručne konferencije o leadershipu, Liderstvo promjena: Ključ uspješnog rasta - PILC 2015 / Rosić, Vladimir; Karanović, Bisera (ed.) - Rijeka: Visoka poslovna škola PAR, Hrvatska, 2015. pp. 239-246 (ISBN: 978-953-57258-6-2) **A2**

Galinec, Darko; Luić, Ljerka: *Asynchronous Message-Passing and Inter-Application Communication Software for Process Improvement in Complex Systems* // International Journal of Knowledge-Based Organizations (IJKBO) / Wang, John; Abel, Marie-Helene; Bergman, Jukka-Pekka; Dealtry, Richard; Dvir, Ron; Grosky, William; Karaszewski, Robert; Lam, Wai; Lee, Anthony; Manolopoulos, Yannis; Mentzas, Gregoris; Riss, Uwe; Swart, Juani; Tatoglu, Ekrem; Terenziani, Paolo (eds.) - IGI Global, USA, Vol. 4, No. 4 (2014) pp. 36-50 (ISSN: 2155-6393, DOI: 10.4018/ijkbo.2014100103) **A1**

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Title: Optimization and risk management in information systems

Ljerka Luić: researcher in national scientific project

Client: Ministry of Science, Education and Sports of the Republic of Croatia

Institution: The Faculty of Electrical Engineering and Computing, University of Zagreb

Period: January 2007 – December 2011

Area: information science / computer science

Code: 036-0361983-3137

Title: Promote, mobilize, reinforce and integrate wireless sensor networking research and researchers

Ljerka Luić: researcher in international scientific project

Client: European Commission, FP7 program

Institution: L. M. Ericsson Limited, Ireland Research Centre

Period: April 2008 – August 2010

Area: information science / computer science

Code: 205494

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Hana Ljubić, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Molecular and biochemical approach to genetic disorders; Methods of molecular biology in medicine

BIOGRAPHY

Hana Ljubić was born on May 23, 1977 in Zagreb. She finished elementary and high school in Zagreb. In 2005 she graduated from the Faculty of Science, University of Zagreb. In July 2006, she started working at the University Hospital Centre Zagreb at the position of cytogeneticist at the Division of Cytogenetics and in November 2007 continued working at the position of analyst at the Division of Molecular Laboratory Diagnosis of the Department of Laboratory Diagnostics. In February 2009 she was at the Microcythemia hospital of Cagliari, Italy, on the professional training in the field of molecular diagnostics of Wilson disease by gene sequencing method. In 2013 she received her PhD at the Department of Biology of the Faculty of Science, University of Zagreb. So far, as a first author she published one paper in the international journal cited in Current Contents, and as a co-author she published four papers in national and international journals, two of them in journals cited in Current Contents. She is the author of 9 scientific abstracts and co-author of one book and manual. She participates in teaching as a collaborator in the Department of Medical Chemistry, Biochemistry and Clinical Chemistry, School of Medicine, University of Zagreb. Since 2016, she is an assessor in an expert group for Huntington disease, which is a part of European Molecular Quality Network (EMQN), organization for quality control in medical laboratories in the molecular genetics field, based in Manchester, England.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: -

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1) Ljubić H. Metoda lančane reakcije polimerazom za hibridizaciju s trinukleotidnim ponavljanjima; Miotonična distrofija tip 1 (Polimerase chain reaction method in trinucleotide repeat hybridization; Myotonic dystrophy type 1). In: Metode molekularne biologije u medicini (Methods of molecular biology in medicine). Bulić-Jakuš F, Sertić J (ed.) Zagreb: University of Zagreb, School of Medicine; 2016. p.156-159.
- 2) Telarović S, Ljubić H, Čelić I, Sertić J. Huntingtonova bolest (Huntington disease). In: Klinička kemija i molekularna dijagnostika u kliničkoj praksi (Clinical chemistry and molecular diagnostics in clinical practice). Sertić J (ed.) Zagreb: Medicinska naklada; 2014. p.150-155.
- 3) Kalauz M, Ljubić H, Telarović S, Sertić J. Wilsonova bolest (Wilson disease). In: Klinička kemija i molekularna dijagnostika u kliničkoj praksi (Clinical chemistry and molecular diagnostics in clinical practice). Sertić J (ed.) Zagreb: Medicinska naklada; 2014.. p.309-320.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1) Ljubić H, Kalauz M, Telarović S, Ferenci P, Ostojić R, Noli MC, Lepori MB, Hrstić I, Vuković J, Premužić M, Radić D, Grubelić Ravić K, Sertić J, Merkler A, Acman Barišić A, Loudianos G, Vucelić B. ATP7B Gene Mutations in Croatian Patients with Wilson Disease. Genet Test Mol Biomarkers. 2016;20:112-117.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



1) 2016. Interaction of Hp, CYP2C9, CYP2C19 and PPAR γ in the development of cerebrovascular ischemic stroke, supported by the University of Zagreb (leader, J. Sertić).

2) 2017. - 2018. The role of genetic and biochemical markers in the development of monogenic diabetes, supported by the University of Zagreb (leader, J. Sertić).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1) 2016. Interaction of Hp, CYP2C9, CYP2C19 and PPAR γ in the development of cerebrovascular ischemic stroke, supported by the University of Zagreb (leader, J. Sertić).

2) 2017. - 2018. The role of genetic and biochemical markers in the development of monogenic diabetes, supported by the University of Zagreb (leader, J. Sertić).

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assoc. Prof. Suncanica Ljubin Sternak, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb; Teaching Institute of Public Health “Dr. Andrija Stampar”, Zagreb, Croatia

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: “Pathogenesis of infectious diseases”.

BIOGRAPHY

Born in 1968 in Zagreb. Graduated at School of Medicine the University of Zagreb (1993). Specialist exam of Medical Microbiology and Parasitology (2002). Doctoral thesis entitled "Clinical and molecular epidemiological characteristics of human metapneumovirus infection in Croatia" (2008). Assistant Professor (cumulative employment) at University of Zagreb (2010-2016). Associate Professor at the University of Zagreb (2016-). Her professional interest is cultivation and molecular diagnostics of viruses, evolution of the viruses and other intracellular pathogens as well as monitoring the resistance of intracellular pathogens. She worked at the Croatian National Institute of Public Health (1996-2014). Head of the National Centre for polio and National Laboratory for Chlamydia (2004-2014). Since 2014 she is employed at the Teaching Institute for Public Health "Dr Andrija Stampar", as Head of the Department of Molecular Microbiology. She was an associate on projects of Croatian Ministry of Science, Basic Education and Sports: "Viral infections of the respiratory system" (2008-2013), also on project of the National Science Foundation "Research on the etiology, epidemiology, diagnostics and treatment of patients with prostatitis syndrome" (2010-2013), and associate on project of the National Science Foundation: "Genomics and molecular epidemiology of human paramyxoviruses in Croatia" (2014-). She coordinated University grants project for 2015 and 2016: "The meaning of the new pathogen metapneumovirus, coronavirus and bocavirus - in children and adults suffering from respiratory infections." She is the principal investigator of the Croatian national Foundation project: New and neglected respiratory viruses in vulnerable group of patients (2017-2021). She has published more than 100 scientific and professional articles and scientific abstracts, of which 75 in cited journals (42 in CC and 33 in other publications). Citations 856, h-index = 17.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 01.02.2016., associate professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Papers indexed in Current Contents:

1. Škerk V, Krhen I, Lisić M, Begovac J, Roglić S, Škerk V, Ljubin Sternak S, Banaszak A, Strugar-Šuica J, Vuković J. Comparative randomized pilot study of azithromycin and doxycycline efficacy in the treatment of prostate infection caused by Chlamydia trachomatis. Int J Antimicrob Agents 2004;24:188-191.
2. Skerk V, Krhen I, Lisic M, Begovac J, Cajic V, Zekan S, Skerk V, Sternak SL, Topic A, Schonwald S. Azithromycin: 4.5- or 6.0- gram dose in the treatment in patients with chronic prostatitis caused by Chlamydia trachomatis-a randomized study. J Chemoter 2004;16(4): 408-410.
3. Škerk V, Ljubin Sternak S, Roglić S, Škerk V, Lisić M. Diagnosis and treatment of chronic prostatitis caused by Chlamydia trachomatis. J Chemoter 2005;17(5): 570-571.
4. Šantak M, Košutić-Gulija T, Tešović G, Ljubin-Sternak S, Gjenero-Margan I, Betica-Radić Lj, Forčić D. Mumps virus strains isolated in Croatia in 1998 and 2005: genotyping and putative antigenic relatedness to vaccine strains. J Med Virol 2006;78(5):638-643.

5. Ljubin Sternak S, Vilibić Čavlek T, Falsey AR, Walsh EE, Mlinarić Galinović G. Serosurvey of human metapneumovirus infection in Croatia. *Croat Med J* 2006;47:878-81.
6. Vilibić Čavlek T, Ljubin Sternak S, Žarković K, Marušić Della Marina B, Cvitanović Šojat Lj, Bašnec A, Kaić B, Turković B, Mlinarić Galinović G. Subacute sclerosing panencephalitis- the continuing threat. *Coll Antropol* 2006; 30(4): 959-963.
7. Lepej SZ, Tešović G, Sternak SL, Jeren T. Naive and memory CD4+ T-cells in the cerebrospinal fluid of children with aseptic meningitis following measles-mumps-rubella vaccination and enteroviral meningitis. *Immunol Invest* 2007;36(3):321-35.
8. Tcheremenskaia O, Marucci G, De Petris S, Ruggeri FM, Dovecar D, Sternak SL, Matyasova I, Dhimolea MK, Mladenova Z, Fiore L. Molecular epidemiology of rotavirus in Central and South-Eastern Europe. *J Clin Microbiol* 2007;45(7):2197-204.
9. Ljubin-Sternak S, Lukic-Grlic A, Fiore L, Di Bartolo I, Ruggeri MF, Bukovski-Simonoski S, Mlinaric-Galinovic G. Norovirus genotypes involved in the outbreaks of gastroenteritis in Croatia during the winter season 2004-2005. *Acta Virol.* 2007;51(3):189-94.
10. Tešović G, Poljak M, Lunar MM, Kocjan BJ, Seme K, Vukić BT, Sternak SL, Čajić V, Vince A. Horizontal transmission of the Leningrad-Zagreb mumps vaccine strain: A report of three cases. *Vaccine.* 2008; 26(16):1922-5.
11. Mlinarić-Galinović G, Welliver RC, Vilibić-Čavlek T, Ljubin-Sternak S, Draženović V, Galinović I, Tomić V. The biennial cycle of respiratory syncytial virus outbreaks in Croatia. *Virol J.* 2008;5(1):18
12. Ljubin Sternak S, Santak M, Cepin-Bogovic J, Baće A, Vojnović G, Mlinarić-Galinović G, Forčić D, Draženović V, Falsey AR. Detection of genetic lineages of human metapneumovirus in Croatia during the winter season 2005/2006. *J Med Virol.* 2008;80(7):1282-1287.
13. Mlinaric-Galinovic G, Vilibic-Cavlek T, Ljubin-Sternak S, Drazenovic V, Galinovic I, Tomic V, Welliver RC. Eleven consecutive years of respiratory syncytial virus outbreaks in Croatia. *Pediatrics International.* 2009;51:237-40.
14. Tabain I, Sviben M, Ljubin-Sternak S, Vilibić-Čavlek T, Mlinarić-Galinović G. Seroprevalence of *Echinococcus granulosus* infection in Croatian patients with cystic liver disease. *J Helminthol.* 2010; 25:1-4.
15. Ljubin-Sternak S, Juretić E, Šantak M, Pleša M, Forčić D, Vilibić-Čavlek T, Aleraj B, Mlinarić-Galinović G. Clinical and Molecular Characterization of a Parechovirus Type 1 Outbreak in Neonates in Croatia. *J Med Virol.* 2011; 83:137-141.
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17. Meštrović T, Sviben M, Vilibić-Čavlek T, Ljubin-Sternak S, Tabain I, Mlinarić-Galinović G. Seroprevalence of *Taenia solium* infections in Croatian patients presenting with epilepsy. *J Helminthol.* 2011;1:1-4.
18. Vilibic-Cavlek T, Kolaric B, Ljubin-Sternak S, Mlinaric-Galinovic G. Herpes simplex virus infection in the Croatian population. *Scand J Infect Dis.* 2011; 43(11-12):918-22.
19. Vilibic-Cavlek T, Kucinar J, Ljubin-Sternak S, Kolaric B, Kaic B, Lazaric-Stefanovic L, Hunjak B, Mlinaric-Galinovic G. Prevalence of *Coxiella burnetii* Antibodies Among Febrile Patients in Croatia, 2008-2010. *Vector Borne Zoonotic Dis.* 2012; 12(4):293-296.

20. Vilibić-Čavlek T, Ljubin-Sternak S, Vojnović G, Sviben M, Mlinarić-Galinović G. The role of IgG avidity in diagnosis of Cytomegalovirus infection in newborns and infants. *Coll Antropol.* 2012; 36:297-300.
21. Vilibić-Cavlek T, Ljubin-Sternak S, Kolaric B, Kaic B, Sviben M, Kos L, Mlinaric-Galinovic G. Immunity to varicella-zoster virus in Croatian women of reproductive age targeted for serology testing. *Arch Gynecol Obstet.* 2012;286(4):901-4.
22. Tabain I, Ljubin-Sternak S, Cepin-Bogović J, Markovinović L, Knezović I, Mlinarić-Galinović G. Adenovirus Respiratory Infections in Hospitalized Children: Clinical Findings in Relation to Species and Serotypes. *Pediatr Infect Dis J.* 2012;31:680-684.
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24. Delogu R, Presti AL, Ruggeri FM, Cella E, Giovanetti M, Ciccozzi M, Sternak SL, Bukovski-Simonoski S, Lukic-Grlic A, Ianiro G, Fiore L. Full-genome characterization of G8P[8] rotavirus emerged among children with diarrhea in Croatia, in 2006. *J Clin Microbiol.* 2013; 51(5):1583-1588.
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26. Barbic L, Vilibic-Cavlek T, Listes E, Stevanovic V, Gjenero-Margan I, Ljubin-Sternak S, Pem-Novosel I, Listes I, Mlinaric-Galinovic G, Di Gennaro A, Savini G. Demonstration of Usutu Virus Antibodies in Horses, Croatia. *Vector Borne Zoonotic Dis.* 2013;13(10):772-4.
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Papers indexed in SCI-Expanded:

1. Skerk V, Krhen I, Cajic V, Markovinović L, Puntarić A, Roglić S, Zekan S, Ljubin-Sternak S, Zidovec Lepej S, Vince A. The Role of Chlamydia trachomatis in Prostatitis Syndrome - Our Experience in Diagnosis and Treatment. *Acta Dermatovenereol Croat.* 2007;15(3):135-140.
2. Barišin A, Ljubin Sternak S. Epidemiology of Norovirus in Croatia-public health impact. *Period Biolog* 2009;111(1):107-112.
3. Ljubin Sternak S, Škerk V. Određivanje antimikrobne rezistencije Chlamydia trachomatis i primjena dosadašnjih spoznaja u svakodnevnoj praksi. *Med Glas* 2010;7(1):26-31.
4. Ljubin-Sternak S, Slavic-Vrzic V, Vilibic-Cavlek T, Aleraj B, Gjenero-Margan I. Outbreak of hand, foot and mouth disease caused by Coxsackie A16 virus in a childcare centre in Croatia, February to March 2011. *Euro Surveill* 2011;16(21):pii= 19875
5. Vilibić-Čavlek T, Ljubin-Sternak S, Kos Lj, Mlinarić-Galinović G. The role of IgG avidity determination in diagnosis of Epstein-Barr virus infection in immunocompetent and immunocompromised patients. *Acta Microbiol et Immunol Hung* 2011;58(4):351-357.
6. Vilibić-Čavlek T, Kučinar J, Ljubin-Sternak S, Kolarić B. Seroepidemiology of hepatitis A in the Croatian population. *Hepat Mon* 2011;11(12):997-999.

7. Vilibic-Cavlek T, Karlovic-Martinkovic D, Ljubin-Sternak S, Tabain I, Persic Z, Mlinaric-Galinovic G. High prevalence of Bartonella henselae and Bartonella quintana antibodies in Croatian patients presenting with lymphadenopathy. *Poslih J Microbiol.* 2012;61(4):315-318.

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1. Kozarić-Kovačić D, Ljubin T, Grubišić-Ilić M, Ljubin Sternak S. Učestalost PTSP-a u skupini prognanika i moguća povezanost sa zatočeništvom u logoru. *Društvena istraživanja* 1997;28-29: 327-341.
2. Borčić B, Kružić V, Kaić B, Ljubin Sternak S, Ljubičić M, Dobrovšak-Šourek V. Immunity of Croatian population to Poliomyelitis- A Serosurvey. *Acta Med Croat.* 1998;52:229-233.
3. Sternak SL, Kružić V, Vilibić Čavlek T, Škerk V. Chlamydia trachomatis infection in Croatian symptomatic and asymptomatic men. *Journal of Men's health & gender* 2006;3(1):80-81.
4. Vilibić Čavlek T, Ljubin Sternak S, Kaić B, Žarković K, Marušić Della Marina B, Cvitanović Šojat Lj, Bašnec A, Mlinarić-Galinović G. Subacute sclerosing panencephalitis in Croatia (1994-2004). *Acta Microbiol et Immunol Hung* 2007;54(1):57-63.
5. Vilibić-Čavlek T, Ljubin-Sternak S, Mlinarić-Galinović G. Value of IgG avidity in cytomegalovirus infection diagnosis in pregnant woman and newborn infants. *Med Jad* 2008;38:23-28.
6. Kaic B, Gjenero-Margan I, Aleraj B, Ljubin-Sternak S, Vilibic-Cavlek T, Kilvain S, Pivic I, Stojanovic D, Ilic A. Transmission of the L-Zagreb mumps vaccine virus, Croatia, 2005-2008. *Euro Surveill* 2008;13(16)
7. Ljubin-Sternak S, Vilibić-Čavlek T, Kaić B, Aleraj B, Šoprek S, Sviben M, Mlinarić-GalinovićG. Non-polio enterovirusne infekcije u Hrvatskoj tijekom desetogodišnjeg razdoblja (2000-2009): virološke i epidemiološke značajke. *Acta Med Croat* 2011; 65:237-242.
8. Vilibić-Cavlek T, Ljubin-Sternak S, Babić-Erceg A, Sviben M, Mlinarić-Galinović G. Virology diagnosis of re-emergent infections: dengue virus. *Lijec Vjesn.* 2012;134(5-6):164-7.
9. Vilibić-Čavlek T, Ljubin-Sternak S, Kolarić B, Mlinarić-Galinović G. Dijagnostika rikecioza:rezultati Hrvatskog zavoda za javno zdravstvo. *Infektološki glasnik.* 2012;32(4):167-172.
10. Vilibić-Čavlek T, Barbić LJ, Ljubin-Sternak S, Pem-Novosel I, Stevanović V, Gjenero-Margan I, Mlinarić-Galinović G. Infekcija virusom Zapadnog Nila: re-emergentna bolest u Hrvatskoj. *Lijec.Vjesn.* 2013;135(5-6):156-161.
11. Vilibić-Čavlek T, Karlović-Martinković D, Tabain I, Ljubin-Sternak S, Peršić Z, Hunjak B, Mlinarić-Galinović B. Prevalence of atypical bacteria in hospitalized patients with clinical and radiologic findings of atypical pneumonia (2009-2012): Results of the Croatian National Institute of Public Health. *Medicina fluminensis* 2014;50(2): 233-238.
12. Ljubin-Sternak S, Meštrović T. Chlamydia trachomatis and Genital Mycoplasmas: Pathogens with an Impact on Human Reproductive Health. *J Pathog* 2014; 2014:183167
13. Ljubin-Sternak S, Marijan T, Vraneš J. Mycoplasma genitalium- uzročnik spolno prenosivih bolesti kojeg se ne smije zanemariti. *Infektološki glasnik.* 2014; 34(4):183-87.
14. Ljubin-Sternak S, Kaić B, Vilibić-Čavlek T, Mlinarić-Galinović G. Eradikacija poliomijelitisa - korak do cilja. *Acta Med Croatica.* 2014;68:327-335.
15. Vilibic-Cavlek T, Kolarić B, Ljubin-Sternak S, Kos M, Kaic B, Mlinaric-Galinovic G. Prevalence and dynamics of cytomegalovirus infection among patients undergoing chronic hemodialysis. *Ind J Nephrol* 2015;25:95-8.

16. Meštrović T, Ljubin-Sternak S, Bedenić B. Tehnički aspekti testiranja antimikrobne osjetljivosti bakterije *Chlamydia trachomatis* u staničnoj kulturi. *Tehnički glasnik*. 2015;9(2):136-41.
17. Ljubin-Sternak S, Vilibić-Čavlek T, Kosanović-Ličina ML, Ivančić-Jelečki J, Kaić B. Ospice - javnozdravstveni izazov. *Medicina fluminensis*. 2017 53:168-178.
18. Ljubin-Sternak S, Meštrović T, Kolarić B, Jarža-Davila N, Marijan T, Vraneš J. Assessing the Need for routine screening for *Mycoplasma genitalium* in the low-risk female population: A prevalence and co-infection study on women in Croatia. *Int J Prev Med*. 2017;8:51.
19. Meštrović T, Ljubin-Sternak S. Spoznaje o antimikrobnoj djelotvornosti azitromicina sukladno prvom hrvatskom istraživanju antibiotske osjetljivosti klamidijских izolata iz mokraćno-spolnog sustava. *Medicus* 2018;27(2):177-182.

Other publications:

1. Vilibic-Cavlek T, Gjenero-Margan I, Retkovac B, Kolaric B, Bisko A, Banozic-Blagus Z, Ljubin-Sternak S, Nemeth-Blazic T. Sociodemographic characteristics and risk behaviors for HIV, hepatitis B and hepatitis C virus infection among Croatian male prisoners. *Int J Prisoner Health* 2011;7(1):28-31.
2. Meštrović T, Bedenić B, Ljubin-Sternak S, Sviben M, Profozić Z. Ciprofloxacin-resistant *Corynebacterium glucuronolyticum* as a cause of male urethritis syndrome. *JMM Case Reports*. 2014; DOI 10.1099/jmmcr.0.000208

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Ljubin-Sternak S, Mlinarić-Galinović G, Buntić AM, Tabain I, Vilibić-Čavlek T, Cepin-Bogovic J, Tesovic G. Seasonal occurrence of human metapneumovirus infections in Croatia. *Pediatr Infect Dis J*. 2014;33(2):165-7
2. Pasini M, Kotarski V, Skerk V, Markotic A, Andrašević AT, Lepej SZ, Maleković G, Sternak SL, Skerk V. The significance of *Chlamydia trachomatis* in prostatitis syndrome. *J Chemother*. 2014; 26(6):382-4.
3. Vilibić-Čavlek T, Kucinar J, Ljubin-Sternak S, Kaić B, Lazarić-Stefanović L, Kolarić B. Prevalence of viral hepatitis in Croatian adult population undergoing routine check-up, 2010-2011. *Cent Eur J Public Health*. 2014;22(1):29-33.
4. Ljubin-Sternak S, Meštrović T. *Chlamydia trachomatis* and Genital Mycoplasmas: Pathogens with an Impact on Human Reproductive Health. *J Pathog* 2014; 2014:183167
5. Ljubin-Sternak S, Marijan T, Vraneš J. *Mycoplasma genitalium*- uzročnik spolno prenosivih bolesti kojeg se ne smije zanemariti. *Infektološki glasnik*. 2014; 34(4):183-87.
6. Meštrović T, Bedenić B, Ljubin-Sternak S, Sviben M, Profozić Z. Ciprofloxacin-resistant *Corynebacterium glucuronolyticum* as a cause of male urethritis syndrome. *JMM Case Reports*. 2014; DOI 10.1099/jmmcr.0.000208
7. Ljubin-Sternak S, Kaić B, Vilibić-Čavlek T, Mlinarić-Galinović G. Eradikacija poliomijelitisa - korak do cilja. *Acta Med Croatica*. 2014;68:327-335.
8. Vilibic-Cavlek T, Kolarić B, Ljubin-Sternak S, Kos M, Kaic B, Mlinaric-Galinovic G. Prevalence and dynamics of cytomegalovirus infection among patients undergoing chronic hemodialysis. *Ind J Nephrol* 2015;25:95-8.
9. Meštrović T, Ljubin-Sternak S, Bedenić B. Tehnički aspekti testiranja antimikrobne osjetljivosti bakterije *Chlamydia trachomatis* u staničnoj kulturi. *Tehnički glasnik*. 2015;9(2):136-41.

10. Vraneš J, Lukšić I, Knežević J, Ljubin-Sternak S. Health Care Associated Cutaneous Abscess – A Rare Form of Primary Gonococcal Infection. *AJMCR* 2015; 3(3):88-90.
11. Meštrović T, Ljubin-Sternak S, Sviben M, Bedenić B, Vraneš J, Markotić A, Skerk V. Antimicrobial sensitivity profile of *Chlamydia trachomatis* isolates from Croatia in McCoy cell culture system and comparison with the literature. *Clin Lab*. 2016;62:357-64.
12. Slovic A, Ivancic-Jelecki J, Ljubin-Sternak S, Galinović GM, Forcic D. A molecular epidemiological study of human respiratory syncytial virus in Croatia, 2011-2014. *Infect Genet Evol*. 2016;44:76-84.
13. Šantak M, Slović A, Ljubin-Sternak S, Galinović GM, Forčić D. Genetic diversity amongst human parainfluenza virus type 2 isolated in Croatia between 2011 and 2014. *J Med Virol*. 2016;88(10):1733-41.
14. Kosutic-Gulija T, Slovic A, Ljubin-Sternak S, Mlinarić-Galinović G, Forčić D. A study of genetic variability of Human Parainfluenza Virus type 1 in Croatia, 2011-2014. *J Med Microbiol*. 2016;65:793-803.
15. Ljubin-Sternak S, Marijan T, Ivković-Jureković I, Čepin-Bogović J, Gagro A, Vraneš J. Etiology and Clinical characteristics of single and multiple respiratory virus infections diagnosed in croatian children in two respiratoy seasons. *J Pathog* 2016;2016:2168780
16. Ljubin-Sternak S, Vilibić-Čavlek T, Kosanović-Ličina ML, Ivančić-Jelečki J, Kaić B. Ospice - javnozdravstveni izazov. *Medicina fluminensis*. 2017 53:168-178.
17. Ljubin-Sternak S, Meštrović T, Kolarić B, Jarža-Davila N, Marijan T, Vraneš J. Assessing the Need for routine screening for *Mycoplasma genitalium* in the low-risk female population: A prevalence and co-infection study on women in Croatia. *Int J Prev Med*. 2017;8:51.
18. Sviben M, Ljubin-Sternak S, Meštrović T, Vraneš J. Sociodemographic, Sexual Behavior, and Microbiological Profiles of Men Attending Public Health Laboratories for Testing for Sexually Transmitted Diseases. *Acta Dermatovenerol Croat* 2017;25(2):125-132.
19. Kosutic-Gulija T, Slovic A, Ljubin-Sternak S, Mlinarić-Galinović G, Forčić D. Genetic analysis of human parainfluenza virus type 3 obtained in Croatia, 2011-2015. *J Med Microbiol*. 2017;66:502-510.
20. Jagušić M, Slović A, Ljubin-Sternak S, Mlinarić-Galinović G, Forčić D. Genetic diversity of human metapneumovirus in hospitalized children with acute respiratory infections in Croatia. *J Med Virol*. 2017; 89(11):1885-1893.
21. Slovic, A, Kosutic-Gulija T, Santak M, Ivancic-Jelecki J, Jagusic M, Ljubin-Sternak S, Mlinaric-Galinovic G, Vilibic-Cavlek T, Tabain I, Forcic D. Genetic Variability and Sequence Relatedness of Matrix Protein in Viruses of the Families Paramyxoviridae and Pneumoviridae. *Intervirolgoy*. 2017;60(5):181-189.
22. Meštrović T, Bedenić B, Wilson J, Ljubin-Sternak S, Sviben M, Neuberg M, Ribić R, Kozina G, Profozić Z. The impact of *Corynebacterium glucuronolyticum* on semen parameters: a prospective pre-post-treatment study. *Andrology*. 2018;6(1):223-229.
23. Mestrovic T, Ljubin-Sternak S. Molecular mechanisms of *Chlamydia trachomatis* resistance to antimicrobial drugs. *Front Biosci (Landmark Ed)*. 2018;23:656-670.
24. Šantak M, Lang Balija M, Mlinarić Galinović G, Ljubin Sternak S, Vilibić-Čavlek T, Tabain I. Genotype replacement of the human parainfluenza virus type 2 in Croatia between 2011 and 2017 - the role of neutralising antibodies. *Epidemiol Infect*. 2018;18:1-12.
25. Ivancic-Jelecki J, Slovic A, Ljubin-Sternak S, Galinović GM, Forcic D. Variability analysis and inter-genotype comparison of human respiratory syncytial virus small hydrophobic gene. *Virology J*. 2018;15:109.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2017-2021 Principal Investigator on Croatian Science Foundation Project titled "New and neglected respiratory viruses in vulnerable groups of patient" (grant: IP-2016-06-7556)

2016-Principal investigator on project Zagreb University Grant for academic year 2016: "Epidemiological and Clinical characteristics of metapneumovirus and bocavirus infection".

2015 Principal investigator on project Zagreb University Grant for academic year 2015: "Significance of metapneumovirus, coronavirus and bocavirus in children and elderly with acute respiratory infection"

2014-2018 research investigator on project of Croatian Science Foundation: "Genomics and molecular epidemiology of human paramyxoviruses in Croatia"

2010-2013 research investigator on project of Croatian Science Foundation No. 1401 5649 titled: „Research on the etiology, epidemiology, diagnostics and treatment of patients with prostatitis syndrome“

2008-2013 research investigator on projects of Croatian Ministry of Science, Education and Sports projects 0005002 and 005-0053443-3447 (G.M.G.) titled: „Viral respiratory infections“

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2017-2021 Principal Investigator on Croatian Science Foundation Project titled "New and neglected respiratory viruses in vulnerable groups of patient" (grant: IP-2016-06-7556)

2016- Management Committee member for Croatia for COST Action: CA15114Anti-Microbial Coating Innovations to prevent infectious diseases (AMICI)

2015 Principal investigator on project Zagreb University Grant for academic year 2015: "Significance of metapneumovirus, coronavirus and bocavirus in children and elderly with acute respiratory infection"

2014- 2018 research investigator on project of Croatian Science Foundation: "Genomics and molecular epidemiology of human paramyxoviruses in Croatia"

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Lovela Machala Poplašen, MA

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Public Health Andrija Štampar,
University of Zagreb, School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Evidence Based Medicine,
Structure, methodology and functioning of scientific work 2

BIOGRAPHY

Lovela Machala Poplašen is head librarian at the Andrija Štampar Library, School of Public Health, School of Medicine, University of Zagreb. She is a LIS PhD candidate at University of Zagreb, Faculty of Humanities and Social Sciences Her research interests are new technologies, information literacy, open science, scholarly communication and social media.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Čuljak M, Machala Poplašen L. Usporedba citatnih izvora na uzorku znanstvenika javnozdravstvene institucije u Hrvatskoj: Web of Science Core Collection, Scopus i Google Scholar// Vjesnik bibliotekara Hrvatske, 2019 [In Press]
- Machala Poplašen L, Vuletić I. Googlanjem do dijagnoze - informacijska pismenost medicinskih sestara i tehničara KB „Dubrava“. U: 15. dani specijalnih i visokoškolskih knjižnica : Povezivanje i suradnja: prilike i izazovi : zbornik sažetaka / Avakumović, Nadica et al. (ur.). - Zagreb : Hrvatsko knjižničarsko društvo , 2017.
- Hadjina G, Čuljak M, Machala Poplašen L. Klasifikacijski sustavi u knjižnicama Medicinskog fakulteta Sveučilišta u Zagrebu // Vjesnik bibliotekara Hrvatske, 57 (2014), 1-3; 161-176 Dostupno na: <https://hrcak.srce.hr/142258>
- Machala Poplašen L. Budućnost najstarije javnozdravstvene knjižnice “Andrija Štampar” // Knjižnice : kamo i kako dalje? : Pohrana i zaštita knjižne građe, Profesija "knjižničar"???, Usluge i korisnici / Špac, Vesna (ur.). Zagreb: Hrvatsko knjižničarsko društvo, 2013. str. 358-364.
- Čuljak M, Machala Poplašen L. Knjižnica "Andrija Štampar" // Medicinski fakultet, Sveučilište u Zagrebu : 1917.-2017. / Pećina, Marko ; Klarica, Marijan (ur.).Zagreb: Sveučilište u Zagrebu, Medicinski fakultet, 2017. str. 104-108

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- Machala Polašen L, Hebrang Grgić I. Altmetric and Bibliometric Scores: Does Open Access Matter? // QQML journal, 5 (2016), 451-460. Dostupno na: http://www.qqml.net/papers/June_2016_Issue/5216QQML_Journal_2016_PoplasenandGrgic_451-460.pdf
- Čuljak M, Machala Poplašen L. Usporedba citatnih izvora na uzorku znanstvenika javnozdravstvene institucije u Hrvatskoj: Web of Science Core Collection, Scopus i Google Scholar// Vjesnik bibliotekara Hrvatske, 2019 [In Press]
- Machala Poplašen L, Vuletić I. Googlanjem do dijagnoze - informacijska pismenost medicinskih sestara i tehničara KB „Dubrava“. U: 15. dani specijalnih i visokoškolskih knjižnica : Povezivanje i suradnja:



prilike i izazovi : zbornik sažetaka / Avakumović, Nadica et al. (ur.). - Zagreb : Hrvatsko knjižničarsko društvo , 2017.

- Hadjina G, Čuljak M, Machala Poplašen L. Klasifikacijski sustavi u knjižnicama Medicinskog fakulteta Sveučilišta u Zagrebu // Vjesnik bibliotekara Hrvatske, 57 (2014), 1-3; 161-176 Dostupno na: <https://hrcak.srce.hr/142258>

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Dubrovnik International Bioethics Summer School (Dubrovnik, 5.-14. kolovoza 2016.): naslov izlaganja „Evidence Based Bioethics“ Dostupno na: <http://dibss.org/dibss-2016>

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ksenija Makar-Aušperger, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: UHC Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Characteristics of clinical medical research

BIOGRAPHY

Dr med Ksenija Makar-Aušperger, Ph.D.
Institute of Clinical Pharmacology
Unit of clinical investigations
Clinical Hospital centre Zagreb
Department of Medicine
Tel +385 1 2388 275; +385 1 2388 284
Fax +385 1 2376 045
e-mail (bussines) : kmakar@kbc-zagreb.hr

PERSONAL DATA

Nationality Croatian
Date of birth 10.12.1958.

WORKING EXPERIENCE

From -to	1986.-1987.
Institution	Clinical Hospital Sestre milosrdnice
Function	intern
From -to	1987.-1995.
Institution	Health Centre Črnomerac
Job title	Medical doctor in primary health care
Function	
Work area	Family practice, pediatrics
From -to	1995.-2000.
Institution	Clinical Hospital Centre Zagreb, Insitute of clinical pharmacology
Job title	doctor
Function	
Work area	Hospital Drug Committee, Hospital Drug Bulletin,
From -to	2000.-2004
Institution	Clinical Hospital Centre Zagreb, Insitute of clinical pharmacology
Job title	Residency of clinical pharmacology
Function	resident
Work area	Clinical pharmacology
From -to	2004.-
Institution	Clinical Hospital Centre Zagreb, Insitute of clinical pharmacology
Job title	Specialist of clinical pharmacology and toxicology
Function	Medical doctor, medical attendant, clinical pharmacologist
Work area	Clinical pharmacology, performing clinical trials, consultant in clinical pharmacology and antimicrobial use , editor in chief of Hospital drug bulletin and Journal of pharmacotherapy,
From -to	2000.- 2013
Institution	Clinical Hospital Centre Zagreb, Insitute of clinical pharmacology
Job title	Member of editorial bord of several editions of Croatian Drug Formulary (3rd, 4th, 5th, 6th, 7th)
Function	Co- editor and author

Work area edition

From -to 2006.- 2013

Institution Clinical Hospital Centre Zagreb, Insitute of clinical pharmacology

Job title Member of editorial bord of Textbook of Clinical Pharmacology (1st, 2nd editions)

Function Author

Work area edition

EDUCATION

Year 1986.

Place Zagreb

Institution Medical School of Zagreb

Title Medical doctor

Year 2000-2004.

Place Zagreb

Institution Clinical Hospital Centre Zagreb, Institute of Clinical Pharmacology

Title položila specijalistički ispit iz kliničke farmakologije

Year 2003.

Place Zagreb

Institution Medical School of Zagreb

Title Professional postgraduate study (clinical pharmacology)

Year 2008-2015. scientific postgraduate study

Place Zagreb

Institution Medical School of Zagreb

Title Ph D

SPECIALIZATION

Year 2001. Introduction to GCP

Place Wien; Austria

Institution Vienna School of Clinical Research

Work field Good Clinical Practice

Year 2001. Scientific aspects of clinical trials in cardiovascular diseases u Vienna School of clinical resea

Place Wien; Austria

Institution Vienna School of Clinical Research

Work field Clinical trials in Cardiology (cardiovascular pharmacotherapy)

Year 2012.

Place Munich, Germany

Ustanova Drug Hypersensitivity Meeting

Work field Drug allergy

GOOD CLINICAL PRACTICE EDUCATION

Year 2008. -2014

Place Medical School of Zagreb

Work field Teacher in postgraduate continuous medical education a course of Good Clinical Practice

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Makar-Aušperger, Ksenija; Krželj, Kristina; Lovrić Benčić, Martina; Radačić Aumiler, Matea; Erdeljić Turk, Viktorija; Božina, Nada Warfarin dosing according to the genotype-guided algorithm is most beneficial in patients with atrial fibrillation: a randomized parallel group trial Therapeutic Drug Monitoring 40(3):362-368, June 2018

Danica Juricic Nahal, Ivana Cegec, Viktorija Erdeljic Turk, Ksenija Makar Ausperger, Iva Kraljickovic, Iveta Simic. Hypersensitivity reactions to low molecular weight heparins: different patterns of cross-reactivity in 3 patients. Canadian Journal of Physiology and Pharmacology, HYPERLINK "<https://doi.org/10.1139/cjpp-2017-0246>"<https://doi.org/10.1139/cjpp-2017-0246>

Turk VE, Likic R, Makar-Ausperger K., Radacic Aumiler M, Cegec I, Juricic Nahal D, Kraljickovic I. New drugs for bad bugs: what's new and what's in the pipeline? Clin Ther 2016; 38 (10s):e9

Turk Ve, Šimić I, Makar-Aušperger K, Radačić Aumiler M. Amoxicillin-induced aseptic meningitis: case report and review of published cases. Int J Clin Pharmacol Ther 2016: 54(9): 716-718.

Radacic-Aumiler, Matea, Kraljickovic Iva, Edeljic-Turk, Viktorija; Makar-Ausperger, Ksenija; Likic, Robert; Simic, Iveta . No Adverse Effects After Radioiodine Treatment at 3 Weeks of Pregnancy. Clinical Nuclear Medicine: HYPERLINK "<https://journals.lww.com/nuclearmed/toc/2016/12000>"December 2016 - Volume 41 - Issue 12 - p 964–965 doi: 10.1097/RLU.0000000000001376

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Sime Manola assistant professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: UH Sisters of mercy, School of medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Electrophysiological methods in medical research

BIOGRAPHY

Baboniceva 117 10000 Zagreb Croatia

Phone: +385 91 30 20 502; email: sime.manola@kbcsn.hr

EDUCATION

2006 - 2007

Subresident in Cardiology, University Hospital “Sestre Milosrdnice”, Zagreb

- Emphasis on Arrhythmology, Electrophysiology and IPG, ICD, CRT devices
- Completed with excellent success

2005 San Donato Milanese, Milan, Italy

- One year scholarship education in electrophysiology, Mentor: prof.dr. Riccardo Cappato

2000 - 2003 University of Zagreb, School of Medicine

- Postgraduate student (relevant coursework in epidemiology, clinical trials)

2000 - 2003 Resident in Internal Medicine, University Hospital “Sestre Milosrdnice”, Zagreb

- Performing plan and program of Ministry of Health of the Republic of Croatia
- Completed with excellent success

1989 - 1995 University of Zagreb, School of Medicine

WORK EXPERIENCE

2011 – present Director of Cardiology Department, University Hospital “Sestre Milosrdnice”, Zagreb

- 12 years of experience in echocardiography and interventional cardiology (150 diagnostic and interventional procedures per year)
- 10 years of experience in electrophysiology (250 diagnostic and ablation procedures per year) and in the implantation program (IPG, CRT, ICD; about 100 devices per year)

2007 - 2011 Department Cardiologist, University Hospital “Sestre Milosrdnice”, Zagreb

2003 - 2007 Department Physician, University Hospital “Sestre Milosrdnice”, Zagreb - Specialist in internal medicine;

2000 - 2003 Fellow in Internal Medicine, University Hospital “Sestre Milosrdnice”, Zagreb

1995 - 2000 Physician, Zagreb Emergency Unit

ACADEMIC EXPERIENCE

2015 Assistant Professor at University of Zagreb, School of Medicine

2014 Senior Research Associate at University of Zagreb

2010 Senior Assistant at Internal Medicine Department, University of Zagreb

2010 PhD; Title: “Impact of AV Delay on Interventricular Disincrony and Stroke Volume in Patients With High Grade AV Block and Implanted DDD Pacemaker”

2005 Assistant at Internal Medicine Department, University of Zagreb

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 15 June 2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Zeljковиć I, Bulj N, Kolačević M, Čabrilo V, Brkljačić DD, Manola Š. Failure of Intracardiac Pacing After Fatal Propafenone Overdose: A Case Report. *J Emerg Med*. 2018 Jan 11. pii: S0736-4679(17)31187-3. doi: 10.1016/j.jemermed.2017.12.021. [Epub ahead of print]

Boban M, Pesa V, Beck N, Manola S, Zulj M, Rotim A, Vcev A. Supplementary Diagnostic Landmarks of Left Ventricular Non-Compaction on Magnetic Resonance Imaging. *Yonsei Med J*. 2018 Jan;59(1):63-71. doi: 10.3349/ymj.2018.59.1.63.

Boban M, Pesa V, Gabric ID, Manola S, Persic V, Antic-Kauzlaric H, Zulj M, Vcev A. Auxiliary diagnostic potential of ventricle geometry and late gadolinium enhancement in left ventricular non-compaction; non-randomized case control study. *BMC Cardiovasc Disord*. 2017 Dec 6;17(1):286. doi: 10.1186/s12872-017-0721-0.

Potpara TS, Trendafilova E, Dan GA, Goda A, Kusljagic Z, Manola S, Music L, Gjini V, Pojskic B, Popescu MI, Georgescu CA, Dimitrova ES, Kamenova D, Ekmeciu U, Mrcic D, Nenezic A, Brusich S, Milanov S, Zeljkovic I, Lip GYH; BALKAN-AF Investigators. The Patterns of Non-vitamin K Antagonist Oral Anticoagulants (NOACs) Use in Patients with Atrial Fibrillation in Seven Balkan Countries: a Report from the BALKAN-AF Survey. *Adv Ther*. 2017 Aug;34(8):2043-2057. doi: 10.1007/s12325-017-0589-5. Epub 2017 Aug 9.

Kresimir K, Sime Manola, Ivan Z, Ivica B, Nikola P. Left anterior descending coronary artery dissection during ventricular tachycardia ablation - case report. *Rom J Intern Med*. 2017 Jul 26. pii: /j/rjim.ahead-of-print/rjim-2017-0030/rjim-2017-0030.xml. doi: 10.1515/rjim-2017-0030. [Epub ahead of print]

Zeljковиć I, Benko I, Manola Š, Radeljić V, Pavlović N. An uncommon case of spontaneous conversion from AV re-entry tachycardia to AV nodal re-entry tachycardia in a patient with dual tachycardia. *Indian Pacing Electrophysiol J*. 2016 Feb 12;15(5):245-8. doi: 10.1016/j.ipej.2016.02.001. eCollection 2015 Sep-Oct.

Potpara TS, Dan GA, Trendafilova E, Goda A, Kusljagic Z, Manola S, Music L, Musetescu R, Badila E, Mitic G, Paparisto V, Dimitrova ES, Polovina MM, Petranov SL, Djergo H, Loncar D, Bijedic A, Brusich S, Lip GY; BALKAN-AF Investigators. Stroke prevention in atrial fibrillation and 'real world' adherence to guidelines in the Balkan Region: The BALKAN-AF Survey. *Sci Rep*. 2016 Feb 12;6:20432. doi: 10.1038/srep20432.

Boban M, Persic V, Petricevic M, Manola S, Boban L, Vcev A. Impact of cardiovascular treatments and systolic dysfunction on nutritional risk in patients with ischemic and valvular heart disease In press: *Journal of the American College of Nutrition* 06/2014; DOI: 10.1080/07315724.2014.915390

Boban M, Persic V, Jovanovic Z, Brozina A, Miletic B, Rotim A, Drinkovic N Jr, Manola S, Laskarin G, Boban L. Obesity dilemma in the global burden of cardiovascular diseases. *Int J Clin Pract*. 2014 Feb;68(2):173-9. doi: 10.1111/ijcp.12254. Epub 2013 Dec 20

Škerk V, Markotić A, Delić Brkljačić D, Manola S, Krčmar T, Gabrić ID, Stajminger G, Pintarić H. The association of ventricular tachycardia and endothelial dysfunction in the setting of acute myocardial infarction with ST elevation. *Med Sci Monit.* 2013 Nov 20;19:1027-36.

Petrač D, Radeljić V, Delić-Brkljačić D, Manola Š, Cindrić-Bogdan G, Pavlović N. Persistent atrial fibrillation is associated with a poor prognosis in patients with atrioventricular block and dual-chamber pacemaker. *Pacing Clin Electrophysiol.* 2012 Jun;35(6):695-702. doi: 10.1111/j.1540-8159.2012.03376.x. Epub 2012 Mar 27.

Radeljić V, Pavlović N, Manola Š, Delić-Brkljačić D, Pintarić H, Petrač D. Incidence and predictors of asymptomatic atrial fibrillation in patients older than 70 years with complete atrioventricular block and dual chamber pacemaker implantation. *Croat Med J.* 2011 Feb;52(1):61-7.

Stambuk K, Pavlović N, Gabrić ID, Krčmar T, Trbušić M, Manola S. Coronary artery stent fracture with in-stent restenosis and aneurysm formation: diagnosis and successful treatment with graft stent implantation. *Int J Cardiol.* 2011 Apr 14;148(2):253-5. doi: 10.1016/j.ijcard.2010.04.087.

Delić-Brkljačić D, Galesić K, Ivanac G, Manola S, Pintarić H, Stambuk K, Gaćina P, Radeljić V. Influence of ATII blockers and calcium channel blockers on renal vascular resistance in patients with essential hypertension. *Coll Antropol.* 2009 Dec;33(4):1129-38.

Manola S, Pavlović N, Radeljić V, Delić Brkljačić D, Pintarić H, Stambuk K, Bulj N, Trbusić M, Krcmar T, Lukinac L. B-type natriuretic peptide as predictor of heart failure in patients with acute ST elevation myocardial infarction, single-vessel disease, and complete revascularization: follow-up study. *Croat Med J.* 2009 Oct;50(5):449-54.

Manola S, Pintarić H, Pavlović N, Stambuk K. Coronary artery stent fracture with aneurysm formation and in-stent restenosis. *Int J Cardiol.* 2010 Apr 15;140(2):e36-9. doi: 10.1016/j.ijcard.2008.11.100. Epub 2008 Dec 23.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Zeljko I, Bulj N, Kolačević M, Čabrilo V, Brkljačić DD, Manola Š. Failure of Intracardiac Pacing After Fatal Propafenone Overdose: A Case Report. *J Emerg Med.* 2018 Jan 11. pii: S0736-4679(17)31187-3. doi: 10.1016/j.jemermed.2017.12.021. [Epub ahead of print]

Boban M, Pesa V, Beck N, Manola S, Zulj M, Rotim A, Vcev A. Supplementary Diagnostic Landmarks of Left Ventricular Non-Compaction on Magnetic Resonance Imaging. *Yonsei Med J.* 2018 Jan;59(1):63-71. doi: 10.3349/ymj.2018.59.1.63.

Boban M, Pesa V, Gabric ID, Manola S, Persic V, Antic-Kauzlaric H, Zulj M, Vcev A. Auxiliary diagnostic potential of ventricle geometry and late gadolinium enhancement in left ventricular non-compaction; non-randomized case control study. *BMC Cardiovasc Disord.* 2017 Dec 6;17(1):286. doi: 10.1186/s12872-017-0721-0.

Potpara TS, Trendafilova E, Dan GA, Goda A, Kusljagic Z, Manola S, Music L, Gjini V, Pojskic B, Popescu MI, Georgescu CA, Dimitrova ES, Kamenova D, Ekmeciu U, Masic D, Nenezic A, Brusich S, Milanov S, Zeljkovic I, Lip GYH; BALKAN-AF Investigators. The Patterns of Non-vitamin K Antagonist Oral Anticoagulants (NOACs) Use in Patients with Atrial Fibrillation in Seven Balkan Countries: a Report from the BALKAN-AF Survey. *Adv Ther.* 2017 Aug;34(8):2043-2057. doi: 10.1007/s12325-017-0589-5. Epub 2017 Aug 9.



Kresimir K, Sime Manola, Ivan Z, Ivica B, Nikola P. Left anterior descending coronary artery dissection during ventricular tachycardia ablation - case report. Rom J Intern Med. 2017 Jul 26. pii: /j/rjim.ahead-of-print/rjim-2017-0030/rjim-2017-0030.xml.doi: 10.1515/rjim-2017-0030. [Epub ahead of print]

Zeljko I, Benko I, Manola Š, Radeljić V, Pavlović N. An uncommon case of spontaneous conversion from AV re-entry tachycardia to AV nodal re-entry tachycardia in a patient with dual tachycardia. Indian Pacing Electrophysiol J. 2016 Feb 12;15(5):245-8. doi: 10.1016/j.ipej.2016.02.001. eCollection 2015 Sep-Oct.

Potpara TS, Dan GA, Trendafilova E, Goda A, Kusljagic Z, Manola S, Music L, Musetescu R, Badila E, Mitic G, Paparisto V, Dimitrova ES, Polovina MM, Petranov SL, Djergo H, Loncar D, Bijedic A, Brusich S, Lip GY; BALKAN-AF Investigators. Stroke prevention in atrial fibrillation and 'real world' adherence to guidelines in the Balkan Region: The BALKAN-AF Survey. Sci Rep. 2016 Feb 12;6:20432. doi: 10.1038/srep20432.

Boban M, Persic V, Petricevic M, Manola S, Boban L, Vcev A. Impact of cardiovascular treatments and systolic dysfunction on nutritional risk in patients with ischemic and valvular heart disease In press: Journal of the American College of Nutrition 06/2014; DOI: 10.1080/07315724.2014.915390

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

0

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Jurica Maraković, MD, PhD, research associate

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Dubrava

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pathophysiology of the brain and CSF

BIOGRAPHY

He was born in 1972 in Sisak.

He graduated from the University of Zagreb Medical School in 1997.

He was awarded the Rector's Award for best studying work in 1997.

In 1998, after completing a one-year internship, he passed a state exam.

In 1999 he began his specialization in neurosurgery for the Clinical Hospital "Dubrava".

During his specialization, he has been abroad for vocational training on several occasions.

Since 2000, he has participated in scientific research at the Ruđer Bošković Institute.

In 2004 he completed a three-year postgraduate doctoral program "Biomedicine and Health" at the Medical School of the University of Zagreb.

In 2006 he completed his specialization in neurosurgery and passed a specialist examination at KBC Rebro's Neurosurgery Clinic in Zagreb.

He is a member of the Croatian Neurosurgery Society, EANS, WFNS, ISHCSF, and the Croatian Society for Neuroscience.

He is also author and co-author of several scientific and professional papers in domestic and international indexed journals, and is an active participant in several domestic and foreign congresses and other professional conferences.

Email: juricam@kdb.hr

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2014

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1: Orešković D, Maraković J, Varda R, Radoš M, Jurjević I, Klarica M. New Insight into the Mechanism of Mannitol Effects on Cerebrospinal Fluid Pressure Decrease and Craniospinal Fluid Redistribution. Neuroscience. 2018 Nov 10;392:164-171. doi: 10.1016/j.neuroscience.2018.09.029. Epub 2018 Sep 29. PubMed PMID: 30273625.

2: Maraković J, Marinović T, Jeleč V, Dlaka D, Muller D, Blažević A, Raguž M. Intraspinal calcosin mimicking intervertebral disc extrusion: A clinical and surgical case report. Surg Neurol Int. 2018 Aug 14;9:166. doi: 10.4103/sni.sni_147_18. eCollection 2018. PubMed PMID: 30186667; PubMed Central PMCID: PMC6108162.

3: Maraković J, Vukić M, Radoš M, Chudy D, Klarica M, Orešković D. Monoamine Neurotransmitter Metabolite Concentration as a Marker of Cerebrospinal Fluid Volume Changes. Acta Neurochir Suppl. 2016;122:283-6. doi:10.1007/978-3-319-22533-3_56. PubMed PMID: 27165922.

- 4: Jurjević I, Maraković J, Chudy D, Markelić I, Klarica M, Froebe A, Orešković D. Dependence of cerebrospinal fluid pressure and volume on the changes in serum osmolarity in cats. *Acta Neurochir Suppl.* 2012;114:351-5. doi: 10.1007/978-3-7091-0956-4_68. PubMed PMID: 22327722.
- 5: Maraković J, Oresković D, Jurjević I, Rados M, Chudy D, Klarica M. Potential error in ventriculocisternal perfusion method for determination of cerebrospinal fluid formation rate in cats. *Coll Antropol.* 2011 Jan;35 Suppl 1:73-7. PubMed PMID: 21648314.
- 6: Maraković J, Oresković D, Rados M, Vukić M, Jurjević I, Chudy D, Klarica M. Effect of osmolarity on CSF volume during ventriculo-aqueductal and ventriculo-cisternal perfusions in cats. *Neurosci Lett.* 2010 Oct 29;484(2):93-7. doi: 10.1016/j.neulet.2010.07.058. Epub 2010 Jul 30. PubMed PMID: 20674671.
- 7: Marakovic J, Vilendecic M, Marinovic T, Lambasa S, Grahovac G. Intracranial recurrence and distant metastasis of scalp dermatofibrosarcoma protuberans. *J Neurooncol.* 2008 Jul;88(3):305-8. doi: 10.1007/s11060-008-9567-8. Epub 2008 Mar 15. PubMed PMID: 18345515.
- 8: Oresković D, Maraković J, Vukić M, Rados M, Klarica M. Fluid perfusion as a method of cerebrospinal fluid formation rate--critical appraisal. *Coll Antropol.* 2008 Jan;32 Suppl 1:133-7. PubMed PMID: 18405072.
- 9: Klarica M, Rados M, Draganic P, Erceg G, Oreskovic D, Maraković J, Bulat M. Effect of head position on cerebrospinal fluid pressure in cats: comparison with artificial model. *Croat Med J.* 2006 Apr;47(2):233-8. PubMed PMID: 16625687; PubMed Central PMCID: PMC2080413.
- 10: Oreskovic D, Klarica M, Vukic M, Marakovic J. Evaluation of ventriculo-cisternal perfusion model as a method to study cerebrospinal fluid formation. *Croat Med J.* 2003 Apr;44(2):161-4. PubMed PMID: 12698506.
- 11: Maraković J, Biocina B, Sutlić Z, Rudez I, Kolovrat M, Barić D, Husedzinović I, Rupčić V. Surgical treatment of mediastinal parathyroid adenoma. *Acta Med Croatica.* 2002;56(2):65-8. PubMed PMID: 12596627.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1: Orešković D, Maraković J, Varda R, Radoš M, Jurjević I, Klarica M. New Insight into the Mechanism of Mannitol Effects on Cerebrospinal Fluid Pressure Decrease and Craniospinal Fluid Redistribution. *Neuroscience.* 2018 Nov 10;392:164-171. doi: 10.1016/j.neuroscience.2018.09.029. Epub 2018 Sep 29. PubMed PMID: 30273625.
- 2: Maraković J, Marinović T, Jeleč V, Dlaka D, Muller D, Blažević A, Raguž M. Intraspinal calcinosis mimicking intervertebral disc extrusion: A clinical and surgical case report. *Surg Neurol Int.* 2018 Aug 14;9:166. doi: 10.4103/sni.sni_147_18. eCollection 2018. PubMed PMID: 30186667; PubMed Central PMCID: PMC6108162.
- 3: Maraković J, Vukić M, Radoš M, Chudy D, Klarica M, Orešković D. Monoamine Neurotransmitter Metabolite Concentration as a Marker of Cerebrospinal Fluid Volume Changes. *Acta Neurochir Suppl.* 2016;122:283-6. doi:10.1007/978-3-319-22533-3_56. PubMed PMID: 27165922.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Hydrodynamics of cerebrospinal fluid

Pathophysiology of cerebrospinal fluid and intracranial pressure

Pathophysiology of Severe Brain Injury and Craniospinal Volumetry



Development of cortical pathways in humans

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Hydrodynamics of cerebrospinal fluid

Pathophysiology of cerebrospinal fluid and intracranial pressure

Pathophysiology of Severe Brain Injury and Craniospinal Volumetry

Development of cortical pathways in humans

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Darko Marčinko, MD, PhD, associate professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb, and University Hospital Center Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical psychopharmacology

BIOGRAPHY

Name (father's name) and surname: DARKO (Jozo) MARČINKO, MD, Ph.D.

Workplace: psychiatrist specialist Psychiatric Clinic, Clinical Hospital Center Zagreb, Kišpatićeva 12, 10000 Zagreb, CROATIA

Date and Place of Birth: November 25, 1973, Zagreb, Croatia

E-mail: darko.marcinko@zg.t-com.hr

Education and jobs so far

1979-1987 OŠ Mladost, Zagreb

1987-1990 SŠ EOC, Zagreb (graduated after completing 3rd grade of high school and enrolled in study)

1990-1996 Faculty of Medicine, University of Zagreb

- During the study, a demonstrator at the Department of Physiology (1992-1994)
- after study, shorter time of scientific research on the same chair (up to going to MORH)

June 1996. Graduated on the first possible date (final exam held on 28.6.1996)

1996-1997 Medical Examination - Jordanovac Hospital for Pulmonary Diseases

September 1997 passed a state exam

December 1997- August 1999 employed at the Ministry of Health, Healthcare Directorate, among other activities worked as the editor of the medical newsletter and the fieldwork of doctors in Baška Polje (Makarska)

August 1999-December 1999 employed by AKD Mungos, on doctors' duties in the demining team

December 1999 - December 2003 KBC Zagreb, specialization in psychiatry

On December 9, 2003 he passed a psychiatric examination

January 2004 - February 2009 employed at the Center for Crisis Situations of the Clinic for Psychiatry KBC Zagreb (Rebro)

Since February 2009 he has been employed as head of Department for Affective and Anxiety Disorders of the Institute for Integrative Psychiatry of the Clinic for Psychiatry KBC Zagreb (Rebro)

September 2009 earned the title of docent, in cumulative employment, at the Faculty of Medicine, University of Zagreb

December 2010 passed the subspecialist exam of biomedical psychiatry

May 2011 passed the examination for a court expert

July 2011 Member of the editorial board of the Croatian Medical Journal

December 2011 employed as Head of Nutrition and Pediatric Disorder Specification of the Clinic for Psychiatry KBC Zagreb (Rebro)

postgraduate education, University of Zagreb

He graduated 3 years of Doctoral Thesis "Medical Science" (1999-2002) at the Faculty of Medicine of the University of Zagreb and passed all examination requirements.

2007 He became a doctor of medical sciences in the field of biomedicine and health

Doctoral dissertation, defended on May 16, 2007 (topic: Biological and Clinical Indicators of Suicidality in Schizophrenia), mentor: Prof.dr. Miro Jakovljević

Psychotherapy education

Family, marital and partner psychotherapy. He finished five years of education (2002-2007) from Family, Marriage and Partnership Psychotherapy (Head of Education: Prof. V.Vidović, PhD in Psychological Medicine Clinic),

- 11/4/2005. passed the final exam,
- 2006 and 2007 completed the final, practical, supervisory part of the education,
- 16.5.2007. based on the education received the title "Family and Parent Psychotherapist, Psychoanalytic psychotherapy - completion of education in 2012.
- For several years (through period 2005-2007) in group supervision from individual psychoanalytic psychotherapy,
- within tripartite education: own therapy (at Prof. Dr. Vlaste Rudan) at the Clinic for Psychological Medicine (total 480 hours, during the period 2007-2012), supervision with 2 supervisors (total of 200 hours of supervision, during the period 2009-2012), as well as theoretical education (2008-2012). Cognitive-Behavioral Psychotherapy. He completed 1st and 2nd grade of Cognitive-Behavioral Psychotherapy (Head of Education: Prof. N.Anić)
- Medical Hypnosis and Hypnotherapy. He has completed several courses of medical hypnosis (co-operation with Dr. D. Legac)
- Group analysis. Introductory part, conducted during specialization training (Head of Education: Prof. Dr. R. Gregurek)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 11.1.2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1: Šimunović Filipčić I, Filipčić I, Glamuzina L, Devčić S, Bajić Ž, Braš M, Mihaljević Peleš A, Marčinko D, Sartorius N. The effect of chronic physical illnesses on psychiatric hospital admission in patients with recurrent major depression. *Psychiatry Res.* 2019 Feb;272:602-608. doi: 10.1016/j.psychres.2018.12.178. Epub 2019 Jan 2. PubMed PMID: 30616130.
- 2: Marčinko D, Radanović Ćorić S, Šeparović Lisak M, Rudan D, Jeleč V, Bilić V. The role of psychodynamic and personality assessment in psychopharmacotherapy of suicidal psychotic patients. *Psychiatr Danub.* 2018 Jun;30(Suppl 4):228-230. PubMed PMID: 29864765.
- 3: Šagud M, Vuksan-Ćusa B, Jakšić N, Mihaljević-Peleš A, Živković M, Vlatković S, Prgić T, Marčinko D, Wang W. Nicotine dependence in Croatian male inpatients with schizophrenia. *BMC Psychiatry.* 2018 Jan 22;18(1):18. doi:10.1186/s12888-018-1606-1. PubMed PMID: 29357830; PubMed Central PMCID: PMC5778660.
- 4: Vuletić M, Marčinko D, Vražić D, Milošević M, Dediol E, Knežević P. Development of a Valid and Reliable Instrument for the Assessment of Quality of Life in Adolescents with Clefts - Detection of Potential Mental Health Issues. *Psychiatr Danub.* 2017 Sep;29(3):360-368. doi: 10.24869/psyd.2017.360. PubMed PMID: 28949317.
- 5: Dujmović A, Marčinko D, Bulić K, Kisić H, Duduković M, Mijatović D. Quality of Life and Depression Among Female Patients Undergoing Surgical Treatment for Breast Cancer: A Prospective Study. *Psychiatr Danub.* 2017 Sep;29(3):345-350. doi: 10.24869/psyd.2017.345. PubMed PMID: 28949315.
- 6: Jaksic N, Marcinko D, Skocic Hanzek M, Rebernjak B, Ogrodniczuk JS. Experience of Shame Mediates the Relationship Between Pathological Narcissism and Suicidal Ideation in Psychiatric Outpatients. *J Clin Psychol.* 2017 Dec;73(12):1670-1681. doi: 10.1002/jclp.22472. Epub 2017 Mar 27. PubMed PMID: 28346685.

- 7: Jakšić N, Margetić BA, Marčinko D. Comorbid Depression and Suicide Ideation in Patients with Combat-Related PTSD: The Role of Temperament, Character, and Trait Impulsivity. *Psychiatr Danub*. 2017 Mar;29(1):51-59. PubMed PMID: 28291974.
- 8: Miličić D, Brajković L, Maček JL, Andrić A, Ardalić Ž, Buratović T, Marčinko D. Type a Personality, Stress, Anxiety and Health Locus of Control in Patients with Acute Myocardial Infarction. *Psychiatr Danub*. 2016 Dec;28(4):409-414. PubMed PMID: 27855433.
- 9: Rudan D, Jakovljević M, Marčinko D. Manic Defences in Contemporary Society. The Psychocultural Approach. *Psychiatr Danub*. 2016 Dec;28(4):334-342. PubMed PMID: 27855423.
- 10: Kušević Z, Čusa BV, Babić G, Marčinko D. Could alexithymia predict suicide attempts - a study of Croatian war veterans with post-traumatic stress disorder. *Psychiatr Danub*. 2015 Dec;27(4):420-3. PubMed PMID: 26609656.
- 11: Marčinko D. Psychodynamics and psychopharmacotherapy in the treatment of difficult patients with personality and eating disorders. *Psychiatr Danub*. 2015 Sep;27(3):330-3. PubMed PMID: 26400147.
- 12: Jakšić N, Aukst-Margetić B, Marčinko D, Brajković L, Lončar M, Jakovljević M. Temperament, character, and suicidality among Croatian war veterans with posttraumatic stress disorder. *Psychiatr Danub*. 2015 Mar;27(1):60-3. PubMed PMID: 25751432.
- 13: Mustapic J, Marčinko D, Vargek P. Eating behaviours in adolescent girls: the role of body shame and body dissatisfaction. *Eat Weight Disord*. 2015 Sep;20(3):329-35. doi: 10.1007/s40519-015-0183-2. Epub 2015 Feb 21. PubMed PMID: 25701441.
- 14: Jakšić N, Aukst-Margetić B, Rózsa S, Brajković L, Jovanović N, Vuksan-Cusa B, Grubisin J, Kudlek-Mikulic S, Jevtović S, Marčinko D, Svrakic DM, Jakovljević M. Psychometric properties and factor structure of the Temperament and Character Inventory-Revised (TCI-R) in a Croatian psychiatric outpatient sample. *Compr Psychiatry*. 2015 Feb;57:177-86. doi: 10.1016/j.comppsy.2014.10.016. Epub 2014 Oct 31. PubMed PMID: 25464839.
- 15: Lončar M, Plašč ID, Bunjevac T, Hrbač P, Jakšić N, Kozina S, Henigsberg N, Sagud M, Marčinko D. Predicting symptom clusters of posttraumatic stress disorder (PTSD) in Croatian war veterans: the role of socio-demographics, war experiences and subjective quality of life. *Psychiatr Danub*. 2014 Sep;26(3):231-8. PubMed PMID: 25191770.
- 16: Martinac M, Pehar D, Karlović D, Babić D, Marčinko D, Jakovljević M. Metabolic syndrome, activity of the hypothalamic-pituitary-adrenal axis and inflammatory mediators in depressive disorder. *Acta Clin Croat*. 2014 Mar;53(1):55-71. Review. PubMed PMID: 24974667.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1: Šimunović Filipčić I, Filipčić I, Glamuzina L, Devčić S, Bajić Ž, Braš M, Mihaljević Peleš A, Marčinko D, Sartorius N. The effect of chronic physical illnesses on psychiatric hospital admission in patients with recurrent major depression. *Psychiatry Res*. 2019 Feb;272:602-608. doi: 10.1016/j.psychres.2018.12.178. Epub 2019 Jan 2. PubMed PMID: 30616130.
- 2: Marčinko D, Radanović Ćorić S, Šeparović Lisak M, Rudan D, Jeleč V, Bilić V. The role of psychodynamic and personality assessment in psychopharmacotherapy of suicidal psychotic patients. *Psychiatr Danub*. 2018 Jun;30(Suppl 4):228-230. PubMed PMID: 29864765.
- 3: Šagud M, Vuksan-Čusa B, Jakšić N, Mihaljević-Peleš A, Živković M, Vlatković S, Prgić T, Marčinko D, Wang W. Nicotine dependence in Croatian male inpatients with schizophrenia. *BMC Psychiatry*. 2018 Jan

22;18(1):18. doi:10.1186/s12888-018-1606-1. PubMed PMID: 29357830; PubMed Central PMCID: PMC5778660.

4: Vuletić M, Marčinko D, Vražić D, Milošević M, Dediol E, Knežević P. Development of a Valid and Reliable Instrument for the Assessment of Quality of Life in Adolescents with Clefts - Detection of Potential Mental Health Issues. *Psychiatr Danub*. 2017 Sep;29(3):360-368. doi: 10.24869/psyd.2017.360. PubMed PMID: 28949317.

5: Dujmović A, Marčinko D, Bulić K, Kisić H, Duduković M, Mijatović D. Quality of Life and Depression Among Female Patients Undergoing Surgical Treatment for Breast Cancer: A Prospective Study. *Psychiatr Danub*. 2017 Sep;29(3):345-350. doi: 10.24869/psyd.2017.345. PubMed PMID: 28949315.

6: Jaksic N, Marcinko D, Skocic Hanzek M, Rebernjak B, Ogrodniczuk JS. Experience of Shame Mediates the Relationship Between Pathological Narcissism and Suicidal Ideation in Psychiatric Outpatients. *J Clin Psychol*. 2017 Dec;73(12):1670-1681. doi: 10.1002/jclp.22472. Epub 2017 Mar 27. PubMed PMID: 28346685.

7: Jakšić N, Margetić BA, Marčinko D. Comorbid Depression and Suicide Ideation in Patients with Combat-Related PTSD: The Role of Temperament, Character, and Trait Impulsivity. *Psychiatr Danub*. 2017 Mar;29(1):51-59. PubMed PMID: 28291974.

8: Miličić D, Brajković L, Maček JL, Andrić A, Ardalić Ž, Buratović T, Marčinko D. Type a Personality, Stress, Anxiety and Health Locus of Control in Patients with Acute Myocardial Infarction. *Psychiatr Danub*. 2016 Dec;28(4):409-414. PubMed PMID: 27855433.

9: Rudan D, Jakovljević M, Marcinko D. Manic Defences in Contemporary Society. The Psychocultural Approach. *Psychiatr Danub*. 2016 Dec;28(4):334-342. PubMed PMID: 27855423.

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15: Lončar M, Plašć ID, Bunjevac T, Hrbač P, Jakšić N, Kozina S, Henigsberg N, Sagud M, Marčinko D. Predicting symptom clusters of posttraumatic stress disorder (PTSD) in Croatian war veterans: the role of socio-demographics, war experiences and subjective quality of life. *Psychiatr Danub*. 2014 Sep;26(3):231-8. PubMed PMID: 25191770.

16: Martinac M, Pehar D, Karlović D, Babić D, Marcinko D, Jakovljević M. Metabolic syndrome, activity of the hypothalamic-pituitary-adrenal axis and inflammatory mediators in depressive disorder. *Acta Clin Croat.* 2014 Mar;53(1):55-71. Review. PubMed PMID: 24974667.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Multidimensional Analysis of Biological Indicators in Mental Disorders

Pharmacogenomics and proteomics of serotonin and catecholamines

Molecular basis and treatment of psychiatric and stress-induced disorders

Molecular-Biochemical Factors in Depressive Patients

Pharmacogenetic variability in psychiatric patients

Resistance to antithrombotic drugs in ischemic heart and brain disease

Predictive value of assessment of emotional and behavioral problems in young people

Hemorrhoidal disorders in chronic diseases

Neurobiological aspects of human adaptation to stress and response to psychotherapy

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Multidimensional Analysis of Biological Indicators in Mental Disorders

Pharmacogenomics and proteomics of serotonin and catecholamines

Molecular basis and treatment of psychiatric and stress-induced disorders

Molecular-Biochemical Factors in Depressive Patients

Pharmacogenetic variability in psychiatric patients

Resistance to antithrombotic drugs in ischemic heart and brain disease

Predictive value of assessment of emotional and behavioral problems in young people

Hemorrhoidal disorders in chronic diseases

Neurobiological aspects of human adaptation to stress and response to psychotherapy

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 3

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ivana Mareković, assoc. prof.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb, School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: 1. Laboratory approach to haematopoietic stem cells transplantation; 2. Methods of investigation in vivo and in vitro

BIOGRAPHY

Education

19 January 1996 Medical doctor after finishing School of Medicine University of Zagreb (average grade 4,70)

1996-1998 Internship at the Clinical Hospital Dubrava, Zagreb

26 March 1998 State exam at the Ministry of Health

27 May 2005 Specialty exam in medical microbiology and parasitology

November, 2005 Educational visit in Vienna, Austria in a Laboratory for Clinical Microbiology, Head of Dpt.

Prof. M. Rotter (Allgemeines Krankenhaus der Stadt Wien – AKH)

May 2009 Educational visit in Leiden, Netherlands, in the Dpt. of Infectious Diseases, for genotyping of acinetobacters guided by Lenie Dijkshoorn

Working experience

1998 – 2001 Product Manager in Schering Plough

2001 – 2005 Specialty trainee in medical microbiology and parasitology at the University Hospital for Pulmonary Diseases Jordanovac, Zagreb

2005 – 2008 Specialist in medical microbiology and parasitology at the University Hospital for Pulmonary Diseases Jordanovac, Zagreb

27 October 2008 – till now Specialist in medical microbiology and parasitology at the Clinical Department for Clinical and Molecular Microbiology

from 2011 – Head of Department for mycobacteriology;

from 1 February 2016 – Head of the Clinical Department of Clinical and Molecular Microbiology

Scientific and teaching activity

14 December 2004 Master's degree at Medical School University of Zagreb with thesis "Clinical significance

of quantitative and semiquantitative cultures of Mycoplasma hominis and Ureaplasma urealyticum in urogenital samples"

8 September 2008 PhD at Medical School University of Zagreb with thesis „Significance of molecular methods in diagnosis of bacterial community-acquired pneumonia“

1 February 2010 - Assistant Professor at the Department of Medical Microbiology and Parasitology, School of Medicine University of Zagreb

4 April 2016 – Associate Professor at the Department of Medical Microbiology and Parasitology, School of

Medicine University of Zagreb

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: April 4, 2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Bielen L, Likić R, Erdeljić V, Mareković I, Firis N, Grgić-Medić M, Godan A, Tomić I, Hunjak B, Markotić A, Bejuk D, Tičić V, Balzar S, Bedenić B Activity of fosfomycin against nosocomial multiresistant bacterial pathogens from Croatia: a multicentric study. *Croat Med J*. 2018 Apr 30;59(2):56-64.
2. Peric Z, Wilson J, Durakovic N, Ostojic A, Desnica L, Vranjes VR, Marekovic I, Serventi-Seiwerth R, Vrhovac R. Early human cytomegalovirus reactivation is associated with lower incidence of relapse of myeloproliferative disorders after allogeneic hematopoietic stem cell transplantation. *Bone Marrow Transplant*. 2018 Nov;53(11):1450-1456. doi: 10.1038/s41409-018-0172-y. Epub 2018 Apr 16.
3. Perić Z, Rezo Vranješ V, Duraković N, Desnica L, Mareković I, Serventi-Seiwerth R, Nemet D, Bilinski J, Basak G, Vrhovac R. Gut Colonization by Multidrug-Resistant Gram-Negative Bacteria is an Independent Risk Factor for Development of Intestinal Acute Graft-Versus-Host Disease. *Biol Blood Marrow Transplant* 2017 Jul;23(7):1221-1222
4. How to: identify non-tuberculous Mycobacterium species using MALDI-TOF mass spectrometry. Alcaide F, Amlerová J, Bou G, Ceyssens PJ, Coll P, Corcoran D, Fangous MS, González-Álvarez I, Gorton R, Greub G, Hery-Arnaud G, Hrábak J, Ingebretsen A, Lucey B, Mareković I, Mediavilla-Gradolph C, Monté MR, O'Connor J, O'Mahony J, Opota O, O'Reilly B, Orth-Höller D, Oviaño M, Palacios JJ, Palop B, Pranada AB, Quiroga L, Rodríguez-Temporal D, Ruiz-Serrano MJ, Tudó G, Van den Bossche A, van Ingen J, Rodriguez-Sanchez B; European Study Group on Genomics and Molecular Diagnosis (ESGMD). *Clin Microbiol Infect*. 2018 Jun;24(6):599-603.
5. Bošnjak Z, Chlebowicz MA, Mareković I, Rezo Vranješ V, Rossen JW, Budimir A. First report of OXA-48-producing *Escherichia coli* in Croatia and confirmed intergenic transfer of a plasmid-carrying blaOXA-48 from *Klebsiella pneumoniae*. *Infect Dis (Lond)*. 2018 Apr;50(4):313-316.
6. Jankovic M, Sabol I, Zmak L, Jankovic VK, Jakopovic M, Obrovac M, Ticac B, Bulat LK, Grle SP, Marekovic I, Samarzija M, van Ingen J. Microbiological criteria in non-tuberculous mycobacteria pulmonary disease: a tool for diagnosis and epidemiology. *Int J Tuberc Lung Dis* 2016 Jul;20(7):934-40.
7. Mareković I, Bošnjak Z, Jakopović M, Boras Z, Janković M, Popović-Grle S. Evaluation of matrix-assisted laser desorption/ionization time-of-flight mass spectrometry in identification of nontuberculous mycobacteria. *Chemotherapy* 2016; 61: 167-170.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Bielen L, Likić R, Erdeljić V, Mareković I, Firis N, Grgić-Medić M, Godan A, Tomić I, Hunjak B, Markotić A, Bejuk D, Tičić V, Balzar S, Bedenić B Activity of fosfomycin against nosocomial multiresistant bacterial pathogens from Croatia: a multicentric study. *Croat Med J*. 2018 Apr 30;59(2):56-64.
2. Peric Z, Wilson J, Durakovic N, Ostojic A, Desnica L, Vranjes VR, Marekovic I, Serventi-Seiwerth R, Vrhovac R. Early human cytomegalovirus reactivation is associated with lower incidence of relapse of myeloproliferative disorders after allogeneic hematopoietic stem cell transplantation. *Bone Marrow Transplant*. 2018 Nov;53(11):1450-1456. doi: 10.1038/s41409-018-0172-y. Epub 2018 Apr 16.
3. Susceptibility of *Escherichia coli* to nitroxoline, an option for uncomplicated urinary tract infections - the first report from Croatia. Mareković I, Bošnjak Z, Jurić K, Ćorić M, Popović-Grle S. *J Chemother*. 2018 May;30(3):189-191.

4. How to: identify non-tuberculous Mycobacterium species using MALDI-TOF mass spectrometry. Alcaide F, Amlerová J, Bou G, Ceyssens PJ, Coll P, Corcoran D, Fangous MS, González-Álvarez I, Gorton R, Greub G, Hery-Arnaud G, Hrábak J, Ingebretsen A, Lucey B, Mareković I, Mediavilla-Gradolph C, Monté MR, O'Connor J, O'Mahony J, Opota O, O'Reilly B, Orth-Höller D, Oviaño M, Palacios JJ, Palop B, Pranada AB, Quiroga L, Rodríguez-Temporal D, Ruiz-Serrano MJ, Tudó G, Van den Bossche A, van Ingen J, Rodriguez-Sanchez B; European Study Group on Genomics and Molecular Diagnosis (ESGMD). Clin Microbiol Infect. 2018 Jun;24(6):599-603.
5. Bošnjak Z, Chlebowicz MA, Mareković I, Rezo Vranješ V, Rossen JW, Budimir A. First report of OXA-48-producing Escherichia coli in Croatia and confirmed intergenic transfer of a plasmid-carrying blaOXA-48 from Klebsiella pneumoniae. Infect Dis (Lond). 2018 Apr;50(4):313-316.
6. Perić Z, Rezo Vranješ V, Duraković N, Desnica L, Mareković I, Serventi-Seiwerth R, Nemet D, Bilinski J, Basak G, Vrhovac R. Gut Colonization by Multidrug-Resistant Gram-Negative Bacteria is an Independent Risk Factor for Development of Intestinal Acute Graft-Versus-Host Disease. Biol Blood Marrow Transplant 2017 Jul;23(7):1221-1222
7. Jankovic M, Sabol I, Zmak L, Jankovic VK, Jakopovic M, Obrovac M, Ticac B, Bulat LK, Grle SP, Marekovic I, Samarzija M, van Ingen J. Microbiological criteria in non-tuberculous mycobacteria pulmonary disease: a tool for diagnosis and epidemiology. Int J Tuberc Lung Dis 2016 Jul;20(7):934-40.
8. Bedenić B, Sardelić S, Luxner J, Bošnjak Z, Varda-Brkić D, Lukić-Grić A, Mareković I, Frančula-Zaninović S, Krilanović M, Šijak D, Grisold A, Zarfel G. Molecular characterization of class b carbapenemases in advanced stage of dissemination and emergence of class d carbapenemases in Enterobacteriaceae from Croatia. Infect Genet Evol. 2016 May 10;43:74-82.
9. Mareković I, Bošnjak Z, Jakopović M, Boras Z, Janković M, Popović-Grle S. Evaluation of matrix-assisted laser desorption/ionization time-of-flight mass spectrometry in identification of nontuberculous mycobacteria. Chemotherapy 2016; 61: 167-170.
10. Bošnjak Z, Plečko V, Budimir A, Mareković I, Bedenić B. First report of NDM-1- producing Acinetobacter guillouiae. Chemotherapy 2015; 60: 250-252.
11. Budimir A, Payerl Pal M, Bošnjak Z, Mareković I, Vuković D, Roksandić Križan I, Milas J, Plečko V, Kalenić S. Prevalence and molecular characteristics of methicillin-resistant Staphylococcus aureus strains isolated in a multicenter study of nursing home residents in Croatia. Am J Infect Control 2014; 42(11): 1197-202.
12. Mareković I, Bošnjak Z, Plečko V. Direct identification of mycobacteria from smear-positive samples using real-time polymerase chain reaction. Int J Tuberc Lung Dis 2014; 18(8): 978-980.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Frequency of moulds and susceptibility to antifungals in hematological and other immunocompromised patients in clinical specimens from respiratory tract and their influence on antifungal treatment (university financial support)
2. The Global Point Prevalence Survey of Antimicrobial Consumption and Resistance (GLOBAL-PPS)
3. "Determination of pathogens from sequenced DNA", Zaklada ADRIS, principal investigator assoc. prof. dr. sc. Mile Šikić

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS



1. Frequency of moulds and susceptibility to antifungals in hematological and other immunocompromised patients in clinical specimens from respiratory tract and their influence on antifungal treatment (university financial support)
2. The Global Point Prevalence Survey of Antimicrobial Consumption and Resistance (GLOBAL-PPS)
3. "Determination of pathogens from sequenced DNA", Zaklada ADRIS, principal investigator assoc. prof. dr. sc. Mile Šikić

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Alemka Markotić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital for Infectious Diseases, Zagreb, Croatia

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Mechanisms of allergic reactions; Pathogenesis of infective diseases; Biomaterial infections;

BIOGRAPHY

Alemka Markotić is a full professor at the Faculty of Medicine, University of Rijeka, a full professor at the Catholic University, Zagreb, Director of the University Hospital for Infectious Diseases "Dr. Fran Mihaljević", Zagreb, Head of the Scientific Unit and Head of the Institute for Urogenital Infections, Associate member of the Croatian Academy of Sciences and Arts since 2012 and a full member of the Academy of Medical Sciences of Croatia since 2018. Since 2016., she is a permanent member of the Homeland Security Council.

She graduated from the Faculty of Medicine, University of Sarajevo, Bosnia and Herzegovina (1989), did her MsC in Medical Microbiology and Parasitology (1996), and PhD in the field of Infectious Diseases (1999) at the Faculty of Medicine, University of Zagreb. Specialist in Infectology (2007) and Clinical Immunology (1997, BiH).

Dr. Markotić began his career at the Medical School, University of Sarajevo, Bosnia and Herzegovina, on an international project to investigate the efficacy of ribavirin in treating hantavirus infections in collaboration with the US Army Medical Research Institute for Infectious Diseases (USAMRIID), Frederick, Maryland. She was a National Academy of Sciences, National Research Council, USA Postdoctoral Research fellow and did her research on Immunopathogenesis on hantaviruses in USAMRIID, Frederick, Maryland, USA. For the results of this research, she were obtained the Joel Dalrymple Memorial Award (American Society of Virology) and USAMRIID's coin.

Dr. Markotić has received seven national and nine international awards (eg. the Croatian Academy of Sciences and Arts annual award for medicine, the annual State Award for Medicine, the European Society of Clinical Microbiology and Infectious Diseases Award for Excellence etc.).

She has published over 100 research papers, of which 64 are in CC / SCI, including manuscripts in prestigious journals like Nature Medicine and The Lancet (number of citations: 1347 - Google Scholar), 15 chapters in books, six of them in foreign books and has presented over 200 presentations (invited and plenary) at national and international conferences. Among others, a lectures were held at Columbia University in New York; National Institute for Allergy and Infectious Diseases, NIH, USA; National Academy of Sciences, USA in Istanbul and Zagreb; Poland Academy of Sciences, Warsaw; NATO International Symposium on Biosecurity and Biosafety in Milan, Italy; the UN Biosafety Convention in Geneva and others.

So far he has been or is the principal investigator of ten domestic and five foreign projects. She has been or is an associate of eight domestic and international scientific projects, including the Center for Excellence in Viral Immunology and Vaccines approved by the Ministry of Science and Education.

Dr. Markotić founded the Center for Emerging and Re-Emerging Infectious Diseases in the Clinic and also participated intensively in the founding and creation of the first Croatian BSL-3 Laboratory for Diagnosis of dangerous pathogens, founded the Croatian Society for Biosafety and Biosecurity. She is one of the few

experts (team led by Professor Markotić) in Croatia who has been trained and certified to work in the BSL-3 Laboratory (USAMRIID certificate), and is continually investigating different pathogens in collaboration with scientists from many prestigious international institutions. At the request of the European Commission and the Chinese Ministry of Agriculture, Dr. Markotić designed, organized and held a Biosafety / Biosecurity Course in Beijing, China, in May 2009.

Dr. Markotić also worked for ten years at the Institute of Immunology, Zagreb, which is the oldest producer of vaccines and immunological reagents in this area. She was responsible for the quality and safety of these products according to GLP, GMP, WHO, EU and some FDA regulations as the head of the Department for Quality Control of Viral Vaccines and Interferons.

Dr. Markotić is also a lecturer at postgraduate studies at the Faculty of Medicine, University of Rijeka, Zagreb, and the Forensic School in Split, and the Study of nursing at the Catholic University of Zagreb. She is a member of the International Society of Hantaviruses and the Board for Allergology and Clinical Immunology and the Committee for Genomics, the Croatian Academy of Sciences and Arts. She is also a member of several national and international societies in the field of immunology and infectious diseases. In the past, she was a member of the National Science Council, the Croatian Science Foundation's Board of Governors and the Deputy Chair of the Regional Council for Biomedicine and Health. Prior to the Ministry of Science Education and Sports she was appointed member of the High Level Group for Joint Programming - GPC at the EU Commission, Brussels.

In 2008, 2009 and 2011, Dr. Markotić was a National Institute for Allergy and Infectious Diseases (NIAID) National Institutes of Health (NIH) project and grant reviewer. In 2004, 2005, 2009 and 2018., she was a project reviewer for the European Commission in Brussels in the field of immunology and infectious diseases. She is a member of the European Network of Imported Viral Diseases. In the period 2013-2014, she was a member of the NRC Committee on Science Needs for Microbial Forensics: Developing an Initial International Roadmap at the National Academy of Sciences, USA, within which he organized a similar symposium at the HAZU. She is currently a member of the NRC Committees: the Committee on Regional Workshops on Science and Technology Issues for Biological Weapons Convention and the Committee for Governance of Dual Use Research in Life Sciences: Advancing Global Consensus on Research Oversight. About the work of the aforementioned commissions and accompanying symposia of the American Academy, she has been lecturing many times (2013, 2014, 2015 and 2018) as chairman of the Biological Weapons Convention (BWC), the Annual BWC Meeting of States Parties in Geneva.

So far, under Dr. Markotić mentorship, six doctoral theses have been defended, while two are in the phase of the application.

Dr. Markotić also was engaged in humanitarian work in her career. In 1992-1994, during the war in Bosnia and Herzegovina, she helped in organization and participate in the work and management of Caritas Health Care and Pharmacy in Sarajevo, which provided assistance to all the needy citizens of Sarajevo. During 1994, as the US Medical Relief Services Medical Coordinator in Zagreb, she spent half a year in participating in providing medicines for expatriate and refugee camps in the Republic of Croatia and devised a study of the incidence and prevalence of chronic diseases in camps, and the results were published in the Lancet.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: January 22, 2019.; full professor – permanent, in the field of biomedicine and health, field of basic medical science, branches of immunology, Faculty of Medicine, University of Rijeka

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2. Turčinov D, Puljiz I, Markotić A, Kuzman I, Begovac J. Clinical and laboratory findings in patients with oliguric and non-oliguric hantavirus haemorrhagic fever with renal syndrome: an analysis of 128 patients. *Clin Microbiol Infect* 2013;19:674-9.
3. Puljiz I, Markotić A, Cvetko Krajinovic L, Gužvinac M, Polašek O, Kuzman I. *Mycoplasma pneumoniae* in adult community-acquired pneumonia increases matrix metalloproteinase-9 serum level and induces its gene expression in peripheral blood mononuclear cells. *Med Sci Monit* 2012;18:CR500-505.
4. Dakovic Rode O, Markotic A, Kujundzic Tiljak M, Zidovec Lepej S, Begovac J. Serum apoptosis markers in HIV-infected patients with human herpesvirus type 8 and herpes simplex virus type 2 co-infection. *Eur J Clin Microbiol Infect Dis* 2012;31:3303-8.
5. Krajinović LC, Soprek S, Korva M, Dželalija B, Rode OD, Skerk V, Avšič-Županc T, Markotić A. Serum levels of metalloproteinases and their inhibitors during infection with pathogens having integrin receptor-mediated cellular entry. *Scand J Infect Dis* 2012;44:663-9.
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7. Vidović A, Grubišić-Ilić M, Kozarić-Kovačić D, Gotovac K, Rakoš I, Markotić A, Rabatić S, Dekaris D, Sabioncello A. Exaggerated platelet reactivity to physiological agonists in war veterans with posttraumatic stress disorder. *Psychoneuroendocrinology* 2011;36:161-72.
8. Markotić A, Skerk V, Cvetko Krajinović L, Beus A. Is the clinical picture of Schnitzler syndrome always Schnitzler syndrome? *Clin Exp Rheumatol* 2009;27(3):507-9.
9. Darabos N, Hundric-Haspl Z, Haspl M, Markotic A, Darabos A, Moser C. Correlation between synovial fluid and serum IL-1beta levels after ACL surgery-preliminary report. *Int Orthop* 2009;33:413-8.
10. Markotić A, Hensley L, Daddario K, Spik K, Anderson K, Schmaljohn C. Pathogenic hantaviruses elicit different immunoreactions in THP-1 cells and primary monocytes and induce differentiation of human monocytes to dendritic-like cells. *Coll Antropol* 2007;31:1159-67.
11. Kosor Krnic E, Gagro A, Drazenovic V, Kuzman I, Jeren T, Cecuk-Jelicic E, Kerhin-Brkljacic V, Gjenero-Margan I, Kaic B, Rakusic S, Sabioncello A, Markotic A, Rabatic S, Mlinaric-Galinovic G, Dekaris D. Enumeration of haemagglutinin-specific CD8+ T cells after influenza vaccination using MHC class I peptide tetramers. *Scand J Immunol* 2008;67:86-94.
12. Kosor Krnic E, Gagro A, Kozaric-Kovacic D, Vilibic M, Grubisic-Ilic M, Folnegovic-Smalc V, Drazenovic V, Cecuk-Jelicic E, Gjenero-Margan I, Kuzman I, Jeren T, Sabioncello A, Kerhin-Brkljacic V, Kaic B, Markotic A, Gotovac K, Rabatic S, Mlinaric-Galinovic G, Dekaris D. Outcome of influenza vaccination in combat-related post-traumatic stress disorder (PTSD) patients. *Clin Exp Immunol* 2007;149:303-10.
13. Cebalo L, Markotić A. Chemokine production predominates in human monocytes infected with Tula virus. *Viral Immunol* 2007;20:206-13.
14. Vidović A, Vilibić M, Markotić A, Sabioncello A, Gotovac K, Folnegović-Smalc V, Dekaris D. Baseline level of platelet-leukocyte aggregates, platelet CD63 expression, and soluble P-selectin concentration in patients with posttraumatic stress disorder: a pilot study. *Psychiatry Res* 2007;150:211-6.
15. Bosnar D, Dekaris I, Gabrić N, Markotić A, Lazić R, Spoljarić N. Influence of interleukin-1alpha and tumor necrosis factor-alpha production on corneal graft survival. *Croat Med J* 2006;47:59-66.

16. Dekaris I, Gabrić N, Bosnar D, Gagro A, Markotić A, Lazić R. Interleukin-1alpha production in human corneal scars. *Coll Antropol* 2005;29 Suppl 1:81-4.
17. Puljiz I, Kuzman I, Turcinov D, Makek N, Markotić A. [Laboratory findings in patients with hemorrhagic fever with renal syndrome]. *Acta Med Croatica* 2005;59:105-11.
- 18 Markotić A. [Immunopathogenesis of hemorrhagic fever with renal syndrome and hantavirus pulmonary syndrome]. *Acta Med Croatica* 2003;57:407-14.
19. Kosor E, Gagro A, Drazenović V, Kuzman I, Jeren T, Rakusić S, Rabatić S, Markotić A, Gotovac K, Sabioncello A, Cecuk E, Kerhin-Brkljacić V, Gjenero-Margan I, Kaić B, Mlinarić-Galinović G, Kastelan A, Dekaris D. [MHC tetramers: tracking specific immunity]. *Acta Med Croatica* 2003;57:255-9.
20. Markotic A, Hensley L, Geisbert T, Spik K, Schmaljohn C. Hantaviruses induce cytopathic effects and apoptosis in continuous human embryonic kidney cells. *J Gen Virol* 2003;84(Pt 8):2197-202.
21. Markotić A, Gagro A, Dasić G, Kuzman I, Lukas D, Nichol S, Ksiazek TG, Sabioncello A, Rode O, Rabatić S, Dekaris D. Immune parameters in hemorrhagic fever with renal syndrome during the incubation and acute disease: case report. *Croat Med J* 2002;43:587-90.
22. Markotić A, Kuzman I, Babić K, Gagro A, Nichol S, Ksiazek TG, Rabatić S, Dekaris D. Double trouble: hemorrhagic fever with renal syndrome and leptospirosis. *Scand J Infect Dis*. 2002;34(3):221-4. PubMed PMID: 12030403.
- 23: Markotić A, Dasić G, Gagro A, Sabioncello A, Rabatić S, Kuzman I, Zgorelec R, Smoljan I, Beus I, Zupanc TA, Dekaris D. Role of peripheral blood mononuclear cell (PBMC) phenotype changes in the pathogenesis of haemorrhagic fever with renal syndrome (HFRS). *Clin Exp Immunol* 1999;115:329-34.
24. Markotić A, LeDuc JW, Hlaca D, Rabatić S, Sarcević A, Dasić G, Gagro A, Kuzman I, Barac V, Avsic-Zupanc T, Beus I, Dekaris D. Hantaviruses are likely threat to NATO forces in Bosnia and Herzegovina and Croatia. *Nat Med* 1996;2:269-70.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Bielen L, Likić R, Erdeljić V, Mareković I, Firis N, Grgić-Medić M, Godan A, Tomić I, Hunjak B, Markotić A, Bejuk D, Tičić V, Balzar S, Bedenić B. Activity of fosfomycin against nosocomial multiresistant bacterial pathogens from Croatia: a multicentric study. *Croat Med J* 2018;59:56-64.
2. Petersen E, Petrosillo N, Koopmans M; ESCMID Emerging Infections Task Force Expert Panel. Emerging infections-an increasingly important topic: review by the Emerging Infections Task Force. *Clin Microbiol Infect* 2018;24:369-375.
3. Teofilović NK, Bihi M, Stojković MR, Tumir LM, Ester K, Kralj M, Majhen D, Oršolić N, Lepur A, Vrbaneć D, Markotić A, Dembić Z, Weber AN, Piantanida I, Vugrek O, Diken M, Knežević J. 1-ethyl-3-(6-methylphenanthridine-8-yl) urea modulates TLR3/9 activation and induces selective pro-inflammatory cytokine expression in vitro. *Bioorg Med Chem Lett* 2017;27:1530-1537.
4. Papeš D, Pasini M, Jerončić A, Vargović M, Kotarski V, Markotić A, Škerk V. Detection of sexually transmitted pathogens in patients with chronic prostatitis/chronic pelvic pain: a prospective clinical study. *Int J STD AIDS* 2017;28:613-15.
5. Papa A, Vaheri A, LeDuc JW, Krüger DH, Avšič-Županc T, Arikawa J, Song JW, Markotić A, Clement J, Liang M, Li D, Yashina LN, Jonsson CB, Schmaljohn CS. Meeting report: Tenth International Conference on Hantaviruses. *Antiviral Res* 2016;133:234-41..
6. Mestrovic T, Ljubin-Sternak S, Sviben M, Bedenić B, Vranes J, Markotić A, Skerk V. Antimicrobial Sensitivity Profile of Chlamydia trachomatis isolates from Croatia in McCoy Cell Culture System and Comparison with the Literature. *Clin Lab* 2016;62:357-64.
7. Tadin A, Tokarz R, Markotić A, Margaletić J, Turk N, Habuš J, Svoboda P, Vucelja M, Desai A, Jain K, Lipkin WI. Molecular Survey of Zoonotic Agents in Rodents and Other Small Mammals in Croatia. *Am J Trop Med Hyg* 2016;94(2):466-73.

8. Skuhala T, Škerk V, Markotić A, Bukovski S, Desnica B. Septic abortion caused by *Campylobacter jejuni* bacteraemia. *J Chemother* 2016;28:335-6.
9. Budowle B, Connell ND, Bielecka-Oder A, Colwell RR, Corbett CR, Fletcher J, Forsman M, Kadavy DR, Markotić A, Morse SA, Murch RS, Sajantila A, Schmedes SE, Ternus KL, Turner SD, Minot S. Validation of high throughput sequencing and microbial forensics applications. *Investig Genet* 2014;5:9. doi: 10.1186/2041-2223-5-9. eCollection 2014.
10. Fernandez-Garcia MD, Negredo A, Papa A, Donoso-Mantke O, Niedrig M, Zeller H, Tenorio A, Franco L; Envid Members. European survey on laboratory preparedness, response and diagnostic capacity for Crimean-Congo haemorrhagic fever, 2012. *Euro Surveill* 2014;19(26). pii: 20844.
11. Svoboda P, Dobler G, Markotić A, Kurolt IC, Speck S, Habuš J, Vucelja M, Krajnović LC, Tadin A, Margaletić J, Essbauer S. Survey for hantaviruses, tick-borne encephalitis virus, and *Rickettsia* spp. in small rodents in Croatia. *Vector Borne Zoonotic Dis* 2014;14:523-30..
12. Kurolt IC, Krajnović V, Topić A, Kuzman I, Baršić B, Markotić A. First molecular analysis of West Nile virus during the 2013 outbreak in Croatia. *Virus Res* 2014;189:63-6.
13. Tadin A, Bjedov L, Margaletić J, Zibrat B, Krajnović LC, Svoboda P, Kurolt IC, Majetić ZS, Turk N, Rode OD, Civić R, Kuzman I, Markotić A. High infection rate of bank voles (*Myodes glareolus*) with Puumala virus is associated with a winter outbreak of haemorrhagic fever with renal syndrome in Croatia. *Epidemiol Infect* 2014;142:1945-51.
14. Jaillon S, Moalli F, Ragnarsdóttir B, Bonavita E, Puthia M, Riva F, Barbati E, Nebuloni M, Cvetko Krajnović L, Markotić A, Valentino S, Doni A, Tartari S, Graziani G, Montanelli A, Delneste Y, Svanborg C, Garlanda C, Mantovani A. The humoral pattern recognition molecule PTX3 is a key component of innate immunity against urinary tract infection. *Immunity* 2014;40:621-32.
15. Pasini M, Kotarski V, Škerk V, Markotić A, Andrašević AT, Lepej SŽ, Maleković G, Sternak SL, Škerk V. The significance of *Chlamydia trachomatis* in prostatitis syndrome. *J Chemother* 2014;26:382-4.
16. Avšič Županc T, Korva M, Markotić A. HFRS and hantaviruses in the Balkans/South-East Europe. *Virus Res* 2014;187:27-33.
17. Vargović M, Pasini M, Papić N, Andrašević S, Markotić A, Butić I, Škerk V. Antimicrobial susceptibility of *Ureaplasma urealyticum* and *Mycoplasma hominis*. *Sex Transm Infect* 2014;90:69. doi: 10.1136/sextrans-2013-051413. Epub 2013 Dec 23.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Project leader: "The role of cytokines and chemokines in human cells infected with hantaviruses", (project supervisor: Connie C. Schmaljohn, Ph.D., postdoctoral research at the US Army Medical Research Institute for Infectious Diseases, Frederick, Maryland, USA), National Research Council, National Academy of Sciences, USA.
2. Head of Technology Development and Research Project: "3-D Cellular Technology in Interferon and Viral Protein Production", Ministry of Science and Technology of the Republic of Croatia (TP-01 / 0021-06), 2001-2003.g.
3. Project leader ISID Small Grants: "Mechanisms of apoptosis induced by hantaviruses", International Society of Infectious Diseases, USA, 2003-2004.
4. Head of the scientific-research project "Immune response to infections of intracellular pathogens" (0021005), "Ministry of Science of the Republic of Croatia", 2002-2005.
5. Head of the scientific and research project "Immunoreactions on Hantaviruses and Leptospirae", Ministry of Science, Education and Sports of the Republic of Croatia, 2006-2008.



6. Head of Program "Hantaviruses and Leptospire", Ministry of Science, Education and Sports of the Republic of Croatia, 2006-2008.

7. Leader of the technological development and research project Jezgre (J-29/07) "Emergency and Re-Emergent Infectious Disease Center", Ministry of Science, Education and Sports of the Republic of Croatia, 2007-2010.g.

8. 2014-2018 - project leader "Innate immunity to hantaviruses", Croatian Sciences foundation

9. 2018-2022 - Workpackages Leader and Coordinator for the University Hospital for Infectious Diseases "Dr. Fran Mihaljević "on the project" Center for Excellence for Viral Immunology and Vaccines"

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. **2014-2018** - project leader "Innate immunity to hantaviruses", Croatian Sciences foundation
2. **2018-2022** - Workpackages Leader and Coordinator for the University Hospital for Infectious Diseases "Dr. Fran Mihaljević "on the project" Center for Excellence for Viral Immunology and Vaccines "
3. **2016-2018** – National coordinator and leader, FP7 project part for the University Hospital for Infectious Diseases "Dr. Fran Mihaljević": Multi-centre European study of MAJOR Infectious Disease Syndromes (MERMAIDS) Arboviral compatible febrile illness, EC Framework 7 Project called "Platform for European Preparedness Against (Re)emerging Epidemics" ("PREPARE") , University of Oxford, UK.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 6

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Darko Marković, PhD, DVM

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Fidelita Ltd. for research and development

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Laboratory animals in biomedical research

BIOGRAPHY

D. Marković holds a veterinary medicine degree, master/spec. in veterinary medicine (animal health protection) and Ph.D. in biomedicine and health / toxicology (Doctoral thesis: An experimental model of potential transplacental genotoxicity of drugs, University of Zagreb). He obtained several certificates in various fields including Toxicology, Pharmacology/Toxicology, Animal Handling and Techniques, GLP. He joined PLIVA in 1993 and held several positions in R&D (one year in USA - project PLIVA /Parke/Davis) including Head of Toxicology WU (PLIVA) and Director of Laboratory Animal Science (GlaxoSmithKline). During this time an Ethics Committee was established and local Animal Facility was AAALAC I OLAW accredited. Fidelita Ltd. (Galapagos) - In 2010 he was appointed to his current position (Toxicology & Laboratory Animal Science, Director) with an overall responsibility for Toxicology, as well as the Animal Facility (OLAW accredited) and all Laboratory Animal Science work/issues. His portfolio encompasses conduct of all in vivo research activities and compliance with national and international regulatory agencies and standards. During his career he has worked on projects which have delivered seven development candidates. He has over twenty-five years' experience in the Pharmaceutical industry, has over 20 scientific publications and has presented at several international conferences. As a Lecturer is teaching at the University (field Toxicology and Laboratory Animal Science).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2009

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. D. Markovic, J. Katic, R. Stojkovic, S. Borovic, N. Zarkovic, A. Fucic (2013): "Lipid peroxidation, detoxification capacity, and genome damage in mice after transplacental exposure to pharmaceutical drugs", Brazilian Journal of Medical and Biological Research, 46:1014-1020
2. Snježana Čužić, Martina Bosnar, Miroslava Dominis Kramarić, Željko Ferenčić, Darko Marković, Ines Glojnarčić and Vesna Eraković Haber (2012): "Claudin-3 and Clara Cell 10 kDa Protein as Early Signals of Cigarette Smoke-Induced Epithelial Injury along Alveolar Ducts", Toxicologic Pathology, 40:1169-1187
3. I. Pasalic, B. Bosnjak, V. Ivetic Tkalecivic, D. Seveljevic Jaran, Z. Javorscak, D. Markovic and B. Hrvacic (2011): Cage enrichment with paper tissue, but not plastic tunnels, increases variability in mouse model of asthma, Laboratory Animals, April, 2011, Vol. 45 Issue 2, p121
4. Aleksandra Fucic, Ranko Stojkovic, Snjezana Miskovic, Davor Zeljezic, Darko Markovic, Romana Gjergja, Jelena Katic, Ana Marija Jazbec, Tomislav Ivcevic Bakulic, Vida Demarin (2010): Transplacental genotoxicity of antiepileptic drugs: Animal model and pilot study on mother/newborn cohort, Reproductive Toxicology, 30 (2010), 613-618
5. Aleksandra Fučić, R. Stojković, J. Katić, D. Marković, Ž. Ferenčić, M. Koršić, A.M. Jazbec, M. Gamulin (2009): Animal model for age- and sex- related genotoxicity of diethylstilbestrol, Brazilian Journal of Medical and Biological Research, 42 (11), 1090-1096

6. Aleksandra Fucic, Darko Marković. Zdenko Herceg, Marija Gamulin, Jelena Katie, Ranko Stojkovic. Zeljko Ferencic, Boris Mildner, Ana-Marija Jazbec, Tomislav Dobranic (2008): Developmental and transplacental genotoxicology: Fluconazole, Mutation Research / Genetic Toxicology and Environmental Mutagenesis, 657(1), 43-47
 7. Fucic Aleksandra, Marković D., Ferencic Z., Mildner B., Jazbec Ana-Marija, Bubic Spoljar Jadranka (2005): Comparision of Genome Damage Caused by 5- Nitrofurantoin in Young and Adult Mice using the in vivo Micronucleus Assay, Environmental and Molecular Mutagenesis, 46 (1), 59-63
 8. Dobranic T., Dobranic Vesna, Tomaskovic A., Cergolj M., Bedrica Ljiljana and Marković D. (2002): The effect of cadmium salts on plasma hormone levels and histopathology of the ovaries in female rabbits, Tierarztl. Umschau 57, 539 -546
- Fucic Aleksandra, Bubic Spoljar Jadranka. Markovic D., Stojkovic R, Ferencic Z., Mildner B., Jazbec Ana-Marija, (2005): Age related genotoxicity and mutagenesis studies, 9th International Conference on Environmental Mutagens & 36th Annual meeting of the Environmental Mutagen Society, San Francisco, CA, US, Mutation Research 577S e20
 - Peraica Maja, Markovic D., Domijan Ana-Marija, Fuchs R., Lucic Ana, Radić Božica and Ferencic Z (2001): Time- and dose-related occurrence of apoptotic cells in kidney epithelium of ochratoxin A treated rats, Toxicology 164 (1-3), 182
 - Dobranic T., Markovic D., Ferencic Z and Dobranic Vesna (2001): Influence of oral cadmium chloride on spermatogenesis and pathohistological changes in rabbit testes. Toxicology 164 (1-3), 73
 - Dobranic T., Stilinovic L., Cergolj M., Tomaskovic A. and Markovic D. (2001): Influence of cadmium salts on gestation and fetuses in rabbits, Vet. Arhiv 71, (4) 203-214
 - Ines Glojnaric, Snježana Čužić, Darko Marković (2013): Evaluation of Hidroxypropyl-beta-Cyclodextrin (HPβCD) as formulation vehicle for use in general toxicity studies in mice, Eurotox 2013, Interlaken, Switzerland, Proceedings.
 - Fucic Aleksandra, Katie J., Markovic D., Mildner B., Ferencic Z., Kleinjams J., (2007): How can knowledge of fetal metabolism help to interpretate genome damage caused by transplacental transported xenobiotics, 4th International conference of children's health and the environment, Vienna, Austria, Proceedings.
 - Markovic D., Mildner B., Ferencic Z., Glojnaric Ines, Stojkovic R., Borovic- Sunjic Suzana, Jazbec Ana-Marija, Dobranic T., Fucic Aleksandra (2006): An experimental model of potential transplacental genotoxicity of fluconazole, 36th Annual meeting of the European, Prague, Czech republic. Proceedings.
 - Fucic Aleksandra, Markovic D., Ferencic Z., Mildner B., Jazbec Ana-Marija, Bubic Spoljar Jadranka (2004): Genome Damage Caused by 5-Nitrofurantoin in Suckling and Adult Mice detected by Micronucleus Assay, European Mutagen Society, Maastricht, Netherlands, Proceedings.
 - Fucic Aleksandra, Markovic D. and Ferencic Z. (2003): Micronucleus induction in mouse peripheral reticulocytes by 5-nitrofurantoin, European Environmental Mutagen Society, Aberdeen, Scotland, UK, Proceedings.
 - Rusic-Pavletic Jasna, Braj[la Karmen, Glojnaric Ines, Culic O., Dominis Kramaric Miroslava, Markovic D., Bencetic Vlatka, Sunjic I., Erakovic Vesna, Danhof M., Parnham M.J. (2000): Erythromycin inhibits LPS induced inflammation rats, ICMAS-KO 5, Seville, Spain, Proceedings.

- Bubic Spoljar Jadranka, D. Nejedli, D. Markovic, Dijana Katica (1998): Microclimatic conditions in animals facility for laboratory mice and rats with focus on exchange of disinfectants, 3. Symposium on D & D, Zadar, Croatia, Proceedings.
- Markovic D., Z. Masic (1997): The feeding of pheasants (*Phasianus colchicus*) in the commercial rearing, Veterinary Congress, Cavtat, Croatia, Proceedings.
- Markovic D., N. Vranesic, Lina Bacar Huskic (1996): The influence of the different nutritional values of the pellet feed for the breeding and growth of the laboratory mouse, First Croatian Veterinary Congress with international participation, Cavtat, Croatia, Proceedings.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- Glenn Dale, Anatol Luther, Joanne Teague, Darko Markovic, Francesca Bernardini, Daniel Obrecht (2018): Outer membrane protein targeting antibiotics (OMPTAs): in vivo characterization of a novel class of compounds with respect to pharmacokinetics, efficacy and renal toxicity, 28th ECCMID, Madrid, Spain
- Maja Antolić, Vesna Eraković Haber, Željko Javorščak, Darko Marković, Ines Glojnarić, Leonardo Patrlj, Robert Kliček, Mario Kopljar, Arijana Pačić, Snježana Čužić (2017): Efficacy assessment of new chemical entities in patient derived xenografts on example of TGFB signal pathway in human colorectal cancer, 26th Ljudevit Jurak, International Symposium on Comparative Pathology, Zagreb, Croatia, Proceedings.
- Darko Marković (2016): Laboratory Animals in the pharmaceutical industry and biomedical research, 16. simpozij Istraživanja na modelima laboratorijskih životinja, Rijeka, Croatia, Proceedings.
- Ines Glojnarić, Snježana Čužić, Darko Marković (2013): Evaluation of Hidroxypropyl-beta-Cyclodextrin (HPβCD) as formulation vehicle for use in general toxicity studies in mice, Eurotox 2013, Interlaken, Switzerland, Proceedings.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Helena Markulin, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Structure, Methodology and Functioning of Scientific Work 1

BIOGRAPHY

Helena Markulin was born in Šibenik. She received MD degree from the University of Zagreb School of Medicine. She also received MA degree from Faculty of Humanities and Social Sciences, University of Zagreb. At the Faculty of Humanities and Social Sciences, University of Zagreb, she completed postgraduate study and received PhD degree. In 2015 she was elected to the scientific title of Research associate. She works as librarian in the Central Medical Library University of Zagreb School of Medicine. Since 2002 she has participated in the curriculum of University of Zagreb School of Medicine (Principles of Research in Medicine, an obligatory course for 5th year students at Zagreb University School of Medicine; Searching for Best Evidence, an elective course for the 3rd year students at Zagreb University School of Medicine; How to Write a Graduate Thesis, an elective course for the 5th year students at Zagreb University School of Medicine). She has published scientific articles in national and international scientific journals. The articles are indexed and cited in international bibliographic databases. She has presented lectures and workshops at national and international conferences. She has participated in the program and organizational committees of numerous conferences.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Škorić L, Markulin H. Otvoreni repozitoriji: repozitorij Medicinskog fakulteta Sveučilišta u Zagrebu. U: Otvorenost u znanosti i visokom obrazovanju / uredila Ivana Hebrang Grgić. Zagreb : Školska knjiga, 2018.
2. Markulin H. Analiza informacijskih potreba i načina uporabe informacijskih izvora na uzorku liječnika hrvatske kliničke bolnice. Liječnički vjesnik 2014;136:256-260.
3. Markulin H, Šember M. University of Zagreb Medical School Repository: promoting institutional visibility. Croatian Medical Journal 2014;55:89-92.
4. Markulin H, Petrak J, Šember M. Internet i studenti medicinskog fakulteta u Zagrebu: analiza navika triju generacija studenata. Vjesnik bibliotekara Hrvatske 2014;57:65-78.
5. Markulin H, Petrak J. Informacijski mrežni servis: potpora knjižnice u provođenju prakse utemeljene na znanstvenim dokazima. Liječnički vjesnik 2014;136:49-52.
6. Markulin H, Škorić L, Petrak J. Informacijska pismenost u visokoškolskom kurikulumu: sustavni pristup Medicinskog fakulteta Sveučilišta u Zagrebu. Čitalište 2014;24:9-15.
7. Škorić L, Šember M, Markulin H, Petrak J. Informacijska pismenost u nastavnom programu diplomskog studija Medicinskog fakulteta Sveučilišta u Zagrebu. Vjesnik bibliotekara Hrvatske 2012;55:17-28.
8. Markulin H, Petrak J. Medicina utemeljena na znanstvenim dokazima: stavovi zdravstvenog osoblja jedne kliničke bolnice. Liječnički vjesnik 2010;132:218-221.

9. Petrak J, Markulin H, Matić T. Information literacy in continuing professional development of medical practitioners : a Croatian example. *Health Information and Libraries Journal* 2007;25:46-49.
10. Marušić M, Markulin H, Lukić K, Marušić A. Academic Advancement of Authors Receiving Tutoring from a Medical Journal. *Teaching and Learning in the Medicine* 2006;18:126-129.
11. Markulin H, Petrak J, Šember M. Internet i studenti Medicinskog fakulteta. *Vjesnik bibliotekara Hrvatske* 2000;43:179-184.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Škorić L, Markulin H. *Otvoreni repozitoriji: repozitorij Medicinskog fakulteta Sveučilišta u Zagrebu. U: Otvorenost u znanosti i visokom obrazovanju / uredila Ivana Hebrang Grgić. Zagreb : Školska knjiga, 2018.*
2. Markulin H. Analiza informacijskih potreba i načina uporabe informacijskih izvora na uzorku liječnika hrvatske kliničke bolnice. *Liječnički vjesnik* 2014;136:256-260.
3. Markulin H, Šember M. University of Zagreb Medical School Repository: promoting institutional visibility. *Croatian Medical Journal* 2014;55:89-92.
4. Markulin H, Petrak J, Šember M. Internet i studenti medicinskog fakulteta u Zagrebu: analiza navika triju generacija studenata. *Vjesnik bibliotekara Hrvatske* 2014;57:65-78.
5. Markulin H, Petrak J. Informacijski mrežni servis: potpora knjižnice u provođenju prakse utemeljene na znanstvenim dokazima. *Liječnički vjesnik* 2014;136:49-52.
6. Markulin H, Škorić L, Petrak J. Informacijska pismenost u visokoškolskom kurikulumu: sustavni pristup Medicinskog fakulteta Sveučilišta u Zagrebu. *Čitalište* 2014;24:9-15.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Prijenos znanstveno utemeljenih medicinskih dokaza u kliničku praksu (Transfer of evidence from research to practice), 2007-2011; collaborator.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist. prof. Krešimir Martić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department for Plastic, Reconstructive and Aesthetic surgery, University Hospital „Dubrava“ Zagreb; Medical School, University of Zagreb; Chair - Surgery

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Hand Surgery, Microvascular tissue transfer

BIOGRAPHY

Education and Training

1995.-2001. Graduated at Medical School University of Zagreb

2002.-2005. Postgraduate study, Biomedicine and Health Sciences, Medical School, University of Zagreb

27.03. 2003. State licence exam

2003.-2008. Specialisation in General Surgery, Department of Surgery, University Hospital „Dubrava“ Zagreb

2010.-2012. Subspecialisation in Plastic, Reconstructive and Aesthetic surgery; Department of Plastic, Reconstructive and Aesthetic surgery, University Hospital „Dubrava“ Zagreb

1.10.2018. Head of Department of Plastic, Reconstructive and Aesthetic surgery, University Hospital „Dubrava“ Zagreb

Work experience

2.01. 2002. Research fellow, Medical School, University of Zagreb

1.11. 2003. Assistant at Surgery Chair, Medical School, University of Zagreb

1.11. 2008. Assistant at Surgery Chair, Medical School, University of Zagreb and Department of Plastic, Reconstructive and Aesthetic Surgery, University Hospital "Dubrava"

17.11. 2011. Senior-assistent at Surgery Chair, Medical School, University of Zagreb and Department of Plastic, Reconstructive and Aesthetic Surgery, University Hospital "Dubrava"

1.04.2014. Department of Plastic, Reconstructive and Aesthetic Surgery, University Hospital "Dubrava"

26.07.2017. Assist. Prof. at Surgery Chair, Medical School, University of Zagreb; Department of Plastic, Reconstructive and Aesthetic Surgery, University Hospital "Dubrava"

Scientific experience

03.10. 2011. Postgraduate doctoral degree (PhD), Medical School, University of Zagreb: „Tumor and breast volume ratio as a predictive factor for axillary lymph node metastases in T1c ductal invasive breast cancer“

2.04. 2014. Scientific grade: Research associate; field Biomedicine and Health; Clinical medicine

Investigator in project of Croatian science foundation : "Sonoelastography and magnetic resonance imaging in diagnostics and treatment of breast cancer"

Investigator in finished projects: "National model of clinical Database in maxillofacial oncology"

"The role of Microsurgery in perifer nerve injuries" and "The role of sentinel node biopsy in treatment of Melanoma and Breast cancer"

Memberships

Croatian Medical Association; Treasurer and member of Board of Croatian Society of Plastic, Reconstructive and Aesthetic Surgery - CSPRAS

European Society of Plastic, Reconstructive and Aesthetic Surgery - ESPRAS

Croatian Society of Surgery; Member of Board of Croatian Medical Sport Society

Participated in organization of numerous International Congress, Symposiums and Courses as organizing committee member, chairman and speaker.

Publications

Published over 20 scientific papers; 6 papers in journals cited by Current Contents

Published chapters in 3 books

Numerous lectures on international symposiums, congresses and courses

Personal information: Married, father of four children

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 27.06. 2017. - Assist. Prof. at Surgery Chair, Medical School, University of Zagreb

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Vljacic Z, Zic R, Skenderi Z, Bilic-Zulle L, Martic K, Stanec Z. Biomechanical trial of modified flexor tendon sutures: an in vitro study. *J Plast Surg Hand Surg.* 2012 Sep;46(3-4):222-8. doi: 10.3109/2000656X.2012.686916.
2. Žic R, Gorjanc B, Stanec Z, Budi S, Milanović R, Vljčić Z, Rudman F, Martić K, Roje Ž, Held R. Kirurška iskustva u liječenju komplikacija vrijeda. *Acta Med Croatica*, 2016. 70; 19-22.
3. Budi S, Gorjanc B, Žic R, Martić K, Rudman F, Vljčić Z, Roje Ž, Milanović R, Stanec Z. Substitute and alternative forms of treatment of skin defects. (Supstitutivni i alternativni oblici liječenja defekata kože). *Acta Med Croatica*, 2015. 69 (Supl. 1) 99-101.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Brajac I, Puizina Ivić N, Bukvić Mokos Z, Bolanča Ž, Vukšić Polić M, Žic R, Martić K, Mijatović K, Budi S. Smjernice za dijagnostiku i liječenje gnojnog hidradenitisa (hidradenitis suppurativa). Guidelines for the diagnostics and treatment of hidradenitis suppurativa. *Liječ Vjesn* 2017;139:247–253
2. Martić K. Kirurški pristup liječenju gnojnog hidradenitisa. *Humira Info*, 2017. 7; 44-48.
3. Budi S, Žic R, Martić K, Rudman F, Vljčić Z, Milanović R, Roje Ž, Munjiza A, Rajković I, Gorjanc B, Held R, Maletić A, Tucaković H, Stanec Z. Usporedba iskustava Klinike za plastičnu, rekonstrukcijsku i estetsku kirurgiju KB Dubrava u liječenju dekubitusa u vremenu od 2011. do 2016. i 2003. do 2008. godine. *Acta Med Croatica*, 2016. 70; (Supl. 1) 11-16.
4. Žic R, Gorjanc B, Stanec Z, Budi S, Milanović R, Vljčić Z, Rudman F, Martić K, Roje Ž, Held R. Kirurška iskustva u liječenju komplikacija vrijeda. *Acta Med Croatica*, 2016. 70; 19-22.
5. Budi S, Gorjanc B, Žic R, Martić K, Rudman F, Vljčić Z, Roje Ž, Milanović R, Stanec Z. Substitute and alternative forms of treatment of skin defects. (Supstitutivni i alternativni oblici liječenja defekata kože). *Acta Med Croatica*, 2015. 69 (Supl. 1) 99-101.

6. Stanec Z, Zic R, Budi S, Stanec S, Milanović R, Vlajčić Z, Roje Z, Rudman F, Martić K, Held R, Božo G. Skin and Nipple-Areola Complex Sparing Mastectomy in Breast Cancer Patients: 15-Year Experience. *Ann Plast Surg.* 2014 Nov;73(5):485-91. doi: 10.1097/SAP.0b013e31827a30e6. PMID: 24378808

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Co-leader at International 1st category practical course: Surgical materials, skin grafts and local flaps. University Hospital Dubrava, Zagreb.

Associate lecturer at International 1st category practical course: Basics of microsurgery. University Hospital Dubrava, zagreb

Arthrex Hand, Foot and Ankle Cadaver Course, ArthroLab, Munich, Germany, November 20th 2015.

Medical education in hand surgery: Hand Surgery Unit, Department of Orthopedic Surgery, Copenhagen University Hospital Gentofte, Kopenhagen, Danska, 1.- 12.06. 2015.

International 1st category course: Hand Surgery course, 23-24th May 2014. Slavonski Brod, Croatia

International 1st category course: Hand Surgery, University Hospital Dubrava, Zagreb, 20-21st May 2011.

Basic traumatic hand surgery – Instructional human cadaver dissection course. 5-6th November, 2010. Ljubljana, Slovenia.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Investigator in project of Croatian science foundation : "Sonoelastography and magnetic resonance imaging in diagnostics and treatment of breast cancer"

Investigator in finished projects: "National model of clinical Database in maxillofacial oncology"; "The role of Microsurgery in perifer nerve injuries" and "The role of sentinel node biopsy in treatment of Melanoma and Breast cancer"

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Snježana Martinović, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Smart Medico Ltd.

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Bone morphogenetic proteins in regeneration of bone and cartilage, Doctoral postgraduate study in the field of Biomedicine and public health

BIOGRAPHY

Snježana Martinović, PhD

Županova 5, 10000 Zagreb, Croatia

Phone/Fax: +385.1.2446.534

Mobile: +385.98.317.212

e-mail: snjezana.martinovic@smart-medico.hr

EDUCATION:

2001 University of Zagreb Medical School, Biomedical Sciences and Genetics (Philosophy Doctor degree); Awarded for the best PhD thesis

1993 University of Zagreb Faculty of Natural Sciences and Mathematics, Biomedical Sciences (Master of Science Degree)

1988 University of Zagreb Faculty of Natural Sciences and Mathematics, Molecular Biology (Bachelor of Science Degree)

PROFESSIONAL WORK EXPERIENCE:

2018 present Senior Clinical Research Site Manager contracted for European Society of Anaesthesiology AIBSL (ESA)

2018 present Partner in H2020 project funded by European Commission, participating in design and development of clinical trial protocol; support in regulatory activities and responsible for monitoring of the clinical trials within OsteoProSpine project <https://osteoprospline.eu/>

2016 - present Senior Clinical Research Site Manager contracted for European Clinical Research Infrastructure Network (ECRIN-ERIC) on H2020 project

2015 - 2018 Clinical Project Lead contracted for Sanofi-Aventis Croatia d.o.o.

2015 - present Senior Clinical Research Site Manager contracted for Pharm-Olam Croatia d.o.o.

2014 - 2016 Senior Clinical Research Site Manager contracted for GlaxoSmithKline Croatia d.o.o.

2014 - 2015 Senior Clinical Research Site Manager contracted for Sanofi-Aventis Croatia d.o.o.

2013 - 2016 Consultant on PaSQ project – European Union Network for Patient Safety and Quality of Care <http://www.pasq.eu/>

2013 - present Co-founder of Clinical Trial Initiative, non-profit and non-political organization for promotion of good clinical practice principles and support of clinical trials conduct in Republic of Croatia

2012 - 2017 Partner in FP7 project funded by European Commission, participating in design and development of clinical trial protocol and responsible for organization, initiation, managing and monitoring of the clinical trials within Osteogrow project <http://osteogrow.eu/>

2010 – 2012 Clinical Operations Lead contracted for Pfizer Croatia d.o.o.

- in oversight of 10 clinical trials (24 sites) phase II-IV in different therapeutic areas monitored by outsourced CRO. One site audit with no observations
- Global Study Management Interface and Site Management Interface
- Investigators' relationship management
- Regulatory/Ethics/Health Authority submission responsibilities
- Performing Protocol Specific Quality Review Visits
- Maintaining Inspection Readiness, Protocol Compliance and Audit Responsiveness

- Study organization, management and on-site coordination oversight of three sites for surgical clinical trial with over 70 subjects enrolled
- Organized and participated in 7 local Investigator Meetings

2007 – 2010 Senior Clinical Research Site Manager contracted for Pfizer Croatia d.o.o. - monitored over 13 phase II-IV trials in all major therapeutic areas.

2005 - present Business Manager Clinical Research for Smart Medico responsible for running clinical research operations (in house and outsourced – Bosnia and Herzegovina) <http://www.smart-medico.hr>

2005 – 2007 Clinical Research Site Manager contracted for Pfizer Croatia d.o.o. – monitored 8 phase III-IV trials in different therapeutic areas.

2004 - 2007 Study Coordinator in Phase II clinical trial of Closed Tibial Fractures healing at Zagreb Trauma Hospital

2003 – 2004 Study Coordinator in Phase II clinical trial of Autologous Chondrocytes Implantation at Zagreb Medical School

2001 – 2003 Study staff in Phase III Clinical trial on Postmenopausal Osteoporosis, Centre for Osteoporosis, Croatian Calcified Tissue Society, Zagreb

OTHER WORK EXPERIENCE:

2008– present: Lecturer at Croatian National GCP course organized by University of Zagreb Medical School, University Hospital Centre Zagreb and Society for Clinical Pharmacology and Therapy within the Croatian Medical Association

2002–2004 Lecturer on Undergraduate course on “Medical and Molecular Biology” University of Zagreb Medical School, Biology Dept

1998–2004 Lecturer on Postgraduate course on “Bone Morphogenetic Proteins” at University of Zagreb School of Dentistry and University of Rijeka Medical School

1995–2004 Lecturer on undergraduate courses on “Bone Metabolism”, “Molecular Biology of the Bone” and “In vitro techniques” at University of Zagreb Medical School, Anatomy Dept

1991–1994 Research Scientist, Laboratory for mineralized tissues, Anatomy Dept Zagreb Medical School

1989–1991 Research Associate, Tissue Culture Laboratory, Centre for Biomedical Research Zagreb

1988–1989 Assistant, Microbiology Dept Centre for Biomedical Research Zagreb

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2005. Senior research associate; Biomedicine and Healthcare

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Many clinical trials conduct (monitoring and oversight) over 14 years of experience; listed in the table above.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

N/A

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Many different clinical programmes for investigational medicinal products in different therapeutic areas, sponsored by different biopharmaceutical companies in last 14 years in roles of monitor and project manager.



1. "OSTEOGROW - Novel Bone Morphogenetic Protein 6 Biocompatible Carrier Device for Bone Regeneration" 2012 – 2017 (European Commission, FP7 HEALTH program, Grant Agreement No. 279239)
2. "OSTEOproSPINE - Novel Bone Regeneration Drug "Osteogrow": Therapeutic Solution for Lumbar Back Pain" 2017 – 2022 (European Commission, HORIZON 2020 program, Grant Agreement No. 779340)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. "OSTEOGROW - Novel Bone Morphogenetic Protein 6 Biocompatible Carrier Device for Bone Regeneration" 2012 – 2017 (European Commission, FP7 HEALTH program, Grant Agreement No. 279239)
2. "OSTEOproSPINE - Novel Bone Regeneration Drug "Osteogrow": Therapeutic Solution for Lumbar Back Pain" 2017 – 2022 (European Commission, HORIZON 2020 program, Grant Agreement No. 779340)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: dr.sc. Ivica Matak, research associate

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research methods in vivo and in vitro

BIOGRAPHY

dr.sc. Ivica Matak, dipl.ing.biol.

Department of Pharmacology, School of Medicine University of Zagreb, Šalata 11 (ivica.matak@mef.hr)

EDUCATION: dipl. ing. molecular biology (2008; Faculty of Science, Zagreb), PhD (2015; School of Medicine, Zagreb). EMPLOYMENT: PhD student - assistant (2009), Post Doc - assistant (2015). SCIENTIFIC RESEARCH EXPERIENCE: Department of Psychiatry, Psychosomatics and Psychotherapy, University Clinic Würzburg, Njemačka (2009, 2010, 2011; 2012); Department of Pharmacology, University of Pecs, Mađarska (2012, 2013, 2014). ASSOCIATE ON PROJECTS: 1x HRZZ, 1x MZOŠ, 2x DAAD, 6x University of Zagreb. SUPERVISOR: 1x diploma thesis. awards of supervised students: 1x rector's award. SCIENTIFIC PRODUCTIVITY: 14 research articles, >20 congress abstracts, 306 heterocitation (WoS), h-index 9. AWARDS: National science award for 2014 (for PhD students); 4 travel grants for international conferences and schools; Best poster award finalist at the World Congress of Basic and Clinical Pharmacology in Capetown, South Africa 2014; abstract chosen for oral presentation at Toxins 2019 in Copenhagen, Denmark. SCIENTIFIC INTEREST: neuroscience, neuropharmacology, experimental Alzheimer's disease. TEACHING ACTIVITIES: integrated study; Pharmacology course/studies in medicine in Croatian and English; Doctoral study Biomedicine and health: course - In vitro and in vivo research methods. MEMBERSHIPS: member of Croatian Pharmacological society.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Caleo M, Spinelli M, Colosimo F, Matak I, Rossetto O, Lackovic Z, Restani L. Transynaptic Action of Botulinum Neurotoxin Type A at Central Cholinergic Boutons. *J Neurosci*. 2018 Nov 28;38(48):10329-10337. doi: 10.1523/JNEUROSCI.0294-18.2018. (Q1)
2. Matak I, Tékus V, Bölskei K, Lacković Z, Helyes Z. Involvement of substance P in the antinociceptive effect of botulinum toxin type A: Evidence from knockout mice. *Neuroscience*. 2017 Sep 1;358:137-145. doi: 10.1016/j.neuroscience.2017.06.040. (Q3)
3. Lacković Z, Filipović B, Matak I, Helyes Z. Activity of botulinum toxin type A in cranial dura: implications for treatment of migraine and other headaches. *Br J Pharmacol*. 2016 Jan;173(2):279-91. doi: 10.1111/bph.13366. (Q1)
4. Matak I, Rossetto O, Lacković Z. Botulinum toxin type A selectivity for certain types of pain is associated with capsaicin-sensitive neurons. *Pain*. 2014 Aug;155(8):1516-26. doi: 10.1016/j.pain.2014.04.027 (Q1)
5. Matak I, Bach-Rojecky L, Filipović B, Lacković Z. Behavioral and immunohistochemical evidence for central antinociceptive activity of botulinum toxin A. *Neuroscience*. 2011 Jul 14;186:201-7. doi: 10.1016/j.neuroscience.2011.04.026. (Q3)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Caleo M, Spinelli M, Colosimo F, Matak I, Rossetto O, Lackovic Z, Restani L. Transsynaptic Action of Botulinum Neurotoxin Type A at Central Cholinergic Boutons. *J Neurosci*. 2018 Nov 28;38(48):10329-10337. doi: 10.1523/JNEUROSCI.0294-18.2018. (Q1)
2. Matak I, Tékus V, Bölcskei K, Lacković Z, Helyes Z. Involvement of substance P in the antinociceptive effect of botulinum toxin type A: Evidence from knockout mice. *Neuroscience*. 2017 Sep 1;358:137-145. doi: 10.1016/j.neuroscience.2017.06.040. (Q3)
3. Lacković Z, Filipović B, Matak I, Helyes Z. Activity of botulinum toxin type A in cranial dura: implications for treatment of migraine and other headaches. *Br J Pharmacol*. 2016 Jan;173(2):279-91. doi: 10.1111/bph.13366. (Q1)
4. Matak I, Lacković Z. Botulinum toxin A, brain and pain. *Prog Neurobiol*. 2014 Aug-Sep;119-120:39-59. doi: 10.1016/j.pneurobio.2014.06.001. (Q1)
5. Botulinum toxin type A selectivity for certain types of pain is associated with capsaicin-sensitive neurons. Matak I, Rossetto O, Lacković Z. *Pain*. 2014 Aug;155(8):1516-26. doi: 10.1016/j.pain.2014.04.027 (Q1)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1) Project of support for young investigators by European Social Fund (project leader) HR.3.2.01-0178 "Prekliničko istraživanje poremećaja pokreta pomoću klostridijskih neurotoksina": 2015-2016
2. HRZZ research project (associate) 2015 – 2017 „Clostridial neurotoxins and Brain (BrainTox)“
- 3) Projects of the University of Zagreb (associate) 2013 – 2018

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 1) Project of support for young investigators by European Social Fund (project leader) HR.3.2.01-0178 "Prekliničko istraživanje poremećaja pokreta pomoću klostridijskih neurotoksina": 2015-2016
2. HRZZ research project (associate) 2015 – 2017 „Clostridial neurotoxins and Brain (BrainTox)“
- 3) Projects of the University of Zagreb (associate) 2013 – 2018

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ratko Matijevic

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb, School of Medicine, Merkur University Hospital

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Evidence Based Medicine

BIOGRAPHY

Undergraduate education. Medical School, University of Zagreb 1984. - 1989.

Postgraduate education, Medical School, University of Zagreb

“Ultrasound in clinical medicine” 1991.-1992.

“Leadership and management of health systems (with London School of Economics) 2001.-2002.

Medical speciality training, "Royal College of Obstetricians and Gynaecologists, UK 1993. - 1998.

Qualifications:

MD 1989.

MSc 1992.

MRCOG 1996.

Specialist obstetrician and gynaecologist 1997.

PhD 2001.

Subspeciality training - fetal maternal medicine 2008.

FRCOG 2013.

Employed Professor of obstetrics and gynaecology Medical school, University of Zagreb, Merkur teaching hospital Zajčeva 19, 10 000 Zagreb 2014. –

During my undergraduate period in Croatia, I was Editor in Chief of Journal "Medicinar" (YU ISSN 0025-7966) for more than two years. Also, during my appointment as Research fellow I was supervising mastership and Ph.D. projects and organizing examinations. I was actively involved in organizing and running several teaching courses in clinical ultrasound under the auspices of the World Health Organization. In UK during my clinical attachments, I was responsible for arranging junior doctors rota, as well as actively involved in the New Curriculum at Manchester University, School of Medicine. After return to Croatia in 2000 I was elected as a member of the Quality control working party of the Ministry of health, Republic of Croatia. I was directly responsible for the quality control being a Chairman of the hospital accreditation committee.

From year 2000, I was editorial secretary of the “Review on ultrasound in obstetrics and gynecology” Journal. Published by Parthenon Publishing (London, New York). From year 2004 I was Executive editor of the same Journal. Organizer of 37-th International Annual Meeting of the Society for the Study of Pathophysiology of Pregnancy, Organization Gestosis», 20.-22.5.2005., Zagreb, Croatia

Member of several different organizing Committees including World Congress of Perinatal Medicine, Zagreb 2005.

Since 2010 initially I was acting CMO of Sveti Duh Hospital in Zagreb, Croatia, during transition period. At that time I was responsible for full management of the clinical institution ie. acute clinical hospital, including medical and financial sectors. After that period, since Oct 2010, I was appointed as deputy CMO

and CMO in the same hospital. I have full financial and clinical responsibility in hospital management including clinical governance, risk management, assessment of medical technologies. Managerial skills though clinical audit as well as management of clinical protocols and financial cost effective assessment programs on local (hospital) and national level. Responsibility for key performance indicators on local and national level.

Clinical experience

During my elective period my main field of interest was diagnostic and therapeutic ultrasound in obstetrics and gynecology. The post was undertaken in the University Department of Obstetrics and Gynecology which is a WHO Collaborative Centre for Diagnostic Ultrasound and referral tertiary centre for fetal medicine in Croatia.

During my training I had an education of clinical obstetrics and gynecology in "Sveti Duh" Hospital, Zagreb, Croatia, Mill Road Maternity Hospital (SHO) Liverpool, UK, Womens Hospital Liverpool, UK, Leighton Hospital, Crewe, UK and Arrowe Park Hospital, Wirral, UK.

After MRCOG exam and continuation of my training in Womens Hospital, Liverpool, UK and St. Mary's Hospital, Manchester, UK I am capable of performing all diagnostic and therapeutic procedures in obstetrics and gynecology. My special field of interest and expertise is fetal – maternal medicine.

Research experience

Several research projects in clinical obstetrics and gynecology mostly in Fetal-maternal medicine and screening for ovarian cancer. Research fellow at Ministry of science, education and sport Republic of Croatia project 3-01-201 "Screening for early stages of ovarian cancer by transvaginal colour Doppler ultrasound". In UK three research projects: principal investigator "Blood flow in spiral arteries in pregnancy", Manchester University. Investigators at "ATAC - Armidex, Tamoxifen alone or in Combination Protocol" Number 1033IL/0029 developed jointly between Zeneca Pharmaceuticals and the Cancer Research Campaign (CRC) and investigator at "Double blind randomised study of the efficacy and tolerance of the sequential combination of 17beta estradiol 2 mg and TRIMEGESTONE 0.25 mg or 0.5 g in comparison with the sequential combination of estradiol valerate 2 mg and norgestrel 0.5 mg during one year in postmenopausal woman" (Number RU 27987 t/3003). Since 2002, principal investigator for Ministry of science, education and sport Republic of Croatia with grant project "Diagnosis and treatment of preterm labor", No 0129111. Since 2004, investigator at international project "Twin birth study" under auspice of MIRU, Toronto, Canada. From 2006 to date I am project leader and principal investigator on "Screening for preterm labor" project under auspice of Croatian Ministry of science, education and sport, project no 109-000000-0387.

Teaching experience

As a research fellow I was granted a status equivalent to an honorary assistant at University Department of Obstetrics and Gynecology and the WHO Collaborative Centre for Diagnostic Ultrasound. My duties included lecturing to Croatian and English-speaking mastership candidates, supervising their mastership and Ph.D. projects and organizing examinations. I was actively involved in organizing and running several teaching courses in clinical ultrasound under the auspices of the World Health Organization.

During my appointments in the UK, I taught fourth year medical students from the Universities of Liverpool and Manchester. This was continued during my appointment as Clinical Lecturer. I was directly responsible for the teaching medical students from the University of Manchester, as well as involved in organizing examinations. This involved problem-based learning, tutorials and clinic teaching. I was actively involved in the developing and establishing the New Curriculum in the year 1997.

After my return to Croatia, I was actively involved in teaching as a honorary lecturer in the University department of obstetric and gynecology. I was teaching undergraduate students (4th and 5th year of the Medical school) as well as postgraduate candidates at postgraduate course “Ultrasound in clinical medicine”. Our institute is running the Basic ultrasound course in obstetrics and gynecology (under auspices of the Medical school, University of Zagreb and Croatian medical association) where I am one of the teachers. As well as that, I am one of the organizers of “European school of perinatal medicine” which until now had 4 successful courses. At postgraduate study I am lecturing at the “Evidence based medicine” University of Zagreb, Croatia. At postgraduate study “Leadership and management of health systems” I am running the topics “Clinical governance” and “Evidence based medicine”.

Presently as assistant professor I am responsible for all undergraduate and postgraduate teaching program at University Department of obstetrics and gynecology at Sveti Duh hospital

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

listed in published work

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Živković N, Krezo S, Matijević R, Živković K. Vaginal delivery through annular placenta – Case report. Croatian Medical Journal 2013;54:203-5

Collaborator u: Barrett JF, Hannah ME, Hutton EK, Willan AR, Allen AC, Armson BA, Gafni A, Joseph KS, Mason D, Oglsson A, Ross S, Sanhhez JJ, Asztalos EV, Twin Birth Study Collaborative Group. A randomized trial of planned caesarean or vaginal delivery for twn pregnancy. N Engl J Med 2013;369:1295-1305

Stipoljev F, Vicic A, Matijevic R. Prenatal diagnosis of pericentric inversion homozygosity for chromosome 9. Journal of Obstetrics and Gynaecology 2014;34:189-190

Vasilj O, Matijevic R, Blagaic V, Miskovic B. Do we sometimes see toomuch? Prenatal diagnosis of a true umbilical cord knot. Eur J Obstet Gynecol Reprod Biol. 2015;187:73-74

Collaborator u: Hutton EK, Hannah ME, Ross S, Joseph KS, Ohlsson A, Asztalos EV, Willan AR, Allen AC, Armson BA, Gafni A, Mangoff K, Sanchez JJ, Barrett JF; Twin Birth Study Collaborative Group. Maternal outcomes at 3 months after planned casesarean section versus planed vaginal birth for twin pregnancies in the Twin Birth Study: a rendomised controlled trial. BJOG 2015;122(12)1653-62

Madžarac V, Matijevic R, Škrtić A, Duić Ž, Fistnoić N, Partl JZ. Pentalogy of Cantrell with unilateral kidney evisceration. A case report and review of Literature. Fetal Pediatr Pathol. 2016;35:43-9

Kordic S, Matijevic R. Mijenja li rutinske atohistološka analiza kiretmana poremećene rane trudnoće daljnji tijek liječenja? Act Med Croat 2016;70:97-101

Matijevic R, Erjavec K. Resposibilities of pregnant women for on going pregnancy – medical aspects. Medicine, Law and Society 2016;9:121-130

Erjavec K, Poljicanin T, Matijevic R. Impact of the implementation of new WHO diagnostic criteria for gestational diabetes on prevalence and pretnatal outcome: a population based study. J Pregnancy 2016; 2670912. doi: 10.1155/2016/2670912

Matijevic R, Erjavec K. Knowledge and attitudes among pregnant women and maternity staff about umbilical cord banking. Transfusion medicine 2016;26:462-466



Filipec M, Matijevic R. Effectiveness of exercise compared to wearing support belt in order to stabilise the sacroiliac joints and reduce the symptoms of sacroiliac dysfunction in pregnancy. *Liječnički Vjesnik* 2017;139:277-280

Vince K, Poljicanin T, Brkic M, Rodin U, Matijevic R. Prevalence of diabetes five years after having gestational diabetes during pregnancy – Croatian national study. *Primary Care Diabetes* 2018;12:325-330

Filipec M, Jadanac M, Kostovic-Srzentic M, van der Vaart H, Matijevic R. Incidence, pain and mobility assessment of pregnant women with sacroiliac dysfunction. *Int J Gynaecol Obstet* 2018; Jun 7. doi: 10.1002/ijgo.12560. [Epub ahead of print]

Perkovic P, Vince K, Matijevic R. Methotrexate therapy in gynaecological patients: four year experience at a tertiary referral center. *Acta Medica Croatica* 2018; 72:319-324

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

listed in CV

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

listed in CV

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Sanja Mazić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of Molecular Biology in Medicine

BIOGRAPHY

Sanja Mazić was born in 1972. in Zadar. She graduated in 1997. at the The University of Zagreb, School of Medicine. In 2005. she defended her Master's thesis and obtained the title Master of Science in University of Zagreb, Medical school, Postgraduate course Medical sciences. In 2011. she defended her doctoral thesis at the University of Zagreb, Faculty of Natural Sciences and obtained her PhD title. In 2015. she was promoted to Research Associate at The University of Zagreb School of Medicine. In period from 2001. to 2005. she completed Residency in Transfusion medicine in University Hospital Centre Zagreb (UHC Zagreb) and became a Transfusion medicine specialist. Since 2005 she has been employed as a Medical doctor -Transfusion medicine specialist at the Clinical Department of Transfusion Medicine and Transplantation Biology, UHC Zagreb. In 2007. she received a scholarship of Government of Republic of France wich supported a professional visit to EFS (Établissement Français du Sang-Aquitaine-Limousin) Établissement Français du Sang-Aquitaine-Limousin; Bordeaux, France. Since 2011. she is working as a Cord Blood Bank Medical Director within the Department. In 2013. she completed International On-line Course in Tissue Banking, Cell Therapy and Regenerative Medicine at University of Barcelona (Extension Certificates).

She continued her education in the field of stem cell and cord blood collection and transplantation during several professional visits to stem cell and cord blood facilities (2015. St. Anna Kinderesptall, Wienna- bone marrow thransplant unit (extracorporeal photopheresis; program director Dr. Volker Witt); 2012. New York Blood Center, Cord Blood Bank, USA (medical director Dr. Pablo Rubinstein); 2008. European Homograft Bank (EHB)-Cardiovascular Tissue Bank; Military Hospital;Dr. Ramadan Jashari, Brussels, Belgium; 2007. Universitätsklinikum Düsseldorf, Germany; Institute for Transplantation Diagnostics and Cell Therapeutics / Cord Blood Bank).

She participates in one course at Specialist postgraduate study in Transfusion Medicine at The University of Zagreb School of Medicine.

She was the autor or co-author in 14 published papers and 67 conference reports. She was a member of a local scientific comittee at 4th International cGVHD Symposium and EBMT TCWP Educational Meeting. 9-10. November 2018. Zagreb. She is a member of the Croatian Society for Transfusion Medicine and Croatian cooperative group for hematologic diseases (KROHEM). Her scientific interests are related to the fields of cellular therapy and cell and tissue banking.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2015., Research Associate, The University of Zagreb School of Medicine

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Ines Bojanic Marinka Mravak Stipetic Drazen Pulanic Lana Desnica Sanja Mazic Branka Golubic Cepulic Ranka Serventi Seiwert Radovan Vrhovac Damir Nemet Steven Z. Pavletic Autologous blood as a source of platelet gel for the effective and safe treatment of oral chronic graft-versus-host disease First published: 14 March 2018 <https://doi.org/10.1111/trf.14594>

2. Tomac G, Bojanić I, Mazić S, Vidović I, Raos M, Čepulić BG, Seiwerth RS, Kelečić J, Labar B. Haemolysis, pure red cell aplasia and red cell antibody formation associated with major and bidirectional ABO incompatible haematopoietic stem cell transplantation. *Blood Transfus.* 2017 Apr 19;1:8. Doi 10.2450/2017.0322-16. [Epub ahead of print]
3. Igor Aurer · Damir Nemet · Zdravko Mitrović · Dino Dujmović · Sandra Bašić-Kinda · Ivo Radman · Dubravka Sertić · Fedor Šantek · Marko Kralik · Snježana Dotlić · Sanja Mazić · Boris Labar. High-dose ifosfamide and mitoxantrone (HDIM) in patients with relapsed or refractory Hodgkin's lymphoma. *Apr 2016 Annals of Hematology*
4. Mörtzell Henriksson M, Newman E, Witt V, Derfler K, Leitner G, Eloit S, Dhondt A, Deeren D, Rock G, Ptak J, Blaha M, Lanska M, Gasova Z, Hrdlickova R, Ramlow W, Prophet H, Liumbruno G, Mori E, Griskevicius A, Audzijoniene J, Vrielink H, Rombout S, Aandahl A, Sikole A, Tomaz J, Lalic K, Mazic S, Strineholm V, Brink B, Berlin G, Dykes J, Toss F, Axelsson CG, Stegmayr B, Nilsson T, Norda R, Knutson F, Ramsauer B, Wahlström A. Adverse events in apheresis: An update of the WAA registry data. *Transfus Apher Sci.* 2016 Feb;54(1):2-15. doi: 10.1016/j.transci.2016.01.003. Epub 2016 Jan 8. Review
5. Ines Bojanic, Sanja Mazic, Ljubica Rajic, Gordana Jakovljevic, Jasminka Stepan, Branka Golubic Cepulic . Large volume leukapheresis is efficient and safe even in small children up to 15 kg body weight. Published online: 13/01/2016 Doi 10.2450/2016.0151-1
6. Bojanić I, Seiwerth RS, Mazić S, Dubravčić K, Batinić D, Cepulić BG, Labar B. Extracorporeal photopheresis in treatment of chronic graft versus host disease. *Lijec Vjesn.* 2013 May-Jun;135(5-6):139-44
7. Ivanovic Z, Rodriguez L, Mazic S, Duchez P, Dazey B, Lafarge X, Vlaski M, Boiron JM. Cord (placental) blood storage: extent and functional aspects. *Transfusion.* 2011 Sep;51(9):2044-2045
8. Bojanic I, Dubravcic K, Batinic D, Cepulic BG, Mazic S, Hren D, Nemet D, Labar B. Large volume leukapheresis: Efficacy and safety of processing patient's total blood volume six times. *Transfus Apher Sci.* 2011 Apr;44(2):139-47
9. Raos M, Nemet D, Bojanić I, Sertić D, Batinić D, Dusak V, Dubravčić K, Mazić S, Serventi-Seiwerth R, Mrsić M, Golubić-Cepulić B, Labar B. Collection and composition of autologous peripheral blood stem cells graft in patients with acute myeloid leukemia: influence on hematopoietic recovery and outcome. *Coll Antropol.* 2010 Mar;34(1):105-15
10. Bojanić I, Mazić S, Cepulić BG. Peripheral blood hematopoietic stem cell collection. *Lijec Vjesn.* 2009 Nov-Dec;131(11-12):315-23
11. Cepulić BG, Bojanić I, Mazić S. Cord blood banking. *Acta Med Croatica.* 2009 Jun;63(3):245-50
12. Bojanić I, Cepulić BG, Mazić S. Collection of hematopoietic progenitor cells from healthy donors. *Acta Med Croatica.* 2009 Jun;63(3):237-44
13. Bojanic I, Cepulic BG, Mazic S, Batinic D, Nemet D, Labar B. Toxicity related to autologous peripheral blood haematopoietic progenitor cell infusion is associated with number of granulocytes in graft, gender and diagnosis of multiple myeloma. *Vox Sanguinis,* 2008 Jul;95(1):70-75
14. Martinovic S, Mazic S, Kisic V, Basic N, Jakic-Razumovic J, Borovecki F, Batinic D, Simic P, Grgurevic L, Labar B, Vukicevic S. Expression of bone morphogenetic proteins in stromal cells from human bone marrow long-term culture. *J Histochem Cytochem.* 2004 Sep;52(9):1159-67

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Ines Bojanic Marinka Mravak Stipetic Drazen Pulanic Lana Desnica Sanja Mazic Branka Golubic Cepulic Ranka Serventi Seiwert Radovan Vrhovac Damir Nemet Steven Z. Pavletic Autologous blood as a source of platelet gel for the effective and safe treatment of oral chronic graft-versus-host disease First published: 14 March 2018 <https://doi.org/10.1111/trf.14594>
2. Tomac G, Bojanić I, Mazić S, Vidović I, Raos M, Čepulić BG, Seiwert RS, Kelečić J, Labar B. Haemolysis, pure red cell aplasia and red cell antibody formation associated with major and bidirectional ABO incompatible haematopoietic stem cell transplantation. *Blood Transfus.* 2017 Apr 19;1-8. Doi 10.2450/2017.0322-16. [Epub ahead of print]
3. Igor Aurer · Damir Nemet · Zdravko Mitrović · Dino Dujmović · Sandra Bašić-Kinda · Ivo Radman · Dubravka Sertić · Fedor Šantek · Marko Kralik · Snježana Dotlić · Sanja Mazić · Boris Labar. High-dose ifosfamide and mitoxantrone (HDIM) in patients with relapsed or refractory Hodgkin's lymphoma. *Annals of Hematology* 2016
4. Mörtzell Henriksson M, Newman E, Witt V, Derfler K, Leitner G, Elöot S, Dhondt A, Deeren D, Rock G, Ptak J, Blaha M, Lanska M, Gasova Z, Hrdlickova R, Ramlow W, Prophet H, Liumbruno G, Mori E, Griskevicius A, Audzijoniene J, Vrielink H, Rombout S, Aandahl A, Sikole A, Tomaz J, Lalic K, Mazic S, Strineholm V, Brink B, Berlin G, Dykes J, Toss F, Axelsson CG, Stegmayr B, Nilsson T, Norda R, Knutson F, Ramsauer B, Wahlström A. Adverse events in apheresis: An update of the WAA registry data. *Transfus Apher Sci.* 2016 Feb;54(1):2-15. doi: 10.1016/j.transci.2016.01.003. Epub 2016 Jan 8. Review
5. Ines Bojanic, Sanja Mazic, Ljubica Rajic, Gordana Jakovljevic, Jasminka Stepan, Branka Golubic Cepulic . Large volume leukapheresis is efficient and safe even in small children up to 15 kg body weight. Published online: 13/01/2016 Doi 10.2450/2016.0151-1

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Scientific projects

- "Molecular markers in solid tumors-predictive and prognostic value" (project leader: Prof.dr. Stjepko Pleština, MD.; # 108-1080058-0047)
- "The role of PI3K/Akt i MAPKin regulation of chemoresistant leukaemic cells" (project leader: prof. D. Batinić, MD#: 214-1081347-0355)

European projects

- IPA2009 Twinning project Croatia, Spain and Italy „ Strengthening of the institutional capacity for blood, tissues and cells”; Ministry of health, Croatia
- ARTHIQS Joint Action project: Assisted Reproductive Technologies and Haematopoietic stem cells Improvements for Quality and Safety throughout Europe; Ministry of health, Croatia

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Vesna Medved, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine,
University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Liver transplantation in children

BIOGRAPHY

Prof. dr. sc. Vesna Medved was born on 2 May 1953 in Zagreb where she attended elementary school, high school and enrolled at the Faculty of Medicine of the University of Zagreb where she graduated in 1978. After working in primary health care, psychiatry specialization started in 1984 at Vrapče Psychiatric Hospital and a specialist examination passed in 1987. Since then she has been employed at KBC Rebro Clinic for Psychiatry.

During her specialization, she completed her postgraduate studies from Clinical Pharmacology at the Faculty of Medicine, University of Zagreb. In 1989 she defended her master's thesis entitled "The Relationship of Productive and Unproductive Schizophrenic Symptoms with Hemodynamic and Cognitive Functions". Since 1990, she has also been teaching in cumulative employment at the Department of Psychiatry with Medical Psychology at the Faculty of Medicine of the University of Zagreb. In 1992 he was appointed as a scientific assistant.

She defended her doctoral thesis in 1995 at the Faculty of Medicine titled "Topographic Differentiation between Schizophrenia and Depression with regard to Audience Evoked Potentials and Regional Cerebral Flow". Since 2004, she has a specialty in biology psychiatry. Since 2007, she is head of the Institute for Anxiety and Stress-induced Disorders.

She has been professionally and scientifically trained abroad on several occasions. School year 1979/80. she spent her professional training in Boston, USA. During her stay, she passed the ECFMG (Educational Commission for Foreign Medical Graduates) exam, and thus gained the right to work as a doctor in the United States. The school year 1990/91 was attended by Massachusetts Mental Health Center at Harvard Medical School in Boston drawing up a doctoral dissertation and as an associate in a research project in the field of biological psychiatry. In 1997 she participated in the Salzburg Cornell Seminar in Salzburg on the subject of "Psychiatry and Psychotherapy". In 1999, she graduated from the Algeteine Krankenhaus (AKH) Psychiatric Clinic in Vienna.

In 1997 she was appointed a position of assistant professor in the cumulative work of the Department of Psychiatry with Psychology, Psychiatry, and in 2002 as Associate Professor and in 2009 as a full professor. Participates in undergraduate teaching in Psychiatry, postgraduate courses in selected chapters from Psychiatry for Clinical Pharmacology, Neurology, Psychotherapy, Psychology for Students at the Faculty of Philosophy, University of Zagreb and undergraduate Psychiatry at the Higher Medical School in Zagreb. He is a lecturer in postgraduate studies at the Faculty of Medicine, University of Zagreb, at the PhD program in Biomedicine and Health, Family Medicine, Social Psychiatry, Psychotherapy and Liver Transplantation in Childhood. He is a mentor for undergraduate students at the Faculty of Medicine. From the academic year 2008/2009 she is the head of the elective subject "The Depression of Modern Society" at the Faculty of Medicine, University of Zagreb. Since 2008 he has been a member of the Commission for Academic Integrity, since 2009 member of the Ethics Committee, since 2010 member of the Working Group for Biomedical Research, and since 2014 has been appointed to the Commissioner for the Protection of Dignity of Workers at the Faculty of Medicine of the University in Zagreb. Since 2015, she is a member of the Postgraduate Education Council. Mentor has three defended doctoral dissertations and four doctoral

dissertations that passed the Public Debate. He is the head of the postgraduate course of the 1st category, which has been held three times so far.

The 2012 Ministry of Health nominated an application for a Specialist Psychiatric Training Program Leader. Since then, he has been the head of postgraduate specialist psychiatric studies held each year in the winter and summer semester.

She has collaborated in the projects of the Ministry of Science and Technology of the Republic of Croatia "Biological Indicators in Diagnosis and Treatment of Psychiatric Disorders (1990-1997) and" Anthropological and Motor Characteristics at the Age of 19-23 Years "(1992-1995). She conducted a scientific project titled "Assessing frontal lobe dysfunction in negative schizophrenia and unipolar depression by regional cerebral blood flow and evoked potentials" under the program Neurology of schizophrenia. She was the head of a scientific research project titled "Pathophysiology of Schizophrenia" under the auspices of the Ministry of Science and Technology of the Republic of Croatia. The review is an international multinational ERC Advanced Grant application "Population dynamics and stress affecting health and aging," one of the associates.

She has been the Secretary of the Croatian Psychiatric Association since 1994 until 2014. Since then she has participated in the organization of the Psychiatric Days Congress, which is reflected every year in Opatija and the National Psychiatric Congress held every four years. Since 2005 Member Komisij

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2009

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Božina N, Jovanović N, Podlessek A, Rojnić Kuzman M, Kudumija Slijepčević M, Roguljić A, Dimitrović A, Božina T, Lovrić J, Ljubić H, Medved V. Suicide ideators and attempters with schizophrenia - The role of 5-HTTLPR, rs25531 and 5-HTT VNTR intron 2 variants. J Psychiatr Res. 2012;46(6):767-73
- A.C.C. Kao, M. Rojnić Kuzman, A.K. Tiwari, M.V. Zivkovic, N.I. Chowdhury, V. Medved, I. Kekić, C.C. Zai, J.A. Lieberman, H.Y. Meltzer, T. Božina, N. Božina, J.L. Kennedy, J. Sertić, D.J. Muller. Methylenetetrahydrofolate reductase gene variants and antipsychotic-induced weight and metabolic disturbances. J Psychiatr Res. 2014;54:36-42
- Jovanović N, Podlessek A, Medved V, Grubišin J, Mihaljević-Peleš A, Goran T, Lovretić V. Association between psychopathology and suicidal behavior in schizophrenia. A cross-sectional study of 509 participants. Crisis. 2013 Jan;34(6):374-81. doi:10.1027/0227-5910/a000211. PubMed PMID:23942386.
- Kuzman MR, Medved V, Velagić V, Goluzić E, Bradas Z. The use of electroconvulsive therapy to treat schizoaffective disorder in a patient with pacemaker: a case report. Psychiatr Danub. 2012;24(2):211-4.
- Medved V, Medved S, Skocic Hanzek M. Transplantation psychiatry: an overview. Psychiatr Danub. 2018. in press.
- Medved S, Ostojic Z, Jurin H, Medved V. Takotsubo cardiomyopathy after the first electroconvulsive therapy regardless of adjuvant beta-blocker use: a case report and literature review. Croatian medical journal. 2018. 59(6), 307-312.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1: Medved V, Medved S, Skočić Hanzek M. Transplantation Psychiatry: an Overview. Psychiatr Danub. 2019 Mar;31(1):18-25. doi: 10.24869/psyd.2019.18. PubMed PMID: 30948685.

2: Medved S, Ostojić Z, Jurin H, Medved V. Takotsubo cardiomyopathy after the first electroconvulsive therapy regardless of adjuvant beta-blocker use: a case report and literature review. *Croat Med J.* 2018 Dec 31;59(6):307-312. Review. PubMed PMID: 30610773; PubMed Central PMCID: PMC6330774.

3: Keller N, Medved V, Armano G. The Influence of Maternal Personality and Risk Factors for Impaired Mother-Infant Bonding on Breastfeeding Duration. *Breastfeed Med.* 2016 Dec;11:532-537. Epub 2016 Nov 2. PubMed PMID: 27805427.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Quantitative EEG Indicators in Depressive and Schizophrenic Patients

Pharmacogenetic variability in psychiatric patients

Functional genomics and proteomics of risk factors of atherosclerosis

Sjögren's syndrome - neurohumoral regulation of autoimmunity and atherogenesis

The role of inflammatory processes in the emergence of malignant tumors

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mario Medvedec, BSc(EE) MSc PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Analysis of Medical Images

BIOGRAPHY

1964 born in Zagreb

1971- 1983 primary and secondary school in Zagreb

1984 – 1989 Faculty of Electrical Engineering University of Zagreb, graduated electrical engineer

since 1990 Clinical Biomedical Engineer at the Department for Nuclear Medicine and Radiation Protection, University Hospital Centre Zagreb and School of Medicine University of Zagreb

1995. Faculty of Electrical Engineering and Computing University of Zagreb, master's thesis " Body Radioactivity Measuring System ", Master of Science in the area of Technical Sciences, Field Electrical Engineering

since 1995 researcher in national and international scientific projects

since 2002 lecturer / senior lecturer at Zagreb Health Polytechnics

since 2003 the lecturer and expert of the International Atomic Energy Agency (IAEA)

2006 School of Medicine University of Zagreb, Doctoral Dissertation "Dosimetry Study of Radioiodine Therapy for Thyroid Carcine", PhD in the area of Biomedicine and Health Sciences, Field Clinical Medical Sciences

2009 - 2015 elected member of the Clinical Engineering Division / International Federation for Medical and Biological Engineering (CED / IFMBE)

since 2012 research associate / senior research associate in the area of Biomedicine and Health sciences, field of Clinical Medical Sciences

since 2013 World Health Organization (WHO) expert and adjunct professor of the Medical Physics doctoral study at the Faculty of Sciences University of Zagreb

2015 – 2021 elected member of the Health Technology Assessment Division / International Federation for Medical and Biological Engineering (HTAD / IFMBE)

He participates in professional and scientific research in the field of biomedical engineering and medical physics, especially nuclear medicine and radiation protection, and undergraduate and postgraduate teaching at the various higher education institutions. He is the author of 40+ articles (10 CC) and 100+ abstracts (59 CC) in journals and proceedings cited 130+ times, and 6 chapters in books. He is a participant of numerous professional and scientific events and a member of ten professional societies.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Huić D, Grošev D, Poropat M, Bubić-Filipi LJ, Dodig D, Ivančević D, Medvedec M. Quantitative analysis of blood flow in the estimation of renal transplant function. Radiology & Oncology 1993; 27:105-Medvedec M, Huić D, Pavlinović Ž, Popović S, Dodig D. A whole body counter for in vivo measurement of radioactivity. In: Magjarević R, Štambuk-Boršić N, editors. Proceedings of 10th international symposium of biomedical engineering '96. Zagreb: KoREMA, 1994:58–61

Huić D, Dodig D, Jurašinović Ž, Težak S, Poropat M, Ivičević A, Bambir M, Medvedec M. Simple quantitative analysis of Ga-67 lung scintigraphy - normal values. Radiology & Oncology 1995; 29:12-4.

Huić D, Medvedec M, Dodig D, Popović S, Ivančević D, Pavlinović Ž, Žuvić M. Radioiodine uptake in thyroid cancer patients after diagnostic application of low-dose I-131. Nuclear Medicine Communication 1996; 17:839-842.

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Grošev D, Medvedec M, Lončarić S, Žuvić M, Dodig D, Šmuc T. Determination of small objects from pinhole scintigrams. Nuclear Medicine Communications 1998; 19:679-688.

Medvedec M, Huić D, Žuvić M, Grošev D, Popović S, Dodig D, Pavlinović Ž. I-131 total body burden in postsurgical patients with thyroid cancer. Radiology & Oncology 1998; 32(3):281-287.

Medvedec M, Dodig D. External radiation dosimetry aspects of patients receiving radioiodine for thyroid cancer. In: Magjarević R, ed. Proceedings of 8th IMEKO TC-13 conference on measurement in clinical medicine & 12th international symposium on biomedical engineering '98. Zagreb: KoREMA, 1998:5.37–5.39.

Poropat M, Batinić D, Bašić M, Nižić LJ, Dodig D, Milošević D, Votava-Raić A, Težak S, Vrljičak K, Huić D, Medvedec M. Tc-99, DTPA renal scintigraphy using deconvolution analysis with six functional images of the mean time to evaluate acute pyelonephritis. Clinical Nuclear Medicine 1999; 24(2):120-124.

Medvedec M. Seeking a radiobiological explanation for thyroid stunning. Eur J Nucl Med 2001;28(3):393-395.

Medvedec M, Dodig D. Measurement of contact absorbed dose rate of I-131 over thyroid remnant in patients with thyroid cancer. In: Magjarević R, ed. Proceedings of the International Federation for Medical & Biological Engineering IX Mediterranean Conference on Medical and Biological Engineering and Computing MEDICON 2001. Zagreb: FER & CROMBES, 2001:803–806.

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Medvedec M. Thyroid stunning in vivo and in vitro. Nuclear Medicine Communications 2005;26:731-735.

Medvedec H, Medvedec M. Opće smjernice nuklearnomedicinskog oslikavanja. Radiološki vjesnik 2005;XXXV(2):5-14. ISSN:0352-9835.

Medvedec M. Peti međunarodni kongres Hrvatskog društva za nuklearnu medicinu. Radiološki vjesnik 2005;XXXV(2):30. ISSN:0352-9835.

Medvedec M, Dermol A, Sejdinović S, Šabulić I. Nuklearna medicina i inženjeri medicinske radiologije u Hrvatskoj. Radiološki vjesnik 2005;XXXV(2):33-34. ISSN:0352-9835

Grošev D, Medvedec M, Kasal B, Dodig D. Upgrade of the Canberra Accuscan in-vivo whole body counting system. In: Čavlina N, Pevec D, Bajs T, ed. Proceedings and book of abstracts of 6th International Conference on Nuclear Options in Countries with Small and Medium Electricity Grids. Zagreb: Croatian Nuclear Society, 2006;S-3.22 i S-3.104.1-13.

Medvedec M. Protection against ionising radiation in national and international nuclear medicine environment / Zaštita od zračenja u domaćem i međunarodnom nuklernomedicinskom okružju. Acta Clin Croat 2007; 46(Suppl. 3):53-56.

Medvedec M. Uvod u molekularno oslikavanje. Radiološki vjesnik 2007;XXXVII(2):13-17. ISSN:0352-9835.

Medvedec M. Elektronički potpomognuta daljinska izobrazba tehnologa u nuklearnoj medicini. Radiološki vjesnik 2008;XXXVIII(2):27-32. ISSN:0352-9835.

Medvedec M. Uvod u kliničko inženjerstvo. Radiološki vjesnik 2009;XXXIX(1):14-16. ISSN:0352-9835.

Kusacic Kuna S, Samardzic T, Tesic V, Medvedec M, Kuna K, Bracic I, Despot M, Dodig D. Thyroid remnant ablation in patients with papillary cancer: a comparison of low, moderate, and high activities of radioiodine. Nucl Med Commun. 2009 Apr;30(4):263-9.

Medvedec M. A New Age for Recombinant Human Thyroid-Stimulating Hormone?. Journal of Nuclear Medicine 2009;50(5):832.

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Medvedec M, Yadin D. From the Society - CED Committee: Clinical Engineering Certification. In: Lin KP (eds). IFMBE News. Singapore: International Federation for Medical and Biological Engineering, 2011; No. 88 (Nov.-Jan. 2011/2012): 14-16.

Medvedec M, Kovačević N, Magjarević R. EMITEL: e-enciklopedija i e-rječnik tehnologija medicinskog oslikavanja. U: Krajcar Bronić I, Kopjar N, Milić M, Branica G, (ur). Zbornik radova VIII simpozija Hrvatskog društva za zaštitu od zračenja. Zagreb: HDZZ, 2011:54-59.

Medvedec M. Medicinska fizika i biomedicinsko inženjerstvo u kliničkom okružju i pravnom okruženju. U: Knežević Ž, Majer M, Krajcar Bronić I (ur). Zbornik radova IX simpozija Hrvatskog društva za zaštitu od zračenja. Zagreb: HDZZ, 2013:59-64.

Medvedec M. Global program for certification of local clinical engineers: back to the future. In: Roa Romero L.M. (ed). IFMBE (International Federation for Medical and Biological Engineering) Proceedings 41 of the XIII Mediterranean Conference on Medical and Biological Engineering and Computing – MEDICON 2013. Berlin Heidelberg New York: Springer, 2014; Volume 41: 1092–1095.

Medvedec M. Why some clinical biomedical engineers may doubt today whether to stay or go away?. In: Lacković I., Vasić D. (ed). Proceedings 45 of the 6th European Conference of the IFMBE (International Federation for Medical and Biological Engineering) - MBEC 2014. Berlin Heidelberg New York: Springer, 2014; Volume 45: 974-977.

Medvedec M. Vision and Provision of Clinical Engineering Division - CED/IFMBE. Folia Med. Fac. Med. Univ. Saraeviensis 2015; 50(1): 12-17.

Medvedec M. Zaštita od zračenja zdravstvenih suradnika. U: Petrinc B, Bituh T, Milić M, Kopjar N (ur). Zbornik radova desetog simpozija Hrvatskog društva za zaštitu od zračenja. Zagreb: HDZZ, 2015:56-61.

Medvedec M. Protection from radiation of allied health professionals. In: Petrinc B, Bituh T, Milić M, Kopjar N (eds). Proceedings of the tenth Symposium of the Croatian Radiation Protection Association. Zagreb: CRPA, 2015:56-61.

Medvedec M. Oh dear medical physicist and biomedical engineer, why is it difficult to pioneer your specialist career? In: D.A. Jaffray (ed.), World Congress on Medical Physics and Biomedical Engineering June 7-12, 2015, Toronto, Canada, IFMBE (International Federation for Medical and Biological Engineering) Proceedings, 2015; Volume 51: 1639-42.

Medvedec M. Global Survey on Biomedical Engineering Professionals in Health Technology Assessment. In: Badnjević A. (eds). CMBEBIH 2017 - IFMBE (International Federation for Medical and Biological Engineering) Proceedings of the International Conference on Medical and Biological Engineering 2017. Singapore: Springer, 2017; Volume 62: 595-598.

Medvedec M. Bespuća prevoditeljske zbiljnosti o ionizirajućem zračenju. U: Radolić V, Poje Sovilj M, Krajcar Bronić I (ur). Zbornik radova jedanaestog simpozija Hrvatskog društva za zaštitu od zračenja. Zagreb: HDZZ, 2017:94-99. Medvedec M. Wastelands of translation reality of ionizing radiation. In: Radolić V, Poje Sovilj M, Krajcar Bronić I (eds). Proceedings of the eleventh Symposium of the Croatian Radiation Protection Association. Zagreb: CRPA, 2017:94-99.

Medvedec M. Unutarnji problemi s unutarnjim ozračenjem u načelu. U: Radolić V, Poje Sovilj M, Krajcar Bronić I (ur). Zbornik radova jedanaestog simpozija Hrvatskog društva za zaštitu od zračenja. Zagreb: HDZZ, 2017:100-105.

Medvedec M, Poluta M. Clinical Engineering Revisited: the Grip of Leadership - Part 1. In: Eskola H, Väisänen O, Viik J, Hyttinen J (eds). EMBEC & NBC 2017 - IFMBE (International Federation for Medical and Biological Engineering) Proceedings of the European medical and Biological Engineering Conference & Nordic-Baltic Conference on Biomedical Engineering and Medical Physics 2017. Singapore: Springer, 2017; Volume 65: 803-806.

Medvedec M, Poluta M. Clinical Engineering Revisited: the Grip of Leadership - Part 2. In: Eskola H, Väisänen O, Viik J, Hyttinen J (eds). EMBEC & NBC 2017 - IFMBE (International Federation for Medical and Biological Engineering) Proceedings of the European medical and Biological Engineering Conference & Nordic-Baltic Conference on Biomedical Engineering and Medical Physics 2017. Singapore: Springer, 2017; Volume 65: 458-461.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Medvedec M. Why some clinical biomedical engineers may doubt today whether to stay or go away?. In: Lacković I., Vasić D. (ed). Proceedings 45 of the 6th European Conference of the IFMBE (International Federation for Medical and Biological Engineering) - MBEC 2014. Berlin Heidelberg New York: Springer, 2014; Volume 45: 974-977.

Medvedec M. Vision and Provision of Clinical Engineering Division - CED/IFMBE. Folia Med. Fac. Med. Univ. Saraeviensis 2015; 50(1): 12-17.

Medvedec M. Zaštita od zračenja zdravstvenih suradnika. U: Petrinc B, Bituh T, Milić M, Kopjar N (ur). Zbornik radova desetog simpozija Hrvatskog društva za zaštitu od zračenja. Zagreb: HDZZ, 2015:56-61.

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Engineering June 7-12, 2015, Toronto, Canada, IFMBE (International Federation for Medical and Biological Engineering) Proceedings, 2015; Volume 51: 1639-42.

Medvedec M. Global Survey on Biomedical Engineering Professionals in Health Technology Assessment. In: Badnjević A. (eds). CMBEBIH 2017 - IFMBE (International Federation for Medical and Biological Engineering) Proceedings of the International Conference on Medical and Biological Engineering 2017. Singapore: Springer, 2017; Volume 62: 595-598.

Medvedec M. Bespuća prevoditeljske zbiljnosti o ionizirajućem zračenju. U: Radolić V, Poje Sovilj M, Krajcar Bronić I (ur). Zbornik radova jedanaestog simpozija Hrvatskog društva za zaštitu od zračenja. Zagreb: HDZZ, 2017:94-99. Medvedec M. Wastelands of translation reality of ionizing radiation. In: Radolić V, Poje Sovilj M, Krajcar Bronić I (eds). Proceedings of the eleventh Symposium of the Croatian Radiation Protection Association. Zagreb: CRPA, 2017:94-99.

Medvedec M. Unutarnji problemi s unutarnjim ozračenjem u načelu. U: Radolić V, Poje Sovilj M, Krajcar Bronić I (ur). Zbornik radova jedanaestog simpozija Hrvatskog društva za zaštitu od zračenja. Zagreb: HDZZ, 2017:100-105.

Medvedec M, Poluta M. Clinical Engineering Revisited: the Grip of Leadership - Part 1. In: Eskola H, Väisänen O, Viik J, Hyttinen J (eds). EMBEC & NBC 2017 - IFMBE (International Federation for Medical and Biological Engineering) Proceedings of the European medical and Biological Engineering Conference & Nordic-Baltic Conference on Biomedical Engineering and Medical Physics 2017. Singapore: Springer, 2017; Volume 65: 803-806.

Medvedec M, Poluta M. Clinical Engineering Revisited: the Grip of Leadership - Part 2. In: Eskola H, Väisänen O, Viik J, Hyttinen J (eds). EMBEC & NBC 2017 - IFMBE (International Federation for Medical and Biological Engineering) Proceedings of the European medical and Biological Engineering Conference & Nordic-Baltic Conference on Biomedical Engineering and Medical Physics 2017. Singapore: Springer, 2017; Volume 65: 458-461.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1995.-1998. Strengthening Application of Radiation in Medicine. International Atomic Energy Agency - IAEA, Code CRO/9/006. Co-investigator.

1996.-1999. Radijacijsko opterećenje organizma kod unosa radionuklida. Ministry of Science, Education and Sports, Code: 214008. Co-investigator.

2001.-2009. Development of Technical Capabilities for Sustainable Radiation and Waste Safety. International Atomic Energy Agency - IAEA, Code CRO/9/065. Co-investigator.

2002.-2006. Fluor-18 FDG koincidenta PET scintigrafija u detekciji malignih bolesti. Ministry of Science, Education and Sports, Code: 214205. Co-investigator.

2003.-2006. Prognostički pokazatelji biološkog ponašanja karcinoma štitnjače. Ministry of Science, Education and Sports, Code: 214202. Co-investigator.

2003.-2006. Dozimetrijska studija radiojodne terapije dobroćudnih bolesti štitnjače. Ministarstvo znanosti, obrazovanja i sporta, Code: 214203. Collaborator.

2006. Pre-project Assistance (Europe and Latin America). International Atomic Energy Agency – IAEA, Code C3-INT/0/079 10 01. Co-investigator.

2007.-2012. Uloga pozitronske emisijske tomografije (PET) u bolesnika sa zloćudnim tumorima. Ministry of Science, Education and Sports, Code: 108-1081872-2062. Co-investigator.



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2013-2015. International Federation for Medical and Biological Engineering - Clinical Engineering Division. Clinical Engineering Certification. Principal investigator.

2016-2018. International Federation for Medical and Biological Engineering - HealthTechnology Assessment Division. Biomedical Engineers in Health Technology Assessment. Principal investigator.

2019-2021. International Federation for Medical and Biological Engineering - Clinical Engineering Division. Registration/Certification of Clinical Engineering Practitioners. Co-investigator.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Vlatka Mejaški Bošnjak

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: retired, expert work at Outpatient Clinic Neuron at Croatian Institute for Brain Research

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Fetal and Neonatal Neurophysiology, Fetal Behavior

BIOGRAPHY

Vlatka Mejaski Bošnjak, MD, PhD, Professor of Child Neurology, Head of Department of Neuropediatrics, Children's Hospital Zagreb, University of Zagreb, Croatia pediatrician (1981), PhD (1989) Assistant Professor of Pediatrics (1992), Pediatric Neurologist (1996), Associate Professor of Pediatrics 2000, Professor of Child Neurology 2009.

Working at Division of Neurology, Department of Pediatric, Children's Hospital Zagreb, Croatia (1980- Head of department of child neurology (2005)

Main field of interest: Perinatal brain damage, developmental neurology, early detection of developmental disabilities, cerebral palsy, neurorehabilitation, neuroimaging (cranial ultrasonography, MRI), neurogenetics, neurometabolic / neurodegenerative disorders.

Lines of Research: perinatal brain damage, Leukoencephalopathies

Leader of research projects on perinatal brain damage (Croatian Ministry of Science, Croatian Institute for Brain Research), Founder and president of Croatian Academy for Developmental Habilitation (1997), institution for education of interdisciplinary experts, doctors and therapist in the field of developmental habilitation. Expert for early detection of Autism spectrum disorder, nominated by Ministry of Health, Member of project initiated by UNICEF Croatia,

Participants of Introduction to Developmental Pediatrics Training Program for International Teams from CEE/CIS, November, Ankara- Turkey. partnership in "Guide for Monitoring Child Development" training organized by UNICEF, June 2014, Zagreb, Croatia

Organizer of many courses in neurohabilitation in collaboration with international institutions and experts in Croatia. President of 20th Annual Meeting of European Academy of Childhood Disability (EACD) in Zagreb, Croatia 2008.

Extensive teaching experience in developmental neurology and intracranial ultrasonography.

Membership: EACD- European Academy of Childhood Disability (2001), EPNS- European Pediatric Neurology Society (1995), ICNA International Child Neurology Association (1998)

Member of General Management Committee of the EACD (2004), EACD Eastern Europe Task force, Senior Member of American Institute for Ultrasound in Medicine

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2009 Full Professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

KATE HIMMELMANN | VERONKA HORBER | JAVIER DE LA CRUZ3 | KAREN HORRIDGE4 | VLATKA MEJASKI-BOSNJAK | KATALIN HOLLODY | INGEBORG KRÆGELOH-MANN | ON BEHALF OF THE SCPE

WORKING GROUP† MRI classification system (MRICS) for children with cerebral palsy: development, reliability, and recommendations *Developmental Medicine & Child Neurology* 2016, DOI: 10.1111/dmcn.13166

Sanja Delin, Katarina Bošnjak Nađ , Sunčica Martinec, Dunja Čokolić Petrović, assist. Andrea Šimić Klarić , Vlatka Mejaški Bošnjak: Value of cranial ultrasonography in comparison with magnetic resonance imaging in children with cerebral palsy: population-based study" *Acta Clinica Croatica* vol 57/2018

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Daković I, Maria da Graca Antrada, Teresa Folha, David Neubauer, Katalin Hollody, Michaela Honold, Veronka Horber, Vlasta Đuranović, Vlatka Mejaški Bošnjak, Clinical features in children with symptomatic congenital cytomegalovirus infection: *European Journal Paediatric Neurology*, 2014;18:618-623

Krkar G, Đaković I, Delin S, Bošnjak VM. Evolutive leukoencephalopathy in congenital cytomegalovirus infection. *J Child Neurol* 2015, 30; 93-95

Nissenhorn A., Levy-Drummer S, Bodi O, A. Raineri, L. Vilard, F. Mari, M. Mencarelli, C Lo Rizzo, I. Meloni, M. Pineda, J. Armstrong, A. Clarke, Nadia Bahi- Buisson. V. Mejaski Bosnjak et al. Epilepsy in Rett syndrome- Lessons from the Rett networked database., *Epilepsia* 1-8, 2015, doi: 10.1111/epi12941

Leniček Krleža J, Đuranović V, Bronić A, Coen Herak D, Mejaški-Bošnjak V, Zadro R. Multiple presence of prothrombotic risk factors in Croatian children with arterial ischemic stroke and transient ischemic attack. *Croat Med J.* 2013;54:346-54.

Klarić AS, Galić S, Kolundžić Z, Bosnjak VM. Neuropsychological development in preschool children born with asymmetrical intrauterine growth restriction and impact of postnatal head growth. *J Child Neurol.* 2013;28(7):867-73.

Alimović S, Katušić A, Mejaški-Bošnjak V. Visual stimulations' critical period in infants with perinatal brain damage. *NeuroRehabilitation.* 2013;33:251-5. Katusić A, Alimović S, Mejaski-Bosnjak V. The effect of vibration therapy on spasticity and motor function in children with cerebral palsy: a randomized controlled trial. *NeuroRehabilitation.* 2013;32:1-8.

KATE HIMMELMANN | VERONKA HORBER | JAVIER DE LA CRUZ³ | KAREN HORRIDGE⁴ | VLATKA MEJASKI-BOSNJAK | KATALIN HOLLODY | INGEBORG KRÆGELOH-MANN | ON BEHALF OF THE SCPE WORKING GROUP† MRI classification system (MRICS) for children with cerebral palsy: development, reliability, and recommendations *Developmental Medicine & Child Neurology* 2016, DOI: 10.1111/dmcn.13166

Sanja Delin, Katarina Bošnjak Nađ , Sunčica Martinec, Dunja Čokolić Petrović, assist. Andrea Šimić Klarić , Vlatka Mejaški Bošnjak: Value of cranial ultrasonography in comparison with magnetic resonance imaging in children with cerebral palsy: population-based study" *Acta Clinica Croatica* vol 57/2018

Megalencephalic leukoencephalopathy with subcortical cysts: characterization of disease variants

Eline M.C. Hamilton, Pinar Tekturk, Fia Cialdella, Diane F. van Rappard, Nicole I. Wolf, Cengiz Yalcinkaya, Ümran Çetinelik, Ahmad Rajaei, Ariana Kariminejad, Justyna Paprocka, Zuhal Yapici, Vlatka Mejaški Bošnjak, and Marjo S. van der Knaap *NEUROLOGY*/2017/849240

Bošnjak J, Butković Soldo S, Miškov S, Čorić L, Ana Jadrijević Tomas A, „Epilepsy in patients with pineal gland cyst. *Clinical Neurology and Neurosurgery* 165(2018).72-75

Đuranović V. Vulin K, Đaković I, Leniček Krleža J, Delin S, Galinović I, Marjanović J, Tripalo Batoš A, Pleša Premilovac Z, Mejaški Bošnjak V. The characteristics of transcranial color-coded duplex sonography in children with cerebral arteriovenous malformation presenting with headache. *Child's Nervous System* (2018)34: 199-203

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Leader of research projects on perinatal brain damage (Croatian Ministry of Science, Croatian Institute for Brain Research),

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 5

Anrea Plovina: Correlation of abnormal postural reactions according to Vojta and cranial ultrasound, Doktorska disertacija, University of Zagreb, Faculty of Science, Department of Biology 2011.

Andrea Šimić Klarić: The relation of postnatal head growth dynamics and neurodevelopmental impairment in preschool children born with intrauterine growth retardation, Disertation, University of Zagreb, School of Medicine 2012.

Ana Katušić: The effect of 40Hz sound wave vibration on spasticity and motor function in children with cerebral palsy. Disertation, University of Zagreb, School of Medicine 2012.

Alimović Sonja: Development of functional vision in children with perinatal brain damage, Disertation University of Zagreb, School of Medicine 2013.

Goran Krakar: Brain Ultrasonographic markers in the diagnosis of congenital cytomegalovirus infection, Disertation

University of Zagreb, School of Medicine 2014.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ana Merkler, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Molecular and biochemical approach to genetic disorders; Methods of molecular biology in medicine

BIOGRAPHY

Ana Merkler was born on January 23, 1985 in Zagreb. She finished elementary and high school in Zagreb. In 2010 she graduated from the Faculty of Food Technology and Biotechnology, University of Zagreb. In December 2010, she started working at the University Hospital Centre Zagreb at the position of analyst at the Division of Molecular Diagnosis of the Department of Laboratory Diagnostics. In October 2011 she was at the Institute for Infectious and Pediatric Immunology, the Center for Medical Science and Health, University of Debrecen, Hungary, on the professional training in the field of molecular diagnostics of primary immunodeficiency by gene sequencing method. In 2017 she received her PhD at the Department of Biology of the Faculty of Science, University of Zagreb. So far, as co-author she published four papers in national and international journals, three of them in journals cited in Current Contents. She is the author of 12 scientific abstracts and co-author of one book and manual. She participates in teaching as a collaborator in the Department of Medical Chemistry, Biochemistry and Clinical Chemistry, School of Medicine, University of Zagreb. Since 2016 she is an assessor in the EMQN (The European Molecular Quality Network) for Myotonic dystrophy scheme. She is a member of the Society for Clinical Genetics of Croatia.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: -

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1) Merkler A. Sekvenciranje gena MEN1, RET, GJB1 i MPZ (Sequencing of MEN1, RET, GJB1 and MPZ genes). In: Metode molekularne biologije u medicini (Methods of molecular biology in medicine). Bulić-Jakuš F, Sertić J (ed.) Zagreb: University of Zagreb, School of Medicine; 2016. p.165-169.
- 2) Kelečić J, Merkler A. Primarne imunodeficijencije (Primary immunodeficiencies). In: Klinička kemija i molekularna dijagnostika u kliničkoj praksi (Clinical chemistry and molecular diagnostics in clinical practice). Sertić J (ed.) Zagreb: Medicinska naklada; 2014. p.507-520.
- 3) Mitrović Z, Juričić Lj, Merkler A, Sertić J. Nasljedne polineuropatije Charcot-Marie-Tooth (Hereditary polyneuropathies Charcot-Marie-Tooth). In: Klinička kemija i molekularna dijagnostika u kliničkoj praksi (Clinical chemistry and molecular diagnostics in clinical practice). Sertić J (ed.) Zagreb: Medicinska naklada; 2014. p.165-170.
- 4) Mitrović Z, Merkler A, Sertić J. Miotonična distrofija (Myotonic dystrophy). In: Klinička kemija i molekularna dijagnostika u kliničkoj praksi (Clinical chemistry and molecular diagnostics in clinical practice). Sertić J (ed.) Zagreb: Medicinska naklada; 2014. p.143-148.
- 5) Mitrović Z, Merkler A, Sertić J. Progresivna mišićna distrofija Duchenne/Becker (Progressive muscular dystrophy Duchenne/Becker). In: Klinička kemija i molekularna dijagnostika u kliničkoj praksi (Clinical chemistry and molecular diagnostics in clinical practice). Sertić J (ed.) Zagreb: Medicinska naklada; 2014. p.172-176.

6) Šimić I, Merkler A, Jurčević I, Sertić J. Nasljedna hemokromatoza (Hereditary hemochromatosis). In: Klinička kemija i molekularna dijagnostika u kliničkoj praksi (Clinical chemistry and molecular diagnostics in clinical practice). Sertić J (ed.) Zagreb: Medicinska naklada; 2014. p.303-308.

7) Telarović S, Juričić Lj, Merkler A, Sertić J. Spinalna mišićna atrofija (Spinal muscular atrophy). In: Klinička kemija i molekularna dijagnostika u kliničkoj praksi (Clinical chemistry and molecular diagnostics in clinical practice). Sertić J (ed.) Zagreb: Medicinska naklada; 2014. p.178-181.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1) Božina T, Lovrić J, Šimičević L, Merkler A, Božina M, Jelaković B, Sertić J. Can the choice of diet undermine the potential genetic risk of AT1R 1166A>C gene polymorphism? *Gene*. 2018;679:291-296.

2) Karmelić I, Lovrić J, Božina T, Merkler A, Božina N, Sertić J. Is there any association of apolipoprotein E gene polymorphisms with metabolic syndrome in a young population of Croatian origin? *Ann Hum Biol*. 2017;44:287-294.

3) Ljubić H, Kalauz M, Telarović S, Ferenci P, Ostojić R, Noli MC, Lepori MB, Hrstić I, Vuković J, Premužić M, Radić D, Grubelić Ravić K, Sertić J, Merkler A, Acman Barišić A, Loudianos G, Vucelić B. ATP7B Gene Mutations in Croatian Patients with Wilson Disease. *Genet Test Mol Biomarkers*. 2016;20:112-117.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1) 2016. Interaction of Hp, CYP2C9, CYP2C19 and PPAR γ in the development of cerebrovascular ischemic stroke, supported by the University of Zagreb (leader, J. Sertić).

2) 2017. - 2018. The role of genetic and biochemical markers in the development of monogenic diabetes, supported by the University of Zagreb (leader, J. Sertić).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1) 2016. Interaction of Hp, CYP2C9, CYP2C19 and PPAR γ in the development of cerebrovascular ischemic stroke, supported by the University of Zagreb (leader, J. Sertić).

2) 2017. - 2018. The role of genetic and biochemical markers in the development of monogenic diabetes, supported by the University of Zagreb (leader, J. Sertić).

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Jasna Mesarić, professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Libertas International University

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Scientific approach to transfusion treatment

BIOGRAPHY

Jasna Mesarić graduated from the University of Zagreb Medical School in 1978. She completed her Postgraduate study in clinical pediatrics (1986) and Postgraduate study in hematology (1988) at the Faculty of Medicine, University of Zagreb. Postgraduate Health Management System (LMHS) at the Medical School of the University of Zagreb in collaboration with the School of Public Health "Andrija Štampar" and London Business School completed in 2002.

The academic degrees of the Masters of Medical Science (1988) and the Doctor of Medical Sciences (1997) she acquired at the same faculty. The specialist of transfusion medicine became in 1978. She worked as a primary health care physician from 1979 to 1984. She was Head of the Center, later Department of Clinical Transfusion of the Clinical Institute for Laboratory Diagnostics at Clinical Hospital Center Zagreb (1988-1996); Head of Hospital Transfusion Unit at the Special Hospital for Cardiology and Cardiosurgery Magdalene in Krapinsko Toplice (1997 - 2000); She worked in Croatian Institute for Transfusion Medicine and the Hospital Transfusion Unit of the Clinical Hospital Merkur (2000-2011). She worked in Agency for Quality and Accreditation in Health Care and Social Welfare, as Assistant Director for Quality and Education (from November 2011 to June 2013 and December 2014 - 2018), as Managing Director from June 2013 to December 2014. Since January 1, 2019 she has been working at the Libertas International University and since January 15, 2019 she has been working as a Dean of the Faculty of Health Sciences. At the Faculty of Medicine, University of Zagreb, she became Scientific Assistant (1990), Scientific Research Associate (2005), Assistant Professor (2007), Senior Research Associate (2010), Assistant Professor (2012), Scientific Advisor (2017) and Professor in the field of Biomedicine and Health Sciences: Clinical medical sciences-Internal Medicine (2018).

Since 1989 she has been actively participating in undergraduate and postgraduate studies at the Faculty of Medicine, University of Zagreb; from 2009 to 2011 at the Medical School in Split; at the University of Applied Health Sciences and from 2015 at the Libertas International University. At the Faculty of Medicine of the University of Zagreb, she has been the lead of elective courses "Blood as a cure" since 2011, and since 2018 has been a co-leader of the same and has been the lead of the PhD study "Scientific Approach to Transfusion Treatment" since 2008. She actively participated in the continuous training medical courses.

Since 1991 she was an associate or lead of several scientific projects at the Ministry of Science of the Republic of Croatia. From 1989 to 1990 she was in study visit at Fred Hutchinson cancer Research Center, Seattle, USA (education in the field of transplantation medicine, stem cell collection and cryobiology; from 1991 to 1992 she was in study visit at Puget Sound Blood Center, Seattle, USA (education and research in the field of transfusion medicine), professional training in Plasmapheresis center, Orebro, Sweden (1996), training qualification in clinical transfusion medicine in Groningen, Netherlands (2001).

She has actively participated in the work of national and international professional societies. She is a member of the Croatian Medical Association, president of the Croatian Society for Health Care Quality Improvement - Croatian Medical Association. She was Executive Board member and president of the

European Society for Quality in Healthcare (ESQH), member of the EU Patient Safety and Quality of Care Expert Group.

She is an examiner at the Ministry of health commission for the exam of transfusion medicine specialist. She has participated at numerous domestic and international conferences as a invited lecturer. Her scientific and research field is clinical transfusion medicine and the quality of health care and patient safety has been confirmed by publishing professional articles in books and papers published in domestic and international journals. She is the reviewer of the Croatian Medical Journal. She has actively participated in the scientific projects of the Ministry of Science of the Republic of Croatia, the World Health Organization, the European Commission and the World Bank. She is the court expert for transfusion medicine at the Velika Gorica County Court.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: May 15, 2018

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Master's thesis: Influence of leukocyte on platelet metabolism during storage of platelet concentrate, Faculty of Medicine, University of Zagreb, 1988

Doctoral thesis: Meaning of reinfusion of peripheral blood in bone marrow transplantation, Faculty of Medicine, University of Zagreb, 1996

Manuscripts published in journals indexed in CC.

1. Nemet D, Labar B, Bogdanić V, Kolevska T, Skodlar J, Mrić M, Pavletić, Kalenić S, Vrtar M, Marušić M, Markulin-Grgić Lj, Boban D, Francetić I. Treatment of acute leukaemia with intensive radiochemotherapy and autologous bone marrow transplantation-Zagreb experience. Bone marrow Transplantation 1989; 4 (Suppl 3): 90-91.
2. Božićević D, Šoštarić V, Skodlar J, Brinar V, Grbavac. Genetic aspects of ischemic cerebrovascular disease (study of genetic markers of erythrocytes surfaces). Coll Antropol 1990;14:151-1555.
3. Stanović S Boranić M, Petrovečki M, Nemet D, Skodlar J, Golubić-Ćepulić B, Batinić D, Labar B. Thiorphan stimulates clonal growth of GM-CFU in short term cultures of bone marrow from a healthy donor and from patients with non – Hodgkin lymphoma. Biomed Pharmacother 1998;52:397- 402.
4. Stanović S, Boranić M, Petrovečki M, Batinić D, Skodlar J, Nemet D, Labar B. Thiorphan, an inhibitor of neutral endopeptidase/enkephalinase (CD10/CALLA) enhances cell proliferation in bone marrow cultures of patients with acute leukemia in remission. Haematologica 2000;30:1-10.
5. Turk Z, Šesto M, Skodlar J, Ferenčak G, Turk N, Stavljenić-Rukavina A. Soluble LDL-Immune Complexes in Type 2 Diabetes and Vascular Disease. Horm Metab Res 2002;34:196-201.
6. Ferenčak G, Pašalić D, Grišković B, Cheng S, Fijal B, Šesto M, Skodlar J, Stavljenić-Rukavina A. Lipoprotein Lipase Gene Polymorphisms in Croatian Patients with Coronary Artery Disease. Clin Chem Lab Med 2003;41(4):541-546.
7. Turk Z, Sesto M, Skodlar J, Ferenčak G, Pokupec R, Turk N, Stavljenic-Rukavina A. Products of advanced glycation in patients with type 2 diabetes and vascular disease. Annals of Clinical Biochemistry 2003;40:552-559.
8. Skodlar J., Štimac D., Majerić-Kogler V., Doughty H. , Sibinga CS: The use of a World Health Organization Transfusion Basic Information Sheet to evaluate transfusion practice in Croatia. Vox Sanguinis 2005; 89: 86 – 91.

9. Čuljak–Aleksić M., Mesarić J: The association of platelet GP1b.(145) Thr/Met (HPA–2a/2b) with myocardial infarction and coronary artery disease. *J Thromb Thrombolysis*, 2010 29: 378 – 379.
10. Zah-Bogović T, Mesarić J, Hrabač P, Majerić-Kogler V: Possible transfusion-related acute lung injury (TRALI) in cardiac surgery patients *CMJ* 2014; 55: 138-45.
11. Marinović I, Marušić S, Mucalo I, Mesarić J, Bačić Vrca V: Clinical pharmacist-led program on medication reconciliation implementation at hospital admission: experience of a single university hospital in Croatia *CMJ* 2016; 57: 572-81.

Manuscripts published in journals indexed in SCI- Expanded

1. Zah T, Mesarić J, Majerić–Kogler V: Transfusion related acute lung injury (TRALI) *Signa Vitae* 2009; 4: 8 – 11
2. Maldini B, Hodžović I, Goranović T, Mesarić J: Challenges in the use of video laryngoscopes *Acta Clin Croatica* 2016; 55: 41-50.

Manuscripts published in journals indexed in other international index publications (Index Medicus, *Experta medica*, *Biological* ili *Chemical Abstracts*)

1. Popović M, Mesarić M, Lacko P, Vinković J, Balagović M: n-Paraffins from cancerous lymph nodes, *Acta Pharm.Jugoslav.*, 27 (1977) 113 – 120.
2. Gašparović V, Labar B, Pulanić D, Skodlar J, Bogdanić V, Ivanović D, Đurašin M. Elimination of antibodies by exchange in ABO incompatible bone marrow transplantation. *Bone Marrow Transplant* 1989; 3: (Suppl) 109.
3. Skodlar J, Grgičević D. Utjecaj leukocita i eritrocita na metabolizam i funkciju trombocita tijekom čuvanja na 220C. *Liječ Vjesn* 1990;113;145-149.
4. Skodlar J, Grgičević D. Transfuzijsko liječenje u ratnim uvjetima, *Liječ Vjesn* 1990;113:242-244
5. Skodlar J, Šakić K, Golubić-Čepulić B, Matasović T, Lukić M, Orlić D, Petrovečki M. Liječenje ortopedskih bolesnika transfuzijama autologne krvi. *Liječ Vjesn* 1991;113:81-6.
6. Grgičević D, Giudici E, Horvat J, Lentz B, Rudman-Tiška Lj, Skodlar J, Vicković V, Vujaklija-Stipanović K. Kontrola svježe smrznute plazme u 8 transfuzijskih ustanova u republici Hrvatskoj. *Liječ Vjesn* 1992;114:50-52.
7. Nemet D, Labar B, Bogdanić V, Skodlar J, Petrovečki M, Mrić M, Maravić N, Šneller V, Radman I, Kovačević-Metelko J, Sertić D, Serventi-Seiwerth R. Autologous bone marrow transplantation for haematological malignancies - experiences of the center of Zagreb. *Wien med Wschr* 1995;145:61-4.
8. Sladojev S, Rakočević S, Maloča D, Mihaljević S, Skodlar J, Marchiotti I. Murin monoclonal antibodies to human blood group B. Culture supernatants of two clons with the performances of hyperimmune human anti-B reagents. *Periodicum Biologorum* 1994;96: 307-312.
9. Skodlar J, Cvrk L, Labar B, Kerhin V, Garner S. Posttransfusion purpura. The first documented case in Croatia. *Croatian Med J* 1996;37:294-7.
10. Skodlar J, Petrovečki M, Sučić M, Batinić D, Marušić M, Nemet D, Labar B. Autologous peripheral blood cells enhance hematopoietic recovery after autologous bone marrow transplantation: a randomized prospective study in patients with hematological malignancies. *Croatian Med J* 1997;38:19-24.
11. Boranić M, Stanović S, Breljak D, Nemet D, Skodlar J, Petrovečki M. Enkephalins in hematopoiesis: fragments of the enkephalin molecule and agents blocking neuropeptide degradation interfere with

proliferation and differentiation of mouse and human bone marrow cells in vitro. *Period biol* 1996;98:487-492.

12. Marović N, Nemet D, Tomašković Z, Dobrić I, Skerlev M, Bogdanić V, Mrić M, Šneler V, Skodlar J, Petrovečki M, Batinić D, Boban D, Labar B. GVHD Induced by Cyclosporin A Following ABMT did not Improve the Outcome in Haematological Malignancies. *Cancer Research Therapy and Control* 1999;10:31-38.

13. Stanović S, Boranić M, Skodlar J, Petrovečki M, Nemet d, Labar B. Effect of opioid peptide methionine-enkephalin in long-term culture of human bone marrow. *Acta med. Croatica* 2000;53:99-105.

14. Grgičević D, Skodlar J. Transfusion medicine in the new millennium. *Acta med. Croatica* 2001;55:25-37.

15. Skodlar J., Štimac D., Majerić-Kogler V., Balen S., Doughty H. , Sibinga CS: A Pilot Study to Assess The Basic Information Sheet (BIS) in Monitoring and Evaluation of Clinical use of Blood. *Indian J. Hemat & Blood Transf.* 2003; 21: 121 – 123.

16. Bajs ID, Cvjetko I., Vičić VK., Skodlar J Blood transfusion in patients with pertrochanetric femoral fracture. *Acta Med. Croatica* 2006; 60; 7 – 10.

17. Mesarić J, Minigo H: Responsibility and consent of patients in transfusion medicine: social responsibility of the recipient and donor for quality care. *Liječ Vjesn.* 2007: 129 Supl 3; 50

18. Čuljak M, J Mesarić. Polimorfizam trombocitnog glikoproteina Ib. kao genski čimbenik rizika od koronarne bolesti. *Liječ Vjesn* 2008;130:146-150

19. Mesarić J i sur. Alat za ocjenu rada u cilju poboljšanja kvalitete u bolnicama: prva iskustva u provođenju programa PATH u hrvatskim bolnicama. *Lij Vjesn* 2011;133:250-255

20. Prkačin I, Mesarić J, Cavrić, Jurenec S, Hundrić-Hašpl Ž, Kardum-Skelin, I, Sindrom hiperhemolize u bolesnice bez hemoglobinomopatije. *Acta medica Croatica.* 65 (2011); 223-227

21. Bošnjak B, Čuljak-Aleksić M, Gojčeta K, Golubić-Cepulić, B, Debeljak Ž, Dodig J, Kogler-Majerić V, Mesarić J, Peraica-Planinc A, Prinčić M, Rode B, Skorić B, Stancic V, Suvić-Krizanić V, Šturm D, Tomičić, M. Croatian Society for Haematology and Transfusion Medicine Guidelines on the diagnosis and management of heparin induced thrombocytopenia (HIT). *Lij Vjesnik* 134 (2012) , 9-10; 253-258).

22. Rustemović N, Krznarić Ž, Bender Vranešić, D, Ostojić R, Čavka Čuković S, Milić S, Anić B, Ljubičić N, Mesarić J, Štimac D. Croatian guidelines for the management of pancreatic exocrine insufficiency. *Lij Vjesnik.* 134 (2012) , 5-6; 141-147

23. Mesarić J. Dekubitus – pokazatelj kvalitet skrbi i sigurnosti pacijenta. *Acta Med Croatica* 2016; (70) Supl.1, 31-34

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. World Bank Project. Improving Quality and efficiency of Health Services Program for Results (2014 - 2019)

2. WP2 leader, EU JA “European Union Network for Patient Safety and Quality of Care” (PaSQ) project (2012 - 2016)

3. Leader of scientific group in Croatia, SAFE-EUR-OOH project “Patient safety culture in European Out-of-hours services” (2015 - 2016)

4. Ekspert - WHO project “Minimal Information model in Patient Safety” (2014 - 2015)



5. Coordinator of WHO project in Croatia: PATH (Performance Assessment Tool for Hospitals) (2008 - 2012)

6. WHO project: Monitoring of Transfusion Therapy = Leader of BIS (Blood Information Sheet) in Croatia (2003. - 2005)

7. Project leader Transfusion treatment: development and application of scientific knowledge (108-1081873-1890) MZOS, (2007 - 2014)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. World Bank Project. Improving Quality and efficiency of Health Services Program for Results

2. WP2 leader, EU JA European Union Network for Patient Safety and Quality of Care (PaSQ) project (2012 - 2016)

3. Leader of scientific group in Croatia, SAFE-EUR-OOH project Patient safety culture in European Out-of-hours services (2015 - 2016)

4. Ekspert - WHO project Minimal Information model in Patient Safety" (2014 - 2015)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Alma Mihaljević-Peješ, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research Methods of Psychological Functions and Behavior , Clinical neuropharmacology; Clinical psychopharmacology

BIOGRAPHY

Alma Mihaljevic-Peles

University of Zagreb, School of Medicine, Croatia

University Hospital Centre Zagreb

Head of the Department for Psychiatry

Alma Mihaljevic-Peles was born in Karlovac, Croatia, in 1959. She received the Medical doctor degree and the Ph.D. degree from the University of Zagreb, School of Medicine,

Croatia, in 1984 and 1996, respectively. Since 1984 she was a Research Fellow at the University of Zagreb and received from 1985-1986 Postgraduate training in clinical pharmacology. In 1989, she finished master thesis on the topic: The possibilities of finding early and late extrapyramidal side effects in treatment with neuroleptics. From 1987 to 1990 she passed training in psychiatry and became psychiatrist. She finished doctoral dissertation in 1996 on the topic: The importance of lowered arylsulphatase A activity in the diagnostics and development of psychiatric disorders. Presently, she is a Fulltime Professor at the Chair of Psychiatry and Medical Psychology on the School of Medicine, University of Zagreb and the Head of the Department for Psychiatry, University Hospital Centre Zagreb

She is mainly interested in the field of clinical psychopharmacology and biological psychiatry. She has published over 200 scientific and professional papers and has a rich experience in participating in numerous clinical studies with different drugs. She is certificated rater for different psychiatric rating scales, principal investigator in the several scientific projects and co-lecturer in various postgraduate courses.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 12.06.2018.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Sagud M, Nikolac Perkovic M, Vuksan-Cusa B, Maravic A, Svob Strac D, Mihaljevic Peles A, Zivkovic M, Kusevic Z, Pivac N. A prospective, longitudinal study of platelet serotonin and plasma brain-derived neurotrophic factor concentrations in major depression: effects of vortioxetine treatment. Psychopharmacology (Berl). 2016 Sep;233(17):3259-67. CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.
2. Mihaljevic-Peles A, Sagud M, Filipcic IS, Grosic V, Pedisic I, Emsley R. Remission and employment status in schizophrenia and other psychoses: One-year prospective study in Croatian patients treated with risperidone long acting injection. Psychiatr Danub. 2016 Sep;28(3):263-272. CC Pristupnica napisala cijeli rad. Odabirala je bolesnike za istraživanje, dala podatke u procijeni bolesnika.
3. Sagud M, Nikolac Perkovic M, Vuksan-Cusa B, Maravic A, Svob Strac D, Mihaljevic Peles A, Zivkovic M, Kusevic Z, Pivac N. A prospective, longitudinal study of platelet serotonin and plasma brain-

derived neurotrophic factor concentrations in major depression: effects of vortioxetine treatment. *Psychopharmacology* (2016) 233:3259–3267 CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.

4. Šagud M, Vuksan-Ćusa B, Božina N, Lovrić M, Mihaljević-Peješ A, Kramarić M. Olanzapine Long-Acting Injections After Neuroleptic Malignant Syndrome: Two Case Reports. *J Clin Psychopharmacol*. 2016 Dec;36(6):733-735. CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.

5. Šagud M, Jakšić N, Vuksan-Ćusa B, Lončar M, Lončar I, Peješ AM, Miličić D, Jakovljević M. Cardiovascular Disease Risk Factors in Patients with Posttraumatic Stress Disorder (PTSD): A Narrative Review. *Psychiatr Danub*. 2017;29(4):421-43 CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.

6. Kudlek Mikulic S, Mihaljevic-Peles A, Sagud M, Bajš Janovic M, Ganoci L, Grubisin J, Kuzman Rojnic M, Vuksan Cusa B, Bradaš Z, Božina N. Brain-derived neurotrophic factor serum and plasma levels in the treatment of acute schizophrenia with olanzapine or risperidone: 6-week prospective study. *Nord J Psychiatry*. 2017 Oct;71(7):513-520. CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.

7. Vlatkovic S, Sagud M, Svob Strac D, Sviben M, Zivkovic M, Vilibic M, Vuksan-Cusa B, Mihaljevic-Peles A, Pivac N. Increased prevalence of *Toxoplasma gondii* seropositivity in patients with treatment-resistant schizophrenia. *Schizophr Res*. 2017 Aug 9. pii: S0920-9964(17)30472-3. CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.

8. Šagud M, Vuksan-Ćusa B, Jakšić N, Mihaljević-Peješ A, Živković M, Vlatković S, Prgić T, Marčinko D and Wang W. Nicotine dependence in Croatian male inpatients with schizophrenia. *BMC Psychiatry* (2018) 18:18 DOI 10.1186/s12888-018-1606-1 CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.

9. Mihaljević-Peješ A, Bajš Janović M, Stručić A, Šagud M, Skočić Hanžek M, Živković M, Janović Š. Electroconvulsive therapy - general considerations and experience in Croatia. *Psychiatr Danub*. 2018 Jun;30(Suppl 4):188-191.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Nikolac Perkovic M, Nedic Erjavec G, Zivkovic M, Sagud M, Uzun S, Mihaljevic-Peles A, Kozumplik O, Muck-Seler D, Pivac N. Association between the brain-derived neurotrophic factor Val66Met polymorphism and therapeutic response to olanzapine in schizophrenia patients. *Psychopharmacology (Berl)*. 2014 Sep;231(18):3757-64. CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.

2. Vuksan-Ćusa B, Sagud M, Mihaljević-Peješ A, Jakšić N, Jakovljević M. Metabolic syndrome and cortisol/DHEAS ratio in patients with bipolar disorder and schizophrenia. *Psychiatr Danub*. 2014 Jun;26(2):187-9. CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.

3. Sagud M, Nikolac Perkovic M, Vuksan-Cusa B, Maravic A, Svob Strac D, Mihaljevic Peles A, Zivkovic M, Kusevic Z, Pivac N. A prospective, longitudinal study of platelet serotonin and plasma brain-derived neurotrophic factor concentrations in major depression: effects of vortioxetine treatment. *Psychopharmacology (Berl)*. 2016 Sep;233(17):3259-67. CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.

4. Mihaljevic-Peles A, Sagud M, Filipcic IS, Grosic V, Pedisic I, Emsley R. Remission and employment status in schizophrenia and other psychoses: One-year prospective study in Croatian patients treated with risperidone long acting injection. *Psychiatr Danub*. 2016 Sep;28(3):263-272. CC Pristupnica napisala cijeli rad. Odabirala je bolesnike za istraživanje, dala podatke u procijeni bolesnika.
5. Sagud M, Nikolac Perkovic M, Vuksan-Cusa B, Maravic A, Svob Strac D, Mihaljevic Peles A, Zivkovic M, Kusevic Z, Pivac N. A prospective, longitudinal study of platelet serotonin and plasma brain-derived neurotrophic factor concentrations in major depression: effects of vortioxetine treatment. *Psychopharmacology* (2016) 233:3259–3267 CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.
6. Šagud M, Vuksan-Ćusa B, Božina N, Lovrić M, Mihaljević-Peleš A, Kramarić M. Olanzapine Long-Acting Injections After Neuroleptic Malignant Syndrome: Two Case Reports. *J Clin Psychopharmacol*. 2016 Dec;36(6):733-735. CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.
7. Šagud M, Jakšić N, Vuksan-Ćusa B, Lončar M, Lončar I, Peleš AM, Miličić D, Jakovljević M. Cardiovascular Disease Risk Factors in Patients with Posttraumatic Stress Disorder (PTSD): A Narrative Review. *Psychiatr Danub*. 2017;29(4):421-43 CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.
8. Kudlek Mikulic S, Mihaljevic-Peles A, Sagud M, Bajs Janovic M, Ganoci L, Grubisin J, Kuzman Rojnic M, Vuksan Cusa B, Bradaš Z, Božina N. Brain-derived neurotrophic factor serum and plasma levels in the treatment of acute schizophrenia with olanzapine or risperidone: 6-week prospective study. *Nord J Psychiatry*. 2017 Oct;71(7):513-520. CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.
9. Vlatkovic S, Sagud M, Svob Strac D, Sviben M, Zivkovic M, Vilibic M, Vuksan-Cusa B, Mihaljevic-Peles A, Pivac N. Increased prevalence of *Toxoplasma gondii* seropositivity in patients with treatment-resistant schizophrenia. *Schizophr Res*. 2017 Aug 9. pii: S0920-9964(17)30472-3. CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.
10. Šagud M, Vuksan-Ćusa B, Jakšić N, Mihaljević-Peleš A, Živković M, Vlatković S, Prgić T, Marčinko D and Wang W. Nicotine dependence in Croatian male inpatients with schizophrenia. *BMC Psychiatry* (2018) 18:18 DOI 10.1186/s12888-018-1606-1 CC Pristupnica je odabirala bolesnike za istraživanje, dala podatke u procijeni bolesnika. Dala svoje sugestije pri pisanju rada.
11. Mihaljević-Peleš A, Bajs Janović M, Stručić A, Šagud M, Skočić Hanžek M, Živković M, Janović Š. Electroconvulsive therapy - general considerations and experience in Croatia. *Psychiatr Danub*. 2018 Jun;30(Suppl 4):188-191.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. "Biological Indicators in Diagnosis and Treatment of Mental Disorders" - subinvestigator
2. "Biological Indicators in Mental Disorders" subinvestigator
3. "Extended Treatment of Schizophrenia" subinvestigator, an international project
4. "Pharmacogenetic Variability in Psychiatric Patients" principal investigator
5. Prognostic Therapeutic Response Factors in Schizophrenia Leader principal investigator
6. Recover E subinvestigator, an international project



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. Strengthening the capacity of psychosocial care providers for war veterans and their family members
co-investigator contributor
2. Recover E subinvestigator
3. Therapeutic response indicators in schizophrenia subinvestigator
4. Influence of Religion on the Outcome of Depression Treatment: Clinical and Biological Indicators
subinvestigator

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

3

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Miletić Vladimir, MD, PhD, neurologist

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of Neurology, University Hospital Center Zagreb, Croatia

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: 1. Clinical Neuropharmacology
2. Movement Disorders

BIOGRAPHY

I was born on 6th of August 1979 in Knin. I ended up elementary school and general gymnasium in Split. I enrolled in the Faculty of Medicine of the University of Zagreb in 1998 and graduated in 2004. I have started residency in neurology in 2007 in the Department of Neurology of University Hospital Center Zagreb which I finished in 2011. Since then I have been working as a neurologist in the Referral Center of the Ministry of Health of the Republic of Croatia for movement disorders and hereditary degenerative diseases at the Department of Neurology of University Hospital Center Zagreb and School of Medicine of the University of Zagreb. I started postgraduate study in Biomedicine and Health at the Faculty of Medicine of the University of Zagreb in 2011. In February 2018 I defended my PhD thesis titled "The effect of botulinum toxins of type-A on nonmotor symptoms in patients with focal dystonia". During the residency, as well as after finishing the specialization I participated in conducting student exercises for students of IV year of the School of Medicine University of Zagreb during the course of Neurology, and also in postgraduate studies and doctoral studies. From March to April 2014 I was trained in the Department of Motor Neuroscience and Movement Disorders, UCL Institute of Neurology, Queen Square, London, UK under the mentorship of prof.dr.sc. Kailash Bhatia where I had the opportunity and honor to undergo education on the diagnosis and treatment of various movement disorders, including all forms of contemporary therapy such as botulinum toxin administration, treatment of advanced Parkinson's disease with Duodopa and APO pumps, and in particular the application of functional neurosurgery in movement disorders. I am the author of several articles and congress releases in indexed journals, of which 15 are indexed in Current Contents. I'm married and father of three children.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: February 2019

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Publications in journal indexed in Current Contents

1. Relja M, Miletić V. When movement disorders hurt: Addressing pain in hyperkinetic disorders. *Parkinsonism Relat Disord.* 2017;44:110-113.
2. Crnošija L, Krbot Skorić M, Lovrić M, Junaković A, Miletić V, Alfired RŠ, Pavelić A, Adamec I, Habek M. Differences in neurohumoral and hemodynamic response to prolonged head-up tilt between patients with high and normal standing norepinephrine forms of postural orthostatic tachycardia syndrome. *Auton Neurosci.* 2017;205:110-114.
3. Bažadona D, Miletić V. Preserved ability to cycle in patient with progressive supranuclear palsy-parkinsonism. *Neurol Sci.* 2017;38:509-510.
4. Markos P, Bilic B, Miletić V, Rustemovic N. Jejunal catheter placement for levodopa-carbidopa infusion in a patient with Billroth I gastrectomy. *Endoscopy.* 2016;48 Suppl 1:E288. doi: 10.1055/s-0042-112977.

5. Miletić V, Bažadona D, Kuliš T, Bilić E. Neuropathic tremor associated with anti-MAG IgM-monoclonal gammopathy and prostate adenocarcinoma: Which one is the culprit? *Parkinsonism Relat Disord.* 2016;27:109-110.
6. Miletić V. Author's reply: Hemidystonia caused by frontal cortical infarction. *Acta Neurol Belg.* 2016 Mar;116(1):117.
7. Crnošija L, Krbot Skorić M, Adamec I, Lovrić M, Junaković A, Mišmaš A, Miletić V, Šprljan Alfirev R, Pavelić A, Habek M. Hemodynamic profile and heart rate variability in hyperadrenergic versus non-hyperadrenergic postural orthostatic tachycardia syndrome. *Clin Neurophysiol.* 2016;127:1639-1644.
8. Miletić V, Radić B, Relja M. Acute pisa syndrome as a neurological emergency. *J Neuropsychiatry Clin Neurosci.* 2015;27:e159-160.
9. Radić B, Miletić V, Petrović R, Radić P. Bilateral middle cranial fossa arachnoidal cysts with temporal lobe agenesis associated with astrocytoma: fortuitous finding. *Acta Neurol Belg.* 2015 ;115:703-705.
10. Blažina K, Miletić V, Relja M, Bažadona D. Cerebral sinovenous thrombosis: a rare complication of Lyme neuroborreliosis. *Wien Klin Wochenschr.* 2015;127:65-67.
11. Miletić V, Blažina K. Hemidystonia caused by frontal cortical infarction. *Acta Neurol Belg.* 2015;115:383-384.
12. Miletić V, Ozretić D, Relja M. Parkinsonian syndrome and ataxia as a presenting finding of acquired hepatocerebral degeneration. *Metab Brain Dis.* 2014;29:207-209.
13. Badzek S, Miletić V, Prejac J, Gorsic I, Golem H, Bilic E, Kekez D, Librenjak N, Plestina S. Paraneoplastic Stiff Person Syndrome Associated with Colon Cancer Misdiagnosed as Idiopathic Parkinson's Disease Worsened After Capecitabine Therapy. *World J Surg Oncol.* 2013;11:224
14. Miletić V, Relja M. Restless legs syndrome. *Collegium antropologicum.* 2011;4:1339-1347.
15. Miletić V, Relja M. Citalopram-Induced Parkinsonian Syndrome: Case Report. *Clinical neuropharmacology.* 2011;2;92-93.

Publications in other journals

1. Miletić V. Pisa syndrome in Parkinson's disease: diagnostic and management challenges. *Journal of Parkinsonism and Restless legs Syndrome.* 2016;6:29-35.
2. Miletić V. Psychogenic facial movement disorders: a report of two cases and review of literature. *Sinapsa.* 2015;13-14:78-81.
3. Bažadona D, Blažina K, Miletić V. 'Wine-glass' sign. *Neurologia Croatica.* 2014;633-634.
4. Relja M, Miletić V. Wilsonova bolest u Hrvatskoj. *Paediatrica Croatica.* 2013;57:15-19.

Congress releases in journals indexed in Current Contents

1. Relja M, Miletić V. Assessment of non-motor symptoms and cognitive functions in patients with isolated adult-onset cervical dystonia previously not treated with botulinum toxin: a single-centre case-controlled study. *Neurology* 2018; 90 (15 Supplement).
2. Relja M, Jurjevic I, Blazina K, Miletić V, Klepac N. Clinical presentation and genetic characteristics of Huntingtons disease in Croatia: Thirty years of experience. *Movement Disorders* 2016;31 (Supplement 2):3665-3665.

3. Crnosija L, Skoric MK, Adamec I, Lovric M, Junakovic A, Mismas A, Miletic V, Sprljan-Alfirev R, Pavelic A, Habek M. Head-up tilt table test in differentiating neuropathic versus hyperadrenergic postural orthostatic tachycardia syndrome. *J. Neurol Sci.* 2015;357 (Supplement 1): E199-E199.
4. Crnosija L, Skoric MK, Adamec I, Mismas A, Miletic V, Sprljan-Alfirev R, Junakovic A, Pavelic A, Lovric M, Habek M. Head-up tilt table test in differentiating neuropathic from hyperadrenergic type of postural orthostatic tachycardia syndrome (POTS). *Eur J Neurol* 2015;22 (Supplement 1): 221-221.
5. Relja M, Miletic V, Blazina K. Nicotine as adjunct therapy to relieve levodopa-induced dyskinesias. *Eur J Neurol.* 2014; 21 (Supplement 1): 665-665.
6. Relja M, Miletic V. False 'other Babinski sign': Clue to psychogenic facial movement disorder. *Movement Disorders* 2014;29 (Supplement 1):S540-S540.
7. Samardzic T, Petrovic R, Relja M, Telarović S, Miletić V, Težak S. I-123 Ioflupane Brain SPECT and I-131 MIBG Myocardial Scintigraphy as Complementary Diagnostic Tools in Parkinsonism. *Eur J Nucl Med Mol Imaging* 2013;40 (Supplement 2):S348-S348.
8. Miletić V, Relja M. Orthostatic autonomic dysfunction in idiopathic Parkinson's disease, multiple system atrophy and progressive supranuclear palsy. *Movement Disorders* 2013;28 (Supplement 1):197-197.
9. Relja M, Miletić V. Epidemiology of restless legs syndrome in Croatia. *Eur J Neurol.* 2012;19 (Supplement):318-318.
10. Miletić V, Relja M. Parkinsonian syndrome and ataxia as a presenting finding of occult cirrhosis *Eur J Neurol.* 2012;19 (Supplement):682-682.
11. Miletić V, Blažina K, Relja M. Transcranial sonography findings in primary cervical dystonia patients with and without depression. *Eur J Neurol.* 2012;19 (Supplement):697-697.
12. Relja M, Miletić V. Parkinsonism after carbon monoxide poisoning: the effect of dopaminergic therapy. *Eur J Neurol.* 2012;18 (Supplement): 500-500.
13. Relja M, Miletić V. Prevalence and awareness of non-motor symptoms in de-novo Parkinson's disease patients. *Eur J Neurol.* 2012;17 (Supplement):377-377.
14. Relja M, Miletić V. Long-term experience with 110 Wilson's disease patients. *Mov Disord.* 2010;25 (Supplement):506-506.
15. Relja M, Telarovic S, Miletić V. Clinical Presentation and Diagnosis of Wilson's Disease: Long-Term Experience with 110 Neurological Patients. *Neurology.* 2009;72:A39-A40.
16. Miletić V, Relja M. Predictive factor for effectiveness of botulinum toxin treatment in migraine. *Cephalalgia.* 2007;27(6):744-744.
17. Relja M, Miletić V. Cutaneous allodynia in migraine patients as a predictive factor for effectiveness of botulinum toxin treatment. *Neurology.* 2007;68(12) supplement:A195-A196.
18. Relja M, Klepac N, Miletić V. A dopamine agonist, pramipexole, and cognitive functions in Parkinson's disease. *Acta Pharmacologica Sinica.* 2006;27(supplement):120-120.
19. Relja M, Miletic V. Botulinum toxin type-A in the treatment of painful diabetic neuropathy: A prospective study. *Neurology.* 2006;66(5)supplement:A70-A70.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Relja M, Miletić V. When movement disorders hurt: Addressing pain in hyperkinetic disorders. *Parkinsonism Relat Disord.* 2017;44:110-113.

2. Crnošija L, Krbot Skorić M, Lovrić M, Junaković A, Miletić V, Alfired RŠ, Pavelić A, Adamec I, Habek M. Differences in neurohumoral and hemodynamic response to prolonged head-up tilt between patients with high and normal standing norepinephrine forms of postural orthostatic tachycardia syndrome. *Auton Neurosci*. 2017;205:110-114.
3. Bažadona D, Miletić V. Preserved ability to cycle in patient with progressive supranuclear palsy-parkinsonism. *Neurol Sci*. 2017;38:509-510.
4. Markos P, Bilic B, Miletić V, Rustemovic N. Jejunal catheter placement for levodopa-carbidopa infusion in a patient with Billroth I gastrectomy. *Endoscopy*. 2016;48 Suppl 1:E288. doi: 10.1055/s-0042-112977. No abstract available.
5. Miletić V, Bažadona D, Kuliš T, Bilić E. Neuropathic tremor associated with anti-MAG IgM-monoclonal gammopathy and prostate adenocarcinoma: Which one is the culprit? *Parkinsonism Relat Disord*. 2016;27:109-110.
6. Miletić V. Author's reply: Hemidystonia caused by frontal cortical infarction. *Acta Neurol Belg*. 2016 Mar;116(1):117.
7. Crnošija L, Krbot Skorić M, Adamec I, Lovrić M, Junaković A, Mišmaš A, Miletić V, Šprljan Alfired R, Pavelić A, Habek M. Hemodynamic profile and heart rate variability in hyperadrenergic versus non-hyperadrenergic postural orthostatic tachycardia syndrome. *Clin Neurophysiol*. 2016;127:1639-1644.
8. Miletić V, Radić B, Relja M. Acute pisa syndrome as a neurological emergency. *J Neuropsychiatry Clin Neurosci*. 2015;27:e159-160.
9. Radić B, Miletić V, Petrović R, Radić P. Bilateral middle cranial fossa arachnoidal cysts with temporal lobe agenesis associated with astrocytoma: fortuitous finding. *Acta Neurol Belg*. 2015 ;115:703-705.
10. Blažina K, Miletić V, Relja M, Bažadona D. Cerebral sinuvenous thrombosis: a rare complication of Lyme neuroborreliosis. *Wien Klin Wochenschr*. 2015;127:65-67.
11. Miletić V, Blažina K. Hemidystonia caused by frontal cortical infarction. *Acta Neurol Belg*. 2015;115:383-384.
12. Miletić V, Ozretić D, Relja M. Parkinsonian syndrome and ataxia as a presenting finding of acquired hepatocerebral degeneration. *Metab Brain Dis*. 2014;29:207-209.

Radovi u drugim časopisima

1. Miletić V. Pisa syndrome in Parkinson's disease: diagnostic and management challenges. *Journal of Parkinsonism and Restless legs Syndrome*. 2016;6:29-35.
2. Miletić V. Psychogenic facial movement disorders: a report of two cases and review of literature. *Sinapsa*. 2015;13-14:78-81.
3. Bažadona D, Blažina K, Miletić V. 'Wine-glass' sign. *Neurologia Croatica*. 2014;633-634.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

a) Scientific projects

1. Assistant on the project of Ministry of Health of the Republic of Croatia 'Clinical pharmacology of movement disorders', leader professor Maja Relja, MD, PhD, 2011-2015.
2. COST Action BM1101 – 'European Network for the study of Dystonia Syndromes' u grupi WG4 (suvoditelj professor Maja Relja, MD, PhD, 2011-2015.) 2011-2015.



b) Professional projects

1. Motion study 27918; Motion study extension 27938
2. Cosmos Study (COMedication Study assessing Mono- and cOmbination therapy with levodopa-carbidopa inteStinal gel)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

a) Scientific projects

1. Assistant on the project of Ministry of Health of the Republic of Croatia 'Clinical pharmacology of movement disorders', leader professor Maja Relja, MD, PhD, 2011-2015.
2. COST Action BM1101 – 'European Network for the study of Dystonia Syndromes' u grupi WG4 (suvoditelj professor Maja Relja, MD, PhD, 2011-2015.) 2011-2015.

b) Professional projects

1. Motion study 27918; Motion study extension 27938
2. Cosmos Study (COMedication Study assessing Mono- and cOmbination therapy with levodopa-carbidopa inteStinal gel)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Davor Miličić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine,
University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Telemedicine

BIOGRAPHY

Davor Miličić was born in Zagreb on July 2, 1962, where he finished elementary and classical grammar school. He enrolled in a medical study in Zagreb, passing the entrance exam. He graduated from the Faculty of Medicine in Zagreb in 1986. He was an excellent student with a grade-point average of 4.9. During his study he was a demonstrator at the Department of Physiology and Immunology and in the Department of Histology and Embryology. He was awarded the Rector's Award in 1985. After completing his internship he passed a professional exam in 1987. He then attended the Postgraduate Study of Allergology and Clinical Immunology at the Zagreb Medical School during 1987/1988, passing all the exams with excellent success. He made a doctoral dissertation at the Department of Physiology at the Faculty of Medicine, and defended him in 1990, gaining a degree in medical science at the age of 27. He graduated from the Department of Internal Medicine at the Faculty of Medicine in 1988, and in 1989 began his specialization in internal medicine at the KBC Internal Medicine Clinic as a research fellow at the Faculty of Medicine. During the last year of his specialization, he worked as a specialist in KBC Zagreb Heart and Blood Diseases Clinic. The Specialist Examination from Internal Medicine has been awarded with great success and has since been uninterruptedly employed at the KBC Zagreb Heart and Blood Center Clinic. He undertook the subspecialist examination of cardiology in 2000. with great success. Diploma The European Cardiologist was awarded by the European Cardiac Society in 2001, and the title "Fellow" of the European Cardiac Society in 2002. In the co-authorship of senior assistant in cumulative work in the Department of Internal Medicine of the Faculty of Medicine in Zagreb was elected in 1994 , and in 1997 he was elected as a professor in the same Department of Science and Education. An Associate Professor in Cumulative Work Became in 2000 and Full Professor in 2004. He became a full professor with tenure in 2009. Head of Department for coronary intensive care, arrhythmia and electrostimulation of the heart became the year 2000, and the head of the Clinic for Heart and Blood Vascular Diseases at the Faculty of Medicine and Clinical Center Zagreb became the head of the heart transplants program at KBC in Zagreb. collaborated on a scientific project, and has been trained, especially in echocardiography. Fundamental training from transplantation cardiology took place at the Cardilogic Center Sveučil hospitals in Udine, Italy, and later for shorter stays in centers of excellence in Vienna, Padua and London. President of the Croatian Cardiac Society in the fourth consecutive term has so far been president of four national cardiology congresses and several elite international scientific conferences. He has published more than 60 publications in CC journals and cited 220 times. He was a researcher in major international studies cited more than 2,400 times. His remarkable and original scientific contribution has been made in the research of resistance to antithrombotic drugs in acute myocardial infarction, advanced heart failure, myocardial depiction and cardiovascular prevention. He introduced several new teaching contents and founded new activities at the Faculty. He is a visiting professor at two foreign universities and at the Vienna School of Clinical Research and invited lecturer at numerous conferences around the world. He was mentor of 10 dissertations. He is a member of the Fellow of the European and American Cardiology Society and holds important functions in international scientific bodies. He has received international and domestic awards for his scientific and professional work, including the International League of Humanists 2008 Prize, the Croatian Academy of Arts and Sciences Award 2010 and the University of Zagreb Medical

School Award for outstanding scientific productivity in 2011. President of the National Bioethics Committee for Medicine, member of the Central Ethics Committee, Member of the Assembly of the Croatian Chamber of Physicians and the General Board of the Croatian Medical Association and National Coordinator for Cardiology Specialization. He is also the founder of the Croatian Cardiology Foundation. With his work so far he has made a lasting and recognizable, great personal contribution to Croatian medicine and medical sciences.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2009

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

SU RELEVANTNI ZA PODRUČJE DOKTORSKOG PROGRAMA

- 1.Juric I, Hadzibegovic I, Kes P, Biocina B, Milicic D, Basic-Jukic N.An Exceptional Cause of Progressive Dyspnoea in a Renal Transplant Recipient: Hemangioma of the Mitral Valve. *Kidney Blood Press Res.* 2013 Feb 26;37(1):9-14.
- 2.Petricevic M, Biocina B, Milicic D, Konosic S, Svetina L, Lekić A, Zdilar B, Burcar I, Milosevic M, Brahimaj R, Samardzic J, Gasparovic H.Bleeding risk assessment using whole blood impedance aggregometry and rotational thromboelastometry in patients following cardiac surgery.*J Thromb Thrombolysis.* 2013 Jan 23.
- 3.Petricevic M, Biocina B, Milicic D, Konosic S, Ivancan V, Milosevic M, Burcar I, Gasparovic H.Bleeding risk assessment using multiple electrode aggregometry in patients following coronary artery bypass surgery.*J Thromb Thrombolysis.* 2013 Jan;35(1):31-40.
- 4.Petricevic M, Biocina B, Milicic D.Hemostatic management in complex aortic surgery: a role for multiple electrode aggregometry and modified rotational thromboelastometry.*J Thorac Cardiovasc Surg.* 2012 Dec;144(6):1534-5
- 5.Petricevic M, Biocina B, Svetina L, Milicic D.Clopidogrel and aspirin administration management prior to coronary artery surgery requires an individual approach. *Eur J Cardiothorac Surg.* 2012 Nov 21
- 6.Heitzler VN, Babić Z, Milčić D, Starcević B, Mirat J, Strozzi M, Plazonić Z, Giunio L, Steiner R, Vuković I, Bernat R, Pintarić H.Evaluation of importance of door-to-balloon time and total ischemic time in acute myocardial infarction with ST-elevation treated with primary percutaneous coronary intervention. *Acta Clin Croat.* 2012 Sep;51(3):387-95.
- 7.Braš M, Brajković L, Milunović V, Bičanić I, Haller F, Dorđević V, Miličić D. Psychiatrists' empathy, beliefs and attitudes towards veterans suffering from combat-related posttraumatic stress disorder. *Psychiatr Danub.* 2012 Sep;24(3):287-91.
- 8.Pećin I, Milčić D, Jurin H, Reiner Z. A pilot Croatian survey of risk factor (CRO-SURF) management in patients with cardiovascular disease. *Coll Antropol.* 2012 Jun;36(2):369-73.
- 9.Kalinić H, Lončarić S, Cikeš M, Miličić D, Bijmens B.Image registration and atlas-based segmentation of cardiac outflow velocity profiles. *Comput Methods Programs Biomed.* 2012 Jun;106(3):188-200.
- 10.Bacak-Kocman I, Basic-Jukic N, Lovcic V, Prkacin I, Milicic D, Kes P. Renal replacement therapy in cardiology wards: changing trends in a transitional country. *Ther Apher Dial.* 2012 Apr;16(2):163-8.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1: Fabijanovic D, Milicic D, Cikes M. Left Ventricular Size and Ejection Fraction: Are They Still Relevant? *Heart Fail Clin.* 2019 Apr;15(2):147-158.

- 2: Cenko E, van der Schaar M, Yoon J, Kedev S, Valvukis M, Vasiljevic Z, Ašanin M, Miličić D, Manfrini O, Badimon L, Bugiardi R. Sex-Specific Treatment Effects After Primary Percutaneous Intervention: A Study on Coronary Blood Flow and Delay to Hospital Presentation. *J Am Heart Assoc.* 2019 Feb 19;8(4):e011190.

- 3: Kotseva K, De Backer G, De Bacquer D, Rydén L, Hoes A, Grobbee D, Maggioni A, Marques-Vidal P, Jennings C, Abreu A, Aguiar C, Badariene J, Bruthans J, Castro Conde A, Cifkova R, Crowley J, Davletov K, Deckers J, De Smedt D, De Sutter J, Dilic M, Dolzhenko M, Dzerve V, Erglis A, Fras Z, Gaita D, Gotcheva N, Heuschmann P, Hasan-Ali H, Jankowski P, Lalic N, Lehto S, Lovic D, Mancas S, Mellbin L, Milicic D, Mirrahimov E, Oganov R, Pogossova N, Reiner Z, Störk S, Tokgözoğlu L, Tsioufis C, Vulic D, Wood D; EUROASPIRE Investigators*. Lifestyle and impact on cardiovascular risk factor control in coronary patients across 27 countries: Results from the European Society of Cardiology ESC-EORP EUROASPIRE V registry. *Eur J Prev Cardiol.* 2019 Feb 10;2047487318825350.

- 4: Vaccarino V, Badimon L, Bremner JD, Cenko E, Cubedo J, Dorobantu M, Duncker DJ, Koller A, Manfrini O, Milicic D, Padro T, Pries AR, Quyyumi AA, Tousoulis D, Trifunovic D, Vasiljevic Z, de Wit C, Bugiardi R; ESC Scientific Document Group Reviewers . Depression and coronary heart disease: 2018 ESC position paper of the working group of coronary pathophysiology and microcirculation developed under the auspices of the ESC Committee for Practice Guidelines. *Eur Heart J.* 2019 Jan 28. doi: 10.1093/eurheartj/ehy913. [Epub ahead of print] PubMed PMID: 30698764.

- 5: Gasparovic H, Kopjar T, Rados M, Anticevic A, Rados M, Malojcic B, Ivancan V, Fabijanic T, Cikes M, Milicic D, Gasparovic V, Biocina B. Impact of remote ischemic preconditioning preceding coronary artery bypass grafting on inducing neuroprotection. *J Thorac Cardiovasc Surg.* 2018 Oct 6. pii: S0022-5223(18)32516-9. doi: 10.1016/j.jtcvs.2018.08.116. [Epub ahead of print] PubMed PMID: 30448166.

- 6: Schwartz GG, Steg PG, Szarek M, Bhatt DL, Bittner VA, Diaz R, Edelberg JM, Goodman SG, Hanotin C, Harrington RA, Jukema JW, Lecorps G, Mahaffey KW, Moryusef A, Pordy R, Quintero K, Roe MT, Sasiela WJ, Tamby JF, Tricoci P, White HD, Zeiher AM; ODYSSEY OUTCOMES Committees and Investigators. Alirocumab and Cardiovascular Outcomes after Acute Coronary Syndrome. *N Engl J Med.* 2018 Nov 29;379(22):2097-2107. doi: 10.1056/NEJMoa1801174. Epub 2018 Nov 7. PubMed PMID: 30403574.

- 7: Gašparović H, Svetina L, Lončarić F, Ljubas J, Čikeš M, Biočina B, Miličić D. Preponderance of microbial isolates among heart transplantation recipients requiring renal replacement therapy: a propensity score-adjusted analysis. *Croat Med J.* 2018 Oct 31;59(5):224-231. PubMed PMID: 30394014; PubMed Central PMCID: PMC6240817.

- 8: Puljevic M, Danilowicz-Szymanowicz L, Molon G, Puljevic D, Raczak G, Canali G, Velagic V, Pezo-Nikolic B, Milicic D. TWARDMI pilot trial: The value and optimal criteria of microvolt T-wave alternans in the diagnosis of reversible myocardial ischemia in patients without structural cardiac disease. *Ann Noninvasive Electrocardiol.* 2019 Mar;24(2):e12610. doi: 10.1111/anec.12610. Epub 2018 Nov 1. PubMed PMID: 30383318.

- 9: De Bacquer D, De Smedt D, Kotseva K, Jennings C, Wood D, Rydén L, Gyberg V, Shahim B, Amouyel P, Bruthans J, Castro Conde A, Cífková R, Deckers JW, De Sutter J, Dilic M, Dolzhenko M, Erglis A, Fras Z, Gaita D, Gotcheva N, Goudevenos J, Heuschmann P, Laucevicius A, Lehto S, Lovic D, Miličić D, Moore D, Nicolaides E, Oganov R, Pajak A, Pogossova N, Reiner Z, Stagno M, Störk S, Tokgözoğlu L, Vulic D, Wagner M, De Backer G; EUROASPIRE Investigators. Incidence of cardiovascular events in patients with stabilized coronary heart disease: the EUROASPIRE IV follow-up study. *Eur J Epidemiol.* 2018 Oct 23. doi: 10.1007/s10654-018-0454-0. [Epub ahead of print] PubMed PMID: 30353266.

- 10: Kotecha D, Bax JJ, Carrera C, Casadei B, Merkely B, Anker SD, Vardas PE, Kearney PP, Roffi M, Ros M, Vahanian A, Weidinger F, Beerli R, Budaj A, Calabrò P, Czerwinska-Jelonkiewicz K, D'Ascenzi F, De Potter T, Fox KF, Hartikainen J, McAdam B, Milicic D, Pasquet AA, Sionis A, Sohaib SMA, Tsioufis C, Verhorst PMJ,

Kirchhof P; ESC Scientific Document Group ; 2016 ESC Education Conference . Roadmap for cardiovascular education across the European Society of Cardiology: inspiring better knowledge and skills, now and for the future. *Eur Heart J*. 2018 Jan 31. doi: 10.1093/eurheartj/ehy058. [Epub ahead of print] PubMed PMID: 30226525.

11: Brida M, Diller GP, Nashat H, Strozzi M, Milicic D, Baumgartner H, Gatzoulis MA. Pharmacological therapy in adult congenital heart disease: growing need, yet limited evidence. *Eur Heart J*. 2018 Aug 21. doi: 10.1093/eurheartj/ehy480. [Epub ahead of print] PubMed PMID: 30137263.

12: Solomon SD, Rizkala AR, Lefkowitz MP, Shi VC, Gong J, Anavekar N, Anker SD, Arango JL, Arenas JL, Atar D, Ben-Gal T, Boytsov SA, Chen CH, Chopra VK, Cleland J, Comin-Colet J, Duengen HD, Echeverría Correa LE, Filippatos G, Flammer AJ, Galinier M, Godoy A, Goncalvesova E, Janssens S, Katova T, Køber L, Lelonek M, Linssen G, Lund LH, O'Meara E, Merkely B, Milicic D, Oh BH, Perrone SV, Ranjith N, Saito Y, Saraiva JF, Shah S, Seferovic PM, Senni M, Sibulo AS Jr, Sim D, Sweitzer NK, Taurio J, Vinereanu D, Vrtovec B, Widimský J Jr, Yilmaz MB, Zhou J, Zweiker R, Anand IS, Ge J, Lam CSP, Maggioni AP, Martinez F, Packer M, Pfeffer MA, Pieske B, Redfield MM, Rouleau JL, Van Veldhuisen DJ, Zannad F, Zile MR, McMurray JJV. Baseline Characteristics of Patients With Heart Failure and Preserved Ejection Fraction in the PARAGON-HF Trial. *Circ Heart Fail*. 2018 Jul;11(7):e004962. doi: 10.1161/CIRCHEARTFAILURE.118.004962. PubMed PMID: 29980595.

13: Miličić D, Jakuš N, Fabijanović D. Microcirculation and Heart Failure. *Curr Pharm Des*. 2018;24(25):2954-2959. doi: 10.2174/1381612824666180625143232. PubMed PMID: 29938612.

14: Smits JM, De Pauw M, Schulz U, Van Cleemput J, Raake P, Knezevic I, Caliskan K, Sutlic Z, Knosalla C, Schoenrath F, Szabolcs Z, Gottlieb J, Hagl C, Doesch A, Baric D, Rudez I, Streliece A, De Vries E, Green D, Samuel U, Milicic D, Hartyanszky I, Berchtold-Herz M, Schulze PC, Mohr F, Meiser B, Haverich A, Reichenspurner H, Gummert J, Laufer G, Zuckermann A. Heart re-transplantation in Eurotransplant. *Transpl Int*. 2018 Nov;31(11):1223-1232. doi: 10.1111/tri.13289. Epub 2018 Jul 16. PubMed PMID: 29885002.

15: Crespo-Leiro MG, Metra M, Lund LH, Milicic D, Costanzo MR, Filippatos G, Gustafsson F, Tsui S, Barge-Caballero E, De Jonge N, Frigerio M, Hamdan R, Hasin T, Hülsmann M, Nalbantgil S, Potena L, Bauersachs J, Gkouziouta A, Ruhparwar A, Ristic AD, Straburzynska-Migaj E, McDonagh T, Seferovic P, Ruschitzka F. Advanced heart failure: a position statement of the Heart Failure Association of the European Society of Cardiology. *Eur J Heart Fail*. 2018 Nov;20(11):1505-1535. doi: 10.1002/ejhf.1236. Epub 2018 Jul 17. PubMed PMID: 29806100.

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17: ESC Board . The future of continuing medical education: the roles of medical professional societies and the health care industry: Position paper prepared with contributions from the European Society of Cardiology Committees for Advocacy, Education and Industry Relations, Endorsed by the Board of the European Society of Cardiology. *Eur Heart J*. 2018 Feb 28. doi: 10.1093/eurheartj/ehy003. [Epub ahead of print] PubMed PMID: 29506125.

18: Ricci B, Cenko E, Vasiljevic Z, Stankovic G, Kedev S, Kalpak O, Vavlukis M, Zdravkovic M, Hinic S, Milicic D, Manfrini O, Badimon L, Bugiardini R. Acute Coronary Syndrome: The Risk to Young Women. *J Am Heart*

Assoc. 2017 Dec 22;6(12). pii: e007519. doi: 10.1161/JAHA.117.007519. PubMed PMID: 29273636; PubMed Central PMCID: PMC5779054.

19: Šagud M, Jakšić N, Vuksan-Ćusa B, Lončar M, Lončar I, Peleš AM, Miličić D, Jakovljević M. Cardiovascular Disease Risk Factors in Patients with Posttraumatic Stress Disorder (PTSD): A Narrative Review. *Psychiatr Danub*. 2017 Dec;29(4):421-430. doi: 10.24869/psyd.2017.421. Review. PubMed PMID: 29197198.

20: Ridker PM, MacFadyen JG, Everett BM, Libby P, Thuren T, Glynn RJ; CANTOS Trial Group. Relationship of C-reactive protein reduction to cardiovascular event reduction following treatment with canakinumab: a secondary analysis from the CANTOS randomised controlled trial. *Lancet*. 2018 Jan 27;391(10118):319-328. doi: 10.1016/S0140-6736(17)32814-3. Epub 2017 Nov 13. PubMed PMID: 29146124.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Resistance to Antithrombotic Drugs in Ischemic Heart and Brain Disease (108-1081875-1993)

Heart Failure in Croatia (108-1081875-1927)

Doppler Myocardial Early Detection and Cardiovascular Disease Tracking (108-1081875-1991)

Perceptions and Prevention of Risk Factors for Atherosclerosis in Croatia (108-1080134-0121)

Intelligent Processing and Image Analysis (036-0362214-1989)

Investigation of platelet reactivity in various cardiovascular diseases (2014-09-8403, SPARELIFE-CVD)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Resistance to Antithrombotic Drugs in Ischemic Heart and Brain Disease (108-1081875-1993)

Heart Failure in Croatia (108-1081875-1927)

Doppler Myocardial Early Detection and Cardiovascular Disease Tracking (108-1081875-1991)

Perceptions and Prevention of Risk Factors for Atherosclerosis in Croatia (108-1080134-0121)

Intelligent Processing and Image Analysis (036-0362214-1989)

Investigation of platelet reactivity in various cardiovascular diseases (2014-09-8403, SPARELIFE-CVD)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

8

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assistant professor Milan Milošević, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb, School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Reproduction and workplace

BIOGRAPHY

Assistant professor Milan Milosevic, MD, PhD was born in Zadar, Croatia at January 11th 1980. He enrolled School of Medicine University of Zagreb, Croatia from 1998 to 2004 and graduated with honors among top 10% of students. In June 2004 he started PhD study Biomedicine and Health at the same University. In period from 2005 till 2012 he was working as a research fellow/assistant on Croatian Ministry of Science, Education and Sports on the project Health at work and Healthy Environment at the Department for Environmental and Occupational Medicine. From 2006 till 2010 he was enrolling medical specialization in Occupational and Sports Medicine. In March of 2010 he defended PhD thesis entitled "Development and evaluation of the measuring tool for perceived workplace stressors among hospital healthcare workers". In November 2011 he became Occupational and Sports Medicine Specialist. In March 2012 he got scientific associate title, and from July 2016 became assistant professor on Department for Environmental and Occupational Health at Andrija Stampar School of Public Health, University of Zagreb, School of Medicine.

He participated on several national and international projects: Scientifically justified health and safety workplace model on University of Zagreb (2014-2015), researcher and project manager for FP7 project: Improving quality and safety in the hospital: The link between organizational culture, burnout, and quality of care – ORCAB (2009-2014) and DG SANCO: Promote Vaccinations among Migrant Populations in Europe – PROMOVAX (2009 - 2013). He attended numerous national and international workshops and trainings in Occupational Health, Sports Medicine, Biostatistics, Children's Environmental Health, Medical Education with emphasizes on collaboration with the World Health Organization (Global Framework for Occupational Health of Health Workers).

Milan Milosevic is an International Committee for Occupational Health (ICOH) Croatian national representative, member of Croatian Society for Occupational Medicine, Croatian Society for Sports Medicine and the director of the postgraduate specialist study Occupational and Sports Medicine. From May 2016 he is director of Croatian World Health Organization Collaborative Centre for Occupational Health.

His particular interests are: occupational and sports medicine, biostatistics, risk assessment, assessment and evaluation of the organizations safety culture, workplace stress, vulnerable population and medical education. In last four years actively involved as an expert in risk assessment process at School of Medicine University of Zagreb with emphasis on chemical, biological and physical workplace hazards.

Milan Milosevic is an author of more than 100 scientific papers of which more than 60 are published in journals indexed in Current Contents. He is a reviewer in several scientific and professional journals. He is married, father of three children and in free time he actively participates in mountain climbing, cycling, running, playing guitar and singing in man choir.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: July 2015.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Skledar, M.T. and M. Milosevic, Breastfeeding and time of complementary food introduction as predictors of obesity in children. Cent Eur J Public Health, 2015. 23(1): p. 26-31.

2. Sisek-Sprem, M., et al., Testosterone levels and clinical features of schizophrenia with emphasis on negative symptoms and aggression. *Nord J Psychiatry*, 2015. 69(2): p. 102-9.
3. Milosevic, M., et al., Patients and health care professionals: partners in health care in Croatia? *Br J Health Psychol*, 2014. 19(3): p. 670-82.
4. Soric, M., et al., Shift work, quality of life and work ability among Croatian hospital nurses. *Coll Antropol*, 2013. 37(2): p. 379-84.
5. Klasan, A., et al., Predictors of lower work ability among emergency medicine employees: the Croatian experience. *Emerg Med J*, 2013. 30(4): p. 275-9.
6. Marton, I., et al., Immunohistochemical expression and prognostic significance of HIF-1alpha and VEGF-C in neuroendocrine breast cancer. *Anticancer Res*, 2012. 32(12): p. 5227-32.
7. Milosevic, M., et al., Work ability as a major determinant of clinical nurses' quality of life. *J Clin Nurs*, 2011. 20(19-20): p. 2931-8.
8. Knezevic, B., et al., Work-related stress and work ability among Croatian university hospital midwives. *Midwifery*, 2011. 27(2): p. 146-53.
9. Knezevic, B., et al., Maintenance of work ability among hospital health care professionals. *Acta Med Croatica*, 2010. 64(5): p. 391-5.
10. Golubic R, Milosevic M, Knezevic B, Mustajbegovic J. Work-related stress, education and work ability among hospital nurses. *J Adv Nurs*. 2009 Oct;65(10):2056-66. doi: 10.1111/j.1365-2648.2009.05057.x. PubMed PMID: 19627386.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Zupcic M, Graf Zupcic S, Duzel V, Simurina T, Sakic L, Fuduric J, Persec J, Milosevic M, Stanec Z, Korusic A, Barisin S. (2017) A combination of levobupivacaine and lidocaine for paravertebral block in breast cancer patients undergoing quadrantectomy causes greater hemodynamic oscillations than levobupivacaine alone. *Croat Med J*. 58(4):270-280.
2. Vuletic M, Marcinko D, Vrazic D, Milosevic M, Dediol E, Knezevic P. (2017) Development of a Valid and Reliable Instrument for the Assessment of Quality of Life in Adolescents with Clefts - Detection of Potential Mental Health Issues. *Psychiatria Danubina*. 29(3):360-368.
3. Vuk T, Bingulac-Popovic J, Ocic T, Mayer LJ, Milosevic M, Jukic I. (2017) Combined cell index in assessing blood donor iron stores. *Transfusion medicine*. 27(1):16-24.
4. Vrsalovic M, Vucur K, Vrsalovic Presecki A, Fabijanic D, Milosevic M. (2017) Impact of diabetes on mortality in peripheral artery disease: a meta-analysis. *Clinical cardiology*. 40(5):287-291.
5. Vidovic D, Elabjer E, Muskardin IVA, Milosevic M, Bekic M, Bakota B. (2017) Posterior fragment in ankle fractures: anteroposterior vs posteroanterior fixation. *Injury*. 48 Suppl 5:S65-S69.
6. Masina T, Madzar T, Musil V, Milosevic M. (2017) Differences in Health-Promoting Lifestyle Profile among Croatian Medical Students According to Gender and Year of Study. *Acta clinica Croatica*. 56(1):84-91.
7. Vucemilo L, Milosevic M, Dodig D, Grabusic B, Dapic B, Borovecki A. (2016) The quality of informed consent in Croatia-a cross-sectional study and instrument development. *Patient education and counseling*. 99(3):436-442.
8. Trbusic M, Potocnjak I, Tiran B, Bodrozic-Dzakic T, Milosevic M, Degoricija V, Frank S. (2016) Endothelial lipase plasma levels are increased in both sexes in stable coronary artery disease and only in women with acute coronary syndrome but not associated with the severity of coronary artery disease. *Croat Med J*. 57(5):482-492.
9. Sklebar I, Mustajbegovic J, Sklebar D, Cesarik M, Milosevic M, Brborovic H, Sporic K, Petric P, Husedzinovic I. (2016) How to Improve Patient Safety Culture in Croatian Hospitals? *Acta clinica Croatica*. 55(3):370-380.
10. Rosenzweig I, Glasser M, Crum WR, Kempton MJ, Milosevic M, McMillan A, Leschziner GD, Kumari V, Goadsby P, Simonds AK, Williams SC, Morrell MJ. (2016) Changes in Neurocognitive Architecture in Patients with Obstructive Sleep Apnea Treated with Continuous Positive Airway Pressure. *EBioMedicine*. 7:221-229.

11. Radulovic B, Potocnjak I, Dokoza Teresak S, Trbusic M, Vrkic N, Malogorski D, Starcevic N, Milosevic M, Frank S, Degoricija V. (2016) Hypochloraemia as a predictor of developing hyponatraemia and poor outcome in acute heart failure patients. *International journal of cardiology*. 212:237-241.
12. Radic J, Kruslin B, Samija M, Ulamec M, Milosevic M, Jazvic M, Samija I, Grah JJ, Bolanca A, Kusic Z. (2016) Connexin 43 Expression in Primary Colorectal Carcinomas in Patients with Stage III and IV Disease. *Anticancer research*. 36(5):2189-2196.
13. Pavicic-Astalos J, Koluder A, Knezevic L, Geber MZ, Novak-Laus K, Csik T, Knezevic T, Milosevic M. (2016) Prevalence of Pseudoexfoliation Syndrome and Pseudoexfoliation Glaucoma in Population of North-West Croatia Aged 40 and Over. *Acta clinica Croatica*. 55(3):483-489.
14. Mihaljevic S, Aukst-Margetic B, Karnicnik S, Vuksan-Cusa B, Milosevic M. (2016) Do spirituality and religiousness differ with regard to personality and recovery from depression? A follow-up study. *Comprehensive psychiatry*. 70:17-24.
15. Loncaric-Katusin M, Milosevic M, Zilic A, Miskovic P, Majeric-Kogler V, Zunic J. (2016) Practical Chronic Pain Assessment Tools in Clinical Practice. *Acta clinica Croatica*. 55 Suppl 1:19-26.
16. Grabovac I, Mustajbegovic J, Milosevic M. (2016) Are Patients Ready for Lesbian, Gay and Bisexual Family Physicians - A Croatian Study. *Coll Antropol*. 40(2):83-90.
17. Durakovic N, Krecak I, Peric Z, Milosevic M, Desnica L, Pulanic D, Pusic I, Kusec V, Vrhovac R, Pavletic SZ, Nemet D. (2016) Glycoprotein YKL-40: a novel biomarker of chronic graft-vs-host disease activity and severity? *Croat Med J*. 57(3):239-246.
18. Ceovic R, Desnica L, Pulanic D, Serventi Seiwert R, Ilic I, Grce M, Mravak Stipetic M, Klepac Pulanic T, Bilic E, Bilic E, Milosevic M, Vrhovac R, Nemet D, Pavletic SZ. (2016) High frequency of cutaneous manifestations including vitiligo and alopecia areata in a prospective cohort of patients with chronic graft-vs-host disease. *Croat Med J*. 57(3):229-238.
19. Alexandrova-Karamanova A, Todorova I, Montgomery A, Panagopoulou E, Costa P, Baban A, Davas A, Milosevic M, Mijakoski D. (2016) Burnout and health behaviors in health professionals from seven European countries. *International archives of occupational and environmental health*. 89(7):1059-1075.
20. Skledar MT, Milosevic M. (2015) Breastfeeding and time of complementary food introduction as predictors of obesity in children. *Central European journal of public health*. 23(1):26-31.
21. Sisek-Sprem M, Krizaj A, Jukic V, Milosevic M, Petrovic Z, Herceg M. (2015) Testosterone levels and clinical features of schizophrenia with emphasis on negative symptoms and aggression. *Nordic journal of psychiatry*. 69(2):102-109.
22. Sakan S, Pavlovic DB, Milosevic M, Virag I, Martinovic P, Dobric I, Davila S, Peric M. (2015) Implementing the Surgical Apgar Score in patients with trauma hip fracture. *Injury*. 46 Suppl 6:S61-66.
23. Potocnjak I, Bodrozic-Dzakic T, Smit I, Trbusic M, Milosevic M, Degoricija V. (2015) Gender-Associated Differences in Acute Heart Failure Patients Presenting to Emergency Department. *Acta clinica Croatica*. 54(3):257-265.
24. Glivetic T, Rodin U, Milosevic M, Mayer D, Filipovic-Grcic B, Seferovic Saric M. (2015) Prevalence, prenatal screening and neonatal features in children with Down syndrome: a registry-based national study. *Italian journal of pediatrics*. 41:81.
25. Cavar S, Jelasic D, Seiwert S, Milosevic M, Hutinec Z, Misic M. (2015) Endoglin (CD 105) as a potential prognostic factor in neuroblastoma. *Pediatric blood & cancer*. 62(5):770-775.
26. Babic Z, Pavlov M, Ostric M, Milosevic M, Misigoj Durakovic M, Pintaric H. (2015) Re-initiating professional working activity after myocardial infarction in primary percutaneous coronary intervention networks era. *International journal of occupational medicine and environmental health*. 28(6):999-1010.
27. Abdovic S, Pavic AM, Milosevic M, Persic M, Senecic-Cala I, Kolacek S. (2015) Short health scale: a valid, reliable, and responsive measure of health-related quality of life in children with inflammatory bowel disease. *Inflammatory bowel diseases*. 21(4):818-823.
28. Vilibic M, Jukic V, Pandzic-Sakoman M, Bilic P, Milosevic M. (2014) Association between total serum cholesterol and depression, aggression, and suicidal ideations in war veterans with posttraumatic stress disorder: a cross-sectional study. *Croat Med J*. 55(5):520-529.
29. Petricevic M, Biocina B, Milicic D, Svetina L, Boban M, Lekic A, Konosic S, Milosevic M, Gasparovic H. (2014) Activated coagulation time vs. intrinsically activated modified rotational thromboelastometry in

assessment of hemostatic disturbances and blood loss after protamine administration in elective cardiac surgery: analysis from the clinical trial (NCT01281397). *Journal of cardiothoracic surgery*. 9:129.

30. Milosevic M, Brborovic H, Mustajbegovic J, Montgomery A. (2014) Patients and health care professionals: partners in health care in Croatia? *British journal of health psychology*. 19(3):670-682.

31. Kudumija Slijepcevic M, Jukic V, Novalic D, Zarkovic-Palijan T, Milosevic M, Rosenzweig I. (2014) Alcohol abuse as the strongest risk factor for violent offending in patients with paranoid schizophrenia. *Croat Med J*. 55(2):156-162.

32. Grabovac I, Abramovic M, Komlenovic G, Milosevic M, Mustajbegovic J. (2014) Attitudes towards and knowledge about homosexuality among medical students in Zagreb. *Coll Antropol*. 38(1):39-45.

33. Demirovic A, Cesarec S, Marusic Z, Tomas D, Milosevic M, Hudolin T, Kruslin B. (2014) TGF-beta1 expression in chromophobe renal cell carcinoma and renal oncocytoma. *European journal of histochemistry : EJH*. 58(1):2265.

34. Cvejanov-Kezunovic L, Mustajbegovic J, Milosevic M, Civljak R. (2014) Occupational exposure to blood among hospital workers in montenegro. *Arhiv za higijenu rada i toksikologiju*. 65(3):273-280.

35. Curkovic M, Milosevic M, Borovecki A, Mustajbegovic J. (2014) Physicians' interpersonal relationships and professional standing seen through the eyes of the general public in Croatia. *Patient preference and adherence*. 8:1135-1142.

36. Brcina N, Mujkic A, Milosevic M, Miskulin M, Wallis AB. (2014) Comparison of knowledge, attitudes and behaviour of health professionals and parents regarding child injuries. *Central European journal of public health*. 22(4):245-250.

37. Brcic L, Jakopovic M, Brcic I, Klaric V, Milosevic M, Sepac A, Samarzija M, Seiwert S. (2014) Reproducibility of histological subtyping of malignant pleural mesothelioma. *Virchows Archiv : an international journal of pathology*. 465(6):679-685.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. *Improving quality and safety in the hospital: The link between organisational culture, burnout, and quality of care* (ORCAB). European commission (FP7).
2. Sveučilišna potpora: *Znanstveno utemeljen održivi sustav zaštite na radu na Sveučilištu u Zagrebu* (2014.-2016.)
3. Sveučilišna potpora: *Procjena psihofizioloških i statodinamičkih napora u radnika koji rade u smjenama* (2017.)
4. Project HRZZ: Epigenetički biomarkeri u krvi i ejakulatu bolesnika sa seminomom testisa (akronim epiSem).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. Health at work and healthy working environment. Ministarstvo znanosti, obrazovanja i športa Republike Hrvatske (broj projekta: 108-1080316-0300).
2. WHO project: Early detection of cardiovascular risks through non-invasive arterial stiffness measuring in different occupational settings and among vulnerable working groups; 2017) (2017.)
3. HRZZ project: Novi biomarkeri kronične bolesti presatka protiv primatelja (2017.-)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: dr.sc. Nikica Mirošević Skvrce, research associate

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Agency for medicinal products and medical devices, Ksaverska cesta 4, 10 000 Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pharmacogenomics

BIOGRAPHY

Born: in 1979. Education: 2004 BPharm- Faculty of Pharmacy and Biochemistry, University of Zagreb, 2014 MSc - European Programme in Pharmacovigilance and Pharmacoepidemiology, 2014 PhD - Doctoral Study in Biomedicine and Health Sciences, School of Medicine, University of Zagreb

Work experience: from 2005 till today, Croatian Agency for Medicinal Products and Medicinal Devices (HALMED).

Current position: Chair of Medicinal Products' Safety Committee and Main Coordinator of new safety issues.

Won several awards at international congresses.

Croatian delegate at Pharmacovigilance Risk assessment committee (PRAC) and Pharmacogenomics working party of the European Medicines Agency (EMA), member of ENCePP (European Network of Centre for Pharmacoepidemiology and Pharmacovigilance).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Ganoci L, Božina T, Mirošević Skvrce N, Lovrić M, Mas P, Božina N. Genetic polymorphisms of cytochrome P450 enzymes: CYP2C9, CYP2C19, CYP2D6, CYP3A4, and CYP3A5 in the Croatian population. *Drug Metab Pers Ther.* 2017;32(1):11-21.
2. Mirošević Skvrce N, Macolić Šarinić V, Šimić I, Ganoci L, Mračević Katanec D, Božina N. ABCG2 gene polymorphisms as risk factors for atorvastatin adverse reactions: a case-control study. *Pharmacogenomics.* 2015;16(8):803-15.
3. Mirošević Skvrce N, Božina N, Zibar L, Barišić I, Pejnović L, Macolić Šarinić V. CYP2C9 and ABCG2 polymorphisms as risk factors for developing adverse drug reactions in renal transplant patients taking fluvastatin: a case-control study. *Pharmacogenomics.* 2013;14(12):1419-1431.
4. Mirošević Skvrce N, Macolić Šarinić V, Mucalo I, Krnić D, Božina N, Tomic S. Adverse drug reactions caused by drug-drug interactions reported to Croatian Agency for Medicinal Products and Medical Devices: a retrospective observational study. *Croat Med J.* 2011;52(5):604-

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Ganoci L, Božina T, Mirošević Skvrce N, Lovrić M, Mas P, Božina N. Genetic polymorphisms of cytochrome P450 enzymes: CYP2C9, CYP2C19, CYP2D6, CYP3A4, and CYP3A5 in the Croatian population. *Drug Metab Pers Ther.* 2017;32(1):11-21.



2. Mirošević Skvrce N, Macolić Šarinić V, Šimić I, Ganoci L, Muačević Katanec D, Božina N. ABCG2 gene polymorphisms as risk factors for atorvastatin adverse reactions: a case-control study. Pharmacogenomics. 2015;16(8):803-15.
3. Mirošević Skvrce N, Božina N, Zibar L, Barišić I, Pejnović L, Macolić Šarinić V. CYP2C9 and ABCG2 polymorphisms as risk factors for developing adverse drug reactions in renal transplant patients taking fluvastatin: a case–control study. Pharmacogenomics. 2013;14(12):1419-1431.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

SCOPE

ADVANCED

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

SCOPE

ADVANCED

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Zrinjka Mišak, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Children's Hospital Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical Nutrition

BIOGRAPHY

Education:

1973-1981 Primary school "Braća Ribar", Zagreb

1981-1985 Secondary school Pedagoški obrazovni centar, Matematičko-informatički obrazovni centar (MIOC) Zagreb

1985-1990 Medical School University of Zagreb

1992-1993 General Hospital "Sveti Duh" Zagreb, Medical School University of Zagreb, Postgraduate study "Ultrasound in clinical medicine - hepatology and gastroenterology"

1997-1998 Children's Hospital Zagreb Medical School University of Zagreb, Postgraduate study "Protection of mother and child"

Work experience

2007 - today: pediatric gastroenterologist, Referral Center for Pediatric Gastroenterology and Nutrition, Children's Hospital Zagreb

2002-2007: pediatrician, Referral Center for Pediatric Gastroenterology and Nutrition, Children's Hospital Zagreb

1997-2002: pediatric specialization, Children's Hospital Zagreb

1996-1997: anesthesiology, UHC Zagreb, Anesthesiology and Intensive Care Clinic

1993-1996: medical coordinator in Medical Center for Human Rights, Medical School University of Zagreb

1992-1993: volunteer at Gastroenterology and hepatology department, General Hospital "Sveti Duh", Zagreb

1991-1992: internship, General Hospital "Sveti Duh", Zagreb

Teaching activity

Associate in teaching at Medical School and Faculty of Food Technology and Biotechnology University of Zagreb

Dissertation

MSc: "Epidemiology of celiac disease in one county in Croatia", 1999 Medical School University of Zagreb

PhD: "Diagnostic algorithm for celiac disease younger of 2 years of age", 2009 Medical School University of Zagreb

Publication

PubMed 38

Scopus 48

citations (Scopus) 457

h-index 11

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2014 scientific associate

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Jadrešin O, Sila S, Trivić I, Mišak Z, Hojsak I, Kolaček S. Lack of Benefit of *Lactobacillus reuteri* DSM 17938 as an Addition to the Treatment of Functional Constipation. *J Pediatr Gastroenterol Nutr* 2018;67(6):763-766
2. Werkstetter KJ, Korponay-Szabó IR, Popp A, et.al.; ProCeDE study group. Accuracy in Diagnosis of Celiac Disease Without Biopsies in Clinical Practice. *Gastroenterology*. 2017 Oct;153(4):924-935.
3. Smarrazzo A, Misak Z, Costa S, Mičetić-Turk D, Abu-Zekry M, Kansu A, Abkari A, Bouziane-Nedjadi K, Ben Hariz M, Roma E, Velmishi V, Legarda Tamara M, Attard T, Djurisić V, Greco L, Magazzù G. Diagnosis of celiac disease and applicability of ESPGHAN guidelines in Mediterranean countries: a real life prospective study. *BMC Gastroenterol* 2017;17(1):17.
4. Jadrešin O, Hojsak I, Mišak Z, Kekez AJ, Trbojević T, Ivković L, Kolaček S. *Lactobacillus reuteri* DSM 17938 in the Treatment of Functional Abdominal Pain in Children: RCT Study. *J Pediatr Gastroenterol Nutr* 2017;64(6):925-929.
5. Szajewska H, Shamir R, Chmielewska A, Pieścik-Lech M, Auricchio R, Ivarsson A, Kolacek S, Koletzko S, Korponay-Szabo I, Mearin ML, Ribes-Koninckx C, Troncone R; PREVENTCD Study Group. Systematic review with meta-analysis: early infant feeding and coeliac disease--update 2015. *Aliment Pharmacol Ther* 2015;41(11):1038-54. +
6. Tucci F, Astarita L, Abkari A, Abu-Zekry M, Attard T, Ben Hariz M, Bilbao JR, Boudraa G, Boukthir S, Costa S, Djurisić V, Hugot JP, Irastorza I, Kansu A, Kolaček S, Magazzù G, Mičetić-Turk D, Misak Z, Roma E, Rossi P, Terzić S, Velmishi V, Arcidiaco C, Auricchio R, Greco L. Celiac disease in the Mediterranean area. *BMC Gastroenterol* 2014;14:24.
7. Lenicek Krleža J, Misak Z, Jadresin O, Skaric I. Refeeding syndrome in children with different clinical aetiology. *Eur J Clin Nutr* 2013;67(8):883-6.
8. Mišak Z, Hojsak I, Jadrešin O, Kekez AJ, Abdović S, Kolaček S. Diagnosis of coeliac disease in children younger than 2 years. *J Pediatr Gastroenterol Nutr* 2013;56(2):201-5.
9. Szajewska H, Chmielewska A, Pieścik-Lech M, Ivarsson A, Kolacek S, Koletzko S, Mearin ML, Shamir R, Auricchio R, Troncone R; PREVENTCD Study Group. Systematic review: early infant feeding and the prevention of coeliac disease. *Aliment Pharmacol Ther* 2012;36(7):607-18.
10. Hojsak I, Strizić H, Mišak Z, Rimac I, Bukovina G, Prlić H, Kolaček S. Central Venous Catheter Related Sepsis In Children On Parenteral Nutrition: A 21-Year Single-Center Experience. *Clin Nutr* 2012;31(5):672-5.
11. Mišak Z. Infant nutrition and allergy. *Proc Nutr Soc*. 2011 Nov;70(4):465-71.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Vugrinec Mamić M, Hojsak I, Mišak Z, Kerman V, Kolaček S. Treatment in a Tertiary Intestinal Rehabilitation Center Improves Outcome for Children With Short Bowel Syndrome. *Gastroenterol Nurs*. 2018 Dec 20. doi: 10.1097/SGA.0000000000000324. [Epub ahead of print]
2. Kovačić M, Unić J, Mišak Z, Jadrešin O, Konjik V, Kolaček S, Hojsak I. One-year outcomes in children with eosinophilic esophagitis. *Esophagus*. 2018 Oct 19. doi: 10.1007/s10388-018-0647-3. [Epub ahead of print]

3. Villanacci V, Lorenzi L, Donato F, Auricchio R, Dziechciarz P, Gyimesi J, Koletzko S, Mišak Z, Laguna VM, Polanco I, Ramos D, Shamir R, Troncone R, Vriezinga SL, Mearin ML. Histopathological evaluation of duodenal biopsy in the PreventCD project. An observational interobserver agreement study. *APMIS* 2018;126(3):208-214.
4. Kifer T, Mišak Z, Jadrešin O, Hojsak I. Anterior Cutaneous Nerve Entrapment Syndrome in Children: A Prospective Observational Study. *Clin J Pain*. 2018 Jul;34(7):670-673. doi: 10.1097/AJP.0000000000000573.
5. Hojsak I, Mišak Z, Trbojević T, Ivković L, Kolaček S. The knowledge and expectations about IBD - difference between pediatric patients and their parents. *Acta Gastroenterol Belg* 2017;80(2):279-282.
6. Hojsak I, Ivković L, Trbojević T, Pavić I, Jadrešin O, Mišak Z, Kolaček S. The role of combined 24-h multichannel intraluminal impedance-pH monitoring in the evaluation of children with gastrointestinal symptoms suggesting gastro-esophageal reflux disease. *Neurogastroenterol Motil* 2016;28(10):1488-93.
7. Hojsak I, Mišak Z, Jadrešin O, Močić Pavić A, Kolaček S. Methotrexate is an efficient therapeutic alternative in children with thiopurine-resistant Crohn's disease. *Scand J Gastroenterol* 2015;50(10):1208-13
8. Hojsak I, Pavić AM, Mišak Z, Kolaček S. Risk factors for relapse and surgery rate in children with Crohn's disease. *Eur J Pediatr*. 2014 May;173(5):617-21.
9. Romanos J, Rosén A, Kumar V, et.al; PreventCD Group. Improving coeliac disease risk prediction by testing non-HLA variants additional to HLA variants. *Gut*. 2014 Mar;63(3):415-22.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

“Influences of the dietary history in the prevention of Coeliac Disease: possibilities of induction of tolerance for gluten in genetically predisposed children”, contract No FOOD-CT-2006-36383, multicenter international project, EU - FP6

„MEDICEL – Mediterranean Network for the management of food induced diseases“.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

„ProCeDe - Prospective Celiac Disease Diagnostic Evaluation“

„EuroPaedHP – European Paediatric Helicobacter pylori Database“

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Berivoj Mišković, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital "Sveti Duh", Department of Gynecology and Obstetrics, School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Fetal and Neonatal Neurophysiology, Fetal Behavior

BIOGRAPHY

I was born in 1957. in Livno where I finished elementary school and high school. I graduated at the Medical Faculty of the University of Rijeka in 1980. and specialized in gynecology and obstetrics at the Clinic for Women's Diseases and Births in Zagreb in the period 1985-1988. Since 1991, I work at the Clinic for Gynecology and Obstetrics "Sveti Duh" in Zagreb. With classical gynecology and obstetrics, the narrower area of interest is prenatal diagnosis. In clinical practice I have introduced or modified several diagnostic and therapeutic invasive ultrasound procedures. I have been educating invasive ultrasound procedures specialist from Croatia and abroad. I am a mentor to the specialists of our Clinic and visiting specialists.

I completed a postgraduate study in perinatology in 1989. and the scientific thesis "The frequency and risk factors of thromboembolic diseases in pregnancy, childbirth and postpartum" was defended in 1992. at the Faculty of Medicine in Zagreb. Doctoral dissertation "Forms of fetal behavior in normal and high-risk pregnancies tested using four-dimensional ultrasound" I defended 2008. at the Faculty of Medicine in Zagreb. I am the head of the Clinic for Gynecology and Obstetrics KB "Sv.Duh" in Zagreb. I am a professor in a cumulative employment relationship at the Department of Gynecology and Obstetrics of the Medical Faculty in Zagreb. I was granted the status of a specialty specialty in Fetal Medicine and Occupation and the name primarius.

I participate in undergraduate studies at the Faculty of Medicine in Zagreb, and postgraduate courses of continuous improvement of the first category "Ultrasound in gynecology and obstetrics" and postgraduate study "Ultrasound in gynecology and obstetrics" and postgraduate study in Family medicine - gynecology and obstetrics. I participated as a lecturer and practitioner in post-graduate studies "Fellowship of Advanced Ultrasound and Obsterics and Gynecology" in Qatar. I was the organizer of the traditional expert meetings "Days of the Clinic of gynecology and obstetrics" of the General Hospital Sv. Ghost.

I actively participate in the scientific research projects of the MSES: "Male and female sex system: development, normal histophysiology and infertility" and "Early indicators of the development of allergic diseases in children".

As the author and co-author I published 72 papers and congressional press releases, 12 chapters in domestic and 7 in internacional textbooks. I am a regular participant in international and Croatian gynecological congresses, seminars or professional meetings. On several occasions I stayed abroad for professional training.

I am the Head of the Croatian Branch of the International Ian Donald Ultrasound School and a member of several internacional and Croatian professional societies: ISUOG - International Society for ultrasound in obstetrics and gynecology; WAPM - World Association for Perinatal Medicine, Croatian Society for Perinatal Medicine, Croatian Society for Ultrasound in Gynecology and Perinatology and Croatian Gynecological and Oncology Society.

There have never been any lawsuits or appeals to my Ministry or Chamber of Commerce. I was a Volunteer of the 1992 Homeland War. I'm married, father of two grown children.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 3.7. 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Vasilj O, Mišković B. Diagnosis and counseling of thanatophoric dysplasia with four-dimensional ultrasound. *Journal of Maternal-Fetal and Neonatal Medicine*. 2012;25(12):2786-8.
2. Miskovic B, Predojevic M, Stanojevic M, Tikvica A, Kurjak A, Ivankovic D, et al. KANET test: Experience of Zagreb group. *Donald School Journal of Ultrasound in Obstetrics and Gynecology*. 2012;6(2):166-70.
3. Kurjak A, Predojevic M, Stanojević M, Kadic AS, Miskovic B, Badreldeen A, Talić A, Zaputovic S, Honemeyer U.
Intrauterine growth restriction and cerebral palsy. *Acta Inform Med*. 2012;18(2):64-82.
4. Stanojevic M, Talic A, Miskovic B, Vasilj O, Shaddad AN, Ahmed B, et al. An attempt to standardize Kurjak's antenatal neurodevelopmental test: Osaka consensus statement. *Donald School Journal of Ultrasound in Obstetrics and Gynecology*. 2011;5(4):317-29.
5. Mišković B, Vasilj O, Predojevic M. Fetal neurobehavior in normal and high-risk pregnancy. *Donald School Journal of Ultrasound in Obstetrics and Gynecology*. 2011;5(2):101-6.
6. Stanojevic M, Kurjak A, Salihagić-Kadić A, Vasilj O, Miskovic B, Shaddad AN, et al. Neurobehavioral continuity from fetus to neonate. *J Perinat Med*. 2011;39(2):171-7.
7. Miskovic B, Vasilj O, Stanojevic M, Ivankovi D, Kerner M, Tikvica A. The comparison of fetal behavior in high risk and normal pregnancies assessed by four dimensional ultrasound. *Journal of Maternal-Fetal and Neonatal Medicine*. 2010;23(12):1461-7.
8. Kurjak A, Stanojević M, Predojević M, Mišković B, Zaputović S, Talić A, et al. From fetal to neonatal neurology - New advances and our experiences. *Gynaecologia et Perinatologia, Supplement*. 2010;19(SUPPL. 1):S89-99.
9. Zaputović S, Stanojević M, Mišković B. From fetal to neonatal neurology. *Gynaecologia et Perinatologia*. 2010;19(1):16-24.
10. Kurjak A, Abo-Yaqoub S, Stanojevic M, Yigiter AB, Vasilj O, Lebit D, et al. The potential of 4D sonography in the assessment of fetal neurobehavior - Multicentric study in high-risk pregnancies. *J Perinat Med*. 2010;38(1):77-82.
11. Kurjak A, Tikvica A, Stanojevic M, Miskovic B, Ahmed B, Azumendi G, et al. The assessment of fetal neurobehavior by three-dimensional and four-dimensional ultrasound. *Journal of Maternal-Fetal and Neonatal Medicine*. 2008;21(10):675-84.
12. Kurjak A, Miškovic B, Tikvica A, Stanojević M, Turudić-Pavelić T, Košuta M. Functional development of fetal brain. *Gynaecologia et Perinatologia, Supplement*. 2008;17(1):S149-62.
13. Lausin I, Kurjak A, Mišković B, Stanojević M. Four dimensional ultrasound in the assessment of structure and movements of the fetal face. *Gynaecologia et Perinatologia*. 2008;17(2):83-93.
14. Kurjak A, Miskovic B, Stanojevic M, Amiel-Tison C, Ahmed B, Azumendi G, et al. New scoring system for fetal neurobehavior assessed by three- and four-dimensional sonography. *J Perinat Med*. 2008;36(1):73-81.

15. Kurjak A, Marton I, Mišković B. Fetal neurology - Obstetrical aspect. *Gynaecologia et Perinatologia*, Supplement. 2007;16(1):1-5.

16. Kurjak A, Miskovic B, Andonotopo W, Stanojevic M, Azumendi G, Vrcic H. How useful is 3D and 4D ultrasound in perinatal medicine? *J Perinat Med*. 2007;35(1):10-27.

Poglavlja objavljena u inozemnim knjigama

17. Kurjak A, Pooh RK, Tikvica A, Miskovic B, Stanojevic M, Badreldeen A. Fetal behavior in high-risk pregnancies assessed by different forms of ultrasound techniques. In: Pooh RK, Kurjak A, editors. *Fetal neurology*. St. Louis: Jaypee Brothers Medical Publishers; 2009, p. 287 – 315.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Vasilj O, Matijevic R, Blagaic V, Miskovic B. Do we sometimes see too much? Prenatal diagnosis of a true umbilical cord knot. *European Journal of Obstetrics Gynecology and Reproductive Biology*. 2015;187:73-4.

2. Vukasovic A, Grbesa D, Nikuseva Martic T, Kusec V, Miskovic B, Serman A, et al. Glycosylation pattern and axin expression in normal and IUGR placentae. *Journal of Maternal-Fetal and Neonatal Medicine*. 2015;28(5):558-63.

3. Haller H, Dugandžić VH, Krištofić I, Gačanin LG, Vukčević I, Milčić H, et al. The incidence of peripartur hysterectomy in five croatian hospitals during sixteen-year period. *Lijec Vjesn* 2015;137(7-8):223-228.

4. Vlatkovic IB, Hafner T, Miskovic B, Vicic A, Poljak B, Stipoljev F. Prenatal diagnosis of sex chromosome aneuploidies and disorders of sex development-a retrospective analysis of 11-year data. *J Perinat Med*. 2014;42(4):529-34.

5. Mišković B, Kerner M. Postpartalna krvarenja, atonija maternice. U : Đelmiš J, Orešković S, ur. *Fetalna medicina i opstetricija*. Zagreb: Medicinska naklada; 2014, str. 564-66.

6. Mišković B, Marton I. Abrupcija posteljice. U: Đelmiš J, Orešković S. *Fetalna medicina i opstetricija*. Zagreb: Medicinska naklada; 2014.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

"C / U ratio and motor parameters in the prevention of perinatal brain damage (MB: 108-1081870-1940"

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

"Male and female sexual system: development, normal histophysiology and infertility"

"Early indicators of the development of allergic diseases in children".

"Regenerative medicine and reproductive research into new platforms and resources"

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: associate professor Dinko Mitrečić, MD PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of Molecular Biology in Medicine; How to become a neuron?; Gene targeting in mammals; Morphological research methods in biomedical sciences; Proteomics in biomedical research

BIOGRAPHY

Date and place of birth: 29.01.1976, Zagreb, Croatia, European Union

Current working address:

Laboratory for Stem Cells, Croatian Institute for Brain Research, School of Medicine, University of Zagreb
Salata 12, HR-10000 Zagreb, Croatia

Telephone number: +385-1-4566792

E-mail: dinko.mitrecic@mef.hr

LinkedIn: <https://www.linkedin.com/in/mitrecic>

Current positions:

School of Medicine, University of Zagreb

-Professor of Histology and Embryology

-Head of the Laboratory for Stem Cells

-Head of the Department for Electron Microscopy

- Secretary General of the Croatian Brain Council <http://hvim.hr/?lang=en>
European positions

- Vice president of the European COST project “Biomaterials and advanced techniques for regenerative cardiology and neurology” <https://bioneca.eu/>

- Member of the Management and Executive Boards of the EU Joint Program for Neurodegenerative Diseases <http://www.neurodegenerationresearch.eu/>

- Member of the General Board of the European Brain Council, <http://www.braincouncil.eu/>

- Member of the Board of the Foundation Adris

- Member of the Program Committee “Health” of the European Commission

- Advisor (for the period 2015-2018) and the chief-advisor (2018-) of the governmental assessment and the evaluation process of the health and research system of the Republic of Lithuania

Academic degrees:

2018 Visiting professor at the Lee Kong School of Medicine, Nanyang University of Singapore

2017 Professor at the School of Medicine and the School of Dentistry

2010 Assistant Professor at School of Medicine, University of Zagreb

2006 Ph.D. (field Biomedicine, University of Zagreb, Zagreb, Croatia)

2000 M.D. (School of Medicine, University of Zagreb, Zagreb, Croatia)

Specific expertise:

- Introduction of new academic courses, international harmonization and inter-university collaboration

- project management and evaluation in the biomedical field

- innovative therapies for brain diseases
- application of neural and mesenchymal stem cells
- therapeutic use of stem cells in neurodegenerative diseases and stroke
- embryology, mouse and human genetics
- development and malformations of the central nervous system
- morphogenesis of the caudal part of the embryo

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 31.01.2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Hribljan V, Salamon I, Đemali A, Alić I, Mitrečić D. Transplantation of neural stem cells in the mouse model of ischemic brain stroke and expression of genes involved in programmed cell death. *Croat Med J.* 2018 Oct 31;59(5):203-212
2. Isakovic J, Dobbs-Dixon I, Chaudhury D, Mitrecic D. Modeling of inhomogeneous electromagnetic fields in the nervous system: a novel paradigm in understanding cell interactions, disease etiology and therapy. *Sci Rep.* 2018 Aug 27;8(1):12909.
3. Mazzini L, Ferrari D, Andjus PR, Buzanska L, Cantello R, De Marchi F, Gelati M, Giniatullin R, Glover JC, Grilli M, Kozlova EN, Maioli M, Mitrečić D, Pivoriunas A, Sanchez-Pernaute R, Sarnowska A, Vescovi AL. Advances in stem cell therapy for amyotrophic lateral sclerosis. *Expert Opin Biol Ther.* 2018 Aug;18(8):865-881.
4. Alajbeg I, Alić I, Andabak-Rogulj A, Brailo V, Mitrečić D. Human- and mouse-derived neurons can be simultaneously obtained by co-cultures of human oral mucosal stem cells and mouse neural stem cells. *Oral Dis.* 2018 Mar;24(1-2):5-10.
5. Kosi N, Alić I, Salamon I, Mitrečić D. Stroke promotes survival of nearby transplanted neural stem cells by decreasing their activation of caspase 3 while not affecting their differentiation. *Neurosci Lett.* 2018 Feb 14;666:111-119.
6. Perić M, Mitrečić D, Andjus PR. Targeting astrocytes for treatment in amyotrophic lateral sclerosis. *Curr Pharm Des.* 2017 Jun 15.
7. Mitrečić D, Alić I, Gorup D. Stem cells and stroke-how glowing neurons illuminate new paths. *Neurogenesis (Austin).* 2017 May 16;4(1).
8. Alić I, Kosi N, Kapuralin K, Gorup D, Gajović S, Pochet R, Mitrečić D. Neural stem cells from mouse strain Thy1 YFP-16 are a valuable tool to monitor and evaluate neuronal differentiation and morphology. *Neurosci Lett.* 2016 Nov 10;634:32-41.
9. Pochet R, Nicaise C, Mitrečić D. Translation of the focus toward excellence in translational science: comment on "TDP-43 Repression of Nonconserved Cryptic Exons is Compromised in ALS-FTD". *Croat Med J.* 2015 Oct 31;56(5):493-5.
10. Kapuralin K, Ćurlin M, Mitrečić D, Kosi N, Schwarzer C, Glavan G, Gajović S. STAM2, a member of the endosome-associated complex ESCRT-0 is highly expressed in neurons. *Mol Cell Neurosci.* 2015 Jun 20;67:104-115
11. Gorup D, Boháček I, Miličević T, Pochet R, Mitrečić D, Križ J, Gajović S. Increased expression and colocalization of GAP43 and CASP3 after brain ischemic lesion in mouse. *Neurosci Lett.* 2015 Jun 15;597:176-82.

12. Kosi, N; Alić, I; Kolačević, M; Vrsaljko, N; Jovanov Milošević, N; Sobol, M; Philimonenko, A; Hozák, P; Gajović, S; Pochet, R; Mitrečić, D. Nop2 is expressed during proliferation of neural stem cells and in adult mouse and human brain. *Brain Res.* 2015 Feb 9;1597:65-76.
13. Mitrečić, D and Rustichelli, F. Science and art in the 21st century: on a way towards the unification. *Croat Med J: Croat Med J.* 2014 Oct 30;55(5):542-4.
14. Mitrečić, D; Bilić, E; Gajović S. How Croatian patients suffering from amyotrophic lateral sclerosis have been turned into medical tourists - a comment on a medical and social phenomenon. *Croat Med J.* 2014 Oct 30;55(5):443-5.
15. Winters, L; Winters, T; Gorup, D; Mitrečić, D; Križ, J; Gajović, S. Expression analysis of genes involved in TLR2-related signaling pathway, inflammation and apoptosis after ischemic brain injury. *Neuroscience.* 2013 Feb 10;238C:87-96.
16. Mitrečić, D. Current advances in intravascular administration of stem cells for neurological diseases: A new dose of rejuvenation injected. *Rejuvenation research.* 2011; 14(5):553-5.
17. Nicaise, C; Mitrečić, D; Pochet, R. Brain and spinal cord affected by amyotrophic lateral sclerosis induce differential growth factors expression in rat mesenchymal and neural stem cells. *Neropath Appl Neuro.* 2011 Feb;37(2):179-88.
18. Vrabec Branica, B; Smojver Ježek, S; Juroš, Z; Grgić, S; Srpak, I; Mitrečić, D; Gajović, S. Detection of human papilloma viruses type 16, 18 and 33 in bronchial aspirates of lung cancer patients by polymerase chain reaction: a study of 84 cases in Croatia. *Coll Anthropol.* 2010 Mar;34(1):159-62.
19. Mitrečić, D; Nicaise, C; Gajovic, S; Pochet, R. Distribution, differentiation and survival of intravenously administered neural stem cells in a rat model of amyotrophic lateral sclerosis. *Cell Transplantation.* 2010;19(5):537-48.
20. Mitrečić Žižić, M; Mitrečić, D; Pochet, R; Kostovic-Knezevic, L; Gajovic, S. The Mouse Gene Noto Is Expressed in the Tail Bud and Essential for Its Morphogenesis. *Cells Tissues Organs.* 2010;192(2):85-92.
21. Vrabec Branica, B; Mitrečić, D; Grgić, S; Smojver Ježek, S; Chalfe, N; Gajović, S. PCR-Quality DNA Isolation from Human Bronchial Aspirates and Buccal and Eyelid Swabs by a Simple Procedure Based on Alkaline Lysis. *Genetic Testing and Molecular Biomarkers.* 2009 Dec;13(6):799-802.
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24. Mitrečić, D; Pochet, R; Gajović, S. Toward the treatments with neural stem cells: experiences from ALS. *Anat Record.* 2009; 292(12):1962-7.
25. Mitrečić, D; Furić Čunko, V; Gajović, S. Semithin sections of epoxy resin embedded mouse embryos in morphological analysis of whole mount in situ RNA hybridization. *Journal of Microscopy.* 2008; 232(3):504-7.
26. Furić Čunko, V; Mitrečić, D; Mavrić, S; Gajović, S. Expression pattern and functional analysis of mouse Stam2 in the olfactory system. *Coll Anthropol.* 2008; 32(1):59-63.

27. Mitrečić, D; Malnar, T; Gajović, S. Nucleolar Protein 1 (Nol1) Expression In The Mouse Brain. *Coll Anthropol.* 2008;32(1):123-126.
28. Mitrečić, D; Mavrić, S; Gajović, S. PCR based identification of short deletion/insertions and single nucleotide substitutions in genotyping of splotch and truncate mouse strains. *Moll Cell Prob*, 2008; 22(2):110-114.
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31. Mitrečić, D; Huzak, M; Ćurlin, M; Gajović, S. An improved method for determination of gene copy numbers in transgenic mice by serial dilution curves obtained by real-time quantitative PCR assay. *J Biochem Biophys Methods* 2005;64(2):83-98.

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1. Hribljan V, Salamon I, Đemalić A, Alić I, Mitrečić D. Transplantation of neural stem cells in the mouse model of ischemic brain stroke and expression of genes involved in programmed cell death. *Croat Med J.* 2018 Oct 31;59(5):203-212
2. Isakovic J, Dobbs-Dixon I, Chaudhury D, Mitrecic D. Modeling of inhomogeneous electromagnetic fields in the nervous system: a novel paradigm in understanding cell interactions, disease etiology and therapy. *Sci Rep.* 2018 Aug 27;8(1):12909.
3. Mazzini L, Ferrari D, Andjus PR, Buzanska L, Cantello R, De Marchi F, Gelati M, Giniatullin R, Glover JC, Grilli M, Kozlova EN, Maioli M, Mitrečić D, Pivoriunas A, Sanchez-Pernaute R, Sarnowska A, Vescovi AL. Advances in stem cell therapy for amyotrophic lateral sclerosis. *Expert Opin Biol Ther.* 2018 Aug;18(8):865-881.
4. Alajbeg I, Alić I, Andabak-Rogulj A, Brailo V, Mitrečić D. Human- and mouse-derived neurons can be simultaneously obtained by co-cultures of human oral mucosal stem cells and mouse neural stem cells. *Oral Dis.* 2018 Mar;24(1-2):5-10.
5. Kosi N, Alić I, Salamon I, Mitrečić D. Stroke promotes survival of nearby transplanted neural stem cells by decreasing their activation of caspase 3 while not affecting their differentiation. *Neurosci Lett.* 2018 Feb 14;666:111-119.
6. Perić M, Mitrečić D, Andjus PR. Targeting astrocytes for treatment in amyotrophic lateral sclerosis. *Curr Pharm Des.* 2017 Jun 15.
7. Mitrečić D, Alić I, Gorup D. Stem cells and stroke-how glowing neurons illuminate new paths. *Neurogenesis (Austin).* 2017 May 16;4(1)..
8. Alić I, Kosi N, Kapuralin K, Gorup D, Gajović S, Pochet R, Mitrečić D. Neural stem cells from mouse strain Thy1 YFP-16 are a valuable tool to monitor and evaluate neuronal differentiation and morphology. *Neurosci Lett.* 2016 Nov 10;634:32-41.
9. Pochet R, Nicaise C, Mitrečić D. Translation of the focus toward excellence in translational science: comment on "TDP-43 Repression of Nonconserved Cryptic Exons is Compromised in ALS-FTD". *Croat Med J.* 2015 Oct 31;56(5):493-5.

10. Kapuralin K, Ćurlin M, Mitrečić D, Kosi N, Schwarzer C, Glavan G, Gajović S. STAM2, a member of the endosome-associated complex ESCRT-0 is highly expressed in neurons. *Mol Cell Neurosci*. 2015 Jun 20;67:104-115
11. Gorup D, Bohaček I, Miličević T, Pochet R, Mitrečić D, Križ J, Gajović S. Increased expression and colocalization of GAP43 and CASP3 after brain ischemic lesion in mouse. *Neurosci Lett*. 2015 Jun 15;597:176-82.
12. Kosi, N; Alić, I; Kolačević, M; Vrsaljko, N; Jovanov Milošević, N; Sobol, M; Philimonenko, A; Hozák, P; Gajović, S; Pochet, R; Mitrečić, D. Nop2 is expressed during proliferation of neural stem cells and in adult mouse and human brain. *Brain Res*. 2015 Feb 9;1597:65-76.
13. Mitrečić, D and Rustichelli, F. Science and art in the 21st century: on a way towards the unification. *Croat Med J: Croat Med J*. 2014 Oct 30;55(5):542-4.
14. Mitrečić, D; Bilić, E; Gajović S. How Croatian patients suffering from amyotrophic lateral sclerosis have been turned into medical tourists - a comment on a medical and social phenomenon. *Croat Med J*. 2014 Oct 30;55(5):443-5.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 2017-2021 Application of human oral stem cells for stroke (principal investigator, CSF)
- 2016-2018 Innovative tracing of stem cells in animal models of amyotrophic lateral sclerosis (principal investigator, Bilateral project with the Republic of Serbia)
- 2015 - 2017 Development of innovative technology for treatment of brain diseases based on regenerative medicine (principal investigator, EU-ESF)
- 2015 - 2018 Coordination Action in support of the sustainability and globalisation of the Joint Programming Initiative on Neurodegenerative Diseases (partner, EU-H2020)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 2017-2021 Application of human oral stem cells for stroke (principal investigator, CSF)
- 2016-2018 Innovative tracing of stem cells in animal models of amyotrophic lateral sclerosis (principal investigator, Bilateral project with the Republic of Serbia)
- 2015 - 2017 Development of innovative technology for treatment of brain diseases based on regenerative medicine (principal investigator, EU-ESF)
- 2015 - 2018 Coordination Action in support of the sustainability and globalisation of the Joint Programming Initiative on Neurodegenerative Diseases (partner, EU-H2020)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ivica Mocos, MD, PhD, senior scientist

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Center Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Kidney Transplantation

BIOGRAPHY

Born in Zagreb in 1967, in 1992 graduated from the Medical School of University of Zagreb. Professional licence 1993, 1993-97 team leader in family practice. 1997-2002 did his urology residency, in 1998 completed postgraduate study in urology, and in 2006 PhD program. Scientific interest: oncogenesis of urothelial tumors, surgical and immunological aspects of kidney transplantation. From 1997 worked as a teaching assistant in graduate and from 2006 in PhD program. Subspecialist in kidney transplantation, Subspecialist in urologic oncology, Head of Outpatient Surgery on Dpt of urology, Certificate for the best poster presentation on European urological Congress in Birmingham 2002. Papers: 12 cited in CC, 4 SCI-Expanded, +8 abstracts cited in CC, 589 CC citations, most of his work is related to renal transplatation, urologic oncology, lithiasis and benign prostatic hyperplasia. Reviewer for "Clinical Transplantation" cited in CC. From 2007 scientific associate, from 2011 senior scientific associate, from 2012 senior scientist. Associate on project MZOŠ "Genetic polymorphism and function of kidney transplant". Memberships: Croatian urological association, European urological association, European Society for Organ Transplantation, American Transplant Congress, Croatian medical association.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: Feb. 22. 2012

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Mareković Z, Mocos I, Krhen I, Ribičić-Goreta N, Rončević T.: Long-term outcome after surgical kidney revascularization for fibromuscular dysplasia and arterosclerotic renal artery stenosis. J Urol 2004;171:1043-5.
2. Pasini J, Mocos I, Đelmiš J, Štern-Padovan R.: Disseminated ureteral carcinoma discovered in a woman patient at childbirth. European Journal of Obstetrics & Gynecology and Reproductive Biology 2005;121:252-3.
3. Mocos I, Bernat MM, Mareković Z, Pasini J. Virilizing adrenal cancer and bail-out nephrectomy. Coll Antropol 2005;29:753-5.
4. Mocos I, Jakić-Razumović J, Mareković Z, Pasini J. Association of cyclooxygenase-2 immunoreactivity with tumor recurrence and disease progression in superficial urothelial bladder cancer. Tumori 2006;92:124-9.
5. Mocos I, Pasini J, Stern-Padovan R, Mrcic S, Ries S. Conservative surgical treatment of low grade urothelial carcinoma in the renal allograft recipient: a case report. Transplant Proc 2006;38:1363-5.
6. Basic-Jukic N, Coric M, Kes P, Bubic-Filipi Lj, Pasini J, Mocos I. Anderson-Fabry disease in kidneys from deceased donor. Am J Transplant 2007;7:2829-33.
7. Mocos I, Pasini J, Hrštic I, Stern-Padovan R, Cacic Z, Knezevic N. Extracorporeal shock wave lithotripsy of impacted radiolucent stone at the right pyeloureteric junction and oral dissolution therapy in a patient with transplanted liver: a case report. Transplant Proc 2007;39:3533-35.
8. Basic-Jukic N, Kes P, Mocos I, Coric M. Do we need more intensive enzyme replacement therapy for Anderson-Fabry disease? Medical Hypotheses 2009;72:476-7.

9. Mokos I, Basic-Jukic N, Kastelan Z, Kes P, Pasini J. Influence of long-term dialysis treatment on operative complications after renal transplantation. *Transplant Proc* 2010;42:2531-3.
10. Mustapic Z, Basic-Jukic N, Kes P, Lovcic V, Bubic-Filipi L, Mokos I, Kastelan Z, Zekan S. Varicella Zoster Infection in Renal Transplant Recipients: Prevalence, Complications and Outcome. *Kidney Blood Press Res.* 2011;34:382-6.
11. Basić-Jukić N, Bubić-Filipi L, Prgomet D, Djanić Hadzibegović A, Bilić M, Kovac L, Kastelan Z, Pasini J, Mokos I, Basić-Koretić M, Kes P. Head and neck malignancies in Croatian renal transplant recipients. *Bosn J Basic Med Sci* 2010;10:37-9.
12. Mokos I, Kastelan Z, Basic-Jukic N, Kes P, Pasini J. Transurethral incision/resection of the prostate (TUIP/TURP) in operative treatment of repeated bladder outlet obstruction early after kidney transplantation. *Acta Clin Croat* 2011;50:381-4.
13. Mokos I, Bukvić Mokos Z, Ljubojević S, Ćorić M, Grce M, Michal M. Penile Cutaneous Horn 10 Years after Excision of Verrucous Squamous Cell Carcinoma and Postoperative Irradiation of Carcinoma in situ on Penile Glans: Case Report. *Acta Dermatovenerol Croat* 2012;20:30-3.
14. Mokos I, Bašić-Jukić N, Smiljanić R, Kaštelan Ž, Pasini J. Evolution of arteriovenous fistula between renal artery and vein in renal allograft after percutaneous nephrostomy in transplant patient – A case report. *Acta Med Croatica* 2011;65:371-5.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Hauptman D, Pasini J, Hudolin T, Mokos I, Krhen I, Kastelan Z. Urinary bladder and kidney transplantation. *Eur Urol Suppl*, 2014; 13:1325-6.

Bukvić Mokos Z, Borlinić T, Bašić-Jukić N, Kes P, Mokos I. Non-melanoma skin cancer in renal transplant recipients: do we still overlook it? *Acta Med Croatica* 2016;70:59-64.

Bukvić Mokos Z, Jović A, Čeović R, Kostović K, Mokos I, Marinović B. Therapeutic challenges in the mature patient. *Clin Dermatol* 2018;36:128-139.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

MZOŠ 219-0000000-3362 "Genetic polymorphism and function of kidney transplant"

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

MZOŠ 219-0000000-3362 "Genetic polymorphism and function of kidney transplant"

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Vesna Musani, Assist. Prof., Ph.D.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods in molecular oncology

BIOGRAPHY

I was born in 1974 in Zagreb, Croatia, where I finished my primary and secondary education. I obtained my Diploma in molecular biology in 1999 at the Faculty of Science, University of Zagreb, Croatia. In 2008 I obtained my PhD degree, also at the Faculty of Science, University of Zagreb, Croatia. I am employed at the Ruđer Bošković Institute since 2001, first as an assistant/PhD student (2001-2008), then as a senior assistant/postdoc (2008-2009), and now as a research associate (2009-now) in the Laboratory for Hereditary Cancer. On several occasions I participated in training both domestic and international. Of the later, I would like to emphasize the three visits to Bordeaux, France, from 2004 to 2007, in duration from 3 to 6 weeks, during the Cogito bilateral project. I participate in several postgraduate courses. From April 2018 I'm an assistant professor at the J. J. Strossmayer University of Osijek. I am one of cofounders of Croatian Association for Cancer Research (HDIR), member of the Presidency, and liquidator. I'm also member of the European Association for Cancer Research, Croatian Society of Biochemistry and Molecular Biology, Croatian and European Societies of Human Genetics, and Croatian Society of Rare Diseases. Main topic of my research is cancer genetics, with special emphasis on hereditary breast and ovarian cancer, but also the study of Hedgehog-Gli signaling pathway in different types of tumors.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 24/04/2018
Assistant Professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Sabol M, Trnski D, Musani V, Ozretić P, Levanat S. Role of Gli transcription factors in pathogenesis and their potential as new therapeutic targets. *Int J Mol Sci.* 2018; 19(9):2562.
2. Musani V, Ozretić P, Trnski D, Sabol M, Poduje M, Tošić M, Šitum M, Levanat S. Potential hot spot for de novo mutations in PTCH1 gene in Gorlin syndrome patients: A case report of twins from Croatia. *Croat Med J.* 2018; 59(1):20-24.
3. Musani V, Sušac I, Ozretić P, Eljuga D, Levanat S. The first case report of a large deletion of the BRCA1 gene in Croatia. *Medicine.* 2017; 96(48):E8667.
4. Ozretić P*, Trnski D*, Musani V, Maurac I, Kalafatić D, Orešković S, Levanat S, Sabol M. Non-canonical Hedgehog signaling activation in ovarian borderline tumors and ovarian carcinomas. *Int J Oncol.* 2017; 51(6):1869-1877.
5. Levanat S, Sabol M, Musani V, Ozretić P, Trnski D. Hedgehog signaling pathway as genetic and epigenetic target in ovarian tumors. *Curr Pharm Design.* 2017; 23(1):73-94.
6. Trnski D, Sabol M, Gojević A, Martinić M, Ozretić P, Musani V, Ramić S, Levanat S. GSK3B and Gli3 play a role in activation of Hedgehog-Gli pathway in human colon cancer – Targeting GSK3β downregulates the signaling pathway and reduces cell proliferation. *BBA - Mol Basis Dis.* 2015; 1852(12):2574-2584.
7. Ozretić P, Bisio A, Musani V, Trnski D, Sabol M, Levanat S, Inga A. Regulation of human PTCH1b expression by different 5' untranslated region cis-regulatory elements. *RNA Biol.* 2015; 12(3):290-304.

8. Sabol M*, Trnski D*, Uzarevic Z, Ozretic P, Musani V, Rafaj M, Cindric M, Levanat S. Combination of cyclopamine and tamoxifen promotes survival and migration of MCF-7 breast cancer cells - Interaction of Hedgehog-Gli and estrogen receptor signaling pathways. *Plos One*. 2014; 9(12):E114510.
9. Musani V, Sabol M, Car D, Ozretić P, Kalafatić D, Maurac I, Orešković S, Levanat S. PTCH1 gene polymorphisms in ovarian tumors: Potential protective role of c.3944T allele. *Gene*. 2013; 517(1):55-59.
10. Muzio LI, Pastorino L, Levanat S, Musani V, Situm M, Ponti G, Bianchi Scarra G. Clinical utility gene card for: Gorlin syndrome - Update 2013. *Eur J Hum Genet*. 2013; 21(10)
11. Sabol M, Car D, Musani V, Ozretic P, Oreskovic S, Weber I, Levanat S. The Hedgehog signaling pathway in ovarian teratoma is stimulated by Sonic Hedgehog which induces internalization of Patched. *Int J Oncol*. 2012; 41(4):1411-1418.
12. Levanat S, Musani V, Cvok MI, Susac I, Sabol M, Ozretic P, Car D, Eljuga D, Eljuga L, Eljuga D. Three novel BRCA1/BRCA2 mutations in breast/ovarian cancer families in Croatia. *Gene*. 2012; 498(2):169-76.
13. Maurac I, Sabol M, Musani V, Car D, Ozretic P, Kalafatic D, Oreskovic S, Babic D, Levanat S. A low grade ovarian carcinoma case with coincident LOH of PTCH1 and BRCA1, and a mutation in BRCA1. *Int J Gynecol Pathol*. 2012; 31(3):264-271.
14. Musani V, Sabol M, Car D, Ozretić P, Orešković S, Leović D, Levanat S. LOH of PTCH1 region in BCC and ovarian carcinoma: Microsatellite vs. HRM analysis. *Front Biosci (Elite Ed)*. 2012; E4:1049-1057.
15. Leovic D, Sabol M, Ozretic P, Musani V, Car D, Marjanovic K, Zubcic V, Sabol I, Sikora M, Grce M, Glavas-Obrovac LJ, Levanat S. HH-Gli signaling pathway activity in oral and oropharyngeal squamous cell carcinoma. *Head Neck - J Sci Spec*. 2012; 34(1):104-112.
16. Muzio LI, Pastorino L, Levanat S, Musani V, Situm M, Scarra Gb: Clinical utility gene card for: Gorlin syndrome. *Eur J Hum Genet*. 2011; 19(8). Doi: 10.1038/Ejhg.2011.9.
17. Car D, Sabol M, Musani V, Ozretic P, Levanat S. Epigenetic regulation of the Hedgehog-Gli Signaling pathway in cancer. *Period Biol*. 2010; 112(4):419-423.
18. Ozretic P, Levacic Cvok M, Musani V, Sabol M, Car D, Levanat S. In silico analysis of potential structural and functional significance of human breast cancer gene BRCA2 sequence variants found in 5' untranslated region. *Period Biol*. 2010; 112(4):469-474.
19. Musani V, Cretnik M, Situm M, Basta-Juzbasic A, Levanat S. Gorlin syndrome patient with large deletion in 9q22.32-q22.33 detected by quantitative multiplex fluorescent PCR. *Dermatology*. 2009; 219(2):111-118.
20. Cretnik M, Poje G, Musani V, Kruslin B, Ozretic P, Tomas D, Situm M, Levanat S. Involvement of p16 and PTCH in pathogenesis of melanoma and basal cell carcinoma. *Int J Oncol*. 2009; 34(4):1045-1050.
21. Willems P, Magri V, Cretnik M, Fasano M, Jakubowska A, Levanat S, Lubinski J, Marras E, Musani V, Thierens H, Vandersickel V, Perletti G, Vral A: Characterization of the c.190T>C missense mutation in BRCA1 codon 64 (cys64arg). *Int J Oncol*. 2009; 34(4):1005-1015.
22. Cvok MI, Cretnik M, Musani V, Ozretic P, Levanat S. New sequence variants in BRCA1 and BRCA2 genes detected by high-resolution melting analysis in an elderly healthy female population in Croatia. *Clin Chem Lab Med*. 2008; 46(10):1376-1383.
23. Bura M, Musani V, Čretnik M, Botica I, Levanat S: Hedgehog-Patched pathway aberrations in a malignant triton tumor case study. *Oncol Rep*. 2008; 20(2):347-352.

23. Levanat S, Čretnik M, Musani V: HH-Gli signaling pathway functions and its therapeutic potential in cancer. *Croat Chem Acta*. 2008; 81(1): 1-5.
24. Čretnik M, Musani V, Orešković S, Leović D, Levanat S: The Patched gene is epigenetically regulated in ovarian dermoids and fibromas, but not in basocellular carcinomas. *Int J Mol Med*. 2007; 19(6):875-883.
25. Musani V, Gorry P, Basta-Juzbašić A, Stipić T, Miklić P, Levanat S: Mutation in exon 7 of PTCH deregulates SHH/PTCH/SMO signaling: Possible linkage to WNT. *Int J Mol Med*. 2007; 17(5):755-759.
26. Levanat S, Kappler R, Hemmerlein B, Döring P, Musani V, Komar A, Orešković S, Pavelić B, Hahn H: Analysis of the PTCH1 signaling pathway in ovarian dermoids. *Int J Mol Med*. 2004; 27. 14(5):793-799.
27. Levanat S, Musani V, Komar A, Oreskovic S: Role of the Hedgehog/Patched signaling pathway in oncogenesis: A new polymorphism in the PTCH gene in ovarian fibroma. *Ann. N. Y. Acad. Sci*. 2004; 1030:134-143.
28. Levanat S, Musani V, Komar A: The Hedgehog/Patched signaling pathway (SHH/PTCH/SMO) in cancer and development. *Period. Biol*. 2004; 106(3):23-27.
29. Levanat S, Šitum M, Crnić I, Marasović D, Puizina-Ivić N, Pokupčić N, Musani V, Komar A, Kubat M, Furač I, Karija-Vlahović M, Križanac S: Alterations in CDKN2A locus as potential indicator of melanoma predisposition in relatives of non-familial melanoma cases. *Croat Med J*. 2003; 44(4):418-424.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Sabol M, Trnski D, Musani V, Ozretić P, Levanat S. Role of Gli transcription factors in pathogenesis and their potential as new therapeutic targets. *Int J Mol Sci*. 2018; 19(9):2562.
2. Cacev T, Zapletal E, Musani V, Rako I, Loncar B, Aralica G, Kapitanovic S. Analysis of MSH2 loss of heterozygosity, expression, and IVS10+12G>A polymorphism in sporadic colon cancer. *Anticancer Res*. 2018; 38(5):2841-2848.
3. Musani V, Ozretić P, Trnski D, Sabol M, Poduje M, Tošić M, Šitum M, Levanat S. Potential hot spot for de novo mutations in PTCH1 gene in Gorlin syndrome patients: A case report of twins from Croatia. *Croat Med J*. 2018; 59(1):20-24.
4. Musani V, Sušac I, Ozretić P, Eljuga D, Levanat S. The first case report of a large deletion of the BRCA1 gene in Croatia. *Medicine*. 2017; 96(48):E8667.
5. Ozretić P*, Trnski D*, Musani V, Maurac I, Kalafatić D, Orešković S, Levanat S, Sabol M. Non-canonical Hedgehog signaling activation in ovarian borderline tumors and ovarian carcinomas. *Int J Oncol*. 2017; 51(6):1869-1877.
6. Ozretić P, Bisio A, Musani V, Trnski D, Sabol M, Levanat S, Inga A. Regulation of human PTCH1b expression by different 5' untranslated region cis-regulatory elements. *RNA Biol*. 2015; 12(3):290-304.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- from 01/2019 – associate on the Croatian Science Foundation research project “GLIcode - Differential regulation of the Gli code in BRAF/NRAS driven tumors” / PI Maja Sabol
- 2019 – associate on research project “Mutational signatures of hereditary breast and ovarian cancer genes” (the Terry Fox Foundation donation) / PI Petar Ozretić
- 2018 – associate on research project “Genetic profile of hereditary breast cancer” (The Terry Fox Foundation donation) / PI Petar Ozretić

- from 05/2017 – associate on the Croatian Science Foundation research project “MIRnaGLI - Novel molecular mechanisms for new therapeutic approaches: Interactions of microRNAs and Hedgehog-GLI signaling pathway in serous ovarian carcinoma”; [HRZZ IP-2016-06-1268] / PI Sonja Levanat
- from 2017 – associate on research project “Interaction of HH-GLI signaling pathway and androgen receptor in prostate cancer” (dm-Drogerie Markt donation) / PI Sonja Levanat
- 2017/18 – associate on research project “Discovery of new biomarkers for melanoma development” (the City of Zagreb donation) / PI Sonja Levanat
- 2016/17 – associate on research project “Mechanisms of interaction of steroids and signaling pathways in the development of ovarian cancer: Looking for early indicators of ovarian cancer” (the City of Zagreb donation) / PI Sonja Levanat
- 2016/17 – associate on research project “Apoptotic pathways and role of BIRC5 (survivin) in breast cancer development” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2015/16 – principal investigator on Hazu Foundation research project “The role of BIRC5 gene polymorphisms in differential expression of survivin isoforms in breast cancer”
- 2015 – associate on research project “microRNA profiling of ovarian cancer” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2014 - 2019 – associate on the Croatian Science Foundation research project “ProNetNel - New protein networks for novel therapeutic avenues in human melanoma”; [HRZZ IP-2013-11-1615] / PI Neda Slade
- 2012 – associate on research project “Role of survivin as a predictive and prognostic marker in breast cancer” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2009 – associate on research project “Genetic testing of inherited predisposition to breast and ovarian cancer” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2007 – 2009 – associate on bilateral joint project Croatian Hungarian intergovernmental s&t cooperation programme (Oncological Institute, Budapest) “Hereditary breast cancer predisposition in Croatia and Hungary” / PI Sonja Levanat
- 2006 – 2013 – associate on MZOŠ research project “Signal transduction in tumors: HH-GLI pathway, interactions and therapeutic potential”; [098-0982464-2461] / PI Sonja Levanat
- 2003 – 2005 – associate on collaborative joint project Cogito between France and Croatia “Molecular genetics of Gorlin syndrome” / PI Sonja Levanat
- 2002 – 2005 – associate on MZOŠ research project “SHH/PTCH/SMO signaling pathway in tumors and malformations” / PI Sonja Levanat
- 2002 – 2004 – associate on Croatian-Austrian joint project “The role of the SHH/PTCH/SMO pathway in oncogenesis. Mechanisms of regulation of the SHH/PTCH/SMO pathway in different pathological conditions” / PI Sonja Levanat
- 2001 – associate on MZOŠ research project “Molecular genetics of Gorlin syndrome” / PI Sonja Levanat

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- from 01/2019 – associate on the Croatian Science Foundation research project “GLIcode - Differential regulation of the GLI code in BRAF/NRAS driven tumors” / PI Maja Sabol
- 2019 – associate on research project “Mutational signatures of hereditary breast and ovarian cancer genes” (the Terry Fox Foundation donation) / PI Petar Ozretić



- 2018 – associate on research project “Genetic profile of hereditary breast cancer” (The Terry Fox Foundation donation) / PI Petar Ozretić
- from 05/2017 – associate on the Croatian Science Foundation research project “MIRnaGLI - Novel molecular mechanisms for new therapeutic approaches: Interactions of microRNAs and Hedgehog-GLI signaling pathway in serous ovarian carcinoma”; [HRZZ IP-2016-06-1268] / PI Sonja Levanat
- from 2017 – associate on research project “Interaction of HH-GLI signaling pathway and androgen receptor in prostate cancer” (dm-Drogerie Markt donation) / PI Sonja Levanat
- 2017/18 – associate on research project “Discovery of new biomarkers for melanoma development” (the City of Zagreb donation) / PI Sonja Levanat
- 2016/17 – associate on research project “Mechanisms of interaction of steroids and signaling pathways in the development of ovarian cancer: Looking for early indicators of ovarian cancer” (the City of Zagreb donation) / PI Sonja Levanat
- 2016/17 – associate on research project “Apoptotic pathways and role of BIRC5 (survivin) in breast cancer development” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2015/16 – principal investigator on Hazu Foundation research project “The role of BIRC5 gene polymorphisms in differential expression of survivin isoforms in breast cancer”
- 2015 – associate on research project “microRNA profiling of ovarian cancer” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2015 – associate on research project “InnoMol - New molecular solutions in research and development for innovative drugs”, FP7-Regpot, PI Oliver Vugrek
- 2014 - 2019 – associate on the Croatian Science Foundation research project “ProNetNel - New protein networks for novel therapeutic avenues in human melanoma”; [HRZZ IP-2013-11-1615] / PI Neda Slade

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Jadranka Mustajbegović

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb, School of Medicine (retired)

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Reproduction and workplace

BIOGRAPHY

Born 1951 in Pula. Graduated 1975 from Medical School University of Zagreb. Medical internship and GP in Regional Medical Centre Mostar (1976-79). Specialized in Occupational Health (1978-80). Received advanced training in Medical School, University of Utrecht, the Netherlands (1992) and in School of Public Health, University of Albany, New York, USA (three months 1994). Degree of MA 1987 and PhD 1992 obtained at the School of Medicine, University of Zagreb. Assistant lecturer 1989-94; assistant professor 1994-98; full professor 2004; full professor in tenure 2009. Teaching course Environmental and Occupational Health at the Medical School University of Zagreb. In charge of leading the elective course in medical ethics “How to implement the Hippocrates’ oath?” In charge of postgraduate studies Occupational and Sports Medicine since 1990; since 1998 in charge of the course “Reproduction and the workplace” in PhD studies. Project manager of the Ministry of Science, Education and Sports, Republic of Croatia, projects nr. 108-1080316-0300 “Health at work and healthy environment” for project period 2006-2011 and nr. 0108332 “Water, food, immediate life environment – health determinants” 2002-2006. Croatian coordinator for the project „Development of core curriculum in occupational health“ Swiss National Science Foundation, IB74B0-111076- SCOPES 2005-2008. FP7 ORCAB (2009.-2014.) i DG SANCO PROMOVAX (2009.-2012.) Published more than 50 papers represented in Current Contents.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2009. Full professor, 2016. Retired.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Mustajbegović J, Parazajder J. Reprodukcijska sposobnost. U: Medicina rada i okoliša (ur. Šarić M i Žuškin E), Medicinska naklada, Zagreb 2002., str. 525-529.
2. Mustajbegović, J. Reprodukcijska sposobnost i radno mjesto. VII. međunarodna konferenca GLOBALNA VARNOST 2006 / ZVD (ur.). Ljubljana : Zavod Republike Slovenije za varstvo pri delu, 2006., str. 43-47.
3. Golubic R, Milosevic M, Knezevic B, Mustajbegovic J. Work-related stress, education and work ability among hospital nurses. J Adv Nurs. 2009 Oct;65(10):2056-66. doi: 10.1111/j.1365-2648.2009.05057.x. PubMed PMID: 19627386.
4. Milošević M, Golubić R, Mustajbegović J, Doko Jelinić J, Janev Holcer N, Kern J. Regional Pattern of Physical Inactivity in Croatia. Collegium antropologicum. Supplement. 33 (2009): 35-38.
5. Zuskin E, Mustajbegovic J, Sachter EN, Kern J, Deckovic-Vukres V, Trosic I, Chiarelli A. Respiratory Function in Pesticide Workers. Journal of Occupational & Environmental Medicine. 50 (2008), 11; 1299-1305.
6. Russo A, Milić R, Knežević B, Mulić R, Mustajbegović J. Harassment in Workplace Among School Teachers: Development of a Survey. Croatian Medical Journal 49 (2008), 4; 545-552.

7. Gazdek D, Strnad M, Mustajbegović J, Nemet-Lojan Z. Lymphohematopoietic Malignancies and Oil Exploitation in Koprivnica – Krizevci County, Croatia. *International Journal of Occupational and Environmental Health*. 13 (2007), 4; 258-267.
8. Pranjić N, Maleš-Bilić Lj, Beganlić A, Mustajbegović J. Mobbing, Stress, and Work Ability Index among Physicians in Bosnia and Herzegovina: Survey Study. *Croatian Medical Journal*. 47 (2006.); 750-758.
9. Pucarín-Cvetković J, Mustajbegović J, Doko-Jelinić J, Senta A, Nola I, Ivanković D, Kaić-Rak A, Milošević M. Body mass index and nutrition as determinants of health and disease in population of Croatian Adriatic islands. *Croatian Medical Journal*. 47 (2006) , 4; 619-626.
10. Žuškin E, Mustajbegović J, Schachter EN, Kanceljak B, Macan J, Kern J, Buneta L, Pucarín-Cvetković J. Immunological and respiratory changes in tobacco workers. *American Journal of Industrial Medicine*. 45 (2004), 1; 76-83.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Sklebar I, Mustajbegovic J, Sklebar D, Cesarik M, Milosevic M, Brborovic H, et al. How to Improve Patient Safety Culture in Croatian Hospitals? *Acta clinica Croatica*. 2016;55(3):370-80.
2. Grabovac I, Mustajbegovic J, Milosevic M. Are Patients Ready for Lesbian, Gay and Bisexual Family Physicians - A Croatian Study. *Collegium antropologicum*. 2016;40(2):83-90.
3. Pranjić N, Mustajbegovic J, Ivankovic D, Kern J, Vuletic S. Recipe from the past for the future: public health intervention represent a process for century. *Mater Sociomed*. 2015;27(2):125-8.
4. Grabovac I, Mustajbegovic J. Healthy occupational culture for a worker-friendly workplace. *Arh Hig Rada Toksikol*. 2015;66(1):1-8.
5. Milosevic M, Brborovic H, Mustajbegovic J, Montgomery A. Patients and health care professionals: partners in health care in Croatia? *British journal of health psychology*. 2014;19(3):670-82.
6. Grabovac I, Abramovic M, Komlenovic G, Milosevic M, Mustajbegovic J. Attitudes towards and knowledge about homosexuality among medical students in Zagreb. *Collegium antropologicum*. 2014;38(1):39-45.
7. Cvejanov-Kezunovic L, Mustajbegovic J, Milosevic M, Civljak R. Occupational exposure to blood among hospital workers in montenegro. *Arh Hig Rada Toksikol*. 2014;65(3):273-80.
8. Curkovic M, Milosevic M, Borovecki A, Mustajbegovic J. Physicians' interpersonal relationships and professional standing seen through the eyes of the general public in Croatia. *Patient Prefer Adherence*. 2014;8:1135-42.
9. Brborovic H, Sklebar I, Brborovic O, Brumen V, Mustajbegovic J. Development of a Croatian version of the US Hospital Survey on Patient Safety Culture questionnaire: dimensionality and psychometric properties. *Postgrad Med J*. 2014;90(1061):125-32.
10. Brborovic H, Brborovic O, Brumen V, Pavlekovic G, Mustajbegovic J. Are nurse presenteeism and patient safety culture associated: a cross-sectional study. *Arh Hig Rada Toksikol*. 2014;65(2):149-56.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Improving quality and safety in the hospital: The link between organisational culture, burnout, and quality of care (ORCAB). European commision (FP7).



Health at work and healthy working environment. Ministarstvo znanosti, obrazovanja i športa Republike Hrvatske (broj projekta: 108-1080316-0300).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Improving quality and safety in the hospital: The link between organisational culture, burnout, and quality of care (ORCAB). European commission (FP7).

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 12

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Andrea Mutvar, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb,
University hospital centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Analysis of medical images

BIOGRAPHY

DATE AND PLACE OF BIRTH July 12th 1971., Rijeka, CROATIA

WORK EXPERIENCE:

2015 – Assistant at Nuclear Medicine Department and Radiation Protection Department, School of Medicine, University of Zagreb

2006 – Nuclear medicine specialist in Nuclear Medicine and Radiation Protection Department, University Hospital Centre Zagreb. Special interest - nuclear medicine oncology.

1998 – 2002 Medical consultant in pharmaceutical company PLIVA

EDUCATION AND TRAINING:

2017 - defense of doctoral thesis The value of single photon emission tomography and computed tomography in detection of sentinel lymph node in breast cancer and melanoma patients

2008 - Postgraduate Doctoral Study «Biomedicine and Health Sciences » University of Zagreb, School of Medicine. Doctoral Thesis „The value of single photon emission tomography and computed tomography (SPECT/CT) in detection of sentinel lymph node in patients with breast cancer and malignant melanoma“

2014 - ESNM Advanced Learning Course on PET/CT in Oncology, Viena, Austria

2012 - Regional Training Course on Hybrid Imaging in Head and Neck Cancers, Brescia, Italy

2010 - First European Sentinella Users Forum (NKI Antoni van Leeuwenhoek, Amsterdam, The Netherlands)

2007 – Fellowship in Hammersmith Hospital, London, UK

2002 – 2006 - Nuclear medicine resident, University Hospital Zagreb

1997 – obligatory medical practice after graduating

1990 – 1996 – University of Zagreb, School of Medicine graduate

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2014

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS



1. Mutvar A, Huić D, Horvatić Herceg G et al. The sentinel node mapping for breast cancer: 2-days protocol combining SPECT/CT. Nuklearmedizin 2014; 53: 19-69; Abstracts; 8th International Congress of Croatian Society of Nuclear Medicine, A132.
2. Horvatić Herceg G, Bračić I, Kusačić-Kuna S, Mutvar A, Antulov J, Herceg D. Introduction of US-guided FNAC in preoperative staging prior to sentinel lymph node biopsy: benefit for patients with cutaneous melanoma. Nuklearmedizin 2014, 53: 19-69; Abstracts; 8th International Congress of Croatian Society of Nuclear Medicine, A132.
3. Golubić AT, Mutvar A, Žuvić M, Huić D. The unspecific lymph node uptake of F-18-choline in patients with prostate cancer. Nuklearmedizin 2014; 53: 19-69; Abstracts; 8th International Congress of Croatian Society of Nuclear Medicine, A131

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2010 -2013 IAEA Research Project (international multicentric project „The Use of Sentinel Lymph Node Detection in Breast, Melanoma, Head & Neck and Pelvic Cancers“).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2010 -2013 IAEA Research Project (international multicentric project „The Use of Sentinel Lymph Node Detection in Breast, Melanoma, Head & Neck and Pelvic Cancers“).

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Gordana Nedic Erjavec, PhD, research associate

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Rudjer Boskovic Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Selected animal models of psychiatric disorders

BIOGRAPHY

Gordana Nedic Erjavec, PhD, graduated in molecular biology in 2006 from University of Zagreb, Faculty of science. She works at Rudjer Boskovic Institute since June 1st 2007 in Laboratory for Molecular Neuropsychiatry. Since then she was an associate on 9 scientific projects, 3 of them Croatian, and 6 international. She gained her PhD in 2013 at PhD studies in molecular biosciences, Josip Juraj Strossmayer University, Osijek, Croatia and spent one year on a postdoctoral training in the Centre for metabolomics and bioanalyses at University San Pablo CEU, Madrid, Spain. In the end of 2017 she was promoted to research associate. Her scientific work contributed to the development of neuroscience, especially in the field of molecular background of neuropsychiatric diseases. Her current scientific achievements are presented through 42 scientific papers, 15 scientific book chapters and 68 scientific conference abstracts. On 14 out of 42 papers she is a first or equally contributing author. According to WoSCC her papers were cited for 520 times, while her h-index is 13.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: November 13th 2013, research associate

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Kovacic Z, Henigsberg N, Pivac N, **Nedic G**, Borovecki A. Platelet serotonin concentration and suicidal behavior in combat related posttraumatic stress disorder. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*. 2008;32(2):544-51.
2. Muck-Seler D, Sagud M, Mustapic M, **Nedic G**, Babic A, Peles AM, et al. The effect of lamotrigine on platelet monoamine oxidase type B activity in patients with bipolar depression. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*. 2008;32(5):1195-8.
3. Noskova T, Pivac N, **Nedic G**, Kazantseva A, Gaysina D, Faskhutdinova G, et al. Ethnic differences in the serotonin transporter polymorphism (5-HTTLPR) in several European populations. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*. 2008;32(7):1735-9.
4. Sagud M, Pivac N, Mustapic M, **Nedic G**, Peles AM, Kramaric M, et al. The effect of lamotrigine on platelet serotonin concentration in patients with bipolar depression. *Psychopharmacology*. 2008;197(4):683-5.
5. Hercigonja Novkovic V, Rudan V, Pivac N, **Nedic G**, Muck-Seler D. Platelet Serotonin Concentration in Children with Attention-Deficit/Hyperactivity Disorder. *Neuropsychobiology*. 2009;59(1):17-22.
6. Muck-Seler D, Presecki P, Mimica N, Mustapic M, Pivac N, Babic A, et al. Platelet serotonin concentration and monoamine oxidase type B activity in female patients in early, middle and late phase of Alzheimer's disease. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*. 2009;33(7):1226-31.
7. Pivac N, Kim B, **Nedic G**, Joo YH, Kozaric-Kovacic D, Hong JP, et al. Ethnic Differences in Brain-derived Neurotrophic Factor Val66Met Polymorphism in Croatian and Korean Healthy Participants. *Croatian Medical Journal*. 2009;50(1):43-8.

8. Pivac N, **Nedic G**, Mustapic M, Babic A, Stipcevic T, Borovecki F, et al. The lack of genotype-phenotype relationship between platelet serotonin concentration and serotonin transporter gene promoter polymorphism in healthy subjects. *Neuroscience Letters*. 2009;462(1):45-8.
9. **Nedic G**, Nikolac M, Borovecki F, Hajnsek S, Muck-Seler D, Pivac N. Association study of a functional catechol-o-methyltransferase polymorphism and smoking in healthy Caucasian subjects. *Neuroscience Letters*. 2010;473(3):216-9.
10. **Nedic G**, Pivac N, Hercigonja DK, Jovancevic M, Curkovic KD, Muck-Seler D. Platelet monoamine oxidase activity in children with attention-deficit/hyperactivity disorder. *Psychiatry Research*. 2010;175(3):252-5.
11. **Nedic G**, Borovecki F, Klepac N, Mubrin Z, Hajnsek S, Nikolac M, et al. Association Study of a Functional Catechol-O-Methyltransferase Polymorphism and Cognitive Function in Patients with Dementia. *Collegium Antropologicum*. 2011;35:79-84.
12. **Nedic G**, Nikolac M, Nenadic Sviglin K, Muck-Seler D, Borovecki F, Pivac N. Association study of a functional catechol-O-methyltransferase (COMT) Val(108)/(158)Met polymorphism and suicide attempts in patients with alcohol dependence. *International Journal of Neuropsychopharmacology*. 2011;14(3):377-88.
13. Nenadic-Sviglin K, **Nedic G**, Nikolac M, Kozaric-Kovacic D, Stipcevic T, Muck-Seler D, et al. Suicide attempt, smoking, comorbid depression, and platelet serotonin in alcohol dependence. *Alcohol*. 2011;45(3):209-16.
14. Nenadic Sviglin K, **Nedic G**, Nikolac M, Mustapic M, Muck-Seler D, Borovecki F, et al. Insomnia, platelet serotonin and platelet monoamine oxidase in chronic alcoholism. *Neuroscience Letters*. 2011;500(3):172-6.
15. Pivac N, Knezevic A, Gornik O, Pucic M, Igl W, Peeters H, Crepel A, Steyaert J, Novokmet M, Redzic I, Nikolac M, Novkovic Hercigonja V, Dodig Curkovic K, Curkovic M, **Nedic G**, Muck-Seler D, Borovecki F, Rudan I, Lauc G. Human Plasma Glycome in Attention-Deficit Hyperactivity Disorder and Autism Spectrum Disorders. *Molecular & Cellular Proteomics*. 2011;10(1)
16. Pivac N, Nikolac M, **Nedic G**, Mustapic M, Borovecki F, Hajnsek S, et al. Brain derived neurotrophic factor Val66Met polymorphism and psychotic symptoms in Alzheimer's disease. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*. 2011;35(2):356-62.
17. Pivac N, Pregelj P, Nikolac M, Zupanc T, **Nedic G**, Muck-Seler D, et al. The association between catechol-O-methyl-transferase Val(108/158)Met polymorphism and suicide. *Genes Brain and Behavior*. 2011;10(5):565-9.
18. Pregelj P, **Nedic G**, Paska AV, Zupanc T, Nikolac M, Balazic J, et al. The association between brain-derived neurotrophic factor polymorphism (BDNF Val66Met) and suicide. *Journal of Affective Disorders*. 2011;128(3):287-90.
19. Babic M, **Nedic G**, Muck-Seler D, Borovecki F, Pivac N. Lack of association between dopamine receptor D4 variable numbers of tandem repeats gene polymorphism and smoking. *Neuroscience Letters*. 2012;520(1):67-70.
20. Pivac N, Kozaric-Kovacic D, Grubisic-Ilic M, **Nedic G**, Rakos I, Nikolac M, et al. The association between brain-derived neurotrophic factor Val66Met variants and psychotic symptoms in posttraumatic stress disorder. *World Journal of Biological Psychiatry*. 2012;13(4):306-11.

21. Sagud M, Nikolac M, Mihaljevic-Peles A, **Nedic G**, Cusa BV, Mustapic M, et al. The lack of effect of ziprasidone on platelet serotonin concentration in schizophrenic patients. *Psychopharmacology*. 2012;219(4):1179-81.
22. Sagud M, Nikolac M, Mihaljevic-Peles A, **Nedic G**, Cusa BV, Mustapic M, et al. Antipsychotic drugs do not effect paltelet 5-HT concentration in schizophrenic patients. *Translational Neuroscience*. 2012;3(1):56-60.
23. **Nedic G**, Nikolac Perkovic M, Nenadic Sviglin K, Muck-Seler D, Borovecki F, Pivac N. Brain-derived neurotrophic factor Val(66)Met polymorphism and alcohol-related phenotypes. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*. 2013;40:193-8.
24. Nikolac M, **Nedic G**, Mustapic M, Muck-Seler D, Pivac N, Sagud M, et al. The lack of association between catechol-O-methyl-transferase Val108/158Met polymorphism and smoking in schizophrenia and alcohol dependence. *Psychiatry Research*. 2013;205(1-2):179-80.
25. Nikolac Perkovic M, Kiive E, **Nedic Erjavec G**, Veidebaum T, Curkovic M, Dodig-Curkovic K, et al. The association between the catechol-O-methyltransferase Val108/158Met polymorphism and hyperactive-impulsive and inattentive symptoms in youth. *Psychopharmacology*. 2013;230(1):69-76.
26. **Nedic Erjavec G**, Nenadic Sviglin K, Nikolac Perkovic M, Muck-Seler D, Jovanovic T, Pivac N. Association of gene polymorphisms encoding dopaminergic system components and platelet MAO-B activity with alcohol dependence and alcohol dependence-related phenotypes. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*. 2014;54:321-7.
27. Nikolac Perkovic M, **Nedic Erjavec G**, Stefulj J, Muck-Seler D, Pivac N, Hercigonja DK, et al. Association between the polymorphisms of the selected genes encoding dopaminergic system with ADHD and autism. *Psychiatry Research*. 2014;215(1):260-1.
28. Nikolac Perkovic M, **Nedic Erjavec G**, Zivkovic M, Sagud M, Uzun S, Mihaljevic-Peles A, et al. Association between the brain-derived neurotrophic factor Val66Met polymorphism and therapeutic response to olanzapine in schizophrenia patients. *Psychopharmacology*. 2014;231(18):3757-64.
29. Svob Strac D, **Nedic Erjavec G**, Nikolac Perkovic M, Nenadic Sviglin K, Borovecki F, Pivac N. Association of GABA(A) receptor alpha(2) subunit gene (GABRA2) with alcohol dependence-related aggressive behavior. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*. 2015;63:119-25.
30. Nikolac Perkovic M, Svob Strac D, **Nedic Erjavec G**, Uzun S, Podobnik J, Kozumplik O, et al. Monoamine oxidase and agitation in psychiatric patients. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*. 2016;69:131-46.
31. Petrovic ZK, **Nedic Erjavec G**, Nikolac Perkovic M, Peraica T, Pivac N. No association between the serotonin transporter linked polymorphic region polymorphism and severity of posttraumatic stress disorder symptoms in combat veterans with or without comorbid depression. *Psychiatry Research*. 2016;244:376-81.
32. Svob Strac D, Petrovic ZK, Nikolac Perkovic M, Umolac D, **Nedic Erjavec G**, Pivac N. Platelet monoamine oxidase type B, MAOB intron 13 and MAOA-uVNTR polymorphism and symptoms of post-traumatic stress disorder. *Stress-the International Journal on the Biology of Stress*. 2016;19(4):362-73.

33. Sustar A, Nikolac Perkovic M, **Nedic Erjavec G**, Svob Strac D, Pivac N. A protective effect of the BDNF Met/Met genotype in obesity in healthy Caucasian subjects but not in patients with coronary heart disease. *European Review for Medical and Pharmacological Sciences*. 2016;20(16):3417-26.
34. **Nedic Erjavec G**, Uzun S, Nikolac Perkovic M, Kozumplik O, Svob Strac D, Mimica N, et al. Cortisol in schizophrenia: No association with tobacco smoking, clinical symptoms or antipsychotic medication. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*. 2017;77:228-35.
35. Nikolac Perkovic M, **Nedic Erjavec G**, Svob Strac D, Uzun S, Kozumplik O, Pivac N. Theranostic Biomarkers for Schizophrenia. *International Journal of Molecular Sciences*. 2017;18(4)
36. **Nedic Erjavec G**, Konjevod M, Nikolac Perkovic M, Svob Strac D, Tudor L, Barbas C, et al. Short overview on metabolomic approach and redox changes in psychiatric disorders. *Redox Biology*. 2018;14:178-86.
37. Hirasawa-Fujita M, Tudor L, Pekovic MN, Kozumplik O, **Nedic Erjavec G**, Uzun S, et al. Genotypic and haplotypic associations of catechol-O-methyltransferase (COMT) rs4680 and rs4818 with salivary cortisol in patients with schizophrenia. *Psychiatry Research*. 2018;259:262-4.
38. Mestrovic AH, Tudor L, Nikolac Perkovic M, **Nedic Erjavec G**, Petrovic ZK, Svob Strac D, et al. Significant association between catechol-O-methyltransferase (COMT) Val(158/108)Met polymorphism and cognitive function in veterans with PTSD. *Neuroscience Letters*. 2018;666:38-43.
39. Nikolac Perkovic M, Svob Strac D, Tudor L, Konjevod M, **Nedic Erjavec G**, Pivac N. Catechol-O-methyltransferase, Cognition and Alzheimer's Disease. *Current Alzheimer Research*. 2018;15(5):408-19.
40. Sagud M, Tudor L, Uzun S, Nikolac Perkovic M, Zivkovic M, Konjevod M, Kozumplik O, Vuksan Cusa, Svob Strac D, Rados I, Mimica N, Mihaljevic Peles A, **Nedic Erjavec G**, Pivac N. Haplotypic and Genotypic Association of Catechol-O-Methyltransferase rs4680 and rs4818 Polymorphisms and Treatment Resistance in Schizophrenia. *Frontiers in Pharmacology*. 2018;941.
41. Tudor L, Konjevod M, Nikolac Perkovic M, Svob Strac D, **Nedic Erjavec G**, Uzun S, et al. Genetic Variants of the Brain-Derived Neurotrophic Factor and Metabolic Indices in Veterans With Posttraumatic Stress Disorder. *Frontiers in Psychiatry*. 2018;9
42. Konjevod M, Tudor L, Svob Strac D, **Nedic Erjavec G**, Barbas C, Zarkovic N, et al. Metabolomic and glycomic findings in posttraumatic stress disorder. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*. 2019;88:181-93.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Nikolac Perkovic M, Kiive E, **Nedic Erjavec G**, Veidebaum T, Curkovic M, Dodig-Curkovic K, et al. The association between the catechol-O-methyltransferase Val108/158Met polymorphism and hyperactive-impulsive and inattentive symptoms in youth. *Psychopharmacology*. 2013;230(1):69-76.
2. **Nedic Erjavec G**, Nenadic Sviglin K, Nikolac Perkovic M, Muck-Seler D, Jovanovic T, Pivac N. Association of gene polymorphisms encoding dopaminergic system components and platelet MAO-B activity with alcohol dependence and alcohol dependence-related phenotypes. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*. 2014;54:321-7.

3. Nikolac Perkovic M, **Nedic Erjavec G**, Stefulj J, Muck-Seler D, Pivac N, Hercigonja DK, et al. Association between the polymorphisms of the selected genes encoding dopaminergic system with ADHD and autism. *Psychiatry Research*. 2014;215(1):260-1.
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9. Sustar A, Nikolac Perkovic M, **Nedic Erjavec G**, Svob Strac D, Pivac N. A protective effect of the BDNF Met/Met genotype in obesity in healthy Caucasian subjects but not in patients with coronary heart disease. *European Review for Medical and Pharmacological Sciences*. 2016;20(16):3417-26.
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13. Hirasawa-Fujita M, Tudor L, Pekovic MN, Kozumplik O, **Nedic Erjavec G**, Uzun S, et al. Genotypic and haplotypic associations of catechol-O-methyltransferase (COMT) rs4680 and rs4818 with salivary cortisol in patients with schizophrenia. *Psychiatry Research*. 2018;259:262-4.
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16. Sagud M, Tudor L, Uzun S, Nikolac Perkovic M, Zivkovic M, Konjevod M, Kozumplik O, Vuksan Cusa, Svob Strac D, Rados I, Mimica N, Mihaljevic Peles A, **Nedic Erjavec G**, Pivac N. Haplotypic and Genotypic Association of Catechol-O-Methyltransferase rs4680 and rs4818 Polymorphisms and Treatment Resistance in Schizophrenia. *Frontiers in Pharmacology*. 2018;941.
17. Tudor L, Konjevod M, Nikolac Perkovic M, Svob Strac D, **Nedic Erjavec G**, Uzun S, et al. Genetic Variants of the Brain-Derived Neurotrophic Factor and Metabolic Indices in Veterans With Posttraumatic Stress Disorder. *Frontiers in Psychiatry*. 2018;9
18. Konjevod M, Tudor L, Svob Strac D, **Nedic Erjavec G**, Barbas C, Zarkovic N, et al. Metabolomic and glycomic findings in posttraumatic stress disorder. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*. 2019;88:181-93.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 2018.-2021. „Early detection of Alzheimer's disease with methylation status of candidate genes in liquid biopsies cfDNA" (financiran od strane Slovenian Research Agency; voditelj doc. dr. sc. Alja Videtič Paska)
- 2017.-2022. „CRO_A-00033, Technology & Know-how Transfer in Metabolomics and Establishment of Latest Scientific Equipment in Zagreb" offset projekt (financiran od strane tvrtke Patria iz Finske u suradnji s Hrvatskim ministarstvom gospodarstva)
- 2015.-2019. „Genomski i glikanski biomarkeri PTSP-a" (financirano od strane Hrvatske zaklade za znanost; voditelj: Nela Pivac)
- 2015.-2018. „Multidisciplinary Metrics for Soldier Resilience Prediction and Training" (financiran od strane NATO Science for Peace and Security Programme; direktor Krešimir Ćosić (Hrvatska); ko-direktori: Omer Bonne (Izrael); Nela Pivac (Hrvatska) i Tanja Jovanovic (SAD)
- 2014.-2017. „The association between stress, genetic variants of the catechol-O-methyltransferase (COMT) and mu opioid receptor gene (OPRM1) polymorphisms and tobacco smoking in patients with schizophrenia." (kolaborativni projekt između University of Michigan, SAD, te Instituta Ruđer Bošković i Klinike za psihijatriju Vrapče, Hrvatska; voditelji Nela Pivac (Hrvatska) i Edward Domino (SAD)
- 2014.-2015. „The role of 5-HT6 receptors in Alzheimer's disease" (hrvatsko-slovenski bilateralni projekt financiran od strane MZOS-a; voditelji Suzana Uzun (Hrvatska) i Zvezdan Pirtovsek (Slovenija))
- 2011.-2015. „Structure-based drug design for diagnosis and treatment of neurological diseases: dissecting and modulating complex function in the monoaminergic systems of the brain" (financirano od strane COST-a - Action CM1103; voditelj Rona Ramsey (UK), član i predstavnik za Hrvatsku: Nela Pivac)
- 2011.-2014. „Otkrivanje i praćenje bioloških biljega radi rane terapijske intervencije u Alzheimerovoj bolesti" (financirano od strane Hrvatske zaklade za znanost, voditelj: Goran Šimić)
- 2007.-2014. „Molekularna podloga i liječenje psihijatrijskih i stresom izazvanih poremećaja" (izvor financiranja: Ministarstvo znanosti, obrazovanja i sporta; voditelj: Nela Pivac)
- 2009.-2010. Hrvatsko-slovenski bilateralni projekt „Genetic factors as markers of suicide" (izvor financiranja: Ministarstvo znanosti, obrazovanja i sporta; voditelji: Nela Pivac (Hrvatska) i Petar Pregelj (Slovenija))



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2018.-2021. „Early detection of Alzheimer’s disease with methylation status of candidate genes in liquid biopsies cfDNA" (financiran od strane Slovenian Research Agency; voditelj doc. dr. sc. Alja Videtič Paska)

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ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Matea Nikolac Perković, PhD, research associate

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Selected animal models of psychiatric disorders

BIOGRAPHY

Education: Faculty of Natural Sciences, University of Zagreb, Zagreb, title obtained: MSc (2008); PhD Studies in Molecular Biosciences, University of Osijek, Osijek, title obtained: PhD (2015); Postdoc at The Centre of Metabolomics and Bioanalysis (CEMBIO), Pharmacy Faculty (San Pablo CEU), Madrid, Spain (2018-2019); Guest researcher at the Institute for Experimental Medicine, Budapest, Hungary (short stays in the period from October to December 2017).

Employment: Research assistant (PhD student), Ruđer Bošković Institute, Zagreb, Croatia (2009-2015); Postdoctoral researcher, Ruđer Bošković Institute, Zagreb, Croatia (2015-2018); Postdoctoral researcher, The Centre of Metabolomics and Bioanalysis (CEMBIO), Pharmacy Faculty (San Pablo CEU), Madrid, Spain (2018-2019); Research associate, Ruđer Bošković Institute, Zagreb, Croatia (2018-today).

Publications: 45 scientific articles and 15 scientific book chapters; citations: 718; H-index: 16 (https://scholar.google.es/citations?user=grN_wdkAAAAJ&hl=en).

Most important awards: National science award of the Republic of Croatia - Annual award for junior researchers for 2013 in the field of biomedicine; The Annual award of the society of university teachers, scholars and other scientists - Zagreb for young scientists and artists for 2013; Annual award of the Ruđer Bošković Institute for the best article in 2014.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2018

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1: Tudor L, Konjevod M, Nikolac Perkovic M, Svob Strac D, Nedic Erjavec G, Uzun S, Kozumplik O, Sagud M, Kovacic Petrovic Z, Pivac N. Genetic Variants of the Brain-Derived Neurotrophic Factor and Metabolic Indices in Veterans With Posttraumatic Stress Disorder. *Front Psychiatry*. 2018 Nov 27;9:637. doi: 10.3389/fpsyt.2018.00637. eCollection 2018. PubMed PMID: 30542302; PubMed Central PMCID: PMC6277864.

2: Babić Leko M, Willumsen N, Nikolac Perković M, Klepac N, Borovečki F, Hof PR, Sonicki Z, Pivac N, de Silva R, Šimić G. Association of MAPT haplotype-tagging polymorphisms with cerebrospinal fluid biomarkers of Alzheimer's disease: A preliminary study in a Croatian cohort. *Brain Behav*. 2018 Nov;8(11):e01128. doi: 10.1002/brb3.1128. Epub 2018 Oct 17. PubMed PMID: 30329219; PubMed Central PMCID: PMC6236251.

3: Huang E, Hettige NC, Zai G, Tomasi J, Huang J, Zai CC, Pivac N, Nikolac Perkovic M, Tiwari AK, Kennedy JL. BDNF Val66Met polymorphism and clinical response to antipsychotic treatment in schizophrenia and schizoaffective disorder patients: a meta-analysis. *Pharmacogenomics J*. 2018 Sep 5. doi: 10.1038/s41397-018-0041-5. [Epub ahead of print] PubMed PMID: 30181602.

4: Konjevod M, Tudor L, Svob Strac D, Nedic Erjavec G, Barbas C, Zarkovic N, Nikolac Perkovic M, Uzun S, Kozumplik O, Lauc G, Pivac N. Metabolomic and glycomic findings in posttraumatic stress disorder. *Prog Neuropsychopharmacol Biol Psychiatry*. 2019 Jan 10;88:181-193. doi: 10.1016/j.pnpbp.2018.07.014. Epub 2018 Jul 17. Review. PubMed PMID: 30025792.

- 5: Havelka Mestrovic A, Tudor L, Nikolac Perkovic M, Nedic Erjavec G, Kovacic Petrovic Z, Svob Strac D, Konjevod M, Pivac N. Significant association between catechol-O-methyltransferase (COMT) Val(158/108)Met polymorphism and cognitive function in veterans with PTSD. *Neurosci Lett*. 2018 Feb 14;666:38-43. doi: 10.1016/j.neulet.2017.12.033. Epub 2017 Dec 14. PubMed PMID: 29248614.
- 6: Nedic Erjavec G, Konjevod M, Nikolac Perkovic M, Svob Strac D, Tudor L, Barbas C, Grune T, Zarkovic N, Pivac N. Short overview on metabolomic approach and redox changes in psychiatric disorders. *Redox Biol*. 2018 Apr;14:178-186. doi: 10.1016/j.redox.2017.09.002. Epub 2017 Sep 6. Review. PubMed PMID: 28942195; PubMed Central PMCID: PMC5609866.
- 7: Nedic Erjavec G, Uzun S, Nikolac Perkovic M, Kozumplik O, Svob Strac D, Mimica N, Hirasawa-Fujita M, Domino EF, Pivac N. Cortisol in schizophrenia: No association with tobacco smoking, clinical symptoms or antipsychotic medication. *Prog Neuropsychopharmacol Biol Psychiatry*. 2017 Jul 3;77:228-235. doi: 10.1016/j.pnpbp.2017.04.032. Epub 2017 Apr 28. PubMed PMID: 28461252.
- 8: Di Giovanni G, Svob Strac D, Sole M, Unzeta M, Tipton KF, Mück-Šeler D, Bolea I, Della Corte L, Nikolac Perkovic M, Pivac N, Smolders IJ, Stasiak A, Fogel WA, De Deurwaerdere P. Monoaminergic and Histaminergic Strategies and Treatments in Brain Diseases. *Front Neurosci*. 2016 Nov 24;10:541. eCollection 2016. Review. PubMed PMID: 27932945; PubMed Central PMCID: PMC5121249.
- 9: Kovacic Petrovic Z, Nedic Erjavec G, Nikolac Perkovic M, Peraica T, Pivac N. No association between the serotonin transporter linked polymorphic region polymorphism and severity of posttraumatic stress disorder symptoms in combat veterans with or without comorbid depression. *Psychiatry Res*. 2016 Oct 30;244:376-81. doi: 10.1016/j.psychres.2016.08.017. Epub 2016 Aug 8. PubMed PMID: 27525827.
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- 11: Svob Strac D, Kovacic Petrovic Z, Nikolac Perkovic M, Umolac D, Nedic Erjavec G, Pivac N. Platelet monoamine oxidase type B, MAOB intron 13 and MAOA-uVNTR polymorphism and symptoms of post-traumatic stress disorder. *Stress*. 2016 Jul;19(4):362-73. doi: 10.1080/10253890.2016.1174849. Epub 2016 Apr 26. PubMed PMID: 27112218.
- 12: Gotovac K, Nikolac Perković M, Pivac N, Borovečki F. Biomarkers of aggression in dementia. *Prog Neuropsychopharmacol Biol Psychiatry*. 2016 Aug 1;69:125-30. doi: 10.1016/j.pnpbp.2016.03.002. Epub 2016 Mar 4. Review. PubMed PMID: 26952705.
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17: Nikolac Perkovic M, Pucic Bakovic M, Kristic J, Novokmet M, Huffman JE, Vitart V, Hayward C, Rudan I, Wilson JF, Campbell H, Polasek O, Lauc G, Pivac N. The association between galactosylation of immunoglobulin G and body mass index. *Prog Neuropsychopharmacol Biol Psychiatry*. 2014 Jan 3;48:20-5. doi: 10.1016/j.pnpbp.2013.08.014. Epub 2013 Sep 5. PubMed PMID: 24012618.

18: Zivković M, Mihaljević-Peles A, Bozina N, Sagud M, Nikolac-Perkovic M, Vuksan-Cusa B, Muck-Seler D. The association study of polymorphisms in DAT, DRD2, and COMT genes and acute extrapyramidal adverse effects in male schizophrenic patients treated with haloperidol. *J Clin Psychopharmacol*. 2013 Oct;33(5):593-9. doi: 10.1097/JCP.0b013e31829abec9. PubMed PMID: 23963056.

19: Nikolac Perkovic M, Kiive E, Nedic Erjavec G, Veidebaum T, Curkovic M, Dodig-Curkovic K, Muck-Seler D, Harro J, Pivac N. The association between the catechol-O-methyltransferase Val108/158Met polymorphism and hyperactive-impulsive and inattentive symptoms in youth. *Psychopharmacology (Berl)*. 2013 Nov;230(1):69-76. doi: 10.1007/s00213-013-3138-1. Epub 2013 May 29. PubMed PMID: 23715639.

20: Nikolac Perkovic M, Mustapic M, Pavlovic M, Uzun S, Kozumplik O, Barisic I, Muck-Seler D, Pivac N. Lack of association between brain-derived neurotrophic factor Val66Met polymorphism and body mass index change over time in healthy adults. *Neurosci Lett*. 2013 Jun 17;545:127-31. doi: 10.1016/j.neulet.2013.04.036. Epub 2013 May 2. PubMed PMID: 23643991.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1: Tudor L, Konjevod M, Nikolac Perkovic M, Svob Strac D, Nedic Erjavec G, Uzun S, Kozumplik O, Sagud M, Kovacic Petrovic Z, Pivac N. Genetic Variants of the Brain-Derived Neurotrophic Factor and Metabolic Indices in Veterans With Posttraumatic Stress Disorder. *Front Psychiatry*. 2018 Nov 27;9:637. doi: 10.3389/fpsy.2018.00637. eCollection 2018. PubMed PMID: 30542302; PubMed Central PMCID: PMC6277864.

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- 15: Nikolac Perkovic M, Nedic Erjavec G, Zivkovic M, Sagud M, Uzun S, Mihaljevic-Peles A, Kozumplik O, Muck-Seler D, Pivac N. Association between the brain-derived neurotrophic factor Val66Met

polymorphism and therapeutic response to olanzapine in schizophrenia patients. *Psychopharmacology (Berl)*. 2014 Sep;231(18):3757-64. doi: 10.1007/s00213-014-3515-4. Epub 2014 Mar 5. PubMed PMID: 24595507.

16: Nikolac Perkovic M, Nedic Erjavec G, Stefulj J, Muck-Seler D, Pivac N, Kocijan Hercigonja D, Hranilovic D, Curkovic M, Dodig-Curkovic K. Association between the polymorphisms of the selected genes encoding dopaminergic system with ADHD and autism. *Psychiatry Res*. 2014 Jan 30;215(1):260-1. doi: 10.1016/j.psychres.2013.10.018. Epub 2013 Oct 24. PubMed PMID: 24210742.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2015-2017 „Multidisciplinary metrics for soldier resilience prediction and training“, NATO Science for Peace and Security Programme: PIs: Kresimir Cosic and Omer Bonne; co-director Nela Pivac

2014-2015 „The role of 5-HT₆ receptors in Alzheimer’s disease“ (funding source: Croatian Ministry of Science, Education and Sports; PIs: Suzana Uzun and Zvezdan Pirtovsek); Croatian-Slovenian bilateral project

2014-2016 „The association between stress, genetic variants of the catechol-O-methyltransferase (COMT) and mu opioid receptor gene (OPRM1) polymorphisms and tobacco smoking in patients with schizophrenia.“; collaborative project among University of Michigan – USA, Rudjer Boskovic Institute, Croatia and University Psychiatric Hospital Vrapce, Zagreb, Croatia (PIs: Nela Pivac and Edward F Domino)

2011-2014 „Detection and tracking of biological markers for early therapeutic intervention in sporadic Alzheimer’s disease“ project (funding source: Croatian Science Foundation; PI: Goran Simic)

2011-2015 „Structure-based drug design for diagnosis and treatment of neurological diseases: dissecting and modulating complex function in the monoaminergic systems of the brain“ project (funding source: European Cooperation in Science and Technology (COST), Action CM1103; PI: Rona Ramsay, member for Croatia: Nela Pivac

2009-2010 „Genetic factors as markers of suicide“ (funding source: Croatian Ministry of Science, Education and Sports; PIs: Nela Pivac and Petar Pregelj); Croatian-Slovenian bilateral project

2007-2014 „Molecular basis and treatment of psychiatric and stress related disorders“ (funding source: Croatian Ministry of Science, Education and Sports; PI: Nela Pivac)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2015-2017 „Multidisciplinary metrics for soldier resilience prediction and training“, NATO Science for Peace and Security Programme: PIs: Kresimir Cosic and Omer Bonne; co-director Nela Pivac

2014-2015 „The role of 5-HT₆ receptors in Alzheimer’s disease“ (funding source: Croatian Ministry of Science, Education and Sports; PIs: Suzana Uzun and Zvezdan Pirtovsek); Croatian-Slovenian bilateral project

2014-2016 „The association between stress, genetic variants of the catechol-O-methyltransferase (COMT) and mu opioid receptor gene (OPRM1) polymorphisms and tobacco smoking in patients with schizophrenia.“; collaborative project among University of Michigan – USA, Rudjer Boskovic Institute, Croatia and University Psychiatric Hospital Vrapce, Zagreb, Croatia (PIs: Nela Pivac and Edward F Domino)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: associate professor Tamara Nikuševa Martić

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Epigenetics; Methods of molecular biology in medicine

BIOGRAPHY

Date and place of birth: 11th 06th 1975 in Zagreb I'm married and the mother of two children. Education

From 1994 to 1999 . Faculty of Science, University of Zagreb

From 2003 to 2008 . Postgraduate studies in molecular and cellular biology at the Faculty of Science , University of Zagreb

2006 Master of Science , Faculty of Science, University of Zagreb.

2008 Ph.D. , thesis entitled " The role of gene AXIN-1 and β - catenin in neuroepithelial brain tumors " , Faculty of Science, University of Zagreb

Training 2003rd TEMPUS WORKSHOP

Recent Advances in Biotechnology and Quality of Life , School of Medicine, University of Zagreb

2004 FEBS Lecture Course on Cellular Signaling

2008 "Skills in medicine teaching process" School of Medicine, University of Zagreb

2014. Cours: Laboratory animal science course (FELASA kat C ekvivalent), Zagreb,

2015 Cours: Academic teaching excellence, Britanska ambasada, Zagreb

work experience

2003 - 2008 - Assistant Research Fellow Department of Biology Faculty of Medicine , University of Zagreb

2008 -2011 . Senior Assistant - researcher

2011 - 2016 Assistant Professor , Department of Medical Biology

2016 -present Associate professor, Department of Medical Biology

Projects: Researcher at the HRZZ Research Projects

: " The role of the Wnt signaling pathway in epithelial and mesenchymal transition "

"Genotype-Phenotype correlation in Alport's syndrome and Thin Glomerular Basement Membrane Nephropathy"

Researcher on Financial support from UNIZG 2014: Wnt signalling in placenta and tumorigenesis

Researcher on Financial support from UNIZG 2015: The role of Hedgehog signalling pathway in the regulation of invasiveness of trophoblasts and tumors

Researcher on Centar of excellence for reproductive and regenerative medicine

Leader of Financial support from UNIZG 2018: Expression of Wnt signalling pathway components in diffuse gastric carcinoma

Teaching : Exercises and seminars from the " Medical Biology " for medical and dental students , including courses in English studies and postgraduate teaching in the course " Genetic basis of brain tumors ," study neuroscience and " Mechanisms of genetic control ," study Biomedicine .

Participate at the postgraduate studies in the English language , " Methods of molecular biology in medicine . Leader of small elective course " Man and Environment" at first year of undergraduate studies.

Workshop leader at the Festival of Science . Mentor for student's thesis "Analysis of protein E- cadherin in meningioma " awarded with Rector's Prize , University of Zagreb, Faculty of Science , Zagreb 2008.

Mentor of 3 student graduate work.

Skills and competencies

Genetics of cancer, Wnt signaling , tumorigenesis , tumor suppressor genes , oncogenes, genetic basis of human brain tumors , molecular biology methods (PCR , DNA and RNA isolation , Western blot, immunohistochemistry, RFLP , electrophoresis, PAGE , heteroduplex analysis).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 5.12.2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Publication indexed in CC.

1. Pećina-Šlaus N, Gall-Trošelj K, Šlaus M, Radić K, Nikuševa-Martić T, Pavelić K. Genetic changes of the E-cadherin and APC tumour suppressor genes in clear cell renal cell carcinoma. *Pathology*, 36:145-151, 2004.
2. Pećina-Šlaus N. Kljaić M, Nikuševa-Martić T. Loss of heterozygosity of APC and CDH1 genes in laryngeal squamous cell carcinoma. *Pathol Res Practice*, 201:557-563, 2005.
3. Pećina-Šlaus N, Žigmund M, Kušec V, Nikuševa-Martić T, Čačić M, Šlaus M. E-cadherin and β -catenin expression patterns in malignant melanoma assessed by image analysis. *J Cutan Pathol* 34:239-246, 2007.
4. Nikuševa Martić T, Beroš V, Pećina-Šlaus N, Pećina HI, Bulić-Jakuš F. Genetic changes of CDH1, APC and CTNNB1 found in human brain tumors. *Pathol Res Practice*. 203; 779-787 , 2007.
5. Pećina-Šlaus N, Nikuševa-Martić T, Beroš V, Tomas D. Genetic Alterations of E-cadherin and Beta-Catenin in Germinoma and Teratoma: Report of Two Central Nervous System Cases. *Pathol Oncol Res*. 13; 370-374, 2007.
6. Pecina-Slaus N, Nikuseva Martic T, Tomas D, Beros V, Zeljko M, Čupić H. Meningiomas exhibit loss of Heterosygosity of the APC gene. *J. Neurooncol*. 87; 63-70, 2008.
7. Hrašćan R, Pećina-Šlaus N, Nikuševa Martić T, Franekić-Čolić J, Gall-Trošelj K, Pavelić K, Karapandža N. Analysis of selected genes in neuroendocrine tumours: insulinomas and pheochromocytomas. *J Neuroendocrinol*. 20; 1015-1022; 2008.
8. Nikuševa Martić T, Pećina-Šlaus N, Kušec V, Kokotović T, Mušinović H, Tomas D, Zeljko M. Changes of AXIN-1 and Beta-Catenin in Neuroepithelial Brain Tumors. *Pathol Oncol Res*. 16;75-79;2010
9. Pećina-Šlaus N, Nikuševa Martić T, Deak AJ, Zeljko M, Hrašćan R. Genetic and protein changes of E-cadherin in meningiomas. *J Cancer Res Clin*. 136;695-702; 2010
10. Pećina-Slaus N, Martić TN, Kokotović T, Kusec V, Tomas D, Hrasćan R.AXIN-1 protein expression and localization in glioblastoma. *Coll Antropol*.;35 Suppl 1:101-6; 2011
11. Pećina-Šlaus N, Nikuševa Martić T, Zeljko M, Bulat S Brain metastases exhibit gross deletions of the APC gene. *Brain Tumor Pathol*.;28(3):223-228, 2011
12. Pećina-Slaus N, Zeljko M, Pećina HI, Nikuseva Martić T, Bacić N, Tomas D, Hrasćan R.Frequency of loss of heterozygosity of the NF2 gene in schwannomas from Croatian patients.*Croat Med J*.53(4):321-327; 2012

13. Nikuševa-Martić T, Šerman Lj, Zeljko M, Vidas Ž, Gašparov S, Zeljko HM, Kosović M, Pećina-Šlaus N. Expression of Secreted Frizzled-Related Protein 1 and 3, T-cell Factor 1 and Lymphoid Enhancer Factor 1 in Clear Cell Renal Cell Carcinoma. *Pathol Oncol Res* 2013 Jul;19(3):545-51.
14. Serman L, Nikuševa Martić T, Vranic S. T-cell factor 1 expression in germ cell tumors with trophoblastic differentiation. *Pathol Int.* 2014;64(2):86-7.
15. Partl JZ, Fabijanovic D, Skrtic A, Vranic S, Martić TN, Serman L. Immunohistochemical expression of SFRP1 and SFRP3 proteins in normal and malignant reproductive tissues of rats and humans. *Appl Immunohistochem Mol Morphol.* 2014;22(9):681-7
16. Vukasovic A, Grbesa D, Nikuševa Martić T, Kusec V, Miskovic B, Serman A, Soken N, Serman L. Glycosylation pattern and axin expression in normal and IUGR placentae. *J Matern Fetal Neonatal Med.* 2015;28(5):558-63.
17. Fabijanovic D, Zunic I, Martic TN, Skenderi F, Serman L, Vranic S. The expression of SFRP1, SFRP3, DVL1, and DVL2 proteins in testicular germ cell tumors. *APMIS.* 2016; 124(11):942-949.
18. Jurkovic I, Gecek I, Skrtic A, Zmijanac Partl J, Nikuseva Martic T, Serman A, Galesic Ljubanovic D, Serman L. ELF5 transcription factor expression during gestation in humans and rats - an immunohistochemical analysis. *J Matern Fetal Neonatal Med.* 2017;30(11):1261-1266.
19. Kardum V, Karin V, Glibo M, Skrtic A, Martic TN, Ibisevic N, Skenderi F, Vranic S, Serman L. Methylation-associated silencing of SFRP1 gene in high-grade serous ovarian carcinomas. *Ann Diagn Pathol.* 2017;31:45-49.
20. Zmijanac Partl J, Karin V, Skrtic A, Nikuseva-Martic T, Serman A, Mlinarec J, Curkovic-Perica M, Vranic S, Serman L. Negative regulators of Wnt signaling pathway SFRP1 and SFRP3 expression in preterm and term pathologic placentas. *J Matern Fetal Neonatal Med.* 2018; 31(22):2971-2979.
21. Grubelic Ravić K, Paić F, Vucelić B, Brinar M, Čuković-Čavka S, Božina N, Krznarić Ž, Kalauz M, Bešić D, Nikuševa Martić T. Association of polymorphic variants in serotonin re-uptake transporter gene with Crohn's disease: a retrospective case-control study. *Croat Med J.* 2018;31;59(5):232-243.

Ostali indeksi/Other indexes

1. Pećina-Šlaus N, Nikuševa-Martić T, Gall-Trošelj K, Radić K, Hrašćan R. Replication Error-Positive Samples Found in Pheochromocytoma. *In vivo* 19: 359-366, 2005.
2. Žigmund M, Nikuševa-Martić T, Čačić M, Pećina-Šlaus N. Najnovije spoznaje o genskoj osnovi melanoma. *Liječ. Vjesn.* 127; 89-93, 2005.
3. Žigmund M, Pećina-Šlaus N, Kušec V, Nikuševa-Martić T, Čačić M, Šlaus M, Bulić-Jakuš F. Beta-catenin expression in malignant melanoma. *Acta Clinica Croatica*, 45(suppl 1) 1-52, 2006.
4. Zeljko M, Pecina-Slaus N, Martic TN, Kusec V, Beros V, Tomas D. Molecular alterations of E-cadherin and beta-catenin in brain metastases. *Front Biosci (Elite Ed).* 2011 Jan 1;3:616-24.
5. Pecina-Slaus N, Nikuseva Martic T, Kokotovic T. AXIN1 (axin1). *Atlas Genet Cytogenet Oncol Haematol.* 2011; 15(11):933-937.
6. Serman L, Nikuševa Martić T, Serman A, Vranic S. Epigenetic alterations of the Wnt signaling pathway in cancer: a mini review. *Bosn J Basic Med Sci.* 2014;14(4):191-4.

7. Serman L, Zunic I, Vrsaljko N, Grbesa D, Gjurcevic E, Matasin Z, Nikuševa Martić T, Bulic Jakus F, Tlak Gajger I, Serman A. Structural changes in the rat placenta during the last third of gestation discovered by stereology. *Bosn J Basic Med Sci.* 2015;15(1):21-5.
8. Šerman L, Žunić I, Vrsaljko N, Grbeša Đ, Gjurčević E, Matašin Ž, Nikuševa Martić T, Bulić Jakuš F, Tlak Gajger I, Šerman A. Reply to comment on "Structural changes in the rat placenta during the last third of gestation discovered by stereology". *Bosn J Basic Med Sci.* 2015 ;15(3):81.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Fabijanovic D, Zunic I, Martic TN, Skenderi F, Serman L, Vranic S. The expression of SFRP1, SFRP3, DVL1, and DVL2 proteins in testicular germ cell tumors. *APMIS.* 2016; 124(11):942-949.
2. Jurkovic I, Gecek I, Skrtic A, Zmijanac Partl J, Nikuseva Martic T, Serman A, Galesic Ljubanovic D, Serman L. ELF5 transcription factor expression during gestation in humans and rats - an immunohistochemical analysis. *J Matern Fetal Neonatal Med.* 2017;30(11):1261-1266.
3. Kardum V, Karin V, Glibo M, Skrtic A, Martic TN, Ibisevic N, Skenderi F, Vranic S, Serman L. Methylation-associated silencing of SFRP1 gene in high-grade serous ovarian carcinomas. *Ann Diagn Pathol.* 2017;31:45-49.
4. Zmijanac Partl J, Karin V, Skrtic A, Nikuseva-Martic T, Serman A, Mlinarec J, Curkovic-Perica M, Vranic S, Serman L. Negative regulators of Wnt signaling pathway SFRP1 and SFRP3 expression in preterm and term pathologic placentas. *J Matern Fetal Neonatal Med.* 2018; 31(22):2971-2979.
5. Grubelic Ravić K, Paić F, Vucelić B, Brinar M, Čuković-Čavka S, Božina N, Krznarić Ž, Kalauz M, Bešić D, Nikuševa Martić T. Association of polymorphic variants in serotonin re-uptake transporter gene with Crohn's disease: a retrospective case-control study. *Croat Med J.* 2018;31;59(5):232-243.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Projects: Researcher at the HRZZ Research Projects

" The role of the Wnt signaling pathway in epithelial and mesenchymal transition "

"Genotype-Phenotype correlation in Alport's syndrome and Thin Glomerular Basement Membrane Nephropathy"

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Projects: Researcher at the HRZZ Research Projects

" The role of the Wnt signaling pathway in epithelial and mesenchymal transition "

"Genotype-Phenotype correlation in Alport's syndrome and Thin Glomerular Basement Membrane Nephropathy"

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Tena Niseteo, PhD, MSc

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Children's Hospital Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical nutrition

BIOGRAPHY

After accomplishment of Master degree in Food Technology and Nutrition Science at the University of Zagreb, Croatia Tena Niseteo joined the Referral Centre for Paediatric Gastroenterology and Nutrition in Children's Hospital Zagreb where she obtains the duties of first paediatric dietician/nutritionist in Croatia. During the year 2009 she made her sub-specialization in paediatric clinical nutrition and professional development at two European hospital centers with expertise in paediatric clinical nutrition Kinderklinik und Kinderpoliklinikim Dr. von Haunerschen Kinderspital in Munich, Germany and in Birmingham's Children Hospital, Birmingham, Great Britain.

In 2009 she joined the ESPEN (European Society for Clinical Nutrition and Metabolism) where she was actively engaged in LLL courses and fulfilled all tasks and exams by which in year 2012 she earned European ESPEN Diploma in Clinical Nutrition and Metabolism with all rights, honors and privileges thereunto pertaining.

During this period she started with the postgraduate course and finished the research based on malnutrition in hospitalized children and defend her PhD thesis in year 2017. Besides her regular clinical duties she is involved in the research work in malnutrition in hospitalized children (Multicenter ESPEN study). She is actively involved in domestic and international scientific congresses. She is coauthor and editor of University handbook under the title Nutrition in general and clinic pediatrics.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Sanja Kolaček, Iva Hojsak, Tena Niseteo. Prehrana u općoj i kliničkoj pedijatriji, 2017.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Hecht C, Weber M, Grote V, Daskalou E, Dell'era L, Flynn D, Gerasimidis K, Gottrand F, Hartman C, Hulst J, Joosten K, Karagiozoglou-Lampoudi T, Koetse HA, Kolaček S, Książek J, Niseteo T, Olszewska K, Pavesi P, Piwowarczyk A, Rousseaux J, Shamir R, Sullivan PB, Szajewska H, Vernon-Roberts A, Koletzko B. (2014) Disease associated malnutrition correlates with length of hospital stay in children. Clin Nutr. 14: 25-9.

Pustišek N, Šitum M, Vurnek Živković M, Ljubojević Hadžavdić S, Vurnek M, Niseteo T. (2016) The significance of structured parental educational intervention on childhood atopic dermatitis: a randomized controlled trial. J Eur Acad Dermatol Venereol. 30(5):806-12.

Vukman, D., Niseteo, T., Kučan, P., Mikulec, N., Grbeša, D., Antunac, N. (2016) Dairy meals of hospitalized children as a source of energy, calcium and phosphorus in satisfying their daily needs. Mljekarstvo 66 (3); 165-77.

Mamić M, Kučan P, Vukman D, Niseteo T (2018) Prevalence of malnutrition and energy intake in hospitalized children, Paediatr Croat. 2018;62:74-80.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



MINTS study 2015-2018 - Effects of oral nutrition supplements in children with disease associated underweight

ESPEN 2011-2015 Malnutrition Project

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

MINTS study 2015-2018 - Effects of oral nutrition supplements in children with disease associated underweight

ESPEN 2011-2015 Malnutrition Project

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Associate Professor Iskra Alexandra Nola, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Health and public health risks management in crisis situations

BIOGRAPHY

Born in Zagreb, Croatia. She holds PhD in Biomedicine, Master in Science (Biomedicine) and Master in Leadership and Management of Health Services. She currently works as Associate Professor at Department of Environmental and Occupational Health and Sports Medicine. The area of scientific and teaching work and interests includes: public health emergencies; environmental factors and related health effects; sociological aspects of environmental health; health/medical tourism; air pollutants and related health effects; and harmful environmental/variable factors and related effects in cardiovascular patients. She teaches at several different subjects in the area of environmental health; health and public health risks in disaster risk management; genes and environment; crisis situations management etc. at graduate, postgraduate and doctoral levels, including study in English – graduate and postgraduate as well. She is a course leader of one course at the postgraduate (doctoral) study of Biomedicine at the School of Medicine, University of Zagreb, and co-organizer and leader of the course "Health care in crisis situations", Interdisciplinary University study Crisis management at the University of Zagreb. She was co-organizer of the Disaster Bioethics Training School in 2014 in Dubrovnik, Croatia. She has participated actively at seven research projects and currently she participates at two, at one of them she is a leader and principal investigator. She has held several invited lectures in health tourism and public health emergencies domain. She is a mentor of about twenty graduate and postgraduate theses. She is a mentor of Student section of Public Health at School of Medicine, University of Zagreb.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 06th March 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Nola IA. Earthquakes and their environmental, medical and public health impacts. *Salud Publica de Mexico*. 2018;60(1):16-22.

Devisch I, Vanheule S, Deveugele M, Nola IA, Civaner M, Pype P. Victims of disaster: can ethical debriefings be of help to care for their suffering? *Med Health Care and Philos*. 2017;20(2):257-67. DOI 10.1007/s11019-016-9742-1

Nola IA, PhD, Andrija Stampar School of Public Health, Croatia, Workshop 3. Public Health Emergencies & Ethics, An interactive workshop-style session to discuss the ethics of public health emergencies and how this relates to the trainee projects. The COST Action IS1201 on Disaster Bioethics Training School from 23 to 27 June 2014 in Dubrovnik, Croatia.

Nola IA, Borovecki A. Professional liability in crisis situations. COST workshop. Disaster Justice in Copenhagen February 27-28 2014. Organized in cooperation between the COST Action IS1201 on Disaster Bioethics and University of Copenhagen's excellence program for interdisciplinary research project "Changing Disasters".

Nola IA, Doko Jelinić J, Žuškin E, Kratochvil M. Potresi – povijesni pregled, okolišni i zdravstveni učinci i mjere zdravstvene skrbi. [Earthquakes – A Historical Review, Environmental and Health Effects, and Health Care Measures] *Arh Hig Rada Toksikol* 2013;64:327-37.

Nola IA, Doko Jelinić J. Zdravstveni menadžment katastrofa. [Health management in disasters] Sigurnost 2012;54(2):165-72.

Nola IA, Doko Jelinić J. Javnozdravstvene intervencije u menadžmentu katastrofa. [Public Health interventions in disaster management] IV. MEĐUNARODNA KONFERENCIJA “DANI KRIZNOG UPRAVLJANJA 2011., Velika Gorica, Hrvatska, 25. i 26. svibnja 2011. Zbornik sažetaka 2011: 67.

Doko Jelinić J, Nola IA. Kemijske katastrofe – prednosti pravovremenog javnozdravstvenog djelovanja. [Chemical disasters – benefits of timely response] IV. MEĐUNARODNA KONFERENCIJA “DANI KRIZNOG UPRAVLJANJA 2011., Velika Gorica, Hrvatska, 25. i 26. svibnja 2011. Zbornik sažetaka 2011: 69.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Nola IA. Earthquakes and their environmental, medical and public health impacts. Salud Publica de Mexico. 2018;60(1):16-22.

Francula-Zaninovic S, Nola IA. Management of Measurable Variable Cardiovascular Disease' Risk Factors. Current Cardiology Reviews. 2018;14

Radovčić Z, Nola IA. Medical tourism globe-trotting: Features, impacts, and risks. International Journal of Healthcare Management. 2018; <https://doi.org/10.1080/20479700.2018.1428388>

Devisch I, Vanheule S, Deveugele M, Nola IA, Civaner M, Pype P. Victims of disaster: can ethical debriefings be of help to care for their suffering? Med Health Care and Philos. 2017;20(2):257-67. DOI 10.1007/s11019-016-9742-1

Nola IA, Kolarić D. Reply on: "Thermography is not a feasible method for breast cancer screening" by Brkljačić et al. Coll Antropol. 2015;39(1):203.

Nola IA, Kolaric D. Thermography in Biomedicine. Proceedings ELMAR- International Symposium Electronics in Marine, 2015: 17-20.

Radovčić Z, Nola IA. Integracija komplementarne i alternativne medicine s primarnom zdravstvenom zaštitom u Republici Hrvatskoj - mišljenja liječnika primarne zdravstvene zaštite. Acta Med Croatica, 2015;69;451-8.

Kolarić D, Herceg Z, Nola IA, Ramljak V, Kuliš T, Holjevac-Katančić J, Deutsch JA, Antonini S. Thermography - A Feasible Method for Screening Breast Cancer? Collegium antropologicum. 2013;37(2): 583-8.

Nola IA, Doko Jelinić J, Žuškin E, Kratochvil M. Potresi – povijesni pregled, okolišni i zdravstveni učinci i mjere zdravstvene skrbi. [Earthquakes – A Historical Review, Environmental and Health Effects, and Health Care Measures] Arh Hig Rada Toksikol 2013;64:327-37.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

COST Action IS1201 Disaster Bioethics

COST Action 15105 European Medicines Shortages Research Network - addressing supply problems to patients (Medicines Shortages)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Disaster Bioethics, EU COST Action

A scientifically based sustainable work safety system at the University of Zagreb, University of Zagreb (Znanstveno utemeljeni održivi sustav zaštite na radu na Sveučilištu u Zagrebu, Sveučilište u Zagrebu)



Application and improvement of a scientifically based work safety system at the University of Zagreb, University of Zagreb (Primjena i unaprjeđenje znanstveno utemeljenog sustava zaštite na radu na Sveučilištu u Zagrebu, Sveučilište u Zagrebu)

European Medicines Shortages Research Network - addressing supply problems to patients (Medicines Shortages)“, EU COST Action

Public health significance of knowledge assessment of cardiovascular risk factors in hypertensive patients, University of Zagreb (Javnozdravstveni značaj procjene znanja o kardiovaskularnim čimbenicima rizika u hipertenzivnih pacijenata, Sveučilište u Zagrebu)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ruđer Novak, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Bone morphogenetic proteins in regeneration of bone and cartilage; Proteomics in biomedical research

BIOGRAPHY

After high school education in the 5th Gymnasium in Zagreb in year 2000, he graduated in 2005 on Molecular Biology at Faculty of Sciences - Biology department. In 2012 he received a Ph.D. from the Faculty of Pharmacy and Biochemistry in the field of Medical-Biochemical Sciences. From 2006 to 2012 he was employed at the Faculty of Pharmacy and Biochemistry, and from 2012 until today at the Faculty of Medicine, University of Zagreb, where he is employed as a research associate at the Department for proteomics of the Center for Translational and Clinical Research.

He has actively participated in 10 scientific research projects in biomedicine and has published 10 scientific papers in internationally recognized journals. He has held 10 lectures and published 18 abstracts in scientific papers, and has participated in the teaching of a dozen undergraduate and postgraduate courses at the Faculty of Pharmacy and Biochemistry and School of Medicine.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: January 16th 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Somborac-Baćura, A., Rumora, L., Novak, R., Rašić, D., Dumić, J., Čepelak, I. and Žanić-Grubišić, T. Differential expression of HSPs and activation of MAPKs in A549 alveolar epithelial cells exposed to cigarette smoke extract. *Experimental Physiology*, 2018 Dec;103(12):1666-1678.
2. Grgurevic, L., Erjavec, I., Grgurevic, I., Dumic-Cule, I., Brkljacic, J., Verbanac, D., Matijasic, M., Cipic Paljetak, H., Novak, R., Plecko, M., Bubic-Spoljar, J., Rogic, D., Kufner, V., Pauk, M., Bordukalo-Niksic, T., Vukicevic, S. Systemic inhibition of BMP1-3 decreases progression of CCl4-induced liver fibrosis in rats. *Growth Factors*, 2017 Dec;35(6):201-215.
3. Vukičević, S., Oppermann, H., Verbanac, D., Jankolija, M., Popek, I., Curak, J., Brkljačić, J., Pauk, M., Erjavec, I., Francetić, I., Dumić-Cule, I., Jelić, M., Đurđević, D., Vlahović, T., Novak, R., Kufner, V., Bordukalo Nikšić, T., Kozlović, M., Banić Tomišić, Z., Bubić-Špoljar, J., Bastalić, I., Vikić-Topić, S., Perić, M., Pećina, M., Grgurević, L. The clinical use of bone morphogenetic proteins (BMPs) revisited: A novel BMP6 biocompatible carrier device OSTEOGROW for bone healing. *International orthopaedics*. 38(2014), 635-647 (review article).

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Somborac-Baćura, A., Rumora, L., Novak, R., Rašić, D., Dumić, J., Čepelak, I. and Žanić-Grubišić, T. Differential expression of HSPs and activation of MAPKs in A549 alveolar epithelial cells exposed to cigarette smoke extract. *Experimental Physiology*, 2018 Dec;103(12):1666-1678.
2. Grgurevic, L., Erjavec, I., Grgurevic, I., Dumic-Cule, I., Brkljacic, J., Verbanac, D., Matijasic, M., Cipic Paljetak, H., Novak, R., Plecko, M., Bubic-Spoljar, J., Rogic, D., Kufner, V., Pauk, M., Bordukalo-Niksic, T., Vukicevic, S. Systemic inhibition of BMP1-3 decreases progression of CCl4-induced liver fibrosis in rats. *Growth Factors*, 2017 Dec;35(6):201-215.
3. Vukičević, S., Oppermann, H., Verbanac, D., Jankolija, M., Popek, I., Curak, J., Brkljačić, J., Pauk, M., Erjavec, I., Francetić, I., Dumić-Cule, I., Jelić, M., Đurđević, D., Vlahović, T., Novak, R., Kufner, V., Bordukalo

Nikšić, T., Kozlović, M., Banić Tomišić, Z., Bubić-Špoljar, J., Bastalić, I., Vikić-Topić, S., Perić, M., Pećina, M., Grgurević, L. The clinical use of bone morphogenetic proteins (BMPs) revisited: A novel BMP6 biocompatible carrier device OSTEOGROW for bone healing. *International orthopaedics*. 38(2014), 635-647 (review article).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018. - today OsteoProSpine - Novel Bone Regeneration Drug Osteogrow: Therapeutic Solution for Lumbar Back Pain (PI: akademitian Slobodan Vukičević), Horizon 2020

2016. - 2018. Novootkrivene cirkulirajuće izoforme BMP1 proteina kao biomarkeri i terapijski ciljevi za humane bolesti (PI: prof. dr. sc. L. Gregurević), Croatian science foundation.

2014. Reduscar – redukcija kožnih ožiljaka (PI: prof. dr. sc. L. Gregurević), University of Zagreb

2014. Hepatoprotect – razvoj nove terapije u liječenju jetrene ciroze (PI: prof. dr. sc. L. Gregurević)

2012. – 2016. Osteogrow - Novel Bone Morphogenetic Protein 6 Biocompatible Carrier Device for Bone Regeneration (PI: akademik Slobodan Vukičević), FP7

2012. – 2018. Prognostička vrijednost proteomskog profila u ranim malignim melanomima kože glave i vrata (PI's: prof. dr. sc. Lovorka Gregurević and prof. dr. sc. Vladimir Bedeković)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2018. - today OsteoProSpine - Novel Bone Regeneration Drug Osteogrow: Therapeutic Solution for Lumbar Back Pain (PI: akademitian Slobodan Vukičević), Horizon 2020

2016. - 2018. Novootkrivene cirkulirajuće izoforme BMP1 proteina kao biomarkeri i terapijski ciljevi za humane bolesti (PI: prof. dr. sc. L. Gregurević), Croatian science foundation.

2014. Reduscar – redukcija kožnih ožiljaka (PI: prof. dr. sc. L. Gregurević), University of Zagreb

2014. Hepatoprotect – razvoj nove terapije u liječenju jetrene ciroze (PI: prof. dr. sc. L. Gregurević)

2012. – 2016. Osteogrow - Novel Bone Morphogenetic Protein 6 Biocompatible Carrier Device for Bone Regeneration (PI: akademik Slobodan Vukičević), FP7

2012. – 2018. Prognostička vrijednost proteomskog profila u ranim malignim melanomima kože glave i vrata (PI's: prof. dr. sc. Lovorka Gregurević and prof. dr. sc. Vladimir Bedeković)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Renata Novak Kujundžić, DVM, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Molecular Oncology – Knowledge Based on New Technologies

BIOGRAPHY

Renata Novak Kujundžić

Year and place of birth: 1965, Zagreb

Address: Laboratorij za epigenomiku, ZMM, Ruđer Bošković Institute, Bijenička 54, 10000 Zagreb, Croatia
Education

1993. PhD, Faculty of Veterinary Medicine, University of Zagreb

1991. MS, Faculty of Veterinary Medicine, University of Zagreb

1989. DVM, Faculty of Veterinary Medicine, University of Zagreb

Employment/Positions held:

2017 Senior Research Associate, Laboratory for Epigenomics, Division of Molecular Medicine, Ruđer Bošković Institute

2002-2017 Research Associate, Division of Molecular Medicine, Ruđer Bošković Institute

1998-2002 Assistant, Division of Molecular Medicine, Ruđer Bošković Institute

1994 (October)- 1997 (July) Postdoctoral Fellow, Department of Avian Medicine, University of Georgia

1992 (September)-1994 (September): Top-Up Award NAFSA, Department of Avian Medicine, University of Georgia

1990-1995, young researcher - assistant, Department of Anatomy, Histology and Embryology, Faculty of Veterinary Medicine, University of Zagreb

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 11. July 2017.
Senior Research Associate.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME (from 2008.)

1. Gall Trošelj K., Novak Kujundžić R, Ugarković. Polycomb repressive complex's evolutionary conserved function: the role of EZH2 status and cellular background. *Clinical Epigenetics* 2016;8:55.
2. Novak Kujundžić R, Žarković N, Gall Trošelj K. Pyridine nucleotides in regulation of cell death and survival by redox and non-redox reactions. *Crit Rev Eukaryot Gene Expr* 2014;24:287-309.
3. Gall Trošelj K, Novak Kujundžić R. Curcumin in combined cancer therapy. *Curr Pharm Des* 2014;20:6682-6696.
4. Novak Kujundžić R, Grbeša I, Ivkić M, Krušlin B, Konjevoda P, Gall Trošelj K. Possible prognostic value of BORIS transcript variants ratio in laryngeal squamous cell carcinomas – a pilot study. *Pathol Oncol Res* 2014;20:687-695.
5. Gall Trošelj K, Novak Kujundžić R. Epigenomics – A Bird's Eye Perspective on the Genome. *Periodicum biologorum* 2010;112: 411-418.
6. Grbeša I, Marinković M, Ivkić M, Krušlin B, Novak-Kujundžić R, Pegan B, Bogdanović O, Bedeković V, Gall-Trošelj K. Loss of imprinting of IGF2 and H19, loss of heterozygosity of IGF2R and CTCF, and *Helicobacter pylori* infection in laryngeal squamous cell carcinoma. *J Mol Med* 2008;86:1057-1066.

7. Novak Kujundžić R, Grbeša I, Ivkić M, Katdare M, Gall-Trošelj K. Curcumin downregulates H19 gene transcription in tumor cells. *J Cell Biochem* 2008;104:1781-1792.

8. Novak Kujundžić R, Lowenthal JW. The role of tryptophan metabolism in iNOS transcription and nitric oxide production by chicken macrophage cells upon treatment with interferon gamma. *Immunol Lett* 2008;115:153-159.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Gall Trošelj K, Novak Kujundžić R, Ugarković. Polycomb repressive complex's evolutionary conserved function: the role of EZH2 status and cellular background. *Clinical Epigenetics* 2016;8:55.
2. Novak Kujundžić R, Žarković N, Gall Trošelj K. Pyridine nucleotides in regulation of cell death and survival by redox and non-redox reactions. *Crit Rev Eukaryot Gene Expr* 2014;24:287-309.
3. Gall Trošelj K, Novak Kujundžić R. Curcumin in combined cancer therapy. *Curr Pharm Des* 2014;20:6682-6696.
4. Novak Kujundžić R, Grbeša I, Ivkić M, Krušlin B, Konjevoda P, Gall Trošelj K. Possible prognostic value of BORIS transcript variants ratio in laryngeal squamous cell carcinomas – a pilot study. *Pathol Oncol Res* 2014;20:687-695.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Ministry of science, education and sport, Republic of Croatia (098-0982464-2511) Gall Trošelj, K (Principal Investigator); 1st January 2007 - 31st December 2013. Epigenetic and immunomodulatory changes in malignant head and neck tumors; R. Novak Kujundžić - researcher

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Croatian Science Foundation Gall Trošelj, K (Principal Investigator). NRF2 at the crossroads of epigenetic remodeling, metabolism and proliferation of cancer cells. R. Novak Kujundžić - researcher

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 1

Ivan Rašić: Clinical significance of BORIS and MYC expression in hypopharyngeal squamous cell carcinoma. School of Medicine, University of Zagreb, Defended 27th September 2017.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Natalija Novokmet, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Institute for Anthropological Research

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Medical Anthropology

BIOGRAPHY

Natalija Novokmet PhD, works as a scientific associate at the Institute for Anthropological Research in Zagreb. She graduated in Biology at the Faculty of Science at the University of Zagreb and defended her M.Sc. thesis (2007), and Ph.D. thesis (2011). Her research interests are anthropological genetics based on genetic markers. The recent focus of her interest is biomedical (candidate genes) and epidemiological aspect of general and isolated populations. She has been involved in ten Croatian and international funded projects with near field point on population (genetic) structure and biomedical research of Croatian island populations and other European's populations. Some of mentioned projects are as follows: Integrated GWAS and EWAS of Cradiometabolic Traits in an Island Population, Genetic and environmental factors of insulin resistance syndrome and its long-term complications in immigrant Mediterranean populations, Genetics of Metabolic Syndrome in an Adriatic Island Population (NIH) and Mapping genes underlying complex quantitative traits in Croatian isolate population, Croatian Islands' Birth Cohort Study (CRIBS).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

2018 Assistant Professor, Field of Biology, Faculty of Science, University of Zagreb

2015 Assistant Professor, Field of Humanities, Field of Ethnology and Anthropology, Faculty of Humanities and Social Sciences, University of Zagreb

2014. Scientific associate, Field of biomedicine and health sciences.

2012 Scientific associate, Field of humanities.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Šarac, Jelena; Šarić, Tena; Havaš Auguštin, Dubravka; Novokmet, Natalija; Vekarić, Nenad; Mustač, Mate; Grahovac, Blaženka; Kapović, Miljenko; Nevajda, Branimir; Glasnović, Anton; Missoni, Saša; Rootsi, Siiri, Rudan, Pavao. Genetic Heritage of Croatians in the Southeastern European Gene Pool—Y Chromosome Analysis of the Croatian Continental and Island Population. // American journal of human biology. 28 (2016), 6; 837-845.

Novokmet, Natalija; Galov, Ana; Marjanović, Damir, Škaro, Vedrana; Projić, Petar; Lauc, Gordan; Primorac, Dragan; Pavao, Rudan. Genetic structure and admixture between Bayash Roma from northwestern Croatia and general Croatian population: evidence from Bayesian clustering analysis// Anthropologischer Anzeiger (2015).

Šarac, Jelena; Šarić, Tena; Havaš Auguštin, Dubravka; Jeran, Nina; Kovačević, Lejla; Cvjetan, Svjetlana; Perinić Lewis, Ana; Metspalu, Ene; Reidla, Maere; Novokmet, Natalija; Vidović, Maruška; Nevajda, Branimir; Glasnović, Anton; Marjanović, Damir; Missoni, Saša; VILLEMS, Richard; Rudan, Pavao. Maternal genetic heritage of Southeastern Europe reveals a new Croatian isolate and a novel, local subbranching in X2 haplogroup. // Annals of human genetics. 78 (2014); 178-194.

Karns, Rebekah; Succop, Paul; Zhang, Ge; Sun, Guangyun; Indugula, Subba Rao; Havas-Augustin, Dubravka; Novokmet, Natalija; Durakovic, Zijad; Music Milanovic, Sanja; Missoni, Sasa; Vuletić, Silvije; Chakraborty, Ranajit; Rudan, Pavao; Dekan, Ranjan. Modeling metabolic syndrome through structural equations of metabolic traits, co-morbid diseases, and GWAS variants. // *Obesity*. 21 (2013), 12; E745-E754.

Krištić, Jasminka; Vučković, Frano; Menni, Cristina; Klarić, Lucija; Keser, Toma; Beceheli, Ivona; Pučić-Baković, Maja; Novokmet, Mislav; Mangino, Massimo; Thaqi, Kujtim; Rudan, Pavao; Novokmet, Natalija; Šarac, Jelena; Missoni, Saša; Kolčić, Ivana; Polašek, Ozren; Rudan, Igor; Campbell, Harry; Hayward, Caroline; Aulchenko, Yuri; Valdes, Ana; Wilson, James F; Gornik, Olga; Primorac, Dragan; Zoldo, Vlatka; Lauc, Gordan. Glycans are a novel biomarker of chronological and biological age. // *Journals of Gerontology Series A - Biological and medical sciences*. published online (2013); 1-11.

Sahay, Rashmi D.; Couch, Sarah C.; Missoni, Saša; Sujoldžić, Anita; Novokmet, Natalija; Duraković, Zijad; Rao, Marepalli B.; Musić Milanović, Sanja; Vuletić, Silvije; Dekan, Ranjan; Rudan, Pavao. Dietary Patterns in Adults from an Adriatic Island of Croatia and their Associations with Metabolic Syndrome and its Components. // *Collegium Antropologicum*. 37 (2013), 2; 335-342.

Karns, Rebekah; Zhang, Ge; Sun, Guangyun; Indugula, Subba Rao; Cheng, Hong; Havaš- Auguštin, Dubravka; Novokmet, Natalija; Rudan, Dusko; Duraković, Zijad; Missoni, Saša; Chakraborty, Ranajit; Rudan, Pavao; Dekan, Ranjan. Genome-Wide Association of Serum Uric Acid Concentration: Replication of Sequence Variants in an Island Population of the Adriatic Coast of Croatia. // *Annals of human genetics*. 76 (2012), 2; 121-127.

Novokmet, Natalija; Marjanović, Damir; Škaro, Vedrana; Projić, Petar; Lauc, Gordan; Grahovac, Blaženka; Ostojić, Saša; Kapović, Miljenko; Rudan, Pavao. Genetic Polymorphism of 15 STR Loci in the Population of the Island of Cres. // *Annals of human biology*. 38 (2011), 1; 12-21.

Novokmet, Natalija; Marjanović, Damir; Škaro, Vedrana; Projić, Petar; Lauc, Gordan; Grahovac, Blaženka; Mohar, Bojana; Kapović, Miljenko; Rudan, Pavao. Forensic efficiency parameters for the 15 STR loci in the population of the Island of Cres (Croatia). // *Collegium Antropologicum*. 33 (2009), 4; 1319-1322.

Novokmet, Natalija; Pavčec, Zlatko. Genetic polymorphisms of 15 AmpFISTR identifier loci in Romani population from Northwestern Croatia. // *Forensic science international*. 168 (2007), 2-3; 43-46.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Šarac, Jelena, Šarić, Tena; Havaš Auguštin, Dubravka; Novokmet, Natalija; Vekarić, Nenad; Mustač, Mate; Grahovac, Blaženka; Kapović, Miljenko; Nevajda, Branimir; Glasnović, Anton; Missoni, Saša; Rootsi, Siiri, Rudan, Pavao. Genetic Heritage of Croatians in the Southeastern European Gene Pool—Y Chromosome Analysis of the Croatian Continental and Island Population. // *American journal of human biology*. 28 (2016), 6; 837-845.

Čoklo, Miran; Havaš Auguštin, Dubravka; Šarac, Jelena; Novokmet, Natalija; Khusnutdinova, Elza; Litvinov, Sergey; Haydar, Sara; Lautier, Corinne; Normand, Christophe; Attaoua, Redha; Vintila, Madalina; Bosch-Comas, Anna; Suarez, Helena; Jares, Pedro; Gomis, Ramon; Missoni, Saša; Marjanović, Damir; Grigorescu, Florin. Diversity of Y-chromosomal and mtDNA Markers Included in Mediscope Chip Within Two Albanian

Subpopulations from Croatia and Kosovo: Preliminary Data. // Collegium antropologicum. 40 (2016) , 3; 195-198 (kratko priopćenje, znanstveni).

Novokmet, Natalija; Galov, Ana; Marjanović, Damir, Škaro, Vedrana; Projić, Petar; Lauc, Gordan; Primorac, Dragan; Pavao, Rudan. Genetic structure and admixture between Bayash Roma from northwestern Croatia and general Croatian population: evidence from Bayesian clustering analysis// Anthropologischer Anzeiger (2015).

Hermanussen, Michael; Anisimova, Anna; Aßman, Christian; van Buuren, Stef; Camara, Antonio D; Elhousseini, Mona Abbas; El-Shabrawi, Mortada Hassan; Godina Elena, Zinovyevna; Gomula, Aleksandra; Groth, Detlef; Koziel, Slawomir; Lieberman, Leslie Sue; Meigen, Christof; Mumm, Rebekka; Nariyama, Koichi; Nowak-Szczepanska, Natalia; Novokmet, Natalija; Satake, Takashi; Scheffler, Christiane; Söderhäll, Jani; Suchomlinov, Andrej; Tutkuvienė, Janina; Wit, Jan M; Witwer-Backofen, Ursula; Yestrebsky, Cherie Lynn. "Proceedings of the 22nd Aschauer Soiree on Growth and Health Screening", held at Altenhof, Germany, November 15th, 2014.. // Pediatric Endocrinology Reviews (PER), Diabetes Nutrition Metabolism Genetics. 12 (2015) , 3; 323-332 (članak, znanstveni).

Sahay, Rashmi; Ollberding, Nicholas; Missoni, Saša; Novokmet, Natalija; Šarac, Jelena; Šarić, Tena; Rao, Marepalli; Rudan, Pavao; Deka, Ranjan. Fish and Shellfish intake and diabetes in a costal population of the Adriatic. // Collegium antropologicum. 39 (2015) , 2; 401-409 (članak, znanstveni)

Šarac, Jelena; Šarić, Tena; Havaš Auguštín, Dubravka; Jeran, Nina; Kovačević, Lejla; Cvjetan, Svjetlana; Perinić Lewis, Ana; Metspalu, Ene; Reidla, Maere; Novokmet, Natalija; Vidović, Maruška; Nevajda, Branimir; Glasnović, Anton; Marjanović, Damir; Missoni, Saša; Villems, Richard; Rudan, Pavao. Maternal genetic heritage of Southeastern Europe reveals a new Croatian isolate and a novel, local subbranching in X2 haplogroup. // Annals of human genetics. 78 (2014); 178-194.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

International projects:

2016. – 2017. Integrated GWAS and EWAS of Cradiometabolic Traits in an Island Population (Studija genetičkih, epigenetičkih i okolišnih čimbenika rizika za kardiometabolička svojstva u otočnoj populaciji) – voditelj prof. Ranjan Deka, Department of Environmental Health, University of Cincinnati, College of Medicine, Cincinnati, Ohio, Sjedinjene Američke Države i doc. dr. sc. Sasa Missoni, Institut za antropologiju, Zagreb.

2013. – 2016. FP7 projekt "MEDIGENE Genetic and environmental factors of insulin resistance syndrome and its long-term complications in immigrant Mediterranean populations (no. 279171), voditelj prof. dr. sc. Florin Grigorescu, University of Montpellier, Montpellier, France.

2007. - 2008. Genetics of Metabolic Syndrome in an Adriatic Island Population projekt NIH (National Institute of Health, SAD) voditelj prof. dr. sc. Ranjan Deka i akademik Pavao Rudan. Projekt je proveden u suradnji s Department of Environmental Health, University of Cincinnati, SAD.

2002. - 2005. Mapping genes underlying complex quantitative traits in Croatian isolate population voditelji i Upravljački odbor projekta bili su ugledni znanstvenici: prof. Pavao Rudan, prof. Alan Wright,

prof. Andrew Carothers, prof. Igor Rudan, prof. Harry Campbell, prof. N.D. Hastie, dr. Kate Wilson, dr. Gordon Murray i prof. Ulf Gyllensten.

National projects:

2015. - 2018. Kohortna studija rođenih na hrvatskim otocima - CRIBS, voditelj doc. dr. sc. Saša Missoni, Institut za antropologiju, Zagreb.

2014. Istraživanje životnih navika adolescenata s ciljem prevencije pretilosti, dijabetesa tipa II i kardiovaskularnih bolesti – voditeljica prof. dr. sc. Vesna Jureša, Škola narodnog zdravlja, Medicinski fakultet, Sveučilište u Zagrebu.

2013. Povezanost procesa glikozilacije i starenja u populaciji otoka Visa (Komiža), (MZOŠRH: Populacijska struktura Hrvatske – antropogenetički pristup, voditelj akademik Pavao Rudan).

2011. - 2012. ANTRONA - Izgradnja temeljnog nazivlja u antropologiji, voditeljica prof. dr. sc. Anita Sujoldžić. Program Hrvatske zaklade za znanost "Izgradnja hrvatskoga strukovnog nazivlja" (STRUNA)

2007. - 2013. Populacijska struktura Hrvatske - antropogenetički pristup - Ministarstvo znanosti, obrazovanja i športa Republike Hrvatske, voditelj akademik Pavao Rudan.

2003. – 2007. Populacijska struktura Hrvatske – antropogenetički pristup – u okviru Programa trajne istraživačke djelatnosti (PTID), Ministarstvo znanosti, obrazovanja i športa Republike Hrvatske 0196005, voditelj akademik Pavao Rudan.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2016. – 2017. Integrated GWAS and EWAS of Cradiometabolic Traits in an Island Population (Studija genetičkih, epigenetičkih i okolišnih čimbenika rizika za kardiometabolička svojstva u otočnoj populaciji) – voditelji prof. Ranjan Deka, Department of Environmental Health, University of Cincinnati, College of Medicine, Cincinnati, Ohio, Sjedinjene Američke Države i doc. dr. sc. Sasa Missoni, Institut za antropologiju, Zagreb.

2013. – 2016. FP7 projekt "MEDIGENE Genetic and environmental factors of insulin resistance syndrome and its long-term complications in immigrant Mediterranean populations (no. 279171), voditelj prof. dr. sc. Florin Grigorescu, University of Montpellier, Montpellier, France.

2015. - 2018. Kohortna studija rođenih na hrvatskim otocima - CRIBS, voditelj doc. dr. sc. Saša Missoni, Institut za antropologiju, Zagreb.

2014. Istraživanje životnih navika adolescenata s ciljem prevencije pretilosti, dijabetesa tipa II i kardiovaskularnih bolesti – voditeljica prof. dr. sc. Vesna Jureša, Škola narodnog zdravlja, Medicinski fakultet, Sveučilište u Zagrebu.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Lana Omerza, MD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Liver transplantation in children

BIOGRAPHY

Date and place of birth: July 3, 1976 in Zagreb

Address: Kutnjački put 18, Zagreb

Telephone / e-mail: 098819876; lanamadercic@yahoo.com

Marital status: married, mother of two children

Education:

Elementary School and VII Gymnasium in Zagreb

1994 -2000.g. Faculty of Medicine, University of Zagreb.

During the study, the demonstrator at the Department of Anatomy (95-97), and at the Department of Pathophysiology (1997-1998)

1998 a student stay at McGill University, Montreal, Canada, for 6 weeks.

From 1998 to 2000 scholarships of the University of Zagreb.

22. 05. 2000. graduated from the University of Zagreb Medical School with an average grade of 4.56.

In 2000 he received the dean of the best student of the sixth year of study

2,000th to 2,001th Preparatory Exercise in the Clinical Hospital for Pulmonary Diseases "Jordanovac"

September 2001.g. passed a state exam.

From 05.11.2001. as a research fellow of the Department of Pediatrics at the Faculty of Medicine, University of Zagreb, on the scientific research project "Cellular immune response to gliadine peptide in children with celiac disease", holder of prof.dr.sc. Ane Votava-Raić, and from July 15, 2008. on the scientific research project "Proteomic study of urinary biomarkers of idiopathic nephrotic syndrome" by the holder of prof.dr.sc. Danice Batinić.

He has been active in teaching at the Faculty of Medicine, University of Zagreb since 2001, from pediatrics, medical genetics and clinical reasoning (since 2010), and an electoral emergency module. She also participates in teaching English in the English language.

Since 2011. Participates in teaching at the postgraduate postgraduate study in pediatrics.

She graduated from the Faculty of Medicine at the University of Zagreb

Since 2009 he is a treasurer of the Croatian Society for Pediatric Gastroenterology, Hepatology and Nutrition.

6.5.2010. passed a specialist examination of pediatrics.

The author participated in about 30 papers and texts.

Speaks English and German. 1994 passed Oxford's first certificate in English.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Omerza L, Tješić-Drinković D. Problemi prehrane u bolesnika s neuromuskularnim bolestima. Neuromuskularne bolesti. Medicinska naklada, Zagreb 2010; 44-47
- Votava-Raić Ana, Tješić-Drinković Duška, Dujšin Margareta, Vuković Jurica, Senečić-Čala Irena, Omerza Lana. Stroga bezglutenska dijeta – je li moguća?. U. Votava-Raić A, Dumić M, Tješić-Drinković D,

Vuković J, ur. Česti poremećaji probavnog sustava u djece – pristup u praksi, Medicinska naklada, Zagreb 2009; 127-135

- Tješić-Drinković Duška, Votava-Raić Ana, Dujšin Margareta, Vuković Jurica, Senečić-Čala Irena, Omerza Lana. Prehrana u zaštiti zdravlja. U: Votava-Raić A, Dumić M, Tješić-Drinković D, Vuković J, ur. Česti poremećaji probavnog sustava u djece – pristup u praksi, Medicinska naklada, Zagreb 2009;149-155
- Tješić-Drinković D, Votava-Raić A, Dujšin M, Vuković J, Senečić-Čala I, Omerza L. Prehrana dojenčadi – prilog kasnijem zdravlju. U: Votava-Raić A, Dumić M, Tješić-Drinković D, ur. Dojenje: -trajni medicinski izazov. Medicinska naklada, Zagreb 2006; 55-66.
- Tješić-Drinković Du, Votava-Raić A, Tješić-Drinković Do, Kelečić J, Omerza L. Nutritivna alergija. U: Votava-Raić A, Dumić M, Tješić-Drinković D, ur. Dojenje - trajni medicinski izazov. Medicinska naklada, Zagreb 2006; 67-78.
- Tješić-Drinković Du, Votava-Raić A, Tješić-Drinković Do, Mađerčić L. Željezo u zdravlju i bolesti. U: Grgurić J, ur. Vitamini i minerali u dječjoj dobi. Klinika za dječje bolesti Zagreb, Zagreb 2004; 126-139.
- Votava –Raić A, Tješić-Drinković D, Mađerčić L. Vitamini B skupine. U: Grgurić J, ur. Vitamini i minerali u dječjoj dobi. Klinika za dječje bolesti Zagreb, Zagreb 2004; 90-103.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Letica Lj, Lasan R, Omerza L, Crkvenac Gornik K, Tonković I, Begović D. Infant with duplication of 12p and a deletion of 18q resulting from mother's t(12;18) balanced translocation. Chromosome research (2011)19(Supp1):S116

Vuković J, Omerza L. Brojna lica i dijagnostički izazovi Wilsonove bolesti. Naslijedne metaboličke bolesti 2011, Djeca, metali i nove bolesti, Medicinska naklada, Zagreb, 2011; 68-71

Omerza L, Tješić-Drinković D. Problemi prehrane u bolesnika s neuromuskularnim bolestima. Neuromuskularne bolesti. Medicinska naklada, Zagreb 2010; 44-47

Omerza L, Senečić-Čala I, Tješić-Drinković D, Vuković J, Dujšin M, Votava-Raić A. Pokazatelji jetrene bolesti. Prepoznamo jetrene bolesti na vrijeme. Medicinska naklada, Zagreb, 2010; 9-17

Senečić-Čala I, Votava-Raić A, Dujšin M, Tješić-Drinković d, Omerza L, Vuković J. Bolesti na koje često mislimo, a rijetko ih nalazimo. Prepoznamo jetrene bolesti na vrijeme. Medicinska naklada, Zagreb, 2010; 39-51

Vuković J, Omerza L, Senečić-Čala I, Tješić-Drinković D, Dujšin M, Votava-Raić A. Kronični virusni hepatitis- pogled pedijatra. Prepoznamo jetrene bolesti na vrijeme. Medicinska naklada, Zagreb, 2010; 77-81

Votava-Raić A, Tješić-Drinković D, Vuković J, Dujšin M, Senečić-Čala I, Omerza L. Ciroza-klinička slika. Prepoznamo jetrene bolesti na vrijeme. Medicinska naklada, Zagreb, 2010; 91-99

Tješić-Drinković Duška, Votava-Raić Ana, Dujšin Margareta, Vuković Jurica, Senečić-Čala Irena, Omerza Lana. Dugoročni učinci dojenačke prehrane na zdravlje. U: Delaš Ivančica, Čačić Hribljan Melita ur. Značenje prehrane u prevenciji i liječenju bolesti. Medicinska naklada, Zagreb 2009; 29-34.

Vuković Jurica, Omerza Lana, Senečić-Čala Irena, Tješić-Drinković Duška, Dujšin Margareta, Votava-Raić Ana. Koliko traje fiziološka žutica. U: Votava-Raić A, Dumić M, Tješić-Drinković D, Vuković J, ur. Česti poremećaji probavnog sustava u djece – pristup u praksi, Medicinska naklada, Zagreb 2009; 1-5

Senečić-Čala Irena, Votava-Raić Ana, Dujšin Margareta, Vuković Jurica, Omerza Lana. Nedoumice o bolestima gušterače. U. Votava-Raić A, Dumić M, Tješić-Drinković D, Vuković J, ur. Česti poremećaji probavnog sustava u djece – pristup u praksi, Medicinska naklada, Zagreb 2009; 21-31

Dujšin Margareta, Votava-Raić Ana, Tješić-Drinković Duška, Vuković Jurica, Senečić-Čala Irena, Omerza Lana. Mislimo li svi isto kad govorimo o gastritisu? U. Votava-Raić A, Dumić M, Tješić-Drinković D, Vuković J, ur. Česti poremećaji probavnog sustava u djece – pristup u praksi, Medicinska naklada, Zagreb 2009; 43-50

Tješić-Drinković Duška, Tješić-Drinković Dorian, Votava-Raić Ana, Kelečić Jadranka, Dujšin Margareta, Vuković Jurica, Senečić-Čala Irena, Omerza Lana. Kako prepoznati i liječiti probavne smetnje u cističnoj fibrozi U. Votava-Raić A, Dumić M, Tješić-Drinković D, Vuković J, ur. Česti poremećaji probavnog sustava u djece – pristup u praksi, Medicinska naklada, Zagreb 2009; 59-67

Votava-Raić Ana, Tješić-Drinković Duška, Dujšin Margareta, Senečić-Čala Irena, Vuković Jurica, Omerza Lana. Dugotrajni proljev – je li uvijek znak opasnosti? U. Votava-Raić A, Dumić M, Tješić-Drinković D, Vuković J, ur. Česti poremećaji probavnog sustava u djece – pristup u praksi, Medicinska naklada, Zagreb 2009; 91-97

Dujšin Margareta, Votava-Raić Ana, Tješić-Drinković Duška, Vuković Jurica, Senečić-Čala Irena, Omerza Lana. Opstipacija U. Votava-Raić A, Dumić M, Tješić-Drinković D, Vuković J, ur. Česti poremećaji probavnog sustava u djece – pristup u praksi, Medicinska naklada, Zagreb 2009; 99-105

Vuković Jurica, Omerza Lana, Senečić-Čala Irena, Tješić-Drinković Duška, Dujšin Margareta, Votava-Raić Ana. Krvarenje iz probavnog sustava. U. Votava-Raić A, Dumić M, Tješić-Drinković D, Vuković J, ur. Česti poremećaji probavnog sustava u djece – pristup u praksi, Medicinska naklada, Zagreb 2009; 107-110

Votava-Raić Ana, Tješić-Drinković Duška, Dujšin Margareta, Vuković Jurica, Senečić-Čala Irena, Omerza Lana. Stroga bezglutenska dijeta – je li moguća?. U. Votava-Raić A, Dumić M, Tješić-Drinković D, Vuković J, ur. Česti poremećaji probavnog sustava u djece – pristup u praksi, Medicinska naklada, Zagreb 2009; 127-135

Tješić-Drinković Duška, Votava-Raić Ana, Dujšin Margareta, Vuković Jurica, Senečić-Čala Irena, Omerza Lana. Prehrana u zaštiti zdravlja. U. Votava-Raić A, Dumić M, Tješić-Drinković D, Vuković J, ur. Česti poremećaji probavnog sustava u djece – pristup u praksi, Medicinska naklada, Zagreb 2009; 149-155

Tješić-Drinković Duška, Votava-Raić Ana, Omerza, Lana. Akutni proljev – česta bolest u ljetnim mjesecima. Farmaceutski tehničar br 41 , lipanj 2007 (ISSN 0350-5715); 5-22.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

As a research assistant since 2001, I actively participate in the maintenance of undergraduate teaching in pediatrics, as well as in clinical examination, medical genetics and emergency module.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Darko Orešković, DVM, PhD, research advisor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: retired

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pathophysiology of the brain and CFS

BIOGRAPHY

Place and date of birth: Pakrac, May 6, 1951

Education: 1970 – high school in Krapina; 1973 - 1978 Faculty of Veterinary Medicine, University of Zagreb; 1981 - defended his master's thesis entitled "Study of the secretion of cerebrospinal fluid by perfusion of liquid spaces" at the University of Zagreb; 1987 - defended his doctoral dissertation titled "Effect of hydrostatic pressure on the formation and disappearance of cerebrospinal fluid" at the Veterinary Faculty of the University of Zagreb;

1979 - present: Ruđer Bošković Institute - Department of Experimental Biology and Medicine (1979 - 1988), Department of Organic Chemistry and Biochemistry (1988-1997), Department of Molecular Genetics / Biology (1997 - present)

Vocational advancement: 1979 - 1981 Assistant trainee; 1981 - 1986 Scientific Assistant; 1986 - 1988 Senior Research Assistant; 1988 - 2003 Associate Professor; 2003 - now Senior Research Associate;

associate or holder of several scientific research projects; a member of a number of scientific societies; lecturer in postgraduate teaching; President of the Rudjer Boskovic Institute Council; Defense Commander and Member of the Ruđer Bošković Institute Crisis Staff; 1991 - 1994 Member of the Senate of the University of Zagreb; 1991 - 1994 Member of the Presidency of the University of Zagreb; 2004 - now a member of the Rudjer Boskovic Institute's Administrative Council

Scientific interest: Patho / physiology of cerebrospinal fluid, Patho / physiology of serotonin, Neuropharmacology, Blood-brain barrier

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Klarica M, Varda R, Vukić M, Orešković D, Radoš M, Bulat M. Spinal contribution to CSF pressure lowering effect of mannitol in cats. *Acta Neurochirurgica-Wien* 2005 (suppl) 95: 407-410.

Orešković D, Vukić M, Klarica M, Bulat M. The investigation of cerebrospinal fluid formation by ventriculo-aqueductal perfusion method in cats. *Acta Neurochirurgica- Wien* 2005 (suppl) 95: 433-436.

Klarica M, Orešković D, Božić B, Vukić M, Butković V, Bulat M. New experimental model of acute aqueductal blockage in cats: effects on cerebrospinal fluid pressure and size of brain ventricles. *Neuroscience* 2009; 158: 1397-1405.

Orešković D, Klarica M. The formation of cerebrospinal fluid: nearly a hundred years of interpretations and misinterpretations. *Brain Res Rev* 2010; 64: 241-262

Maraković J, Orešković D, Radoš M, Vukić M, Jurjević I, Chudy D, Klarica M. Effect of osmolarity on CSF volume during ventriculo-aqueductal and ventriculo-cisternal perfusions in cats. *Neurosci Lett* 2010; 484: 93-97

Darko Orešković, Marijan Klarica. Measurement of Cerebrospinal Fluid Formation and Absorption by Ventriculo-Cisternal Perfusion: What is Really Measured? *Croat Med J* 55: 317-327, 2014.

Darko Orešković, Marijan Klarica. A new look at cerebrospinal fluid movement. *Fluids and Barriers of the CNS* 2014, 11:16

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1: Bobic Rasonja M, Orešković D, Knezovic V, Pogledic I, Pupacic D, Vukšić M, Brugger PC, Prayer D, Petanjek Z, Jovanov Milošević N. Histological and MRI Study of the Development of the Human Indusium Griseum. *Cereb Cortex*. 2019 Feb 4. doi: 10.1093/cercor/bhz004. [Epub ahead of print] PubMed PMID: 30722016.
- 2: Orešković D, Maraković J, Varda R, Radoš M, Jurjević I, Klarica M. New Insight into the Mechanism of Mannitol Effects on Cerebrospinal Fluid Pressure Decrease and Craniospinal Fluid Redistribution. *Neuroscience*. 2018 Nov 10;392:164-171. doi: 10.1016/j.neuroscience.2018.09.029. Epub 2018 Sep 29. PubMed PMID: 30273625.
- 3: Orešković D, Radoš M, Klarica M. Reply to Comment on "Role of Choroid Plexus in Cerebrospinal Fluid Hydrodynamics". *Neuroscience*. 2018 Jun 1;380:165. doi: 10.1016/j.neuroscience.2018.02.040. Epub 2018 Mar 7. PubMed PMID: 29524636.
- 4: Kaštelan S, Gverović Antunica A, Salopek Rabatić J, Gotovac M, Orešković D, Kasun B. Traumatic Optic Neuropathy - Case Report with Discussion on Diagnostic Procedures and Therapy. *Acta Clin Croat*. 2018 Mar;57(1):166-172. doi: 10.20471/acc.2018.57.01.22. PubMed PMID: 30256027.
- 5: Orešković D, Radoš M, Klarica M. The recent state of a hundred years old classic hypothesis of the cerebrospinal fluid physiology. *Croat Med J*. 2017 Dec 31;58(6):381-383. PubMed PMID: 29308829; PubMed Central PMCID: PMC5778680.
- 6: Orešković D, Radoš M, Klarica M. Role of choroid plexus in cerebrospinal fluid hydrodynamics. *Neuroscience*. 2017 Jun 23;354:69-87. doi: 10.1016/j.neuroscience.2017.04.025. Epub 2017 Apr 27. Review. PubMed PMID: 28456718.
- 7: Orešković D, Radoš M, Klarica M. New Concepts of Cerebrospinal Fluid Physiology and Development of Hydrocephalus. *Pediatr Neurosurg*. 2017;52(6):417-425. doi: 10.1159/000452169. Epub 2016 Dec 21. Review. PubMed PMID: 27997915.
- 8: Klarica M, Jukić T, Miše B, Kudelić N, Radoš M, Orešković D. Experimental Spinal Stenosis in Cats: New Insight in Mechanisms of Hydrocephalus Development. *Brain Pathol*. 2016 Nov;26(6):701-712. doi: 10.1111/bpa.12337. Epub 2015 Dec 14. PubMed PMID: 26549012.
- 9: Orešković D, Radoš M, Klarica M. Cerebrospinal fluid secretion by the choroid plexus? *Physiol Rev*. 2016 Oct;96(4):1661-2. doi: 10.1152/physrev.00021.2016. Review. PubMed PMID: 27630176.
- 10: Nikić I, Radoš M, Frobe A, Vukić M, Orešković D, Klarica M. The effects of lumboperitoneal and ventriculoperitoneal shunts on the cranial and spinal cerebrospinal fluid volume in a patient with idiopathic intracranial hypertension. *Croat Med J*. 2016 Jun 30;57(3):293-7. PubMed PMID: 27374831; PubMed Central PMCID: PMC4937228.
- 11: Maraković J, Vukić M, Radoš M, Chudy D, Klarica M, Orešković D. Monoamine Neurotransmitter Metabolite Concentration as a Marker of Cerebrospinal Fluid Volume Changes. *Acta Neurochir Suppl*. 2016;122:283-6. doi: 10.1007/978-3-319-22533-3_56. PubMed PMID: 27165922.

- 12: Klarica M, Kuzman T, Jurjević I, Radoš M, Tvrdeić A, Orešković D. The Effect of Body Position on Intraocular and Intracranial Pressure in Rabbits. *Acta Neurochir Suppl.* 2016;122:279-82. doi: 10.1007/978-3-319-22533-3_55. PubMed PMID: 27165921.
- 13: Orešković D. The controversy on choroid plexus function in cerebrospinal fluid production in humans: how long different views could be neglected? *Croat Med J.* 2015 Jun;56(3):306-10. PubMed PMID: 26088856; PubMed Central PMCID: PMC4500964.
- 14: Radoš M, Orešković D, Radoš M, Jurjević I, Klarica M. Long lasting near-obstruction stenosis of mesencephalic aqueduct without development of hydrocephalus--case report. *Croat Med J.* 2014 Aug 28;55(4):394-8. PubMed PMID: 25165053; PubMed Central PMCID: PMC4157388.
- 15: Radoš M, Klarica M, Mučić-Pucić B, Nikić I, Raguž M, Galkowski V, Mandić D, Orešković D. Volumetric analysis of cerebrospinal fluid and brain parenchyma in a patient with hydranencephaly and macrocephaly--case report. *Croat Med J.* 2014 Aug 28;55(4):388-93. PubMed PMID: 25165052; PubMed Central PMCID: PMC4157378.
- 16: Orešković D, Klarica M. Measurement of cerebrospinal fluid formation and absorption by ventriculo-cisternal perfusion: what is really measured? *Croat Med J.* 2014 Aug 28;55(4):317-27. Review. PubMed PMID: 25165046; PubMed Central PMCID: PMC4157383.
- 17: Klarica M, Orešković D. Enigma of cerebrospinal fluid dynamics. *Croat Med J.* 2014 Aug 28;55(4):287-90. PubMed PMID: 25165043; PubMed Central PMCID: PMC4157379.
- 18: Orešković D, Klarica M. A new look at cerebrospinal fluid movement. *Fluids Barriers CNS.* 2014 Jul 27;11:16. doi: 10.1186/2045-8118-11-16. eCollection 2014. PubMed PMID: 25089184; PubMed Central PMCID: PMC4118619.
- 19: Klarica M, Radoš M, Erceg G, Petošić A, Jurjević I, Orešković D. The influence of body position on cerebrospinal fluid pressure gradient and movement in cats with normal and impaired craniospinal communication. *PLoS One.* 2014 Apr 18;9(4):e95229. doi: 10.1371/journal.pone.0095229. eCollection 2014. PubMed PMID: 24748150; PubMed Central PMCID: PMC3991613.
- 20: Kaštelan S, Salopek Rabatić J, Tomić M, Gverović Antunica A, Ljubić S, Kaštelan H, Novak B, Orešković D. Body mass index and retinopathy in type 1 diabetic patients. *Int J Endocrinol.* 2014;2014:387919. doi: 10.1155/2014/387919.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Pathophysiology and serotonin genetics in the mammalian organism
 Pathophysiology and Therapeutic Possibilities of Increased Intracranial Pressure
 Pathophysiology of cerebrospinal fluid
 Hydrodynamics of cerebrospinal fluid
 Hydrodynamics of cerebrospinal fluid
 Neurobiological background of autism: role of serotonin system

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Serotonergic modulating of obesity
 The Fate of Brain Metabolites and Drugs in the Liquor System
 Pathophysiology of hydrocephalus



Intracranial pressure regulation mechanism

Mechanism of action of osmotic drugs on intracranial hypertension

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Slavko Orešković, full professor tenure

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department for Gynecology and Obstetrics
Medical School University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Diagnostics and treatment of female urinary incontinence

BIOGRAPHY

Date and place of birth February 3, 1960 Gospić

Education:

1979-1984. School of Medicine, University of Zagreb

1989-1991. School of Medicine, University of Zagreb – Postgraduate study “Perinatology and Neonatology”

1996 Master degree

1999 PhD degree

Work experience

1988-1992 Clinical hospital centre Zagreb / Department of Obstetrics and Gynaecology - specialization in gynaecology and obstetrics

1992 - present: Clinical hospital centre Zagreb / Department of Obstetrics and Gynaecology, gyn&obs specialist;

2006 - subspecialist of urogynecology

2007 – present Head of Department of Gynecology and Obstetrics

2009 – Head of Chair for Gynecology and Obstetrics Medical School University of Zagreb

2013 – scientific assistant

2018 – present – Full professor tenure of Obstetrics&Gynecology, University of Zagreb

Membership in domestic and foreign medical association :

Croatian Medical Chamber

President of Croatian Society for Urogynecology

Vice president of Croatian Society of Gynecology and Obstetrics

Member of the Board Croatian Society of Gynecological Surgery

Croatian Society of corniers

Croatian Society for perinatal Medicine

European Association for Cancer Research

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2018

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Šprem M, Miličić D, **Orešković S**, Ljubojević N, Kalafatić D. Intravesically administered ketoprofen in treatment of detrusor instability: Cross-over study. Croatian Medical Journal. 41(4):423-427, 2000.
2. **Orešković S**, Kalafatić D, Lovrić Gršić H, Gojević A, Gregov M, Babić I. Operative Complications and Results of the „SPARC“ Procedure for Stress Urinary Incontinence. Coll Antropol 2009 ;33 (1):201-204.
3. Grgić O, **Orešković S**, Grsic HL, Kalafatic D, Zupic T, Maurac I. Outcome and efficacy of a transobturator polypropylene mesh kit in the treatment of anterior pelvic organ prolapse. Int J Gynaecol Obstet 2011;
4. **Orešković S**, But I, Banović M, Šprem Goldštajn M. The Efficacy and Safety of Solifenacin in Patients with Overactive Bladder Syndrome. Coll Antropol 2012;36(1):243-248.

5. But I, Šprem Goldštajn M, **Orešković S**. Comparison of TWO Selective Muscarinic Receptor Antagonists (Solifenacin and Darifenacin) in Women with Overactive Bladder – the SOLIDAR Study. Coll Antropol 2012(4):1347-1353.
6. But I, **Orešković S** Bratus D, Sprem-Goldstajn M, Hlebic D. Patient-report outcome of solifenacin treatment among women experiencing urinary urgency and urgency incontinence. Int J Gynaecol Obstet 2013
7. Hodžić D, Župić T, Mandić V, Valetić J, Gojević A. **Orešković S**. Efficacy of sling procedures for treatment of female stress urinary incontinence. Coll Antropol 2014;38(3):1063-9.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Koš-Šantić K, Rudan D, Buković D, Šegregur J, Wagner J, **Orešković S**, Župić T, Radan M. Asymmetric Neonatal Crying: Microdeletion, Infection or Birth Injury? – A Case Report. Coll Antropol 2014;38(1):331-334.
2. Kasum M, Šimunić V, Vrčić H, Stanić P, **Orešković S**, Beketić-Orešković L. Follicular progesterone elevations with ovulation induction for IVF. Gynecol Endocrinol 2014;19:1-5.
3. Kasum M, Danolić D, **Orešković S**, Ježek D, Beketić-Orešković L, Pekez M. Thrombosis following ovarian hyperstimulation syndrome. Gynecol Endocrinol 2014;11:1-5.
4. Kasum M, Vrcić H, Stanić P, Ježek D, **Orešković S**, Beketić-Orešković L, Pekez M. Dopamine agonists in prevention of ovarian hyperstimulation syndrome. Gynecol Endocrinol 2014;5:1-5.
5. Kasum M, Pavičić-Baldani D, Stanić P, **Orešković S**, Šarić JM, Blajić J, Juras J. Importance of macroprolactinemia in hyperprolactinemia. Eur J Obstet Gynecol Reprod Biol 2014;183C:28-32.
6. Banović M, Mahovlić V, Salopek KM, Banović V, Babić I, **Orešković S**, Babić D. The value of HPV-HR DNA Testing During the Follow-Up After Treatment of CIN3/AIS. Pathol Oncol Res 2014;
7. Hodžić D, Župić T, Mandić V, Valetić J, Gojević A. **Orešković S**. Efficacy of sling procedures for treatment of female stress urinary incontinence. Coll Antropol 2014;38(3):1063-9.
8. Klepac Pulanic T, Stratton P, Grković L, **Orešković S**, Kasum M, Pulanic D, Nemet D, Pavletic SZ. Demographic and clinical characteristics of female patients with genital cGVHD. Bone Marrow Transplant 50: S392-S393;doi 10.1038/bmt.2015.30.
9. Klepac Pulanic T, Stratton P, Grković L, **Orešković S**, Kasum M, Serventi Seiwert R, Grce M, Dusek D, Pulanic D, Vrhovac R, Pavletic SZ, Nemet D. Importance of gynecological examination in female patients with chronic graft versus host disease. Bone Marrow Transplant 50: S393; doi 10.1038/bmt.2015.30.0
10. Kasum M, von Wolff M, Franulić D, Čehić E, Klepac-Pulanić T, **Orešković S**, Juras J. Fertility preservation options in breast cancer patients. Gynecol Endocrinol 2015;15:1-6.
11. Kasum M, Kurdija K, **Orešković S**, Čehić E, Pavičić-Baldani D, Škrgatić L. Combined ovulation triggering with GnRH agonist and hCG in IVF patients. Gynecol Endocrinol 2016;8:1-5.
12. Čehić E, Kasum M, Šimunić V, Orešković S, Vujić G, Grgić F. Fertility in men with spinal cord injury. Gynecol Endocrinol 2016;1-5.
13. Djelmis J, Pavić M, Mulliqui Kotori V, Renar Pavlic I, Ivanisevic M, **Orešković S**. Prevalence of gestational diabetes according to IADPSG and NICE criteria. Int J Gynecol Obst 2016;
14. Kasum M, Franulić D, Čehić E, **Orešković S**, Lila A, Ejubović E. Kisspeptin as a promising oocyte maturation trigger for in vitro fertilisation in humans. Gynecol Endocrinol 2017;38(8):583-587.
15. Horvaticek M, Djelmis J, Ivanisevic M, **Orešković S**, Herman M. Effect of eicosapentaenoic acid and docosahexaenoic acid supplementation on C-peptide preservation in pregnant women with type-1 diabetes: randomized placebo controlled clinical trial. Eur J Clin Nutr 2017;71(8):968-972.
16. Ozretić P, Trnski D, Musani V, Maurac I, Kalafatic D, **Orešković S**, Levanat S, Sabol M. Non-canonical Hedgehog signaling activation in ovarian borderline tumors and ovarian carcinomas. International Journal of Oncology 2017.
17. Kasum M, Orešković S, Čehić E, Šunj M, Lila A, Ejubović E. Laboratory and clinical significance of macroprolactinemia in women with hyperprolactinemia. TJOG 2017.



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Zdravljenje mikcijskih motenj pri otrocih s funkcionalno magnetno stimulacijo“. Br: IRP-2012/01-13. Voditelj prof.dr.sc Igor But UKC Maribor Slovenija.
2. „Spremembe debeline stene sečnega mehurja in sprememba količine izločanega živčnega rastnega faktorja in citokinov v urinu pri zdravljenju prekomerne aktivnosti sečnega mehurja

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. „Clinical and biological factors determining severity and activity of cronic graft-versus-host disease after allogenic hematopoietic stem cell transpaltation2 Unity Through Knowledge Fund (UKF) Research Cooperlability Program, Crossing Borders Grant (1B) Voditelji: prof.dr.sc. Steven Živko Pavletić (National Cancer Institute, National Institutes of Health, USA, prof.dr.sc. Damir Nemet KBC Zagreb.
2. Testis i spermij čovjeka. Centar znanstvene izvrsnosti za reproduktivnu i regenerativnu medicinu, Medicinski fakultet u Zagrebu financiran sredstivma EU. Voditelj: prof.dr.sc. Davor Ježek.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 13

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Orešković Stjepan, Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of research and evaluation of health interventions; Health and public health risks management in crisis situations

BIOGRAPHY

Professor Stjepan Oreskovic, PhD. was born on February 7, 1960, in Virovitica. PhD in 1991; graduate program in Public Health, and Gerontology (1987-1989), MSc in 1989; graduate program in Research Methodology (1985-1988), MSc in 1990. Since 1986 Associate Professor at the Andrija Stampar School of Public Health, Zagreb University Medical School. Head of the Department of Medical Sociology and Health Economics. Management consultant and researcher: Director of Andrija Stampar School of Public Health, director of the World Bank Health System Project in Croatia, adviser to the World Health Organization for Health Technology Assessment. Published 258 publications including books, lecture texts and textbooks, published in various domestic and foreign scientific journals, 865 Google Scholar citations with 16 h-index and 27 i-10 index. Participation in 11 major domestic and foreign scientific projects, mostly as project leader. Member of several associations in which acting as board of director (International Association for Health Policy, European Association for Health and Medical Sociology, Association of Schools of Public Health Europe, Canadian Society for International Health)

Professor Orešković has experience in science as a researcher, lecturer and professor and as a manager of international projects, and academic institutions. He is the director of a collaborative center for HIV's strategic information from the World Health Organization, which has taught courses from 106 countries around the world. He is a lead investigator for the Global GRAND Project (2018-2021), which includes research teams from Harvard Medical School - Massachusetts General Hospital and Medical University of Ljubljana and University of Zagreb. Stjepan has led joint educational, research and consultancy projects with the London School of Economics and Political Science, the London School of Hygiene and Tropical Medicine, Harvard School of Public Health, Bocconi University, the University of Trieste and the University of Ljubljana. He has published a total of 156 reviewed articles with the leading world publishers such as Springer Publishing, Elsevier Science, Wiley-Blackwell and Pergamon Press. He also worked as a consultant for international organizations such as the World Bank, the European Commission, and the World Health Organization. Stjepan is best known for his projects that foster innovative interventions and health care research in the field of tobacco addiction control, obesity prevention, and new forms of addiction, including addiction to the Internet.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 15 December 2017, Full-Professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Scopus

Dajak L, Orešković S. Nedostatno korištenje ekonomskih potencijala demografskog starenja u Hrvatskoj. revija za socijalnu politiku. 2018;25(1): 99-105.

Orešković S. A tale of two continents: A life of bioethics amid American and European perspectives. Socijalna ekologija. 2018;26(1-2):3-12.

Karacic S, Orešković S. Internet addiction and mental health status of adolescents in Croatia and Germany. *Psychiatr Danub.* 2017;29(3):313–21.

Dajak L, Mastilica M, Orešković S, Vuletić G. Health-related quality of life and mental health in the process of active and passive ageing. *Psychiatr Danub.* 2016;28(4):404–8.

Orešković S. Breaking down the silo mentality in global mental health: The new role for the schools of public health. *Psychiatr Danub.* 2016;28(4):318-20.

Orešković S. Evidence-based bioethics: delineating the connections between science, practice, and values in medicine. *Croat Med J.* 2016;57(4):307–10.

Čivljak M, Milošević M, Čelić I, Rukavina TV, Brborović O, Orešković S. Predictors of the desire/decision to quit smoking in a Cohort of Croatian adult smokers followed for five years: the CroHort study. *Collegium Antropologicum* 2012; 36(suppl. 1):65-9.

Borovečki A, Makar-Aušperger K, Francetić I, Babić-Bosanac S, Gordijn B, Steinkamp N, Orešković S. Developing a model of healthcare ethics support in Croatia. *Cambridge Quarterly of Healthcare Ethics* 2010;19:395-401.

Borovečki A, ten Have H, Orešković S. A critical analysis of Croatian hospital ethics committees: opportunity or bureaucratic cul-de-sac. *Društvena istraživanja* 2006;15:1221-38

Borovečki A, ten Have H, Orešković S. Education of ethics committee members: experiences from Croatia. *Journal of Medical Ethics* 2006;32:138-42.

Kušec S, Orešković S, Škegro M, Korolija D, Bušić Ž, Horžić M. Improving comprehension of informed consent. *Patient Education and Counseling* 2006;60:294-300.

Borovečki A, ten Have H, Orešković S. Ethics and the structures of health care in the European countries in transition: hospital ethics committees in Croatia. *British Medical Journal* 2005;331:227-9.

Čivljak M, Ulovec Z, Soldo D, Posavec M, Orešković S. Why choose lent for a “Smoke out day?” changing smoking behavior in Croatia. *Croatian Medical Journal* 2005;46:132-6.

Šogorić S, Vukušić Rukavina T, Brborović O, Vlahušić A, Žganec N, Orešković S. Counties selecting public health properties – a “bottom-up” approach (Croatian experience). *Collegium Antropologicum* 2005;29:111-9.

Borovečki A, ten Have H, Orešković S. Developments regarding ethical issues in medicine in the Republic of Croatia. *Cambridge Quarterly of Healthcare Ethics* 2004;13:263-6.

Katić M, Jureša V, Orešković S. Family medicine in Croatia: past, present, and forthcoming challenges. *Croatian Medical Journal* 2004;45:543-9.

Pavičić D, Orešković S, Rudan I, Rudan D, Božičević I, Bistrović D, Vrdoljak A, Vorko-Jović A, Biloglav Z, Kolarić B, Kujundžić-Tiljak M, Sonicki Z, Vuletić G, Troškot R, Saftić V, Rudan P. Youth and AIDS – a study of attitudes, knowledge, behavior and risks in the post-war Croatia. *Collegium Antropologicum* 2003;27:161-72.

Posavec M, Čivljak M, Šoškić T, Soldo D, Šimić Z, Orešković S. First toll free helpline for smoking cessation - analysis of results after one year of operation. *Collegium Antropologicum* 2003;27:461-467.

Borovečki A, Belicza B, Orešković S. 75th anniversary of Andrija Štampar School of Public Health – what can we learn from our for the future. *Croatian Medical Journal* 2002;43:371-3.

McKee M, Orešković S. Childhood injury: call for action. *Croatian Medical Journal* 2002;43:375-8.

Nasić M, Orešković S. Two ophthalmology departments financed by compulsory health insurance: what is it that makes a difference in costs and clinical effectiveness? *Croatian Medical Journal* 2002;43:433-8.

Orešković S. The ideal minister of health. Should be performed and managed on stewardship, loyalty, authority, and efficiency. *Journal of Epidemiology and Community Health* 2002;56:894-5.

Orešković S, Božičević I, Mastilica M, Bakran I, Popović SG, Ben-Joseph R. Health-care resource use by asthmatics in Croatia. *Journal of Asthma* 2002;39:351-8.

Orešković S, Letica S, Mastilica M, Babić-Bosanac S, Čivljak M, Božičević I, Borovečki A. Building new University Hospital – what citizens know and policy makers should be aware of. *Collegium Antropologicum* 2002;26:457-65.

Orešković S. Introducing compulsory health insurance in Central Europe: redirecting a wheel. U: Twaddle AC, editor. *Health care reform around the world*. Westport, Conn.: Auburn House; 2002. Str. 121-41.

Božičević I, Orešković S, Stevanović R, Rodin U, Nolte E, McKee M. What is happening to the health of the Croatian population? *Croatian Medical Journal* 2001;42:601-5.

Mandić D, Orešković S, Francetić I. Oral antibiotic prescription in ambulatory care in 1999 – a contribution to the development of methods for drug consumption and prescription surveillance monitoring. *Collegium Antropologicum* 2001;25:459-65.

Orešković S, Majdak P, Strnad M, Babić S. Opinion of patients on the quality of hospital care. *National Medical Journal of India* 2001;14:246-7.

Božičević I, Orešković S. Risk factors in asthmatic patients in Croatia. *Collegium Antropologicum* 2000;24:325-34.

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Orešković S. Health care and cost containment in the European Union. *Social Science and Medicine*. 2000;50(12): 1882-1883.

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Reamy J, Orešković S. Life expectancy in Central and Eastern European countries and newly independent states of the former Soviet Union: changes by gender. *Croatian Medical Journal* 1999;40:237-43.

Orešković S. Managed care: Made in America. *Social science and medicine*. 1998;47(5): 694-695.

Orešković S. New priorities for health sector reform in central and eastern Europe. *Croatian Medical Journal* 1998;39:225-33.

Orešković S, Kuzman M, Budak A, Vrcić-Keglević M, Ivanković A. Doctor in the house: trends in GPs home visiting in Croatia 1990-1995 compared to current trends in USA and UK. *Collegium Antropologicum* 1997;20:595-608.

Deppe HU, Orešković S. Back to Europe: back to Bismarck? *International Journal of Health Services* 1996;26:777-802.

Orešković S. The New World Order – noosological principles and epidemiological techniques from Comte to Huntington. *International Sociology* 1996;11:427-40.

Orešković S. Gospodo, predsjednik ima karcinom. *Društvena istraživanja* 1996;5:735-50.

Orešković S, Kovačić L. Philia and benefitientia: their distribution among donor countries. *Collegium Antropologicum* 1996;20:283-91.

Orešković S, Budak A. Hrvatska obitelj: demografske, epidemiološke i zdravstvene tranzicije i novi sustav zdravstvene zaštite. *Društvena istraživanja* 1995;4:487-502.

Orešković S, Kovačić L, Kenfelj H. Evaluation of humanitarian aid. *Collegium Antropologicum* 1995;19:395-406.

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Karačić S, Orešković S. Internet Addiction Through the Phase of Adolescence: A Questionnaire Study. *JMIR Mental Health*. 2017;4(2):e11.

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Karacic S, Oreskovic S. Internet Addiction and Mental Health Status of Adolescents in Croatia and Germany. *Psychiatr Danub*. 2017 Sep;29(3):313-321.

Borovecki A, ten Have H, Oresković S. Ethics committees in Croatia in the healthcare institutions: the first study about their structure and functions, and some reflections on the major issues and problems. *HEC Forum*. 2006 Mar;18(1):49-60.

Have HT, Borovecki A, Oresković S. Master programme "health, human rights and ethics": a curriculum development experience at Andrija Stampar School of Public Health, Medical School, University of Zagreb. *Med Health Care Philos*. 2005;8(3):371-6.

Nuijten MJ, Szende A, Kosa J, Mogyorosy Z, Kramberger B, Nemecek K, Tomek D, Oreskovic S, Laskowska M. Health care reform in six Central European countries. A focus on health economic requirements in the drug pricing and reimbursement processes. *Eur J Health Econ*. 2003 Nov;4(4):286-91.

Borovecki A, ten Have H, Oreskovic S. Ethics and the European countries in transition--the past and the future. *Bull Med Ethics*. 2006 Apr-May;(214):15-20.

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Nuijten MJ, Szende A, Kosa J, Mogyorosy Z, Kramberger B, Nemecek K, Tomek D, Oreskovic S, Laskowska M. Health care reform in six Central European countries. A focus on health economic requirements in the drug pricing and reimbursement processes. *Eur J Health Econ*. 2003 Nov;4(4):286-91.

Orešković S. Škola narodnog zdravlja : kuća Štamparova bitka. *Liječnički vjesnik* 2002;124(Supl. 2):1-4

Orešković S. Farmakoekonomika – koncepcije, metode i proturječnosti. *Medicus*. 2002;11:27-36.

Orešković S. Dostupnost i povjerljivost podataka o genetskim oboljenjima. *Socijalna ekologija*. 1997;6:273-86.

Orešković S. Rasne varijacije ili rasne razlike: generička produkcija novih rasnih mitova. *Socijalna ekologija*. 1995;4:331-43.

Orešković S. Društvo nultog rizika. Socijalna ekologija 1994;3:27-42.

Orešković S. Koncepti kvalitete života. Socijalna ekologija 1994;3:263-74.

Orešković S, Letica S. Socio-andragogical method in treatment of alcoholism. (Sociological epistemological analysis). Alcoholism 1994;30:63-73.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Dajak L, Orešković S. Nedostatan korištenje ekonomskih potencijala demografskog starenja u Hrvatskoj. revija za socijalnu politiku. 2018;25(1): 99-105.

Orešković S. A tale of two continents: A life of bioethics amid American and European perspectives. Socijalna ekologija. 2018;26(1-2):3-12.

Karacic S, Orešković S. Internet addiction and mental health status of adolescents in Croatia and Germany. Psychiatr Danub. 2017;29(3):313–21.

Dajak L, Mastilica M, Orešković S, Vuletić G. Health-related quality of life and mental health in the process of active and passive ageing. Psychiatr Danub. 2016;28(4):404–8.

Orešković S. Breaking down the silo mentality in global mental health: The new role for the schools of public health. Psychiatr Danub. 2016;28(4):318-20.

Orešković S. Evidence-based bioethics: delineating the connections between science, practice, and values in medicine. Croat Med J. 2016;57(4):307–10.

Čivljak M, Milošević M, Čelić I, Rukavina TV, Brborović O, Orešković S. Predictors of the desire/decision to quit smoking in a Cohort of Croatian adult smokers followed for five years: the CroHort study. Collegium Antropologicum 2012; 36(suppl. 1):65-9.

Karačić S, Orešković S. Internet Addiction Through the Phase of Adolescence: A Questionnaire Study. JMIR Mental Health. 2017;4(2):e11.

Borovecki A, ten Have H, Oresković S. Ethics committees in Croatia in the healthcare institutions: the first study about their structure and functions, and some reflections on the major issues and problems. HEC Forum. 2006 Mar;18(1):49-60.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Principal Investigator: Comparison of Varenicline and Cytisine effectiveness on nicotine smoking cessation in Primary health care- randomized controlled trial GRAND FOUNDATION GLOBAL AWARD

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Principal Investigator: Comparison of Varenicline and Cytisine effectiveness on nicotine smoking cessation in Primary health care- randomized controlled trial GRAND FOUNDATION GLOBAL AWARD

Principal Investigator MZO „Kvaliteta života liječnika i budućnost liječničke profesije u RH“ (108-0000000-3577) 2007-2013

Project Collaborator 2016 „Analiza Internet foruma o mentalnim bolestima- FOMB, Principal Investigator Assistant Professor Ognjena Brborović



Project Collaborator 2017 „E-profesionalizam zdravstvenih djelatnika“, Principal Investigator
Assistant Professor Tee Vukušić Rukavina

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 6

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Doc.dr.sc. Jelena Osmanović Barilar

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research methods in vivo and in vitro

BIOGRAPHY

Department of pharmacology, Laboratory for molecular neuropharmacology, School of Medicine, University of Zagreb Šalata 11 (josmanov@mef.hr)

EDUCATION and academic title: (School of Medicine): medical doctor(2004). internship (2004-2005), doctor of science(2013), Specialist in Clinical Pharmacology (2016) SCIENTIFIC/PROFESSIONAL DEGREE : scientific fellow (2005), Senior Research Assistant (2013), assistant professor (2017), SCIENTIFIC TRAINING: Psychiatry Clinic, Würzburg, Germany (2005; 2006-2007; 2008; 2018). PROJECTS (ASSISTANT): 2x HRZZ, 1x Ministry of science and education, 1x UKF, 2x DAAD. SUPERVISION: 3x undergraduate thesis(2/3 still in process of writing): SCIENTIFIC ACHIEVEMENTS: 12 articles, >60 Congress abstracts, 410 citations (WoS), h-index 8. SCIENTIFIC INTERESTS : neuroscience, neuropharmacology, experimental Alzheimer disease. TEACHING ACTIVITIES: :Undergraduate: Pharmacology, Medical ethics; Postgraduate: Biomedicine and health (teacher): In vivo and in vitro methods in research; Neuroscience (teacher) Mechanisms of intracellular signaling of hormone receptors in the central nervous system. PROFESSIONAL ACTIVITIES: External expert for Agency for medical products and medical devices of Croatia, Member of Croatian Pharmacological Society, member of Croatian Society for Clinical Pharmacology and Therapy.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: March 2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Articles from 2010- 2018:

1. J Osmanovic-Barilar, M Salkovic-Petrisi. Evaluating the Role of Hormone Therapy in Postmenopausal Women with Alzheimer's Disease. *Drugs & aging* 2016; 33 (11), 787-808 (Q2).
2. Salkovic-Petrisic M, Knezovic A, Osmanovic-Barilar J, Smailovic U, Trkulja V, Riederer P, Amit T, Mandel S, Youdim MB. Multi-target iron-chelators improve memory loss in a rat model of sporadic Alzheimer's disease. *Life Sci.* 2015;136:108-19. (Q2)
3. Barilar JO, Knezovic A, Grünblatt E, Riederer P, Salkovic-Petrisic M. Nine-month follow-up of the insulin receptor signalling cascade in the brain of streptozotocin rat model of sporadic Alzheimer's disease. *Neural Transm (Vienna)*. 2015;122:565-76. (Q2)
4. Salkovic-Petrisic M, Osmanovic-Barilar J, Knezovic A, Hoyer S, Mosetter K, Reutter W. Long-term oral galactose treatment prevents cognitive deficits in male Wistar rats treated intracerebroventricularly with streptozotocin. *Neuropharmacology*. 2013;77C:68-80.
5. Salkovic-Petrisic M, Osmanovic-Barilar J, Brückner MK, Hoyer S, Arendt T, Riederer P. Cerebral amyloid angiopathy in streptozotocin rat model of sporadic Alzheimer's disease: a long-term follow up study. *J Neural Transm* 2011;118:765-772. (Q2)

6. Osmanovic J, Plaschke K, Salkovic-Petrisic M, Grünblatt E, Riederer P, Hoyer S. Chronic exogenous corticosterone administration generates an insulin-resistant brain state in rats. *Stress*. 2010;13:123-31. (Q2)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Babic Perhoc A, Osmanovic Barilar J, Knezovic A, Farkas V, Bagaric R, Svarc A, Grünblatt E, Riederer P, Salkovic-Petrisic M. Cognitive, behavioral and metabolic effects of oral galactose treatment in the transgenic Tg2576 mice. *Neuropharmacology* 2018;148:50-67. doi: 10.1016/j.neuropharm.2018.12.018. [Epub ahead of print] (Q1)
2. Knezovic A, Osmanovic Barilar J, Babic A, Bagaric R, Farkas V, Riederer P, Salkovic-Petrisic M. Glucagon-like peptide-1 mediates effects of oral galactose in streptozotocin-induced rat model of sporadic Alzheimer's disease. *Neuropharmacology* 2018 Jun;135:48-62. (Q1)
3. Knezovic A, Osmanovic-Barilar J, Curlin M, Hof PR, Simic G, Riederer P, Salkovic-Petrisic M. Staging of cognitive deficits and neuropathological and ultrastructural changes in streptozotocin-induced rat model of Alzheimer's disease. *J Neural Transm* 2015;122:577-92. (Q2)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1) MZOŠ istraživački projekti (suradnik) 2007-2012 „Mozak, eksperimentalni i središnji dijabetes, te kognitivne i druge povezane promjene“
- 2) UKF istraživački projekt (suradnik) 2010-2012 „Cytopathological characterization of the brain in a rat model of sporadic Alzheimer's disease“
- 3) DAAD/MZOŠ bilateralni projekt (suradnik) 2004 – 2010

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 1) HRZZ istraživački projekti (suradnik) 2018 – 2022 „Mehanizmi nutrijentom posredovanih učinaka endogenog glukagonu sličnog peptida-1 na kognitivne i metaboličke poremećaje u eksperimentalnim modelima neurodegenerativnih bolesti (NutrientGLP-1)“; 2015 - 2018 „Terapijski potencijal oralne galaktoze u eksperimentalnoj Alzheimerovoj bolesti (GALAD)“
- 2) DAAD/MZOŠ bilateralni projekt (suradnik) 2017 – 2018 „Molecular characterization of the therapeutic galactose potential as a new strategy in Alzheimer's disease treatment“
- 4) Znanstveni centar izvrsnosti (ZCI) za bazičnu, kliničku i translacijsku neuroznanost (suradnik) 2017 – 2022 (HIIM, voditelj prof. dr. s.c M. Judaš), u istraživačkoj skupini istraživanje „Modeliranje inzulinske rezistencije u mozgu kao pokretača sporadične Alzheimerovu bolest“

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Slobodanka Ostojic-Kolonic professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Clinical Hospital Merkur

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Understanding bone metabolism – basic science in clinical practice; Scientific approach to transfusion treatment

BIOGRAPHY

Slobodanka Ostojić Kolonić graduated from the University of Zagreb Medical School in 1983. She completed her Postgraduate Study of Clinical Pharmacology at the Faculty of Medicine in Zagreb in 1988. She graduated from the same faculty at the Academy of Sciences (1989) and finished her doctoral thesis in 2000.

Since 1986. she is the member of Hematology department Clinical Hospital Merkur.

From 2004 to 2011 she was the head of the Department of Clinical Pharmacology . Since December 2011 until November 2018 she has been the Head of the Department of Internal Medicine.

From December 2011. until today she has been the Head of Hematology Department at Clinical Hospital Merkur.

In April 2015. she became cumulative associate professor at School of Medicine, University of Zagreb in the field of Biomedicine and Health Sciences: Clinical medical sciences- Internal Medicine.

Slobodanka Ostojić Kolonić actively participates in undergraduate and postgraduate studies at School of Medicine, University of Zagreb: internal propedeutics, internal medicine, small elective courses and postgraduate studies of family medicine, pathology, clinical cytology and hemato/oncology. She is now a member of the postgraduate study committee of hematology.

For the last 6 years, she has been the head of the postgraduate courses of continuous medical education of the 1st category at the Faculty of Medicine in Zagreb (courses: Hematologic Patient and Primary Health Care Physician, Increased Lymph Node: Diagnostic and Therapeutic Algorithm) and Continuous Medical Training Courses from Knowledge Recognition (Courses: treatment of oncological patients; Anemia, diagnostic and therapeutic approaches). She also participates in other courses at the School of Medicine in Zagreb in the field of intensive medicine, mycology, immunology and transfusion medicine.

Prof Ostojić is an elected mentor for doctors during their hematology fellowship in Clinical Hospital Merkur. She was also a member of a specialist training group in hematology.

She actively participates in the work of national and international expert meetings. She is a member of the Croatian Medical Association, Croatia Hematology Society, European Association of Hematologists (EHA), European Association for Research and Treatment of Cancer (EORTC) and American Association of Hematologists (ASH).

She is currently vice-president of the Croatian Co-operative Group for Hematologic Diseases (KroHem) and the chair of the KroHem Working Group for Myelodysplastic Syndrome.

She was a member of the Steering Committee of the European Myelodysplastic Syndromes Registry (EU MDS). She was a member of the Organizing Committee of the Third (2003), Fourth (2007), Fifth (2012) and Sixth

2

(2014) Congress of Croatian hematologists and transfusionists and a member of the Scientific Committee of the 7th Congress of Croatian Hematologic Society.

Prof Ostojić Kolonić has lectured numerous domestic and international meeting, published numerous manuscripts in CC and non-CC journals, educational chapters in university books.

She was a member of the editorial board of the Pharmaca journal and the Medicine Newsletter, now a reviewer of the journal Acta Medica Croatica, Medical Journal and Acta Clinica Croatica.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Pavlovic A, Ostojic Kolonic S, Radic Kristo D, Jelic Puskaric B, Kardum Skelin I. Atypical blast morphology of primary plasma cell leukemia with renal involvement and plasmablasts in urine. *Diagn Cytopathol*. 2015 Feb;43(2):158-62.

Aurer I, Gasparov S, Kralik M, Balenović A, Huić D, Santek F, Duletić-Nacinović A, Pejša V, Ostojić-Kolonić S, Grah JJ; Croatian Society for Hematology and Transfusion; Croatian Cooperative Group for Treatment of Hematologic Diseases; Croatian Medical Society. [Lymphoma diagnosis and treatment - second Croatian consensus]. *Lijec Vjesn*. 2013 Mar-Apr;135(3-4):63-76. Croatian.

Mrzljak A, Gasparov S, Kardum-Skelin I, Colic-Cvrlje V, Ostojic-Kolonic S. Febrile cholestatic disease as an initial presentation of nodular lymphocyte-predominant Hodgkin lymphoma. *World J Gastroenterol*. 2010 Sep 21;16(35):4491-3.

Jelić-Puskarić B, Ostojić-Kolonić S, Planinc-Peraica A, Obad-Kovacević D, Kardum-Skelin I, Jakšić B. Myeloid sarcoma involving the breast. *Coll Antropol*. 2010 Jun;34(2):641-4.

Ostojić Kolonić S. [The story about Hodgkin's lymphoma]. *Acta Med Croatica*. 2008 Oct;62(4):409-12. Croatian.

Kardum-Skelin I, Planinc-Peraica A, Ostojić Kolonić S, Radić-Kristo D, Milas M, Vrhovac R, Sustercić D, Minigo H, Jakšić B. [Clinical and laboratory prognostic parameters for leukemic types of chronic lymphoproliferative diseases]. *Acta Med Croatica*. 2008 Oct;62(4):351-64. Croatian.

Aurer I, Huić D, Zuvic M, Sever-Prebilić M, Ajduković R, Radman I, Skare-Librenjak L, Ostojić-Kolonić S, Labar B. [90Y-ibritumomab tiuxetan in patients with follicular lymphoma relapsing or refractory to rituximab]. *Lijec Vjesn*. 2006 Jul-Aug;128(7-8):224-7. Croatian.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

"Guidelines for Diagnosis and Treatment of Chronic Lymphocytic Leukemia. *Krohem B-CII* 2017. Jakšić B, Pejša V, Ostojić-Kolonić S, Kardum-Skelin I, Bašić-Kinda S, Coha B, Gverić-Krečak V, Vrhovac R, Jakšić O, Aurer I, Sinčić-Petričević J, Načinović-Duletić A, Nemet D. *Acta Clin Croat*. 2018 Mar;57(1):190-215. doi: 10.20471/acc.2018.57.01.27.

"Real world multiple myeloma management practice patterns and outcomes in selected Central and Eastern European countries. Coriu D, Dytfeld D, Niepel D, Spicka I, Markuljak I, Mihaylov G, Ostojic-Kolonic S, Fink L, Toka KS, Björklöf K. *Pol Arch Intern Med*. 2018 Sep 28;128(9):500-511. doi: 10.20452/pamw.4305. Epub 2018 Jul 27. Erratum in: [HYPERLINK](https://www.ncbi.nlm.nih.gov/pubmed/30540287)

"<https://www.ncbi.nlm.nih.gov/pubmed/30540287>" *Pol Arch Intern Med*. 2018 Dec 12;;null.

"Inactivated varicella zoster vaccine in autologous haemopoietic stem-cell transplant recipients: an international, multicentre, randomised, double-blind, placebo-controlled trial. Winston DJ, Mullane KM, Cornely OA, Boeckh MJ, Brown JW, Pergam SA, Trociukas I, Žák P, Craig MD, Papanicolaou GA, Velez JD,

Panse J, Hurtado K, Fernsler DA, Stek JE, Pang L, Su SC, Zhao Y, Chan ISF, Kaplan SS, Parrino J, Lee I, Popmihajlov Z, Annunziato PW, Arvin A; V212 Protocol 001 Trial Team. *Lancet*. 2018 May 26;391(10135):2116-2127. doi: 10.1016/S0140-6736(18)30631-7. Epub 2018 May 24.

"Rituximab Maintenance Strategy in Advanced Follicular Lymphoma: Facts and Controversies Milunović V, Bogeljić Patekar M, Jakubac KM, Mandac Rogulj I, Radić-Krišto D, Planinc-Peraica A, Ostojić Kolonić S. *Acta Clin Croat*. 2017 Mar;56(1):143-156. doi: 10.20471/acc.2017.56.01.20. Review.

"Fine-needle aspiration cytology yield as a basis for morphological, molecular, and cytogenetic diagnosis in alk-positive anaplastic large cell lymphoma with atypical clinical presentation. Bogdanic M, Ostojic Kolonic S, Kaic G, Kardum Paro MM, Lasan Trcic R, Kardum-Skelin I. *Diagn Cytopathol*. 2017 Jan;45(1):51-54. doi: 10.1002/dc.23542. Epub 2016 Jul 29.

"Atypical blast morphology of primary plasma cell leukemia with renal involvement and plasmablasts in urine. Pavlovic A, Ostojic Kolonic S, Radic Kristo D, Jelic Puskaric B, Kardum Skelin I.

Diagn Cytopathol. 2015 Feb;43(2):158-62. doi: 10.1002/dc.23168. Epub 2014 May 15.

[Lymphoma diagnosis and treatment - second Croatian consensus]. Aurer I, Gasparov S, Kralik M, Balenović A, Huić D, Santek F, Duletić-Nacinović A, Pejša V, Ostojić-Kolonić S, Grah JJ; Croatian Society for Hematology and Transfusion; Croatian Cooperative Group for Treatment of Hematologic Diseases; Croatian Medical Society. *Lijec Vjesn*. 2013 Mar-Apr;135(3-4):63-76. Croatian.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Petar Ozretić, Assist. Prof., Ph.D.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods in molecular oncology

BIOGRAPHY

I was born in 1976 in Čakovec, Croatia. In 2005 I obtained Diploma degree in molecular biology at the Faculty of Science, University of Zagreb, Croatia, and in 2013 PhD degree in biomedicine and health at the Doctoral study of Molecular Biosciences at J. J. Strossmayer University of Osijek, Croatia. My entire scientific career has been developing at the Division of Molecular Medicine at the Ruđer Bošković Institute in Zagreb, Croatia. I was professional associate (11/2006-04/2007), assistant/PhD student (06/2007-07/2013), senior assistant/postdoc (07/2013-03/2017), and from 04/2017 I am a research associate in the Laboratory for Hereditary Cancer at the same Division. I was a visiting scientist at the Centre for Integrative Biology (CIBIO), Trento, Italy; German Cancer Research Center (DKFZ), Heidelberg, Germany; Karolinska Institute, Stockholm, Sweden, and at the Division of Bioinformatics at Biocenter of Medical University of Innsbruck, Austria. From 04/2018 I'm an assistant professor at the J. J. Strossmayer University of Osijek and participate in several postgraduate courses. I was one of cofounders of Croatian Association for Cancer Research (HDIR) and its Secretary since 2009. From 2015 I'm treasurer of Croatian Society for Theoretical and Mathematical Biology (HDTMB). My two main research topics are genetics of hereditary breast/ovarian cancer syndrome (BRCA1/2 genes) and epi/genetic causes of aberrant Hedgehog-Gli signaling pathway activity in various tumors. I'm also collaborating with numerous Croatian clinicians and scientists on cancer biomarker discovery and validation and application of STR markers in forensics and population genetics. In recent years I've become more interested in high-throughput sequencing data analysis and more complex biomathematics.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 24/04/2018
Assistant Professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Sabol M, Trnski D, Musani V, Ozretić P, Levanat S. Role of Gli transcription factors in pathogenesis and their potential as new therapeutic targets. *Int J Mol Sci.* 2018; 19(9):2562.
2. Musani V, Ozretić P, Trnski D, Sabol M, Poduje M, Tošić M, Šitum M, Levanat S. Potential hot spot for de novo mutations in PTCH1 gene in Gorlin syndrome patients: A case report of twins from Croatia. *Croat Med J.* 2018; 59(1):20-24.
3. Musani V, Sušac I, Ozretić P, Eljuga D, Levanat S. The first case report of a large deletion of the BRCA1 gene in Croatia. *Medicine.* 2017; 96(48):E8667.
4. Ozretić P*, Trnski D*, Musani V, Maurac I, Kalafatić D, Orešković S, Levanat S, Sabol M. Non-canonical Hedgehog signaling activation in ovarian borderline tumors and ovarian carcinomas. *Int J Oncol.* 2017; 51(6):1869-1877.
5. Levanat S, Sabol M, Musani V, Ozretić P, Trnski D. Hedgehog signaling pathway as genetic and epigenetic target in ovarian tumors. *Curr Pharm Design.* 2017; 23(1):73-94.
6. Trnski D, Sabol M, Gojević A, Martinić M, Ozretić P, Musani V, Ramić S, Levanat S. GSK3B and Gli3 play a role in activation of Hedgehog-Gli pathway in human colon cancer – Targeting GSK3β downregulates the signaling pathway and reduces cell proliferation. *BBA - Mol Basis Dis.* 2015; 1852(12):2574-2584.

7. Ozretić P, Bisio A, Musani V, Trnski D, Sabol M, Levanat S, Inga A. Regulation of human PTCH1b expression by different 5' untranslated region cis-regulatory elements. *RNA Biol.* 2015; 12(3):290-304.
8. Sabol M*, Trnski D*, Uzarevic Z, Ozretic P, Musani V, Rafaj M, Cindric M, Levanat S. Combination of cyclopamine and tamoxifen promotes survival and migration of MCF-7 breast cancer cells - Interaction of Hedgehog-Gli and estrogen receptor signaling pathways. *Plos One.* 2014; 9(12):E114510.
9. Musani V, Sabol M, Car D, Ozretić P, Kalafatić D, Maurac I, Orešković S, Levanat S. PTCH1 gene polymorphisms in ovarian tumors: Potential protective role of c.3944T allele. *Gene.* 2013; 517(1):55-59.
10. Ozretić P, Bisio A, Inga A, Levanat S. The growing relevance of cap-independent translation initiation in cancer-related genes. *Period Biol.* 2012; 114(4):471-478.
11. Sabol M, Car D, Musani V, Ozretic P, Oreskovic S, Weber I, Levanat S. The Hedgehog signaling pathway in ovarian teratoma is stimulated by Sonic Hedgehog which induces internalization of Patched. *Int J Oncol.* 2012; 41(4):1411-1418.
12. Levanat S, Musani V, Cvok MI, Susac I, Sabol M, Ozretic P, Car D, Eljuga D, Eljuga L, Eljuga D. Three novel BRCA1/BRCA2 mutations in breast/ovarian cancer families in Croatia. *Gene.* 2012; 498(2):169-76.
13. Maurac I, Sabol M, Musani V, Car D, Ozretic P, Kalafatic D, Oreskovic S, Babic D, Levanat S. A low grade ovarian carcinoma case with coincident LOH of PTCH1 and BRCA1, and a mutation in BRCA1. *Int J Gynecol Pathol.* 2012; 31(3):264-271.
14. Musani V, Sabol M, Car D, Ozretić P, Orešković S, Leović D, Levanat S. LOH of PTCH1 region in BCC and ovarian carcinoma: Microsatellite vs. HRM analysis. *Front Biosci (Elite Ed).* 2012; E4:1049-1057.
15. Leovic D, Sabol M, Ozretic P, Musani V, Car D, Marjanovic K, Zubcic V, Sabol I, Sikora M, Grce M, Glavas-Obrovac Lj, Levanat S. HH-Gli signaling pathway activity in oral and oropharyngeal squamous cell carcinoma. *Head Neck - J Sci Spec.* 2012; 34(1):104-112.
16. Car D, Sabol M, Musani V, Ozretic P, Levanat S. Epigenetic regulation of the Hedgehog-Gli Signaling pathway in cancer. *Period Biol.* 2010; 112(4):419-423.
17. Ozretic P, Levacic Cvok M, Musani V, Sabol M, Car D, Levanat S. In silico analysis of potential structural and functional significance of human breast cancer gene BRCA2 sequence variants found in 5' untranslated region. *Period Biol.* 2010; 112(4):469-474.
18. Cretnik M, Poje G, Musani V, Kruslin B, Ozretic P, Tomas D, Situm M, Levanat S. Involvement of p16 and PTCH in pathogenesis of melanoma and basal cell carcinoma. *Int J Oncol.* 2009; 34(4):1045-1050.
19. Cvok MI, Cretnik M, Musani V, Ozretic P, Levanat S. New sequence variants in BRCA1 and BRCA2 genes detected by high-resolution melting analysis in an elderly healthy female population in Croatia. *Clin Chem Lab Med.* 2008; 46(10):1376-1383.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Sabol M, Trnski D, Musani V, Ozretić P, Levanat S. Role of Gli transcription factors in pathogenesis and their potential as new therapeutic targets. *Int J Mol Sci.* 2018; 19(9):2562.
2. Musani V, Ozretić P, Trnski D, Sabol M, Poduje M, Tošić M, Šitum M, Levanat S. Potential hot spot for de novo mutations in PTCH1 gene in Gorlin syndrome patients: A case report of twins from Croatia. *Croat Med J.* 2018; 59(1):20-24.
3. Ozretic P, Alvir I, Sarcevic B, Vujaskovic Z, Rendic-Miocevic Z, Roguljic A, Beketic-Oreskovic L. Apoptosis regulator Bcl-2 is an independent prognostic marker for worse overall survival in triple-negative breast cancer patients. *Int J Biol Markers.* 2018; 33(1):109-115.

4. Musani V, Sušac I, Ozretić P, Eljuga D, Levanat S. The first case report of a large deletion of the BRCA1 gene in Croatia. *Medicine*. 2017; 96(48):E8667.
5. Ozretić P*, Trnski D*, Musani V, Maurac I, Kalafatić D, Orešković S, Levanat S, Sabol M. Non-canonical Hedgehog signaling activation in ovarian borderline tumors and ovarian carcinomas. *Int J Oncol*. 2017; 51(6):1869-1877.
6. Levanat S, Sabol M, Musani V, Ozretić P, Trnski D. Hedgehog signaling pathway as genetic and epigenetic target in ovarian tumors. *Curr Pharm Design*. 2017; 23(1):73-94.
7. Trnski D, Sabol M, Gojević A, Martinić M, Ozretić P, Musani V, Ramić S, Levanat S. GSK3B and GLI3 play a role in activation of Hedgehog-GLI pathway in human colon cancer – Targeting GSK3 β downregulates the signaling pathway and reduces cell proliferation. *BBA - Mol Basis Dis*. 2015; 1852(12):2574-2584.
8. Ozretić P, Bisio A, Musani V, Trnski D, Sabol M, Levanat S, Inga A. Regulation of human PTCH1b expression by different 5' untranslated region cis-regulatory elements. *RNA Biol*. 2015; 12(3):290-304.
9. Sabol M*, Trnski D*, Uzarevic Z, Ozretic P, Musani V, Rafaj M, Cindric M, Levanat S. Combination of cyclopamine and tamoxifen promotes survival and migration of MCF-7 breast cancer cells - Interaction of Hedgehog-GLI and estrogen receptor signaling pathways. *Plos One*. 2014; 9(12):E114510.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- from 01/2019 – associate on the Croatian Science Foundation research project “GLIcode - Differential regulation of the GLI code in BRAF/NRAS driven tumors” / PI Maja Sabol
- 2019 – principal investigator on research project “Mutational signatures of hereditary breast and ovarian cancer genes” (the Terry Fox Foundation donation)
- 2018 – principal investigator on research project “Genetic profile of hereditary breast cancer” (The Terry Fox Foundation donation)
- from 05/2017 – associate on the Croatian Science Foundation research project “MIRnaGLI - Novel molecular mechanisms for new therapeutic approaches: Interactions of microRNAs and Hedgehog-GLI signaling pathway in serous ovarian carcinoma”; [HRZZ IP-2016-06-1268] / PI Sonja Levanat
- from 2017 – associate on research project “Interaction of HH-GLI signaling pathway and androgen receptor in prostate cancer” (dm-Drogerie Markt donation) / PI Sonja Levanat
- 2017/18 – associate on research project “Discovery of new biomarkers for melanoma development” (the City of Zagreb donation) / PI Sonja Levanat
- 2016/17 – associate on research project “Mechanisms of interaction of steroids and signaling pathways in the development of ovarian cancer: Looking for early indicators of ovarian cancer” (the City of Zagreb donation) / PI Sonja Levanat
- 2016/17 – associate on research project “Apoptotic pathways and role of BIRC5 (survivin) in breast cancer development” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2015 – associate on research project “microRNA profiling of ovarian cancer” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2014 - 2019 – associate on the Croatian Science Foundation research project “ProNetNel - New protein networks for novel therapeutic avenues in human melanoma”; [HRZZ IP-2013-11-1615] / PI Neda Slade
- 2012 – associate on research project “Role of survivin as a predictive and prognostic marker in breast cancer” (the Terry Fox Foundation donation) / PI Sonja Levanat

- 2011/12 – principal investigator on the Croatian Science Foundation’s Fellowships for Doctoral Students project “Functional analysis of CGG-trinucleotide repeats variants found in the 5' untranslated region of PTCH1 gene”; [HRZZ 03.01/214]
- 2009 – associate on research project “Genetic testing of inherited predisposition to breast and ovarian cancer” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2006 – 2013 – assistant on MZOŠ research project “Signal transduction in tumors: HH-GLI pathway, interactions and therapeutic potential”; [098-0982464-2461] / PI Sonja Levanat

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- from 01/2019 – associate on the Croatian Science Foundation research project “GLIcode - Differential regulation of the GLI code in BRAF/NRAS driven tumors” / PI Maja Sabol
- 2019 – principal investigator on research project “Mutational signatures of hereditary breast and ovarian cancer genes” (the Terry Fox Foundation donation)
- 2018 – principal investigator on research project “Genetic profile of hereditary breast cancer” (The Terry Fox Foundation donation)
- from 05/2017 – associate on the Croatian Science Foundation research project “MIRnaGLI - Novel molecular mechanisms for new therapeutic approaches: Interactions of microRNAs and Hedgehog-GLI signaling pathway in serous ovarian carcinoma”; [HRZZ IP-2016-06-1268] / PI Sonja Levanat
- from 2017 – associate on research project “Interaction of HH-GLI signaling pathway and androgen receptor in prostate cancer” (dm-Drogerie Markt donation) / PI Sonja Levanat
- 2017/18 – associate on research project “Discovery of new biomarkers for melanoma development” (the City of Zagreb donation) / PI Sonja Levanat
- 2016/17 – associate on research project “Mechanisms of interaction of steroids and signaling pathways in the development of ovarian cancer: Looking for early indicators of ovarian cancer” (the City of Zagreb donation) / PI Sonja Levanat
- 2016/17 – associate on research project “Apoptotic pathways and role of BIRC5 (survivin) in breast cancer development” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2015 – associate on research project “microRNA profiling of ovarian cancer” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2014 - 2019 – associate on the Croatian Science Foundation research project “ProNetNel - New protein networks for novel therapeutic avenues in human melanoma”; [HRZZ IP-2013-11-1615] / PI Neda Slade

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ljiljana Pačić-Turk, Ph.D, assistant professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Catholic University of Croatia

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research Methods of Psychological Functions and Behaviour

BIOGRAPHY

WORK EXPERIENCE

2015. - current Assistant Professor, Psychology Department, Catholic University of Croatia

1985. – 2015. Psychologist, Department of Neurosurgery, University of Zagreb's School of Medicine, University Hospital Centre Zagreb

EDUCATION:

2003. Ph. D. School of Medicine, University of Zagreb Dissertation: „Factors of changes in psychological functions following brain artery aneurism surgery“

1996. Master of Science, School of Medicine, University of Zagreb; Dissertation: „Neuropsychological deficits and personality changes following brain artery aneurism surgery“

1982. Psychologist; Faculty of Humanities and Social Sciences, University of Zagreb

TEACHING ACTIVITIES

Catholic University of Croatia

2014 – current Introduction to Clinical Psychology

2014 – 2017 Introduction to Neuropsychology

2015 – current Clinical Psychodiagnostics

2015 – current Health Psychology

2016 – current Psychology of Rehabilitation

2016 – current Psychological Reports Writing

2016 – current Neuropsychological Assessment in Children and Adults

Centre for Croatian Studies, University of Zagreb

2001 – 2008 Clinical Psychology

2005 – 2011 Introduction to Clinical Psychology

2005 – 2013 Clinical Psychodiagnostics

2005 – 2018 Clinical Interview

2005 – 2018 Writing Clinical Psychological Reports

2011 – 2018 Diagnostic Criteria in Clinical Practice

2013 – 2018 Clinical Neuropsychology

University of Applied Health Sciences

1998. – 2002. Neuropsychology for Occupational Therapists

Participates in postgraduate studies in psychotherapy and several courses within the undergraduate classes at Medical School Zagreb. Held a series of lectures to students of speech pathology at Education and Rehabilitation Sciences in the field of neuropsychological diagnostics, medical students as part of the Integrated classes in neurosurgery and lectures to students of other psychological studies in Croatia.

She was president of the Organizing Committee of the 1st and 2nd Croatian Congress of Applied Psychology. In 2006, as an invited speaker, held the lectures at the course of permanent education of epilepsy "Applying new knowledge and therapeutic guidelines in neurology" and during Brain Awareness Week in Rijeka, 2009. "Neuropsychological approach: diagnosis and rehabilitation of cognitive functions" at the psychiatric hospital Rab. Organized a round table "Problems of verbal and non-verbal communication in patients with brain damage" during the Brain Awareness Week in Rijeka, 2009. At the beginning of her professional work, she volunteered on the phone for psychological help.

She held lectures in several courses: in 1998. at the continuous training of court experts at the School of Public Health A. Štampar, 2006 at the permanent education of epilepsy course "Applying new knowledge and therapeutic guidelines in neurology" and at postgraduate course of continuing medical education "Craniocerebral injuries" in 1996. She attended trainings of cognitive-behavioural psychotherapy (IV. Seminar in behavioural psychotherapy, behavioural therapy Practicum II, International School of Cognitive Therapy 1990), participated at the 11th International Seminar on the Rehabilitation of War Victims in Copenhagen in 1993 and the courses of the World Health Organization - "An interdisciplinary approach to rehabilitation" and "The cranio-cerebral centre - analysis and proposals for the improvement of the interdisciplinary team approach" in 1993.

She was Head of the Section of Clinical Psychology and Section of Health Psychology of the Croatian Psychological Association and vice president of the Croatian Psychological Association (2001-2004), Vice President of Croatian Psychological Chamber (2004-2005), and 2004-2009. President of The Croatian Psychological Chamber.

She is the Head of the Department of Psychology, Catholic University of Croatia, since 2017.

Membership of:

Croatian Society for Neuroscience

Croatian Psychological Chamber

Croatian Psychological Society

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 13.10.2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

PAČIĆ-TURK, LJ., JANDRIJEVIĆ, P., HAVELKA-MEŠTROVIĆ, A. Recovery of Memory after Cerebral Artery Aneurysm Surgery Acta Clinica Croatica - IN PRINT

PAČIĆ-TURK, LJ., ŠULENTIĆ, T., HAVELKA MEŠTROVIĆ, A., PALADINO, J., MRAK, G. (2016). Personality Changes Following Brain Artery Aneurysm Surgery. Acta Clinica Croatica, 55(4): 565-578.

PAČIĆ-TURK, LJ., GAJSKI, M. (2014). The Self-Report Psychopathy Scale SRP-III and Its Correlation with the Five-Factor Model. Journal for General Social Issues, 23(1): 155-175.

PAČIĆ-TURK, LJ., TOMAŠIĆ, B., DIVČIĆ, B. (2013). Relationship of demographic, social and health factors, neuroticism and characteristics of emotionality with eating disorders. Clinical Psychology, 6(1-2): 5-26.

- PAČIĆ-TURK, LJ., BOŠKOVIĆ G. (2010). The role of psychologists and psychological profession in the field of health promotion and addiction prevention. *Journal of Public Health*, 19(1): 47-55.
- PAČIĆ-TURK, LJ., BOŠKOVIĆ, G. (2009). Prevention of drug dependence from the aspect of social learning theory and cognitive psychology. *Clinical Psychology*, 1(1-2): 39-58.
- PAČIĆ-TURK, LJ., VLAŠIĆ CICVARIĆ, I., BARUŠIĆ, T. (eds.) (2009). Protecting the health of children and youth. Book of Abstract, 2nd Croatian Congress of Applied Psychology, Opatija.
- PAČIĆ-TURK, LJ. (2008). Neuropsychological deficits in patients after craniocerebral injury. In: Gnjidić, Ž., Bilić, R. i sur. (eds.). *Uvod u medicinsko vještačenje u građanskim parnicama* (pp. 138-147). Zagreb: Medicinska naklada.
- PAČIĆ-TURK, LJ., KOSTOVIĆ- SRZENTIĆ, M. (2006). Clinical Neuropsychology. Lecture notes for occupational therapy students. Zagreb: University of Applied Health Sciences
- PAČIĆ-TURK, LJ., GREGUREK, R. (2006). Neurology and Neurosurgery. In: Gregurek R. i sur. *Suradna i konzultativna psihijatrija* (pp. 160-164). Zagreb: Školska knjiga.
- PAČIĆ-TURK, LJ. (editor) (2006). Psychologists in improvement and protection of health – interdisciplinary approach. Book of Abstracts. 1st Croatian Congress of Applied Psychology, Zagreb.
- PAČIĆ-TURK, LJ. (2006). Perspectives of Clinical Neuropsychology. In: Žebec, M. S., Sabol, G., Šakić, M., Kotrla Topić, M. (eds.). *Brain and mind: a permanent challenge for the mankind* (pp. 199-206). Zagreb: Institute for Social Sciences Ivo Pilar.
- PAČIĆ-TURK, LJ. (2006). 1st Croatian Congress of Applied Psychology. *Suvremena psihologija* 6, 129-132.
- HAVELKA, M., PAČIĆ-TURK, LJ., SEVER, T. (2004). Health Psychology in Croatia – 20 Years Later. *Journal for General Social Issues*, 71: 465-486.
- PAČIĆ-TURK, LJ. (2004). The role of psychologists in treating dementia. Book of Abstracts, 2nd Croatian Conference on Dementia, Zagreb, 14-18.
- PAČIĆ-TURK, LJ. (2004). Legal aspects and dementia in Croatia. Book of Abstracts, 2nd Croatian Conference on Dementia, Zagreb, 34-5.
- PAČIĆ-TURK, LJ., HAUPTFELD, V. (2002). Psychological methods for assessing cognitive functions. In: Gregurek, R., Folnegović-Šmalc, V. *Methods for assessing psychological functions and behaviour* (pp. 15-21). Zagreb: Medicinska naklada.
- PAČIĆ-TURK, LJ. (2002). 10th Annual Conference of Croatian Psychologists. *Suvremena psihologija* 5, 2:381-383.
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PAČIĆ-TURK, LJ., BRNOBIĆ, M., PALADINO, J., ŠČAP, M., ROTIM, K. (1997). Neuropsychological follow-up of the cognitive functions and personality alterations after cerebral aneurysm surgery. *Clinical Neurology and Neurosurgery*, 99(1): 1319-1329.-

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HAUPTFELD, V., PAČIĆ-TURK, LJ. (1993). Neuropsychological factors in craniocerebral injuries. In: Iveković, V., Jeličić, I.: *Diagnostics and treatment of craniocerebral injuries* (pp. 110-114). Zagreb: School of Medicine, University of Zagreb

PETRUŠIĆ, I., KEROS, P., HAUPTFELD, V., PAČIĆ-TURK, LJ. (1991). Late complications, rehabilitation and prognosis of craniocerebral injuries during the war. In: Čupak, K. (editor) *Head and neck injuries in war* (pp. 25-27). Zagreb: Croatian Academy of Medical Sciences and Croatian Ministry of Defence.

Scientific conferences - abstracts

KANTOLIĆ, I., PAČIĆ-TURK, LJ., ŠKARO, A. (2014). Quality of life, way of coping with stress and health locus of control in persons suffering from thyroid gland disorders. *Book of Abstracts, XIX Psychology Days in Zadar*.

PAČIĆ-TURK, LJ., HAUPTFELD, V. (2008). Cognitive deficits after unruptured aneurysm surgery. *Neurologia Croatica*, 5th Congress of Croatian Neurosurgical Society and the Joint Meeting with the Congress of Neurological Surgeons, Dubrovnik.

PAČIĆ-TURK, LJ. (2007). Neuropsychological assessment in patients undergone cerebral aneurysm surgery. *Book of Abstracts, 2nd Croatian Congress on neurorehabilitation and restoration neurology*, Osijek.

PAČIĆ-TURK, LJ. (2006). Psychological and neuropsychological assessment of mental functioning in elderly persons. *Book of Abstracts, 3rd symposium in psychogeriatric with international participation*, Rab.

PAČIĆ-TURK, LJ. (2006). An Interdisciplinary Approach to Enhancing and Protecting Health – Current State and Perspective. *Book of Abstracts, 1st Croatian Congress of Applied Psychology*, Zagreb.

PAČIĆ-TURK, LJ. (2003). Neuropsychological Assessment of Craniocerebral Injuries. *Book of Abstract, 11th Annual Conference of Croatian Psychologists*, Zadar.

PAČIĆ-TURK, LJ., MELADA, A., HEINRICH, Z., PALADINO, J. (2003). Multifactorial analysis of cognitive outcome after keyhole approach to intracranial aneurysms. *The book of abstracts of the 12th European Congress of Neurosurgery*, Lisbon.

PAČIĆ-TURK, LJ., MELADA, A., HEINRICH, Z., PALADINO, J. (2003). The factors of cognitive outcome after intracranial aneurysm surgery. *Neurologia Croatica*, 52(4).

PAČIĆ-TURK, LJ. (2002). Emotional changes and their influence on cognitive functions in patients with postconcussive syndrome. *Book of Abstracts, 3rd congress of the Croatian Neurosurgical Society*, Zagreb.

GALIĆ, S., PAČIĆ-TURK, LJ. (2000). Facial recognition, age and sex. *Book of Abstracts, 11th Psychology Days in Zadar*.

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PAČIĆ-TURK, LJ., PALADINO, J. (1999). Neuropsychological assessment after the operation of intracranial aneurysms: eyebrow keyhole approach. *Book of Abstracts, 11th European Congress of Neurosurgeons*, Copenhagen.

- PAČIĆ-TURK, LJ., KEROS, P., KUKIN, T., HAUPTFELD, V. (1998). Prikaz rada Centra za suzbijanje boli Klinike za neurokirurgiju KBC Rebro. Book of Abstracts, 6th Annual Conference of Croatian Psychologists, Dubrovnik.
- PAČIĆ-TURK, LJ. (1998). Neuropsychological diagnostics, follow-up and rehabilitation. Book of Abstracts, 6th Annual Conference of Croatian Psychologists, Dubrovnik.
- LUČANIN, D., PAČIĆ-TURK, LJ. (1998). Overview of the methods and techniques for assessing pain. Book of Abstracts, 6th Annual Conference of Croatian Psychologists, Dubrovnik.
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- PAČIĆ-TURK, LJ. (1998). Neuropsychological deficits and personality changes after open craniocerebral injury. Book of Abstracts. XI. Psychology Days, Zadar.
- PAČIĆ-TURK, LJ., HAUPTFELD, V., PALADINO, J. (1997) Neuropsychological assessment after the operation of cerebral aneurysms. *Neurologia Croatica*, 46(3):59; 29th International Danube Symposium of Neurological Sciences, Dubrovnik.
- PAČIĆ-TURK LJ., BRNOBIĆ, M., PALADINO, J., ŠČAP, M. (1997). Memory deficits after cerebral aneurysm operation. *Acta Clinica Croatica*, 36:97. 2nd Croatian Neurology Congress.
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- PAČIĆ-TURK, LJ., BRNOBIĆ, M., PALADINO, J., ŠČAP, M. (1996). Memory deficits after operation of cerebral aneurysm. Book of Abstract, 1st Congress of Croatian Neurosurgical Society, Zagreb.
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- HAUPTFELD, V., PAČIĆ-TURK, LJ. (1996). Neuropsychological follow-up of early recovery after mild head injury. Book of Abstract, 1st Congress of Croatian Neurosurgical Society, Zagreb.
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- PAČIĆ-TURK, LJ. (1994). Deficits in verbal functions in patients with war related craniocerebral injuries. Book of Abstracts, 1st Congress of Croatian Speech Therapists, Varaždin.
- KONDIĆ, LJ., PAČIĆ-TURK, LJ., MUAČEVIĆ, V. (1994). Psychological reactions of former concentration camps prisoners of war. Book of Abstracts, 1st Croatian Psychiatry Congress, Split.
- PETRUŠIĆ, I., KEROS, P., HAUPTFELD, V., PAČIĆ-TURK, LJ., GRGAS, M. (1992). Late complications, rehabilitation, and prognosis of craniocerebral injuries in the war. *Acta Medica Croatica*, 46.
- PAČIĆ-TURK, LJ., KOVAČEVIĆ, M. (1992). Speech disorders and other neuropsychological deficits in patients with craniocerebral injuries. Book of Abstracts, *Istraživanja na području defektologije*, Zagreb.
- KOVAČEVIĆ, M., PAČIĆ-TURK, LJ. (1992). Problems with treatment and rehabilitation of wounded patients with craniocerebral injuries. War Psychology and Psychiatry Symposium, Varaždinske toplice.

BRNOBIĆ, M., PAČIĆ-TURK, LJ., JELIČIĆ, I. (1991). Neuropsychological examination after the operation of cerebral aneurysm in acute stage. Book of Abstracts, 9th European Congress of Neurosurgeons, Moskva.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

PAČIĆ-TURK, LJ., JANDRIJEVIĆ, P., HAVELKA-MEŠTROVIĆ, A. Recovery of Memory after Cerebral Artery Aneurysm Surgery - Acta Clinica Croatica - IN PRINT

PAČIĆ-TURK, LJ., ŠULENTIĆ, T., HAVELKA MEŠTROVIĆ, A., PALADINO, J., MRAK, G. (2016). Personality Changes Following Brain Artery Aneurysm Surgery. Acta Clinica Croatica, 55(4): 565-578.

PAČIĆ-TURK, LJ., GAJSKI, M. (2014). The Self-Report Psychopathy Scale SRP-III and Its Correlation with the Five-Factor Model. Journal for General Social Issues, 23(1): 155-175.

PAČIĆ-TURK, LJ., TOMAŠIĆ, B., DIVČIĆ, B. (2013). Relationship of demographic, social and health factors, neuroticism and characteristics of emotionality with eating disorders. Clinical Psychology, 6(1-2): 5-26.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2016 – 2017: Association between personality traits and ways of coping with stress, project leader: Krunoslav Matešić

2007 – 2014: Research on the effectiveness of functional neurosurgical procedures, project leader: Josip Paladino

2002 – 2006: Functional Neurosurgery, project leader: Josip Paladino

1997 – 2001: Craniocerebral injuries, project leader: Josip Paladino

1991 – 1996: Treatment of craniocerebral injuries, project leaders: I. Jeličić and V. Iveković

1981. – 1990. Acute craniocerebral injuries, project leader: M. Vidović

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2016 – 2017: Association between personality traits and ways of coping with stress, project leader: Krunoslav Matešić

2007 – 2014: Research on the effectiveness of functional neurosurgical procedures, project leader: Josip Paladino

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Frane Paić. assistant professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of medical biology, School of Medicine Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Epigenetics; Methods of molecular biology in medicine

BIOGRAPHY

Born: 27. 08. 1966, Šibenik, Croatia. Education: 1999 BS, molecular biology, School of Sciences, Zagreb, Croatia. 2002. MS, School of Medicine Split, Croatia. 2011., PhD, School of Sciences Zagreb, Croatia. Working experience: 2002-2004 Exchange visitor/research fellow on scientific project: „Novel animal models for viral hepatitis, Molecular agents against viral hepatitis and liver transplantation“; PI - Prof. George and Catherin Wu, MD, PhD. University of Connecticut Health Centre, School of Medicine, Department of Gastroenterology/Hepatology, 263 Farmington Avenue, CT 06030, USA. 2004–2005., Investigation of Biological traces - Forensic DNA analysis, trainee, Ministry of Interior Republic of Croatia, Centre for Crime Scene Investigation “Ivan Vučetić”, Ilica 335, 10 000 Zagreb, Croatia. 2005-2006., research fellow, trainee, University of Zagreb, School of Medicine, Centre for Functional Genomics, Šalata 3, 10 000 Zagreb, Croatia. 2006-2011., young research fellow-assistant, Department of Medical Biology School of Medicine, University of Zagreb, Šalata 3, 10 000 Zagreb, Croatia. 2007-2008., PhD student-worker, research fellow, Department of Reconstructive Sciences, School of Dental Medicine, University of Connecticut Health Centre, 263 Farmington Avenue, CT 06030, USA. 2011-2016, Senior assistant, Department of Medical Biology School of Medicine, University of Zagreb; 2016- till present assistant professor at Department of Medical Biology School of Medicine, University of Zagreb. Publications: 5 scientific articles in CC journals, 5 in others, 35 abstracts in scientific meetings, 3 chapters in books, and 2 invited lectures; 283 citations (Scopus) 266 (Web of science) 401 (Gogle scholar) 302 (Researchgate); h index: 4(Scopus), 5 (Google scholar) 4 (Web of sciences). Reviewer: Gene (Publisher Elsevier). Mentorship: 4 graduate thesis; 3 PhD Thesis in progress; Ad hoc reviewer: Bioscience Reports, BMJ Case Reports, Bentham science: Current Cardiology Reviews, Periodicum Biologorum, Current Pharmaceutical Design, Croatian Medical Journal, OMICS publishing group; Journal of Clinical & Experimental Cardiology, Gene; Cancer Cell International, Arh Hig Rada Toksikol.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Association between Circulatory and Plaque Resistin Levels with Carotid Plaque Instability and Ischemic Stroke Events. Jurin I, Paić F, Bulimbašić S, Rudež I, Đerek L, Jurin H, Knežević A, Starcevic B, Ajduk M. Heart Surg Forum. 2018 ;21(6):E448-E463.
2. Association of polymorphic variants in serotonin re-uptake transporter gene with Crohn's disease: a retrospective case-control study. Grubelic Ravić K, Paić F, Vucelić B, Brinar M, Čuković-Čavka S, Božina N, Krznarić Ž, Kalauz M, Bešić D, Nikuševa Martić T. Croat Med J. 2018 Oct 31;59(5):232-243.
3. Epigenome alterations in aortic valve stenosis and its related left ventricular hypertrophy. Gošev I, Zeljko M, Đurić Ž, Nikolić I, Gošev M, Ivčević S, Bešić D, Legčević Z, Paić F. Clin Epigenetics. 2017 Oct 3;9:106.

4. Correlation of phosphorylated HER2 with clinicopathological characteristics and efficacy of trastuzumab treatment for breast cancer. Ramić S, Asić K, Balja MP, Paić F, Benković V, Knežević F. *Anticancer Res.* 2013 ;33(6):2509-15.
5. Cardiac myxoma the great imitators: comprehensive histopathological and molecular approach. Gošev I, Paić F, Đurić Z, Gošev M, Ivčević S, Jakuš FB, Biočina B. *Int J Cardiol.* 2013 ;164(1):7-20.
6. Neuropeptide Y is expressed by osteocytes and can inhibit osteoblastic activity. Igwe JC, Jiang X, Paic F, Ma L, Adams DJ, Baldock PA, Pilbeam CC, Kalajzic I. *J Cell Biochem.* 2009 ;108(3):621-30.
7. Identification of differentially expressed genes between osteoblasts and osteocytes. Paic F, Igwe JC, Nori R, Kronenberg MS, Franceschetti T, Harrington P, Kuo L, Shin DG, Rowe DW, Harris SE, Kalajzic I. *Bone.* 2009 Oct;45(4):682-92.
8. Twelve-year experience in identification of skeletal remains from mass graves. Andelinović S, Sutlović D, Erceg Ivkosić I, Skaro V, Ivkosić A, Paić F, Rezić B, Definis-Gojanović M, Primorac D. *Croat Med J.* 2005 ;46(4):530-9;
9. Baus Lončar, Mirela; Paić, Frane; Ugarković, Đurđica. Molecular cytogenetic study of heterochromatin in some coleopteran insects // *Entomologia Croatica*, 9 (2005), 1/2; 47-56
10. Dragan Primorac, Ivana Erceg, Davorka Sutlović, Ante Ivkosić, Frane Paić, Vedrana Škaro, Damir Primorac, Bojana Rezić, Šime Andelinović DNA Identification of Skeletal Remains Discovered From Mass Graves // *Medicina Legale - Criminologia e Deontologia Medica* 10 - Lo stato dell' arte in genetica forense / Dott. A. Giuffrè (ur.). Milano: Centri di documentazione e di distribuzione Giuffrè, 2003. str. 23-32.
11. Primorac, Dragan; Paić, Frane Analiza DNA u sudskoj medicini // *Medicinskobiochemijska dijagnostika u kliničkoj praksi* / Topić, Elizabeta ; Primorac, Dragan ; Janković, Stipan (ur.). Zagreb: Medicinska naklada, 2004. str. 365-385
12. Dragan primorac, Frane Paić. Statistička obrada rezultata i utvrđivanje vjerodostojnosti identifikacije. January 2005 In book: *Metode molekularne biologije u medicini* Edition: 2005 Chapter: Statistička obrada rezultata i utvrđivanje vjerodostojnosti identifikacije Publisher: Medicinska Naklada, Zagreb Editors: Draško Šerman, Jadranka Sertić, Ana Stavljenić Rukavina, Floriana Bulić-Jakuš.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Association between Circulatory and Plaque Resistin Levels with Carotid Plaque Instability and Ischemic Stroke Events. Jurin I, Paić F, Bulimbašić S, Rudež I, Đerek L, Jurin H, Knežević A, Starcevic B, Ajduk M. *Heart Surg Forum.* 2018 Nov 13;21(6):E448-E463. doi: 10.1532/hsf.2071.
2. Association of polymorphic variants in serotonin re-uptake transporter gene with Crohn's disease: a retrospective case-control study. Grubelić Ravić K, Paić F, Vucelić B, Brinar M, Čuković-Čavka S, Božina N, Krznarić Ž, Kalauz M, Bešić D, Nikuševa Martić T. *Croat Med J.* 2018 Oct 31;59(5):232-243.
3. Epigenome alterations in aortic valve stenosis and its related left ventricular hypertrophy. Gošev I, Zeljko M, Đurić Ž, Nikolić I, Gošev M, Ivčević S, Bešić D, Legčević Z, Paić F. *Clin Epigenetics.* 2017 Oct 3;9:106. doi: 10.1186/s13148-017-0406-7. eCollection 2017. Review.
4. Correlation of phosphorylated HER2 with clinicopathological characteristics and efficacy of trastuzumab treatment for breast cancer. Ramić S, Asić K, Balja MP, Paić F, Benković V, Knežević F. *Anticancer Res.* 2013 Jun;33(6):2509-15.
5. Cardiac myxoma the great imitators: comprehensive histopathological and molecular approach. Gošev I, Paić F, Đurić Z, Gošev M, Ivčević S, Jakuš FB, Biočina B. *Int J Cardiol.* 2013 Mar 20;164(1):7-20. doi: 10.1016/j.ijcard.2011.12.052. Epub 2012 Jan 11. Review.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Participation in scientific projects: 2000 - 2002. Clinical Hospital Split, Laboratory for Clinical and Forensic Genetics, Department of Pathology and Forensic Medicine: "Promega, European/STR working group: Validation of DNA IQ System for DNA isolation; AluQuant Human DNA Quantification System and PowerPlex 16 kit for DNA amplification and their use in process of identification of skeletal remains" PI- Dragan Primorac MD, PhD. 2002 - 2004. University of Connecticut Health Centre School of Medicine Department of Gastroenterology/Hepatology; "Novel animal models for viral hepatitis, Molecular agents against viral hepatitis and liver transplantation" PI - Prof. George Wu MD PhD and Catherin Wu, MD, PhD. 2007 – 2008, University of Connecticut Health Centre, School of Dental Medicine, Department of reconstructive Science, Global gene expression in bone cells. PI- Assistant Prof. Ivo Kalajzic MD, PhD. 2006, School of Medicine, University of Zagreb "Experimental approach on reproductive health in mammals", PI Prof. Floriana Bulić-Jakuš MD., PhD, financed by Ministry of Science Republic of Croatia. 2007-2013, School of Medicine, University of Zagreb, "Experimental embryonic tumors and development of the mammalian embryo in vitro and in vivo", PI Prof. Floriana Bulić-Jakuš MD., PhD, financed by Ministry of Science Republic of Croatia. HRZZ project: 5699; Project name: Karakterizacija reakcije osteoklastnih progenitora na artritis; Principal investigator: Prof. Danka Grčević, Project duration: 1.9.2014 - 31.8.2017; HRZZ project: 2014-09 7406 ; Project name: Molecular mechanisms of Fas-driven osteoresorption in arthritis Acronm: Acronim: MEFRA Project duration: 01.11.2015 - 31.10.2019 Status: in progress); University support for scientific projects 2018: The role of Hedgehoge signaling and DNA damaging and demethylation pathway in development of aortic valve stenosis: Principal investigator: Frane Paić

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

HRZZ project: 5699; Project name: Karakterizacija reakcije osteoklastnih progenitora na artritis; Principal investigator: Prof. Danka Grčević, Project duration: 1.9.2014 - 31.8.2017; HRZZ project: 2014-09 7406 ; Project name: Molecular mechanisms of Fas-driven osteoresorption in arthritis Acronm: Acronim: MEFRA Project duration: 01.11.2015 - 31.10.2019 Status: in progress); University support for scientific project: The role of Hedgehoge signaling and DNA damaging and demethylation pathway in development of aortic valve stenosis: Principal investigator: Frane Paić

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Neven Papić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: PhD Programme Biomedicine and Health Science - course "Viral hepatitis"

BIOGRAPHY

Neven Papić, born on January 5th 1984 in Zagreb, following graduation from School of Medicine at the University of Zagreb in 2008, worked as a Research Fellow at the University Hospital for Infectious Diseases in Zagreb where he gained interest in the field of viral hepatitis and has started infectious disease fellowship in 2010. In 2011 and 2012 he gained additional education in the field of genome analysis at the University of Utah, USA. In 2016 he finished specialization in infectious diseases, and from 2019. he is working as a postdoctoral fellow at the University of Zagreb, School of Medicine, Department of infectology. He received several prestige awards in 2011 ESCMID (European Society of Clinical Microbiology and Infectious Diseases) Training and Education Award and Croatian Science Foundation Scholarship for doctoral students and in 2014 ESCMID TAE Award for Training achievements. He is researcher on several Croatian and international science projects. In his research he advocates the interdisciplinary approach that integrates the basic and clinical science to decode dynamic interactions between microbial pathogens and their hosts.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2018.,
postdoctoral fellow

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Papić N, Zidovec Lepej S, Gorenec L, Grgić I, Gasparov S, Filipec Kanizaj T, Vince A. The association of semaphorins 3C, 5A and 6D with liver fibrosis stage in chronic hepatitis C. PLoS One. 2018 Dec 28;13(12):e0209481.

Papić N, Budimir J, Kurelac I, Dušek D, Jugović D, Krajcar N, Vince A. Treatment of Elderly Patients with Chronic Hepatitis C: A Retrospective Cohort Study. Acta Clin Croat. 2018 Mar;57(1):61-70.

Vince A, **Papić N**. Unresolved issues in hepatitis C: The role of liver non-parenchymal cells and semaphorins. Infect Dis Rep. 2018 Mar 29;10(1):7232.

Civiljak R, **Papić N**, Stamenic V, Kalenic S, Kuzman I, Car J. Influenza and hepatitis B vaccination coverage among healthcare workers in Croatian hospitals: a series of cross-sectional surveys, 2006-2011. BMC Infect Dis. 2013 Nov 5;13:520.

Negash AA, Ramos HJ, Crochet N, Lau DT, Doehle B, **Papić N**, Delker DA, Jo J, Bertoletti A, Hagedorn CH, Gale M Jr. IL-1 β Production through the NLRP3 Inflammasome by Hepatic Macrophages Links Hepatitis C Virus Infection with Liver Inflammation and Disease. PLoS Pathog. 2013;9(4):e1003330.

Kurelac I, Zidovec LS, Grgić I, Gorenec L, **Papić N**, Dusek D, Barsic B, Vince A. Chemokine CXCL10 at week 4 of treatment predicts sustained virological response in patients with chronic hepatitis C. J Interferon Cytokine Res. 2012;32(8):386-91.

Papic N, Maxwell CI, Delker DA, Liu S, Heale BS, Hagedorn CH. RNA-Sequencing Analysis of 5' Capped RNAs Identifies Many New Differentially Expressed Genes in Acute Hepatitis C Virus Infection. *Viruses*. 2012;4(4):581-612.

Papic N, Pangercic A, Vargovic M, Barsic B, Vince A, Kuzman I. Liver involvement during influenza infection: perspective on the 2009 influenza pandemic. *Influenza Other Respi Viruses*. 2012;6(3):e2-5.

Kurelac I, **Papic N**, Sakoman S, Orban M, Dusek D, Coric M, Vince A. Intravenous Drug Users Can Achieve a High Sustained Virological Response Rate: experience From Croatian Reference Center for Viral Hepatitis. *Hepat Mon*. 2011;11(12):986-92.

Papic N, Zidovec LS, Kurelac I, Cajic V, Budimir J, Dusek D, Vince A. Treatment of chronic hepatitis C in Croatian war veterans: experiences from Croatian reference center for viral hepatitis. *Croat Med J*. 2011;52(1):35-40.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Papic N, Zidovec Lepej S, Gorenec L, Grgic I, Gasparov S, Filipec Kanizaj T, Vince A. The association of semaphorins 3C, 5A and 6D with liver fibrosis stage in chronic hepatitis C. *PLoS One*. 2018 Dec 28;13(12):e0209481.

Papic N, Maric LS, Vince A. Efficacy of oral vancomycin in primary prevention of *Clostridium Difficile* infection in elderly patients treated with systemic antibiotic therapy. *Infect Dis (Lond)*. 2018 Jan 11:1-4. doi:10.1080/23744235.2018.1425551. [Epub ahead of print]

Kutleša M, Santini M, Krajinović V, **Papić N**, Novokmet A, Josipović Mraović R, Baršić B. Nosocomial blood stream infections in patients treated with venovenous extracorporeal membrane oxygenation for acute respiratory distress syndrome at the Croatian referral center for respiratory extracorporeal membrane oxygenation. *Minerva Anesthesiol*. 2017 Jan 25. doi: 10.23736/S0375-9393.17.11659-7. [Epub ahead of print]

Maric LS, Knezovic I, **Papic N**, Mise B, Roglic S, Markovinovic L, Tesovic G. Risk factors for coronary artery abnormalities in children with Kawasaki disease: a 10-year experience. *Rheumatol Int*. 2014 Nov 28. [Epub ahead of print]

Vargović M, Pasini M, **Papić N**, Andrašević S, Markotić A, Butić I, Škerk V. Antimicrobial susceptibility of *Ureaplasma urealyticum* and *Mycoplasma hominis*. *Sex Transm Infect*. 2014 Feb;90(1):69. doi: 10.1136/sextrans-2013-051413. Epub 2013 Dec 23.

Civljak R, **Papic N**, Stamenic V, Kalenic S, Kuzman I, Car J. Influenza and hepatitis B vaccination coverage among healthcare workers in Croatian hospitals: a series of cross-sectional surveys, 2006-2011. *BMC Infect Dis*. 2013 Nov 5;13:520.

Negash AA, Ramos HJ, Crochet N, Lau DT, Doehle B, **Papic N**, Delker DA, Jo J, Bertoletti A, Hagedorn CH, Gale M Jr. IL-1 β Production through the NLRP3 Inflammasome by Hepatic Macrophages Links Hepatitis C Virus Infection with Liver Inflammation and Disease. *PLoS Pathog*. 2013;9(4):e1003330.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

«Imunopatogeneza hepatitisa B i C» (143-0000000-0117) - Croatian Science Foundation (science novice)



"Infectomics Study of Human Liver Non-parenchymal Cells in Chronic Hepatitis C" (HRZZ), researcher

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

«Imunopatogeneza hepatitisa B i C» (143-0000000-0117) - Croatian Science Foundation (science novice)

"Infectomics Study of Human Liver Non-parenchymal Cells in Chronic Hepatitis C" (HRZZ), researcher



ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Daria, Pašalić, PhD, Associate Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Zagreb University School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical Methods in Biomedical research

BIOGRAPHY

DATE AND PLACE OF BIRTH: Split, Croatia, July 29, 1969

FAMILY: Married, Three kids

EDUCATION:

Faculty of Pharmacy and biochemistry (FP&B)-Zagreb University	1988-1993
Postgraduate study of medical biochemistry (FP&B, Zagreb University)	1996-1999
Education- study visit in Clinical hospital center-Zagreb, Clinical department for laboratory diagnostics	1997-1999
Master of Sciences, Biomedicine and Health, Medical Biochemistry	2000
Tutor education, Zagreb University School of Medicine & Harvard Medical International	2002
PhD-Biomedicine and Health, Medical Biochemistry	2004
Certificate for Art of medical education, School of Public Health, Zagreb University School of Medicine	2010

LANGUAGES

English, French, German

PROFESSIONAL APPOINTMENTS

Outpatient Clinic-Tresnjevka-Zagreb, Central diagnostic laboratory	1993-1994
Scientific institute „Rudjer Boskovic“-Zagreb, volunteer	November 1994-March 1995
Zagreb University School of Medicine, Department of Medical Chemistry, Biochemistry and Clinical Chemistry	
Young assistant	1996-2000
Assistant	2000-2004
Senior assistant	2005-2008
Assistant Professor	2008-2013
Associate Professor	2013-

TEACHING SKILLS AND EXPERIENCE

Undergraduate studies:

Integrated study of Medicine:

1. Medical Chemistry and Biochemistry I –Medical studies in Croatian- 1st year (since 1996)

2. Medical Chemistry and Biochemistry II –Medical studies in Croatian- 2nd year (since 1996)
3. Clinical Biochemistry- Medical studies in Croatian-4th year (since 2005)
4. Medical Chemistry and Biochemistry I –Medical studies in English- 1st year (since 2002)
5. Medical Chemistry and Biochemistry II –Medical studies in English- 2nd year (since 2002)
6. Clinical Biochemistry- Medical studies in English-6th year (since 2005)

Integrated study of Dental Medicine

7. Biochemistry for dental medicine -1st year (since 1997)

University of applied health sciences

8. Biochemistry for students of Laboratory medical diagnostics (2010-2014)
9. Biochemistry for students of Environmental health engineering (2010-2014)

Postgraduated studies:

1. PhD study: Biomedicine and Health-Zagreb University School of Medicine-
Biochemical methods in biomedical research- collaborator (since 2006)
2. PhD study: Pharmaceutical and Biochemical Sciences-
Zagreb University School of Pharmacy and Biochemistry-Molecular biochemistry of cardiovascular disorders- course coordinator (since 2009)
3. Specialist study of molecular diagnostics- Zagreb University School of Pharmacy and Biochemistry-
Molecular diagnostics of atherosclerosis-course coordinator (since 2010)
4. The meaning of diet in prevention and treatments (Postgraduate course of continuous medical education- 2nd category, Zagreb University School of Medicine)- collaborator

MENTORSHIP AND TEACHING

1. Co-mentor (N. Marinković, doctoral thesis, 2010, University of Zagreb Faculty of Science)
2. Mentorship in doctoral thesis (L. Feher Turković Faculty of Science, University of Zagreb)
3. Lecturer and mentor in Biochemia Medica course for young editors and reviewers
4. Mentorship in 3 students' Master thesis

MEMBERSHIP IN SCIENTIFIC AND PROFESSIONAL SOCIETIES

1. Croatian Society of Medical Biochemistry and Laboratory Medicine
- Member since 1993
-vice president 2012-2018, president since 2018
-EFLM national representative since 2012 to 2018
-IFCC national representative since 2014 to 2018
2. Croatian Society of Biochemistry and Molecular Biology
- Member since 1996
3. CSMBLM Member of Working group for competences in clinical biochemistry –joint workgroup of CSMBLM and CCMB (Croatian Chamber of Medical Biochemists)
4. EFLM, C-ET WG-CPE, corresponding member since 2016, full member since 2017

5. Chair of the Committee on Education and Training-European Federation for Clinical Chemistry and Laboratory Medicine

CONFERENCE ACTIVITIES

- 1st Croatian Congress of Medical Biochemistry, ZAGREB 1993- member or organizing committee
- 8th Congress of Croatian Society of Medical Biochemistry and Laboratory Medicine, RIJEKA 2015- member of scientific committee and lecturer
- 9th Congress of Croatian Society of Medical Biochemistry and Laboratory Medicine, ZAGREB 2018- president of scientific committee
- EuroMedLab PARIS 2015- member of ISAB
- EuroMedLab ATHENS 2017- member of ISAB
- IFCC WorldLab DURBAN 2017- member of ISAB
- EuroMedLab Barcelona 2019- member of ISAB
- 30 conference poster abstracts and lectures

REVIEWER IN SCIENTIFIC JOURNALS

1. Molecular Biology Reports
2. International Journal of Osteoporosis and Metabolic Disorders
3. Biologia
4. Biochemia Medica
5. Macedonian Journal of Medical Sciences
6. Cardiovascular Pathology
7. Pediatría Croatica
8. Archives of Industrial Hygiene and Toxicology
9. Molecular Testing and Genetic Biomarkers
10. Public Health Nutrition

EDITORIAL EXPERIENCE

1. International Journal of Osteoporosis and Metabolic Disorders- member of editorial board (2008-2009)
2. Biochemia Medica- Assistant Editor (2012-2017.)
3. Biochemia Medica- Editor-in-Chief (since 2017)
4. Journal of Education Evaluation for Health Professionals-member of editorial board (since 2015)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 24.11.2013.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Sekovanić A, Jurasović J, Piasek M, Pašalić D, Orct T, Grgec AS, Stasenکو S, Čakanić KB, Jazbec A. Metallothionein 2A gene polymorphism and trace elements in mother-newborn pairs in the Croatian population. *J Trace Elem Med Biol.* 2018 Jan;45:163-170
2. Pašalić D, Marinković N. Genetic polymorphisms of the CYP1A1, GSTM1, and GSTT1 enzymes and their influence on cardiovascular risk and lipid profile in people who live near a natural gas plant. *Arh Hig Rada Toksikol.* 2017 Mar 1;68(1):46-52
3. Marinković N, Pašalić D, Potočki S. Polymorphisms of genes involved in polycyclic aromatic hydrocarbons' biotransformation and atherosclerosis. *Biochem Med* 2013;23:255-65.
4. Pašalić D, Pauković P, Cvijetić S, Pizent A, Jurasović J, Milković-Kraus S, Dodig S, Muck-Seler D, Mustapić M, Pivac N, Feher-Turković L, Pavlović M. Prostate Cancer in Elderly Croatian Men: 5-HT Genetic Polymorphisms and the Influence of Androgen Deprivation Therapy on Osteopenia—A Pilot Study. *Genet Test Mol Biomarkers* 2012;16:598-604.
5. Feher-Turković L, Pizent A, Dodig S, Pavlović M, Pašalić D. FABP 2 gene polymorphism and metabolic syndrome in elderly people of Croatian descent. *Biochem Med* 2012;22:217-24.
6. Cvijetić S, Pavlović M, Pašalić D, Dodig S. Ultrasound bone measurement in an older population with metabolic syndrome. *Aging Clin Exp Res* 2011;23:29-34.
7. Pašalić D, Dodig S, Čorović N, Pizent A, Jurasović J, Pavlović M. High prevalence of metabolic syndrome in an elderly Croatian population - a multicentre study. *Public Health Nutr* 2011;14:1650-7.
8. Pizent A, Pavlović M, Jurasović J, Dodig S, Pašalić D, Mujagić R. Antioxidants, trace elements and metabolic syndrome in elderly subjects. *J Nutr Health Aging* 2010;14:866-71.
9. Pašalić D, Marinković N, Gršković B, Ferenčak G, Bernat R, Stavljenić-Rukavina A. C-reactive protein gene polymorphisms affect plasma CRP and homocysteine concentrations in subjects with and without angiographically confirmed coronary artery disease. *Mol Biol Rep* 2009;36:775-80.
10. Marinković N, Pašalić D, Gršković B, Ferenčak G, Honović L, Stavljenić Rukavina A. Genotype frequencies Of UDP-glucuronosyltransferase 1A1 promoter gene polymorphism in the population of healthy Croatian pre-scholars. *Coll Antropol* 2008;32:725-729
11. Pašalić D, Ferenčak G, Gršković B, Stavljenić Rukavina A. Body mass index in patients with positive or suspected coronary artery disease: a large Croatian cohort. *Biochem Med* 2008;18(3):321-30
12. Gršković B, Pašalić D, Ferenčak G, Stavljenić-Rukavina A. Influence of gene polymorphisms in adhesion molecules and inflammation mediators as risk factors for coronary heart disease and myocardial infarction—an overview. *Acta Med Croatica* 2008;62:41-52.
13. Pašalić D, Stavljenić-Rukavina A. Lipoprotein lipaza – fiziološke i patofiziološke uloge te genske varijante u Hrvatskoj populaciji. *Lijec Vjesn* 2007;129:32-38. (Croatian).
14. Pašalić D, Ferenčak G, Gršković B, Šesto M, Stavljenić-Rukavina A. Association of Two Genetic Variations of Lipoprotein Lipase, S447X and Hind III, with Coronary Artery Disease and Hypertriglyceridemia. *Coll Antropol.* 2006;30:549-554.
15. Pašalić D, Bilić-Zulle L, Štimac D, Krznarić Ž, Ferenčak G, Gršković B, Djurovic S, Stavljenić-Rukavina A. Influence of the different lipoprotein lipase gene polymorphisms on developing pancreatitis of different etiology in Croatian patients. *Period Biol* 2006;108:581-6.
16. Pašalić D, Ferenčak G, Gršković B, Stavljenić-Rukavina A. Gene candidates for atherosclerosis: genes involved in lipoprotein metabolism. *Period Biol.* 2006;108:553-62.

17. Pašalić D, Ferenčak G, Gršković B, Stavljenić-Rukavina A. Učestalost apolipoprotein E genotipova u zdravlju i bolesti: očekivanja i pravi rezultati u hrvatskih ispitanika – pregled. *Acta Med Croatica*. 2006;60:403-10.
18. Pašalić D, Jurčić Z, Stipančić G, Ferenčak G, Leren TP, Djurovic S, Stavljenić-Rukavina A. Missense mutation W86R in exon 3 of the lipoprotein lipase gene in a boy with chylomicronemia. *Clin Chim Acta* 2004;343:179-84.
19. Ferenčak G, Pašalić D, Gršković B, Cheng S, Fijal B, Šesto M, Skodlar J, Stavljenić-Rukavina A. Lipoprotein lipase gene polymorphisms in Croatian patients with coronary artery disease. *Clin Chem Lab Med* 2003;41:541-6.
20. Pašalić D, Sertić J, Kunović B, Miličević Z, Pašić A, Zrinski-Topić R, Ferenčak G, Stavljenić-Rukavina A. Lipoprotein lipase gene polymorphism and lipid profile in patients with hypertriglyceridemia. *Croat Med J*. 2001;42:517-22.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Sekovanić A, Jurasović J, Piasek M, Pašalić D, Orct T, Grgec AS, Stasenکو S, Čakanić KB, Jazbec A. Metallothionein 2A gene polymorphism and trace elements in mother-newborn pairs in the Croatian population. *J Trace Elem Med Biol*. 2018 Jan;45:163-170
2. Pašalić D, Marinković N. Genetic polymorphisms of the CYP1A1, GSTM1, and GSTT1 enzymes and their influence on cardiovascular risk and lipid profile in people who live near a natural gas plant. *Arh Hig Rada Toksikol*. 2017 Mar 1;68(1):46-52
3. Kuleš J, Jokić A, Dukić L, Pašalić D. The knowledge and understanding of preanalytical phase among biomedicine students at the University of Zagreb. *Biochem Med* 2016;26:90-7.
4. Pašalić D, Honović L. Licensing of medical biochemists and specialists in laboratory medicine, Croatian academic educated professionals in health care. *J Educ Eval Health Prof*. 2016 Jan 13;13:4. doi: 10.3352/jeehp.2016.13.4.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Molecular basis of hypercholesterolemia (1996-2002); 108201, chaired by Ana Stavljenić-Rukavina, PhD; Funding: Ministry of science, education and Health
2. Molecular basis of atherogenesis (2002-2006); 0108247, chaired by Ana Stavljenić-Rukavina, PhD; Funding: Ministry of science, education and Health
3. Molecular basis of atherogenesis (2007-2010); 108-1080316-0298, chaired by Goran Ferenčak, PhD; Funding: Ministry of science, education and Health
4. Morbidity and mortality risk assessment in Croatian population: a follow-up study, (2008-2011); (02-0222411-2407) chaired by Mladen Pavlović, Ph.D. Funding: Ministry of science, education and Health
5. Zagreb University grant "The effect of proopiomelanocortin and other peptides on the sperm quality in vitro" (2013-2014); chaired by Alenka Boban Blagaić, Ph.D
6. Zagreb University grant "Characterization of gangliosides and neuroplastin potential as brain tumor markers" (2015), chaired by Željka Vukelić, Ph.D



7. Assessment of Daily Exposure to Metals and Maternal Individual Susceptibility as Factors of Developmental Origins of Health and Disease (2017-2021), chaired by dr. Martina Piasek, Ph.D., IP-2016-06-1998, Croatian Science Foundation

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. Zagreb University grant “The effect of proopiomelanocortin and other peptides on the sperm quality in vitro” (2013-2014); chaired by Alenka Boban Blagaić, Ph.D
2. Zagreb University grant ” Characterization of gangliosides and neuroplastin potential as brain tumor markers“ (2015), chaired by Željka Vukelić, Ph.D
3. Assessment of Daily Exposure to Metals and Maternal Individual Susceptibility as Factors of Developmental Origins of Health and Disease (2017-2021), chaired by dr. Martina Piasek, Ph.D., IP-2016-06-1998, Croatian Science Foundation

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Leonardo Patrlj, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Unievrstiy of Zagreb School of Meidicne

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Liver transplantation

BIOGRAPHY

Working experience:

1982-1987: physician, general practitioner

1987-1991. resident of general surgery (Clinical Hospital Merkur)

1991-1997. general surgeon at the Department of Abdominal Surgery (Clinical Hospital Merkur)

1997-2004. the Head of team for transplantation surgery (Clinical Hospital Merkur)

1998-2004. the Head of the Department of Abdominal and Transplantation Surgery (Clinical Hospital Merkur)

2004.-2005. the vice-Head of Surgical Clinic Clinical Hospital Merkur

From 2005.-2018. the Head of Surgical Clinic and the Department of Abdominal Surgery, Clinical Hospital Dubrava

From 2019.- general and abdominal surgeon at University Hospital for Tumours, Department of oncological Surgery, Clinical Hospital Centre „Sisters of Mercy“

The Employer: Clinical University Hospital for Tumours, Department of oncological Surgery, Clinical Hospital Centre „Sisters of Mercy“

Working place: University Hospital for Tumours, Department of oncological Surgery, Clinical Hospital Centre „Sisters of Mercy“, 197 Ilica Street, 10 000 Zagreb, Croatia

Working position: the general and abdominal surgeon

The main activity: abdominal and general surgery

Education:

1990. Master of sciences

1997. PhD

2004. Assistant Professor at School of Medicine, University of Zagreb

2009. senior scientific associate

2009. Associate Professor at School of Medicine, University of Zagreb

2018. Professor at School of Medicine, University of Zagreb

The institution od education: School of Medicine, University of Zagreb

Scientific Title: Associate Professor at School of Medicine, scientific consultant

Practical training:

1992. postgraduate training in coloproctology, St. Mark`s Hospital, London

1992. postgraduate training in laparoscopic surgery, AKH, Beč

1997. postgraduate training in liver transplantation, L`Hopitaql Paul Brousse, Paris

1997. training in transplantation surgery, Chicago Memorial Hospital, USA

1998. postgraduate training in transplantation surgery

2000. postgraduate training in transplantation surgery, Universitiy Clinic of Bruxelles, Belgium

2005. postgraduate training in abdominal surgery, Washington Hospital Center, USA

Skills: laparoscopic surgery, oncological surgery, transplanton surgery

Languages: Croatian, English, Italian

Social skills and achievements:

The Award of City of Zagreb (2004)

The Certificate of the Croatian Medical Association Assembly (1999)

The Certificate of the Main Committee of Croatian Medical Association (2002)

Two Special Awards of the Croatian Medical Association

Organizing skills and achievements:

1998. He has performed the first liver transplantation in Croatia with long term survival

2003. He has performed the first simultaneous transplantation of kidney and pancreas with long term survival. Under his leadership his team performed more than 200 liver transplantations and 35 kidney transplantations with 1-year survival of more than 83%.

Since 1996. he has been teaching at graduate and postgraduate Study of medicine at the University of Zagreb.

He took part at the numerous Croatian and International congresses in digestive and transplantation surgery.

He organised a postgraduate course of "Benign anorectal diseases", Zagreb, 2012.

He organised the 1st Hepatobiliary and Pancreatic Surgery Congress in Dubrovnik, 2012.

He organised the 2nd Hepatobiliary and Pancreatic Surgery Congress in Split, 2014.

Membership:

The president of Croatian Hepatobiliary and Pancreatic Surgery Association at Croatian Medical Association

The president of Croatian Organisation for promotion of Hepatobiliary and Pancreatic Surgery

The member of Croatian Academy of Medical Sciences

The member of European Gastrointestinal Surgeons' Community (IGSC)

The Member of the Main Committee of European Academy of Surgical Sciences

The president of National Transplantation Committee

The member of Editorial Board of Acta Medica Croatica Journal

The member of Eurotransplant Main Committee (the Croatian representative)

The Member of the Main Committee of Croatian Surgical Association

Teaching:

Since 1996. he has been teaching at graduate and postgraduate Study of medicine at the University of Zagreb.

Courses:

- Surgery
- Liver transplantation
- Focal liver disease
- Acute abdominal pain
- Extrahospital management of polytrauma

Lecturer at the postgraduate course "Surgery of colorectal carcinoma"

The Head lecturer at the postgraduate courses "Benign anorectal diseases" and "Liver transplantation"

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2019

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Persec Z, Bulimbasic S, Persec J, Ljubanovic D, Bartolin Z, Patrlj L, Hrgovic Z. Xanthogranulomatous epididymitis: clinical report and immunohistochemical analysis. Wien Klin Wochenschr. 2008;120(11-12):366-9.

Ajduk M, Pavić L, Bulimbašić S, Sarlija M, Pavić P, Patrlj L, Brkljačić B. Multidetector-Row Computed Tomography in Evaluation of Atherosclerotic Carotid Plaques Complicated with Intraplaque Hemorrhage. *Ann Vasc Surg.* 2008 24.

Suknaić S, Patrlj L, Steresinić M, Skopljanac Macina A, Erdelez L. [Surgical or biologic sphincterotomy in the treatment of chronic anal fissure] *Acta Med Croatica.* 2008;62(1):73-80.

Arslani N, Patrlj L, Branislav K, Vladić I. [Physiological and clinical outcome of open and closed hemorrhoidectomy compared with stapling method according to long] *Acta Med Croatica.* 2006;60(5):487-95.

Horzić M, Kopljar M, Cupurdija K, Skupnjak M, Korica J, Lacković Z, Vanjak-Bielen D, Patrlj L. Quality of life changes after inguinal hernia repair using anterior rectus sheath--a preliminary study. *Coll Antropol.* 2006;30(2):349-53.

Staresinic M, Petrovic I, Novinscak T, Jukic I, Pevec D, Suknaic S, Kokic N, Batelja L, Brcic L, Boban-Blagaic A, Zoric Z, Ivanovic D, Ajduk M, Sebecic B, Patrlj L, Sosa T, Buljat G, Anic T, Seiwerth S, Sikiric P. Effective therapy of transected quadriceps muscle in rat: Gastric pentadecapeptide BPC 157. *J Orthop Res.* 2006;24(5):1109-17.

Brnic Z, Gasparov S, Lozo PV, Anic P, Patrlj L, Ramljak V. Is quadrant biopsy sufficient in men likely to have advanced prostate cancer? Comparison with extended biopsy. *Pathol Oncol Res.* 2005;11(1):40-4.

Ajduk M, Mikulić D, Sebecić B, Gasparov S, Patrlj L, Erdelez L, Skopljanac A, Staresinić M, Desković S, Sosa T, Sitić S. Spontaneously ruptured gastrointestinal stromal tumor (GIST) of the jejunum mimicking acute appendicitis. *Coll Antropol.* 2004;28(2):937-41.

Darabos N, Patrlj L, Kocman B, Vladić I, Jadrijević S, Jasprica M. Orthotopic liver retransplantation--case report. *Coll Antropol.* 2003;27(2):653-7.

Staresinic M, Sebecic B, Patrlj L, Jadrijevic S, Suknaic S, Perovic D, Aralica G, Zarkovic N, Borovic S, Srdjak M, Hajdarevic K, Kopljar M, Batelja L, Boban-Blagaic A, Turcic I, Anic T, Seiwerth S, Sikiric P. Gastric pentadecapeptide BPC 157 accelerates healing of transected rat Achilles tendon and in vitro stimulates tendocytes growth. *J Orthop Res.* 2003;21(6):976-83.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1: Božin T, Mustapić S, Bokun T, Patrlj L, Rakić M, Aralica G, Kujundžić M, Trkulja V, Grgurević I. Albi Score as a Predictor of Survival in Patients with Compensated Cirrhosis Resected for Hepatocellular Carcinoma: Exploratory Evaluation in Relationship to Palbi and Meld Liver Function Scores. *Acta Clin Croat.* 2018 Jun;57(2):292-300.

2: Rakić M, Patrlj L, Amić F, Aralica G, Grgurević I. Comparison of hepatoprotective effect from ischemia-reperfusion injury of remote ischemic preconditioning of the liver vs local ischemic preconditioning of the liver during human liver resections. *Int J Surg.* 2018 Jun;54(Pt A):248-253.

3: Unić A, Derek L, Duvnjak M, Patrlj L, Rakić M, Kujundžić M, Renjić V, Štoković N, Dinjar P, Jukic A, Grgurević I. Diagnostic specificity and sensitivity of PIVKII, GP3, CSTB, SCCA1 and HGF for the diagnosis of hepatocellular carcinoma in patients with alcoholic liver cirrhosis. *Ann Clin Biochem.* 2018 May;55(3):355-362.

- 4: Nikolić I, Kukulj S, Samaržija M, Jeleč V, Žarak M, Orehovec B, Taradi I, Romić D, Kolak T, Patrlj L. Neutrophil-to-lymphocyte and platelet-to-lymphocyte ratio help identify patients with lung cancer, but do not differentiate between lung cancer subtypes. *Croat Med J.* 2016 Jun 30;57(3):287-92.
- 5: Busić Z, Kolovrat M, Đuzel A, Rakić M, Cavka M, Begović A, Kopljar M, Patrlj L. [LAPAROSCOPIC PARTIAL PERICYSTECTOMY OF SPLENIC HYDATID CYST - A CASE REPORT]. *Lijec Vjesn.* 2015 Nov-Dec;137(11-12):361-3. Croatian.
- 6: Kopljar M, Patrlj L, Korolija-Marinic D, Horzic M, Cupurdija K, Bakota B. High Expression of DARPP-32 in Colorectal Cancer Is Associated With Liver Metastases and Predicts Survival for Dukes A and B Patients: Results of a Pilot Study. *Int Surg.* 2015 Feb;100(2):213-20.
- 7: Patrlj L, Kopljar M, Kliček R, Patrlj MH, Kolovrat M, Rakić M, Duzel A. The surgical treatment of patients with colorectal cancer and liver metastases in the setting of the "liver first" approach. *Hepatobiliary Surg Nutr.* 2014 Oct;3(5):324-9.
- 8: Rakić M, Patrlj L, Kliček R, Kopljar M, Duzel A, Cupurdija K, Bušić Z. The laparoscopic liver resections-an initial experience and the literature review. *Hepatobiliary Surg Nutr.* 2014 Oct;3(5):313-6.
- 9: Kopljar M, Patrlj L, Bušić Z, Kolovrat M, Rakić M, Kliček R, Zidak M, Stipančić I. Potential use of Doppler perfusion index in detection of occult liver metastases from colorectal cancer. *Hepatobiliary Surg Nutr.* 2014 Oct;3(5):259-67.
- 10: Rakić M, Patrlj L, Kopljar M, Kliček R, Kolovrat M, Loncar B, Busic Z. Gallbladder cancer. *Hepatobiliary Surg Nutr.* 2014 Oct;3(5):221-6.
- 11: Patrlj L, Kopljar M, Fong Y. Maturation of HBP surgery: worldwide advances to address worldwide problems. *Hepatobiliary Surg Nutr.* 2014 Oct;3(5):219-20.
- 12: Busić Z, Kolovrat M, Kopljar M, Servis D, Cavka V, Patrlj L, Busić N, Cavka M, Nikolić I. Laparoscopic surgery for large hydatid liver cyst after two previous laparotomies. *Coll Antropol.* 2014 Jun;38(2):577-81.
- 13: Busić Z, Cupurdija K, Kolovrat M, Servis D, Amić F, Cavka M, Patrlj L, Nikolić I, Cavka V. Emergency surgery for large bowel obstruction caused by cancer. *Coll Antropol.* 2014 Mar;38(1):111-4.
- 14: Rakić M, Jukić M, Pogorelić Z, Mrklić I, Kliček R, Družijanić N, Perko Z, Patrlj L. Analysis of endoloops and endostaples for closing the appendiceal stump during laparoscopic appendectomy. *Surg Today.* 2014 Sep;44(9):1716-22.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Martina Pauk, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Bone morphogenetic proteins in regeneration of bone and cartilage, Doctoral postgraduate study in the field of Biomedicine and public health

BIOGRAPHY

University of Zagreb, School of Medicine
Center for Translational and Clinical Research
Zagreb, Croatia
martina.pauk@mef.hr

EDUCATION

PhD, Biochemistry and Molecular Biology, December 2014.
Faculty of science, Department of Biology, University of Zagreb, Croatia

Dissertation: “Iron regulation mechanisms of bone morphogenetic protein pathway in tissue and plasma”
M. Sc. Biology, September 2007.

Faculty of science, Department of Biology, University of Zagreb, Croatia

Dissertation: „Sequencing of mitochondrial DNA control region of bottlenose dolphin *Tursiops truncatus* (Montagu, 1821) on genetic diversity of bottlenose dolphin (*Tursiops truncatus*)“

RESEARCH EXPERIENCE

Postdoctoral Researcher, March 2018 – Present, Laboratory for Mineralized Tissues, Center for translational and clinical research, School of Medicine, University of Zagreb, Croatia

- Studying specified features of BMP6 biology on regulation of serum iron to develop a novel therapy for anemia of chronic disease

- Investigating new functions of BMPs in modulating glucose metabolism

Postdoctoral Fellow, July 2017 – February 2018, Physical Education and Sport Sciences, University of Limerick, Limerick, Ireland

- Evaluated protein and protein derivatives bioactivity in skeletal myotubes by analyzing serum samples from human screening panels collected through human post-feeding *ex-vivo*

Postdoctoral Researcher, 2015 – 2017, Laboratory for Mineralized Tissues, Center for translational and clinical research, School of Medicine, University of Zagreb, Croatia

- Involved in bioanalytical method validations, pharmacokinetics of therapeutic proteins, analysis of clinical trials samples and stability studies by optimized C2C12-BRE-Luc cell bioassay

- Developed sensitive assays for protein detection including processes of production, purification and characterization of monoclonal antibodies to certain BMP isoforms

Research Assistant, 2009 –2015, Laboratory for Mineralized Tissues, Center for translational and clinical research, School of Medicine, University of Zagreb, Croatia

- Investigated iron regulation mechanisms of bone morphogenetic protein (BMP) pathway in tissue and plasma

Volunteer, April 2008 - September 2008, Department of Clinical Microbiology, University Hospital for Infectious Diseases "Dr Fran Mihaljevic", Zagreb, Croatia

- Molecular diagnostics of different types of bacteria in blood and cerebrospinal liquor and pneumococci serotyping

SKILLS and TECHNIQUES

RNA and DNA isolation, cDNA synthesis, PCR, primer construction, Mammalian cell culture, xCELLigence RTCA System, RNA silencing technique, Protein isolation, Protein gel electrophoresis, IgG purification, Western blotting, Immunoprecipitation, Immunohistochemistry, ELISA, Handling laboratory animals, Genotyping KO mice lines

TEACHING AND ADVISING EXPERIENCE

Teaching Assistant, School of Medicine, University of Zagreb, 2011 – 2014

- Postgraduate studies in the field of Bone morphogenetic proteins in bone and cartilage regeneration

FELLOWSHIPS AND AWARDS

New Investigator Award, 37th European Symposium on Calcified Tissues, 2010.

PROFESSIONAL ASSOCIATIONS

Croatian Calcified Tissue Society European Calcified Tissue Society

INVITED TALKS AND PRESENTATIONS

Paralkar VM, Grgurevic L, Simic P, Ryskin M, Hong Q, Brault AL, Lubeski C, Brenner MB, Pauk M, Riccardi KA, Healy D, Vukicevic S. A novel role of bone morphogenetic protein (BMP6) as an endocrine regulator of bone and glucose homeostasis. 37th European Symposium on Calcified Tissues, Glasgow 2010.

Pauk M, Grabusic K, Grgurevic L, Brkljacic J, Erjavec I, Cipic A, Sulc I, Razdvorov G, Simic P, Rogic D, Volarevic S, Oppermann H, Vukicevic S. Effect of iron loading on bone resorption in the *Bmp6* ^{-/-} mouse. 6th Croatian and 1st Regional congress on osteoporosis, Rovinj, 2011.

Pauk M, Grgurevic L, Brkljacic J, Kufner V, Bordukalo-Niksic T, Jankolija M, Oppermann H, Vukicevic S. New method of measuring BMP6 in biological fluids. 7th Croatian congress on osteoporosis, Opatija, 2013.

Pauk M, Brkljacic J, Kufner V, Jankolija M, Popek I, Olic A, Oppermann H, Grgurevic L, Vukicevic S. Compensatory BMP mechanisms in the regulation of bone mass during iron loading. 8th Croatian congress on osteoporosis, Opatija, 2014.

Pauk M, Brkljacic J, Kufner V, Jankolija M, Popek I, Olic A, Oppermann H, Grgurevic L, Vukicevic S. Effect of iron on the biodistribution of BMP6 and hepcidin expression. 8th Croatian congress on osteoporosis, Opatija, 2014.

Pauk M, Brkljacic J, Jankolija M, Popek I, Vukicevic S. Development of an in vitro assay for measuring BMP6 activity. 9th Croatian and 2nd Regional congress on osteoporosis, Rovinj, 2015

Pauk M, Brkljacic J, Kufner V, Vukicevic S. Testing rhBMP6 activity. 10th Croatian congress on osteoporosis, Trakoscan 2017.

Pauk M, Brkljacic J, Kufner V, Vukicevic S. SERM application in new clinical indications. 10th Croatian congress on osteoporosis, Trakoscan 2017.

PUBLICATIONS

Brkljacic J, Pauk M, Erjavec I, Cipic A, Grgurevic L, Zadro R, Inman GJ, Vukicevic S. (2013) Exogenous heparin binds and inhibits bone morphogenetic protein 6 biological activity. *Int Orthop* 37:529-541.

Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, Pauk M, Erjavec I, Francetic I, Dumic-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo-Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikić-Topic S, Peric M, Pecina M, Grgurevic L. (2014) The clinical use of bone morphogenetic proteins revisited: a novel biocompatible carrier device OSTEOGROW for bone healing. *Int Orthop* 38:635-647.

Pauk M, Grgurevic L, Brkljacic J, Kufner V, Bordukalo-Niksic T, Grabusic K, Razdorov G, Rogic D, Zuvic M, Oppermann H, Babitt JL, Lin HY, Volarevic S, Vukicevic S. (2015) Exogenous BMP7 corrects plasma iron overload and bone loss in *Bmp6* ^{-/-} mice. *Int Orthop*. 39(1):161-72.

Grgurevic L, Erjavec I, Dumic-Cule I, Bordukalo-Niksic T, Pauk M, Trkulja V, Maticic D, Pecin M, Lipar M, Peric M and Vukicevic S. (2017) Osteogrow: A Novel Bone Graft Substitute for Orthopedic Reconstruction. Springer International Publishing AG. S. Vukicevic, K. Sampath (eds.), Bone Morphogenetic Proteins: Systems Biology Regulators, Progress in Inflammation Research, pp 215-228.

Grgurevic L, Erjavec I, Grgurevic I, Dumic-Cule I, Brkljacic J, Verbanac D, Matijasic M, Paljetak HC, Novak R, Plecko M, Bubic-Spoljar J, Rogic D, Kufner V, Pauk M, Bordukalo-Niksic T, Vukicevic S. (2017) Systemic inhibition of BMP1-3 decreases progression of CCl₄-induced liver fibrosis in rats. *Growth Factors* D35(6):201-215.

Carson BP, Patel B, Amigo-Benavent M, Pauk M, Kumar Gujulla S, Murphy SM, Kiely PA, Jakeman PM. (2018) Regulation of muscle protein synthesis in an in vitro cell model using ex vivo human serum. *Exp Physiol* 103(6):783-789.

Grgurevic L, Oppermann H, Pecin M, Erjavec I, Capak H, Pauk M, Karlovic S, Kufner V, Lipar M, Bubic Spoljar J, Bordukalo-Niksic T, Maticic D, Peric M, Windhager R, Sampath TK, Vukicevic S. (in press) Recombinant Human Bone Morphogenetic Protein 6 delivered within Autologous Blood Coagulum Restores Critical Size Segmental Defects of Ulna in Rabbits. *JBMR Plus*. 2018 Nov 05. <https://doi.org/10.1002/jbm4.10085>.

Pauk M, Bordukalo-Niksic T, Brkljacic J, Paralkar VM, Brault AL, Dumic-Cule I, Borovecki F, Grgurevic L, Vukicevic S. (in press) A Novel Role of Bone Morphogenetic Protein 6 (BMP6) in Glucose Homeostasis. *Acta Diabetol*. 2018 Dec 11. doi: 10.1007/s00592-018-1265-1.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

01.02.2015. Postdoctoral Researcher

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Brkljacic J, **Pauk M**, Erjavec I, Cipic A, Grgurevic L, Zadro R, Inman GJ, Vukicevic S. (2013) Exogenous heparin binds and inhibits bone morphogenetic protein 6 biological activity. *Int Orthop* 37:529-541.
2. Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, **Pauk M**, Erjavec I, Francetic I, Dumic-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo-Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikić-Topic S, Peric M, Pecina M, Grgurevic L. (2014) The clinical use of bone morphogenetic proteins revisited: a novel biocompatible carrier device OSTEOGROW for bone healing. *Int Orthop* 38:635-647.
3. **Pauk M**, Grgurevic L, Brkljacic J, Kufner V, Bordukalo-Niksic T, Grabusic K, Razdorov G, Rogic D, Zuvic M, Oppermann H, Babitt JL, Lin HY, Volarevic S, Vukicevic S. (2015) Exogenous BMP7 corrects plasma iron overload and bone loss in *Bmp6* ^{-/-} mice. *Int Orthop*. 39(1):161-72.

4. Grgurevic L, Erjavec I, Domic-Cule I, Bordukalo-Niksic T, **Pauk M**, Trkulja V, Maticic D, Pecin M, Lipar M, Peric M and Vukicevic S. (2017) Osteogrow: A Novel Bone Graft Substitute for Orthopedic Reconstruction. Springer International Publishing AG. S. Vukicevic, K. Sampath (eds.), Bone Morphogenetic Proteins: Systems Biology Regulators, Progress in Inflammation Research, pp 215-228.
5. Grgurevic L, Erjavec I, Grgurevic I, Domic-Cule I, Brkljacic J, Verbanac D, Matijasic M, Paljetak HC, Novak R, Plecko M, Bubic-Spoljar J, Rogic D, Kufner V, **Pauk M**, Bordukalo- Niksic T, Vukicevic S. (2017) Systemic inhibition of BMP1-3 decreases progression of CCl4- induced liver fibrosis in rats. Growth Factors D35(6):201-215.
6. Carson BP, Patel B, Amigo-Benavent M, **Pauk M**, Kumar Gujulla S, Murphy SM, Kiely PA, Jakeman PM. (2018) Regulation of muscle protein synthesis in an in vitro cell model using ex vivo human serum. *Exp Physiol* 103(6):783-789.
7. Grgurevic L, Oppermann H, Pecin M, Erjavec I, Capak H, **Pauk M**, Karlovic S, Kufner V, Lipar M, Bubic Spoljar J, Bordukalo-Niksic T, Maticic D, Peric M, Windhager R, Sampath TK, Vukicevic S. (in press) Recombinant Human Bone Morphogenetic Protein 6 delivered within Autologous Blood Coagulum Restores Critical Size Segmental Defects of Ulna in Rabbits. JBMR Plus. 2018 Nov 05. <https://doi.org/10.1002/jbm4.10085>.
8. **Pauk M**, Bordukalo-Niksic T, Brkljacic J, Paralkar VM, Brault AL, Domic-Cule I, Borovecki F, Grgurevic L, Vukicevic S. (in press) A Novel Role of Bone Morphogenetic Protein 6 (BMP6) in Glucose Homeostasis. Acta Diabetol. 2018 Dec 11. [doi:10.1007/s00592-018-1265-1](https://doi.org/10.1007/s00592-018-1265-1).

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, **Pauk M**, Erjavec I, Francetic I, Domic-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo-Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikic- Topic S, Peric M, Pecina M, Grgurevic L. (2014) The clinical use of bone morphogenetic proteins revisited: a novel biocompatible carrier device OSTEOGROW for bone healing. Int Orthop 38:635-647.
2. **Pauk M**, Grgurevic L, Brkljacic J, Kufner V, Bordukalo-Niksic T, Grabusic K, Razdorov G, Rogic D, Zuvic M, Oppermann H, Babitt JL, Lin HY, Volarevic S, Vukicevic S. (2015) Exogenous BMP7 corrects plasma iron overload and bone loss in *Bmp6* ^{-/-} mice. Int Orthop. 39(1):161-72.
3. Grgurevic L, Erjavec I, Domic-Cule I, Bordukalo-Niksic T, **Pauk M**, Trkulja V, Maticic D, Pecin M, Lipar M, Peric M and Vukicevic S. (2017) Osteogrow: A Novel Bone Graft Substitute for Orthopedic Reconstruction. Springer International Publishing AG. S. Vukicevic, K. Sampath (eds.), Bone Morphogenetic Proteins: Systems Biology Regulators, Progress in Inflammation Research, pp 215-228.
4. Grgurevic L, Erjavec I, Grgurevic I, Domic-Cule I, Brkljacic J, Verbanac D, Matijasic M, Paljetak HC, Novak R, Plecko M, Bubic-Spoljar J, Rogic D, Kufner V, **Pauk M**, Bordukalo- Niksic T, Vukicevic S. (2017) Systemic inhibition of BMP1-3 decreases progression of CCl4- induced liver fibrosis in rats. Growth Factors D35(6):201-215.
5. Carson BP, Patel B, Amigo-Benavent M, **Pauk M**, Kumar Gujulla S, Murphy SM, Kiely PA, Jakeman PM. (2018) Regulation of muscle protein synthesis in an in vitro cell model using ex vivo human serum. *Exp Physiol* 103(6):783-789.
6. Grgurevic L, Oppermann H, Pecin M, Erjavec I, Capak H, **Pauk M**, Karlovic S, Kufner V, Lipar M, Bubic Spoljar J, Bordukalo-Niksic T, Maticic D, Peric M, Windhager R, Sampath TK, Vukicevic S. (in press) Recombinant Human Bone Morphogenetic Protein 6 delivered within Autologous Blood Coagulum Restores Critical Size Segmental Defects of Ulna in Rabbits. JBMR Plus. 2018 Nov 05. <https://doi.org/10.1002/jbm4.10085>.

7. **Pauk M**, Bordukalo-Niksic T, Brkljacic J, Paralkar VM, Brault AL, Dumic-Cule I, Borovecki F, Grgurevic L, Vukicevic S. (in press) A Novel Role of Bone Morphogenetic Protein 6 (BMP6) in Glucose Homeostasis. *Acta Diabetol.* 2018 Dec 11. [doi:10.1007/s00592-018-1265-1](https://doi.org/10.1007/s00592-018-1265-1).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Croatian Science Foundation: „Novel anabolic targeted therapy for osteoporosis: BONE6-BIS“ (01.01.2012. – 31.12.2014.)
2. EU Research and Innovation funding programme FP7 - „Novel Bone Morphogenetic Protein-6 Biocompatible Carrier Device for Bone Regeneration – OSTEOGROW“ (01.01.2012. – 31.12.2017.)
3. Croatian Science Foundation: „Newly discovered BMP1 circulating isoforms as biomarkers and therapeutic targets for human diseases“ (01.01.2016. - 31.12.2018.)
4. Croatian Science Foundation – „Development of novel antibodies (biologics) that will selectively inhibit hepcidin expression in the liver for the Treatment of Anemia of Chronic Disease“ (01.07.2017. - 30.06.2021.)
5. EU Framework Programme for Research and Innovation Horizon 2020 – „Novel Bone Regeneration Drug Osteogrow: Therapeutic Solution for Lumbar Back Pain“ – OSTEOproSPINE“ (01.01.2018. – 31.12.2022.)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. EU Research and Innovation funding programme FP7 - „Novel Bone Morphogenetic Protein-6 Biocompatible Carrier Device for Bone Regeneration – OSTEOGROW“ (01.01.2012. – 31.12.2017.)
2. Croatian Science Foundation: „Newly discovered BMP1 circulating isoforms as biomarkers and therapeutic targets for human diseases“ (01.01.2016. - 31.12.2018.)
3. Croatian Science Foundation: „Development of novel antibodies (biologics) that will selectively inhibit hepcidin expression in the liver for the Treatment of Anemia of Chronic Disease“ (01.07.2017. - 30.06.2021.)
4. EU Framework Programme for Research and Innovation Horizon 2020 – „Novel Bone Regeneration Drug Osteogrow: Therapeutic Solution for Lumbar Back Pain“ – OSTEOproSPINE“ (01.01.2018. – 31.12.2022.)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Dinka Pavičić Baldani, Full Professor of Obstetrics & Gynecology, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb, Dpt of Obstetrics and Gynecology, Division for Gynecological Endocrinology and Reproductive Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Human Reproduction

BIOGRAPHY

EDUCATION

1985-1990 MD, University of Zagreb, School of Medicine

1990-1991 Internship, Clinic for Lung Diseases, State exam

1991-1993 Postgraduate Studies in Clinical Oncology PhD, University of Zagreb, School of Medicine **Thesis:** Papillomaviruses and Tumor Suppressor Genes in the Development of Cervical Intraepithelial Neoplasia

1993-1997 residency in Obstetrics and Gynecology, University Clinic for Women's Diseases, Clinical Hospital Centre Zagreb, Croatia

1997-2000 Subspeciality in Reproductive Endocrinology and Infertility, University Clinic for Women's Diseases, Clinical Hospital Centre, Zagreb, Croatia

ACADEMIC BACKGROUND

Academic

1987-1990 Student Demonstrator at the Department of Anatomy, School of Medicine, University of Zagreb

1990-1993 Research Fellow - Project of Croatian Academy of Science and Art with a job at the Clinic for Women's Diseases

1998-2004 Assistant, Department of Obstetrics & Gynecology, School of Medicine, University of Zagreb

2004-2008 Senior Assistant, Department of Obstetrics & Gynecology, School of Medicine, University of Zagreb

2008-2012 Assistant Professor, Department of Obstetrics & Gynecology, School of Medicine, University of Zagreb

2012 Associated Professor, Department of Obstetrics & Gynecology, School of Medicine, University of Zagreb

2012 Clinical consultant

2018 Full Professor, Department of Obstetrics & Gynecology, School of Medicine, University of Zagreb

2018 Full member of Croatian Academy of Medical Sciences

Scientific

2004 – 2006 **Research Associate**, Ministry of Science, Education and Sports of the Republic of Croatia

2006 – 2012 **Senior Research Associate**, Ministry of Science, Education and Sports of the Republic of Croatia

2013 - Scientific Adviser, Ministry of Science, Education and Sports of the Republic of Croatia

Administrative

2004 – present Faculty mentor to residents, Department of Obstetrics and Gynecology

2007 – present Head Course in Gynecology and Obstetrics, Medical School in English, University of Zagreb

2012 – present Coordinator of residents program in Gynecology and Obstetrics, Ministry of Science, Education and Sports of the Republic of Croatia

NATIONAL CREDENTIALING ACTIVITIES

Committees:

2013 – present President of Croatian Society for Human Reproduction and Gynecological Endocrinology, Croatian Medical Association

2014 – present Vice-president of Croatian Menopausal Society, Croatian Medical Association

2016 – present Board Member of Croatian Andrology Society, Croatian Medical Association

2016 – present Member of National Commission for Medically Assisted Conception (responsible for ART regulations) Croatian Ministry of Health

2016 – present Member of Central Ethical Committee of Agency for Medical Products and Medical Devices of Croatia (responsible for approval of Clinical studies in Croatia)

2016 – present Member of Ethical Committee of University of Zagreb, School of Medicine

2016 – present Chairman of the working group for drafting and supplementing the law on Medical assisted technology, Ministry of Health, Republic of Croatia

2018 – present Member of the Commission for Evaluation of Legislative Criteria and Experiences of EU States Relating to Abortion, Ministry of Health of the Republic of Croatia

Editorial Activities:

1985- 1990 Editorial Board of scientific and professional journal „Medicinar“

1990 Editor in chief of scientific and professional journal „Medicinar“

1997-1999 Secretary of „Gynecologia et Perinatologia“.

2000 – present Editorial board Gazette of Croatian Society for Human reproduction and Gynecologic Endocrinology

2014 – present Editor for Human Reproduction and Gynecological Endocrinology, journal Gynecologia et Perinatologia

INTERNATIONAL COMMITTEES

2014 – present National representative in Board member in ESHRE

2015- present Croatian representative in the Board of Mediterranean Society for Reproductive Medicine

2013 – present Croatian representative in the Board of The European Society for Contraception and Reproductive Health

GRANTS

1987-1990 Metabolic Bone Diseases, Foundation of Ministry of Science, Education and Sports of the Republic of Croatia, **Junior researcher**

1991-1993 Tumor Bank Formation, Foundation of Croatian Academy of Sciences and Arts and the Ministry of Science, Education and Sports of the Republic of Croatia, **Junior researcher**

2000-2007 Bone Mineral Density and Calcium Homeostasis during Pregnancy and Lactation, Foundation of Croatian Ministry of Science, Education and Sports of the Republic of Croatia, **Senior researcher**

2006 – 2014 Molecular Interactions in the Differentiation of Lymphocytes, Foundation of Croatian Ministry of Science, Education and Sports of the Republic of Croatia, **Senior researcher**

2006 – 2014 The Etiology and Pathogenesis of PCOS – Choice of Therapy and Metabolic Consequences, Foundation of Croatian Ministry of Science, Education and Sports of the Republic of Croatia, **Principal investigator**

2013 – 2017 FP-7-HEALTH-2013-INNOVATION-1, No:602587-2, « Development of Stem Cell Based Therapy for Thymic regeneration», Acronym: THYMISTEM, **Clinical consultant**

2013 - 2017 International Physician Cardiovascular Disease (CVD) Risk Factor Management Study (RSP/IRB 2008-3), **Senior researcher**

2013 – 2017 Analysis of folate metabolism biomarkers in the risk assessment for neural tube defects (ARRSRPOJJ/2011/1062), **Senior researcher**

2015 – present Scientific centre for excellence for reproductive and regenerative medicine – Exploring new platforms and potentials, co-financed by the European Union through the European Regional Development Fund, contract No. 01.1.1.01.0008.

2016- present Epigenetics in nonseminomatous testicular germ cell tumors. Croatian foundation for science - **Senior researcher**

2018- present New frontiers in folate supplementation in obstetrics and gynecology. (NEFFS-OB-GYN), No J3-8207 (C) Slovenian Research Agency **Senior researcher**

HONORS and AWARDS

Award of Croatian Medical Association for the promotion of science, ethics and improvement of the health of Croatian population, 2017

Medical Academy award for the best published paper in field of clinical medical sciences, 2014

Award of the Rector of the University of Zagreb for the best student paper, 1987

Foundation „dr. Miljenko Jakupcevic“ for best student paper in the field of medical science

Chancellor's Award for best student of the University of Zagreb

Foundation „Drago Perovic“ for best student of the Medical faculty

SERVICE

Membership in Professional Societies:

Croatian Medical Association

Croatian Medical Chamber

Croatian Society for Human Reproduction and Gynecologic Endocrinology

Croatian Society for Menopause

Croatian Society for Perinatal Medicine

Croatian Society for Osteoporosis

European Society for Human reproduction and Embriology (ESHRE).

American Society for Reproductive Medicine (ASRM)

European Society for Contraception and Reproductive Health (ESCHR)

Mediterranean Society for Reproductive Medicine (MSRM)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2018

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. **Baldani DP**, Skrgatić L, Kasum M, Zlopasa G, Kralik Oguic S, Herman M. Altered leptin, adiponectin, resistin and ghrelin secretion may represent an intrinsic polycystic ovary syndrome abnormality. *Gynecol Endocrinol* 2019; doi:10.1080/09513590.2018.1534096.
2. Gelo N, Kirinec G, **Baldani DP**, Vrčić H, Ježek D, Milošević M, Stanić P. Influence of human embryo cultivation in a classic CO₂ incubator with 20% oxygen versus benchtop incubator with 5% oxygen on live births: the randomized prospective trial. *Zygote*. Page 1 of 6. doi: 10.1017/S0967199418000618
3. **Baldani DP**, Škrgatić L, Ougang R, Kasum M. The Cardiometabolic Effect of Current Management of Polycystic Ovary Syndrome: Strategies of Prevention and Treatment. *Gynecol Endocrinol* 2018;34(2):87-91.
4. **Baldani DP**, Škrgatić L, Šprem Goldštajn M, Goluža T, Flisar I, Pagon S. Questionnaire on knowledge of midwives about oral emergency contraception. *Acta Clinica Croatica* 2018;57:1-7.
5. Alebić MŠ, Stojanović N, **Baldani DP**, Duvnjak LS. Metabolic implications of menstrual cycle length in non-hyperandrogenic women with polycystic ovarian morphology. *Endocrine* 2016;54(3):798-807.
6. Kasum M, Kurdija K, Orešković S, Čehić E, **Baldani DP**, Škrgatić L. Combined ovulation triggering with GnRH agonist and hCG in IVF patients. *Gynecol Endocrinol* 2016: 8:1-5.
7. **Baldani DP**, Škrgatić L, Oguang R. Polycystic Ovary Syndrome: Important Underrecognised Cardiometabolic Risk Factor in Reproductive-Age Women. In *J Endocrinol* 2015;2015:786363;doi 10.1155/2015/786362
8. **Baldani DP**, Skrgatic L, Cerne JZ, Kralik Oguic S, Gersak B, Gersak K. Association of pentanucleotide polymorphysm in *SHBG* gene with serum levels and cardiovascular risk factors in women with PCOS. *Mol Med Rep* 2015;11:3941-3947.
9. Crubach ME, Škrgatić L, Goluža T, **Baldani DP**. Long-term consequences of polycystic ovary syndrome. *Gynecol Perinatol* 2016; 25(2):53-58.
10. Čorić M, Škrgatić L, Gregov M, **Baldani DP**, Radošević V, Karadza M. Laparoscopic extirpation of cervical endometriosis in 28-year patient with persistent dyspareunia, *Gynecol Perinatol* 2016; 25(1):20-22.
11. Toljan K, Grgić F, **Baldani DP**, Jurković I, Šprem Goldštajn M. Sex hormone binding globulin (SHBG) as a marker of clinical disorders. *Coll Antropol* 2016;40:199-209.
12. **Baldani DP**, Skrgatic L, Sprem Goldstajn M, Simunic V, Gasparovic V. Hormone replacement therapy and venous thromboembolism. *Lijec Vjes*, 2015;137: 34-40

13. **Baldani DP**, Škrgatić L, Šprem Goldštajn M, Kasum M, Orešković S. Ethynil estradiol/Chlormadinon acetate - contraceptive with additional noncontraceptive benefits. *Gynecol Perinatol* 2015; 24(4);
14. Škrgatić L, **Pavičić Baldani D**, Karadža M, Ćorić M, **Goluža T**, Herman M. The effect of ulipristal acetat treatment on fibroid volume and quality of life among women of reproductive age. *Gynecol Perinatol* 2015; 24(4);139-
15. Toljan K, Banović M, Juković I, **Pavicic Baldani D**, Šprem Goldstajn M. The linkage of insulin and regulation of sex-hormone-binding globulin levels. *Gynaecol Perinatol* 2015;24(4):
16. Kasum M, **Pavicic Baldani D**, Stanic P, Oreskovic S, Saric JM, Blajić J, Juras. J. Importance of macroprolactinemia in hyperprolactinemia. *Eur J Obstet Gynecol Reprod Biol* 2014;138:28-32.
17. **Pavicic Baldani D**, Skrgatic L, Cerne JZ, Ferk P, Simunic V, Gersak K. Association of PPARG Pro12Ala polymorphism with insulin sensitivity and body mass index in patients with polycystic ovary disease. *Biomed Rep.* 2014;2(2):199-206.
18. Skrgatić L, **Pavicic Baldani D**, Barišić D, Ćorušić A, Ćorić M. Uterine perforation with levonorgestrel-releasing intrauterine system: Case report. *Gyn Perinatol Gynaecol Perinatol* 2014;23(1):35–37.
19. Sprem Goldstajn M, **Pavičić Baldani D**, Skrgatic L, Radaković B, Vrcic H, Canic T. Ulipristale acetate in emergency contraception. *Coll Antropol* 2014;38 (1):377-382.
20. Sunj M, Canic T, **Pavičić Baldani D**, Tandara M, Jeroncic A, Palada I. Does unilateral laparoscopic diathermy adjusted to ovarian volume increase the chances of ovulation in women with polycystic ovary syndrome? *Hum Reprod* 2013; 28:1-8.
21. **Pavičić Baldani D**, Skrgatic I, Simunic V, Zlopasa G, Canic T, Trgovcic I. Characteristics of different phenotypes of polycystic Ovary Syndrome based on the Rotterdam criteria in Croatian population. *Coll Antropol* 2013;37 (2)
22. **Pavičić Baldani D**, Skrgatic I, Sprem Goldstajn M, Vrcic H, Canic T, Strelec M. Clinical, hormonal and metabolic characteristics of polycystic ovary syndrome among obese and non obese women in Croatian population. *Coll Antropol* 2013;37 (2)
23. **Pavičić Baldani D**, Skrgatic L, Bukvic Z, Trgovcic I. Association between hyperandrogenemia and acne and hirsutism severity in Croatian women with polycystic ovary syndrome. *Acta Dermatovenerol Croatica* 2013; 21
24. Skrgatic L, **Pavicic Baldani D**, Gersak K, Cerne JZ, Ferk P, Coric M. Genetic polymorphism of *INS*, *INSR* and *IRS-1* genes are not associated with polycystic ovary syndrome in Croatian women. *Coll Antropol* 2013;37 (1):141-146.
25. Simunic V, **Pavicic Baldani D**, Sprem Goldstajn M. Hormone replacement therapy: benefits, risks and recommendations. *Gynecol Perinatol* 2013;22 (2):116-123.
26. **Pavičić Baldani D**. Polycystic ovary syndrome. *Medix* 2013; 104/105:138-144.
27. **Pavicic Baldani D**, Canic T, Sprem Goldstajn M, Strelec M, Simunic V. Ectopic pregnancy with progestin-releasing intrauterine device (LNG-IUS) in situ. *Gynecol Perinatol* 2012;21(3):119-122.
28. **Pavičić Baldani D**, Skrgatic I, Sprem Goldstajn M, Zlopasa G, Kralik Oguic S, Canic T, Piljek AN. Clinical and Biochemical Characteristics of Polycystic Ovary Syndrome in Croatian population. *Coll Antropol* 2012;36(4);1413-1418.
29. Canic T, **Pavicic Baldani D**, Sprem Goldstajn M. Simunic V, Strelec M. Non-contraceptive benefits of progestin-releasing intrauterine device (LNG-IUS) *Gynecol Perinatol* 2012;21(3):106-111.
30. Sprem Goldstajn M, **Pavicic Baldani D**, Canic T. Ovulation stimulation today – indications, medications and protocols. *Gynecol Perinatol* 2012;21(3):100-105.

31. Sprem Goldstajn M, **Pavicic Baldani D**, Simunic V. Emergency contraception update. *Gynecol Perinatol* 2012;21(4):133-140.
32. Sprem Goldstajn M, **Pavicic Baldani D**, Vrcic H, Canic T, Strelec M, Simunic V. Treatment of menopausal symptoms in women with breast cancer. *Gynecol Perinatol* 2012;21(2):62-67.
33. Skrgatic L, **Pavicic Baldani D**, Cerne JZ, Ferk P, Gersak K. CAG polymorphism in androgen receptor gene is not directly associated with polycystic ovary syndrome but influences serum testosterone levels. *J Steroid Biochem Mol Biol* 2012;36:345-349.
34. Sprem Goldstajn M, **Pavicic Baldani D**, Vrcic H, Oreskovic S. Emergency Contraception: Can We Benefit from Lessons Learned? *Coll Antropol* 2012;36:345-349.
35. Paradzik M, Novak S, Mokrovic G, Bordukalo Niksic T, Heckel D, Stipic J, **Pavicic Baldani D**, Cicin-Sain L, Antica M. Ikaros family transcription factor expression in rat thymus: detection of impaired development. *Int J Immunopathol Pharmacol* 2012;25(4):893-900.
36. Coric M, Barisic D, **Pavicic D**, Karadza M, Banović M. Electrocoagulation versus suture after laparoscopic stripping of ovarian endometriomas assessed by antral follicle count: preliminary results of randomized clinical trial. *Arch Gynecol Obstet* 2011;282(2):373-8.
37. **Pavicic Baldani D**. Old Challenges, New Methods of Emergency Contraception. *Pharmaceutical Bulletin* 2011;67:342-347.
38. Simunic V, **Pavicic Baldani D**, Jurkovic I. Hormonal contraception: Individualization, Benefits, Risks. *Gynecol Perinatol* 2011;20 (suppl. 1):S10-14.
39. Strkalj Ivezic S, Kusan Jukic M, Tikvica A, **Pavicic Baldani D**. Diagnostic and therapeutic algorithm for the treatment of premenstrual dysphoric disorder. *Acta Med Croatica* 2010;64(3):183-190.
40. **Pavicic Baldani D**. News in the area of hormonal contraception and PCOS. *Medix* 2009;84: 15-20.
41. Šimunić V, **Pavičić Baldani D**. Subjects from the V Croatian Congress on Gynecological Endocrinology, Human Reproduction and Menopause. *Medix* 2006;62/63:10-15.
42. **Pavičić Baldani D**. Are all gestagens equal? *Gynecol Perinatol* 2004;13 (suppl 1):21-23.
43. **Pavičić Baldani D**. Osteoporosis, be sure to try to prevent and treat. *Health* 2004;36:1-2.
44. Šimunić V, Banović I, Ciglar S, Jeren L, **Pavičić Baldani D**, Šprem M. Local estrogen treatment in patients with urogenital symptoms. *Int J Gynecology & Obstetrics* 2003;82:187-197.
45. Čorušić A, Šprem M, **Pavičić Baldani D**, Petričević B, Matković V. Hormone therapy in females and genital carcinoma. *Gynecol Perinatol* 2003;4:139-190.
46. Škrablin S, Kuvačić I, **Pavičić D**, Kalafatić D, Goluža T. Maternal neonatal outcome in quadruplet and quintuplet versus triplet gestations. *Eur J Obstet Gyn* 2000;88:147-152.
47. **Pavičić Baldani D**. Aesthetic endocrinology. *Gynecol Endocrinol & Hum Reprod & Menopause*. 2000;1:9-11.
48. **Pavičić Baldani D**, Strelec M. Andropause. *Gynecol Endocrinol & Hum Reprod & Menopause*. 2000;2:5-8.
49. Vujić G, Čorušić A, Babić D, Forko J, Barišić D, **Pavičić D**, Kovačević S. Use of transvaginal sonography in evaluation of endometrial abnormalities. 7th Biennial meeting of the international gynecologic cancer society. 1999;167-169.
50. Šimunić V, **Pavičić Baldani D**. Menopause and hormone replacement therapy. *Medix* 1999;1:49-56.
51. Škrablin S, Kovačić I, Juretić E, **Pavičić D**, Elvedić-Gašparović V. Complications and outcome of multiple pregnancies cared for by conservative expectant treatment. *Gynecol Perinatol* 1997;6:13-18.
52. Čorušić A, **Pavičić D**, Ljubojević N. Pelvic inflammatory disease and intrauterine device. *Gynecol Perinatol* 1996;5:53-55.
53. **Pavičić D**, Eljuga D. Smoking and pregnancy. *Fight against Cancer* 1994;1:15-17.

54. Gall K, **Pavičić D**, Pavelić J, Audy-Jurković S, Pavelić K. PCR amplification of DNA from stained cytological smears. J Clin Pathol 1993;46:378-379.
55. Šimunić V, Grizelj V, **Pavičić D**. Effectiveness of a continuous estrogen-gestagen combination therapy on early postmenopause symptoms. Gynecol Perinatol 1992;1,3:137-42.
56. Mihaljević T, **Pavičić D**. Effect of late parathyroidectomy on aluminium distribution in uremic rats. Rad Med Fak Zagrebu 1988;29(1):43-47.
57. Rihter D, Bičanić V, **Pavičić D**, Brkić T, Gregurić I, Pavičić F. Correlation of bronchial resistance with other ventilation parameters. Topics Pneumophysiology 1988;1:220.
58. Orešković B, Pavelić Lj, Pavičić F, Fališevac J, **Pavičić D**. Respiratory gases, acid-base status and ECG of patients with chronic obstructive pulmonary disease and chronic pulmonary heart. Topics Pneumophysiology 1988;1:94-102.
59. **Pavičić D**, Mihaljević T. Influence of talc granulomatosis on bone and bone marrow in rats. Medicinar 1987;36(1):1-8.
60. Mihaljević T, **Pavičić D**. Bone disease in uremic rats intoxicated by aluminium. Medicinar 1987;36(2):107-114.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2006 – 2014 The Etiology and Pathogenesis of PCOS – Choice of Therapy and Metabolic Consequences, Foundation of Croatian Ministry of Science, Education and Sports of the Republic of Croatia, **Principal investigator**

2013 – 2017 FP-7-HEALTH-2013-INNOVATION-1, No:602587-2, « Development of Stem Cell Based Therapy for Thymic regeneration», Acronym: THYMISTEM, **Clinical consultant**

2013 - 2017 International Physician Cardiovascular Disease (CVD) Risk Factor Management Study (RSP/IRB 2008-3), **Senior researcher**

2013 – 2017 Analysis of folate metabolism biomarkers in the risk assessment for neural tube defects (ARRSRPOJJ/2011/1062), **Senior researcher**

2015 – present Scientific centre for excellence for reproductive and regenerative medicine – Exploring new platforms and potentials, co-financed by the European Union through the European Regional Development Fund, contract No. 01.1.1.01.0008.

2016- present Epigenetics in nonseminomatous testicular germ cell tumors. Croatian foundation for science - **Senior researcher**

2018- present New frontiers in folate supplementation in obstetrics and gynecology. (NEFFS-OB-GYN) , No J3-8207 (C) Slovenian Research Agency **Senior researcher**

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

The Etiology and Pathogenesis of PCOS – Choice of Therapy and Metabolic Consequences, Foundation of Croatian Ministry of Science, Education and Sports of the Republic of Croatia, **Principal investigator**

Epigenetics in nonseminomatous testicular germ cell tumors. Croatian foundation for science

- **Senior researcher**

New frontiers in folate supplementation in obstetrics and gynecology. (NEFFS-OB-GYN) , No



J3-8207 (C) Slovenian Research Agency **Senior researcher**

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assistant professor Tajana Pavić, MD, Phd.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Center "Sestre milosrdnice" Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Viral hepatitis

BIOGRAPHY

Name TAJANA PAVIĆ

Adress Vidikovac 41, 10000 Zagreb

Telephone 098 720 555

E-mail tajana.pavic@gmail.com

Citizenship Croatian

Date of birth 14.5.1972.

Institution of employment University Hospital Center "Sestre milosrdnice" Zagreb

Function Head of Interventional Gastroenterology Unit

Field of work Internal medicine, Gastroenterology, Clinical Nutrition

Education

1990-1996. Medical School, University of Zagreb

1997. ECFMG certificate

2005. residency in internal medicine

2008. subspecialisation in gastroenterology and hepatology

2012. the European ESPEN diploma in Clinical Nutrition and Metabolism

Work experience

1996. internship in general practice

1998-1999. research fellow in scientific project "HBV X protein – carcinogenesis and gene therapy"

1999-2005. residency in internal medicine, Clinical Hospital „Sestre milosrdnice“ Zagreb

2005 – present. attending in Department of gastroenterology and hepatology Clinical Hospital „Sestre milosrdnice“ Zagreb

2014 - present. Head of Interventional Gastroenterology Unit, Clinical Hospital Center „Sestre milosrdnice“ Zagreb

Field of expertise

- trained endoscopist with experience in urgent procedures;
- 15-year experience in transabdominal ultrasound

- 10-year experience in diagnostic and interventional endoscopic ultrasound (annually 500 procedures, 150 FNAs, EUS-guided drainage of pancreatic fluid collections with plastic stents and LAMS)
- certified expert in clinical nutrition

Educational Activities

2005 – present: lecturer in postgraduate course “Abdominal ultrasound”

2006 – present: lecturer at doctoral study Biomedicine and health, topic „Viral hepatitis“ and „Pancreatic diseases“ Zagreb School of medicine

2007- present: lecturer in postgraduate course „Gastrointestinal diseases in family medicine practice“

2008. lecturer at the 4th International Congress of the Croatian Society for ultrasound in medicine and biology, Zagreb

2009. lecturer at the 4th International Congress of the Croatian Society for Clinical cytology, Split

2010-present. lecturer and demonstrator in the Adriatic EUS Workshop, Zagreb

2010. lecturer in the Symposium of the Croatian Society for parenteral and enteral nutrition, Marija Bistrica

2011. lecturer in the Symposium of the Croatian Society for clinical nutrition, Opatija

2011. lecturer in the 1st Congress of Clinical Nutrition of Bosnia and Herzegovina, Sarajevo

2011. lecturer in postgraduate course “Clinical nutrition”

2012. lecturer at the 19th ESPEN Course of Clinical Nutrition and Metabolic Care, Dubrovnik

2013. lecturer on the 4th Croatian congress of clinical nutrition, Zagreb

2013. lecturer on the 3rd Slovenian-Croatian Ultrasound Congress, Maribor

2014. lecturer in the postgraduate course „Pancreatic disease-current approach“, Split

2015. head researcher in the study „Prevalence of sarcopenia in institutions for elderly in Republic of Croatia“ under auspice of Croatian Society for Geriatrics and Gerontology

2016.-present lecturer on the Postgraduate Study General medicine, Zagreb School of medicine

2016. lecturer in the 6th Congress of physical and rehabilitation medicine, Šibenik

2016. lecturer in the IUPHAR GI Section Meeting 2016, Novigrad

2017. lecturer on the Postgraduate Study Gastroenterology, Zagreb School of medicine

2017. lecturer in the module Clinical nutrition Zagreb School of medicine

2017. lecturer in the 12th Adriatic Club of Clinical Nutrition, Antalya, Turkey

2017. lecturer on the 5th Croatian Congress on clinical nutrition, Zagreb

2017. lecturer on the 39th ESPEN Congress on clinical nutrition and metabolism, LLL module “Let’s talk about nutrition”, Hague

2018. lecturer on the 9th Congress of lecturers in family practice, Zagreb

2018. lecturer on the 4th Symposium of the Croatian Society for digestive surgery, Poreč

2018. organizer of the 1st Scientific symposium „Pancreatic fluid collections-therapeutic challenge, Zagreb

2018. organizer of the workshop „Clinical nutrition in family practice“, Zagreb

2018. lecturer on the 40th ESPEN Congress on clinical nutrition and metabolism, LLL module “Let’s talk about nutrition”, Madrid

2018. lecturer on the 8th Congress of Croatian Gastroenterological Society, Split

2018. lecturer on the 1st European Conference of young Gastroenterologists, LLL modules “Approach to Oral and Enteral Nutrition” and “Nutritional Support in Gastrointestinal Diseases”

Thesis

„Effect of biliary obstruction on ghrelin, cholecystokinin, inflammatory markers and nutritional status“
Zagreb School of Medicine 2014.

Scientific position

Assistant Professor, Zagreb School of Medicine

Publications (total number of categories)

Scientific papers: 35

Abstracts: 38

Book chapters: 6

Teaching papers: 4

Reviewer in:

- European Journal of Gastroenterology and Hepatology
- Nutrition
- Acta Clinica Croatica

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 27.2.2018.

Assistant professor of Internal medicine Zagreb School of medicine

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Duvnjak M, Pavić T, Virović L, Hrabar D. Terapija interferonom-alfa i ribavirinom bolesnika s kroničnim hepatitisom C i normalnim vrijednostima alaninaminotransferaze. Acta Med Croatica 2003;;57:159-162.
2. Duvnjak M, Pavić T, Tomašić V, Lerotić I, Virović L. Hepatitis C – terapijski pristup neliječenim (naivnim) bolesnicima. Acta Med Croat 2005; 59 (5):453-461.
3. Duvnjak M, Barsic N, Tomasic V, Virovic Jukic L, Lerotic I, Pavic T. Adjusted blood requirement index as indicator of failure to control acute variceal bleeding. Croat Med J. 2006;47(3):398-403.
4. Ljubicic N, Biscanin A, Nikolic M, Supanc V, Hrabar D, Pavic T, Boban M. A Randomized-Controlled Trail of Endoscopic Treatment of Acute Esophageal Variceal Hemorrhage: N-Butyl-2-Cyanoacrylate Injection vs. Variceal Ligation. Hepato-Gastroenterology 2011;58:1-6

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Pavić T, Grgić MV, Schmidt S. An Unusual Cause of Anemia and Positive Fecal Occult Blood Test Screening. JAMA Otolaryngol Head Neck Surg. 2017 Jan 1;143(1):93-94.
2. Muscaritoli M, Krznarić Z, Singer P, Barazzoni R, Cederholm T, Golay A, Van Gossum A, Kennedy N, Kreymann G, Laviano A, Pavić T, Puljak L, Sambunjak D, Utrobičić A, Schneider SM. Effectiveness and efficacy of nutritional therapy: A systematic review following Cochrane methodology. Clin Nutr 2017 Aug;36(4):939-957.
3. Budimir I, Stojšavljević S, Baršić N, Biščanin A, Mirošević G, Bohnec S, Kirigin SL, Pavić T, Ljubičić N. Scoring systems for peptic ulcer bleeding: which one to use? World J Gastroenterol 2017 ; 23(41): 7450-7458
4. Pavić T, Hrabar D, Kralj D, Lerotic I, Ogresta D. Candidemia after endoscopic therapy with lumen-apposing metal stent for pancreatic walled-off necrosis. Clin J Gastroenterol. 2018 Jun;11(3):206-211
5. Kruljac I, Vičić I, Blaslov K, Kolak Z, Benković M, Kust D, Ladika Davidović B, Tometić G, Penavić I, Dabelić N, Vazdar Lj, Pavić T, Vrkljan M. The Role of the Acute Octreotide Suppression Test in Detecting Patients with Neuroendocrine Neoplasms. Neuroendocrinology 2018, DOI: 10.1159/000492934

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2015. head researcher in the study „Prevalence of sarcopenia in institutions for elderly in Republic of Croatia“ under auspice of Croatian Society for Geriatrics and Gerontology

2015. researcher in the study "Body assessment in patients with rheumatoid arthritis - multicenter study in RH" Croatian society for physical and rehabilitational medicine

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ivana Pavlič-Renar, MD, PhD, retired professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: retired

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Diabetes and pregnancy

BIOGRAPHY

Ivana Pavlic Renar obtained her MD (1977) and PhD (2000) degree at University of Zagreb Medical School and has been trained in internal medicine (certified in 1986) and endocrinology (certified in 2002) in affiliated teaching hospitals. Her research fellowship in endocrinology was at L Strelitz Institute, Norfolk, VA, USA, mentored by Dr A.I. Vinik (1991-3). Dr Pavlic Renar has become a faculty member of Zagreb Medical School in 1996, currently serving as associate professor. Her professional affiliation was at Vuk Vrhovac Diabetes Institute in Zagreb 1979 -2007, currently at Department of medicine – Endocrinology at Clinical Hospital Centre Zagreb. Most of her professional career is in the various fields in diabetology. She has been one of initiators and creators of Croatian diabetes registry (CroDiabNet). Dr Pavlič-Renar published around 100 papers (20 in CC listed journals), 32 chapters in books/monographs and one textbook on diabetes

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2011

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Pavlic-Renar I. Metelko Z. Epidemiology of pregestational and gestational diabetes. Diabetology Of Pregnancy. 17 PG. 1-8. 2005.

Metelko Z. Pavlic-Renar I. Insulin and oral hypoglycemic agents in pregnancy. Diabetology Of Pregnancy. 17 PG. 206-213. 2005.

Djelmis J, Pavić M, Mulliqi Kotori V, Pavlič Renar I, Ivanisevic M, Oreskovic S. Prevalence of gestational diabetes mellitus according to IADPSG and NICE criteria. Int J Gynaecol Obstet. 2016;135:250-4

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Goran Pavliša, MD, PhD, Assistant professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Center Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Selected chapters in epileptology in developmental age

BIOGRAPHY

Born 13.12.1972. in Zagrebu.

Zagreb Medical School graduated in 1997. and in 2008. finished PhD degree awarded with thesis "Characterization of intracranial tumors by diffusion-weighted magnetic resonance imaging and quantification of apparent diffusion coefficient"

2006-2008. – neuroradiology fellowship at University Hospital Center Zagreb, where he is currently employed as a neuroradiologist.

Education in University Hospital Center Zagreb, Grosshadern Munchen 2005. and in Royal Preston Hospital as part of Lancashire Teaching Hospitals UK in 2015.

Since 2016 Assistant professor of radiology at Zagreb Medical School.

Published 31 scientific papers, 24 indexed in CC, with 207 independent citations.

Vice president of Section for neuroradiology of Croatian radiological society.

Reviewer for CC journals.

Member of scientific board of Neurologia Croatica journal.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 3. 10. 2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Šarac H, Petelin Gadže Ž, Pavliša G, Perić S, Bošnjak Pašić M, Pašić H, Henigsberg N. Autonomic seizures and déjà vu in a patient with gangliocytoma of the orbitofrontal cortex. Psychiatr Danub. 2018 Jun;30(2):220-222.
2. Ozretić D, Radoš M, Pavliša G, Poljaković Z. Long-term angiographic outcome of stent-assisted coiling compared to non-assisted coiling of intracranial saccular aneurysms. Croat Med J. 2015 Feb;56(1):24-31.
3. Bazina A, Mišmaš A, Hucika Z, Pavliša G, Poljaković Z. Endovascular treatment of internal carotid artery pseudo-aneurysm presenting with epistaxis. A case report. Interv Neuroradiol. 2014 Dec;20(6):743-5
4. Šupe S, Poljaković Z, Habek M, Pavliša G, Stojanović-Špehar S. A near-hanging patient with PTSD and acute stroke - an unusual condition for "off label" thrombolysis. Psychiatr Danub. 2013 Jun;25(2):185-7.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Šarac H, Petelin Gadže Ž, Pavliša G, Perić S, Bošnjak Pašić M, Pašić H, Henigsberg N. Autonomic seizures and déjà vu in a patient with gangliocytoma of the orbitofrontal cortex. Psychiatr Danub. 2018 Jun;30(2):220-222.



2. Ozretić D, Radoš M, Pavliša G, Poljaković Z. Long-term angiographic outcome of stent-assisted coiling compared to non-assisted coiling of intracranial saccular aneurysms. Croat Med J. 2015 Feb;56(1):24-31.
3. Bazina A, Mišmaš A, Hucika Z, Pavliša G, Poljaković Z. Endovascular treatment of internal carotid artery pseudo-aneurysm presenting with epistaxis. A case report. Interv Neuroradiol. 2014 Dec;20(6):743-5
4. Šupe S, Poljaković Z, Habek M, Pavliša G, Stojanović-Špehar S. A near-hanging patient with PTSD and acute stroke - an unusual condition for "off label" thrombolysis. Psychiatr Danub. 2013 Jun;25(2):185-7.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

„The role of subcortical structures in the epileptogenesis of developmental age“, project leader Nina Barisic, MD, PhD, Professor of pediatric medicine

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

0

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Hrvoje Ivan Pećina, MD, PhD, primarius, specialist of radiology and subspecialist of neuroradiology

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of Diagnostic and Interventional Radiology in KBC “Sestre milosrdnice” in Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Surgical treatment of tumours of hypophysis

BIOGRAPHY

Hrvoje Ivan Pećina, MD, PhD, was born in Zagreb in 1969. He graduated from Zagreb University School of Medicine in 1996. and finished his residency in radiology in 2004. In 2008. he became subspecialist in neuroradiology. He finished PhD study “Biomedicine and Health” at the School of Medicine University of Zagreb in 2005. He defended PhD thesis in June 12, 2013.

He works at the Department of Diagnostic and Interventional Radiology in KBC “Sestre milosrdnice” in Zagreb since 2000.

Hrvoje Ivan Pećina has visited and professionally improved his skills in several radiological departments in Croatia and abroad. It should be emphasized that he spent 2 months in the Department of Radiology at Medical University South Carolina, Charleston, USA during 2006.

He has published 37 articles; 19 in CC and SCI indexed journals; and 27 chapters in books.; 21 abstracts in international and 36 in domestic congresses and symposiums. He received the award for the scientific poster at the World SICOT/SIROT Congress in Istanbul in 2005. He is a researcher on the scientific project granted by Ministry of Science and Education of the Republic of Croatia (No:6625) and his registration number as researcher is **340632**.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1.. Marić A, Kruljac I, Čerina V, Pećina HI, Šulentić V, Vrkljan M. Endocrinological outcome of pure endoscopic transsphenoidal surgery: a Croatian Referral Pituitary Center experience. Croat Med J. 2012 Jun;53(3):224-33.
- 2.. Pećina-Šlaus N, Zeljko M, Pećina HI, Nikuševa Martić T, Bačić N, Tomas D, Hrašćan R. Frequency of loss of heterozygosity of the NF2 gene in schwannomas from Croatian patients. Croat Med J 53(4) : 321-327, 2012.
3. Kruljac I, Cerina V, Pećina HI, Pažanin L, Matić T, Božikov V, Vrkljan M. Pituitary Metastasis Presenting as Ischemic Pituitary Apoplexy Following Heparin-induced Thrombocytopenia. Endocr Pathol. 23(4) :264-267, 2012.
4. Kafka A, Tomas D, Beroš V, Pećina HI, Zeljko M, Pećina-Šlaus N. Brain Metastases from Lung Cancer Show Increased Expression of DVL1, DVL3 and Beta-Catenin and Down-Regulation of E-Cadherin. Int J Mol Sci. 2014 Jun 13; 15(6) : 10635-51. Doi:10.3390/ijms150610635

5. Kruljac I, Kirigin LS, Strinović M, Marinković J, Pećina HI, Čerina V, Stipić D, Vrkljan M. Treatment of Prolactinomas in Low-Income Countries. *International Journal of Endocrinology* 01/2015; 2015 : 1-5. DOI: 10.1155/2015/697065
6. Kruljac I, Rinčić G, Pećina HI. Hyperosmolar coma in patient with hypothalamic Lagerhans cell histiocytosis. *Endocrine (Springer)*. 52(1) : 176-177, 2016.
- 7.. Cerina V, Kruljac I, Radošević JM, Kirigin LS, Stipić D, Pecina HI, Vrkljan M. Diagnostic Accuracy of Perioperative Measurement of Basal Anterior Pituitary and Target Gland Hormones in Predicting Adrenal Insufficiency after Pituitary Surgery. *Medicine (Baltimore)* 2016 Mar; 95(9) : e2898.
8. Perić B, Kruljac I, Šundalić S, Pećina HI, Jović A, Štefanović M, Butorac D, Vrkljan M. Obesity and hypercholesterolemia in patients with prolactinomas: Could DHEA-S and growth hormone be the missing link? *Endocr Res* 41(3) : 200-206, 2016.
9. Pećina-Šlaus N, Kafka A, Vladušić T, Pećina HI, Hrašćan R. AXIN1 Expression and Localization in Meningeomas and Association to Changes of APC and E-cadherin. *Anticancer Res* 36(9) : 4583-4594, 2016.
10. Pećina HI, Cicvara-Pećina T, Vyroubal V, Kruljac I, Šlaus M. Age and sex related differences in normal pituitary gland and fossa volumes. *Frontiers in Bioscience, Elite*, 9, 204 – 213, March 1, 2017.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1.. Kafka A, Tomas D, Beroš V, Pećina HI, Zeljko M, Pećina-Šlaus N. Brain Metastases from Lung Cancer Show Increased Expression of DVL1, DVL3 and Beta-Catenin and Down-Regulation of E- Cadherin. *Int J Mol Sci*. 2014 Jun 13; 15(6) : 10635-51. Doi:10.3390/ijms150610635
- 2.. Kruljac I, Kirigin LS, Strinović M, Marinković J, Pećina HI, Čerina V, Stipić D, Vrkljan M. Treatment of Prolactinomas in Low-Income Countries. *International Journal of Endocrinology* 01/2015; 2015 : 1-5. DOI: 10.1155/2015/697065
3. Kruljac I, Rinčić G, Pećina HI. Hyperosmolar coma in patient with hypothalamic Lagerhans cell histiocytosis. *Endocrine (Springer)*. 52(1) : 176-177, 2016.
- 4.. Cerina V, Kruljac I, Radošević JM, Kirigin LS, Stipić D, Pecina HI, Vrkljan M. Diagnostic Accuracy of Perioperative Measurement of Basal Anterior Pituitary and Target Gland Hormones in Predicting Adrenal Insufficiency after Pituitary Surgery. *Medicine (Baltimore)* 2016 Mar; 95(9) : e2898.
5. Perić B, Kruljac I, Šundalić S, Pećina HI, Jović A, Štefanović M, Butorac D, Vrkljan M. Obesity and hypercholesterolemia in patients with prolactinomas: Could DHEA-S and growth hormone be the missing link? *Endocr Res* 41(3) : 200-206, 2016.
6. Pećina-Šlaus N, Kafka A, Vladušić T, Pećina HI, Hrašćan R. AXIN1 Expression and localization in Meningeomas and Association to Changes of APC and E-cadherin. *Anticancer Res* 36(9) : 4583-4594, 2016.
- 7.. Pećina HI, Cicvara-Pećina T, Vyroubal V, Kruljac I, Šlaus M. Age and sex related differences in normal pituitary gland and fossa volumes. *Frontiers in Bioscience, Elite*, 9, 204 – 213, March 1, 2017.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



The role of Wnt signalling in epithelo-mesenchymal transition WNT4EMT (6625)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

The role of Wnt signalling in epithelo-mesenchymal transition WNT4EMT (6625)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. dr. sc. Nives Pećina-Šlaus

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Medicinski fakultet Sveučilišta u Zagrebu

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Genome Instability

BIOGRAPHY

Nives Pecina-Slaus is tenured professor at the Department of biology and Head of the Laboratory of Neuro-oncology Croatian Institute for Brain Research School of Medicine University of Zagreb. She has received her B.S. in 1990. her MS in 1992. from the University of Zagreb, Faculty of Math and Sciences, and PhD in the field of molecular oncology in 1998. from School of Medicine University of Zagreb. She was trained at Cold Spring Harbor Laboratory, New York, USA in 1990; Georgetown University, Washington DC, USA. In 2005. she was elected Senior Investigator (scientific rank of full professor), in 2007. associate professor, in 2011. full professor and in 2017. tenured professor at the Department of Biology, School of Medicine. She was mentor on numerous theses, altogether 13 defended theses of which 4 dissertations. Her main fields of research are cancer genetics, Wnt signaling pathway, brain tumorigenesis, tumor suppressor genes, oncogenes, genetic profiles of brain tumors, genomic instability, epithelial to mesenchymal transition. She was granted and was/is leading as principal investigator six scientific projects and was a collaborator on international project FP7–REGPOT GlowBrain, and is researcher on ZCI-CoRE – Neuro. Her research has led to more than 100 publications - 63 scientific papers, a book, 70 abstracts, 23 invited lectures. She was cited 741 times on Web of Science (H indeks 15), 844 on Scopus (H indeks 16) and 1313 on Google Scholar, (H indeks 19). She acts as a reviewer for Ministry of Science, Education and Sports Croatia, for Slovenian Research Agency (ARRS) for National council for university education, HAZU and many scientific peer-reviewed journals. She was elected as editor for scientific journal Frontiers in Bioscience and is a member on editorial boards of Acta Clinica Croatica, Cancer Cell International and Croatian Medical Journal (2011.-2016). She is the leader of 4 doctoral and 1 graduate courses. She is a member of Croatian Society of Human Genetics, Croatian Medical Association, Croatian Biological Society, European Society for Human Genetics, European Association for Cancer Research, Croatian Society for Neuroscience, Odbor za neuroznanost i bolesti mozga Razred za medicinske znanosti HAZU, Odbora za apoptozu Akademije Medicinskih znanosti Hrvatske. She was awarded several scientific awards; from Croatian Medical Association and Academy of Medical Sciences for best paper in basic medical research for young scientist (2000), in 2011. National Scientific Award and School of Medicine Award for exceptional publication activity.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 17.01.2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Pavelić K, Pećina-Šlaus N, Spaventi R. Int. J. Develop. Biol. 35: 209-214, 1991.
2. Grazio S, Frković-Grazio S, Čabrijan T, Zjačić-Rotkvić V, Goldoni V, Pećina-Šlaus N, Kamenjicki E, Pavelić K. Period. Biol. 94: 215-220, 1992.
3. Osmak, M., Pećina, N., Pavelić, K. Period. Biol. 94: 59-64, 1992.
4. Štorga, D., Pećina-Šlaus, N., Pavelić, J., Pavelić, Z. P., Pavelić, K. Int. J. Exp. Path. 73: 527-533, 1992.
5. Poljak, Lj., Pećina, N., Džubur, A., Užarević, B., Vitale, B., Pavelić K. Tumordiagn. u. Ther. 14: 158-162, 1993.

6. Spaventi R, Kamenjicki E, Pećina-Šlaus N, Grazio S, Pavelić J, Kušić B, Cvrtila D, Spaventi Š, Pavelić K, Pavelić ZP. *in vivo* 8: 183-190, 1994.
7. Pećina-Šlaus N, Pavelić J, Pavelić K. *Period. Biol.* 96: 161-164, 1994.
8. Gall-Trošelj, K., Kušić, B., Pećina-Šlaus, N., Pavelić, K., Pavelić, J. *Eur. J. Clin. Chem. Clin. Biochem.*, 33: 733-737, 1995.
9. Pećina-Šlaus N. *Croatian Med. J.*, 37: 75-80, 1996.
10. Pećina-Šlaus N. *Liječ Vjesn.* 120: 219-227, 1998.
11. Pećina-Šlaus N, Pavelić K, Pavelić J. *J. Mol. Med.* 77: 446-453, 1999.
12. Pećina-Šlaus N, Šlaus, M. *Homo*, 51: 151-155, 2000.
13. Milavec-Puretić V, Lipozenčić J, Šustić N, Pećina-Šlaus, N. *Croatian Med. J.*, 42: 64-66, 2001.
14. Pećina-Šlaus N, Gall-Trošelj K, Kapitanović S, Pavelić J, Pavelić K. *Coll. Antropol.* 26: 85-88, 2002.
15. Pećina-Šlaus N, Milavec-Puretić V, Kubat M, Furač I, Karija M, Fischer-Žigmund M, Lipozenčić J. Clinical case of acral hemorrhagic Darier's disease is not caused by mutations in exon 15 of the ATP2A2 gene. *Coll. Antropol.* 27:125-133, 2003.
16. Pećina-Šlaus N. *Cancer Cell Int*, 3:17, 2003 (<http://www.cancer-ci.com/content/3/1/17>)
11. Pećina-Šlaus N, Gall-Trošelj K, Šlaus M, Radić K, Nikuševa-Martić T, Pavelić K. *Pathology*, 36:145-151, 2004.
17. Pećina-Šlaus N, Nikuševa-Martić T, Gall-Trošelj K, Radić K, Hrašćan R. *In vivo* 19: 359-366, 2005.
18. Žigmund M, Nikuševa-Martić T, Čačić M, Pećina-Šlaus N. *Liječ. Vjesn.* 127; 89-93, 2005.
19. Pećina-Šlaus N. Kljaić M, Nikuševa-Martić T. *Pathol Res Practice*, 201:557-563, 2005.
20. Pećina-Šlaus N, Beroš V, Houra K, Čupić H. *J Neurooncol.* 78 :213-5, 2006.
21. Žigmund M, Pećina-Šlaus N, Kušec V, Nikuševa-Martić T, Čačić M, Šlaus M, Bulić-Jakuš F. *Acta Clinica Croatica*, 45(suppl 1) 1-52, 2006.
22. Pećina-Šlaus N, Žigmund M, Kušec V, Nikuševa-Martić T, Čačić M, Šlaus M. *J Cutan Pathol* 34:239-246, 2007.
23. Borovečki F, Pećina-Slaus N, Vukičević S. *Int Orthop.* 31; 799-805, 2007.
24. Nikuševa Martić T, Beroš V, Pećina-Šlaus N, Pećina HI, Bulić-Jakuš F. *Pathol Res Practice.* 203; 779-787 , 2007.
25. Pećina-Šlaus N, Nikuševa-Martić T, Beroš V, Tomas D. *Pathol Oncol Res.* 13; 370-374, 2007.
26. Pecina-Slaus N, Nikuseva Martic T, Tomas D, Beros V, Zeljko M, Čupić H. *J. Neurooncol.* 87; 63-70, 2008.
27. Hrašćan R, Pećina-Šlaus N, Nikuševa Martić T, Franekić-Čolić J, Gall-Trošelj K, Pavelić K, Karapandža N. *J Neuroendocrinol.* 20; 1015-1022; 2008.
28. Pećina-Šlaus N. *Acta medica Croatica. Supplement.*, 63 (Supl. 2); 13- 19, 2009.
29. Vladusic T, Hrascan R, Pecina-Slaus N, Vrhovac I, Gamulin M, Franekic J, Kruslin B. *Radiol Oncol* 44; 168-173, 2010.
30. Pecina-Slaus N. *Cancer Cell International*, 10; 22, 2010 (<http://www.cancer-ci.com/content/10/1/22>)

31. Nikuševa Martić T, Pećina-Šlaus N, Kušec V, Kokotović T, Mušinović H, Tomas D, Zeljko M. *Pathol Oncol Res.* 16; 75-79; 2010.
32. Pećina-Šlaus N, Majić Ž, Musani V, Zeljko M, Čupić H. *J Neurooncol.* 97; 143-148; 2010.
33. Pećina-Šlaus N, Nikuševa Martić T, Deak AJ, Zeljko M, Hrašćan R. *J Cancer Res Clin. Oncol.* 136; 695-702; 2010.
34. Vladušić T, Hrašćan R, Vrhovac I, Krušlin B, Gamulin M, Grgić M, Pećina-Šlaus N, Franekić Čolić J. *Pathol Res Practice* 206; 163-167; 2010.
35. Zeljko M, Pećina-Šlaus N, Nikuševa Martić T, Kušec V, Beroš V, Tomas D. *Front Biosci*, E3, 616-624, 2011.
36. Pećina-Šlaus N, Nikuševa Martić T, Kokotović T, Kušec V, Tomas D, Hrašćan R. *Coll. Antropol.* 2011 Jan;35 Suppl 1:101-6.
37. Pećina-Šlaus N, Nikuševa Martić T, Zeljko M, Bulat S. *Brain Tumor Pathol.* 28; 223-228, 2011.
38. Pećina-Šlaus N, Cicvara-Pecina T, Kafka A. *Front Biosci*, E4, 889-896, 2012.
39. Pećina-Šlaus N. *Acta Clin Croat.* 51; 643-647, 2012.
40. Pecina-Slaus N, Zeljko M, Pecina HI, Nikuseva Martic T, Bacic N, Tomas D, Hrascan R. *Croat Med J.* 2012;53:321-7.
41. Nikuševa-Martić, T. Šerman L, Zeljko M, Vidas Ž, Gašparov S, Zeljko HM, Kosović M, Pećina-Šlaus N. *Pathol. Oncol. Res.* 2013;19(3):545-551
42. Pećina-Šlaus N. *Pathol. Oncol. Res.* 2013;19(3):365-373.
43. Kafka, A. Musani, V. Pećina-Šlaus, N. *Period Biol*, 116; 197-199, 2014.
44. Pećina-Šlaus N, Gotovac K, Kafka A, Tomas D, Borovečki F. *Mol Cytogenet.* 2014;7(1):95. doi: 10.1186/s13039-014-0095-2. eCollection, 2014.
45. Kafka, A. Tomas, D. Beroš, V. Pećina, H.I. Zeljko, M. Pećina-Šlaus, N. *Int. J. Mol. Sci.* 15(6): 10635-10651, 2014, doi:10.3390/ijms150610635
46. Pećina-Šlaus, N. Kafka, A. Tomas, M. Marković, L. Okštajner, P.K. Sukser, V. Krušlin, B. *Histol Histopathol*, 29: 1557-1564, 2014.
47. Vladusic T, Hrašćan R, Krušlin B, Pećina-Šlaus N, Perica K, Bićanić A, Vrhovac I, Gamulin M, Franekić J. *Anticancer Research* 34: 4005-4012, 2014.
48. Kafka A, Bašić-Kinda S, Pećina-Šlaus N. *Croat Med J.* 2014; 55(5):459-67.
49. Pećina-Šlaus N, Pećina M. *Cancer Cell Int* 15:64, 2015, DOI 10.1186/s12935-015-0212-2
50. Szécsényi-Nagy A, Brandt G, Haak W, Keerl V, Jakucs J, Möller-Rieker S, Köhler K, Mende BG, Oross K, Marton T, Oszás A, Kiss V, Fecher M, Pálfi G, Molnár E, Sebők K, Czene A, Paluch T, Šlaus M, Novak M, Pećina-Šlaus N, Ősz B, Voicsek V, Somogyi K, Tóth G, Kromer B, Bánffy E, Alt KW. *Proc Biol Sci.* 2015;282(1805). pii: 20150339. doi: 10.1098/rspb.2015.0339.
51. Pećina-Šlaus N, Kafka A. *CNS Oncol.* 4(6), 367–370, 2015. 10.2217/cns.15.22
52. Pećina-Šlaus N, Kafka A, Vladušić T, Tomas D, Logara M, Skoko J, Hrašćan R. *Int J Exp Pathol* 2016; 97(2):159-69. doi: 10.1111/iep.12186.
53. Pećina-Šlaus N, Kafka A, Vladušić T, Pećina, HI, Hrašćan R. *Anticancer Research*, 2016; 36: 4583-4594.

54. Pećina-Šlaus N, Kafka A, Varošaneć AM, Marković L, Krsnik Ž, Njirić N, Mrak G. *Mol Med Rep* 2016, 13, 4245-4251. doi: 10.3892/mmr.2016.5061
55. Pećina-Šlaus N, Kafka A, Lechpammer M. *Cancers* 2016;8(7). pii: E67. doi: 10.3390/cancers8070067
56. Pećina-Šlaus N, Kafka A, Bukovac A, Vladušić T, Tomas D, Hrašćan R. *Tumor Biol* 2017. 39(7):1010428317705791. doi: 10.1177/1010428317705791; IF 2.926, Q2
57. Kafka A, Tomas D, Lechpammer M, Gabud T, Pažanin L, Pećina-Šlaus N. *Hindawi Disease Markers*, vol. 2017, Article ID 9253495, 10 pages, 2017. doi:10.1155/2017/9253495
<https://doi.org/10.1155/2017/9253495> IF 2.348, Q2.
58. Pećina-Šlaus N, Bukovac A, Salamon I, Kafka A. *Cancer Hypotheses* 2017 1, 6, 1-16
59. Kafka A, Karin-Kujundžić V, Šerman L, Bukovac A, Njirić N, Jakovčević A, Pećina-Šlaus N. *Croat Med J*. 2018 Oct 31;59:213-223. <https://doi.org/10.3325/cmj.2018.59.213>
60. Kafka A, Bačić M, Tomas D, et al. *J Cell Mol Med*. 2018;00:1–15. <https://doi.org/10.1111/jcmm.13969>

1. Author of the postgraduate textbook

Pećina-Šlaus i suradnici: *Odabrane metode molekularne biologije*, Medicinska naklada, Zagreb, 2009.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Kafka, A, Tomas D, Beroš, V, Pećina, H.I, Zeljko, M, Pećina-Šlaus, N. Brain metastases from lung cancer show increased expression of DVL1, DVL3 and beta-catenin and down regulation of E-cadherin. *Int. J. Mol. Sci.* 15(6): 10635-10651, 2014, doi:10.3390/ijms150610635
2. Pećina-Šlaus, N, Kafka, A, Tomas, M, Marković, L, Okštajner, P.K, Sukser, V, Krušlin, B. Wnt signaling transcription factors TCF-1 and LEF-1 are upregulated in malignant astrocytic brain tumors. *Histol Histopathol*, 29: 1557-1564, 2014.
3. Vladusić T, Hrašćan R, Krušlin B, Pećina-Šlaus N, Perica K, Bićanić A, Vrhovac I, Gamulin M, Franekić J. Histological Groups of Human Postpubertal Testicular Germ Cell Tumours Harbour Different Genetic Alterations. *Anticancer Research* 34: 4005-4012, 2014.
4. Kafka A, Bačić-Kinda S, Pećina-Šlaus N. The cellular story of dishevelleds. *Croat Med J*. 2014; 55:459-67.
5. Kafka, A, Musani, V, Pećina-Šlaus, N. Optimal amplification conditions for D16S3399 polymorphic STS Axin-1 gene marker. *Period Biol*, 116; 197-199, 2014.
6. Pećina-Šlaus N, Gotovac K, Kafka A, Tomas D, Borovečki F. Genetic changes observed in a case of adult pilocytic astrocytoma revealed by array CGH analysis. *Mol Cytogenet*. 2014;7(1):95. doi: 10.1186/s13039-014-0095-2. eCollection, 2014.
7. Pećina-Šlaus N, Pećina M. Only one health and so many omics. *Cancer Cell Int* 15:64, 2015, DOI 10.1186/s12935-015-0212-2
8. Pećina-Šlaus N, Kafka A. Wnt signaling and astrocytic brain tumors. *CNS Oncol*. 4(6), 367–370, 2015. 10.2217/cns.15.22
9. Pećina-Šlaus N, Kafka A, Vladušić T, Tomas D, Logara M, Skoko J, Hrašćan R. Loss of p53 expression is accompanied with upregulation of beta-catenin in meningiomas: a concomitant reciprocal expression. *Int J Exp Pathol* 2016; 97(2):159-69. doi: 10.1111/iep.12186.
10. Pećina-Šlaus N, Kafka A, Vladušić T, Pećina, H, Hrašćan R. AXIN's expression and localization in meningiomas and association to changes of APC and E-cadherin, *Anticancer Research*, 2016; 36: 4583-4594.

11. Pećina-Šlaus N, Kafka A, Varošaneć AM, Marković L, Krsnik Ž, Njirić N, Mrak G. Expression patterns of Wnt signaling component sFRP3 in astrocytoma and glioblastoma. *Mol Med Rep* 2016, 13, 4245-4251. doi: 10.3892/mmr.2016.5061
12. Pećina-Šlaus N, Kafka A, Lechpammer M. Molecular genetics of intracranial meningiomas with emphasis on canonical Wnt signalling. *Cancers* 2016;8(7). pii: E67. doi: 10.3390/cancers8070067
13. Pećina-Šlaus N, Kafka A, Bukovac A, Vladušić T, Tomas D, Hrašćan R. Genetic changes of MLH1 and MSH2 genes could explain constant findings on microsatellite instability in intracranial meningioma. *Tumor Biol* 2017. 39(7):1010428317705791. doi: 10.1177/1010428317705791; IF 2.926, Q2
14. Kafka A, Tomas D, Lechpammer M, Gabud T, Pažanin L, Pećina-Šlaus N. Expression Levels and Localizations of DVL3 and sFRP3 in Glioblastoma. *Hindawi Disease Markers*, vol. 2017, Article ID 9253495, 10 pages, 2017. doi:10.1155/2017/9253495 <https://doi.org/10.1155/2017/9253495> IF 2.348, Q2.
15. Pećina-Šlaus N, Bukovac A, Salamon I, Kafka A. Microsatellite instability as a driving force for cancer progression. *Cancer Hypotheses* 2017 1, 6, 1-16
16. Kafka A, Karin-Kujundžić V, Šerman L, Bukovac A, Njirić N, Jakovčević A, Pećina-Šlaus N. Hypermethylation of Secreted Frizzled Related Protein 1 gene promoter in different astrocytoma grades. *Croat Med J*. 2018 Oct 31;59(5):213-223. <https://doi.org/10.3325/cmj.2018.59.213>
17. Kafka A, Bačić M, Tomas D, et al. Different behaviour of DVL1, DVL2, DVL3 in astrocytoma malignancy grades and their association to TCF1 and LEF1 upregulation. *J Cell Mol Med*. 2018;00:1–15. <https://doi.org/10.1111/jcmm.13969>

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. 1997-2002. poticajni projekt “Uloga gena APC u humanoј tumorigenezi i embriogenezi”, (108 509) (PI);
2. 2002-2005 Ministarstvo znanosti i tehnologije RH, projekt “Uloga gena signalnog puta wnt u neoplazijama čovjeka (0108 215) (PI);
3. 2007- 2013 MZOŠ, projekt “Uloga signalnog puta wnt u tumorigenezi i embriogenezi mozga (108-1081870-1905)” (PI)
4. 2013-2014. Sveučilište u Zagrebu, Potpora istraživanju, projekt „Signalni put Wnt od membrane do jezgre tumorskih stanica mozga“ (1.2.1.19). (PI)
5. 2014.-2018. projekt Hrvatske zaklade za znanost „Uloga signalnog puta Wnt u epitelno-mezenhimskoj tranziciji“. WNT4EMT (6625) (PI) 6. 2016.-2020. „Razvoj karijere mladih znanstvenika“, HRZZ (PI–mentor Nives Pećina-Šlaus).
7. Researcher on international project FP7–REGPOT GlowBrain, MEF
8. Researcher on ZCI-Neuro, European Union European Regional Development Fund, Operational Programme Competitiveness and Cohesion, grant agreement no. KK.01.1.1.01.0007, CoRE – Neuro".
9. Researcher on project Potpora UNIZG2014 Wnt signalizacija u placentaciji i tumorigenezi (šifra potpore BM2.16).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. 2013-2014. Sveučilište u Zagrebu, Potpora istraživanju, projekt „Signalni put Wnt od membrane do jezgre tumorskih stanica mozga“ (1.2.1.19). (PI)



2. 2014.-2018. projekt Hrvatske zaklade za znanost „Uloga signalnog puta Wnt u epitelno-mezenhimskoj tranziciji“. WNT4EMT (6625) (PI)3. 2016.-2020. „Razvoj karijere mladih znanstvenika“, HRZZ (PI–mentor Nives Pećina-Šlaus).

4. Researcher on international project FP7–REGPOT GlowBrain, MEF

5. Researcher on ZCI-Neuro, European Union European Regional Development Fund, Operational Programme Competitiveness and Cohesion, grant agreement no. KK.01.1.1.01.0007, CoRE – Neuro".

6. Researcher on project Potpora UNIZG2014 Wnt signalizacija u placentaciji i tumorigenezi (šifra potpore BM2.16).

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

mentor of 4 defended dissertations, 3 masters theses, 11 graduation theses i 6 awarded student papers.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mihaela Perić, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Bone morphogenetic proteins in regeneration of bone and cartilage

BIOGRAPHY

PROFESSIONAL EXPERIENCE:

2009- Research associate, Center for translational and clinical research, University of Zagreb School of Medicine (UZSM)

2006-2008 Project leader, project New antimalarial macrolides, performed in collaboration with Walter Reed Army Institute of Research, Washington D.C. and Medicines for Malaria Venture, Geneva, Switzerland

2001-2002 Internship in the research laboratory of Dr. Peter C. Appelbaum Professor of Pathology and Director of Clinical Microbiology at The Milton S. Hershey Medical Center, Penn State College of Medicine (1 year), training in molecular epidemiology, molecular biology and clinical microbiology

1999 -2006 Researcher microbiologist, PLIVA R&D, Zagreb. Actively involved in microbiology, biochemistry and molecular biology research for the purpose of developing new anti-infective and anti-inflammatory agents

1998 Assistant, Laboratory for plant tissue culture, University of Zagreb, Faculty of Science (UZFS) and Laboratory for plant molecular biology, Ruđer Bošković Institute, Zagreb.

EDUCATION

1992-1997 Undergraduate studies, University of Zagreb, Faculty of Science (UZFS)

1999-2006 Graduate school with major in molecular and cell biology, UZFS, Ph. D. thesis entitled "Influence of efflux and ribosomal mutations on Haemophilus influenzae sensitivity to macrolide antibiotics"

SCHOLARSHIPS AND AWARDS

1995 Plant tissue culture training (one month), Forest University, Sofia, Bulgaria

1997 Practical course in Transformation Methods in Transgenic Plants (two weeks), Brazilia, Brazil

2007 GSK - Silver Science Award

2011 Award for scientific productivity – UZSM

TEACHING

2011- „Biologically active components in food“, UZSM

2014- „P4 in medicine“, UZSM

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2009

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, Pauk M, Erjavec I, Francetic I, Dumic-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikic-Topic S, Peric M, Pecina M, Grgurevic L. The clinical use of bone morphogenetic proteins revisited: a novel biocompatible carrier device OSTEOGROW for bone healing. Int Orthop. 2014, 38(3):635-47.

2. Peric M*, Dumic-Cule I, Grcevic D, Matijasic M, Verbanac D, Paul R, Grgurevic L, Trkulja V, Bagi CM, Vukicevic S. The rational use of animal models in the evaluation of novel bone regenerative therapies. *Bone*, 2014 doi: 10.1016/j.bone.2014.07.010.

3. Dumic-Cule I, Peric M, Kucko L, Grgurevic L, Pecina M, Vukicevic S. Bone morphogenetic proteins in fracture repair. *Int Orthop*. 2018 Sep 15. doi: 10.1007/s00264-018-4153-y

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, Pauk M, Erjavec I, Francetic I, Dumic-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikic-Topic S, Peric M, Pecina M, Grgurevic L. The clinical use of bone morphogenetic proteins revisited: a novel biocompatible carrier device OSTEOGROW for bone healing. *Int Orthop*. 2014, 38(3):635-47. (IF 2,319; cit: 19; Q1 14/65 in Orthopedics)
2. Peric M, Dumic-Cule I, Grcevic D, Matijasic M, Verbanac D, Paul R, Grgurevic L, Trkulja V, Bagi CM, Vukicevic S. The rational use of animal models in the evaluation of novel bone regenerative therapies. *Bone*, 2014, 70:73-86. (IF 3,823; cit: 5; Q2 40/122 in Endocrinology and Metabolism)
3. Stolić I, Čipčić Paljetak H, Perić M*, Matijašić M, Stepanić V, Verbanac D, Bajić M. Synthesis and structure–activity relationship of amidine derivatives of 3,4-ethylenedioxythiophene as novel antibacterial agents. *Eur J Med Chem*, 2015, 90:68-81 (IF 3,432; cit: 0; Q1 13/58 in Chemistry, Medicinal)
4. Maračić S, Kraljević TG, Paljetak HČ, Perić M, Matijašić M, Verbanac D, Cetina M, Raić-Malić S. 1,2,3-Triazole pharmacophore-based benzofused nitrogen/sulfur heterocycles with potential anti-Moraxella catarrhalis activity. *Bioorg Med Chem*. 2015 Dec 1;23(23):7448-63 (IF 2,793; cit: 0; Q2 24/59 in Chemistry, Medicinal)
5. Matijašić M, Meštrović T, Peric M, Čipčić Paljetak H, Panek M, Vranešić Bender D, Ljubas Kelečić D, Krznarić Ž, Verbanac D. Modulating Composition and Metabolic Activity of the Gut Microbiota in IBD Patients. *Int. J. Mol. Sci*. 2016, 17, 578; doi:10.3390/ijms17040578 (IF 2.862; cit 1; Q2 46/157 in Chemistry, Multidisciplinary)
6. Čipčić Paljetak, H., D. Verbanac, J. Padovan, M. Dominis-Kramarić, Ž. Kelnerić, M. Peric, M. Banjanac, G. Ergović, N. Simon, J. Broskey, D. J. Holmes, and V. Eraković Haber. 2016. Macrolones - novel class of macrolide antibiotics active against key resistant respiratory pathogens in vitro and in vivo. *Antimicrob. Agents Chemother*. 2016, 60(9):5337-48. doi: 10.1128/AAC.00524-16 (IF 4,547; cit. 0, Q1 22/123, in Microbiology; Q1 34/253 in Pharmacology & Pharmacy)
7. Verbanac D, Malik R, Chand M, Kushwaha K, Vashist M, Matijašić M, Stepanić V, Peric M, Čipčić Paljetak H, Saso L, Jain SC. Synthesis and evaluation of antibacterial and antioxidant activity of novel 2-phenyl-quinoline analogs derivatized at position 4 with aromatically substituted 4H-1,2,4-triazoles. *J Enzyme Inhib Med Chem*. 2016, doi: 10.1080/14756366.2016.1190714 (IF 3.428; cit 0; Q1 11/59 in Chemistry, Medicinal)
8. Čipčić Paljetak, H.; Tomasković, L.; Matijasić, M.; Bukvić, M.; Fajdetić, A.; Verbanac, D.; Perić, M. Macrolide Hybrid Compounds: Drug Discovery Opportunities in Anti-Infective and Anti-Inflammatory Area. *Curr. Top. Med. Chem.*, 2016, 16, 1-22. doi: 10.2174/1568026616666160927160036 (IF 2.9; cit 0; Q2 21/59 in Chemistry, Medicinal)
9. Perin N, Starčević K, Perić M, Čipčić Paljetak H, Matijašić M, Stepanić V, Verbanac D, Karminski-Zamola G, Hranjec M. Synthesis and SAR Study of Novel Amidino 2-substituted Benzimidazoles as Potential Antibacterial Agents. *Croat. Chem. Acta* 2017, 90(2) DOI: 10.5562/cca3147
10. Panek M, Čipčić Paljetak H, Barešić A, Perić M, Matijašić M, Lojkić I, Vranešić Bender D, Krznarić Ž, and Verbanac D. Methodology challenges in studying human gut microbiota – effects of collection, storage,

DNA extraction and next generation sequencing technologies. Sci Rep. 2018. DOI: 10.1038/s41598-018-23296-4

11. Cindrić M, Perić M, Kralj M, Martin-Kleiner I, David-Cordonnier M-H, Čipčić Paljetak H, Matijašić M, Verbanac D, Karminski-Zamola G and Hranjec M. Antibacterial and antiproliferative activity of novel 2-benzimidazolyl- and 2-benzothiazolyl-substituted benzo[b]thieno-2-carboxamides. Mol Divers 2018. DOI: 10.1007/s11030-018-9822-7

12. Mašek T, Perin N, Racané L, Cindrić M, Čipčić Paljetak H, Perić M, Matijašić M, Verbanac D, Radić B, Šuran J, Starčević K. Chemical Composition, Antioxidant and Antibacterial Activity of Different Extracts of Poplar Type Propolis. Croat. Chem. Acta 2018, 91(1), 81–88 DOI: 10.5562/cca3298

13. Dumic-Cule I, Peric M, Kucko L, Grgurevic L, Pecina M, Vukicevic S. Bone morphogenetic proteins in fracture repair. Int Orthop. 2018 Sep 15. doi: 10.1007/s00264-018-4153-y

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

H2020 OSTEOproSPINE (2018-2022), Work package leader for 2 Work packages

Center of Excellence for Reproductive and Regenerative (2014-2022), researcher

FP7 OSTEOGROW (2012-2017), Work package leader

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

H2020 OSTEOproSPINE (2018-2022), Work package leader for 2 Work packages

Center of Excellence for Reproductive and Regenerative (2014-2022), researcher

HRZZ projekt Minute for IBD (2014-2018) – researcher

COST action (CM1307) "Targeted chemotherapy towards diseases caused by endoparasites" (2013-2017), Management Committee Member representing Croatia

FP7 OSTEOGROW (2012-2017), Work package leader

PoC POC_4_01_12 (2012-2013) New intervention procedure by introducing new technology for improving heart function after myocardial infarction, leader of scientific activities, administrative affairs and reporting University of Zagreb incentives (2013-2018) – project leader, new chemical entities testing, investigation of anaerobic bacteria, research of IBD and potential new biomarkers

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE 0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Zdravko Petanjek, Full Professor, Tenured

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb, School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Fetal and Neonatal Neurophysiology, Fetal Behavior; Selected chapters in epileptology in developmental age; Human developmental neurobiology; Synaptic plasticity and mind

BIOGRAPHY

School of Medicine (employed since 1992) Participated in 20 research projects (head in 6). Maintained more than 20.000 teaching hours on courses related with Anatomy, Neuroscience, Biological psychology, Neurology and Psychiatry: participating in 20 graduate (head in 12) and 16 (head in 7) PhD courses. Author of 2 textbook manuals, 3 teaching articles, 1 chapter in textbook, translator of 2 textbooks and 3 chapters in textbooks.

General research interest is to assess organization of cortical circuitry via a multidisciplinary approach (including functional neuroanatomy - from proteins in specific cell types to fiber tracts in the human brain, electrophysiology - from single channel activity to global activity in the human brain, as well as using imaging, behavior, psychometric and theoretical approach) in human and animal models.

Specific main interest is systematic quantitative research of (a) adult and developmental morphological (re)organization of pyramidal neurons in human prefrontal cortex, and (b) immunohistochemical studies about organization and origin of primate cortical calretinin GABAergic neurons.

Other specific interest is research of (c) circuitry reorganization in human cortical pathology, in experimental animal model, genetically manipulated animals and animals raised under different environmental influence, as well as (d) comparative analysis of neuron morphology in various mammalian species.

Experience in laboratory techniques: classical neuroanatomical methods (Golgi), immuno-histochemistry and in situ hybridization. Trained for confocal microscopy analysis, high expertise in the field of quantitative microscopy (morphometry and stereology), including topologic analysis and statistical evaluation of data. Expert in techniques of human brain dissection, and experienced for the human gross anatomical dissection.

Administrative and organizational experience (e.g. organization of national and international meetings, public awareness events, responsibilities as officer of societies, committees etc.)

Member of organizing committee of 2 FENS/IBRO summer schools (head of practical course), 7 international neuroscience and anatomy meetings and 12 Brain awareness weeks. Guest editor for two issues of CC journal.

Member of the 10 committees (currently in 7) at the School of Medicine, Member of Faculty Council (1992-1994, 2004-2008, 2013-present), Deputy member of Biomedical Council from University of Zagreb Senate (2005-present), Member of Interdisciplinary Scientific Field Committee, Agency for Science and Higher Education (2013-present).

2002-2006. Secretary, Croatian Society of Anatomist, Histologist and Embryologist;

Provided more than 50 public lectures, more than 30 scientific interviews for newspapers and radio stations, participated in more than 20 scientific broadcasts on National TV channels. Co-worker and participant in 5 scientific educational documentaries on Croatian National TV.

Performed over 100 reviews for scientific journals (Cerebral Cortex, J. of Anatomy, PNAS USA).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 13.12.2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Petanjek Z, Judas M, Simic G, Rasin MR, Uylings HB, Rakic P, Kostovic I (2011) Extraordinary neoteny of synaptic spines in the human prefrontal cortex. *Proc Natl Acad Sci U S A*. 108(32):13281-13286.

Petanjek Z, Judaš M, Kostović I, Uylings HBM (2008) Lifespan Alterations of Basal Dendritic Trees of Pyramidal Neurons in the Human Prefrontal Cortex: A Layer-Specific Pattern. *Cereb Cortex* 18:915-929.

Petanjek Z, Dujmović A, Kostović I, Esclapez M (2008) Distinct origin of GABA-ergic neurons in forebrain of man, nonhuman primates and lower mammals.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Bobić M, Orešković D, Knezović V, Pogledić I, Pupačić D, Vukšić M, Brugger CP, Prayer D, Petanjek Z, Jovanov Milošević N (2019) Histological and MRI Study of the Development of the Human Indusium Griseum. *Cerebral Cortex*.

Bicanic I, Hladnik A, Petanjek Z (2017) A Quantitative Golgi Study of Dendritic Morphology in the Mice Striatal Medium Spiny Neurons. *Front Neuroanat*. 2017 Apr 28;11:37. doi:10.3389/fnana.2017.00037. eCollection 2017.

Džaja D, Hladnik A, Bičanić I, Baković M, Petanjek Z (2014) Neocortical calretinin neurons in primates: increase in proportion and microcircuitry structure. *Front. Neuroanat*. 8:103. doi: 10.3389/fnana.2014.00103

Hladnik A, Džaja D, Darmopil S, Jovanov-Milošević N, Petanjek Z (2014). Spatio-temporal extension in site of origin for cortical calretinin neurons in primates. *Front Neuroanat*. 8:50. doi: 10.3389/fnana.2014.00050.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Head:

2006-2013: “Migration routes of hippocampal GABAergic neurons in monkey and man.” Ministry of Science Education and Sport (MZOS-108-1081870-1932), Croatia.

Participant (main collaborator):

2007-2010: UKF project „Neuroimaging, neurogenomics and pharmacogenomics of the frontal lobe connectivity: normal development and abnormalities in developmental cognitive disorders“ (P.I. dr. I. Kostović)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Head:

01.07.2014-30.06.2018: Croatian Science Foundation - HRZZ project “Microcircuitry of higher cognitive functions.” (HRZZ-5943)

Participant (main collaborator):

2013-2016: Zaklada Adris – HIMRICO (P.I. N. Jovanov Milošević)

01.12.2012-30.11.2015: Croatian Science Foundation - HRZZ project: Transcriptome development in human cortical neurons important for language and mirror network. (P.I. M. Judaš)



NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Jelka Petrak, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: retired

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Structure, methodology and functioning of scientific work 1 ; Telemedicine

BIOGRAPHY

Academic Degrees:

1970: School of Economics in Tourism, Dubrovnik, Croatia

1977: B.A., University of Zagreb, Faculty of Philosophy, Zagreb

1992: M.S., University of Zagreb, Croatia

1998: Ph.D., University of Zagreb, Croatia

Professional Experience:

1980-2014 in Central Medical Library;

Teaching Experience:

Principles of Research in Medicine, an obligatory for 5th year students at Zagreb University School of Medicine, since 1995;

Searching for Best Evidence, an elective for the 3rd year students at Zagreb University School of Medicine, since 2006;

How to Write, Publish and Communicate Research Results , 3rd year students at Faculty of Electrical Engineering, Zagreb University

Positions Held:

1982-1989: Serials Department Head, Central Medical Library

1989-2014: Head of the Central Medical Library,

Publications: 37 articles (13 CC journals), 10 book chapters

Citations: 96, 7 h-index (WoS CC)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: Oct. 11, 2011

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Vrkić, Dina; Škorić, Lea; Petrak, Jelka. Altmetrics of papers from scientific periphery reflect global trends: A case study of publications by Zagreb University School of Medicine. // Journal of academic librarianship. 43 (2017) , 6; 479-486

- Škorić, Lea; Petrak, Jelka. Hrvatski medicinski časopisi i standardi dobre uređivačke prakse: analiza uputa autorima. // Liječnički vjesnik : glasilo Hrvatskoga liječničkog zbora. 139 (2017) , 7-8; 204-210
- Škorić, Lea; Vrkić, Dina; Petrak, Jelka. Current state of open access to journal publications from the University of Zagreb School of Medicine. // Croatian medical journal. 57 (2016) , 1; 71-76
- Šember, Marijan; Petrak, Jelka. Radovi doktorskih kandidata s Medicinskog fakulteta Sveučilišta u Zagrebu u hrvatskim časopisima. // Liječnički vjesnik. 136 (2014) , 1-2; 18-21
- Franić, Miljenko; Dokuzović, Stjepan; Petrak, Jelka. Sustavni pregled – podloga medicini utemeljenoj na znanstvenim spoznajama. // Časopis za primijenjene zdravstvene znanosti. 2 (2016) , 2; 113-120
- Markulin, Helena; Petrak, Jelka. Informacijski mrežni servis: potpora knjižnice provođenju prakse utemeljene na znanstvenim dokazima. // Liječnički vjesnik. 136 (2014) , 1-2; 49-52
- Šember, Marijan; Utrobičić, Ana; Petrak, Jelka. Croatian Medical Journal citation score in Web of Science, Scopus, and Google Scholar. // Croatian Medical Journal. 51 (2010) , 2; 99-103
- Petrak, Jelka; Šember, Marijan; Granić, Davorka. Procjena publicističke produktivnosti Klinike za unutrašnje bolesti Medicinskog fakulteta i Kliničkog bolničkog centra Zagreb. // Liječnički vjesnik : glasilo Hrvatskoga liječničkog zbora. 134 (2012) , 3-4; 69-74
- Markulin, Helena; Petrak, Jelka. Book chapter: Medicina utemeljena na znanstvenim dokazima: stavovi zdravstvenog osoblja jedne kliničke bolnice. // Liječnički vjesnik : glasilo Hrvatskoga liječničkog zbora. 132 (2010) , 7-8; 218-221
- Stojanovski, Jadranka; Petrak, Jelka; Macan, Bojan. The Croatian national open access journal platform. // Learned Publishing. 22 (2009) , 4; 263-273
- Petrak, Jelka; Markulin, Helena; Matić, Tomislav. Information literacy in continuing professional development of medical practitioners: a Croatian example. // Health Information and Libraries Journal. 25 (2008) , 1; 46-49
- Kljaković-Gašpić, Marko; Petrak, Jelka; Rudan, Igor; Biloglav, Zrinka. For free or for fee? Dilemma of small scientific journals. // Croatian Medical Journal. 48 (2007) , 3; 292-299
- Pulišelić, Lea; Petrak, Jelka. Is it enough to change the language? A case study of Croatian biomedical journals. // Learned publishing. 19 (2006) , 4; 299-306
- Petrak, Jelka; Božikov, Jadranka. Journal publications from Zagreb University Medical School in 1995-1999.. // Croatian medical journal. 44 (2003) , 6; 681-689
- Mišak, Aleksandra; Petrak, Jelka; Pećina, Marko. Scientific biomedical journals in Croatia. // Croatian medical journal. 43 (2002) , 1; 8-15
- Bekavac, Anamarija; Petrak, Jelka; Buneta, Zoran. Citation behavior and place of publication in the authors from the scientific periphery: A matter of quality?. // Information processing & management. 30 (1994) , 1; 33-42

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- Vrkić, Dina; Škorić, Lea; Petrak, Jelka. Altmetrics of papers from scientific periphery reflect global trends: A case study of publications by Zagreb University School of Medicine. // Journal of academic librarianship. 43 (2017) , 6; 479-486
- Šember, Marijan; Škorić, Lea; Petrak, Jelka. Current impact of ceased journals: are they still alive?. // MALAYSIAN JOURNAL OF LIBRARY & INFORMATION SCIENCE. 22 (2017) , 1; 15-27

Škorić, Lea; Petrak, Jelka. Hrvatski medicinski časopisi i standardi dobre uređivačke prakse: analiza uputa autorima. // Liječnički vjesnik : glasilo Hrvatskoga liječničkog zbora. 139 (2017) , 7-8; 204-210

Škorić, Lea; Vrkić, Dina; Petrak, Jelka. Current state of open access to journal publications from the University of Zagreb School of Medicine. // Croatian medical journal. 57 (2016) , 1; 71-76

Franić, Miljenko; Dokuzović, Stjepan; Petrak, Jelka. Sustavni pregled – podloga medicini utemeljenoj na znanstvenim spoznajama. // Časopis za primijenjene zdravstvene znanosti. 2 (2016) , 2; 113-120

Markulin, Helena; Petrak, Jelka. Informacijski mrežni servis: potpora knjižnice provođenju prakse utemeljene na znanstvenim dokazima. // Liječnički vjesnik. 136 (2014) , 1-2; 49-52

Šember, Marijan; Petrak, Jelka. Radovi doktorskih kandidata s Medicinskog fakulteta Sveučilišta u Zagrebu u hrvatskim časopisima. // Liječnički vjesnik. 136 (2014) , 1-2; 18-21

Book chapter:

Macan, Bojan; Petrak, Jelka. Bibliometrijski pokazatelji za procjenu kvalitete znanstvenih časopisa // Hrvatski znanstveni časopisi : iskustva, gledišta, mogućnosti / Hebrang Grgić, Ivana (ur.).

Zagreb : Školska knjiga, 2015. Str. 37-53

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Indikatori znanosti i društvene promjene (Research indicators and social changes), 1990-1992 (collaborator)

Procjena učinka medicinskoga časopisa na hrvatsku medicinsku zajednicu (Assessment of impact of a medical journal on the Croatian medical community), 2002-2004 (collaborator)

Prijenos znanstveno utemeljenih medicinskih dokaza u kliničku praksu (Transfer of evidence from research to practice), 2007-2011 (leader)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ratimir Petrović, MD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Medical image analysis

BIOGRAPHY

Personal data: born in Zagreb, 23. X. 1957.

Clinical Hospital Center Zagreb

Nuclear Medicine and Radiation Protection Clinic

Rebro - Kišpatićeva 12, Zagreb

tel. 01/2333850

Biography and qualification list:

1. 2103 - to date - Head of Department of Nuclear Medicine at the Faculty of Medicine of Rijeka

2. 2009.-to-present - PhD in progress (title of protected and approved topics - "Changes in regional cerebral flow in patients with PTSD")

3. 2005. Ph.D. Postgraduate: Biomedicine and Healthcare

In 1993 he passed the Specialist Exam from Nuclear Medicine

5. In 1984. he passed a professional exam

6th 1976th-1982nd studied medicine at the Faculty of Medicine in Zagreb, graduated in 1982.

7th 1972nd to 1976th completed high school in Zagreb

8th 1964th to 1972nd finished elementary school in Zagreb

Professional experience:

1st 1,982th to 1,983th internship at the Psychiatric Hospital "Sveti Ivan", Jankomir

2nd 1,983th to 1,984th a secondary physician at the General Hospital "Bračak", DZ Zabok

3rd 1985th to 1988th a general practitioner at the Emergency Medical Service in Zagreb

4th 1989th to 1993rd Nuclear Medicine Specialist at the Clinical Institute for Nuclear Medicine and Radiation Protection, KBC Zagreb, Zagreb

5. 1993- to date a nuclear medicine specialist at the Clinical Institute for Nuclear Medicine and Radiation Protection, KBC Zagreb, Zagreb

6. Member of the Croatian Medical Association

7. Member of the Croatian Society for Nuclear Medicine

8. Member of the European Society for Nuclear Medicine

9. Member of the Croatian Association for the Application of Ultrasound in Nuclear Medicine

Participation in classes

1. Lecturer in the Elective subject "Physical Fluids and Edema" of the Medical Faculty in Zagreb

2. Lecturer on the methodological subject "Methods of Psychological Function and Behavioral Examination" in the field of Biomedicine and Health Sciences Postgraduate Study

3. Lecturer on the subject "Establishing Diagnosis of Brain Death and Support to Explosion of Solid Organs". Scientific Postgraduate Study in Biomedicine and Health

4. Lecturer on the subject "Neurobiology of Aging" in the field of Biomedicine and Health in Postgraduate Studies

Work area:

Total Nuclear Medicine Diagnosis with Special Focus on Functional Nuclear Medicine ("Neuroimaging")

New Nuclear Disease Diagnostic Searches Introduced:

1. Single-photon emission computerized tomography (SPECT) of the dopamine system with I-123 ioflupation (DaTSCAN) -

123I-FP-CIT (DaTSCAN, 123I-ioflupane) is a radiopharmaceutical used to diagnose Parkinson's disease and distinguish Parkinson's syndrome from essential tremor. This iodine-tagged ligand binds to dopamine protein transporter on presynaptic nigrostriatal endings of the nerve and serves to evaluate dopaminergic activity, integrity and / or degenerative changes.

2. Scintigraphy of sympathetic myocardial infarction with I-131 MIBG in Parkinsonism patients

Participation in congresses, courses and symposiums as invited lecturers (partial list):

Contribution to Nuclear-Medical Functional Imaging of the Brain in Cognitive Disorders Diagnosis (SPECT, PET) - Clinically Oriented View

First Croatian Congress "Dilemma in Neurology 2008" (organized by Neurology Clinic in Zagreb and Croatian Neurological Society), Opatija 2008

SPECT brain in differential diagnosis of cognitive disorders

V. CROATIAN NEUROLOGICAL CONGRESS with international participation, Vukovar 2009.

Functional Nuclear Medical Imaging of the Brain in Diagnosis of Dementia (SPECT, PET)

Recognition, Diagnosis and Dementia Treatment (Continuing Education Course organized by the Neurology Clinic at the Faculty of Medicine in Zagreb and Croatian Neurological Society) - Zagreb, January 2009

Seeing is believing - Brain SPECT Imaging in Dementias

6th International Alpe Adria Symposium - Portschach, Austria, May 2009

Dosage of scintigraphic methods of brain analysis in pediatrics

"Healing Metabolic Diseases 2009" (Main Subject "Central Nervous System") - October 16, 2009
(Postgraduate Course in Continuing Medical Education I Category)

Nuclear medicine in the brain

FUNCTIONAL DIAGNOSTICS OF DRIVE PORTRAIT; postgraduate course for continuing education of category I; Zagreb, 3.12.2009.

Functional depiction of dopamine synapse in nuclear medicine

FUNCTIONAL DIAGNOSTICS OF DRIVE PORTRAIT; postgraduate course for continuing education of category I; Zagreb, 3.12.2009.

How and How Early Functional (SPECT and PET) Dementia Diagnosis Helps Us

Section - Cognitive Neurology - Clinical Needs and Economic Justifiability

Second Croatian Congress "Dilemma in neurologia 2010" with international participation, Novigrad 2010.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Boris Radić, Vladimir Miletić, Ratimir Petrović, Petra Radić Bilateral middle cranial fossa arachnoidal cysts with temporal lobe agenesis associated with astrocytoma: fortuitous finding. *Acta Neurol Belg* 2015 Dec 26;115(4):703-5.

2. Dobrenić M; Huić D; Žuvić M; Grošev D; Petrović R; Samardžić T. Usefulness of low iodine diet in managing patients with differentiated thyroid cancer - initial results. *Radiotherapy and oncology*. 45 (2011), 3; 189-195

3. Kovačević I., Hajnšek S., Šepec B., Petelin Ž., Nanković S., Petrović R., Ozretić D., Bielen I., Epilepsija i demencija - kliničke manifestacije neurosifilisa. *Neurologia Croatica*. 59 (2010), 1-2; 73-81

4. Herceg, D, Kusačić-Kuna S.; Dotlić S, Petrović R, Bračić I, Horvatić-Herceg G, Pleština S, F-18 FDG PET Evaluation of a Rapidly Growing Extraocular Sebaceous Carcinoma. *Clinical nuclear medicine*. 34 (2009) , 11; 798-801

5. Horvatić Herceg G, Brčić I, Korsić M, Herceg D, Petrović R, Kusačić Kuna S, Dodig D., "Sandstorm" image: bone scintigraphy in pulmonary alveolar microlithiasis. *Eur J Nucl Med Mol Imaging*. 2009 Aug;36(8):1353. Epub 2009 May 27.

6. Sporis D, Hajnšek S, Boban M, Basić S, Petrović R, Rados M, Babić T., Epilepsy due to malformations of cortical development--correlation of clinical, MRI and Tc-99mECD SPECT findings., *Coll Antropol*. 2008 Jun;32(2):345-50.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS



- 1: Radić B, Petrović R, Golubić A, Bilić E, Borovečki F. EEG Analysis and Spect Imaging in Alzheimer's Disease, Vascular Dementia and Mild Cognitive Impairment. *Psychiatr Danub*. 2019 Mar;31(1):111-115. doi: 10.24869/psyd.2019.111. PubMed PMID: 30948698.
- 2: Radić B, Miletić V, Petrović R, Radić P. Bilateral middle cranial fossa arachnoidal cysts with temporal lobe agenesis associated with astrocytoma: fortuitous finding. *Acta Neurol Belg*. 2015 Dec;115(4):703-5. doi: 10.1007/s13760-015-0448-6. Epub 2015 Feb 26. PubMed PMID: 25715752.
- 3: Restek-Petrović B, Gregurek R, Petrović R, Orešković-Krezler N, Mihanović M, Ivezić E. Social functioning of patients with psychotic disorders in long-term psychodynamic group psychotherapy: preliminary research. *Psychiatr Danub*. 2014 Jun;26(2):122-6. PubMed PMID: 24909248.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Nela Pivac, PhD, senior scientist, re-elected

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Rudjer Boskovic Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Selected animal models of psychiatric disorders; Genomic approaches in biomedical and translational research

BIOGRAPHY

Professor Nela Pivac: DVM (1974), School of Veterinary Medicine, University of Zagreb; MSc (1987), School of Medicine, University of Zagreb; PhD (1994), School of Veterinary Medicine, University of Zagreb; one-year post doc study (October 1, 1996-October 1, 1997) at the Montreal Neurological Institute, McGill University, Montreal, Canada; Guest Professor of the Hungarian Academy of Sciences she has spent 3 months (October 1, 2017. January 1, 2018) in the Institute for Experimental Medicine in Budapest, Hungary. From 2001, she is a secretary of the Croatian Pharmacological Society; from 2016; secretary of the Collegium of Basic Medical Sciences in Croatian Academy of Medical Sciences; from 2012: senior scientist- reelected; from 2017; full professor; from May 31, 2016 regular member of the Croatian Academy of Medical Sciences; from 2017, Associate Editor in Progress in Neuro-Psychopharmacology and Biological Psychiatry. Awards: 2018. Annual award of the Ruđer Bošković Institute for researchers Gordana Nedic Erjavec, Matea Nikolac Perkovic, Dubravka Svob Strac and Neli Pivac for 2017. For excellent scientific paper (Nedic Erjavec G, Uzun S, Nikolac Perkovic M, Kozumplik O, Svob Strac D, Mimica N, Hirasawa-Fujita M, Domino E, Pivac N (2017) Cortisol in Schizophrenia: No Association with Tobacco Smoking, Clinical Symptoms or Antipsychotic Medication. *Progr Neuropsychopharmacol Biol Psychiatry* 77: 228–235); 2013: Award of the Croatian Academy of Science and Arts (HAZU) for the scientific achievements in the Republic of Croatia for the field of medical sciences; 2012: Award of the Academy of Medical Sciences of Croatia „Ante Šerčer“ for the author from Croatia for the best scientific article published in the year 2011 (Pivac N, Nikolac M, Nedić G, Mustapić M, Borovečki F, Hajnšek S, Presečki P, Pavlović M, Mimica N, Muck-Šeler D: Brain derived neurotrophic factor Val66Met polymorphism and psychotic symptoms in Alzheimer’s disease. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 35: 356-362. 2011); 2010. Annual award of the Director General of the Ruđer Bošković Institute for the exceptional success in science in the year 2010 given for the scientific research in the field in molecular medicine (for the article: Pivac N, Knežević A, Gornik O, Pučić M, Igl W, Peeters H, Crepel A, Steyaert J, Novokmet M, Redžić I, Nikolac M, Novković Hercigonja V, Dodig Ćurković K, Ćurković M, Nedić G, Muck-Seler D, Borovecki F, Rudan I, Lauc G (2011) Human plasma glycome in attention-deficit hyperactivity disorder and autism spectrum disorders. *Mol Cell Proteomics*, 10.1: 1-7); 2009. Award of the Croatian Parliament: State annual award of the Republic of Croatia for the year 2008, for the significant scientific achievements in the field of molecular basis and treatment of psychiatric disorders; 1986. State annual award for young scientists for scientific research; 1979. Award of the Dean of Veterinary Faculty, University of Zagreb for exceptional success in learning and study.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: November 29, 2017, full professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Svob Strac D, Nedic Erjavec G, Nikolac Perković M, Nenadic-Sviglin K, Konjevod M, Grubor M, **Pivac N** (2019) The association between HTR1B gene rs13212041 polymorphism and onset of alcohol abuse. *Neuropsychiatric Disease and Treatment*, prihvaćeno za tisak.
2. Török B, Sipos E, **Pivac N**, Zelena D (2019) Modelling posttraumatic stress disorders in animals. *Progr Neuro-Psychopharmacol Biol Psychiatry*, 90: 117–133.
3. Konjevod M, Tudor L, Svob Strac D, Nedic Erjavec G, Barbas C, Zarkovic N, Nikolac Perkovic M, Uzun S, Kozumplik O, Lauc G, **Pivac N** (2019) Metabolomic and glycomic findings in posttraumatic stress disorder. *Progr Neuropsychopharmacol Biol Psychiatry*, 88 (2019) 181–193.
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5. Babic Leko M, Willumsen N, Nikolac Perkovic M, Klepac N, Borovečki F, Hof PF, Sonicki Z, **Pivac N**, de Silva R, Simic G (2018) Association of MAPT haplotype-tagging polymorphisms with cerebrospinal fluid biomarkers of Alzheimer's disease: a preliminary study in a Croatian cohort. *Brain and Behavior*, prihvacen za tisak.
6. Kennedy J, Huang E, Hettige N, Zai G, Tomasi J, Huang J, Zai C, **Pivac N**, Nikolac Perkovic M, Tiwari A (2018) BDNF Val66Met polymorphism and clinical response to antipsychotic treatment in schizophrenia and schizoaffective disorder patients: a meta-analysis. *Pharmacogenomic J*, doi: 10.1038/s41397-018-0041-5.
7. Sagud M, Tudor L, Nikolac Perkovic M, Uzun S, Zivković M, Konjevod M, Kozumplik O, Vuksan Ćusa B, Švob Štrac D, Mihaljević-Peleš A, Rados Iva, Mimica N, Nedić Erjavec G, **Pivac N** (2018) Haplotypic and genotypic association of catechol-O-methyltransferase rs4680 and rs4818 polymorphisms and treatment resistance in schizophrenia. *Front Pharmacol* 9:705. doi: 10.3389/fphar.2018.00705
8. Sagud M, Vuksan-Ćusa B, Jakšić N, Mihaljević-Peleš A, Rojnić Kuzman M, **Pivac N**. (2018) Smoking in Schizophrenia: an Updated Review. *Psychiatr Danub* 30(Suppl 4):216-223.
9. Sagud M, Vlatkovic S, Svob Strac D, Sviben M, Zivkovic M, Vilibic M, Vuksan-Cusa B, Mihaljevic-Peles A, **Pivac N** (2018) Latent *Toxoplasma Gondii* infection is associated with decreased serum triglyceride to high-density lipoprotein cholesterol ratio in male patients with schizophrenia. *Comprehens Psychiatr* <https://doi.org/10.1016/j.comppsy.2018.02.002>
10. Hirasawa-Fujita M, Tudor L, Nikolac Perkovic M, Kozumplik O, Nedic Erjavec G, Uzun S, Svob Strac D, Konjevod M, Mimica N, Domino E, **Pivac N** (2018) Genotypic and haplotypic associations of catechol-O-methyltransferase (COMT) rs4680 and rs4818 with salivary cortisol in patients with schizophrenia. *Psychiatry Res* 259: 262-264.
11. Nedic Erjavec G, Konjevod M, Nikolac Perkovic M, Svob Strac D, Tudor L, Barbas C, Grune T, Zarkovic N, **Pivac N** (2018) Short overview on metabolomic approach and redox changes in psychiatric disorders. *Redox Biol* 14: 178-186.
12. Nikolac Perkovic M, Svob Strac D, Tudor L, Konjevod M, Nedic Erjavec G, **Pivac N** (2018) Catechol-O-methyltransferase, cognition and Alzheimer's disease. *Curr Alzheimer Res* 15:408-419.
13. Havelka Mestrovic A, Tudor L, Nikolac Perkovic M, Nedic Erjavec G, Kovacic Petrovic Z, Svob Strac D, Konjevod M, **Pivac N** (2018) Significant association between catechol-O-methyltransferase (COMT) Val^{158/108}Met polymorphism and cognitive function in veterans with PTSD. *Neurosci Lett* 666:38-43.
14. Uzun S, Kozumplik O, Celic I, **Pivac N**, Mimica N (2017) Occurrence of post-injection delirium/sedation syndrome after application of olanzapine long-acting injection during one year period. *Psychiatr Danub* 29: 497-499.
15. Bozek T, Blazekovic A, Nikolac Perkovic N, Gotovac Jercic K, Sustar A, Smircic-Duvnjak L, Fleming Outeiro T, **Pivac N**, Borovecki F (2017) The influence of dopamine-beta-hydroxylase and catechol

- O-methyltransferase gene polymorphism on the efficacy of insulin detemir therapy in patients with type 2 diabetes mellitus. *Diabetology & Metabolic Syndrome*, 9:97. doi: 10.1186/s13098-017-0295-0. eCollection 2017.
16. Vlatkovic S, Sagud M, Svob Strac D, Sviben M, Zivkovic M, Vilibic M, Vuksan-Cusa B, Mihaljevic-Peles A, **Pivac N** (2017) Increased prevalence of *Toxoplasma gondii* seropositivity in patients with treatment-resistant schizophrenia. *Schizophrenia Res, Letter to the Editor*, pii: S0920-9964(17)30472-3.
 17. Nedic Erjavec G, Uzun S, Nikolac Perkovic M, Kozumplik O, Svob Strac D, Mimica N, Hirasawa-Fujita M, Domino E, **Pivac N** (2017) Cortisol in Schizophrenia: No Association with Tobacco Smoking, Clinical Symptoms or Antipsychotic Medication. *Progr Neuropsychopharmacol Biol Psychiatry* 77: 228–235.
 18. Nikolac Perkovic M, Nedic Erjavec G, Svob Strac D, Uzun S, Kozumplik O, **Pivac N** (2017) Theranostic Biomarkers for Schizophrenia. *Int J Mol Sci*, 18, 733; doi:10.3390/ijms18040733
 19. Di Giovanni G, Svob Strac D, Sole M, Unzeta M, Tipton KF, Muck-Seler D, Bolea I, Della Corte L, Nikolac Perkovic M, **Pivac N**, Smolders IJ, Stasiak A, Fogel WA, De Deurwaerdere P (2016) Monoaminergic and histaminergic strategies and treatments in brain diseases. *Front Neurosci*, 10:541. doi: 10.3389/fnins.2016.00541
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 21. Kovacic Petrovic Z, Nedic Erjavec G, Nikolac Perkovic M, Peraica T, **Pivac N** (2016) No association between the serotonin transporter linked polymorphic region polymorphism and severity of posttraumatic stress disorder symptoms in combat veterans with or without comorbid depression. *Psychiatry Res* 244: 376–381.
 22. Sagud M, Nikolac Perkovic M, Vuksan-Cusa B, Maravic A, Svob Strac D, Mihaljevic Peles A, Zivkovic M, Kusevic Z, **Pivac N** (2016) A prospective, longitudinal study of platelet serotonin and plasma brain-derived neurotrophic factor concentrations in major depression: effects of vortioxetine treatment. *Psychopharmacology*, 233:3259–3267.
 23. Svob Strac D, **Pivac N**, Muck-Seler D (2016) The serotonergic system and cognitive function. *Transl Neurosci* 7: 35-49.
 24. **Pivac N**, Ramsay RR (2016) Editorial: MAO and aggression. *Progr Neuro-Psychopharmacol Biol Psychiatry* 69: 79-80.
 25. Sustar A, Nikolac Perkovic M, Nedic Erjavec G, Svob Strac D, **Pivac N** (2016) A protective effect of the BDNF Met/Met genotype in obesity in healthy Caucasian subjects but not in patients with coronary heart disease. *Eur Rev Med Pharmacol Sci*, 20: 3417-3426.
 26. Svob Strac D, Kovacic Petrovic K, Nikolac Perkovic M, Umolac D, Nedic Erjavec G, **Pivac N** (2016) Platelet monoamine oxidase type B, *MAOB* intron 13 and *MAOA-uVNTR* polymorphism and symptoms of posttraumatic stress disorder, *Stress*, 26: 1-12.
 27. Gotovac K, Nikolac Perkovic M, **Pivac N**, Borovecki F (2016) Biomarkers of aggression in dementia. *Progr Neuro-Psychopharmacol Biol Psychiatry* 69: 125-130
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 30. Britvić D, Antičević V, Kaliterna M, Lušić L, Beg, A, Brajević-Gizdić I, Kudrić M, Ćuk Ž, Krolo V, **Pivac N** (2015) Comorbidities with PTSD among combat veterans; 15 years postwar analysis. *Int J Clin Health Psychology* 15: 81-92;

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32. Svob Strac D, Muck-Seler D, **Pivac N** (2015) Neurotransmitter measures in the cerebrospinal fluid of patients with Alzheimer's disease: a review. *Psychiatria Danubina*, 27:14-24.
33. Svob Strac D, Nedic Erjavec G, Nikolac Perkovic M, Nenadic Sviglin K, Borovecki F, **Pivac N** (2015) Association of GABAA receptor $\alpha 2$ subunit gene (GABRA2) with alcohol dependence-related aggressive behavior. *Progr Neuro-Psychopharmacol Biol Psychiatry*, 63: 119–125;
34. Babic M, Svob Strac D, Muck-Seler D, **Pivac N**, Stanic G, Hof PR, Simic G (2014) Update on the core and developing cerebrospinal fluid biomarkers for Alzheimer's disease. *Croat Med J*, 55: 347-365,
35. Gotovac K, Hajnšek S, Bošnjak Pašić M, **Pivac N**, Borovečki F (2014) Personalized medicine in neurology: how far along are we? *Molecular Diagnosis & Therapy* 18: 17-24
36. Nedic Erjavec G, Nenadic Sviglin K, Nikolac Perkovic M, Muck-Seler D, Jovanovic T, **Pivac N** (2014) Association of gene polymorphisms encoding dopaminergic system components and platelet MAO-B activity with alcohol dependence and alcohol dependence-related phenotypes. *Progr Neuro-Psychopharmacol Biol Psychiatry*, 54: 321-327,
37. Nikolac Perkovic M, Nedic Erjavec G, Zivkovic M, Sagud M, Uzun S, Mihaljevic-Peles A, Kozumplik O, Muck-Seler D, **Pivac N** (2014) Association between the brain-derived neurotrophic factor Val66Met polymorphism and therapeutic response to olanzapine in schizophrenia patients. *Psychopharmacology*, 231; 3757-3764,
38. Bortolato M, **Pivac N**, Muck-Seler D, Nikolac Perkovic M, Pessia M, Giovanni GD (2013) The role of serotonin at the interface between aggression and suicide. *Neuroscience* 236: 160–185.
39. Mustapic M, Presecki P, **Pivac N**, Mimica N, Hof PR, Simic G, Folnegovic-Smalc V, Muck-Seler D (2013) Genotype-independent decrease in plasma dopamine beta-hydroxylase activity in Alzheimer's disease. *Progr Neuro-Psychopharmacol Biol Psychiatry*, 44: 84-99,
40. Nedic G, Nikolac Perkovic M, Nenadic Sviglin K, Muck-Seler D, Borovecki F, **Pivac N** (2013) Brain-derived neurotrophic factor Val⁶⁶Met polymorphism and alcohol-related phenotypes. *Progr Neuro-Psychopharmacol Biol Psychiatry*, 40: 193-198.
41. Nikolac M, Sagud M, Nedic G, Nenadic Sviglin K, Mihaljevic Peles A, Uzun S, Vuskan Cusa B, Kozumplik O, Zivkovic M, Mustapic M, Jakovljevic M, Pavlovic M, Muck-Seler D, Borovecki F, **Pivac N** (2013) The lack of association between catechol-O-methyl-transferase Val108/158Met polymorphism and smoking in schizophrenia and alcohol dependence. *Letter to the Editor. Psychiatry Res* 205: 179-180.
42. Nikolac Perkovic M, Kiive E, Nedic Erjavec G, Veidebaum T, Curkovic M, Dodig Curkovic K, Muck Seler D, Harro J, **Pivac N** (2013). The association between the catechol-O-methyltransferase Val108/158Met polymorphism and hyperactive-impulsive and inattentive symptoms in youth. *Psychopharmacology*, 230: 69-76
43. Nikolac Perkovic M, Mustapic M, Pavlovic M, Uzun S; Kozumplik O, Barisic I, Muck-Seler D, **Pivac N** (2013) Lack of association between brain-derived neurotrophic factor Val66Met polymorphism and body mass index change over time in healthy adults. *Neurosci Lett*, 545: 127131,
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47. Babic M, Nedic G, Muck-Seler D, Borovecki F, **Pivac N** (2012) Lack of association between dopamine receptor D4 variable numbers of tandem repeats gene polymorphism and smoking. *Neurosci Lett* 520:67-70,
48. Muck-Šeler D, **Pivac N**, Diksic M (2012) Acute treatment with fluvoxamine elevates rat brain serotonin synthesis in some terminal regions: An autoradiographic study, *Nucl Med Biol*, 39: 1053-1057.
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50. Pašalić D, Pauković P, Cvijetić S, Pizent A, Jurasović J, Milković-Kraus S, Dodig S, Muck-Šeler D, Mustapić M, **Pivac N**, Feher-Turković L, Pavlović M (2012). Prostate cancer in elderly Croatian men: 5-HT genetic polymorphisms and the influence of androgen deprivation therapy on osteopenia-a pilot study. *Gen Test Molec Biomarkers*, 16: 598-604,
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61. Nedić G, Borovečki F, Klepac N, Mubrin Z, Hajnšek S, Nikolac M, Muck-Šeler D, **Pivac N** (2011) Association Study of a Functional Catechol-O-Methyltransferase Polymorphism and Cognitive Function in Patients with Dementia. *Coll Antropol*, 35: Suppl 1, 79-84.
62. Nedic G, Nikolac M, Nenadic Sviglin K, Muck Seler D, Borovecki F, **Pivac N** (2011): Association study of a functional catechol-omethyltransferase (COMT) val108/158Met and suicide attempts in patients with alcohol dependence. *Int J Neuropsychopharmacol* 14: 377388.
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40. Nedic G, Nikolac Perkovic M, Nenadic Sviglin K, Muck-Seler D, Borovecki F, **Pivac N** (2013) Brain-derived neurotrophic factor Val⁶⁶Met polymorphism and alcohol-related phenotypes. *Progr Neuro-Psychopharmacol Biol Psychiatry*, 40: 193-198.
41. Nikolac M, Sagud M, Nedic G, Nenadic Sviglin K, Mihaljevic Peles A, Uzun S, Vuskan Cusa B, Kozumplik O, Zivkovic M, Mustapic M, Jakovljevic M, Pavlovic M, Muck-Seler D, Borovecki F, **Pivac N** (2013) The lack of association between catechol-O-methyl-transferase Val108/158Met polymorphism and smoking in schizophrenia and alcohol dependence. *Letter to the Editor. Psychiatry Res* 205: 179-180.
42. Nikolac Perkovic M, Kiive E, Nedic Erjavec G, Veidebaum T, Curkovic M, Dodig Curkovic K, Muck Seler D, Harro J, **Pivac N** (2013). The association between the catechol-O-methyltransferase Val108/158Met polymorphism and hyperactive-impulsive and inattentive symptoms in youth. *Psychopharmacology*, 230: 69-76
43. Nikolac Perkovic M, Mustapic M, Pavlovic M, Uzun S; Kozumplik O, Barisic I, Muck-Seler D, **Pivac N** (2013) Lack of association between brain-derived neurotrophic factor Val66Met polymorphism and body mass index change over time in healthy adults. *Neurosci Lett*, 545: 127131,
44. Nikolac Perkovic M, Nedic Erjavec G, Kocijan Hercigonja D, Hranilovic D, Curkovic M, Stefulj J, Dodig-Curkovic K, Muck-Seler D, **Pivac N** (2013) Association between the polymorphisms of the selected genes encoding dopaminergic system with ADHD and autism. *Letter to the Editor. Psychiatry Res*, 215:260–261.

45. Nikolac Perkovic M, Pucic Bakovic M, Kristic J, Novokmet M, Huffman JE, Vitart V, Hayward C, Rudan I, Wilson JE, Campbell H, Polasek O, Lauc G, **Pivac N** (2013) The association between galactosylation of immunoglobulin G and body mass index. *Progr Neuro-Psychopharmacol Biol Psychiatry*, 48:20-25
46. Sagud M, Mihaljevic-Peles A, Uzun S, Vuksan Cusa B, Kozumplik O, Kudlek-Mikulic S, Mustapic M, Barisic I, Muck-Seler D, **Pivac N** (2013) The lack of association between components of metabolic syndrome and treatment resistance in depression. *Psychopharmacology* 230: 15-21

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

July 1st, 2018-July 1st, 2021; collaborator: „Early detection of Alzheimer's disease with methylation status of candidate genes in liquid biopsies cfDNA, PI Alja Videtič Paska, basic project. Slovenian Research Agency, J3-9293

October 1st, 2017- January 1st, 2018. winner of the MTA DISTINGUISHED GUEST SCIENTISTS FELLOWSHIP PROGRAMME IN HUNGARY , Budapest, Hungary, Institute for Experimental Medicine

2017-2021; collaborator: offset project CRO_A-00033 "Technology & Know-how Transfer in Metabolomics and Establishment of Latest Scientific Equipment in Zagreb", financed by Patria, Finland, PI Neven Žarković

2016-2017; collaborator: „Differential scanning calorimetry based diagnostics of Alzheimer's type dementia“; The Croatian Agency for SMEs, Innovation and Investments (HAMAG-BICRO), PI Ivo Crnolatac

2016 PI: Rudjer Boskovic Institute Award for the competitive international project 2016-PIVAC

2016-2020 PI: Croatian Science Foundation: Young researchers' career development project – training of new doctoral students: for PhD student Lucija Tudor

2015-2019 PI: „Genomic and glycomic biomarkers of PTSD“, Croatian Science Foundation

2015-2017 collaborator on the project „The influence of religiosity on treatment response in depression: clinical and biological markers, PI Marine Šagud; funding source: School of Medicine University of Zagreb

2014-2017 collaborator on the project „Indicators of therapeutic response in schizophrenia“; PI Marina Šagud; funding source: School of Medicine University of Zagreb

2015-2019: “Multidisciplinary metrics for soldier resilience prediction and training“, NATO Science for Peace and Security Programme: PI: Kresimir Cosic; co-director Nela Pivac

2014-2016: „The role of 5-HT6 receptors in Alzheimer’s disease“ (funding source: Croatian Ministry of Science, Education and Sports; PIs: Suzana Uzun and Zvezdan Pirtovsek); Croatian-Slovenian bilateral project

2014-2017: „The association between stress, genetic variants of the catechol-O-methyltransferase (COMT) and mu opioid receptor gene (OPRM1) polymorphisms and tobacco smoking in patients with schizophrenia.“; CRO-USA collaborative project among University of Michigan – USA, Rudjer Boskovic Institute, Croatia and University Psychiatric Hospital Vrapce, Zagreb, Croatia (PIs: Nela Pivac and Edward F Domino)

2011-2014; collaborator on the project: „Detection and tracking of biological markers for early therapeutic intervention in sporadic Alzheimer's disease“, supported by the Croatian Science Foundation (PI:Goran Šimić)

2011-2015; member of the COST project „Structure-based drug design for diagnosis and treatment of neurological diseases: dissecting and modulating complex function in the monoaminergic systems of the brain“, Action CM1103; PI: Rona Ramsay

2007 – 2014: PI: „Molecular basis and treatment of psychiatric and stress related disorders“ supported by the Croatian Ministry of Science, Education and Sport, grant No 098-0982522-2455

2007 – 2014: collaborator on: „Pharmacogenomics and proteomics of serotonergic and catecholaminergic system“ supported by the Croatian Ministry of Science, Education and Sport, grant No 098-0982522-2457 (PI: Dorotea Muck-Seler)

2010-2008; PI: bilateral Croatian-Slovenian project: „Genetic factors as markers of suicide“

2010-2008: collaborator on the project and the member of the Coordination Committee of the project Integrating and strengthening genomic research in South-Eastern Europe (INTEGERS), FP7-REGPOT-2007-1 (PI: Fran Borovečki)

2007-2008; collaborator on the bilateral Croatian-Slovenian project: „Frontotemporal dementia and motor neuron disease“ (PI: Rajka Liščić)

2006-2001: project advisor: „Biological basis of mental disorders“ supported by Croatian Ministry of Science, Education and Sport, grant No 1 0 (PI: Miro Jakovljević).

2006-2003; technological project advisor: „Integrative diagnostic model for the follow-up of stress related disorders“ supported by Croatian Ministry of Science, Education and Sport, grant No TP-01/01201 0 (PI: Dragica Kozarić-Kovačić).

2006-2002: collaborator: „Neuropharmacology of serotonergic system “ supported by the Croatian Ministry of Science, grant No 0098088 (PI: Dorotea Muck-Seler)

2003-2000: collaborator: „The effect of TMAZ on serotonergic receptors“ supported by the Croatian Ministry of Science, grant No 00981499. (PI: Dorotea Muck-Seler)

1997-1996: collaborator on the project MRC of Canada (MA-10232); and US Public service (RO1-NS29629), “Studies of the effects of different antidepressants on the serotonin synthesis rate in the rat brain“ (PI: Mirko Dikšić).

2001-1996: collaborator on the project: “Neuropharmacology of GABA and 5-HT system” in the Program of Croatian Brain Research Institute, Medical School, University of Zagreb (PI Danka Peričić).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

July 1st, 2018-July 1st, 2021; collaborator: „Early detection of Alzheimer's disease with methylation status of candidate genes in liquid biopsies cfDNA, PI Alja Videtič Paska, basic project. Slovenian Research Agency, J3-9293

October 1st, 2017- January 1st, 2018. winner of the MTA DISTINGUISHED GUEST SCIENTISTS FELLOWSHIP PROGRAMME IN HUNGARY , Budapest, Hungary, Institute for Experimental Medicine

2017-2021; collaborator: offset project CRO_A-00033 "Technology & Know-how Transfer in Metabolomics and Establishment of Latest Scientific Equipment in Zagreb", financed by Patria, Finland, PI Neven Žarković

2016-2017; collaborator: „Differential scanning calorimetry based diagnostics of Alzheimer's type dementia“; The Croatian Agency for SMEs, Innovation and Investments (HAMAG-BICRO), PI Ivo Crnolatac

2016 PI: Rudjer Boskovic Institute Award for the competitive international project 2016-PIVAC

2016-2020 PI: Croatian Science Foundation: Young researchers' career development project – training of new doctoral students: for PhD student Lucija Tudor

2015-2019 PI: „Genomic and glycomic biomarkers of PTSD“, Croatian Science Foundation

2015-2017 collaborator on the project „The influence of religiosity on treatment response in depression: clinical and biological markers, PI Marine Šagud; funding source: School of Medicine University of Zagreb

2014-2017 collaborator on the project „Indicators of therapeutic response in schizophrenia“; PI Marina Šagud; funding source: School of Medicine University of Zagreb

2015-2019: “Multidisciplinary metrics for soldier resilience prediction and training“, NATO Science for Peace and Security Programme: PI: Kresimir Cosic; co-director Nela Pivac

2014-2016: „The role of 5-HT6 receptors in Alzheimer’s disease“ (funding source: Croatian Ministry of Science, Education and Sports; PIs: Suzana Uzun and Zvezdan Pirtovsek); Croatian-Slovenian bilateral project

2014-2017: „The association between stress, genetic variants of the catechol-O-methyltransferase (COMT) and mu opioid receptor gene (OPRM1) polymorphisms and tobacco smoking in patients with schizophrenia.“; CRO-USA collaborative project among University of Michigan – USA, Rudjer Boskovic Institute, Croatia and University Psychiatric Hospital Vrapce, Zagreb, Croatia (PIs: Nela Pivac and Edward F Domino)

2011-2014; collaborator on the project: „Detection and tracking of biological markers for early therapeutic intervention in sporadic Alzheimer's disease“, supported by the Croatian Science Foundation (PI:Goran Šimić)

2011-2015; member of the COST project „Structure-based drug design for diagnosis and treatment of neurological diseases: dissecting and modulating complex function in the monoaminergic systems of the brain“, Action CM1103; PI: Rona Ramsay

2007 – 2014: PI: „Molecular basis and treatment of psychiatric and stress related disorders“ supported by the Croatian Ministry of Science, Education and Sport, grant No 098-0982522-2455

2007 – 2014: collaborator on: „Pharmacogenomics and proteomics of serotonergic and catecholaminergic system“ supported by the Croatian Ministry of Science, Education and Sport, grant No 098-0982522-2457 (PI: Dorotea Muck-Seler)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

6

Zrnka Kovačić: Serotonin transporter gene promoter polymorphism in patients with posttraumatic stress disorder, School of Medicine University of Zagreb, supervisors Neven Henigsberg and Nela Pivac; PhD defended on December 21st, 2010.

Gordana Nedić Erjavec: Monoamine oxidase type B, catechol-O-methyltransferase, dopamine beta-hydroxylase and dopamine receptor D4 in alcoholism and alcohol-related phenotypes. Josip Juraj Strossmayer University of Osijek, University of Dubrovnik, Ruđer Bošković Institute, University Postgraduate Interdisciplinary Doctoral Study of Molecular biosciences, supervisor Nela Pivac; PhD defended on April 15, 2013.

Antonija Puljić: The impact of the disrupted monoamine homeostasis on lipid metabolism, activity of the monoamine oxidase type B and serotonin concentration in platelets, Faculty of Sciences, University of Zagreb, supervisors Darko Marčinko and Nela Pivac, PhD defended on October 31, 2014.



Matea Nikolac Perković: The role of brain derived neurotrophic factor in dementia, Josip Juraj Strossmayer University of Osijek, University of Dubrovnik, Ruđer Bošković Institute, University Postgraduate Interdisciplinary Doctoral Study of Molecular biosciences, supervisor Nela Pivac, PhD defended on May 21, 2015.

Aleksandra Šustar: The role of BDNF in the development of coronary heart disease in obese subjects. Faculty of Natural Sciences University of Zagreb, supervisor Nela Pivac, PhD defended on June 10, 2015.

Marijana Turčić: Distribution of the brain derived neurotrophic factor (BDNF) genotypes and serum level of N-glycans as predictors of overweight in children. School of Medicine University of Zagreb, supervisors Fran Borovecki and Nela Pivac; PhD defended on October 2, 2015.

Josip Podobnik: The association of the catechol-O-methyltransferase and monoamine oxidase type B gene polymorphisms and platelet monoamine oxidase type B activity with aggressive behavior and psychopathological characteristics in adolescents in correctional institutions, School of Medicine University of Zagreb, supervisors Nela Pivac and Darko Marčinko; PhD defended on November 11, 2017.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: primarijus Sanja Poduje

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: KBC Sestre milosrdnice

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Telemedicine

BIOGRAPHY

Education:

1988-1994 - University of Zagreb Faculty of Medicine ; 1995-1997 - Internship, Zagreb University Hospital Center ; 2000-2005 - Specialisation in dermatology, Sestre milosrdnice University Hospital Center ; 2000-2005 - Specialist postgraduate studies in dermatovenereology
2013- present - Postgraduate doctoral studies in dental medicine, University of Zagreb School of Dental Medicine
2016 - Title of *Primarius* acquired
2018. Subspecialisation from dermatooncology

ADDITIONAL EDUCATION:

1993 Student exchange programme, Medical Centre Rennes, France; 1996. postgraduate education at the Department of Obstetrics, Royal Free Hospital, London, UK
2007 Visiting the Department of Dermatology, Goethe Clinic, Frankfurt, Germany
2008. International course in dermatoscopy, Graz, Austria
2018. „Nail surgery“ EADV course Brisel, Belgium, 2018. Education in nail surgery, Dermatology Clinic, Lyon, France; 2019. Dermatooncology school, EADO, Berlin, Germany

WORK EXPERIENCE:

1995-1997 Zagreb University Hospital Center - internship
1997 -1998. Peščenica Health Centre - general practitioner
1998.-1999. MILSING d.o.o. - product manager
1999.-2000. “Osiguranje Zagreb” Clinic - general practitioner
2000 -2005 “Osiguranje Zagreb” Clinic - specialization in dermatovenereology
Since 2005 Sestre milosrdnice University Hospital Centre - Department of Dermatology, specialist in dermatovenereology, subspecialisation: dermatological oncology - work at the Melanoma Reference Centre

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Kotrulja L, Šitum M, **Poduje S**, Meštrović-Štefekov J, Lugović L. Telemedicine in Dermatology. I. Telemedicine Congress with the international participation, Makarska, May 2002

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Musani V, Ozretić P, Trnski D, Sabol M, Poduje S, Tošić M i sur. Potential hot spot for de novo mutations in PTCH1 gene in Gorlin syndrome patients: a case report of twins from Croatia. Croat Med J 2018;59:20-4

Poduje S, Huljev D, Cubrilović Z, Bosnjak J. Squamous cell carcinoma--case report, *Acta Med Croatica*. 2012 Oct;66 Suppl 1:123-6.

Cavka V, Šitum M, Poduje S, Brtan A, Mandusić N, Cubrilović Z. Pyoderma gangrenosum: case report. *Acta Med Croatica*. 2012 Oct;66 Suppl 1:25-8

Poduje S, Šitum M, Buljan M. Dermatoskopija u dijagnostici melanoma s posebnim osvrtom na ulogu dermatoskopije u diferencijalnoj dijagnozi melanoma; U : Šitum M. i suradnici. *Melanom*. Zagreb: Medicinska naklada; 2016:139-61.

Šitum M, Buljan M, Poduje S. Prognostički čimbenici kod melanoma; U: Šitum M i suradnici *Melanom*. Zagreb: Medicinska naklada; 2016:139-61.

Šitum M, Buljan M, Poduje S. Smjernice za praćenje bolesnika s melanomom; U: Šitum M i suradnici *Melanom*. Zagreb: Medicinska naklada; 2016:139-61.

Poduje S, Šitum M, Buljan M. Lokalna i opća terapija, U: Šitum M i suradnici. *Dermatovenerologija*. Zagreb: Medicinska naklada; 2017:

Poduje S. Ciste i sinusi, U: Šitum M i suradnici. *Dermatovenerologija*. Zagreb: Medicinska naklada; 2017: 353-57

Poduje S. dobroćudni tumori kože. U: Šitum M i suradnici. *Dermatovenerologija*. Zagreb: Medicinska naklada; 2017: 358-66.

Poduje S. Vaskularni tumori i malformacije kože, usnica i sluznice usne šupljine. U: Šitum M i suradnici. *Dermatovenerologija*. Zagreb: Medicinska naklada; 2017: 367-372.

Poduje S. Prekanceroze. U: Šitum M i suradnici. *Dermatovenerologija*. Zagreb: Medicinska naklada; 2017: 373-75

Sanja Poduje, Marija Buljan, Mirna Šitum: Priručnik Osnove dermatoskopije. Klinika za kožne i spolne bolesti KBC „Sestre milosrdnice“, Zagreb veljača 2015. g.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Author and co-author of several scientific articles and book chapters in the field of dermatology and dermatooncology.

Regular participant in symposia and conferences as a speaker or poster presenter.

Since 2013, leader and lecturer in more than ten dermatoscopy courses for specialists and residents and a general practitioners

Co-organizer and lecturer at the courses organized by the European Dermatological Society for residents and specialists from across Europe, three courses have been held so far:

- Poduje S. Melanoma epidemiology, aetiology and risk factors. EADV Fostering training course: Melanoma update and short course of dermoscopy, Zagreb, Croatia, 14-16 March 2014.

- Poduje S. Introduction, Basic dermatoscopic features, Dermatoscopy in early diagnosis of melanoma. EADV Fostering training course: Melanoma update and short course of dermoscopy, Zagreb, Croatia, 14-16 March 2014.
- Poduje S. Basics of dermoscopy- part I (melanocytic lesions): Structures and histology correlations; Dermoscopic features of melanocytic lesions, Melanoma- specific structures in dermoscopy; Dermatoscopy of melanocytic lesions: practical part (cases and interactive analysis), EADV Resident Course: Dermatoscopy, 19-21/06/2015, Zagreb, Croatia
- Poduje S. Introduction to dermoscopy, Basics of dermoscopy: structures and histopathological correlations – part 1, Dermoscopic equipment – Summer School: Dermatoscopy, Resident EADV Course, 5.9. June 2017, Vis, Croatia

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2014 - 2016 Clinical trial M025616, Roche d.o.o. - sub-investigator “A Single Arm, Open-label, Phase II, Multicentre Study, to Assess the Safety of Vismodegib (GDC-0449) in Patient With Locally Advanced or Metastatic Basal Cell Carcinoma (BCC)”

2018. - Research project of the Croatian Foundation for Science in cooperation with the Ruđer Bošković Institute; G1I code regulation in tumors dependent on BRAF / NRAS mutations

2016 - as a dermatologist I co-operate in a study conducted at the Clinic for Neurology KBC SM: Multicenter, randomized, double-blind, parallel-group, active-controlled, superiority study to compare the efficacy and safety of ponesimod to teriflunomide in subjects with relapsing multiple sclerosis

2008 - present Active participation in the organisation and implementation of the public Preventive Health Programme for Early Detection of Melanoma and Other Skin Cancers “EUROMELANOMA DAY” (organised by the Croatian Dermatology and Venereology Society as part of the Croatian Medical Association, the Melanoma Referral Centre as part of the Ministry of Health Republic of Croatia and the European Academy of Dermatology and Venereology)

2012 - present Public prevention campaign “Act Now”, organized by the Zagreb City Office for Health, active participation in the organisation and implementation of the campaign

2016 and 2017 as a lecturer I participate in educating elementary and high school teachers about the impact of UV radiation on the skin. Education is organized in cooperation with the Croatian Institute for Public Health and the Education Agency.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE



ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Frano Poljak, MSc (phys.)

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Analysis of medical images

BIOGRAPHY

Date of birth: 04/03/1991

Education:

2009-2016: University of Zagreb, Faculty of Science, Department of Physics

Work experience:

2016- present: medical physicist, Division of Medical Physics, Department of Nuclear Medicine and Radiation Protection, University Hospital Centre Zagreb

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Marijana Popović Hadžija, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Molecular genetics of gastrointestinal tumors

BIOGRAPHY

Name and surname: Marijana Popović Hadžija

Date and place of birth: June 25th, 1966, Zagreb, Croatia

Identification number from records of scientific workers: 172455

Address: Ruđer Bošković Institute, Division of Molecular Medicine, Laboratory for mitochondrial bioenergetics and diabetes (LaMBDa)

Bijenička cesta 54, Zagreb

Telefon / Fax: 01 4561 064 / 01 456 10 10

e-mail: mhadzija@irb.hr

Education:

1973–1981 – elementary school in Zabok

1981-1984 – high school in Zabok

1984 – 1989 - the Faculty of Natural Sciences and Mathematics – Molecular Biology, University of Zagreb,

1989 – 1992 - postgraduate study of Molecular Biology at the Faculty of Natural Sciences and Mathematics, University of Zagreb

1992 – defended the Master of Sciences thesis entitled “Condition of cell-free transplantation of murine myeloid leukemia” under the guidance of Dr. Sc. Marija Poljak-Blaži, senior scientist, R. Boskovic Institute

1998 – received Ph.D. in cellular and molecular biology from the Faculty of Natural Sciences and Mathematics, University of Zagreb, under the guidance of Dr. Sc. Marija Poljak-Blaži, senior scientist, R. Boskovic Institute (Title of thesis “Studies of the causes and processes of malignant transformation on mouse model of myeloid leukemia”)

Training:

1992 – fellowship for FEBS advanced course “Recombinant DNA technology in human medicine”, Skopje, Mecedonia, 14.-26. September

1993 – education at the Institute fur Immunologie GSF, Munnich, Germany, laboratorry of Prof. dr. Stephan Thierfelder, May-July

2006 – workshop „The protein arrays for biomarker discovery and protein expression profiling“, Prague, Czech Republic , 25. September

2011 – course „Statistical data analysis in biomedical investigations“, Rijeka, 7.-10. April
2011 – workshop „Critical evaluation of statistical analysis in scientific paper“, Rijeka, 10. June
2011- transMedRi workshop „Translational Cancer Research“, Rijeka, 10. November
2013 - „Laboratory Animal Science Course“, Zagreb, 1.-9. February
2014 – „InnoMol Bioimaging Workshop“, Zagreb, 20.-22. October
2014 – workshop „Positron emission tomography on Ruder Boskovic Institute: a new method in investigation of animal models“, Zagreb, 12.-14. November
2015 – „High-resolution ultrasound imaging Vevo 2100 imaging platform hands-on workshop“, Zagreb, 9.-10. June
2015 – „High-resolution ultrasound imaging Vevo 2100 imaging platform hands-on workshop“, 9.-10. lipanj, Zagreb
2016 – workshop „The InnoMol new platforms for molecular solutions in research and development“, Zagreb, 11.-12. May,
2016 – workshop „Dynamics of the cytoskeleton“, Zagreb, 14.-15. July

Work experiences and positions:

1. 1.-16.9.1990.- worked at the Faculty of Natural Sciences and Mathematics, University of Zagreb, Plant physiology, prof. dr. Ivan Regula
17. 9. 1990 - today – work at Ruđer Bošković Institute, Division of Molecular Medicine
1990 – Ph.D. student
1999 – Ph. D. Senior Research Assistant, Laboratory for molecular endocrinology and transplantation
2005 – Research Associate, Laboratory for molecular endocrinology and transplantation
2010 – Research Associate (2nd), Laboratory for molecular endocrinology and transplantation, Zavod za molekularnu medicinu, Institut Ruđer Bošković
2016 – today – Senior Research Associate, Laboratory for mitochondrial bioenergetics and diabetes

Scientific publications

-total 32 scientific articles
- 29 published in journals cited in basis Thomson Reuters Web of Science Core Collection (WoSCC) or Current Contents (CC)
- 3 published in journals cited in base Scopus
-3 internationally recognized patent

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: November, 20. 2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Pavelić K., Križanac Š., Čačev T., Popović Hadžija M., Crnić I., Levanat S., Kapitanović S: Aberration of FHIT gene associated with increased tumor proliferation and decreased apoptosis – clinical evidence in lung and head and neck carcinomas. *Molecular Medicine* 2001, 7, 442-453.

Popović Hadžija M., Kapitanović S., Radošević S., Čačev T., Mirt M., Kovačević D., Lukač J., Hadžija M., Spaventi R., Pavelić K: Loss of heterozygosity of DPC4 tumor suppressor gene in human sporadic colon cancer. *Journal of Molecular Medicine* 2001, 79, 128-132.

Popović Hadžija M., Radošević S., Kovačević D., Lukač J., Hadžija M., Spaventi R., Pavelić K., Kapitanović S: Status of the DPC4 tumor suppressor gene in sporadic colon carcinoma from Croatian patients: identification of a novel somatic mutation. *Mutation Research* 2004, 548, 61-73.

Popović Hadžija M., Hrašćan R., HerakBosnar M., Zeljko Ž., Hadžija M., Čadež J., Pavelić K., Kapitanović S: Infrequent alteration of the DPC4 tumor suppressor gene in renal cell carcinoma. *Urological Research* 2004, 32, 229-235.

Kapitanović S., Čačev T., Berković M., Popović Hadžija M., Radošević S., Seiwert S., Spaventi Š., Pavelić K., Spaventi R. nm23-H1 expression and loss of heterozygosity in colon adenocarcinoma. *J Clinical Pathology Molecular Pathology* 2004, 57, 1312-1318.

Popović Hadžija M., Korolija M., Jakić Razumović J., Pavković P., Hadžija M., Kapitanović S. K-ras and Dpc4 mutations in chronic pancreatitis: case series. *Croatian Medical Journal* 2007, 48, 218-24.

Korolija M., Pavlić Renar. I., Hadžija M., Pape Medvidović E., Pavković P., Jokić M., Popović Hadžija M. Association of PTPN22 C1858T and CTLA-4 A49G Polymorphisms with Type 1 Diabetes in Croats. *Diabetes Research and Clinical Practice* 2009, 86, 3, e4-e57.

Korolija M., Hadžija M., Pape Medvidović E., Pavković P., Kaptanović S., Pavlić Renar I., Popović Hadžija M. Genetic evaluation of the TNF-alpha -238G>A and -308 G>A promoter polymorphisms in Croatian patients with type I diabetes. *Human Immunology* 2010, 71, 1228-1232.

Kopriva I., Hadžija M., Popović Hadžija M., Korolija M., Cichocki A. Rational variety mapping for contrast-enhanced nonlinear unsupervised segmentation of multispectral images of unstained specimen. *The American Journal of Pathology* 2011, 179, 547-554.

Mustapić M., Popović Hadžija M., Pavlović M., Pavković P., Presečki P., Mrazovac M., Mimica N., Korolija M., Pivac N., Muck-Seler D. Alzheimer's disease and type 2 diabetes: the association study of

polymorphisms in tumor necrosis factor-alpha and apolipoprotein E genes. *Metabolic Brain Disease* 2012, 27, 507-512.

Nikolić A., Čačev T., Aralica G., Popović Hadžija M., Kapitanović S., Radojković D. Mononucleotide repeats in the SMAD4 gene promoter in colon carcinoma tissue of Croatian patients. *Experimental and Molecular Pathology* 2015, 98, 133-135.

Kopriva I., Popović Hadžija M., Hadžija M., Aralica G. Offset-sparsity decomposition for automated enhancement of color microscopic image of stained specimen in histopathology. *Journal of Biomedical Optics* 2015, 20 (7).

Siketić Z., Bogdanović Radović I., Jakšić M., Popović Hadžija M., Hadžija M. Submicron mass spectrometry imaging of single cells by combined use of megaelectron volt time-of-flight secondary ion mass spectrometry and scanning transmission ion microscopy. *Applied physics letters*, 2015, 107.

Kopriva I., Popović Hadžija M., Hadžija M., Aralica G. Unsupervised segmentation of low-contrast multichannel images: discrimination of tissue components in microscopic images of unstained specimens. *Scientific Reports* 2015, 5, 11576-1-1157613.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Nikolić A., Čačev T., Aralica G., Popović Hadžija M., Kapitanović S., Radojković D. Mononucleotide repeats in the SMAD4 gene promoter in colon carcinoma tissue of Croatian patients. *Experimental and Molecular Pathology* 2015, 98, 133-135.

Sobočanec S., Šarić A., Mačak Šafranko Ž., Popović Hadžija M., Abramić M., Balog T. The role of 17 Beta-estradiol in the regulation of antioxidant enzymes via the nrf2keap1 pathway in livers of CBA/h mice. *Life Sciences* 2015, 130, 57-65.

Kopriva I., Popović Hadžija M., Hadžija M., Aralica G. Offset-sparsity decomposition for automated enhancement of color microscopic image of stained specimen in histopathology. *Journal of Biomedical Optics* 2015, 20 (7).

Siketić Z., Bogdanović Radović I., Jakšić M., Popović Hadžija M., Hadžija M. Submicron mass spectrometry imaging of single cells by combined use of megaelectron volt time-of-flight secondary ion mass spectrometry and scanning transmission ion microscopy. *Applied physics letters* 2015, 107.

Sobočanec S., Filić V., Matovina M., Majhen D., Mačak Šafranko Ž., Popović Hadžija M., Krsnik Ž., Gudan Kurilj A., Šarić A., Abramić M., Balog T. Prominent role of exopeptidase DPP III in estrogen mediated protection against hyperoxia in vivo. *Redox Biology* 2016, 8, 149-159.



Kopriva I., Popović Hadžija M., Hadžija M., Aralica G. Unsupervised segmentation of low-contrast multichannel images: discrimination of tissue components in microscopic images of unstained specimens. Scientific Reports 2015, 5, 11576-1-1157613.

Pinteric M., Podgorski I., Sobocanec S., Popovic Hadzija M., Paradzik M., Dekanic A., Marinovic M., Halasz M., Beluzic R., Davidovic G., Ambriovic Ristov A., Balog T. De novo expression of transfected sirtuin 3 enhances susceptibility of human MCF-7 breast cancer cells to hyperoxia treatment. Free Radical Research, 2018 <https://doi.org/10.1080/10715762.2018.1462495>

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1991-1996. Eksperimentalni diabetes, transplantacija i imunomodulacija, 3-01-141;
1996-2002 "Causes and consequences of transplanting pancreatic endocrine tissue" 00981109;
2002-2006 "Embryonic cell production of pancreatic –like islets" 0098098;
2006-2012 "Obtaining the structures like Langerhans islets from mouse stem cells" 0982464-2460
2012-2015- "Nonlinear sparse component analysis with applications in chemometrics and pathology" (09.01/232)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2012-2015- "Nonlinear sparse component analysis with applications in chemometrics and pathology" (09.01/232), project leader dr. sc. Ivica Kopriva
2016- 2019 - "Sirtuin3 as a mediator of mitochondrial function in estrogen-dependent resistance to hyperoxia and high-fat diet", (IP-09-2014), project leader, dr. sc. Tihomir Balog
2017-2020 - "Structured Decompositions of Empirical Data for Computationally-Assisted Diagnoses of Disease" , project leader dr. sc Kopriva

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Slavica Potočki (Ribar), Associate professor.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of Chemistry and Biochemistry,
School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical methods in
biomedical research

BIOGRAPHY

Education and training 1986.-1991. Faculty of Science, University of Zagreb (BSc/M Biol Chem, Biology and Chemistry); 1996.-2000. Scientific postgraduate study Faculty of Science, University of Zagreb (degree obtained: master of natural sciences, biology/toxicology)

2005. degree obtained: PhD, scientific field of chemistry/chemistry

Training: 1998. Instituto tossine e micotossine, Bari, Italy, 2015. HPLC i UPLC: Troubleshooting Workshop + DSP Workshop, Zagreb; 2015. New Column Technologies and Application Possibilities from Waters, Zagreb; 2016. Breaking bad chromatography habits, Zagreb;

2016. Columns and preparation of samples for liquid chromatography, Zagreb; 2018. Great Shimadzu tech tour, workshop on successful analysis and future challenges, Zagreb.

Professional experience 1996.-2000. young teaching assistant at Department of Chemistry and Biochemistry, School of Medicine, University of Zagreb.

2000.-2005. teaching assistant

2005.-2008. senior teaching assistant

2008.-2017. Assistant Professor

2017.- current Associate professor.

Actively involved in teaching of chemistry and biochemistry at undergraduate level to students studying Medicine and Dental medicine at University of Zagreb.

Research activity Scientific activity focused on topics in the field of sphingolipids and HPLC analysis of their metabolites.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 11 September 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Ribar S, Mesarić M, Bauman M. High-performance liquid chromatographic determination of sphinganine and sphingosine in serum and urine of subjects from an endemic nephropathy area in Croatia. *Journal of Chromatography B, Biomedical Sciences & Applications* 754(2):511-9, 2001.
2. Ribar S, Mesarić M, Sedić M. Sphingoid bases as possible diagnostic parameters. *Croatian Medical Journal* 44(2):165-70, 2003.
3. Ribar S, Feher-Turkovi L, Karmelić I, Mesarić M. Sphingoid bases in infant formulas. *Food Chemistry*. 103 (1): 173-180, 2007.

4. Potočki S. Potential health benefits of sphingolipids in milk and dairy products. *Mljekarstvo* 66(4), 251-261, 2016.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Potočki S. Potential health benefits of sphingolipids in milk and dairy products. *Mljekarstvo* 66(4), 251-261, 2016.

2. Potočki S. Gangliosides in dairy products: Milk sphingolipids. *Acta Alimentaria* 45(4), 572-577, 2016.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2002.-2006. "The role and significance of sphingolipids in nutrition, diagnosis and therapy", Ministry of Science, Education and Sports, Project Code: 0108186, (head: Marko Mesarić, associate professor), associate researcher

2007.-2013. "Sphingolipids - biologically active compounds", Ministry of Science, Education and Sports, project code: 108-0000000-0045, (head: Marko Mesarić, associate professor), associate researcher

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

"Morphological and biochemical characteristics of in vitro treated sperm with melanotrophins and other peptides": University support 2014. (head: Alenka Boban Blagaić, associate professor), associate researcher

"Glycosphingolipids and Sphingolipid Metabolites as Glioblastoma Marks", HAZU 2017. (head: Dragana Fabris, postdoctoral researcher - senior teaching assistant), associate researcher

"Characterization of glycolipid and sphingolipid metabolite composition as human brain tumors", Project – University support 2017. (head: Željka Vukelić, associate professor), associate researcher

"Further characterization of the composition of glycolipids and sphingolipid metabolites as human tumor markers", (continued research), Project -University support 2018. (head: Željka Vukelić, associate professor), associate researcher

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ingrid Prkacin, PhD, MD, Associate Profesor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Universty Hospital Merkur

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Characteristics of clinical medical research

BIOGRAPHY

Currently, dr Ingrid Prkacin working in the Department of Emergency Internal Medicine as Head of Unit. She was born in Zagreb, Croatia, on August 1, 1964. She received the Doctor of Medicine in 1988, Master degree-direction biomedicine in 1994, Internal medicine specialist in 1996 and PhD in Biomedical Sciences in 2000, University of Zagreb, Croatia. She was Assistant Professor from 2009-2015 and from 2015 is Associate Profesor of internal medicine at the University of Zagreb. Research interest area is hypertension and resistant hypertension, biomedicine , chronic kidney disease and diabetes mellitus , in particular. On these topics she authored more than 110 regular papers appeared in Pubmed/Scopus indexed journals: 29 Current Contents, 33 Index Medicus, 18 SCI Expanded/SSCI , 22 Scopus (Excerpta Medica). In May 2018 Scopus-based H-index was 14, with 485 citations. She has more than 30 years of experience in medicine, and most of it was spent in hypertension and chronic kidney disease research. Resistant hypertension, biomedicine and obesity are another area of research interest.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2015.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. **Prkačin I**, Malčić I, Ivančević D, Hebrang A. Rational choice of diagnostic medical test in patients with renal tumors. Liječ Vjesn 1995; 117: 209-215.
2. Prkačin I, Sabljarić Matovinović M, Škegro D, Dabo N, Palčić I, Babić Z. Metastasis of renal adenocarcinoma to the pelvic region. Acta med Croatica 2000; 53:119-123
3. **Prkačin I**, Naumovski-Mihalić S, Dabo N, Palčić I, Vujanić S, Babić Z. Comparison of CT analyses of primary renal cell carcinoma and of metastatic neoplasms of the kidney. Radiol Oncol 2001; 35(2): 105-110.
4. **Prkačin I**, Cavrić G, Bašić- Jukić N. MicroRNA in kidney disease. BANTAO Journal 2016; 14: 8-10.
5. Gornik I, **Prkačin I**, Adam V.N, Grabovac V, Giljača V, Šikić A. Algorithms for periprocedural management and management of bleeding in patients treated with non-vitamin K oral anticoagulants. Liječn Vjesn 2017; 139 (3-4): 67-71.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. **Prkačin I**, Ožvald I, Cavrić G, Balenović D, Bulum T, Flegar-Meštrić Z. Importance of Urinary NGAL, Serum Creatinine Standardization and Estimated Glomerular Filtration Rate in Resistant Hypertension. Coll. Antropol. 2013; 37 (3): 821-825.



2. **Prkačin I**, Cavrić G, Pranjić IK, Kasumović D, Šantek L. Renal denervation in patients with resistant hypertension-beyond blood pressure reduction. *Signa Vitae* 2014; 9 (Suppl 1): 95-96.
3. Flegar-Mestric Z, Perkov S, Radeljak A, Kardum Paro M, **Prkacin I**, Devcic-Jeras A. Risk analysis of the preanalytical process based on quality indicators data. *Clin Chem Lab Med* 2017; 3: 368-377.
4. Pervan P, Svaguša T, **Prkačin I**, Šavuk A, Bakos M, Perkov S. Urine high sensitive troponin I measuring in patients with hypertension. *Signa Vitae* 2017; 13: 62-64.
5. Marković D, Trgo G, Prkacin I, Fabijanic D, Kovacic V. The association between high-density lipoproteins and estimated glomerular filtration rate in patients without severe kidney disease. *Int Urol Nephrol* 2018; mar 28.doi: 10.1007/s11255-018-1851-8.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Project Troponin, Project BPC 157

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 0, 3 in progress

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. dr. sc. Davor Puljević

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Clinic for cardiovascular diseases, Clinical Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Ablation methods and electrostimulation

BIOGRAPHY

Date and place of birth: January 16, 1959, Mostar

Medical education:

1977-1982 School of Medicine, University of Zagreb (average grade 4.42)

Postgraduate training and positions:

1983-1984 Internship, Department of Gynecology and Obstetrics, Zagreb University Hospital Centre

1985-1988 Assistant Intern, Center for Medical Sciences, Zagreb University Hospital Centre

1988-1993 Residency in Internal Medicine (for Zagreb University Hospital in founding)

1993-1995 Polyclinic for Prevention of Cardiovascular Diseases and Rehabilitation, Zagreb

1995 - Coronary Care Unit, University Clinic for Cardiovascular Diseases, Zagreb University Hospital Centre

1998-2000 Subspecialty in cardiology (passed subspecialty exam in January 2001)

1999. Leader of service for rhythmology and heart electrostimulation

2003. – acknowledgement of title «primarius»

Professional activities:

1991 Postgraduate course "Emergency medicine"

1993 Course and final exam "Abdominal ultrasound"

2002 and 2003 Courses and final exams "ALS provider course" and "Advanced life support instructor course", which bestow the title of the European Resuscitation Council resuscitation instructor

2002 June 2-7, Budapest: Course "How to approach complex arrhythmias" organized by Prof. M.E. Josephson and Prof. H. J. Wellens

1989 Zagreb School of Medicine, appointed associate researcher for the field

of medicine

- 2006 Zagreb School of Medicine title “RESEARCH ASSOCIATE»
- 2009 Zagreb School of Medicine title “ASSISTANT PROFESSOR»
- 2013 Zagreb School of Medicine title “HIGHER RESEARCH ASSOCIATE»
- 2014 Zagreb School of Medicine title “PROFESSOR»

2010. Leader of the first category postgraduate course « Heart arrhythmias- rational approach», Zagreb School of Medicine

2018. Leader of the theme „Cardiac arrhythmias “ on the postgraduate study “Cardiology” Zagreb School of Medicine

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2014 professor , Zagreb School of Medicine

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Puljević D, Šmalcelj A, Duraković Z, Goldner V. QT dispersion,daily variations,QT interval adaptation and late potentials as risk markers for ventricular tachycardia. Eur Heart J, 18,1343-9, 1997 (13 citata)

Puljević D, Šmalcelj A, Duraković Z, Goldner V. The influence of atenolol and propafenone on QT interval dispersion in patients three months after myocardial infarction. Int J Clin Pharmacol Ther, 35,381-4, 1997 (7 citata)

Puljević D, Šmalcelj A, Duraković Z, Goldner V. Effects of post-myocardial infarction scar size, cardiac function and severity of coronary artery disease on Q-T interval dispersion as a risk factor for complex ventricular arrhythmia. PACE, 21,1508-1516, 1998 (18 citata)

Puljević D: Bradyarrhythmias in critically ill patients. Neurol Croat 52 (supp 3),69-78,2003

Puljević D, Miličić D, Buljević B, Jug M, Lojo N, Lovrić D, Kraljević I, Krakar G: Temporary heart pacing in the University Clinic for Cardiovascular Diseases - Zagreb, University Hospital Centre, in the year 2002. Neurol Croat 52 (supp 3),79-83, 2003

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Puljević D, Velagić V, Puljević M, Pezo-Nikolić B. The first case of radiofrequent ablation of ventricular tachycardia in a patient with ischemic cardiomyopathy in our country. Lijec Vjesn. 2013 Mar-Apr;135(3-4):77-82.
2. Puljević M, Velagić V, Puljević D, Miličić D. Propranolol efficiency in prevention of sustained ventricular tachycardia in patients with implanted cardioverter-defibrillator: a case series. Croat Med J. 2014 Feb 28;55(1):75-6.
3. Puljević D: 2018 ESC Guidelines for the Diagnosis and Management of Syncope, European Heart Journal. 39(21):1883–1948, JUN 2018 – nacionalni recenzent i suradnik

4. Puljevic M, Danilowicz-Szymanowicz L, Molon G, Puljevic D, Raczak G, Canali G, Velagic V, Pezo-Nikolic B, Milicic D. TWARMI pilot trial: The value and optimal criteria of microvolt T-wave alternans in the diagnosis of reversible myocardial ischemia in patients without structural cardiac disease. Ann Noninvasive Electrocardiol. 2018 Nov 1((multicentrična međunarodna studija)
5. Puljević M, Velagić V, Pezo-Nikolić, Puljević D. Fibrilacija atrija i hemodinamski nestabilna tahikardija širokih QRS-a – prikaz bolesnice Liječ Vjesn 2016;138:255–259

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Multicentric study of AF ablation: Cryo-First 2018

SPARELIFE (changes in platelet reactivity in patients with AF undergoing PVI procedures (RF vs CRYO)) from Croatian Science Foundation

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Multicentric study of AF ablation: Cryo-First 2018

SPARELIFE (changes in platelet reactivity in patients with AF undergoing PVI procedures (RF vs CRYO)) from Croatian Science Foundation

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Nives Pustišek, MD, PhD, research associate

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Children's University Hospital

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Mechanisms of allergic reactions

BIOGRAPHY

Prim. dr. sc. Nives Pustišek, MD spec. dermatology and venerology, a specialist in pediatric dermatology, was born on October 4, 1969 in Zagreb, where she finished elementary and high school. She graduated from the Faculty of Medicine of the University of Zagreb in 1994. During the three years of her studies she was a demonstrator at the Department of Pathophysiology. She studied dermatology and venerology examination in December 2003 and since then she has been employed at the Zagreb Children's Disease Clinic, Pediatric and Adolescent Dermatology and Venerology Clinic. Primary title was recognized in October 2014 and subspecialization from pediatric dermatology in April 2015. In 2010 she enrolled in the doctoral study "Biomedicine and Health" at the Faculty of Medicine, University of Zagreb, and in February 2013 the subject of doctoral dissertation was accepted. On February 4, 2016, she defended her doctoral dissertation "Influence of structured education on the clinical course of atopic dermatitis of children's age". In the academic year 2015/16 she earned Dekan's award for scientific productivity during the dissertation. Scientific title Scientific associate in the scientific field of biomedicine and health - field of clinical medical science (decision no. UO / I-640-03 / 18-01 / 1143) was recognized in 2018. She is also a co-author of 27 scientific and professional papers, of which 12 are in the Current Contents indexed journals and 10 chapters in books and monographs in the field of dermatology. She has lectured at numerous congresses and courses at home and abroad. She actively participates in the work of the Croatian Dermatovenerology Society of the Croatian Medical Association, and from 2008 to 2018. is its secretary. Participates in the organization of numerous scientific and professional conferences and congresses. She is a member of the European Academy of Dermatology and Venerology and the European Society for Pediatric Dermatology.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2018

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Pustišek N, Lipozenčić J, Ljubojević S. Tacrolimus ointment: A new therapy for atopic dermatitis-review of the literature. Acta Dermatovenerol Croat 2002;10:25-32.
2. Pustišek N, Jaklin-Kekez A, Frkanec R, Šikanić Dugić N, Mišak Z, Jadrešin O, Kolaček S. Our experience with the use of atopy patch test in the diagnosis of cow s milk hypersensitivity. Acta Dermatovenerol Croat 2010;18:14-20.
3. Pustišek N, Vurnek Živković M, Šitum M. Quality of life with families with children with atopic dermatitis. Ped dermatol. 2016;33:28-32.
4. Pustišek N, Šitum M, Vurnek Živković M, Ljubojević Hadžavdić S, Vurnek M, Niseteo T. The significance of structured parental educational intervention on childhood atopic dermatitis: a randomized controlled trial. J Eur Acad Dermatol Venereol. 2016;30:806-12.
5. Ljubojević Hadžavdić S, Pustišek N, Žužul K, Švigir A. Contact allergy: an update. G Ital Dermatol Venereol 2018;153:419-28.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Šikanić Dugić N, Ljubojević S, Pustišek N, Hiršl Hećej V. Treatment of anogenital warts in an 18-month-old girl with 5% imiquimod cream. *Acta Dermatovenerol Croat* 2014;22:40-3.

Stanimirović A, Šitum M, Kostović K, Bulat V, Kovačević M, Kaštelan M, Puizina-Ivić N, Pustišek N, Čulav-Košćak I. Proposal for Guidelines for the Treatment of Vitiligo in Croatia. *Global J. Dermatol. Venereol.* 2014;2:19-26.

Pustišek N, Vurnek Živković M, Šitum M. Quality of life with families with children with atopic dermatitis. *Ped dermatol.* 2016;33:28-32.

Pustišek N, Šitum M, Vurnek Živković M, Ljubojević Hadžavdić S, Vurnek M, Niseteo T. The significance of structured parental educational intervention on childhood atopic dermatitis: a randomized controlled trial. *J Eur Acad Dermatol Venereol* 2016;30:806-12.

Ljubojević Hadžavdić S, Pustišek N, Žužul K, Švigir A. Contact allergy: an update. *G Ital Dermatol Venereol* 2018;153:419-28.

Chernyshov PV, Linder MD, Pustišek N, Manolache L, Szepietowski JC, Tomas-Aragones L, Marron SE, Poot F, Augustin M, Bewley A, van Cranenburgh OD, Jemec GB, Salek MS, Sampogna F, Svensson A. Quimp (quality of life impairment): an addition to quality of life lexicon. *J Eur Acad Dermatol Venereol* 2018;32:e181-e182.

Chernyshov PV, Boffa MJ, Corso R, Pustišek N, Marinovic B, Manolache L et al. Creation and pilot test results of the dermatology-specific proxy instrument the Infants and Toddlers Dermatology Quality of Life. *J Eur Acad Dermatol Venereol* 2018;32:2288-2294.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Doc.dr.sc. Matea Radačić Aumiler, MD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Characteristics of clinical medical research

BIOGRAPHY

Education

1992-1998 School of Medicine, University of Zagreb

2001-2007 Residency in Clinical Pharmacology and Toxicology

1999 -2003 Postgraduate Study Faculty of Science, University of Zagreb, master's degree

2003 Master of Science with the thesis "Growth hormone and insulin-like growth factors in diabetic nephropathy"

2003-2012 Postgraduate Doctoral Study, Faculty of Science, University of Zagreb

2012 PhD degree with doctoral thesis entitled: "Combined antitumor effectiveness of hyperthermia, quercetin, vanadium, chlorpromazine and vitamin D in tumor cell cultures and animal models"

2003 – 2005 Postgraduate Study Clinical Pharmacology and Toxicology

1999 GCP Exam in organisation of Brookwood International Academy of Healthcare Research

Work experience

1998-1999 Internship in Clinical Hospital Jordanovac

1999 -2007 junior researcher on project pathogenesis of tumor hypoglycemia; Research of cancer

2001 - 2007 Residency in Clinical Pharmacology and Toxicology

2008 - specialist of clinical pharmacology and toxicology in Clinical Hospital Center Zagreb

Teaching

2010 - lecturer at graduate and postgraduate studies , Postgraduate Study Obiteljska medicina, University of Zagreb

2011- lecturer at Postgraduate Study in Urology , School of Medicine, University of Zagreb

2012 - lecturer at Sveučilišni diplomski studij sestrinstva, School of Medicine, University of Zagreb

2013 – lecturer at Postgraduate Study in English at School of Medicine, University of Zagreb

2013 - Graduate Study "Drug research and development" , kolegijum Clinical Pharmacology, Department of Biotechnology, University of Rijeka, lecturer

2014 - lecturer at Postgraduate course of medical education Good Clinical practice, GCP ,School of Medicine, University of Zagreb

Dissertation

2003 Master of Science with the thesis "Growth hormone and insulin-like growth factors in diabetic nephropathy"

PhD with doctoral thesis: "Combined antitumor effectiveness of hyperthermia, quercetin, vanadium, chlorpromazine and vitamin D in tumor cell cultures and animal models"

Scientific activity

Rector Award of University Zagreb during study at School of Medicine Zagreb for the paper: Effectiveness of tetrahydroindazolon-karboxylic acid on nephrotoxicity of cisplatin“

Publications

Author/coauthor of many scientific and professional papers in Croatia and international journals;
some indexed in Web of Science Core Collection, Scopus and Medline (CC, SCOPUS/Medline), (9),
chapters in books and textbooks (10), abstracts in CC, SCI Expanded (24), other scientific and professional
papers (20)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 25.11.2014.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

M. Radačić Aumiler, I. Kraljičković, V. Erdeljić-Turk, K. Makar Aušperger, R. Likić, I. Šimić. No adverse effects after radioiodine treatment at 3 weeks of pregnancy. *Clinical Nuclear Medicine* 2016 ; 41(12):964-965 (Q1)

V. Erdeljić, I. Francetić, K. Makar Aušperger, R. Likić, M. Radačić Aumiler: Clinical pharmacology consultation: a better answer to safety issues of drug therapy during pregnancy? *European Journal of Clinical Pharmacology* 2010; 66(10):1037-46. (Q1)

M. Doko, V. Zjačić-Rotkvić, M. Zovak, M. Kopljar, E. Glavan, M. Radačić Aumiler: Glycogen Storage Disease Ib and Chron Colitis In a Young Woman. *Endocrine* 16: 69-71, 2001. (članak, znanstveni) (Q2)

M. Pavlak, R. Stojković, M. Radačić Aumiler, J. Kašnar - Šamprec, J. Jerčić, K. Vlahović, B. Žinić, M. Radačić: Antitumor activity of novel N-sulfonylpyrimidine derivatives on the growth of anaplastic mammary carcinoma in vivo. *Journal of Cancer Research & Clinical Oncology* 131: 829-836, 2005. (Q2,Q1)

V. Erdeljić Turk, I.Šimić, K.Makar-Aušperger, M.Radačić-Aumiler. Amoxicillin-induced aseptic meningitis: Case report and review of published cases. *International Journal of Clinical Pharmacology and Therapeutics* 2016; Vol. 54, 716-718. (Q3)

Makar-Aušperger, Ksenija; Krželj, Kristina; Lovrić Benčić, Martina; Radačić Aumiler, Matea; Erdeljić Turk, Viktorija; Božina, Nada. Warfarin dosing according to the genotype-guided algorithm is most beneficial in patients with atrial fibrillation: a randomized parallel group trial. *Therapeutic Drug Monitoring* vol. 40, 362-368, 2018. (Q2)

V. Erdeljić, I. Francetić, K. Makar-Aušperger, L. Bielen, R. Likić, M. Radačić Aumiler. Possible cost containment by usage of early sequential therapy in treatment of community-acquired pneumonia at University Hospital Zagreb: Cost minimization analysis (Moguće uštede ranom sekvencijskom terapijom u liječenju pneumonija koje zahtijevaju hospitalizaciju na KBC Zagreb: analiza minimalizacije troškova). *Pharmaca* 47 (2009); 3-4; 75-85 (članak, znanstveni) (Q4)

M. Radačić Aumiler: Infections with enterobacteriaceae that produce extended spectrum beta lactamases (ESBL) (Infekcije enterobakterijaceja koje proizvode beta laktamaze proširenog spektra (extended spectrum beta lactamases, ESBL). *Pharmaca* 2010; 48:1-2; 14-29 (pregledni stručni članak) (Q4)

Erdeljić V, Francetić I, Makar-Aušperger K, Likić R, Radačić Aumiler M, Juričić D, Bielen L. Primjena psihotropnih lijekova u ranoj trudnoći, *Pharmaca* 2009; 47: 55-59 (stručni rad) (Q4)

M. Radačić Aumiler. Nuspojave bioloških lijekova. *Pharmaca* 2011;49 (1-2), 46-50 (kratki pregled) (Q4)

V. Erdeljić Turk, I.Šimić, R.Likić, K.Makar Aušperger, M.Radačić Aumiler, I.Čegec. D.Juričić Nahal, I.Kraljičković. New drugs for bad bugs: what's new and what's in the pipeline? *Clinical Therapeutics* 38(10S):e9 • Oct 2016

D. Juričić Nahal, I. Čegec, V. Erdeljić Turk, M. Radačić Aumiler, K. Makar Aušperger, R. Likić, I. Kraljičković, I. Šimić. Why Reporting The Iodinated Contrast Media Used During Radiological Procedures Should Be Standard Practice: A Case Report. *Clinical Therapeutics* 38(10):e31 • Oct 2016.

I.Kraljičković,V,.Erdeljić Turk, I.Čegec, D.Juričić Nahal, M.Radačić Aumiler, K.Makar Aušperger, R.Likić, I.Šimić. Testing for Hypersensitivity to Nonsteroidal Anti-Inflammatory Drugs (NSAIDS) At the University Hospital Zagreb. *Clinical Therapeutics* 38(10):e25 • Oct 2016

M. Radačić Aumiler, V. Erdeljić Turk, K. Makar Aušperger, R.Likić, L. Bielen i I. Šimić. Pregnancy exposure to drugs: role of clinical pharmacologist, *Clinical Therapeutics* 2016 :38(Suppl 10): 26

R.Likić, I.Šimić, V. Erdeljić Turk, K.Makar Aušperger, M.Radačić Aumiler, I.Čegec, D.Juričić Nahal, I.Kraljičković. Outlook For Biosimilar Molecules Entering Croatian Pharmaceutical Market In The Period From 2016 To 2020. *Clinical Therapeutics* 38(10):e16 • October 2016

K. Makar Aušperger, N.Božina, V.Erdeljić Turk, R.Likić, M.Radačić Aumiler, L. Ganoci, I.Francetić. Clinically Guided Warfarin Dose Versus Genotyping In Early Achievement Of Stable Anticoagulant Effect Of Warfarin. *Clinical Therapeutics* 38(10):e10 • October 2016

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

M. Radačić Aumiler, I. Kraljičković, V. Erdeljić-Turk, K. Makar Aušperger, R. Likić, I. Šimić. No adverse effects after radioiodine treatment at 3 weeks of pregnancy. *Clinical Nuclear Medicine* 2016 ; 41(12):964-965 (Q1)

V. Erdeljić, I. Francetić, K. Makar Aušperger, R. Likić, M. Radačić Aumiler: Clinical pharmacology consultation: a better answer to safety issues of drug therapy during pregnancy? *European Journal of Clinical Pharmacology* 2010; 66(10):1037-46. (Q1)

V. Erdeljić Turk, I.Šimić, K.Makar-Aušperger, M.Radačić-Aumiler. Amoxicillin-induced aseptic meningitis: Case report and review of published cases. *International Journal of Clinical Pharmacology and Therapeutics* 2016; Vol. 54, 716-718. (Q3)

Makar-Aušperger, Ksenija; Krželj, Kristina; Lovrić Benčić, Martina; Radačić Aumiler, Matea; Erdeljić Turk, Viktorija; Božina, Nada. Warfarin dosing according to the genotype-guided algorithm is most beneficial in patients with atrial fibrillation: a randomized parallel group trial. *Therapeutic Drug Monitoring* vol. 40, 362-368, 2018. (Q2)

M. Radačić Aumiler, V. Erdeljić Turk, K. Makar Aušperger, R.Likić, L. Bielen i I. Šimić. Pregnancy exposure to drugs: role of clinical pharmacologist, *Clinical Therapeutics* 2016 :38(Suppl 10): 26

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Margareta Radić Antolic

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of molecular biology in medicine

BIOGRAPHY

I was born 11.02.1980. in Sisak, graduated Faculty of Pharmacy and Biochemistry in 2003. I trained one year in Department of laboratory diagnostics, University Hospital Centre Zagreb and passed a professional exam in 2005. In the period from 2004. to 2007. I was a research fellow at the Ministry of Science, Education and Sports project No. 0214212 Prothrombotic Risk Factors in Cerebrovascular Diseases in Children) under the guidance of Professor Renata Zadro. I started Medical biochemistry specialization in 2007 at Department of Laboratory Diagnostics, University Hospital Centre Zagreb. Since 2014. I work as a specialist in medical biochemistry and laboratory medicine at Department of laboratory diagnostics, University Hospital Centre Zagreb. I am a collaborator of Prof. Renata Zadro PhD in undergraduate and postgraduate studies (exercises, seminars, lectures) at the Faculty of Pharmacy and Biochemistry.

My field of interest is molecular diagnostics of hematologic diseases. Since 2004 I am a part of team for introduction of new molecular diagnostic methods in routine work (allele specific PCR for JAK2 V617F, real time PCR quantitative determination of bcr/abl1, sequencing of ABL1 gene, fragment analysis for mutation detection in NPM1, CALR, MPL and FLT3 gene), accreditation of molecular assays according to ISO 15189, standardization of quantitative determination of bcr/abl1 fusion transcript during tyrosine kinase inhibitor therapy, introduction of methods for the analysis of polymorphisms of platelet antigens within the project "Prothrombotic Risk Factors in cerebrovascular diseases in children". I also participate in other projects (different Clinics or Faculty) in the form of co-operation in the collection of samples, isolation of nucleic acids and analytical part (quantification of WT1 gene, quantification of BMP expression in renal carcinoma). Important part of my education is participation at various international conferences with poster presentations in the field of hematooncology. In last 2 years I am attending practical seminars, workshops and educations for implementing NGS technology in laboratory routine.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1) Ceri A, Pavic M, Horvat I, Radic Antolic M, Zadro R. Development and validation of a rapid method for genotyping three P-selectin gene polymorphisms based on high resolution melting analysis. J Clin Lab Anal. 2018 Oct 23:e22698. doi: 10.1002/jcla.22698.
- 2) Horvat I, Boban A, Zadro R, Antolic MR, Serventi-Seiwerth R, Roncevic P, Radman I, Sertic D, Vodanovic M, Pulanic D, Basic-Kinda S, Durakovic N, Zupancic-Salek S, Vrhovac R, Aurer I, Nemet D, Labar B. Influence of Blood Count, Cardiovascular Risks, Inherited Thrombophilia, and JAK2 V617F Burden Allele on Type of Thrombosis in Patients With Philadelphia Chromosome Negative Myeloproliferative Neoplasms. Clin Lymphoma Myeloma Leuk. 2018 Sep 10. pii: S2152-2650(18)31049-8. doi: 10.1016/j.clml.2018.08.020.
- 3) Grdić Rajković M, Popović-Grle S, Vukić Dugac A, Rogić D, Rako I, Radić Antolić M, Beriša M, Rumora L.

PON1 gene polymorphisms in patients with chronic obstructive pulmonary disease. *J Clin Pathol.* 2018 Nov;71(11):963-970. doi: 10.1136/jclinpath-2018-205194

4) Coen Herak D, Lenicek Krleza J, Radic Antolic M, Horvat I, Djuranovic V, Zrinski Topic R, Zadro R. Association of Polymorphisms in Coagulation Factor Genes and Enzymes of Homocysteine Metabolism With Arterial Ischemic Stroke in Children. *Clin Appl Thromb Hemost.* 2017 Nov;23(8):1042-1051. doi: 10.1177/1076029616672584.

5) Basic-Jukic N, Hudolin T, Radic-Antolic M, Coric M, Zadro R, Kastelan Z, Pasini J, Bandic-Pavlovic D, Kes P. Bone morphogenetic protein-7 expression is down-regulated in human clear cell renal carcinoma. *J Nephrol.* 2011 Jan-Feb;24(1):91-7.

6) Basic-Jukic N, Radic-Antolic M, Hudolin T, Coric M, Zadro R, Pasini J, Kastelan Z, Kes P. Immunolocalization and mRNA expression of bone morphogenetic protein-6 in human clear cell renal carcinoma. *Kidney Blood Press Res.* 2009;32(6):445-50.

7) Pavic M, Zadro R, Herak DC, Antolic MR, Dodig S. Gene frequencies of platelet-specific antigens in Croatian population. *Transfus Med.* 2010 Apr;20(2):73-7.

8) Herak DC, Antolic MR, Krleza JL, Pavic M, Dodig S, Duranovic V, Brkic AB, Zadro R. Inherited prothrombotic risk factors in children with stroke, transient ischemic attack, or migraine. *Pediatrics.* 2009 Apr;123(4):e653-60.

9) Horvat I, Radić Antolic M, Zadro R, Sertić D, Labar B. Clinical significance of T315I ABL kinase domain mutation detection in patients resistant to imatinib mesylate therapy. *Biochemia Medica* 2010; 20: 75-81.

10) Radić Antolic M, Zadro R, Sertić D, Labar B. Monitoring chronic myeloid leukemia patients responding to treatment with tyrosine kinase inhibitors by real-time quantitative polymerase chain reaction . *Biochemia Medica* 2009;19: 63-72.

11) Rogić D, Radić M, Fressl G, Fuček M. Evaluation of RAMP Troponin I Point of Care Assay. *Point of care* 2005;4(1):24-26.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1) Ceri A, Pavic M, Horvat I, Radic Antolic M, Zadro R. Development and validation of a rapid method for genotyping three P-selectin gene polymorphisms based on high resolution melting analysis. *J Clin Lab Anal.* 2018 Oct 23:e22698. doi: 10.1002/jcla.22698.

2) Horvat I, Boban A, Zadro R, Antolic MR, Serventi-Seiwerth R, Roncevic P, Radman I, Sertic D, Vodanovic M, Pulanic D, Basic-Kinda S, Durakovic N, Zupancic-Salek S, Vrhovac R, Aurer I, Nemet D, Labar B. Influence of Blood Count, Cardiovascular Risks, Inherited Thrombophilia, and JAK2 V617F Burden Allele on Type of Thrombosis in Patients With Philadelphia Chromosome Negative Myeloproliferative Neoplasms. *Clin Lymphoma Myeloma Leuk.* 2018 Sep 10. pii: S2152-2650(18)31049-8. doi: 10.1016/j.clml.2018.08.020.

3) Grdić Rajković M, Popović-Grle S, Vukić Dugac A, Rogić D, Rako I, Radić Antolić M, Beriša M, Rumora L. PON1 gene polymorphisms in patients with chronic obstructive pulmonary disease. *J Clin Pathol.* 2018 Nov;71(11):963-970. doi: 10.1136/jclinpath-2018-205194

4) Coen Herak D, Lenicek Krleza J, Radic Antolic M, Horvat I, Djuranovic V, Zrinski Topic R, Zadro R. Association of Polymorphisms in Coagulation Factor Genes and Enzymes of Homocysteine Metabolism With Arterial Ischemic Stroke in Children. *Clin Appl Thromb Hemost.* 2017 Nov;23(8):1042-1051. doi: 10.1177/1076029616672584.



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Prothrombotic risk factors in cerebrovascular diseases in children, Ministry of Science, Education and Sport, No. 214212, 2002-2006. (principal investigator Professor Renata Zadro)

Gene polymorphisms and ischemic and ischemic stroke in children, Croatian Scientific Foundation, No. 2047 2015-2019. (principal investigator Professor Renata Zadro)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Gene polymorphisms and ischemic and ischemic stroke in children, Croatian Scientific Foundation, No. 2047 2015-2019. (principal investigator Professor Renata Zadro)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assistant Prof. MARINA RADMILOVIĆ

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of Histology and Embryology; School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: How to become a neuron?

BIOGRAPHY

PERSONAL INFORMATION

Researchers Identification Number: 333511

Email: marina.radmilovic@mef.hr

EDUCATION

2010 - 2013 Ph.D. in Neuroscience, School of Medicine, University of Zagreb

2001 - 2008 Faculty of Science and Mathematics, University of Zagreb, Professor of Biology and Chemistry

WORK EXPERIENCE

04/2017 - to date Assistant Professor at Department of Histology and Embryology, School of Medicine, University of Zagreb, Zagreb, Croatia

07/2013 - 02/2017 Senior Assistant at Department of Histology and Embryology, School of Medicine, University of Zagreb, Zagreb, Croatia

06/2010 - 07/2013 Assistant at Department of Histology and Embryology, School of Medicine, University of Zagreb, Zagreb, Croatia

02/2009 - 06/2010 Research Assistant at Department of Histology and Embryology, School of Medicine, University of Zagreb, Zagreb, Croatia

FELLOWSHIPS AND AWARDS

2015 – 2016 Max Planck fellowship for postdoctoral researchers (18 months)

2008 Fellowship award for best poster: First Eastern European Conference: What's new in diagnosis, treatment, and prevention of cystic fibrosis? Zagreb, Croatia, November 28-30, 2008.

TEACHING ACTIVITIES

2010 - 2019 Histology and Embryology for Medical Studies in Croatian, School of Medicine, University of Zagreb

2009 - 2019 Histology and Embryology for Medical Studies in English, School of Medicine, University of Zagreb

2017 - 2018 Histology and Embryology for Dentistry Studies in English, School of Medicine, University of Zagreb

SUPERVISION OF GRADUATE/ DOCTORAL STUDENTS AND POSTDOCTORAL RESEARCHERS

Doctoral students:

1. Anja Barić, mag-biol.mol. - 2018 enrolled as a Neuroscience doctoral student
2. Helena Justić, mag.biol.exp. - 2018 enrolled as a Neuroscience doctoral student

MD theses:

1. Šimunić Sven. Morphological analysis of murine brain following ischemic injury and natriuretic peptides application. Graduation thesis. School of Medicine, University of Zagreb, Zagreb, 2015.
2. Borden Gabriel. Morphological analysis of brain injury after early neonatal hypoxia – ischemia in mice. Graduation thesis. School of Medicine, University of Zagreb, Zagreb, 2016.

MEMBERSHIPS

2015. - 2018 Max Planck Society
2012. -to date Croatian Society for Neuroscience
2009. - to date International Brain Research Organization - IBRO Alumni
2009. - 2015. Croatian Microscopy Society
2008. - to date Croatian Physiological Society

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 17.04.2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Saccomano M, Albers J, Tromba G, Dobrivojević Radmilović M, Gajović S, Alves F and Dullin C. Synchrotron inline phase contrast μ CT enables detailed virtual histology of embedded soft-tissue samples with and without staining. J. Synchrotron Rad. 2018;25.

Kostiva U, Patsulaa V, Šloufa M, Pongrac IM, Škokić S, Dobrivojević Radmilović M, Pavičić I, Vinković Vrček I, Gajović S, Horák D. Physico-chemical characteristics, biocompatibility, and MRI applicability of novel monodisperse PEG-modified magnetic $\text{Fe}_3\text{O}_4/\text{SiO}_2$ core-shell nanoparticles". RSC Advances. 2017;7:8786-

Dobrivojević M, Špiranec K, Gorup D, Erjavec I, Habek N, Radmilović M, Unfirer S, Ćosić A, Drenjančević I, Gajović S, Sindić A. Urodilatin reverses the detrimental influence of bradykinin in acute ischemic stroke. Exp Neurol. 2016;284(Pt A):1-10.

Pongrac IM, Dobrivojević M, Ahmed LB, Babić M, Šlouf M, Horák D, Gajović S. Improved biocompatibility and efficient labeling of neural stem cells with poly(L-lysine)-coated maghemite nanoparticles. Beilstein J Nanotechnol. 2016;7:926-36.

Dobrivojević M, Habek N, Kapuralin K, Ćurlin M, Gajović S. Krüppel-like transcription factor 8 (Klf8) is expressed and active in the neurons of the mouse brain. Gene. 2015;570(1):132-40.

Dobrivojević M, Špiranec K, Sindić A. Involvement of bradykinin in brain edema development after ischemic stroke. Pflugers Arch. 2015;467(2):201-12.

Massmann V, Edemir B, Schlatter E, Al-Monajjed R, Harrach S, Klassen P, Holle SK, Sindić A, Dobrivojević M, Pavenstädt H, Ciarimboli G. The organic cation transporter 3 (OCT3) as molecular target of psychotropic drugs: transport characteristics and acute regulation of cloned murine OCT3. Pflugers Arch. 2014;466(3):517-527.

Dobrivojević M, Bohaček I, Erjavec I, Gorup D, Gajović S. Computed microtomography visualization and quantification of mouse ischemic brain lesion by nonionic radio contrast agents. Croat Med J. 2013;54(1):3-11.

Dobrivojević M, Sindić A, Edemir B, Kalweit S, Forssmann W-G, Hirsch JR. Interaction between bradykinin and natriuretic peptides via RGS protein activation in HEK-293 cells. *Am J Physiol.* 2012;303(12):1260-1268.

Sindić A, Dobrivojević M, Hirsch JR. Natriuretic peptides in brain physiology. *Translational Neuroscience.* 2011;2(3):246-251.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Saccomano M, Albers J, Tromba G, Dobrivojević Radmilović M, Gajović S, Alves F and Dullin C. Synchrotron inline phase contrast μ CT enables detailed virtual histology of embedded soft-tissue samples with and without staining. *J. Synchrotron Rad.* 2018;25.

Kostiva U, Patsulaa V, Šloufa M, Pongrac IM, Škokić S, Dobrivojević Radmilović M, Pavičić I, Vinković Vrček I, Gajović S, Horák D. Physico-chemical characteristics, biocompatibility, and MRI applicability of novel monodisperse PEG-modified magnetic Fe₃O₄/SiO₂ core-shell nanoparticles". *RSC Advances.* 2017;7:8786-

Dobrivojević M, Špiranec K, Gorup D, Erjavec I, Habek N, Radmilović M, Unfirer S, Čosić A, Drenjančević I, Gajović S, Sindić A. Urodilatin reverses the detrimental influence of bradykinin in acute ischemic stroke. *Exp Neurol.* 2016;284(Pt A):1-10.

Pongrac IM, Dobrivojević M, Ahmed LB, Babić M, Šlouf M, Horák D, Gajović S. Improved biocompatibility and efficient labeling of neural stem cells with poly(L-lysine)-coated maghemite nanoparticles. *Beilstein J Nanotechnol.* 2016;7:926-36.

Dobrivojević M, Habek N, Kapuralin K, Čurlin M, Gajović S. Krüppel-like transcription factor 8 (Klf8) is expressed and active in the neurons of the mouse brain. *Gene.* 2015;570(1):132-40.

Dobrivojević M, Špiranec K, Sindić A. Involvement of bradykinin in brain edema development after ischemic stroke. *Pflugers Arch.* 2015;467(2):201-12.

Massmann V, Edemir B, Schlatter E, Al-Monajjed R, Harrach S, Klassen P, Holle SK, Sindić A, Dobrivojević M, Pavenstädt H, Ciarimboli G. The organic cation transporter 3 (OCT3) as molecular target of psychotropic drugs: transport characteristics and acute regulation of cloned murine OCT3. *Pflugers Arch.* 2014;466(3):517-527.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018 – 2023 Croatian science foundation project "The role of bradykinin in brain and retinal ischemia in diabetic murine models BRADISCHEMIA" - project leader

2018 – 2020 Croatian ministry of science and education cooperation project with Austrian federal ministry of science research and economy "High field MRI to measure efficacy of extracellular vesicle therapy after spinal cord injury in a rat contusion model" - Croatian coordinator

2017 – 2021 Croatian science foundation project "Multimodal molecular imaging of the mouse brain repair after ischemic lesion" - collaborator

2016 – 2017 HAMAG BICRO project Poc6_1_153 "Mouse with bioluminescent nerve cells" - collaborator, post-doctoral researcher

2016 Grant supported by the University of Zagreb "The expression and activity of uroguanylin in the brain" - collaborator, post-doctoral researcher

2015 – 2016 EU FP7-HEALTH project TargetBrain F2-2012-279017 - collaborator, post-doctoral researcher

2015 Grant supported by the University of Zagreb “Mechanism of guanylin peptides action on the bradykinin signaling pathway in the brain” - collaborator, post-doctoral researcher

2014 Grant supported by the University of Zagreb “Mechanism of guanylin peptides action on the bradykinin signaling pathway in the brain” - collaborator, post-doctoral researcher

2012 – 2016 EU-FP7-REGPOT–2012–CT2012–316120 GlowBrain: Combining Stem Cells and Biomaterials for Brain Repair - Unlocking the Potential of the Existing Brain Research through Innovative In Vivo Molecular Imaging - collaborator, post-doctoral researcher

2009 – 2011 Unity through Knowledge Fund 35/08 “Regeneration and plasticity after ischemic brain damage studied on innovative transgenic mouse models” - collaborator, Ph.D. student researcher

2008 – 2012 Research project Pharis Biotec GmbH, Hannover, Germany, collaborator, Ph.D. student researcher

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2018 – 2023 Croatian science foundation project “The role of bradykinin in brain and retinal ischemia in diabetic murine models -BRADISCHEMIA” - project leader

2018 – 2020 Croatian ministry of science and education cooperation project with Austrian federal ministry of science research and economy “High field MRI to measure efficacy of extracellular vesicle therapy after spinal cord injury in a rat contusion model” - Croatian coordinator

2017 – 2021 Croatian science foundation project “Multimodal molecular imaging of the mouse brain repair after ischemic lesion” - collaborator

2016 – 2017 HAMAG BICRO project Poc6_1_153 "Mouse with bioluminescent nerve cells" - collaborator, post-doctoral researcher

2016 Grant supported by the University of Zagreb “The expression and activity of uroguanylin in the brain” - collaborator, post-doctoral researcher

2015 – 2016 EU FP7-HEALTH project TargetBrain F2-2012-279017 - collaborator, post-doctoral researcher

2015 Grant supported by the University of Zagreb “Mechanism of guanylin peptides action on the bradykinin signaling pathway in the brain” - collaborator, post-doctoral researcher

2014 Grant supported by the University of Zagreb “Mechanism of guanylin peptides action on the bradykinin signaling pathway in the brain” - collaborator, post-doctoral researcher

2012 – 2016 EU-FP7-REGPOT–2012–CT2012–316120 GlowBrain: Combining Stem Cells and Biomaterials for Brain Repair - Unlocking the Potential of the Existing Brain Research through Innovative In Vivo Molecular Imaging - collaborator, post-doctoral researcher

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Milan Radoš, assoc.prof.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pathophysiology of the brain and the CSF; Synaptic plasticity and mind

BIOGRAPHY

I was born 21st September 1972, at Tomislavgrad (Bosnia at Herzegovina). I graduated at School of Medicine University of Zagreb at year 1997. and then obtained Master of Science degree at year 2001 for research conducted at Croatian Institute for Brain Research. Investigations for doctoral thesis were performed at McGill University in Montreal, while doctoral degree was obtained at Faculty of Natural Sciences in Zagreb at year 2006.

From June 2001 to December 2006 I was at position of research-fellow, and during period December 2006-September 2009 I was at position of assistant at Department of Neuroscience at Croatian Institute for Brain Research. In period September 2009-May 2016 I was at position of assistant professor, and since May 2016 I work as associated professor at Department of Neuroscience at Croatian Institute for Brain Research.

I participate in lectures since academic year 2001/2002 at School of Medicine Course Fundamental of Neuroscience and since year 2003 I participate as lecturer and course leader in post-doctoral studies.

In period 2001-2003 I was at scientific education at Department of Pharmacology and Therapeutics at McGill University where I had studied peripheral neuropathy. During year 2009 I spent one month in McConnell Brain Imaging Centre learning how to acquire and analyse functional magnetic resonance image.

In period 2007-2011 I was resident of radiology at Department of diagnostic and interventional radiology at University Hospital Centre Zagreb.

I am leader of laboratory for functional neuroimaging, and since year 2013 I work as a director of Centre for Clinical Research in Neuroscience.

My scientific interests are focused to use of magnetic resonance in studies of cerebrospinal fluid pathophysiology and perinatal brain lesion.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Orešković D, Radoš M, Klarica M. New Concepts of Cerebrospinal Fluid Physiology and Development of Hydrocephalus. *Pediatric Neurosurgery*. 2017;52(6):417–425.
<https://www.karger.com/Article/FullText/452169>

Orešković D, Radoš M, Klarica M. Role of choroid plexus in cerebrospinal fluid hydrodynamics. *Neuroscience*. 2017;354:69–87.

<https://linkinghub.elsevier.com/retrieve/pii/S030645221730283X>

Orešković D, Radoš M, Klarica M. The recent state of a hundred years old classic hypothesis of the cerebrospinal fluid physiology. *Croatian Medical Journal*. 2017;58(6):381–383.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5778680/>

Orešković D, Radoš M, Klarica M. New Concepts of Cerebrospinal Fluid Physiology and Development of Hydrocephalus. *Pediatric Neurosurgery*. 2017;52(6):417–425.

<https://www.karger.com/Article/FullText/452169>

Orešković D, Radoš M, Klarica M. Role of choroid plexus in cerebrospinal fluid hydrodynamics. *Neuroscience*. 2017;354:69–87.

<https://linkinghub.elsevier.com/retrieve/pii/S030645221730283X>

Orešković D, Radoš M, Klarica M. The recent state of a hundred years old classic hypothesis of the cerebrospinal fluid physiology. *Croatian Medical Journal*. 2017;58(6):381–383.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5778680/>

Maraković J, Vukić M, Radoš M, Chudy D, Klarica M, Orešković D. Monoamine Neurotransmitter Metabolite Concentration as a Marker of Cerebrospinal Fluid Volume Changes. 2016. p. 283–286.

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Klarica M, Jukić T, Miše B, Kudelić N, Radoš M, Orešković D. Experimental Spinal Stenosis in Cats: New Insight in Mechanisms of Hydrocephalus Development. *Brain Pathology*. 2016;26(6):701–712.
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Orešković D, Radoš M, Klarica M. Cerebrospinal fluid secretion by the choroid plexus? *Physiological Reviews*. 2016;96(4):1661–1662. <http://www.physiology.org/doi/10.1152/physrev.00021.2016>

Radoš M, Klarica M, Mučić-Pucić B, Nikić I, Raguž M, Galkowski V, Mandić D, Orešković D. Volumetric analysis of cerebrospinal fluid and brain parenchyma in a patient with hydranencephaly and macrocephaly – case report. *Croatian Medical Journal*. 2014;55(4):388–393.
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Radoš M, Orešković D, Radoš M, Jurjević I, Klarica M. Long lasting near-obstruction stenosis of mesencephalic aqueduct without development of hydrocephalus – case report. Croatian Medical Journal. 2014;55(4):394–398. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4157388/>

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LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2002-2006. Investigator on project Patophysiology of cerebrospinal fluid and intracranial pressure (0108134), principal investigator prof. Marijan Klarica, HIIM, School of Medicine, University of Zagreb

2014-2015 Investigator on project „Volumetrijska analiza kranispinalnog likvorskog prostora kod čovjeka pri različitim položajima tijela u magnetskoj rezonanciji“ principal investigator: prof.dr.sc. Marko Radoš,

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2012-2103 Investigator on project “Rano otkrivanje i praćenje bioloških biljega radi rane terapijske intervencije u sporadičnoj Alzheimerovoj bolesti“. principal investigator prof. Goran Šimić, HIIM, School of Medicine, University of Zagreb

2013-2014 Investigator on project “Perinatalna reorganizacija medijalnog (limbičkog) korteksa u čovjeka“ principal investigator prof. Mario Vukšić, HIIM School of Medicine, University of Zagreb fakultet Sveučilišta u Zagrebu.

2013-2014 Investigator on project „Komparativno histološko/MRI istraživanje u cilju poboljšanja dijagnostike perinatalnih oštećenja u ljudskom mozgu“ principal investigator prof. Nataša Jovanov-Milošević, HIIM, School of Medicine, University of Zagreb

2014-2015 Investigator on project „Volumetrijska analiza kranispinalnog likvorskog prostora kod čovjeka pri različitim položajima tijela u magnetskoj rezonanciji“ principal investigator: prof.dr.sc. Marko Radoš,

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mario Ravić, Mr.sc. , mag.ing.elektrotehnike,

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ericsson Nikola Tesla d.d.

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Telemedicina

BIOGRAPHY

Mario Ravić is Manager of IoT & Digital Health business area in company Ericsson Nikola Tesla. He led product development and market introduction for medical product Ericsson Mobile Health used for remote patient monitoring on the global market. For the last nine years he is actively involved in commercial and research digital health projects worldwide. He is employed in Ericsson Nikola Tesla on various positions for the last 18 years. He graduated on Faculty of electrical engineering and computing in 1999 where he also obtained M.Sc. in 2011, and during 2016 he enrolled graduate program „Leadership and Management of Healthcare Services“ on Medical Faculty in Zagreb.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2019

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

V. Galetić; I. Benc; S. Dešić; J. Križanić; M. Mošmondor; A. Grgurić; D. Gvozdanović; D. Huljanić; L. Damjanić; M. Ravić. Ericsson mobile health solution overview
<http://ieeexplore.ieee.org/document/5533318/>

G. Kopčak ; I. Ćubić ; M. Ravić: Unified health application; <http://ieeexplore.ieee.org/document/5967101/>
Mario Ravić: dr.Mobilni. (<http://www.infotrend.hr/clanak/2015/9/dr.-mobilni,86,1187.html>)

Krešimir Đapić, Viktor Domislović, Luka Kovačić, Ivica Nekić, Ana Jelaković, Vanja Ivković, Ines Ćavar, Lidija Bušić Bjelobaba, Vjeran Pajić, Mario Ravić, Bojan Jelaković. Hrvatska aplikacija za poboljšanje kontrole arterijske hipertenzije. (http://www.kardio.hr/pdf/Cardiologia%20croatica%202017%2012-3_092.pdf)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

V. Galetić; I. Benc; S. Dešić; J. Križanić; M. Mošmondor; A. Grgurić; D. Gvozdanović; D. Huljanić; L. Damjanić; M. Ravić. Ericsson mobile health solution overview
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Krešimir Đapić, Viktor Domislović, Luka Kovačić, Ivica Nekić, Ana Jelaković, Vanja Ivković, Ines Ćavar, Lidija Bušić Bjelobaba, Vjeran Pajić, Mario Ravić, Bojan Jelaković. Hrvatska aplikacija za poboljšanje kontrole arterijske hipertenzije. (http://www.kardio.hr/pdf/Cardiologia%20croatica%202017%2012-3_092.pdf)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Maja Relja MD, PhD tenured professor of neurology

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Medical School University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research Methods of Psychological Functions and Behavior , Clinical Neuropharmacology, Movement Disorders; Molecular and biochemical approach to genetic disorders

BIOGRAPHY

Education and Academic Degrees:

1975 – Medical Doctor Medical Faculty of Zagreb

1978 – 1979 Guest Worker, Laboratory of Preclinical Neuropharmacology, NIMH, Saint Elizabeth's Hospital, Washington D.C. USA

1979 – Master of Biomedical Sciences, Postgraduate Scientific Perfection in Biomedicine

1980 – Doctor of Medical Sciences, University of Zagreb

1982 – Postgraduate Study of Clinical Neuropharmacology, Medical faculty, Zagreb

1987 – Assistant Professor of Neurology, Medical School University of Zagreb

1990 – date Professor of Neurology, Medical School University of Zagreb

1995 - 1996 Visiting Professor, Department of Neurology, Turku University, Finland

2006 – Full professor of Neurology Medical School University of Zagreb

2012 - Full professor of Neurology-tenured Medical School University of Zagreb

Brief Chronology of Employment:

1975 – 1976 Internship, Clinical Medical Center Zagreb

1976 – 1979 Scientific Assistant "Ruđer Bošković Institute", Zagreb

1980 -2018 Date Department of Neurology, Medical School, University of Zagreb

1995 – 2018 date Head Referral Centre for Movement Disorders and Neurodegeneration Republic of Croatia, Clinical medical Center - Department of Neurology, Medical School of Zagreb, University of Zagreb

Teaching Experience:

- Lectures in the Neurology course, undergraduate students, postgraduate courses in Neurology (Course leader), Preclinical and Clinical Pharmacology, Urology, Geriatrics, Family medicine
- Lectures in doctoral study Medical School of Zagreb (Courses leader)
- Supervisions for PhD students (PhD Thesis)

Professional activities:

University: Coordinator of postgraduate course of clinical neurology; Medical school: doctoral study committee

Others: Editorial Board member of J Hedache, J Parkinson's disease; Guideline committees: EAN; Vice-president of Dystonia Europe

Membership: American Academy of Neurology (AAN), Movement Disorder Society (MDS), Parkinson's Disease and Related Disorders (PDRD), European Academy of Neurology (EAN), European Pharmacological Societies Association (EPHAR) and International Union of Pharmacological Societies (IUPHAR), Vice-president of Dystonia Europe

Scientific research project

2000-2015 Project of Croatian Ministry of Science 'Pharmacology of Movement Disorders' - principal investigator

2005-2013 International Collaborative project of Deutscher Akademischer Austausch Dienst' (DAAD) „Antinociceptive activity of botulinum toxin type A: new mechanisms of action, new indications? (Croatia, Germany)

2011-2015 COST BM1001EU action project 'European network for the Study of Dystonia Syndrome' (coordinator WG4 group)

2018-date European Brain Council- EBC The value of treatment for brain disorders project : EBC VoT2 project (principal investigator)

Scientific research field: Peripheral dopaminergic receptors, Botulinum toxin and pain, Non-motor symptoms in dystonia and Parkinson's Disease and Quality of life, Quantification of Neurologic deficit

Clinical Research Experience (clinical studies - principal investigator)

1988 - Deprenyl (MAO-B inhibitor) st No 3794-44; 1996 - Selegilin (MAO.-B inhibitor): 1996/7 - Entacapone (COMT inhibitor); 1996/7 - Botox (CD); 2001/04 - Botox (Migraine); Motion study 27918; Motion study extension 27938 (2015/18) Cosmos Study (COMedication Study assessing Mono- and combination therapy with levodopa-carbidopa inteStinal gel) (2017/2018).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 26.04.2012.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1.Relja M, Lacković Z, Neff NH. Evidence for the presence of dopaminergic receptors in vas deferens. Life Sci 1982;31:2571.

2.Relja M, Petravić D, Kolaj M. Quantifying rigidity with a new computerized elbow device. Clin Neuropharmacol 1996;19:148-156

3.Panula P, Rinne J, Kuokkanen K, Eriksson K, Sallmen T, Kalimo H, Relja M. Neuronal histamine deficit in Alzheimer's-disease. Neuroscience 1998;82(4):993- 997.

4.Relja M, Klepac N. (2002) From gene to therapy-Chorea Huntington. Biochem Medica 12:35-41

5.Hečimović S, Klepac N, Vlašić J, Vojta A, Janko D, Prpić I, Canki-Klain N, Marković D, Božikov J, Relja M, Pavelić K. Genetic background of Huntington's disease in Croatia: Molecular analysis of CAG, CCG and D2642 polymorphisms. Hum Mutat.2002;20 (3):233-241

6.Relja M. (2003) Pathophysiology and classification of neurodegenerative disorders. U 'New Trends in classification, monitoring and management of neurological diseases'-3rd FESCC Continuous postgraduate course in clinical chemistry-Handbook (Ed: Topić E.), pp 95-99

7.Bach-Rojecky L., Relja M, Lacković Botulinum toxin type A in experimental neuropathic

pain J Neural Transm. 2005;112:215-219

8.Nauman M, Albanese A, Heinen F, Molenaers G, Relja M. Safety and efficacy of botulinum toxin type A following long-term use. Eur J Neurol 2006;14(4):35-40

9.Relja M, Klepac N. A dopamine agonist, pramipexole, and cognitive functions in Parkinson's disease. J Neurol Sci. 2006 25;248(1-2):251-4.

10.Klepac N, Relja M, Klepac R, Hecimovic S, Babic T, Trukulja V. Oxidative stress parameters in plasma of Huntington's disease patients, asymptomatic Huntington's disease patients, asymptomatic Huntington's disease gene carriers and healthy subjects. J Neurol 2007;254:1676-1683.

11.Relja M, Poole AC, Schoenen J, Pascual J, Lei X, Thompson C. A Multicenter, Double-blind, randomized, placebo-controlled, parallel group study of multiple treatments of Botulinum Toxin Type A (BoNTA) for the prophylaxis of episodic migraine headaches. Cephalgia 2007;27(6):492-503

12.Klepac N, Trkulja V, Relja M. Nondemented Parkinson's disease patients: Is cognitive performance associated with depressive difficulties. Cogn Behav Neurol 2008;21:87-91

13. Miletić V, Relja M. Restless legs syndrome. Collegium antropologicum. 2011;4:1339-1347.

14. Miletić V, Relja M. Citalopram-Induced Parkinsonian Syndrome: Case Report. Clinical neuropharmacology. 2011;2;92-93

15.Relja M. Clinical rating scales. Parkinsonism Relat Disor 2012;18S:232-235

16.Sovic-Brkicic Lj, Godman B, Voncina, Sovic S, Relja M. Initiatives to improve efficacy for drugs to treat Parkinson's disease in Croatia: future directions Expert Review of Pharmacoeconomics and Outcomes Res 2012;12:373-84

17. Relja M, Miletić V. Epidemiology of restless legs syndrome in Croatia. Eur J Neurol. 2012;19 (Suppl):318-318.

18.Miletić V, Blažina K, Relja M. Transcranial sonography findings in primary cervical dystonia patients with and without depression. Eur J Neurol. 2012;19 (Suppl):697-697.

19. Relja M, Miletić V. Parkinsonism after carbon monoxide poisoning: the effect of dopaminergic therapy. Eur J Neurol. 2012;18 (Suppl): 500-500.

20. Relja M, Miletić V. Prevalence and awareness of non-motor symptoms in de-novo Parkinson's disease patients. Eur J Neurol. 2012;17 (Suppl):377-377.

21. Relja M, Miletić V. Wilsonova bolest u Hrvatskoj. Paediatrica Croatica. 2013;57:15-19.

22.Berardelli A, Wenning K, Antonini A, Berg D, Bloem R, Bonifati V, Brooks D, Colosimo C, Fanciulli A, Ferreira J, Gasser T, Grandas F, Kanovsky P, Kostic V, Kulisevsky J, Oertel W, Poewe W, Colosimo C, Ruzicka E, Relja M, Ruzicka E, Schrag A, Seppi K, Taba P, Vidailhet M (EFNS Task Force Article) Diagnosis of Parkinson's disease European Journal of Neurol 2013;20:34-46.Relja

23.Samardzic T, Petrovic R, Relja M, Telarović S, Miletić V, Težak S. I-123 Ioflupane Brain SPECT and I-131 MIBG Myocardial Scintigraphy as Complementary Diagnostic Tools in Parkinsonism. Eur J Nucl Med Mol Imaging 2013;40 (Suppl 2):S348-S348.

24.. Miletić V, Relja M. Orthostatic autonomic dysfunction in idiopathic Parkinson's disease, multiple system atrophy and progressive supranuclear palsy. Movement Disorders 2013;28 (Suppl 1):197-197.

25. Miletić V, Ozretić D, Relja M. Parkinsonian syndrome and ataxia as a presenting finding of acquired hepatocerebral degeneration. Metab Brain Dis. 2014;29:207-209.

26. Albanese, A., Abbruzzese, G., Dressler, D., Duzynski, W., Khatkova, S., Marti, M.J., Mir, P., Montecucco, C., Moro, E., Pinter, M., Relja, M., Roze, E., Skogseid, I.M., Timerbaeva, S., Tzoulis, C. Practical guidance for CD management involving treatment of Botulinum toxin: a consensus statement . *Journal of Neurology*, 2015 262 (10) 2201- 2213.
27. Miletić V, Radić B, Relja M. Acute pisa syndrome as a neurological emergency. *J Neuropsychiatry Clin Neurosci*. 2015;27:e159-160.
28. Relja, M., Jacinto, J., Jankovic, J., Albanese, A. Botulinum neurotoxin revisited – An individualised, patient-centric approach for the treatment of dystonia and spasticity *European Neurological Review*, 2015 10 (1) 28-34.
29. Relja M, Jurjevic I, Blazina K, Miletić V, Klepac N. Clinical presentation and genetic characteristics of Huntingtons disease in Croatia: Thirty years of experience. *Movement Disorders* 2016;31 (Suppl 2):3665-3665.
30. Valadas, A., Contarino, M.-F., Albanese, A., Bhatia, K.P., Falup-Pecurariu, C., Forsgren, L., Friedman, A., Giladi, N., Hutchinson, M., Kostic, V.S., Krauss, J.K., Lokkegaard, A., Marti, M.J., Milanov, I., Pirtosek, Z., Relja, M., Skorvanek, M., Stamelou, M., Stephens, A. Tamás, G., Taravari, A., Tzoulis, C., Vandenberghe, W., Vidailhet, M., Ferreira, J.J., Tijssen, M.A. Management of dystonia in Europe: A survey of the European network for the study of the dystonia syndromes. *Eur Journal of Neurology*, 2016 23 (4) 772-779.
31. Matak, I., Lacković, Z., Relja, M. Botulinum toxin type A in motor nervous system: unexplained observations and new challenges *Journal of Neural Transmission*, 2016 123 (12), 1415-1421.
32. Dressler, D., Bhidayasiri, R., Bohlega, S., Chahidi, A., Chung, T.M., Ebke, M., Jacinto, L.J., Kaji, R., Koçer, S., Kanovsky, P., Micheli, F., Orlova, O., Paus, S., Pirtosek, Z., Relja, M., Rosales, R.L., Sagástegui-Rodríguez, J.A., Schoenle, P.W., Shahidi, G.A., Timerbaeva, S., Walter, U., Saberi, F.A. Botulinum toxin therapy for treatment of spasticity in multiple sclerosis: review and recommendations of the IAB-Interdisciplinary Working Group for Movement Disorders task force *Journal of Neurology*, 2017 264
33. Relja M, Miletić V. When movement disorders hurt: Addressing pain in hyperkinetic disorders. *Parkinsonism Relat Disord*. 2017;44:110-113.
34. Relja M, Miletić V. Assessment of non-motor symptoms and cognitive functions in patients with isolated adult-onset cervical dystonia previously not treated with botulinum toxin: a single-centre case-controlled study. *Neurology* 2018; 90 (Suppl 15) 46.
35. Lacković Z, Relja M. Analgesic effects of botulinum toxin, *Treatment of Dystonia* (Eds: Dressler D., Altenmueller E., Kraus J) Cambridge University Press 2018 pp 112-120.
36. Pirtosek Z, Bajenaru O, Kovacs N, Milanov I, Relja M, Skorvanek M. What every neurologist should know about the management of Parkinson's disease. *Clinical Neurology and Neurosurgery* 2019 (in press)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Berardelli A, Wenning K, Antonini A, Berg D, Bloem R, Bonifati V, Brooks D, Colosimo C, Fanciulli A, Ferreira J, Gasser T, Grandas F, Kanovsky P, Kostic V, Kulisevsky J, Oertel W, Poewe W, Colosimo C, Ruzicka E, Relja M, Ruzicka E, Schrag A, Seppi K, Taba P, Vidailhet M (EFNS Task Force Article) *Diagnosis of Parkinson's disease European Journal of Neurol* 2013;20:34-46.
2. Relja M, Miletić V. Wilsonova bolest u Hrvatskoj. *Paediatrica Croatica*. 2013;57:15-19.

3. Samardžić T, Petrović R, Relja M, Telarović S, Miletić V, Težak S. I-123 Ioflupane Brain SPECT and I-131 MIBG Myocardial Scintigraphy as Complementary Diagnostic Tools in Parkinsonism. *Eur J Nucl Med Mol Imaging* 2013;40 (Suppl 2):S348-S348.
4. Miletić V, Relja M. Orthostatic autonomic dysfunction in idiopathic Parkinson's disease, multiple system atrophy and progressive supranuclear palsy. *Movement Disorders* 2013;28 (Suppl 1):197-197.
5. Miletić V, Ozretić D, Relja M. Parkinsonian syndrome and ataxia as a presenting finding of acquired hepatocerebral degeneration. *Metab Brain Dis.* 2014;29:207-209.
6. Relja M, Miletić V. False 'other Babinski sign': Clue to psychogenic facial movement disorder. *Movement Disorders* 2014;29 (Suppl 1):S540-S540.
7. Relja M, Miletić V, Blazina K. Nicotine as adjunct therapy to relieve levodopa-induced dyskinesias. *Eur J Neurol.* 2014; 21 (Suppl 1): 665-665.
8. Albanese, A., Abbruzzese, G., Dressler, D., Duzynski, W., Khatkova, S., Marti, M.J., Mir, P., Montecucco, C., Moro, E., Pinter, M., Relja, M., Roze, E., Skogseid, I.M., Timerbaeva, S., Tzoulis, C. Practical guidance for CD management involving treatment of Botulinum toxin: a consensus statement. *Journal of Neurology*, 2015 262 (10) 2201- 2213.
9. Relja M, Jurjević I, Blazina K, Miletić V, Klepac N. Clinical presentation and genetic characteristics of Huntingtons disease in Croatia: Thirty years of experience. *Movement Disorders* 2016;31 (Suppl 2):3665-3665.
10. Valadas, A., Contarino, M.-F., Albanese, A., Bhatia, K.P., Falup-Pecurariu, C., Forsgren, L., Friedman, A., Giladi, N., Hutchinson, M., Kostic, V.S., Krauss, J.K., Lokkegaard, A., Marti, M.J., Milanov, I., Pirtosek, Z., Relja, M., Skorvanek, M., Stamelou, M., Stephens, A., Tamás, G., Taravari, A., Tzoulis, C., Vandenberghe, W., Vidailhet, M., Ferreira, J.J., Tijssen, M.A. Management of dystonia in Europe: A survey of the European network for the study of the dystonia syndromes. *Eur Journal of Neurology*, 2016 23 (4) 772-779.
11. Matak, I., Lacković, Z., Relja, M. Botulinum toxin type A in motor nervous system: unexplained observations and new challenges *Journal of Neural Transmission*, 2016 123 (12), 1415-1421.
12. Dressler, D., Bhidayasiri, R., Bohlega, S., Chahidi, A., Chung, T.M., Ebke, M., Jacinto, L.J., Kaji, R., Koçer, S., Kanovsky, P., Micheli, F., Orlova, O., Paus, S., Pirtosek, Z., Relja, M., Rosales, R.L., Sagástegui-Rodríguez, J.A., Schoenle, P.W., Shahidi, G.A., Timerbaeva, S., Walter, U., Saberi, F.A. Botulinum toxin therapy for treatment of spasticity in multiple sclerosis: review and recommendations of the IAB-Interdisciplinary Working Group for Movement Disorders task force *Journal of Neurology*, 2017 264
13. Relja M, Miletić V. When movement disorders hurt: Addressing pain in hyperkinetic disorders. *Parkinsonism Relat Disord.* 2017;44:110-113.
14. Relja M, Miletić V. Assessment of non-motor symptoms and cognitive functions in patients with isolated adult-onset cervical dystonia previously not treated with botulinum toxin: a single-centre case-controlled study. *Neurology* 2018; 90 (Suppl 15) 46.
15. Lacković Z, Relja M. Analgesic effects of botulinum toxin, *Treatment of Dystonia* (Eds: Dressler D., Altenmueller E., Kraus J) Cambridge University Press 2018. pp 112-120.
16. Pirtosek Z, Bajenaru O, Kovacs N, Milanov I, Relja M, Skorvanek M. What every neurologist should know about the management of Parkinson's disease. *Clinical Neurology and Neurosurgery* 2019 (in press)



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Scientific research project

2000-2015 Project of Croatian Ministry of Science 'Pharmacology of Movement Disorders' - principal investigator

2005-2013 International Collaborative project of Deutscher Akademischer Austausch Dienst' (DAAD) „Antinociceptive activity of botulinum toxin type A: new mechanisms of action, new indications? (Croatia, Germany)

2011-2015 COST BM1001EU action project 'European network for the Study of Dystonia Syndrome' (coordinator WG4 group)

2018-date European Brain Council- EBC The value of treatment for brain disorders project : EBC VoT2 project (principal investigator)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2011-2015 COST BM1001EU action project 'European network for the Study of Dystonia Syndrome' (coordinator WG4 group)

2018-date European Brain Council- EBC The value of treatment for brain disorders project : EBC VoT2 project (principal investigator)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist. Prof. Mihael Ries M.D. PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb,
University Hospital “Sestre milosrdnice”

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Elektrofiziološke metode u
medicinskim istraživanjima

BIOGRAPHY

ENT specialist since 1996., and subspecialist in Audiology since 2004.

1991./1992. employed at the University Clinic for Neurology, field of neurophysiology, performing electromyoneurography under the mentorship of Professor Anica Jušić, MD, PhD.

Since 1992. Employed at the University Clinic for ENT and Head and Neck Surgery, University Hospital „Sestre milosrdnice“ .

From 2009. Employed at the School of Medicine, University of Zagreb, since 2017. as Assist. Professor. Involved in the subject of Basic Medical Artistry since 2012. Since 2014. Involved in the postdoctoral scientific study subject „Electrophysiology in medical research“. Teacher in the subject ENT and surgery of head and neck in English language at the School of Medicine, University of Zagreb. Vice president of the Croatian Society for Audiology and Phoniatrics, and president of the section for Otology and Neurotology.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Ajduk J, Ries M, Trotic R, Marinac I, Vlatka K, Bedekovic V. Hyperbaric Oxygen Therapy as Salvage Therapy for Sudden Sensorineural Hearing Loss. J Int Adv Otol. 2017 Apr;13(1):61-64. doi: 10.5152/iao.2017.3185.
2. Košec A, Kelava I, Ajduk J, Ries M, Trotić R, Bedeković V. Significance of intraoperative findings in revision tympanomastoidectomy. Am J Otolaryngol. 2017 Jul - Aug;38(4):462-465. doi: 10.1016/j.amjoto.2017.04.006. Epub 2017 Apr 12.
3. Košec A, Ajduk J, Ries M, Trotić R. Primary Ameloblastoma of the Temporal Bone. J Oral Maxillofac Surg. 2017 Jun;75(6):1300.e1-1300.e4. doi: 10.1016/j.joms.2017.01.014. Epub 2017 Jan 24.
4. Ries M, Kostić M, Ajduk J, Trotić R, Bedeković V. A case of bilateral congenital middle ear cholesteatoma. Braz J Otorhinolaryngol. 2017 Nov - Dec;83(6):723-725. doi: 10.1016/j.bjorl.2015.09.003. Epub 2015 Dec 17.
5. Kostić M, Ribarić Jankes K, Trotić R, Ries M, Ledić B, Bedeković V. Clinical and audiological findings in children with acute otitis media. Acta Otolaryngol. 2015 Jul;135(7):645-50.
6. Ries M, Kostić M, Zadavec D, Drvis P, Ajduk J, Trotić R. Nasopharyngeal bacterial flora in healthy preschool children during winter-spring months. Coll Antropol. 2013 Jun;37(2):415-22.
7. Drvis P, Ries M, Zurak K, Trotić R, Ajduk J, Stevanović S. Hidradenoma of the external auditory canal: clinical presentation and surgical treatment. Coll Antropol. 2012 Nov;36 Suppl 2:159-61.

8. Trotić R, Kostić M, Ries M, Drvis P, Ajduk J, Petrović I. Long-term functional outcomes after 10 years of bilateral cochlear implant use. *Coll Antropol.* 2012 Mar;36(1):161-5.
9. Ajduk J, Ries M, Vagic D, Batos-Tripalo A. Temporomandibular joint fistula into the external ear canal. *J Laryngol Otol.* 2012 Aug;126(8):837-9. doi: 10.1017/S0022215112001144.
10. Etiology of deafness in children cochlear implant candidates in Croatia. Drvis P, Ajduk J, Trotić R, Ries M, Kosović V, Hat J. *Coll Antropol.* 2008 Dec;32(4):1111-3.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Hyperbaric Oxygen Therapy as Salvage Therapy for Sudden Sensorineural Hearing Loss. Ajduk J, Ries M, Trotić R, Marinac I, Vlatka K, Bedeković V. *J Int Adv Otol.* 2017 Apr;13(1):61-64. doi: 10.5152/iao.2017.3185.
2. Significance of intraoperative findings in revision tympanomastoidectomy. Košec A, Kelava I, Ajduk J, Ries M, Trotić R, Bedeković V. *Am J Otolaryngol.* 2017 Jul - Aug;38(4):462-465. doi: 10.1016/j.amjoto.2017.04.006. Epub 2017 Apr 12.
3. Primary Ameloblastoma of the Temporal Bone. Košec A, Ajduk J, Ries M, Trotić R. *J Oral Maxillofac Surg.* 2017 Jun;75(6):1300.e1-1300.e4. doi: 10.1016/j.joms.2017.01.014. Epub 2017 Jan 24.
4. A case of bilateral congenital middle ear cholesteatoma. Ries M, Kostić M, Ajduk J, Trotić R, Bedeković V. *Braz J Otorhinolaryngol.* 2017 Nov - Dec;83(6):723-725. doi: 10.1016/j.bjorl.2015.09.003. Epub 2015 Dec 17.
5. Nasopharyngeal bacterial flora in healthy preschool children during winter-spring months. Ries M, Kostić M, Zadravec D, Drvis P, Ajduk J, Trotić R. *Coll Antropol.* 2013 Jun;37(2):415-22.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Cochlear implantation prognostic factors in very young children
Prognostic value of proteomic profile head and neck melanoma tissue grade I and II

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Prognostic value of proteomic profile head and neck melanoma tissue grade I and II

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assoc. Prof. Dunja Rogić, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Center Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical Methods in Biomedical Research, Evidence-based medicine

BIOGRAPHY

Assoc. Prof. Dunja Rogić, PhD, was born on 8 Oct 1962 in Zagreb where she graduated from the Faculty of Pharmacy and Biochemistry; in 1991 she defended her M.Sc. thesis and in 2000 her PhD thesis; she became a medical biochemistry specialist in 1995. Since 1987 she has been employed at the University Hospital Center Zagreb; she has been head of Department of Laboratory Diagnostics since 2013. In 2002, she completed a postgraduate study entitled "Leadership and Management in Health Services" (Andrija Štampar School of Public Health, Zagreb University School of Medicine and London School of Economics), and the following courses: Critical Appraisal Skills, and: Teaching Evidence-Based Medicine, Oxford, UK. In 1999 she was at the Institute for Clinical Chemistry, Klinikum München-Bogenhausen, Munich, Germany (prof. dr. Walter Guder) where she learnt about an expert system for urine protein differentiation and translated it in Croatian; then she spent a study period at the Institute for Clinical Chemistry, Kaiser Franz-Josef Spital, Vienna, Austria (prof. dr. Matthias Mueller), and in 2010 she was on an academic visit to the laboratory of the University Hospital in Skåne, Malmö, Sweden. She was elected asst. professor of the Faculty of Pharmacy and Biochemistry in 2008, and an associate research scientist in 2012. She has actively collaborated in research projects of the Croatian Ministry of Science, Education and Sports, of the Croatian Science Foundation, and in two international projects. She has been a chairperson of scientific and organizing committees of a number of national scientific and professional meetings (e.g., International Advisory Scientific Board, Worldlab 2014), an invited speaker, a director and organizer of the international course Evidence-Based Laboratory Medicine, and a lecturer and organizer of continuous education courses for physicians and medical biochemists. She participates in postgraduate teaching at the Zagreb University School of Medicine; since 2008 she has taught and been a course coordinator in undergraduate and postgraduate studies of the Faculty of Pharmacy and Biochemistry, University of Zagreb. She is the author of 73 scientific and professional papers and 154 congress abstracts at international and national scientific and professional meetings. She is the co-editor of two books and textbooks for undergraduate students, and the author of four chapters in books and of a number of chapters in continuous education course handbooks. She has mentored the preparation of 17 graduate theses by students of the Zagreb University Faculty of Pharmacy and Biochemistry, and of three PhD dissertations. She is a member of the international IFCC Committee for Evidence-based Laboratory Medicine and of the international IFCC Working Group for Postanalytical Phase; she was vice-president (2007-2017) of the Croatian Chamber of Medical Biochemists, and since 2017 she has been a chairperson of the Chamber's Committee for Professional Issues; a member of Ethics Committee, University Hospital Center Zagreb, since 2014, a member of the National Medical Council, Croatian Ministry of Health, since 2015, and a member of the Committee for Automated Biochemistry Analyzers, Croatian Ministry of Health, since 2018.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 21 Oct 2013

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Ajzner É, Rogic D, Meijer P, Kristoffersen AH, Carraro P, Sozmen E, Faria AP, Sandberg S; joint Working Group on Postanalytical Phase (WG-POST) of the European Federation of Clinical Chemistry and

Laboratory Medicine (EFLM) and European Organisation for External Quality Assurance Providers in Laboratory Medicine (EQALM). An international study of how laboratories handle and evaluate patient samples after detecting an unexpected APTT prolongation. *Clin Chem Lab Med* 2015;1;53(10):1593-603.

Kristoffersen AH, Ajzner E, Rogic D, Sozmen EY, Carraro P, Faria AP, Watine J, Meijer P, Sandberg S; joint Working Group on Postanalytical Phase (WG-POST) of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) and European Organisation for External Quality Assurance Providers in Laboratory Medicine (EQALM). Is D-dimer user according to clinical algorithms in the diagnostic work-up of patients with suspicion of venous thromboembolism? A study in six European countries. *Thromb Res* 2016;142;1-7.

Šegulja D, Matišić D, Honović L, Batinić J, Rogić D. Unusual pattern in haemoglobin electrophoresis in Croatian population: a case report. *Biochem Med* 2016;26(3):451-456.

Lapić I, Fressl Juroš G, Rako I, Rogić D. Changing the electronic request form proves to be an effective tool for optimizing laboratory test utilization in the emergency department. *International Journal of Medical Informatics* 2017;102:29-34.

Fogazzi GB, Anderlini R, Canovi S, Covarelli C, Gras J, Kučera J, Proietti A, Rogic D, Teboul R, Ferraris Fusarini C, de Liso F, Garigali G, Daudon M. "Daisy-like" crystals: A rare and unknown type of urinary crystal. *Clinica Chimica Acta* 2017;471:154-157.

Kristoffersen AH, Ajzner E, Bauca JM, Carraro P, Faria AP, Hillarp A, Rogic D, Sozmen EY, Watine J, Meijer P, Sandberg S. Pre- and post-test probabilities of venous thromboembolism and diagnostic accuracy of D-dimer, estimated by European clinicians working in emergency departments. *Thromb Res* 2017;18;159:19-23.

Mlinaric A, Milos M, Coen Herak D, Fucek M, Rimac V, Zadro R, Rogic D. Autovalidation and automation of the postanalytical phase of routine hematology and coagulation analyses in a university hospital laboratory. *Clin Chem Lab Med* 2017; 56(3): 454-462.

Fuček M, Dika Ž, Karanović S, Vuković Brinar I, Premužić V, Kos J, Cvitković A, Mišić M, Samardžić J, Rogić D, Jelaković B. Reliability of CKD-EPI predictive equation in estimating chronic kidney disease prevalence in the Croatian endemic nephropathy area. *Biochem Med (Zagreb)* 2018;28(1):010701.

Zekušić M, Škaričić A, Fumić K, Rogić D, Žigman T, Petković Ramadža D, Vukojević N, Ruefenacht V, Uroić V, Barić I. Metabolic follow-up of a Croatian patient with gyrate atrophy and a new mutation in the OAT gene: a case report. *Biochem Med (Zagreb)* 2018;28(3):030801.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Dumic-Cule I, Brkljacic J, Rogic D, Bordukalo Niksic T, Tikvica Luetic A, Draca N, Kufner V, Trkulja V, Grgurevic L, Vukicevic S. Systemically available bone morphogenetic protein two and seven affect bone metabolism. *Int Orthop* 2014;38(9):1979-85.

Dumic-Cule I, Draca N, Luetic AT, Jezek D, Rogic D, Grgurevic L, Vukicevic S. TSH prevents bone resorption and with calcitriol synergistically stimulates bone formation in rats with low levels of calciotropic hormones. *Horm Metab Res* 2014;46(5):305-12.

Herak-Kramberger CM, Breljak D, Ljubojevic M, Matokanovic M, Lovric M, Rogic D, Brzica H, Vrhovac I, Karaica D, Micek V, Duper JI, Brown D, Sabolic I. Sex-dependent expression of water channel AQP1 along the rat nephron. *Am J Physiol Renal Physiol* 2015;308(8):F809-21.

Pauk M, Grgurevic L, Brkljacic J, Kufner V, Bondukalo-Niksic T, Grabusic K, Razdorov G, Rogic D, Zuvic M, Oppermann H, Babitt JL, Lin HY, Volarevic S, Vukicevic S. Exogenous BMP7 corrects plasma iron overload and bone loss in Bmp6^{-/-} mice. *Int Orthop* 2015;39(1):161-72.

Ajzner É, Rogic D, Meijer P, Kristoffersen AH, Carraro P, Sozmen E, Faria AP, Sandberg S; joint Working Group on Postanalytical Phase (WG-POST) of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) and European Organisation for External Quality Assurance Providers in Laboratory Medicine (EQALM). An international study of how laboratories handle and evaluate patient samples after detecting an unexpected APTT prolongation. *Clin Chem Lab Med* 2015;1;53(10):1593-603.

Kristoffersen AH, Ajzner E, Rogic D, Sozmen EY, Carraro P, Faria AP, Watine J, Meijer P, Sandberg S; joint Working Group on Postanalytical Phase (WG-POST) of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) and European Organisation for External Quality Assurance Providers in Laboratory Medicine (EQALM). Is D-dimer user according to clinical algorithms in the diagnostic work-up of patients with suspicion of venous thromboembolism? A study in six European countries. *Thromb Res* 2016;142;1-7.

Šegulja D, Matišić D, Honović L, Batinić J, Rogić D. Unusual pattern in haemoglobin electrophoresis in Croatian population: a case report. *Biochem Med* 2016;26(3):451-456.

Lapić I, Fressl Juroš G, Rako I, Rogić D. Changing the electronic request form proves to be an effective tool for optimizing laboratory test utilization in the emergency department. *International Journal of Medical Informatics* 2017;102:29-34.

Fogazzi GB, Anderlini R, Canovi S, Covarelli C, Gras J, Kučera J, Proietti A, Rogic D, Teboul R, Ferraris Fusarini C, de Liso F, Garigali G, Daudon M. "Daisy-like" crystals: A rare and unknown type of urinary crystal. *Clinica Chimica Acta* 2017;471:154-157.

Kristoffersen AH, Ajzner E, Bauca JM, Carraro P, Faria AP, Hillarp A, Rogic D, Sozmen EY, Watine J, Meijer P, Sandberg S. Pre- and post-test probabilities of venous thromboembolism and diagnostic accuracy of D-dimer, estimated by European clinicians working in emergency departments. *Thromb Res* 2017;18;159:19-23.

Mlinaric A, Milos M, Coen Herak D, Fucek M, Rimac V, Zadro R, Rogic D. Autovalidation and automation of the postanalytical phase of routine hematology and coagulation analyses in a university hospital laboratory. *Clin Chem Lab Med* 2017; 56(3): 454-462.

Grgurevic L, Erjavec I, Grgurevic I, Dumic-Cule I, Brkljacic J, Verbanac D, Matijasic M, Cipic Paljetak H, Novak R, Plecko M, Bubic-Spoljar J, Rogic D, Kufner V, Pauk M, Bordukalo-Niksic T, Vukicevic S. Systemic inhibition of BMP1-3 decreases progression of CCl₄-induced liver fibrosis in rats. *Growth Factors* 2017;35(6):201-215.

Fuček M, Dika Ž, Karanović S, Vuković Brinar I, Premužić V, Kos J, Cvitković A, Mišić M, Samardžić J, Rogić D, Jelaković B. Reliability of CKD-EPI predictive equation in estimating chronic kidney disease prevalence in the Croatian endemic nephropathy area. *Biochem Med (Zagreb)* 2018;28(1):010701.

Rako I, Mlinaric A, Dozelencic M, Juros GF, Rogic D. Effect of different pre-analytical conditions on plasma lactate concentration. *Biochem Med (Zagreb)* 2018;28(2):020701.

Zekušić M, Škaričić A, Fumić K, Rogić D, Žigman T, Petković Ramadža D, Vukojević N, Ruefenacht V, Uroić V, Barić I. Metabolic follow-up of a Croatian patient with gyrate atrophy and a new mutation in the OAT gene: a case report. *Biochem Med (Zagreb)* 2018;28(3):030801.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Dunja Rogić, collaborator in the Croatian Science Foundation project: The Role of Oxidative Stress and Opiorphin in Temporomandibular Disorders, IP-2014-09-0370; principal investigator: prof Iva Alajbeg.

Collaborator in the University of Zagreb project: Chronic Kidney Disease - Prevalence and Markers of Early Lesion. 2014-2017. Principal investigator: prof. Bojan Jelaković.

Collaborator in the Croatian Science Foundation project: Epidemiology of Hypertension and Intake of Kitchen Salt in Croatia (EH-UH2). 2017. Principal investigator: prof. Bojan Jelaković.

Collaborator in the project: Quality of Guidelines. A project of the IFCC Committee for Evidence-Based Laboratory Medicine. Principal investigator: prof. Andrea Rita Horvath.

Collaborator, i.e. member: Postanalytical Phase: International Survey on Oral Anticoagulation Therapy Management. A project of the EFLM Working Group for Postanalytical Phase.

Collaborator in the University of Zagreb project: Isolation of Exosomes and Extracellular DNA from Cultivated Tumor Cells. 2018. Principal investigator: prof. Jozsef Petrik.

Collaborator in the Croatian Science Foundation project: Determination of the Content of the Intestinal Microbiota, Inflammatory Markers, Nutritional and Endocrine Status of Patients With Inflammatory Bowel Disease. 2014 – 2018. Principal investigator: prof. Donatella Verbanac.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Dunja Rogić, collaborator in the Croatian Science Foundation project: The Role of Oxidative Stress and Opiorphin in Temporomandibular Disorders, IP-2014-09-0370; principal investigator: prof Iva Alajbeg.

Collaborator in the University of Zagreb project: Chronic Kidney Disease - Prevalence and Markers of Early Lesion. 2014-2017. Principal investigator: prof. Bojan Jelaković.

Collaborator in the Croatian Science Foundation project: Epidemiology of Hypertension and Intake of Kitchen Salt in Croatia (EH-UH2). 2017. Principal investigator: prof. Bojan Jelaković.

Collaborator in the project: Quality of Guidelines. A project of the IFCC Committee for Evidence-Based Laboratory Medicine. Principal investigator: prof. Andrea Rita Horvath.

Collaborator, i.e. member: Postanalytical Phase: International Survey on Oral Anticoagulation Therapy Management. A project of the EFLM Working Group for Postanalytical Phase.

Collaborator in the University of Zagreb project: Isolation of Exosomes and Extracellular DNA from Cultivated Tumor Cells. 2018. Principal investigator: prof. Jozsef Petrik.

Collaborator in the Croatian Science Foundation project: Determination of the Content of the Intestinal Microbiota, Inflammatory Markers, Nutritional and Endocrine Status of Patients With Inflammatory Bowel Disease. 2014 – 2018. Principal investigator: prof. Donatella Verbanac.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Martina Rojnić Kuzman, assist. professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Zagreb School of Medicine, University of Zagreb and Zagreb University Hospital Centre

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pharmacogenomics

BIOGRAPHY

Born in Pula 1978. Education: 2002 – MD (School of Medicine University of Zagreb), 2008 – Psychiatrist (University Hospital Centre Zagreb), 2008 – PhD (psychiatry) (School of Medicine University of Zagreb). Actively involved in clinical and research work with patients with first episode psychosis. Published more than 50 expert and scientific papers, and serves as associate editor in journal *Psychiatria Danubina* (2011.-), reviewer of number of international journals. Actively involved in professional associations at international and national level, serving as secretary general of the Croatian Psychiatric Association (CPA) (2014-), and Board member of the European Psychiatric Association (2017 -), continuing former activities (president of the European Federation of Psychiatry Trainees (2008-2011); president and founder of the Croatian Section of Young Psychiatrists and Trainees, CPA (2005-2009); Board Member of the ECPC - EPA (2009 - 2013) and chair of the ECPC - EPA (2013-2015). Teaching students at the Zagreb School of Medicine, since 2003, also having mentorship of doctoral and graduate thesis, and students research work.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1.Kudlek Mikulic S, Mihaljevic-Peles A, Sagud M, Bajs Janovic M, Ganoci L, Grubisin J, Kuzman Rojnic M, Vuksan Cusa B, Bradaš Z, Božina N. Brain-derived neurotrophic factor serum and plasma levels in the treatment of acute schizophrenia with olanzapine or risperidone: 6-week prospective study. *Nord J Psychiatry*. 2017;71(7):513-520.
- 2.Kao AC, Rojnic Kuzman M, Tiwari AK, Zivkovic MV, Chowdhury NI, Medved V, Kekin I, Zai CC, Lieberman JA, Meltzer HY, Bozina T, Bozina N, Kennedy JL, Sertic J, Müller DJ. Methylenetetrahydrofolate reductase gene variants and antipsychotic-induced weight gain and metabolic disturbances. *J Psychiatr Res* 2014;54:36-42.
- 3.Lovrić M, Božina N, Hajnšek S, Kuzman MR, Sporiš D, Lalić Z, Božina T, Granić P. Association between lamotrigine concentrations and ABCB1 polymorphisms in patients with epilepsy. *Ther Drug Monit*. 2012;34(5):518-25.
- 4.Kuzman MR, Medved V, Bozina N, Grubišin J, Jovanovic N, Sertic J. Association study of MDR1 and 5-HT2C genetic polymorphisms and antipsychotic-induced metabolic disturbances in female patients with schizophrenia. *Pharmacogenomics J*. 2011;11(1):35-44.
5. Bozina N, Kuzman MR, Medved V, Jovanovic N, Sertic J, Hotujac L. Associations between MDR1 gene polymorphisms and schizophrenia and therapeutic response to olanzapine in female schizophrenic patients. *J Psychiatr Res*. 2008;42(2):89-97.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1.Kekin I, Bosnjak D, Makaric P, Bajic Z, Rossini Gajsak L, Malojcic B, Boban M, Rojnic Kuzman M. Significantly lower right middle cerebral artery blood flow velocity in the first episode of psychosis during neurocognitive testing. *Psychiatr Danub*. 2018 Jun;30(2):172-182.

2. Bosnjak Kuharic D, Makaric P, Kekin I, Lukacevic Lovrencic I, Savic A, Ostojic D, Silic A, Brecic P, Bajic Z, Rojnic Kuzman M. Differences in Facial Emotional Recognition Between Patients With the First-Episode Psychosis, Multi-episode Schizophrenia, and Healthy Controls. *J Int Neuropsychol Soc.* 2018;1-9.
3. Rojnic Kuzman M, Bosnjak Kuharic D, Kekin I, Makaric P, Madzarac Z, Koricanic Makar A, Kudlek Mikulic S, Bajic Z, Bistrovic P, Bonacin D, Vogrinc Z. Effects of Long-Term Multimodal Psychosocial Treatment on Antipsychotic-Induced Metabolic Changes in Patients With First Episode Psychosis. *Front Psychiatry.* 2018 ;9:488.
4. Maric NP, Petrovic SA, Raballo A, Rojnic-Kuzman M, Klosterkötter J, Riecher-Rössler A. Survey of the European Psychiatric Association on the European status and perspectives in early detection and intervention in at-risk mental state and first-episode psychosis. *Early Interv Psychiatry.* 2018 Jun 8. doi:10.1111/eip.12682.
5. Rojnic Kuzman M, Andlauer O, Burmeister K, et al. Effective assessment of psychotropic medication side effects using PsyLOG mobile application. *Schizophr Res.* 2018;192:211-212.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2015-2018 Glavni istraživač na projektu " Biomarkers in schizophrenia – integration of complementary methods in longitudinal follow up of first episode psychosis patients, financiram od HRZZ

2013-2015 Glavni istraživač na međunarodnom projektu mPIVAS: m-health Psychoeducational Intervention Versus Antipsychotic-Induced Side-effects, financed by the Life Learning Programmes, Leonardo da Vinci Partnership, Agency for Mobilities and Programmes of the European Union.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2018- 2022 Suradnik na međunarodnom projektu RECOVER-E (LaRge-scalE implementation of COmmunity based mental health care for people with seVere and Enduring mental ill health in EuRopE) financiran sredstvima Horizon 2020.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ivica Rubelj Prof. PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Molecular Genetics of Aging and Carcinogenesis

BIOGRAPHY

Education:

PhD in Molecular biology, Faculty of sciences, University of Zagreb, 1991.

MSc in Molecular biology, Faculty of sciences, University of Zagreb, 1989.

BSc in Experimental biology, Faculty of sciences, University of Zagreb, 1985.

Work experience:

2018- Senior Scientist at Ruđer Bošković Institute, Department of Molecular biology.

2011-2018: Senior Research Associate at Ruđer Bošković Institute, Department of Molecular biology.

2001-2011: Research Associate at Ruđer Bošković Institute, Department of Molecular biology.

1996-2001: Senior research assistant at Ruđer Bošković Institute, Department of Molecular genetics.

2002- : Head of the Laboratory for Molecular and Cell Biology at Ruđer Bošković Institute, Department of Molecular biology.

Postdoc employments:

1995-1996: Postdoctoral fellow at “Louisiana State University Medical Center”, New Orleans, Louisiana, USA.

1991-1995: Postdoctoral fellow at “Baylor College of Medicine”, Houston, Texas, USA.

Short term fellowships:

2006."Sam and Ann Barshop Center for Longevity and Aging Studies, UTHSCSA" San Antonio, Texas, USA.

2003."Sam and Ann Barshop Center for Longevity and Aging Studies, UTHSCSA" San Antonio, Texas, USA.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 20.12.2018.-

Senior scientist at RBI; 28.9.2018.-Appointed Full Professor at Faculty of Sciences

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Dimri GP, Lee X, Basile G, Acosta M, Scott G, Roskelley C, Medrano EE, Linskens M, Rubelj I, Pereira-Smith O, et al. A biomarker that identifies senescent human cells in culture and in aging skin in vivo. Proc Natl Acad Sci U S A. 1995 Sep 26;92(20):9363-7.

Gajski G, Gerić M, Vučić Lovrenčić M, Božićević S, Rubelj I, et al. Analysis of health-related biomarkers between vegetarians and non-vegetarians: A multi-biomarker approach. J Funct Foods Volume: 48 Pages: 643-653 Published: SEP 2018

Ljubojevic M, et al. Sex-dependent expression of metallothioneins MT1 and MT2 and concentrations of trace elements in rat liver and kidney tissues: effect of gonadectomy. JTEMB_2018_322_R6-in press.

Špoljarić AM, Rubelj I, Huzak M. Mathematical model and computer simulations of telomere loss. J Theor Biol. 2019 Mar 21;465:78-89. doi: 10.1016/j.jtbi.2019.01.007

Huđek A, Škara L, Smolković B, Kazazić S, Ravlić S, Nanić L, Osvatić MM, Jelčić J, Rubelj I, Bačun-Družina V. Higher prevalence of FTO gene risk genotypes AA rs9939609, CC rs1421085, and GG rs17817449 and

saliva containing *Staphylococcus aureus* in obese women in Croatia. *Nutr Res.* 2017 Dec 18;50:94-103. doi: 10.1016/j.nutres

Nanić L, Vidaček NŠ, Ravlić S, Šatović E, Huzak M, Rubelj I. Mutual interactions between telomere heterogeneity and cell culture growth dynamics shape stochasticity of cell aging. *Biogerontology.* 2018 Feb;19(1):23-31. doi: 10.1007/s10522-017-9736-2

Ravlić S, Škrobot Vidaček N, Nanić L, Laganović M, Slade N, Jelaković B, Rubelj I. Mechanisms of fetal epigenetics that determine telomere dynamics and health span in adulthood. *Mech Ageing Dev.* 2018 Sep;174:55-62. doi: 10.1016/j.mad.2017.08.014

Vidacek NŠ, Nanic L, Ravlic S, Sopta M, Geric M, Gajski G, Garaj-Vrhovac V, Rubelj I. Telomeres, Nutrition, and Longevity: Can We Really Navigate Our Aging? *J Gerontol A Biol Sci Med Sci.* 2017 Dec 12;73(1):39-47. doi: 10.1093/gerona/glx082

Cukusic Kalajzic A, Vidacek NS, Huzak M, Ivankovic M, Rubelj I. Telomere Q-PNA-FISH--reliable results from stochastic signals. *PLoS One.* 2014 Mar 18;9(3):e92559. doi: 10.1371/journal.pone.0092559. eCollection 2014.

Nemet J, Jelicic B, Rubelj I, Sopta M. The two faces of Cdk8, a positive/negative regulator of transcription. *Biochimie.* 2014 Feb;97:22-7. doi: 10.1016/j.biochi.2013.10.004

Ferenac M, Polancec D, Huzak M, Pereira-Smith OM, Rubelj I. Early-senescent human skin fibroblasts do not demonstrate accelerated telomere shortening. *J Gerontol A Biol Sci Med Sci.* 2005 Jul;60(7):820-9.

Rubelj I, Vondracek Z. Stochastic mechanism of cellular aging--abrupt telomere shortening as a model for stochastic nature of cellular aging. *J Theor Biol.* 1999 Apr 21;197(4):425-38.

Rubelj I, Venable SF, Lednický J, Butel JS, Bilyeu T, Darlington G, Surmacz E, Campisi J, Pereira-Smith OM. Loss of T-antigen sequences allows SV40-transformed human cells in crisis to acquire a senescent-like phenotype. *J Gerontol A Biol Sci Med Sci.* 1997 Sep;52(5):B229-34.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Gajski G, Gerić M, Vučić Lovrenčić M, Božićević S, Rubelj I, et al. Analysis of health-related biomarkers between vegetarians and non-vegetarians: A multi-biomarker approach. *J Funct Foods* Volume: 48 Pages: 643-653 Published: SEP 2018

Ljubojevic M, et al. Sex-dependent expression of metallothioneins MT1 and MT2 and concentrations of trace elements in rat liver and kidney tissues: effect of gonadectomy. *JTEMB_2018_322_R6*-in press.

Špoljarić AM, Rubelj I, Huzak M. Mathematical model and computer simulations of telomere loss. *J Theor Biol.* 2019 Mar 21;465:78-89. doi: 10.1016/j.jtbi.2019.01.007

Huđek A, Škara L, Smolković B, Kazazić S, Ravlić S, Nanić L, Osvatić MM, Jelčić J, Rubelj I, Bačun-Družina V. Higher prevalence of FTO gene risk genotypes AA rs9939609, CC rs1421085, and GG rs17817449 and saliva containing *Staphylococcus aureus* in obese women in Croatia. *Nutr Res.* 2017 Dec 18;50:94-103. doi: 10.1016/j.nutres

Nanić L, Vidaček NŠ, Ravlić S, Šatović E, Huzak M, Rubelj I. Mutual interactions between telomere heterogeneity and cell culture growth dynamics shape stochasticity of cell aging. *Biogerontology.* 2018 Feb;19(1):23-31. doi: 10.1007/s10522-017-9736-2

Ravlić S, Škrobot Vidaček N, Nanić L, Laganović M, Slade N, Jelaković B, Rubelj I. Mechanisms of fetal epigenetics that determine telomere dynamics and health span in adulthood. *Mech Ageing Dev.* 2018 Sep;174:55-62. doi: 10.1016/j.mad.2017.08.014

Vidacek NŠ, Nanic L, Ravlic S, Sopta M, Geric M, Gajski G, Garaj-Vrhovac V, Rubelj I. Telomeres, Nutrition, and Longevity: Can We Really Navigate Our Aging? *J Gerontol A Biol Sci Med Sci.* 2017 Dec 12;73(1):39-47. doi: 10.1093/gerona/glx082

Cukusic Kalajzic A, Vidacek NS, Huzak M, Ivankovic M, Rubelj I. Telomere Q-PNA-FISH--reliable results from stochastic signals. PLoS One. 2014 Mar 18;9(3):e92559. doi: 10.1371/journal.pone.0092559. eCollection 2014.

Nemet J, Jelcic B, Rubelj I, Sopta M. The two faces of Cdk8, a positive/negative regulator of transcription. Biochimie. 2014 Feb;97:22-7. doi: 10.1016/j.biochi.2013.10.004

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Current grants:

Research Grant (IP-01-2018): "Reprogramming of skin homeostasis and regeneration using a novel cell micro-transplantation technology", CSF (2018-2022)

Collaborator on Grant (IP-11-2013): "Aging-related expression of membrane transporters in rat", leader Ivan Sabolić/Davorka Breljak PhD, CSF. (2014-2019)

Research grants:

Grant No. 098-0982913-2768: "Structure and function of telomeres in control of cell senescence", MSES (2007-2014)

Grant No. 0098077: "Molecular mechanisms of cell immortalization and aging", MSES (2002-2006)

Collaborative Grant No. 0098904: "Revitalization of cells and tissues by telomerase in vitro and in vivo", MSES (2002-2006)

Grant No. 0098436: "Telomere shortening as a mechanism of cell senescence", Ministry of Sciences, Education and Sports (MSES) (1998-2001)

Applied science grants:

Grant No. PoC5_11_07: "Construction of genetic tools for safe integration of foreign DNA into human genome", BICRO (2014-2015)

Grant No. 13MHT700: "Construction, Development and application of target vectors", CIT (2009-2014)

Grant No. PLR-19: "Influence of selected compounds on the cell growth", Pliva - Research Institute (2004-2006)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Current grants:

Research Grant (IP-01-2018): "Reprogramming of skin homeostasis and regeneration using a novel cell micro-transplantation technology", CSF (2018-2022)

Collaborator on Grant (IP-11-2013): "Aging-related expression of membrane transporters in rat", leader Ivan Sabolić/Davorka Breljak PhD, CSF. (2014-2019)

Grant No. PoC5_11_07: "Construction of genetic tools for safe integration of foreign DNA into human genome", BICRO (2014-2015)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

PhD Theses (5):

Lucia Nanić, Influence of resveratrol and melatonin antioxidants and young transplanted fibroblasts on tissue homeostasis changes and tissue regeneration in rat aging, Josip Juraj Strossmayer University of Osijek; University of Dubrovnik; Ruđer Bošković Institute, 20. 12. 2018.

Andrea Ćukušić Kalajžić, Structural characterisation of telomeres in normal human fibroblasts, Faculty of sciences, University of Zagreb, 27.05.2011.



Marina Ferenac Kiš, Structural and functional telomere changes during growth of normal and immortal cells in cell culture, Faculty of sciences, University of Zagreb, 20.05.2011.

Milena Ivanković, Dynamics of individual telomeres in growth control of normal human cells, Faculty of sciences, University of Zagreb, 25. 2. 2009.

Nikolina Škrobot Vidaček, Recombinational telomere shortening in growth control of normal human fibroblasts, Faculty of sciences, University of Zagreb, 18. 5. 2010.

MSc Thesis (1):

Marina Ferenac, Dynamics of telomere shortening in cell senescence. Faculty of sciences, University of Zagreb, 16. 05. 2005.

BSc theses (10):

Jasmin Božo, Effects of mitochondrial complex I inhibition on the viability of normal human fibroblasts. Faculty of sciences, University of Zagreb, 1.09.2016.

Vedran Stančić, A quantitative analysis of the dynamic of telomeres in human MJ-90 hTERT cells. Faculty of sciences, University of Zagreb, 6.04.2017.

Matea Cedilak, Moltkia petraea and Micromeria croatica plant extracts influence on protection of telomeres, senescence and proliferation of MJ90 cells. Faculty of sciences, University of Zagreb, 16.02.2015.

Tanja Božić, Influence of human proteins α -Enolase and MBP-1 on telomere stabilization in mice fibroblasts A9. Faculty of sciences, University of Zagreb, 17.02.2014.

Ines Kralj, Autotransplantation of rat skin cells. Faculty of sciences, University of Zagreb 28.02.2014.

Šatović Eva, Telomere shortening in growth control of human fibroblasts in vitro. Faculty of sciences, University of Zagreb, 21.09. 2006.

Ivo Šegota, Analysis of extrachromosomal DNA of human MDA-MB-231 cells in culture. Faculty of sciences, University of Zagreb, 28.06. 2006.

Andrea Ćukušić. Isolation and characterisation of senescent cells from immortal human cell line MDA-MB-231. Faculty of sciences, University of Zagreb, 16. 12. 2004.

Ivana Gotić. Telomerase activity during growth of HeLa cells. Faculty of sciences, University of Zagreb, 15. 07. 2004.

Irena Jevtov. Quantitative analysis of telomeric DNA in immortal mammalian cells. Faculty of sciences, University of Zagreb, 02. 04. 2003.

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Academician Pavao Rudan

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Institute for Anthropological Research

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Medical Anthropology

BIOGRAPHY

Academician Pavao Rudan, established anthropology as a science in Croatia and initiated holistic analytic research of population structure of Croatia. He was general secretary and member of organizational committee of 1st Congress of European Anthropological Association – 1stCEAA that was held in Zagreb in 1977. He is founder of undergraduate and graduate studies of Anthropology and postgraduate study of Biological Anthropology in University of Zagreb. He is a member of Croatian Academy of Sciences and Arts since 2006, and from 2011 a general secretary. He is director of the Permanent Scientific Programme *Anthropological Research of the Population Structure of Croatia* funded by Ministry of Science, Education and Sports of the Republic of Croatia. He was leader, advisor and principal researcher in nine internationally funded projects, some of them are: *Genetics of metabolic syndrome in an Adriatic population* (National Institutes of Health USA), *Mapping quantitative trait loci in Croatian island isolates*, (Medical Research Council, UK), *The Neandertal Genome Project* (Max Planck Institute for Evolutionary Anthropology, Berlin - Brandenburg Academy of Sciences and Humanities, Croatian Academy of Sciences and Arts), *Biological and Cultural Microdifferentiation among Rural Populations* (Smithsonian Institute, USA). He published over 500 scientific papers, reviews, proceedings and abstracts, from which 230 are original scientific papers. He received many awards and acknowledgments, to point out *Newcombe Cleveland Price* by the American Association for the Advancement of Science for the best scientific paper written in co-authorship and published in *Science*, 382/5997, 2010, 710-722.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

Scientific Advisor; Full Professor, 2007 (Full Professor: 2007. School of Medicine, University in Osijek; 2000. Faculty of Social Sciences and Humanities, University of Zagreb; 1997. Faculty of Natural Sciences and Mathematics, University of Zagreb; 1988 - School of Medicine, University of Zagreb).

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Sahakyan, H., Kashani, BH., Tamang, R., Kushniarevich, A., Francis, A., Costa, M.D., Pathak, A.K., Khachatryan, Z., Sharma, I., van Oven, M., Parik, J., Hovhannisyanyan, H., Metspalu, E., Pennarun, E., Karmin, M., Tamm, E., Tambets, K., Bahmanimehr, A., Reisberg, T., Reidla, M., Achilli, A., Olivieri, A., Gandini, F., Perego, U.A., Al-Zahery, N., Houshmand, M., Sanati M., Hossein; S.P., Rai, E., Šarac, J., Šarić, T., Sharma, V., Pereira, L., Fernandes, V., Cerny, V., Farjadian, S., ... Kutuev, I., Litvinov, S., Bermisheva, M., Khusnutdinova, E., Rai, N., Singh, M., Singh, V., Reddy, AG., Tolk, H.V., Cvjetan, S., Barać Lauc, L., **Rudan, P.**, Michalodimitrakis, E.N., Anagnou, N., Kalliopi, P., Golubenko, M.V., Orekhov, V., Borinskaya, S.A., Kaldma, K., Schauer, M., Simionescu, M., Gusar, V., Grechanina, E., Periyasamy, G., Voevoda, M., Damba, L., Sharma, S., Singh, L., Semino, O., Behar, D., Yepiskoposyan, L., Richards, M., Metspalu, Kivisild, T., Thangaraj, K., Endicott, P., Chaubey, G., Torroni, A., Villems, R. Origin and spread of human mitochondrial DNA haplogroup U7. // Scientific Reports. 7 (2017)
2. Kushniarevich, A., ...; Marjanović, D., **Rudan, P.**, ...; Balanovsky, O. Genetic Heritage of the Balto-Slavic Speaking Populations: A Synthesis of Autosomal, Mitochondrial and Y-Chromosomal Data. // PLoS One. 10 (2015) , 9; e0135820-1-e0135820- (članak, znanstveni).

3. Deka, R., Duraković, Z., Niu, W., Zhang, G., Karns, R., Smolej-Narančić N., Missoni, S., Carić, D., Carić, T., Rudan, D., Salzer, B., Chakraborty, R., **Rudan, P: Prevalence of metabolic syndrome and related metabolic traits in an island population of the Adriatic**, *Annals of Human Biology*, 39/1: 46-53, 2012.
4. Zhang, G., Karns, R., Sun, G., Indugula S. R., Cheng, H., Havas Augustin, D., Novokmet, N., Rudan, D., Durakovic, Z., Missoni, S., Chakraborty, R., **Rudan, P., Deka, R. Extent of Height Variability Explained by Known Height- Associated Genetic Variants in an Isolated Population of the Adriatic Coast of Croatia**, *PLoS One*. 6/12; e29475-e29475, 2011.
5. Green, R.E., J. Krause, A.W. Briggs, T. Maricic, U. Stenzel, M. Kircher, N. Patterson, H. Li, W. Zhai, M. Hsi-Yang Fritz, N.F. Hansen, E.Y. Durand, A.S. Malaspinas, J.D. Jensen, T. Marques-Bonet, C. Alkan, K. Prüfer, M. Meyer, H. A. Burbano, J.M. Good, R. Schultz, A. Aximu-Petri, A. Butthof, B. Höber, B. Höffner, M. Siegemund, A. Weihmann, C. Nusbaum, E.S. Lander, C. Russ, N. Novod, J. Affourtit, M. Egholm, C. Verna, **P. Rudan**, D. Brajkovic, Ž. Kucan, I. Gušić, V.B. Doronichev, L.V. Golovanova, C. Lalueza-Fox, M. de la Rasilla, J. Fortea, A. Rosas, R.W. Schmitz, P.L.F. Johnson, E.E. Eichler, D. Falush, E. Birney, J.C. Mullikin, M. Slatkin, R. Nielsen, J. Kelso, M. Lachmann, D. Reich, S. Pääbo: **A Draft Sequence of the Neandertal Genome**. *Science* 328/5979: 710-722, 2010.
6. Underhill P. A., N.M. Myres, S. Rootsi, P., M. Metspalu, L.A. Zhivotovsky, R.J. King, Lin, A. Alice, C.E. Chow, O. Semino, V. Battaglia, I. Kutuev, M. Järve, G. Chaubey, Q. Ayub, A. Mohyuddin, S.Q. Mehdi, S. Sengupta, E.I. Rogaev, E. Khusnutdinova, A. Pshenichnov, O. Balanovsky, E. Balanovska, N. Jeran, D. Havaš Auguštin, M. Baldović, R.J. Herrera, K. Thangaraj, V. Singh, L. Singh, P. Majumder, **P. Rudan**, D. Primorac, R. Villems, T. Kivisild: **Separating the post-Glacial co-ancestry of European and Asian Y chromosomes within haplogroup R1a**. *European Journal of Human Genetics* 18/4: 479-484, 2010.
7. Vitart, V., I. Rudan, C. Hayward, N. K. Gray, J. Floyd, C. N. A. Palmer, S. A. Knott, I. Kolčić, O. Polasek, J. Graessler, J. F. Wilson, A. Marinaki, P. L. Riches, X. Shu, B. Jančićević, N. Smolej Narančić, B. Gorgoni, J. Morgan, S. Campbell, Z. Biloglav, L. Barac-Lauc, M. Perićić, I. Martinović Klarić, L. Zgaga, T. Škarić-Jurić, S. H. Wild, W. A. Richardson, P. Hohenstein, C. H. Kimber, A. Tenesa, L. A. Donnelly, L. D. Fairbanks, M. Aringer, P. M. McKeigue, S. H. Ralston, A. D. Morris, **P. Rudan**, N. D. Hastie, H. Campbell, A. F. Wright: **SLC2A9 is a newly identified urate transporter influencing serum urate concentration, urate excretion and gout**. *Nature Genetics*, 40: 437-442, 2008.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Sahakyan, H., Kashani, BH., Tamang, R., Kushniarevich, A., Francis, A., Costa, MD., Pathak, AK., Khachatryan, Z., Sharma, I., van Oven, M., Parik, J., Hovhannisyan, H., Metspalu, E., Pennarun, E., Karmin, M., Tamm, E., Tambets, K., Bahmanimehr, A., Reisberg, T., Reidla, M., Achilli, A., Olivieri, A., Gandini, F., Perego, UA., Al-Zahery, N., Houshmand, M., Sanati M., Hossein; SP., Rai, E., Šarac, J., Šarić, T., Sharma, V., Pereira, L., Fernandes, V., Cerny, V., Farjadian, S., ... Kutuev, I., Litvinov, S., Bermisheva, M., Khusnutdinova, E., Rai, N., Singh, M., Singh, V., Reddy, AG., Tolk, HV., Cvjetan, S., Barac Lauc, L., **Rudan, P.**, Michalodimitrakakis, EN., Anagnou, N., Kalliopi, P., Golubenko, M V., Orekhov, V., Borinskaya, SA., Kaldma, K., Schauer, M., Simionescu, M., Gusar, V., Grechanina, E., Periyasamy, G., Voevoda, M., Damba, L., Sharma, S., Singh, L., Semino, O., Behar, D., Yepiskoposyan, L., Richards, M., Metspalu, Kivisild, T., Thangaraj, K., Endicott, P., Chaubey, G., Torroni, A., Villems, R. Origin and spread of human mitochondrial DNA haplogroup U7. // *Scientific Reports*. 7 (2017)

2. Kushniarevich, A., ...; Marjanović, D., **Rudan, P.**, ...; Balanovsky, O. Genetic Heritage of the Balto-Slavic Speaking Populations: A Synthesis of Autosomal, Mitochondrial and Y-Chromosomal Data. // PLoS One. 10 (2015), 9; e0135820-1-e0135820- (članak, znanstveni).
3. Šarac, J., Šarić, T., Havaš Auguštin, D., Novokmet, N., Vekarić, N., Mustač, M., Grahovac, B., Kapović, M., Nevajda, B., Glasnović, A., Missoni, S., Rootsi, S., **Rudan, P.** *Genetic Heritage of Croats in the Southeastern European Gene Pool—Y Chromosome Analysis of the Croatian Continental and Island Population.* // American journal of human biology. 28 (2016), 6; 837-845.
4. Novokmet, N., Galov, A., Marjanović, D., Škaro, V., Projić, P., Lauc, G., Primorac, D., **Pavao, R.** *Genetic structure and admixture between Bayash Roma from northwestern Croatia and general Croatian population: evidence from Bayesian clustering analysis*// Anthropologischer Anzeiger (2015).
5. Sahay, R., Ollberding, N., Missoni, S., Novokmet, N., Šarac, J., Šarić, T., Rao, M., **Rudan, P.**, Deka, R., *Fish and Shellfish intake and diabetes in a coastal population of the Adriatic.* // Collegium antropologicum. 39 (2015) , 2; 401-409 (članak, znanstveni)
6. Šarac, J., Šarić, T., Havaš Auguštin, D., Jeran, N., Kovačević, L., Cvjetan, S., Perinić Lewis, A., Metspalu, E., Reidla, M., Novokmet, N., Vidović, M., Nevajda, B., Glasnović, A., Marjanović, D., Missoni, S., Villems, R., **Rudan, P.** *Maternal genetic heritage of Southeastern Europe reveals a new Croatian isolate and a novel, local subbranching in X2 haplogroup.* // Annals of human genetics. 78 (2014); 178-194.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Program trajne istraživačke djelatnosti (PTID) *Antropološka istraživanja populacijske strukture Hrvatske* (1962766), Ministarstvo znanosti, obrazovanja i športa Republike Hrvatske
2. Znanstveni projekt *Populacijska struktura Hrvatske - antropogenetički pristup* (196-1962766-2751), Ministarstvo znanosti, obrazovanja i športa Republike Hrvatske
3. Znanstveni projekt *Languages In a Network of European Excellence, LINEE* (288388-2), FP6 Program EU
4. Međunarodni znanstveni projekt *Metabolic Syndrome in an Island Population* (R01 DK069845-01A2) National Institutes of Health, Washington, D.C., SAD
5. Međunarodni znanstveni projekt *The Neandertal Genome Project* (Max Planck Institute for Evolutionary Anthropology, Berlin - Brandenburg Academy of Sciences and Humanities, Croatian Academy of Sciences and Arts)
6. Integrated GWAS and EWAS of Cradiometabolic Traits in an Island Population (Studija genetičkih, epigenetičkih i okolišnih čimbenika rizika za kardiometabolička svojstva u otočnoj populaciji)
7. Genetics of Metabolic Syndrome in an Adriatic Island Population projekt NIH (National Institute of Health, SAD)
8. Mapping genes underlying complex quantitative traits in Croatian isolate population

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. Integrated GWAS and EWAS of Cradiometabolic Traits in an Island Population
2. Genetics of Metabolic Syndrome in an Adriatic Island Population projekt NIH (National Institute of Health, SAD)



3. Mapping genes underlying complex quantitative traits in Croatian isolate population

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

32

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Igor Rudez, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb, School of Medicine,
Department of Cardiac and Transplantation Surgery, University Hospital Dubrava

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Microvascular tissue transfer

BIOGRAPHY

Date of birth: 23.09.1966.

CONGRESS ABSTRACTS (130), SCIENTIFIC RESEARCH PAPERS (49), NUMBER OF CITATIONS 349, H-index 9 (SCOPUS)

EDUCATION

1986-1991 School of Medicine, University of Zagreb, Croatia

1992-1994 Faculty of Science, Postgraduate study in Biomedicine, Zagreb, Croatia

1994-1996 KBC Rebro, Registrar in General Surgery

1997 Master of Sciences (Biomedicine)

1996-1999 KB Dubrava, Registrar in General Surgery

2004-2006 KB Dubrava, Subspecialization in Cardiac Surgery

2005 PhD degree (Medicine), School of Medicine, Osijek, Croatia

2013 Assistant Professor of Surgery, School of Medicine, Mostar, Bosnia and Herzegovina

WORK EXPERIENCE

- 1991-1992 Internship, Clinical Hospital for Tumors, Zagreb
- 1992-1994 Research fellow, KBC Rebro, Zagreb
- 1994-1996 Resident in General Surgery, KBC Rebro, Zagreb
- 1996-1999 Resident in General and Cardiac Surgery, KB Dubrava, Zagreb
- 1999-2011 Staff surgeon, KB Dubrava, Zagreb
- 2011 – 2018 Head, Division for Coronary and Aortic Surgery @ Dept. of Cardiac Surgery and Heart Transplantation, KB Dubrava, Zagreb
- 2018 – Chief, Department of Cardiac and Transplant Surgery, KB Dubrava, Zagreb, Croatia

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 16.May 2018.
Medical School, University of Zagreb

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Rudman F, Baric D, Unic D, Rudez I, Letter to the editor, The Heart Surgery Forum #2017-1907, 20(5)2017

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Rudez I, Planinc M, Unic D, Baric D, Blazekovic R, Radolovic P, Varvodic J, Sutlic Z. Concomitant heart transplantation and replacement of ascending aorta and proximal aortic arch. J Cardiovasc Surg (Torino). 2013;54(5):661-2.

Barsic B, Dickerman S, Krajcinovic V, Pappas P, Altclas J, Carosi G, Casabé JH, Chu VH, Delahaye F, Edathodu J, Fortes CQ, Olaison L, Pangercic A, Patel M, Rudez I, Tamin SS, Vincelj J, Bayer AS, Wang A; International Collaboration on Endocarditis–Prospective Cohort Study Investigators. Influence of the timing of cardiac surgery on the outcome of patients with infective endocarditis and stroke. Clin Infect Dis. 2013;56(2):209-17.

Kristovic D, Horvatic I, Husedzinovic I, Sutlic Z, Rudez I, Baric D, Unic D, Blazekovic R, Crnogorac M. Cardiac surgery-associated acute kidney injury: risk factors analysis and comparison of prediction models. *Interact Cardiovasc Thorac Surg.* 2015;21(3):366-73.

Unic D, Sutlic Z, Starcevic B, Bradic N, Baric D, Rudez I. Successful treatment of annular rupture during transcatheter aortic valve implantation. *Wien Klin Wochenschr.* 2017;129(7-8):284-286.

Delahaye F, Chu VH, Altclas J, Barsic B, Delahaye A, Freiburger T, Gordon DL, Hannan MM, Hoen B, Kanj SS, Lejko-Zupanc T, Mestres CA, Pachirat O, Pappas P, Lamas C, Selton-Suty C, Tan R, Tattevin P, Wang A, Rudez I, et al; International Collaboration on Endocarditis Prospective Cohort Study (ICE-PCS) Investigators. One-year outcome following biological or mechanical valve replacement for infective endocarditis. *Int J Cardiol.* 2015;178:117-23.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

ERA Prospective observational center for research of efficiency of surgical radiofrequent ablation for patients with paroxizmal atrial fibrillation 2007

PARMA Prospective observational center for research of efficiency of surgical electromagnetic ablation for patients with atrial fibrillation 2007

ICE „International Collaboration on Endocarditis“, 2010

E-vita Open REGISTRY World registry of patients operated with „frozen elephant trunk“ E-vita open stent-grafta; 2014

AVIATOR REGISTRY Svjetski registar bolesnika sa rekonstrukcijom korjena aorte uz prezervaciju nativnih kuspisa aortnog zaliska; 2014

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Role of Hedge Hog singling pathway in development of calcified aortic stenosis

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Franjo Rudman, M.D. Ph. D.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of Plastic, Reconstructive and Esthetic Surgery, University Hospital "Dubrava"

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Hand Surgery, Microvascular tissue transfer

BIOGRAPHY

Franjo Rudman, MD PhD -CV

University Hospital "Dubrava", Department for Plastic, Reconstructive and Aesthetic Surgery, Tel. 290 2581, E-mail frudman@dr.com

Education

MD: Medical School, University of Zagreb, 1997.

Scientific postgraduate study, 2000-2003.

Specialist in surgery, 2005.

Subspecialty in plastic surgery 2008.

Work experience

University Hospital for Tumors: internship 1997-1997,

University Hospital "Dubrava" residency in surgery 2000-2005, residency in plastic surgery 2005-2008.

specialist in surgery, Department for Plastic, Reconstructive and Aesthetic Surgery 2005-

Research activities

Investigator on projects: "Treating patients with nerve injury" 2000-2005.

2014. Conferment of the title of research associate

Publications

11 papers in CC indexed journals, 7 in elsewhere indexed journals, 8 book chapters, editor of two books

Personal

Born in Zagreb, 1973. Father of one child.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Rudman F Jr, Stanec S, Stanec M, Stanec Z, Margaritoni M, Zic R, Milanovic R, Krizanac S, Separović V. Rare complication of breast cancer irradiation: postirradiation osteosarcoma. Ann Plast Surg. 2002;48(3):318-22.

2. Bušić Ž, Rudman F, Stipančić I, Amić E, Bušić D. War injuries of colon and rectum-results after 10 years. *Coll Antropol.* 2002;26(2):441-6.
3. Bušić Ž, Rudman F, Amić E, Stanec Z, Stipančić I, Bušić D. Subcuticular catgut versus polyglactin 910 in scar formation in sheep. *Vet Med.* 2003;48(3):79-82.
4. Milanovic R, Vlajčić Z, Žic R, Stanec S, Rudman F, Stanec Z. Alveolar rhabdomyosarcoma of the hand in a 2 year-old child. *J Hand Surg Eur Vol.* 2007;32(1):109-10.
5. Martić K, Vlajčić Z, Rudman F, Lambaša S, Tomasović-Lončarić Č, Stanec Z. Tumor and breast volume ratio as a predictive factor for axillary lymph node metastases in T1c ductal invasive breast cancer: prospective observational clinico-pathological study. *Jpn J Clin Oncol.* 2011 Dec;41(12):1322-6.
6. Zidak M, Zidak D, Cupurdija K, Lacković Z, Korusić A, Held R, Vergles D, Rudman F, Horzić M. Immediate breast reconstruction in relation to women's age. *Coll Antropol.* 2012;36(3):835-9.
7. Stanec Z, Žic R, Budi S, Stanec S, Milanović R, Vlajčić Z, Roje Z, Rudman F, Martić K, Held R, Božo G. Skin and nipple-areola complex sparing mastectomy in breast cancer patients: 15-year experience. *Ann Plast Surg.* 2014 Nov;73(5):485-91.
8. Sabolovic Rudman S, Mustapic M, Kosec V, Pivac N, Rudman F, Muck-Seler D. Serotonin risk factors for the development of hypertension in pregnancy. *Arch Gynecol Obstet.* 2015 Apr;291(4):779-85.
9. Dobrović K, Rudman F, Ottaviani D, Šestan Crnek S, Leoni F, Škrilin J. A rare case of necrotizing fasciitis caused by *Vibrio cholerae* O8 in an immunocompetent patient. *Wien Klin Wochenschr.* 2016 Oct;128(19-20):728-730.
10. Rudman F, Barić D, Unić D, Rudež I. LETTER TO THE EDITOR. *Heart Surg Forum.* 2017 Oct 31;20(5):E230.
11. Rudman F, Barić D, Unić D. Omentum flap as a salvage procedure in deep sternal wound infection. *Ther Clin Risk Manag.* 2017 Nov 9;13:1495-1497.
12. Rudman F, Budi S, Stanec Z. Letter to the Editor - Sentinel lymph node biopsy in melanoma: Which hot nodes should be harvested and is blue dye really necessary? *J Plast Reconstr Aesthet Surg.* 2018 Nov 29. pii: S1748-6815(18)30431-5

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Sabolovic Rudman S, Mustapic M, Kosec V, Pivac N, Rudman F, Muck-Seler D. Serotonin risk factors for the development of hypertension in pregnancy. *Arch Gynecol Obstet.* 2015 Apr;291(4):779-85.
2. Dobrović K, Rudman F, Ottaviani D, Šestan Crnek S, Leoni F, Škrilin J. A rare case of necrotizing fasciitis caused by *Vibrio cholerae* O8 in an immunocompetent patient. *Wien Klin Wochenschr.* 2016 Oct;128(19-20):728-730.
3. Rudman F, Barić D, Unić D, Rudež I. LETTER TO THE EDITOR. *Heart Surg Forum.* 2017 Oct 31;20(5):E230.
4. Rudman F, Barić D, Unić D. Omentum flap as a salvage procedure in deep sternal wound infection. *Ther Clin Risk Manag.* 2017 Nov 9;13:1495-1497.
5. Rudman F, Budi S, Stanec Z. Letter to the Editor - Sentinel lymph node biopsy in melanoma: Which hot nodes should be harvested and is blue dye really necessary? *J Plast Reconstr Aesthet Surg.* 2018 Nov 29. pii: S1748-6815(18)30431-5

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Investigator on projects: "Treating patients with nerve injury"



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Nadan Rustemović

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of Gastroenterology, University Hospital Centre Zagreb; Department of Interventional Gastroenterology

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Advanced ultrasonography in gastroenterology and hepatology

BIOGRAPHY

Professor Nadan Rustemovic, MD, PhD, internal medicine specialist and gastroenterologist, the head of the Interventional Gastroenterology center of the University Hospital Centre Zagreb, the head of the Referral center for Interventional Gastroenterology of the Ministry of Health of the Republic of Croatia and the head of “Official ESGE Host Training Centre”. He takes part in undergraduate and in postgraduate teaching at the Medical School of Zagreb. He is a co-leader and a lecturer in a couple of courses of continuous medical education for ultrasound and endoscopy. He is the head of the organization committee of a yearly workshop “Algorithms in gastrointestinal endoscopy and endoscopic ultrasound”, and since 2013 he organizes “hands-on-training” workshop on mechanical and animal models. He authored several chapters in medical textbooks, published many papers and held more than one hundred invited lectures.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: September 2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Rustemovic N , Cukovic Cavka S, Opacic M, Petroveckii M, Hrstic I, Radic D, Ostojic R, Pulanic R, Vucelic B. Endoscopic ultrasound elastography as method for screening the patients with suspected primary sclerosing cholangitis. Eur J Gastroenterol Hepatol 2010; 22:748-53.
2. Rustemovic N, Cukovic-Cavka S, Brinar M, Radic D, Opacic M, Ostojic R, Vucelic B. A pilot study of transrectal ultrasound elastography in inflammatory bowel disease. BMC Gastroenterol 2011 Oct 20;11(1):113.
3. Rustemovic N et al. Differentiation of Pancreatic Masses via Endoscopic Ultrasound Strain Ratio Elastography Using Adjacent Pancreatic Tissue as the Reference. Pancreas 2017; 46(3):347-351.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1: Valori R, Cortas G, de Lange T, Salem Balfaqih O, de Pater M, Eisendrath P, Falt P, Koruk I, Ono A, Rustemović N, Schoon E, Veitch A, Senore C, Bellisario C, Minozzi S, Bennett C, Bretthauer M, Dinis-Ribeiro M, Domagk D, Hassan C, Kaminski MF, Rees CJ, Spada C, Bisschops R, Rutter M. Performance measures for endoscopy services: A European Society of Gastrointestinal Endoscopy (ESGE) quality improvement initiative. United European Gastroenterol J. 2019 Feb;7(1):21-44.
- 2: Markos P, Sisko Markos I, Ivekovic H, Bilic B, Rustemovic N. Self-expandable metal stent for dysphagia caused by mediastinal masses in patients with lung cancer. Arab J Gastroenterol. 2019 Mar;20(1):28-31.
- 3: Valori R, Cortas G, de Lange T, Balfaqih OS, de Pater M, Eisendrath P, Falt P, Koruk I, Ono A, Rustemović N, Schoon E, Veitch A, Senore C, Bellisario C, Minozzi S, Bennett C, Bretthauer M, Dinis-Ribeiro M, Domagk D, Hassan C, Kaminski MF, Rees CJ, Spada C, Bisschops R, Rutter M. Performance measures for endoscopy services: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. Endoscopy. 2018 Dec;50(12):1186-1204.

- 4: Patrun J, Okreša L, Iveković H, Rustemović N. Diagnostic Accuracy of NICE Classification System for Optical Recognition of Predictive Morphology of Colorectal Polyps. *Gastroenterol Res Pract*. 2018 Mar 14;2018:7531368.
- 5: Majerović M, Jelaković M, Premužić M, Štromar IK, Radić D, Mance M, Pleština S, Ostojić R, Rustemović N, Krznarić Z. Hepatocellular Carcinoma Surveillance-Experience from Croatian Referral Centre for Chronic Liver Diseases. *J Gastrointest Cancer*. 2019 Mar;50(1):48-53.
- 6: Markos P, Bilic B, Ivekovic H, Rustemovic N. Radiofrequency ablation for gastric antral vascular ectasia and radiation proctitis. *Indian J Gastroenterol*. 2017 Mar;36(2):145-148.
- 7: Rustemović N, Kalauz M, Grubelić Ravić K, Iveković H, Bilić B, Ostojić Z, Opačić D, Ledinsky I, Majerović M, Višnjić A. Differentiation of Pancreatic Masses via Endoscopic Ultrasound Strain Ratio Elastography Using Adjacent Pancreatic Tissue as the Reference. *Pancreas*. 2017 Mar;46(3):347-351.
- 8: Markos P, Bilic B, Miletic V, Rustemovic N. Jejunal catheter placement for levodopa-carbidopa infusion in a patient with Billroth I gastrectomy. *Endoscopy*. 2016;48 Suppl 1:E288.
- 9: Acar Y, Tezel O, Salman N, Cevik E, Algaba-Montes M, Oviedo-García A, Patricio-Bordomás M, Mahmoud MZ, Sulieman A, Ali A, Mustafa A, Abdelrahman I, Bahar M, Ali O, Lester Kirchner H, Prosen G, Anzic A, Leeson P, Bahreini M, Rasooli F, Hosseinejad H, Blecher G, Meek R, Egerton-Warburton D, Ćuti EĆ, Belina S, Vančina T, Kovačević I, Rustemović N, Chang I, Lee JH, Kwak YH, Kim do K, Cheng CY, Pan HY, Kung CT, Ćurčić E, Pritišanac E, Planinc I, Medić MG, Radonić R, Fasina A, Dean AJ, Panebianco NL, Henwood PS, Fochi O, Favarato M, Bonanomi E, Tomić I, Ha Y, Toh H, Harmon E, Chan W, Baston C, Morrison G, Shofer F, Hua A, Kim S, Tsung J, Gunaydin I, Kekec Z, Ay MO, Kim J, Kim J, Choi G, Shim D, Lee JH, Ambrozic J, Prokselj K, Lucovnik M, Simenc GB, Mačiulienė A, Maleckas A, Kriščiukaitis A, Mačiulis V, Macas A, Mohite S, Narancsik Z, Možina H, Nikolić S, Hansel J, Petrovčič R, Mršić U, Orlob S, Lerchbaumer M, Schönegger N, Kaufmann R, Pan CI, Wu CH, Pasquale S, Doniger SJ, Yellin S, Chiricolo G, Potisek M, Drnovšek B, Leskovic B, Robinson K, Kraft C, Moser B, Davis S, Layman S, Sayeed Y, Minardi J, Pasic IS, Dzananovic A, Pasic A, Zubovic SV, Hauptman AG, Brajkovic AV, Babel J, Peklic M, Radonic V, Bielen L, Ming PW, Yezid NH, Mohammed FL, Huda ZA, Ismail WN, Isa WY, Fauzi H, Seeva P, Mazlan MZ. 12th WINFOCUS world congress on ultrasound in emergency and critical care. *Crit Ultrasound J*. 2016 Sep;8 (Suppl 1):12.
- 10: Iveković H, Brljak J, Bilić B, Markoš P, Pulanić R, Ostojić R, Rustemović N. THE OVER-THE-SCOPE-CLIP FOR THE TREATMENT OF THE DIGESTIVE TUBE LEAKS AND TEARS: A CASE-SERIES. *Lijec Vjesn*. 2016 Mar-Apr;138(3-4):79-84.
- 11: Jovanovic I, Fry LC, Rustemovic N, Bilic B, Ivekovic H, D'Assunção M, Mönkemüller K. Initial validation of a simple, nonbiological, mechanical ERCP training model for cannulation and stent placement. *Endoscopy*. 2015;47 Suppl 1 UCTN:E585-6.
- 12: Ivekovic H, Vrzic D, Bilic B, Rustemovic N, Ostojic R. Release and re-hook: a novel method with combined use of clips and nylon snare to close a colonic defect after endoscopic mucosal resection. *Endoscopy*. 2015;47 Suppl 1:E545-6.
- 13: Ivekovic H, Bilic B, Jakic Razumovic J, Kalauz M, Rustemovic N, Piessevaux H, Deprez PH. Endoscopic muscularis excavation of a rectal duplication cyst. *Endoscopy*. 2015;47 Suppl 1 UCTN:E522-4.
- 14: Ivekovic H, Bilic B, Markos P, Rustemovic N, Ostojic R, Mönkemüller K. Successful use of Hemospray to control refractory post-polypectomy bleeding. *Endoscopy*. 2015;47 Suppl 1 UCTN:E466-7.

- 15: Rustemovic N, D'Assuncao M, Bilic B, Ivekovic H, Hewitt BA, Jovanovic I, Mönkemüller K. A simple ex vivo, biologic ERCP training model for sphincterotomy. *Endoscopy*. 2015;47 Suppl 1 UCTN:E401-3.
- 16: Opačić D, Rustemović N, Kalauz M, Markoš P, Ostojić Z, Majerović M, Ledinsky I, Višnjić A, Krznarić J, Opačić M. Endoscopic ultrasound elastography strain histograms in the evaluation of patients with pancreatic masses. *World J Gastroenterol*. 2015 Apr 7;21(13):4014-9.
- 17: Ivekovic H, Radulovic B, Jankovic S, Markos P, Rustemovic N. Combined use of clips and nylon snare ("tulip-bundle") as a rescue endoscopic bleeding control in a mallory-weiss syndrome. *Case Rep Gastrointest Med*. 2014;2014:972765.
- 18: Ivekovic H, Rustemovic N, Brkic T, Ostojic R, Monkemuller K. Endoscopic ligation ("Loop-And-Let-Go") is effective treatment for large colonic lipomas: a prospective validation study. *BMC Gastroenterol*. 2014 Jul 8;14:122.
- 19: Rustemović N, Krznarić Z, Bender DV, Ostojić R, Cavka SC, Milić S, Anić B, Ljubicić N, Mesarić J, Stimac D; Croatioan Society of Clinical Nutrition; Croatian Medical Association; Croatian Society for Quality Improvement in Health Care; Croatian Society of Gastroenterology; Croatian Society of Rheumatology. [Croatian guidelines for the management of pancreatic exocrine insufficiency]. *Lijec Vjesn*. 2012 May-Jun;134(5-6):141-7. Croatian.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Project leader approved by the Ministry of Science of the Republic of Croatia (2002): Evaluation of telemedicine consultations in ultrasound diagnostics (No. 0214214), which was closed but was the basis for the establishment of the Institute for the Application of Telemedicine in Gastroenterology at KBC Zagreb, which is also the MZRH Reference Center

Contributor to the Ministry of Science project: Inflammatory bowel disease (Crohn's bolset and ulcerative colitis) - (No. 108-1081874-1917)

Previous projects:

1. From 1995-2001 researcher on a scientific project: "Interventional gastroenterology, development and application of new technologies".
2. Consultant in the pilot project of the Ministry of Science and Technology "Virtual Polyclinic-specialist consular service for the islands" 2000 which developed into a comprehensive project of Island Telemedicine under the auspices of the Government of the Republic of Croatia

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE



ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: George Rutherford, professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of California, San Francisco

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research and evaluation methods of health interventions

BIOGRAPHY

Professor Rutherford is the Director for the Institute for Global Health, the Salvatore Pablo Lucia Professor and the Head of the Division of Prevention Medicine and Public Health in the Department of Epidemiology and Biostatistics in the School of Medicine, University of California, San Francisco. He is also Professor of Pediatrics and of Family and Community Medicine and Adjunct Professor of Epidemiology and Health Administration at the School of Public Health at the University of California, Berkeley. Educated at Stanford University and the Duke University School of Medicine, Professor Rutherford is board certified in pediatrics and in general preventive medicine and public health.

Following training in epidemiology in the Centers for Disease Control's Epidemic Intelligence Service, he spent the majority of his professional career in public health practice, with a primary emphasis on the epidemiology and control of communicable diseases. He has held a number of positions in public health agencies, including serving as the State Health Officer for the California Department of Health Services, the State Epidemiologist for the California Department of Health Services, the Director of the AIDS Office for the San Francisco Department of Public Health and the Director of the Division of Immunizations for the New York City Department of Health.

Professor Rutherford is currently the director of the Joint UCSF-University of California, Berkeley Residency Program in Public Health and General Preventive Medicine. He also is the Director of the Center for AIDS Prevention Studies' International Program and the Coordinating Editor of the Cochrane Collaborative Review Group on HIV Infection and AIDS.

At the University of California, Professor Rutherford teaches courses on public and international health, public health surveillance, preventive medicine, and the design of clinical research trials. His current research interests include the epidemiology and control of human immunodeficiency virus infection and AIDS-related opportunistic infections, especially in the developing world, the prevention of coccidioidomycosis, sexually transmitted disease control in California, pediatric vaccination policy, the role of public health in managed care, evidence-based public health practice, the epidemiology and control of tuberculosis in California and emerging infectious diseases.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Masel J, McCracken MK, Gleeson T, Morrison B, Rutherford G, Imrie A, Jarman RG, Koren M, Pollett S. Does prior dengue virus exposure worsen clinical outcomes of Zika virus infection? A systematic review, pooled analysis and lessons learned. PLoS Negl Trop Dis. 2019 Jan 25; 13(1):e0007060. PMID: 30682026.

Handanagic S, Bozicevic I, Sekerija M, Rutherford GW, Begovac J. Overdose mortality rates in Croatia and factors associated with self-reported drug overdose among persons who inject drugs in three Croatian cities. *Int J Drug Policy*. 2019 Jan 11; 64:95-102. PMID: 30641451.

Penn AW, Azman H, Horvath H, Taylor KD, Hickey MD, Rajan J, Negussie EK, Doherty M, Rutherford GW. Supportive interventions to improve retention on ART in people with HIV in low- and middle-income countries: A systematic review. *PLoS One*. 2018; 13(12):e0208814. PMID: 30550574.

Ngeno B, Waruru A, Inwani I, Nganga L, Wangari EN, Katana A, Gichangi A, Mwangi A, Mukui I, Rutherford GW. Disclosure and Clinical Outcomes Among Young Adolescents Living With HIV in Kenya. *J Adolesc Health*. 2019 Feb; 64(2):242-249. PMID: 30482659.

Awotiwon AA, Johnson S, Rutherford GW, Meintjes G, Eshun-Wilson I. Primary antifungal prophylaxis for cryptococcal disease in HIV-positive people. *Cochrane Database Syst Rev*. 2018 08 29; 8:CD004773. PMID: 30156270.

Kelly JD, Hickey MD, Schlough GW, Conteh S, Sesay M, Rutherford GW, Giordano TP, Weiser SD. Understanding why HIV-infected persons disengaged from pre-ART care in Freetown, Sierra Leone: a qualitative study. *AIDS Care*. 2018 Aug 26; 1-4. PMID: 30146898.

Kelly JD, Hoff NA, Spencer D, Musene K, Bramble MS, McIlwain D, Okitundu D, Porco TC, Rutherford GW, Glymour MM, Bjornson Z, Mukadi P, Okitolonda-Wemakoy E, Nolan GP, Muyembe-Tamfum JJ, Rimoin AW. Neurological, cognitive, and psychological findings among survivors of Ebola virus disease from the 1995 Ebola outbreak in Kikwit, Democratic Republic of Congo: a cross-sectional study. *Clin Infect Dis*. 2018 Aug 10. PMID: 30107392.

Aguilar G, Miranda AE, Rutherford GW, Munoz S, Hills N, Samudio T, Galeano F, Kawabata A, González CMR. Mortality Rate and Predictors in Children Under 15 Years Old Who Acquired HIV from Mother to Child Transmission in Paraguay. *AIDS Behav*. 2018 Jul; 22(Suppl 1):99-104. PMID: 29455264.

Cummings B, Horth R, McFarland W, Lane T, Young PW, Nalá R, Rutherford G, Raymond HF. Bisexual and Bidirectional: Assessing the Potential for HIV Bridging in Mozambique. *AIDS Behav*. 2018 Jul; 22(7):2189-2198. PMID: 29188391.

Hudson M, Rutherford GW, Weiser S, Fair E. Linking private, for-profit providers to public sector services for HIV and tuberculosis co-infected patients: A systematic review. *PLoS One*. 2018; 13(4):e0194960. PMID: 29634772.

Rice B, Boulle A, Baral S, Egger M, Mee P, Fearon E, Reniers G, Todd J, Schwarcz S, Weir S, Rutherford G, Hargreaves J. Strengthening Routine Data Systems to Track the HIV Epidemic and Guide the Response in Sub-Saharan Africa. *JMIR Public Health Surveill*. 2018 Apr 03; 4(2):e36. PMID: 29615387.

Kelly JD, Barrie MB, Mesman AW, Karku S, Quiwa K, Drasher M, Schlough GW, Dierberg K, Koedoyoma S, Lindan CP, Jones JH, Chamie G, Worden L, Greenhouse B, Weiser SD, Porco TC, Rutherford GW, Richardson ET. Anatomy of a Hotspot: Chain and Seroepidemiology of Ebola Virus Transmission, Sukudu, Sierra Leone, 2015-16. *J Infect Dis*. 2018 Mar 28; 217(8):1214-1221. PMID: 29325149.

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Virus Disease in Kono District, Sierra Leone: A Cross-Sectional Study. *Am J Trop Med Hyg.* 2018 May; 98(5):1484-1488. PMID: 29557329.

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37. Schwarcz SK, Rutherford GW, Horvath H. Training for Better Management: Avante Zambézia, PEPFAR and Improving the Quality of Administrative Services Comment on "Implementation of a Health Management Mentoring Program: Year-1 Evaluation of Its Impact on Health System Strengthening in Zambézia Province, Mozambique". *Int J Health Policy Manag*. 2015 Jul 23; 4(11):773-5. PMID: 26673340; PMCID: PMC4629705.

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39. Thompson GR, Stevens DA, Clemons KV, Fierer J, Johnson RH, Sykes J, Rutherford G, Peterson M, Taylor JW, Chaturvedi V. Call for a California coccidioidomycosis consortium to face the top ten challenges posed by a recalcitrant regional disease. *Mycopathologia.* 2015 Feb; 179(1-2):1-9. PMID: 25318989.
40. Vitek CR, Cakalo JI, Kruglov YV, Dumchev KV, Salyuk TO, Božicevic I, Baughman AL, Spindler HH, Martsynovska VA, Kobysheva YV, Abdul-Quader AS, Rutherford GW. Slowing of the HIV epidemic in Ukraine: evidence from case reporting and key population surveys, 2005-2012. *PLoS One.* 2014; 9(9):e103657. PMID: 25251080; PMCID: PMC4174506.
41. Lindan CP, Anglemeyer A, Hladik W, Barker J, Lubwama G, Rutherford G, Ssenkusu J, Opio A, Campbell J. High-risk motorcycle taxi drivers in the HIV/AIDS era: a respondent-driven sampling survey in Kampala, Uganda. *Int J STD AIDS.* 2015 Apr; 26(5):336-45. PMID: 24970473.
42. Rahnema R, Mohraz M, Mirzazadeh A, Rutherford G, McFarland W, Akbari G, Malekinejad M. Access to harm reduction programs among persons who inject drugs: findings from a respondent-driven sampling survey in Tehran, Iran. *Int J Drug Policy.* 2014 Jul; 25(4):717-23. PMID: 24974367; PMCID: PMC4231781.
43. Ng'eno B, Mwangi A, Ng'ang'a L, Kim AA, Waruru A, Mukui I, Ngugi EW, Rutherford GW. Burden of HIV infection among children aged 18 months to 14 years in Kenya: results from a nationally representative population-based cross-sectional survey. *J Acquir Immune Defic Syndr.* 2014 May 01; 66 Suppl 1:S82-8. PMID: 24732823; PMCID: PMC4784690.
44. Maina WK, Kim AA, Rutherford GW, Harper M, K'Oyugi BO, Sharif S, Kichamu G, Muraguri NM, Akhwale W, De Cock KM. Kenya AIDS Indicator Surveys 2007 and 2012: implications for public health policies for HIV prevention and treatment. *J Acquir Immune Defic Syndr.* 2014 May 01; 66 Suppl 1:S130-7. PMID: 24732817; PMCID: PMC4784700.
45. Galbraith JS, Ochieng A, Mwalili S, Emusu D, Mwandi Z, Kim AA, Rutherford G, Maina WK, Kimanga DO, Chesang K, Cherutich P. Status of voluntary medical male circumcision in Kenya: findings from 2 nationally representative surveys in Kenya, 2007 and 2012. *J Acquir Immune Defic Syndr.* 2014 May 01; 66 Suppl 1:S37-45. PMID: 24732820; PMCID: PMC4794989.
46. Sirengo M, Muthoni L, Kellogg TA, Kim AA, Katana A, Mwanyumba S, Kimanga DO, Maina WK, Muraguri N, Elly B, Rutherford GW. Mother-to-child transmission of HIV in Kenya: results from a nationally representative study. *J Acquir Immune Defic Syndr.* 2014 May 01; 66 Suppl 1:S66-74. PMID: 24732822; PMCID: PMC4790087.
47. De Cock KM, Rutherford GW, Akhwale W. Kenya AIDS Indicator Survey 2012. *J Acquir Immune Defic Syndr.* 2014 May 01; 66 Suppl 1:S1-2. PMID: 24732813.
48. Ngugi EW, Kim AA, Nyoka R, Ng'ang'a L, Mukui I, Ng'eno B, Rutherford GW. Contraceptive practices and fertility desires among HIV-infected and uninfected women in Kenya: results from a nationally representative study. *J Acquir Immune Defic Syndr.* 2014 May 01; 66 Suppl 1:S75-81. PMID: 24413040; PMCID: PMC4786173.

49. Suthar AB, Rutherford GW, Horvath T, Doherty MC, Negussie EK. Improving antiretroviral therapy scale-up and effectiveness through service integration and decentralization. AIDS. 2014 Mar; 28 Suppl 2:S175-85. PMID: 24849478.

50. Anglemyer A, Rutherford GW, Easterbrook PJ, Horvath T, Vitória M, Jan M, Doherty MC. Early initiation of antiretroviral therapy in HIV-infected adults and adolescents: a systematic review. AIDS. 2014 Mar; 28 Suppl 2:S105-18. PMID: 24849469.

51. Rutherford GW, Anglemyer A, Easterbrook PJ, Horvath T, Vitoria M, Penazzato M, Doherty MC. Predicting treatment failure in adults and children on antiretroviral therapy: a systematic review of the performance characteristics of the 2010 WHO immunologic and clinical criteria for virologic failure. AIDS. 2014 Mar; 28 Suppl 2:S161-9. PMID: 24849476.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

GH15-1615, NAMIBIA, UCSF-GSI Technical Assistance in Strategic Information and Health Systems Strengthening under NAMPHACTS
CDC/CGH U2GGH001410Apr 1, 2015 - Mar 31, 2020
Role: Principal Investigator

Enhancing Strategic Information Capacity for HIV/AIDS Programs in Kenya through Surveillance and Epidemiology, Monitoring and Evaluation under the U.S. PEPFAR (Program Area A and Program Area B)
CDC/CGH U2GGH001520Apr 1, 2015 - Mar 31, 2020
Role: Principal Investigator

GH13-1328, HQ, Technical Assistance to Countries Supported by the PEPFAR and Global
CDC/CGH U2GGH000977Sep 30, 2013 - Mar 31, 2019
Role: Principal Investigator

RWANDA TRIANGULATION PROJECT
CDC/NCHHSTP U2GPS002742Sep 30, 2010 - Sep 29, 2014
Role: Principal Investigator

PS09-990: CDC KENYA - MONITORING AND EVALUATION (M&E)
CDC/NCHHSTP U2GPS001814Sep 30, 2009 - Mar 31, 2015
Role: Principal Investigator

PROVISION OF TECHNICAL ASSISTANCE TO STRENGTHEN HIV STRATEGIC INFORMATION ACTIVIT
CDC/NCHHSTP U2GPS001945Sep 1, 2009 - Mar 31, 2015
Role: Co-Principal Investigator

PS09-904:GHANA UCSF TECH. ASSISTANCE TO SUPP. PRESIDENTS EMERGENCY PLAN FOR AIDS
CDC/NCHHSTP U2GPS001469Apr 1, 2009 - Mar 31, 2015
Role: Principal Investigator

PS09-904 ATLANTA HQ UCSF TECHNICAL ASSISTANCE TO SUPPORT PEPFAR
CDC/NCHHSTP U2GPS001468Apr 1, 2009 - Mar 31, 2014
Role: Principal Investigator

PS09-904:TANZANIA UCSF TECH. ASSISTANCE TO SUPP. PRESIDENTS EMERG. PLAN FOR AIDS
CDC/NCHHSTP U2GPS001472Apr 1, 2009 - Mar 31, 2014
Role: Principal Investigator

UNIV. TECHNICAL ASSISTANCE PROJECTS IN SUPPORT OF THE GLOBAL AIDS PROGRAM

CDC/NCHHSTP U62PS922423 Sep 30, 2002 - Mar 31, 2010

Role: Principal Investigator

International Traineeships in AIDS Prevention Studies (ITAPS)

NIH/NIMH [R25MH064712](#) Jan 8, 2002 - Aug 31, 2019

Role: Principal Investigator

ICOHRTA Brazilian Scientists Program

NIH/FIC [D43TW005799](#) Sep 26, 2001 - Apr 30, 2013

Role: Principal Investigator

Center for AIDS Prevention Studies

NIH/NIMH [P30MH062246](#) Sep 24, 2001 - Aug 31, 2021

Role: Co-Investigator

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

GH15-1615, NAMIBIA, UCSF-GSI Technical Assistance in Strategic Information and Health Systems Strengthening under NAMPHACTS

CDC/CGH U2GGH001410 Apr 1, 2015 - Mar 31, 2020

Role: Principal Investigator

Enhancing Strategic Information Capacity for HIV/AIDS Programs in Kenya through Surveillance and Epidemiology, Monitoring and Evaluation under the U.S. PEPFAR (Program Area A and Program Area B)

CDC/CGH U2GGH001520 Apr 1, 2015 - Mar 31, 2020

Role: Principal Investigator

GH13-1328, HQ, Technical Assistance to Countries Supported by the PEPFAR and Global

CDC/CGH U2GGH000977 Sep 30, 2013 - Mar 31, 2019

Role: Principal Investigator

RWANDA TRIANGULATION PROJECT

CDC/NCHHSTP U2GPS002742 Sep 30, 2010 - Sep 29, 2014

Role: Principal Investigator

PS09-990: CDC KENYA - MONITORING AND EVALUATION (M&E)

CDC/NCHHSTP U2GPS001814 Sep 30, 2009 - Mar 31, 2015

Role: Principal Investigator

PROVISION OF TECHNICAL ASSISTANCE TO STRENGTHEN HIV STRATEGIC INFORMATION ACTIVIT

CDC/NCHHSTP U2GPS001945 Sep 1, 2009 - Mar 31, 2015

Role: Co-Principal Investigator

PS09-904: GHANA UCSF TECH. ASSISTANCE TO SUPP. PRESIDENTS EMERGENCY PLAN FOR AIDS

CDC/NCHHSTP U2GPS001469 Apr 1, 2009 - Mar 31, 2015

Role: Principal Investigator

PS09-904 ATLANTA HQ UCSF TECHNICAL ASSISTANCE TO SUPPORT PEPFAR

CDC/NCHHSTP U2GPS001468 Apr 1, 2009 - Mar 31, 2014

Role: Principal Investigator

PS09-904: TANZANIA UCSF TECH. ASSISTANCE TO SUPP. PRESIDENTS EMERG. PLAN FOR AIDS

CDC/NCHHSTP U2GPS001472 Apr 1, 2009 - Mar 31, 2014

Role: Principal Investigator

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Maja Sabol, Assist. Prof., Ph.D.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods in molecular oncology

BIOGRAPHY

Born in Zagreb in 1981, where she completed her graduate Studies of Molecular Biology at the University of Zagreb, Faculty of Science in 2004. She enrolled in Postgraduate Study in 2005, and successfully completed it in 2010, when she defended her thesis titled "Mechanism of HH-GLI signaling pathway activation in ovarian dermoid primary cultures" at the University of Zagreb, Faculty of Science. She also completed a Specialist Course of Project Management in 2013 at the University of Applied Studies "Baltazar Adam Krčelić", Zaprešić. She was employed at the Ruđer Bošković Institute (RBI) in 2005 as a research assistant, in the group led by prof. dr. sc. Sonja Levanat. There she focused on studying the role of signaling pathways in tumorigenesis, with a special emphasis on the Hedgehog-GLI signaling pathway. From 2013 to 2015 she did her postdoctoral training at the Institute for Molecular Genetics (IMG) in Prague, Czech Republic. During her postdoc, she also spent 3 months at the Institute for Molecular and Cell Biology (IGBMC) in Strasbourg, France. After completing her postdoc, she returned to the RBI as a senior assistant, and since 2016 she is employed as a research associate. She has 24 published papers with more than 190 citations. Currently she is a principal investigator on a project funded by the Croatian Science Foundation.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 24/04/2018
Assistant Professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Sabol M, Trnski D, Musani V, Ozretić P, Levanat S. Role of GLI transcription factors in pathogenesis and their potential as new therapeutic targets. *Int J Mol Sci.* 2018; 19(9):2562.
2. Musani V, Ozretić P, Trnski D, Sabol M, Poduje M, Tošić M, Šitum M, Levanat S. Potential hot spot for de novo mutations in PTCH1 gene in Gorlin syndrome patients: A case report of twins from Croatia. *Croat Med J.* 2018; 59(1):20-24.
3. Ozretić P*, Trnski D*, Musani V, Maurac I, Kalafatić D, Orešković S, Levanat S, Sabol M. Non-canonical Hedgehog signaling activation in ovarian borderline tumors and ovarian carcinomas. *Int J Oncol.* 2017; 51(6):1869-1877.
4. Levanat S, Sabol M, Musani V, Ozretić P, Trnski D. Hedgehog signaling pathway as genetic and epigenetic target in ovarian tumors. *Curr Pharm Design.* 2017; 23(1):73-94.
5. Trnski D, Sabol M, Gojević A, Martinić M, Ozretić P, Musani V, Ramić S, Levanat S. GSK3B and GLI3 play a role in activation of Hedgehog-GLI pathway in human colon cancer – Targeting GSK3 β downregulates the signaling pathway and reduces cell proliferation. *BBA - Mol Basis Dis.* 2015; 1852(12):2574-2584.
6. Ozretić P, Bisio A, Musani V, Trnski D, Sabol M, Levanat S, Inga A. Regulation of human PTCH1b expression by different 5' untranslated region cis-regulatory elements. *RNA Biol.* 2015; 12(3):290-304.
7. Sabol M*, Trnski D*, Uzarevic Z, Ozretic P, Musani V, Rafaj M, Cindric M, Levanat S. Combination of cyclopamine and tamoxifen promotes survival and migration of MCF-7 breast cancer cells - Interaction of Hedgehog-GLI and estrogen receptor signaling pathways. *Plos One.* 2014; 9(12):E114510.

8. Musani V, Sabol M, Car D, Ozretić P, Kalafatić D, Maurac I, Orešković S, Levanat S. PTCH1 gene polymorphisms in ovarian tumors: Potential protective role of c.3944T allele. *Gene*. 2013; 517(1):55-59.
9. Sabol M, Car D, Musani V, Ozretić P, Oreskovic S, Weber I, Levanat S. The Hedgehog signaling pathway in ovarian teratoma is stimulated by Sonic Hedgehog which induces internalization of Patched. *Int J Oncol*. 2012; 41(4):1411-1418.
10. Levanat S, Musani V, Cvok MI, Susac I, Sabol M, Ozretić P, Car D, Eljuga D, Eljuga L, Eljuga D. Three novel BRCA1/BRCA2 mutations in breast/ovarian cancer families in Croatia. *Gene*. 2012; 498(2):169-76.
11. Maurac I, Sabol M, Musani V, Car D, Ozretić P, Kalafatic D, Oreskovic S, Babic D, Levanat S. A low grade ovarian carcinoma case with coincident LOH of PTCH1 and BRCA1, and a mutation in BRCA1. *Int J Gynecol Pathol*. 2012; 31(3):264-271.
12. Musani V, Sabol M, Car D, Ozretić P, Orešković S, Leović D, Levanat S. LOH of PTCH1 region in BCC and ovarian carcinoma: Microsatellite vs. HRM analysis. *Front Biosci (Elite Ed)*. 2012; E4:1049-1057.
13. Leovic D, Sabol M, Ozretić P, Musani V, Car D, Marjanovic K, Zubcic V, Sabol I, Sikora M, Grce M, Glavas-Obrovac Lj, Levanat S. HH-GLI signaling pathway activity in oral and oropharyngeal squamous cell carcinoma. *Head Neck - J Sci Spec*. 2012; 34(1):104-112.
14. Car D, Sabol M, Musani V, Ozretić P, Levanat S. Epigenetic regulation of the Hedgehog-GLI Signaling pathway in cancer. *Period Biol*. 2010; 112(4):419-423.
15. Ozretić P, Levacic Cvok M, Musani V, Sabol M, Car D, Levanat S. In silico analysis of potential structural and functional significance of human breast cancer gene BRCA2 sequence variants found in 5' untranslated region. *Period Biol*. 2010; 112(4):469-474.
16. Cretnik M, Poje G, Musani V, Kruslin B, Ozretić P, Tomas D, Situm M, Levanat S. Involvement of p16 and PTCH in pathogenesis of melanoma and basal cell carcinoma. *Int J Oncol*. 2009; 34(4):1045-1050.
17. Cvok MI, Cretnik M, Musani V, Ozretić P, Levanat S. New sequence variants in BRCA1 and BRCA2 genes detected by high-resolution melting analysis in an elderly healthy female population in Croatia. *Clin Chem Lab Med*. 2008; 46(10):1376-1383.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Sabol M, Trnski D, Musani V, Ozretić P, Levanat S. Role of GLI transcription factors in pathogenesis and their potential as new therapeutic targets. *Int J Mol Sci*. 2018; 19(9):2562.
2. Ozretić P*, Trnski D*, Musani V, Maurac I, Kalafatić D, Orešković S, Levanat S, Sabol M. Non-canonical Hedgehog signaling activation in ovarian borderline tumors and ovarian carcinomas. *Int J Oncol*. 2017; 51(6):1869-1877.
3. Levanat S, Sabol M, Musani V, Ozretić P, Trnski D. Hedgehog signaling pathway as genetic and epigenetic target in ovarian tumors. *Curr Pharm Design*. 2017; 23(1):73-94.
4. Trnski D, Sabol M, Gojević A, Martinić M, Ozretić P, Musani V, Ramić S, Levanat S. GSK3B and GLI3 play a role in activation of Hedgehog-GLI pathway in human colon cancer – Targeting GSK3β downregulates the signaling pathway and reduces cell proliferation. *BBA - Mol Basis Dis*. 2015; 1852(12):2574-2584.
5. Ozretić P, Bisio A, Musani V, Trnski D, Sabol M, Levanat S, Inga A. Regulation of human PTCH1b expression by different 5' untranslated region cis-regulatory elements. *RNA Biol*. 2015; 12(3):290-304.
6. Sabol M*, Trnski D*, Uzarevic Z, Ozretić P, Musani V, Rafaj M, Cindric M, Levanat S. Combination of cyclopamine and tamoxifen promotes survival and migration of MCF-7 breast cancer cells - Interaction of Hedgehog-GLI and estrogen receptor signaling pathways. *Plos One*. 2014; 9(12):E114510.



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- from 01/2019 – principal investigator on the Croatian Science Foundation research project “GLIcode - Differential regulation of the GLI code in BRAF/NRAS driven tumors”
- from 05/2017 – associate on the Croatian Science Foundation research project “MIRnaGLI - Novel molecular mechanisms for new therapeutic approaches: Interactions of microRNAs and Hedgehog-GLI signaling pathway in serous ovarian carcinoma”; [HRZZ IP-2016-06-1268] / PI Sonja Levanat
- 2014 - 2019 – associate on the Croatian Science Foundation research project “ProNetNel - New protein networks for novel therapeutic avenues in human melanoma”; [HRZZ IP-2013-11-1615] / PI Neda Slade
- 9/2013 - 8/2015 - postdoctoral fellow on the project by Czech Ministry of Education, Youth and Sports and the European Social Fund “Founding the expert platform for phenotyping and imaging technologies” OP EC 1.07/2.3.00/30.0050 / PI Radislav Sedlaček
- 06/2006 – 07/2013 – associate on MZOŠ research project “Signal transduction in tumors: HH-GLI pathway, interactions and therapeutic potential”; [098-0982464-2461] / PI Sonja Levanat
- 2004 – 2006 – assistant on MZOŠ research project “SHH/PTCH/SMO signaling pathway in tumors and malformations” / PI Sonja Levanat

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- from 01/2019 – principal investigator on the Croatian Science Foundation research project “GLIcode - Differential regulation of the GLI code in BRAF/NRAS driven tumors”
- from 05/2017 – associate on the Croatian Science Foundation research project “MIRnaGLI - Novel molecular mechanisms for new therapeutic approaches: Interactions of microRNAs and Hedgehog-GLI signaling pathway in serous ovarian carcinoma”; [HRZZ IP-2016-06-1268] / PI Sonja Levanat
- 2014 - 2019 – associate on the Croatian Science Foundation research project “ProNetNel - New protein networks for novel therapeutic avenues in human melanoma”; [HRZZ IP-2013-11-1615] / PI Neda Slade
- 9/2013 - 8/2015 - postdoctoral fellow on the project by Czech Ministry of Education, Youth and Sports and the European Social Fund “Founding the expert platform for phenotyping and imaging technologies” OP EC 1.07/2.3.00/30.0050 / PI Radislav Sedlaček

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist. Prof. Tomislav Sajko, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University hospital center Sestre milosrdnice, ERF

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Surgical therapy of pituitary tumors

BIOGRAPHY

From 01.05.2007-currently. Neurosurgeon at the Department of Neurosurgery University Hospital Center “Sestre milosrdnice”, Zagreb, Croatia

November 2008.-October 2009. Epilepsy surgery fellowship at the Department of Neurosurgery University Hospital Bonn, Germany, granted by the Deutscher Akademischer Austausch Dienst-German Academic Exchange Service (**DAAD**). Supervisor: Professor Johannes Schramm, President of EANS

29.01.2010. European Association of Neurosurgical Societies (EANS)/ European Union of Medical Specialists /UEMS) licence examination in Neurosurgery

20.04.2007. Croatian state licence examination in Neurosurgery

14.06.2006. PhD thesis in Biology at the Faculty of science University of Zagreb, Croatia

19.11.1998. Croatian state licence examination for medical doctors

04.07.1997. graduated from Medical School University of Zagreb

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: assist. prof. 2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. **Sajko T**, Gnjidić Ž, Sesar N, Malenica M. Sphenoid sinus aspergilloma in trans-sphenoidal surgery for pituitary adenomas. Acta Neurochir (Wien) 2015; 157(8):1345-51
2. Gnjidic Z, **Sajko T**, Kudelic N, Malenica M, Vizner B, Vrkljan M, Hat J, Rumboldt Z. Reversible “brain atrophy” in patients with Cushing’s disease. Coll Antropol 2008; 32 (4): 1165-70
3. **Sajko T**, **Rumboldt Z**, **Talan-Hranilovic J**, **Radic I**, **Gnjidic Z**. Primary sellar esthesioneuroblastoma. Acta Neurochir (Wien). 2005 Apr;147(4):447-8.
4. **Gnjidić Z**, **Sajko T**, **Malenica M**, **Kudelić N**, **Talan-Hranilović J**, **Rumboldt Z**. Oblique transsphenoidal approach to the cavernous sinus. Neurol Med Chir (Tokyo). 2008;48(10):433-9.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Fabris D, Rožman D, **Sajko T**, Vukelić Ž. Aberrant ganglioside composition in glioblastoma multiforme and peritumoral tissue: A mass spectrometry characterization. Biochimie 2017; 137:56-68
2. **Sajko T**, Gnjidić Ž, Sesar N, Malenica M. Sphenoid sinus aspergilloma in trans-sphenoidal surgery for pituitary adenomas. Acta Neurochir (Wien) 2015; 157(8):1345-51
3. **Sajko T**, Škoro I, Rotim K. How I do it- selective amygdalohippocampectomy via subtemporal approach. Acta Neurochirurgica 2013 Dec;155(12):2381-7.
4. Kovačević V, Jovanović N, Miletić-Kovačević M, Nikolić R, Peulić M, Rotim K, **Sajko T**, Rasulić L. Standard Lumbar Discectomy Versus Microdiscectomy - Differences in Clinical Outcome and Reoperation Rate. Acta Clin Croat. 2017 Sep;56(3):391-398.

5. Miškov S, Juraški RG, Mikula I, Bašić S, Pašić MB, Košec V, Sabol Z, Fučić A, **Sajko T**, Kes VB. The Croatian model of integrative prospective management of epilepsy and pregnancy. *Acta Clin Croat* 2016; 55(4):535-48
6. Rotim K, **Sajko T**, Zmajević M, Šumonja I, Grgić M. Dysphonia as an uncommon presentation of pontocerebellar choroid plexus papilloma. *Acta Clin Croat* 2015; 54(2):227-31
7. **Sajko T**, Škoro I, Rotim K. How I do it- selective amygdalohippocampectomy via subtemporal approach. *Acta Neurochirurgica* 2013 Dec;155(12):2381-7.
8. Kovačević V, Jovanović N, Miletić-Kovačević M, Nikolić R, Peulić M, Rotim K, **Sajko T**, Rasulić L. Standard Lumbar Discectomy Versus Microdiscectomy - Differences in Clinical Outcome and Reoperation Rate. *Acta Clin Croat*. 2017 Sep;56(3):391-398.
9. Miškov S, Juraški RG, Mikula I, Bašić S, Pašić MB, Košec V, Sabol Z, Fučić A, **Sajko T**, Kes VB. The Croatian model of integrative prospective management of epilepsy and pregnancy. *Acta Clin Croat* 2016; 55(4):535-48
10. Rotim K, **Sajko T**, Zmajević M, Šumonja I, Grgić M. Dysphonia as an uncommon presentation of pontocerebellar choroid plexus papilloma. *Acta Clin Croat* 2015; 54(2):227-31

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Collaborator: Molecular markers of neuronal vulnerability, adaptation and plasticity in acute and chronic brain lesion (NeuroReact) (leader: Professor Kalanj Bogner; Croatian Science Foundation)

2011 collaborator on scientific-investigational project of Ministry of science Republic of Croatia No. 108-1081870-2415 : **“Structural and functional glicolipidomics of brain development and malignant alteration”**. (Leader: Professor Ž. Vukelić)

2001-2005. collaborator on scientific-investigational project of Ministry of science Republic of Croatia No.134018: **“Current principles in treatment of severe head injury”** (Leader: Professor Lucijan Negovetić, MD, PhD)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Collaborator: Molecular markers of neuronal vulnerability, adaptation and plasticity in acute and chronic brain lesion (NeuroReact) (leader: Professor Kalanj Bogner; Croatian Science Foundation)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Aida Salihagić Kadić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Medical School University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Fetal and Neonatal Neurophysiology, Fetal Behavior

BIOGRAPHY

She was born on 6th May 1959. She graduated from the University of Zagreb Medical School in 1984 and has been employed at the Department of Physiology since 1986. MSc thesis in 1988 and PhD thesis in 1989. The second postgraduate study Ultrasound in Clinical Medicine completed in 1993. From January 1995 to April 1996: postdoctoral fellow (INSERM-French Ministry of Science Fellowship Award)-collaborator on the scientific projects «Hypoxia in utero, brain lesions, postnatal behavior» and «Development of the fetal brain and cocaine intoxication». In 1992, she was appointed on the position of Assistant Professor and in 1997 the Associate Professor of Physiology, Immunology and Fundamental Neuroscience. From 2000 to 2004-Head of the Department of Physiology, University of Zagreb Medical School. In 2008 she was appointed on the position of Full Professor (field Basic Medical Sciences, branches Physiology and Neuroscience) and in 2013 permanent position of Full Professor. She was leader of 4 scientific projects, financed by the Ministry of Science, Education and Sports of the Republic of Croatia and 1 project financed by University of Zagreb. She was mentor for 9 graduation theses and 2 doctoral theses (one of them is voted and awarded for the best dissertation at the University of Zagreb Medical School in 2002). She is mentor of one PhD thesis. Research area: fetal physiology, intrauterine growth restriction and fetal hypoxia, fetal behaviour, perinatal brain damage. She has developed a non-invasive method for the assessment of cerebral blood vessels in the fetuses exposed to chronic hypoxia and participated, together with an international team of scientists, in the creation of a new test for the evaluation of the neurological status of the fetus. She is the author of numerous chapters in the field of fetal physiology and neurophysiology in nationally and internationally published books and the author/co-author of 6 handbooks (3 university), 3 university textbooks, and scientific book. She has published 36 papers indexed in Current Contents, and 26 papers indexed in other international index publications (Science Citation Index, IM, Excerpta Med). Total citation (Scopus): >1160, h-index: 20. She is a member of the Croatian Society for Neuroscience and the World Association of Perinatal Medicine as well as an associate member of the International Academy of Perinatal Medicine and she has been Vice President of the Croatian Society of Physiologists since 1999.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 11. 7. 2013.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Arbeille Ph, Maulik D, Salihagić A, Locatelli A, Lansac J, Platt LD. Effect of long-term cocaine administration to pregnant ewes on fetal hemodynamics, oxygenation, and growth. *Obstet Gynecol* 1997; 90:795-802.
2. Salihagić A, Georgescu M, Perrotin R, Laurini R, Arbeille B, Fignon A, Zudenigo D, Kurjak A, Arbeille Ph. Daily Doppler assessment of the fetal hemodynamic response to chronic hypoxia: a five case report. *Prenatal Neonat Med* 2000; 5: 35-41.
3. Habek D, Hodek B, Herman R, Jugović D, Habek Čerkez J, Salihagić A. Fetal biophysical profile and cerebro-umbilical ratio in the assessment of perinatal outcome in growth-restricted fetuses. *Fetal Diagn Ther* 2003; 18(1) 12-16.

4. Salihagić-Kadić A, Kurjak A, Medić M, Andonotopo W, Azumendi G. New data about embryonic and fetal neurodevelopment and behavior obtained by 3D and 4D sonography. *J Perinat Med* 2005; 33(6): 478-490.
5. Salihagic-Kadic A, Medic M, Jugovic D, Kos M, Latin V, Kusan Jukic M, Arbeille P. Fetal cerebrovascular response to chronic hypoxia--implications for the prevention of brain damage. *J Matern Fetal Neonatal Med* 2006; 19(7):387-96.
6. Jugović D, Medić M, Kušan-Jukić M, Tumbri J, Kurjak A, Arbeille P, Salihagić-Kadić A. New Doppler index for prediction of perinatal brain damage in growth-restricted and hypoxic fetuses. *Ultrasound Obstet Gynecol* 2007; 30 (3):303-311.
7. Kurjak A, Azumendi G, Andonopo W, Salihagic-Kadic A. Three- and four-dimensional ultrasonography for the structural and functional evaluation of the fetal face. *Am J Obstet Gynecol* 2007; 196(1):16-28.
8. Kurjak A, Mišković B, Stanojević M, Amiel-Tison C, Ahmed B, Azumendi G, Vasilj O, Andonotopo W, Turudić T, Salihagić-Kadić A. New scoring system for fetal neurobehavior assessed by three- and four-dimensional sonography. *J Perinat Med* 2008;36(1):73-81.
9. Predojević M, Stanojević M, Vasilj O, Kadić AS. Prenatal and postnatal neurological evaluation of a fetus and newborn from pregnancy complicated with IUGR and fetal hypoxemia. *J Matern Fetal Neonatal Med* 2011; 24(5):764-7.
10. Stanojevic M, Kurjak A, Salihagić-Kadić A, Vasilj O, Miskovic B, Shaddad AN, Ahmed B, Tomasović S. Neurobehavioral continuity from fetus to neonate. *J Perinat Med* 2011; 39(2):171-7.
11. Salihagić Kadić A, Predojević M. Fetal neurophysiology according to gestational age. *Semin Fetal Neonatal Med* 2012;17(5):256-60.
12. Kurjak A, Stanojević M, Predojević M, Laušin I, Salihagić-Kadić A. Neurobehavior in fetal life. *Semin Fetal Neonatal Med* 2012; 17(6): 319-323.
13. Salihagić Kadić A, Predojević M. What We have Learned from Fetal Neurophysiology? *Donald School Journal of Ultrasound in Obstetrics & Gynecology* 2012; 6(2) :179-188.
14. Kadić AS, Predojević M, Kurjak A. Fetal and Maternal Physiology and Ultrasound Diagnosis. *Donald School Journal of Ultrasound in Obstetrics and Gynecology* 2013; 7(1).9-35.
15. Salihagić Kadić A. Fetal Neurology: The Role of Fetal Stress. *Donald School Journal of Ultrasound in Obstetrics and Gynecology* 2015; 9(1):30-39.
16. Kadic AS, Kurjak A. Cognitive Functions of the Fetus. *Ultraschall Med.* 2018 Apr;39(2):181-189. doi: 10.1055/s-0043-123469. Epub 2018 Apr 5.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Predojević M, Talić A, Stanojević M, Kurjak A, Salihagić Kadić A. Assessmnet of motoric and hemodynamic parameters in growth restricted fetuses – case study. *J Matern Fetal Neonatal Med* 2014; 27 (3): 247-251.
2. Kurjak A, Barisic LS, Stanojevic M, Kadic AS, Porovic S. Are We Ready to investigate Cognitive Function of Fetal Brain? The Role of Advanced Four-dimensional Sonography. *Donald School Journal of Ultrasound in Obstetrics and Gynecology* 2016; 10: 116-124.
3. Starčević M, Predojević M, Butorac D, Tumbri J, Konjevoda P, Salihagić Kadić A. Early functional and morphological brain disturbances in late-onset intrauterine growth restriction. *Early Human Development* 2016, 93:33–38.

4. Salihagić Kadić A, Glavač F, Vasilj O. Advances in Understanding of Neurophysiological Function of the Fetus. Donald School Journal of Ultrasound in Obstetrics and Gynecology 2018;12: 23-31.
5. Kadic AS, Kurjak A. Cognitive Functions of the Fetus. Ultraschall Med. 2018 Apr;39(2):181-189. doi: 10.1055/s-0043-123469. Epub 2018 Apr 5.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1991-96: Group leader and principle investigator on the scientific project: "Arise and development of the fetal circulation detected by transvaginal color Doppler", granted by Croatian Ministry of Science

1995-1996: Collaborator on scientific projects "Hypoxia in utero, brain lesions, postnatal behavior", INSERM, Tours, France

1995-1996: Collaborator on scientific projects "Development of the fetal brain and cocaine intoxication", INSERM, Tours, France

1997-2001: Group leader and principle investigator on the scientific project: "Fetal hypoxia and cerebrovascular reactivity", granted by Croatian Ministry of Science

2002-2006: Group leader and principle investigator on the scientific project: "Fetal hypoxia index in prevention of perinatal brain damage", granted by Croatian Ministry of Science

2007-2014: Group leader and principle investigator on the scientific project: "C/U ratio and motor parameters in prevention of perinatal brain damage", granted by Croatian Ministry of Science

2013-14: Group leader and principle investigator on the scientific project „New algorithm for the prevention of neurological disabilities and damage in children with intrauterine growth restriction ", granted by University of Zagreb

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2007-2014: Group leader and principle investigator on the scientific project: "C/U ratio and motor parameters in prevention of perinatal brain damage", granted by Croatian Ministry of Science

2013-14: Group leader and principle investigator on the scientific project „New algorithm for the prevention of neurological disabilities and damage in children with intrauterine growth restriction ", granted by University of Zagreb

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME AND THE TITLE OF THE TEACHER: SANDA SARDELIĆ, PHD, MD

NAME OF THE INSTITUTION OF EMPLOYMENT OF THE TEACHER: UNIVERSITY HOSPITAL CENTER SPLIT

NAME OF THE COURSE/MODULE THAT SHE TEACHES: Multiresistant bacteria associated with nosocomial infections

BIOGRAPHY

EDUCATION:

1983-1989 MEDICAL SCHOOL SPLIT UNIVERSITY OF ZAGREB - Medical degree MD

1992-1995 POSTGRADUATE STUDY IN CLINICAL PHARMACOLOGY, UNIVERSITY OF ZAGREB MEDICAL SCHOOL

1995 - MEDICAL SCHOOL UNIVERSITY OF ZAGREB MASTER OF SCIENCE DEGREE MSc

1996-2000 SPECIALIZATION IN MEDICAL MICROBIOLOGY, UNIVERSITY HOSPITAL CENTRE SPLIT AND ZAGREB

November 9th, 1998 Assistant, Department of Microbiology Medical School University of Split

1998-2000 POSTGRADUATE STUDY IN MICROBIOLOGY AND PARASITOLOGY UNIVERSITY OF ZAGREB MEDICAL SCHOOL

2010 MEDICAL SCHOOL UNIVERSITY OF ZAGREB DOCTORAL DEGREE PhD

2014 MEDICAL SCHOOL UNIVERSITY OF SPLIT - SCIENTIFIC ASSOCIATE

EMPLOYMENT:

1989-1990 RESIDENCY-CLINICAL HOSPITAL SPLIT

1990-1991 GENERAL PRACTITIONER SPLIT

1991- 1996 UNIVERSITY HOSPITAL CENTRE SPLIT, DEPARTMENT OF CLINICAL PHARMACOLOGY

1996 TO DATE UNIVERSITY HOSPITAL CENTRE SPLIT, DEPARTMENT OF CLINICAL MICROBIOLOGY

DATE OF LAST APPOINTMENT TO A RESEARCH RANK: July 2nd, 2014, Scientific Associate Medical School University Hospital Centre Split

LIST OF PUBLISHED WORK WHICH QUALIFIES HER FOR THE IMPLEMENTATION OF THE PROGRAMME:

Bedenić B, Slade M, Starčević LŽ, Sardelić S, et al. Epidemic spread of OXA-48 beta-lactamase in Croatia. J Med Microbiol. 2018;67(8):1031-1041.

Bedenić B, Sardelić S, Luxner J et al. Molecular characterization of class b carbapenemases in advanced stage of dissemination and emergence of class d carbapenemases in Enterobacteriaceae from Croatia. Infect Genet Evol. 2016 Sep;43:74-82.

Bedenić B, Sardelić S, Ladavac M. Multiresistant bacteria. Acta Med Croatica. 2015 Sep;69(3):211-6.

Zujić Atalić V(1, Bedenić B, Kocsis E, Mazzariol A, Sardelić S et al. Diversity of carbapenemases in clinical isolates of Enterobacteriaceae in Croatia--the results of a multicentre study. Clin Microbiol Infect 2014;20(11):O894-903.

Bedenić B, Plečko V, Sardelić S, Uzunović S, Godić Torkar K. Carbapenemases in Gram-Negative Bacteria: Laboratory Detection and Clinical Significance. BioMed Res Int 2014.

Sardelić S, Bedenić B, Colinon-Dupuich C et al. Infrequent finding of metallo-β-lactamase VIM-2 in carbapenem-resistant Pseudomonas aeruginosa strains from Croatia. Antimicrob Agents Chemother 2012;56(5):2746-9.

Sardelić S, Pallecchi L, Punda Polić V, Rossolini GM. Carbapenem-resistant Pseudomonas aeruginosa carrying VIM-2 metallo-beta-lactamase determinants, Croatia. Emerg Infect Dis 2003;9:1022-3.

PUBLISHED WORK IN THE LAST FIVE YEARS

Vince A, Židovec Lepej S, Bingulac-Popović J, Miletić M, Kuret S, Sardelić S, Vrakela IB, Kurelac I. Distribution of hepatitis C virus genotypes and subtypes in Croatia: 2008-2015. Cent Eur J Public Health. 2018;26(3):159-163.

Bedenić B, Slade M, Starčević LŽ, Sardelić S, et al. Epidemic spread of OXA-48 beta-lactamase in Croatia. J Med Microbiol. 2018;67(8):1031-1041.

Franić-Kukina I, Sardelić S, Beader N et al. EVOLUTION OF BETA-LACTAM ANTIBIOTIC RESISTANCE IN ENTEROBACTER SPP. IN CROATIA. Lijec Vjesn. 2016 Sep-Oct;138(9-10):240-9.



Bedenić B, Sardelić S, Luxner J et al. Molecular characterization of class b carbapenemases in advanced stage of dissemination and emergence of class d carbapenemases in Enterobacteriaceae from Croatia. *Infect Genet Evol.* 2016 ;43:74-82.

Bedenić B, Sardelić S, Ladavac M. Multiresistant bacteria. *Acta Med Croatica.* 2015 Sep;69(3):211-6.

Zujić Atalić V(1, Bedenić B, Kocsis E, Mazzariol A, Sardelić S et al. Diversity of carbapenemases in clinical isolates of Enterobacteriaceae in Croatia--the results of a multicentre study. *Clin Microbiol Infect* 2014;20(11):O894-903.

Bedenić B, Sardelić S, Vranić-Ladavac M, Barisić N, Ladavac R. Carbapenemases of gram-negative bacteria. *Lijec Vjesn.* 2014;136(3-4):94-103.

Bedenić B, Plečko V, Sardelić S, Uzunović S, Godić Torkar K. Carbapenemases in Gram-Negative Bacteria: Laboratory Detection and Clinical Significance. *BioMed Res Int* 2014.

LIST OF THE PROJECTS IN WHICH SHE PARTICIPATED WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Mechanisms of antimicrobial resistance of Gram-negative bacteria, project code 108-1080114-0015, Medical School Zagreb

LIST OF THE PROJECT IN THE LAST FIVE YEARS

University of Zagreb research grants-COLLABORATOR

2014: Postexposure effect of metal chelators on carbapenemase producing Gram-negative bacteria

2015: Multiresistant Gram-negative bacteria in long term care facilities

2016: Carbapenemases in hospitals, nursing homes and environment

2017: Mechanisms of spread of OXA-48 carbapenemase

2018: Mechanisms of colistin resistance in Gram-negative bacteria

THE NUMBER OF SUCCESSFUL MENTORSHIPS WHICH RESULTED IN DISERTATION DEFENCE: 0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Sven Seiwerth, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Morphological research methods in biomedical sciences

BIOGRAPHY

Date and place of birth: 20.02.1959, Zagreb.

Faculty of Medicine: University of Zagreb. Joined 1977 graduated in 1983.

Prerequisites: DZ Center, Zagreb, 1984.

Professional Exam: 1984. year

Scientific number: 177914

Professional and scientific advancement:

Specialist Pathology Practice: From November 1986 to February 1990

Specialist exam: 1990.

Postgraduate study in experimental pharmacology, Faculty of Medicine, University of Zagreb. 1987-88

Defended scientific master's thesis: 1989 Defended Doctoral Thesis in 1993 at the Faculty of Medicine in Zagreb.

Scientific Assistant at the Department of Pathology at the Faculty of Medicine, University of Zagreb, 1990.

Assistant professor in cumulative work in the Department of Pathology: 1996

Associate Professor: 2001

Full professor in 2007

Tenure: 2012

Working place: Department of Pathology at the Faculty of Medicine of the University of Zagreb from 1985 until today

Clinical Base: KBC Zagreb, from 1996 until today

Field of Professional Work: Pathology of the Locomotor System, Pulmonary Pathology, Molecular Pathology

Prof. Seiwerth is a full time tenured professor of pathology, Head of the Department of Pathology and Head of the Department of Pathology at the Faculty of Medicine, University of Zagreb, and head of the Department of Pathology of Bone and Soft Tissue and Pathology of the Clinical Institute of Pathology of KBC Zagreb. In the last five and a half years, he was a Vice-Dean of the School of Medicine, and three years ago Assistant Dean for Graduate Teaching. For thirty years he has been continuously participating in all forms of graduate and postgraduate studies at the Faculty and at the ent of Health and continuing education courses. He is intensively involved in scientific work and encourages and assists the academic work of students and younger colleagues. He is in the group of the most successful scientists of our faculty (over 135 papers in PubMed and over 120 in CC). He is involved in the inter-institutional and international cooperation of the School, and is a member of the working group for the creation of the Catalogue of Knowledge and Skills, the Clinical Skills Booklet and the Learning Outcomes Catalogue. In four terms, he is the Secretary General of the Croatian Association of Pathologists and Judicial Medics with the task of international cooperation, and the National Representative at UEMS / Board of Pathology, where he is also the Secretary General. He has also been appointed National Coordinator for Specialist Training in Specialization in Pathology and has successfully completed the development of a new specialty program "Pathology and Cytology Logic", which combines the two specializations (Pathological Anatomy and Clinical Cytology), thus leaving Croatia to be one of the two remaining EU

countries with separate specialization. Organized or participated in the organization of numerous domestic and international conferences, one of the main organizers of the European School of Pathology Zagreb Edition, one of the initiators and major organizers of the Pannonia Congress of Pathology (a biennial regional congress that includes Austria, Czech Republic, Croatia, Hungary, Slovakia and Slovenia), and President of the Organizing Committee of the Memorial Meeting Sergey Saltykow. He is a member of the Regional Council for Biomedicine at the University of Zagreb (six years) and the University Senate.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 15.05.2012

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Brčić L, Jakopović M, Brčić I, Klarić V, Milošević M, Sepac A, Samaržija M, Seiwerth S. Reproducibility of histological subtyping of malignant pleural mesothelioma. *Virchows Arch.* 2014 Dec;465(6):679-85.
- Alerić I, Mosler D, Seiwerth S, Polić IM, Mosler EL. Pulmonary tumorlets with surrounding fibrous tissue--suspected carcinoma: case report and review of the literature. *Acta Clin Croat.* 2014 Jun;53(2):226-32.
- Duplancic B, Stambolija V, Holjevac J, Zemba M, Balenovic I, Drmic D, Suran J, Radic B, Filipovic M, Blagaic AB, Brcic L, Kolenc D, Grabarevic Z, Seiwerth S, Sikiric P. Pentadecapeptide BPC 157 and anaphylactoid reaction in rats and mice after intravenous dextran and white egg administration. *Eur J Pharmacol.* 2014 Mar 15;727:75-9. doi: 10.1016/j.ejphar.2014.01.046. Epub 2014 Jan 31.
- Grabarević Z, Kurilj AG, Hohsteter M, Artuković B, Hinke-Bruckmann A, Dzaja P, Hutinec Z, Seiwerth S, Bata I. Eccrine carcinoma in the foot of an Asian elephant (*Elephas maximus*). *J Zoo Wildl Med.* 2013 Dec;44(4):1049-54.
- Klicek R, Kolenc D, Suran J, Drmic D, Brcic L, Aralica G, Sever M, Holjevac J, Radic B, Turudic T, Kokot A, Patrlj L, Rucman R, Seiwerth S, Sikiric P. Stable gastric pentadecapeptide BPC 157 heals cysteamine-colitis and colon-colon-anastomosis and counteracts cuprizone brain injuries and motor disability. *J Physiol Pharmacol.* 2013 Oct;64(5):597-612.
- Baričević M, Mravak Stipetić M, Situm M, Marinović B, Seiwerth S, Baričević D, Lončar B. Oral bullous eruption after taking lisinopril--case report and literature review. *Wien Klin Wochenschr.* 2013 Jul;125(13-14):408-11. doi:10.1007/s00508-013-0382-7. Epub 2013 Jun 21.
- Seiwerth S, Brcic L, Vuletic LB, Kolenc D, Aralica G, Misic M, Zenko A, Drmic D, Rucman R, Sikiric P. BPC 157 and blood vessels. *Curr Pharm Des.* 2014;20(7):1121-5.
- Sikiric P, Seiwerth S, Rucman R, Turkovic B, Rokotov DS, Brcic L, Sever M, Klicek R, Radic B, Drmic D, Ilic S, Kolenc D, Aralica G, Stupnisek M, Suran J, Barisic I, Dzidic S, Vrcic H, Sebecic B. Stable gastric pentadecapeptide BPC 157-NO-system relation. *Curr Pharm Des.* 2014;20(7):1126-35.
- Prutki M, Potocki K, Stern-Padovan R, Seiwerth S, Laktasic-Zerjavic N, Habek M. Unilateral muscle hypertrophy and focal myositis following S1 radiculopathy. *J Musculoskelet Neuronal Interact.* 2013 Jun;13(2):259-61.
- Jandric I, Vrcic H, Jandric Balen M, Kolenc D, Brcic L, Radic B, Drmic D, Seiwerth S, Sikiric P. Salutory effect of gastric pentadecapeptide BPC 157 in two different stress urinary incontinence models in female rats. *Med Sci Monit Basic Res.* 2013 Mar 12;19:93-102.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1: Sever AZ, Sever M, Vidovic T, Lojo N, Kolenc D, Vuletic LB, Drmic D, Kokot A, Zoricic I, Coric M, Vlainic J, Poljak L, Seiwerth S, Sikiric P. Stable gastric pentadecapeptide BPC 157 in the therapy of the rats with bile duct ligation. *Eur J Pharmacol.* 2019 Mar 15;847:130-142.
- 2: Drmic D, Samara M, Vidovic T, Malekinusic D, Antunovic M, Vrdoljak B, Ruzman J, Milkovic Perisa M, Horvat Pavlov K, Jeyakumar J, Seiwerth S, Sikiric P. Counteraction of perforated cecum lesions in rats: Effects of pentadecapeptide BPC 157, L-NAME and L-arginine. *World J Gastroenterol.* 2018 Dec 28;24(48):5462-5476.
- 3: Amic F, Drmic D, Bilic Z, Krezic I, Zizek H, Peklic M, Klicek R, Pajtak A, Amic E, Vidovic T, Rakic M, Milkovic Perisa M, Horvat Pavlov K, Kokot A, Tvrdeic A, Boban Blagaic A, Zovak M, Seiwerth S, Sikiric P. Bypassing major venous occlusion and duodenal lesions in rats, and therapy with the stable gastric pentadecapeptide BPC 157, L-NAME and L-arginine. *World J Gastroenterol.* 2018 Dec 21;24(47):5366-5378.
- 4: Ryska A, Buiga R, Fakirova A, Kern I, Olszewski W, Plank L, Seiwerth S, Toth E, Zivka E, Thallinger C, Zielinski C, Brcic L. Non-Small Cell Lung Cancer in Countries of Central and Southeastern Europe: Diagnostic Procedures and Treatment Reimbursement Surveyed by the Central European Cooperative Oncology Group. *Oncologist.* 2018 Dec;23(12):e152-e158.
- 5: Potočnjak I, Crumbach ME, Hrgetić Vitols AM, Hrnčić S, Lambers C, Braš M, Ježek D, Seiwerth S, Degoricija V. The attitudes of international medical students toward educational methods and styles applied in a 6-year longitudinal course in fundamentals of medical skills in Croatia. *Croat Med J.* 2018 Oct 31;59(5):267-273.
- 6: Mašić S, Brčić L, Krušlin B, Šepac A, Pigac B, Stančić-Rokotov D, Jakopović M, Seiwerth S. Expression of plakophilin 3 in diffuse malignant pleural mesothelioma. *Histol Histopathol.* 2018 Sep;33(9):995-1004.
- 7: Vukojević J, Siroglavić M, Kašnik K, Kralj T, Stančić D, Kokot A, Kolarić D, Drmić D, Sever AZ, Barišić I, Šuran J, Bojić D, Patrlj MH, Sjekavica I, Pavlov KH, Vidović T, Vlainić J, Stupnišek M, Seiwerth S, Sikirić P. Rat inferior caval vein (ICV) ligation and particular new insights with the stable gastric pentadecapeptide BPC 157. *Vascul Pharmacol.* 2018 Jul;106:54-66.
- 8: Ostojić J, Brčić L, Hrbač P, Seiwerth S. Expression of Nedd9 in Transbronchial Biopsies of Lung Adenocarcinoma. *Acta Clin Croat.* 2018 Jun;57(2):251-256.
- 9: Seiwerth S, Rucman R, Turkovic B, Sever M, Klicek R, Radic B, Drmic D, Stupnisek M, Misic M, Vuletic LB, Pavlov KH, Barisic I, Kokot A, Japjec M, Blagaic AB, Tvrdeic A, Rokotov DS, Vrcic H, Staresinic M, Sebecic B, Sikiric P. BPC 157 and Standard Angiogenic Growth Factors. Gastrointestinal Tract Healing, Lessons from Tendon, Ligament, Muscle and Bone Healing. *Curr Pharm Des.* 2018;24(18):1972-1989.
- 10: Sikiric P, Rucman R, Turkovic B, Sever M, Klicek R, Radic B, Drmic D, Stupnisek M, Misic M, Vuletic LB, Pavlov KH, Barisic I, Kokot A, Peklic M, Strbe S, Blagaic AB, Tvrdeic A, Rokotov DS, Vrcic H, Staresinic M, Seiwerth S. Novel Cytoprotective Mediator, Stable Gastric Pentadecapeptide BPC 157. Vascular Recruitment and Gastrointestinal Tract Healing. *Curr Pharm Des.* 2018;24(18):1990-2001.
- 11: Duzel A, Vlainic J, Antunovic M, Malekinusic D, Vrdoljak B, Samara M, Gojkovic S, Krezic I, Vidovic T, Bilic Z, Knezevic M, Sever M, Lojo N, Kokot A, Kolovrat M, Drmic D, Vukojevic J, Kralj T, Kasnik K, Siroglavic M, Seiwerth S, Sikiric P. Stable gastric pentadecapeptide BPC 157 in the treatment of colitis and ischemia and reperfusion in rats: New insights. *World J Gastroenterol.* 2017 Dec 28;23(48):8465-8488.

- 12: Vučićević Boras V, Gabrić D, Smiljanić Tomičević L, Seiwerth S, Gršić K, Šarčević B, Lončar Brzak B, Marunica E, Glavina A. Tuberculosis of the Oral Cavity Misdiagnosed as Precancerous Lesion. *Acta Stomatol Croat.* 2017 Dec;51(4):326-331.
- 13: Werkstetter KJ, Korponay-Szabó IR, Popp A, Villanacci V, Salemme M, Heilig G, Lillevang ST, Mearin ML, Ribes-Koninckx C, Thomas A, Troncone R, Filipiak B, Mäki M, Gyimesi J, Najafi M, Dolinšek J, Dydensborg Sander S, Auricchio R, Papadopoulou A, Vécsei A, Szitanyi P, Donat E, Nenna R, Alliet P, Penagini F, Garnier-Lengliné H, Castillejo G, Kurppa K, Shamir R, Hauer AC, Smets F, Corujeira S, van Winckel M, Buderus S, Chong S, Husby S, Koletzko S; ProCeDE study group. Accuracy in Diagnosis of Celiac Disease Without Biopsies in Clinical Practice. *Gastroenterology.* 2017 Oct;153(4):924-935.
- 14: Strinic D, Belosic Halle Z, Luetic K, Nedic A, Petrovic I, Sucic M, Zivanovic Posilovic G, Balenovic D, Strbe S, Udovicic M, Drmic D, Stupnisek M, Lovric Bencic M, Seiwerth S, Sikiric P. BPC 157 counteracts QTc prolongation induced by haloperidol, fluphenazine, clozapine, olanzapine, quetiapine, sulpiride, and metoclopramide in rats. *Life Sci.* 2017 Oct 1;186:66-79.
- 15: Mašić S, Vučić M, Seiwerth S. Pulmonary myelolipoma containing osseous tissue: An unexpected finding at autopsy. *Respir Med Case Rep.* 2017 Sep14;22:254-256.
- 16: Drmic D, Kolenc D, Ilic S, Bauk L, Sever M, Zenko Sever A, Luetic K, Suran J, Seiwerth S, Sikiric P. Celecoxib-induced gastrointestinal, liver and brain lesions in rats, counteraction by BPC 157 or L-arginine, aggravation by L-NAME. *World J Gastroenterol.* 2017 Aug 7;23(29):5304-5312.
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- 20: Luetic K, Sucic M, Vlainic J, Halle ZB, Strinic D, Vidovic T, Luetic F, Marusic M, Gulic S, Pavelic TT, Kokot A, Seiwerth RS, Drmic D, Batelja L, Seiwerth S, Sikiric P. Cyclophosphamide induced stomach and duodenal lesions as a NO-system disturbance in rats: L-NAME, L-arginine, stable gastric pentadecapeptide BPC 157. *Inflammopharmacology.* 2017 Apr;25(2):255-264.
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- 22: Sikiric P, Seiwerth S, Rucman R, Drmic D, Stupnisek M, Kokot A, Sever M, Zoricic I, Zoricic Z, Batelja L, Ziger T, Luetic K, Vlainic J, Rasic Z, Bencic ML. Stress in Gastrointestinal Tract and Stable Gastric Pentadecapeptide BPC 157. Finally, do we have a Solution? *Curr Pharm Des.* 017;23(27):4012-4028.
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- 37: Antabak A, Đapić T, Seiwerth S, Papeš D, Karlo R, Luetić T. [SUBUNGUAL EXOSTOSIS OF THE THUMB - CASE REPORT IN AN EIGHT YEAR OLD GIRL]. *Lijec Vjesn*. 2015 Jul-Aug;137(7-8):233-5. Croatian. PubMed PMID: 26502674.
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- 41: Stupnisek M, Kokot A, Drmic D, Hrelec Patrlj M, Zenko Sever A, Kolenc D, Radic B, Suran J, Bojic D, Vcev A, Seiwerth S, Sikiric P. Pentadecapeptide BPC 157 Reduces Bleeding and Thrombocytopenia after Amputation in Rats Treated with Heparin, Warfarin, L-NAME and L-Arginine. *PLoS One*. 2015 Apr 21;10(4):e0123454. doi: 10.1371/journal.pone.0123454. eCollection 2015. PubMed PMID: 25897838; PubMed Central PMCID: PMC4405609.
- 42: Bergovec M, Petković M, Smerdelj M, Seiwerth S, Brkić L, Robert K, Orlić D. [GIANT CELL TUMOR OF BONE: RESULTS AND TREATMENT COMPLICATIONS]. *Acta Med Croatica*. 2014 Dec;68(4-5):405-10. Croatian. PubMed PMID: 26285474.
- 43: Brčić L, Jakopović M, Brčić I, Klarić V, Milošević M, Sepac A, Samaržija M, Seiwerth S. Reproducibility of histological subtyping of malignant pleural mesothelioma. *Virchows Arch*. 2014 Dec;465(6):679-85. doi: 10.1007/s00428-014-1664-9. Epub 2014 Oct 10. PubMed PMID: 25300229.
- 44: Alerić I, Mosler D, Seiwerth S, Polić IM, Mosler EL. Pulmonary tumorlets with surrounding fibrous tissue--suspected carcinoma: case report and review of the literature. *Acta Clin Croat*. 2014 Jun;53(2):226-32. Review. PubMed PMID: 25163239.
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- 46: Seiwerth S, Brcic L, Vuletic LB, Kolenc D, Aralica G, Misic M, Zenko A, Drmic D, Rucman R, Sikiric P. BPC 157 and blood vessels. *Curr Pharm Des*. 2014;20(7):1121-5. Review. PubMed PMID: 23782145.
- 47: Sikiric P, Seiwerth S, Rucman R, Turkovic B, Rokotov DS, Brcic L, Sever M, Klicek R, Radic B, Drmic D, Ilic S, Kolenc D, Aralica G, Stupnisek M, Suran J, Barisic I, Dzidic S, Vrcic H, Sebecic B. Stable gastric

pentadecapeptide BPC 157-NO-system relation. Curr Pharm Des. 2014;20(7):1126-35. Review. PubMed PMID: 23755725.

48: Mravak-Stipetić M, Lončar-Brzak B, Bakale-Hodak I, Sabol I, Seiwert S, Majstorović M, Grce M. Clinicopathologic correlation of oral lichen planus and oral lichenoid lesions: a preliminary study. ScientificWorldJournal. 2014;2014:746874. doi: 10.1155/2014/746874. Epub 2014 Oct 29. PubMed PMID: 25531004; PubMed Central PMCID: PMC4229965.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Quantitative analysis and transmission of images in pathology
Pentadecapeptide BPC 157 - Further research
Influence of pentadecapeptide BPC 157 on female urogenital system
The effect of BPC 157 on induced bilijar obstruction
Hepatocellular tumours
Comparative diagnostics, morphometry and human and animal tumor analysis
Shaping bone defect after implantation
Pentadecapeptide BPC 157 - Effective Therapy of Muscle and Tinnitus
Genetic research of the effect of BPC-157 on microorganisms
Lipids, free radicals and their messengers in integrative oncology
Oxidative stress and central nervous system tumours
Pharmacogenetics in Paediatric Oncology
Malignant diseases in children
Genetic Therapy of Mineralized Tissues
Mechanisms of lipoprotein structure damage by external factors
Molecular basis of thyroid cancer criteria in the treatment of differentiated carcinomas
Molecular mechanisms of the formation of precancerous and cancerous lesions of the oral cavity
Influence of organized education on quality of work in outpatient care
Cytological indicators of cell proliferation
Doppler myocardial in early detection and monitoring of cardiovascular diseases
Experimental and Clinical Endodontology
Experimental embryonic tumours and development of mammalian embryos in vitro and in vivo
Epigenetic changes of pancreatic cell carcinoma of the head and neck
Carcinogenesis in Thyroidism and Stomach in Croatia
Treatment of diseases and injuries of large joints of cartilage
Modelling bioactive molecules and testing their properties and effects
Modelling of molecules and materials by methods of mathematical and computer chemistry
Molecular genetics and pharmacogenetics of gastrointestinal tumours
Molecular pathology in neoplasms of the female sex system
Molecular profiling of metastatic breast tumours
Male and female sexual system: development, normal histophysiology and infertility
Application of the principle of medicine founded on scientific knowledge in the general hospital
Prognostic value of FOXP1 and FOXP3 in B lymphoproliferative diseases
Changed status of DNA methylation in HPV-related lesions
Changes in the telencephalic wall in patients with hydrocephalus
Developmental neuropathology of genetic malformations of human brain cortex



Thermal changes in bone healing after fracture

Radiation in patients with prostate cancer on Tregs-lymphocytes

Heart failure in Croatia

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 8

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Jadranka Sertić, full professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb, University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Movement Disorders, Biochemical methods in biomedical research; Selected chapters in epileptology in developmental age; Molecular and biochemical approach to genetic disorders; Genomic approaches in biomedical and translational research; Methods of molecular biology in medicine

BIOGRAPHY

Born: 1956. Education: 1980 Bsc, University of Zagreb, School of Biotechnology. 1985 MSc-MEF Zagreb, 1992 PhD-MEF Zagreb, 1992 specialist in medical biochemistry. Work experience: 1988-1990 researcher - Max Planck Institute for Biology Tuebingen, 2005-2012 Head of Department of Laboratory Diagnostics, University Hospital Centre Zagreb, 2011.-Head of Clinical Unit for Molecular Diagnostics, Department of Laboratory Diagnostics, University Hospital Centre Zagreb. 2006-2011 associate professor, 2012-2016 full professor, 2016 -full professor permanent position at the Department of Medical Chemistry, Biochemistry and Clinical Chemistry, School of Medicine, University of Zagreb. Scientific interest: laboratory medicine, hereditary diseases, molecular genetic and biochemical approach. Award: School of Medicine, University of Zagreb in scientific productivity in the project period 2007-2011, (" Genomics and proteomics risk factors of atherosclerosis") . Publications: more than 80 scientific papers, of which 59 in CC, more than 1300 CC and SCI citations, h-index=21, mentor of 8 doctoral dissertations, editor of two university textbooks. Memberships: Croatian Chamber of Medical Biochemists, Clinical Genetic Society of Croatia, Croatian Catholic Medical Society, 1999-2000 Croatian delegate at the IFCC, 1996-2012 at the EMQN. Teaching experience in postgraduate studies: leader of two courses in the Ph.D. program Biomedicine and Health Sciences, School of Medicine, University of Zagreb.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 11.12.2016.

Selected publications:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Sertić J, Vincek V, Ledley FD, Figueroa F, Klein J. Mapping of the L-methyl-malonil-CoA mutase gene to the mouse chromosome 17. *Genomics* 1990;6:560-64.
2. Sertić J, Rutczynska Z, Vincek V, Nadeau J, Figueroa F, Klein J. Mapping of six DNA markers on mouse chromosome 17. *Mammalian Genome* 1992;2:138-42.
3. Sertić J, Barišić N, Šoštarko M, Bošnjak N, Čulić V, Cvitanović Lj, Ferenčak G, Brzović Z, Stavljenić-Rukavina A. Deletion in the SMN and NAIP genes in patients with spinal muscular atrophy in Croatia. *Coll Antropol* 1997;21:487-92.
4. Sertić J, Slaviček J, Božina N, Malenica B, Kes P, Reiner Z. Cytokines and growth factors in mostly atherosclerotic patients on hemodialysis determined by Biochip array technology. *Clin Chem Lab Med* 2007;45(10):1347-52.
5. Sertić J, Juričić L, Ljubić H, Božina T, Lovrić J, Markeljević J, Jelaković B, Merkler M, Reiner Ž. Variants of ESR1, APOE, LPL and IL-6 loci in young healthy subjects: association with lipid status and obesity. *BMC Res* 2009;2:203-06.

6. Skoric B, Milicic D, Lovric D, Gornik I, Skoric KN, Sertic J. Initial patency of the infarct-related artery in patients with acute ST elevation myocardial infarction is related to platelet response to aspirin. *Int J Cardiol.* 2010;140(3):356-68.
7. Milicic D, Lovric D, Skoric B, Narancic-Skoric K, Gornik I, Sertic J. Platelet response to standard aspirin and clopidogrel treatment correlates with long-term outcome in patients with acute ST-elevation myocardial infarction. *Int J Cardiol.* 2011;153(2):227-79.
8. Vuksan-Ćusa B, Jakovljević M, Sagud M, Mihaljević Peleš A, Marčinko D, Topić R, Mihaljević S, Sertić J. Metabolic syndrome and serum homocysteine in patients with bipolar disorder and schizophrenia treated with second generation antipsychotics. *Psychiatry Res.* 2011;189:21-25.
9. Mendizabal I, Lao O, Marigorta UM, Wollstein A, Gusmão L, Ferak V, Ioana M, Jordanova A, Kaneva R, Kouvatsi A, Kučinskas V, Makukh H, Metspalu A, Netea MG, de Pablo R, Pamjav H, Radojkovic D, Rolleston SJ, Sertic J, Macek M Jr, Comas D, Kayser M. Reconstructing the population history of European Romani from genome-wide data. *Curr Biol.* 2012;22(24):2342-49.
10. Rako I, Jakic-Razumovic J, Katalinic D, Sertic J, Plestina S. Mutation pattern of KRAS and BRAF oncogenes in colorectal cancer patients. *Neoplasma.* 2012;59(4):376-83.
11. Karmelić I, Lovrić J, Božina T, Ljubić H, Vogrinc Ž, Božina N, Sertić J. Adiponectin level and gene variability are obesity and metabolic syndrome in a young population. *Arch Med Res.* 2012;43(2):145-53.
12. Zariwala MA, Gee HY, Kurkowiak M, Al-Mutairi DA, Leigh MW, Hurd TW, Hjej R, Dell SD, Chaki M, Dougherty GW, Adan M, Spear PC, Esteve-Rudd J, Loges NT, Rosenfeld M, Diaz KA, Olbrich H, Wolf WE, Sheridan E, Batten TF, Halbritter J, Porath JD, Kohl S, Lovric S, Hwang DY, Pittman JE, Burns KA, Ferkol TW, Sagel SD, Olivier KN, Morgan LC, Werner C, Raidt J, Pennekamp P, Sun Z, Zhou W, Airik R, Natarajan S, Allen SJ, Amirav I, Wiczorek D, Landwehr K, Nielsen K, Schwerk N, Sertic J, Köhler G, Washburn J, Levy S, Fan S, Koerner-Rettberg C, Amselem S, Williams DS, Mitchell BJ, Drummond IA, Otto EA, Omran H, Knowles MR, Hildebrandt F. ZMYND10 is mutated in primary ciliary dyskinesia and interacts with LRRC6. *Am J Hum Genet.* 2013;93(2):336-45.
13. Šarac H, Markeljević J, Erdeljić V, Josipović-Jelić Z, Hajnšek S, Klapan T, Batinica M, Baršić I, Sertic J, Dobrila Dintinjana R. Signal hyperintensities on brain magnetic resonance imaging in patients with primary Sjögren syndrome and frequent episodic tension-type headache: relation to platelet serotonin level and disease activity. *J Rheumatol.* 2013;40(8):1360-66.
14. Pećin I, Whittall R, Futema M, Sertić J, Reiner Z, Leigh SE, Humphries SE. Mutation detection in Croatian patients with hypercholesterolemia. *Ann Hum Genet.* 2013 77:22-30.
15. Božina T, Sertić J, Lovrić J, Jelaković B, Šimić I, Reiner Ž. Interaction of genetic risk factors confers increased risk for metabolic syndrome: the role of peroxisome proliferator-activated receptor γ . *Genet Test Mol Biomarkers.* 2014;18(1):32-40.
16. Kao AC, Rojnic Kuzman M, Tiwari AK, Zivkovic MV, Chowdhury NI, Medved V, Kekić I, Zai CC, Lieberman JA, Meltzer HY, Božina T, Božina N, Kennedy JL, Sertic J, Müller DJ. Methylenetetrahydrofolate reductase gene variants and antipsychotic-induced weight gain and metabolic disturbances. *J Psychiatr Res.* 2014;54:36-42.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Bazina A, Sertić J, Mišmaš A, Lovrić T, Poljaković Z, Miličić D. PPAR γ and IL-6 - 174G>C gene variants in Croatian patients with ischemic stroke. *Gene.* 2015;560(2):200-04.

2. Batinić D, Sertić J, Čorić M, Konjevoda P, Batinić D, Milošević D. Angiotensin-converting enzyme genotype is not a significant genetic risk factor for idiopathic nephrotic syndrome in Croatian children. *Nephron*. 2015;130:29-34.
3. Ljubić H, Kalauz M, Telarović S, Ferenci P, Ostojić R, Noli MC, Lepori MB, Hrstić I, Vuković J, Premužić M, Radić D, Ravić KG, Sertić J, Merkler A, Barišić AA, Loudianos G, Vucelić B. ATB7B gene mutations in Croatian patients with Wilson disease. *Genet Test Mol Biomarkers*;2016;20(3):112-27.
4. Sporiš D, Bašić S, Sertić J, Mahović Lakušić D, Babić T. Is apolipoprotein E ε2 associated with delayed onset of non-lesional temporal lobe epilepsy? *Acta Clin Croat*. 2017;56(1):10-14.
5. Karmelić I, Lovrić J, Božina T, Merkler A, Božina N, Sertić J. Is there any association of apolipoprotein E gene polymorphisms with metabolic syndrome in a young population of Croatian origin? *Ann Hum Biol*. 2017; 44(3):287-94.
6. Božina T, Lovrić J, Šimičević L, Merkler A, Božina N, Jelaković B, Sertić J. Can the choice of diet undermine the potential genetic risk of AT1R 1166A>C gene polymorphisms? *Gene* 2018; 8:291-96.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1988.-1990. Linkage map of mouse chromosome 17. Max-Planck Institut Tübingen (leader J. Klein)
- 1995- 2000. BIOMED - ApoEurope Project (leader G. Siest)
- 2008-2010. INTEGERS- Integrating and strengthening genomic research in South-Eastern Europe, (FP7, leader F. Borovečki)
- 2009-2013. Functional Genomics and Proteomics of Risk Factors of Atherosclerosis, (MZOS, HR, leader J. Sertić)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 2013-2015. The role of gene markers in the development of early stroke, supported by the University of Zagreb (leader, J. Sertić).
2016. Interaction of Hp, CYP2C9, CYP2C19 and PPARγ in the development of cerebrovascular ischemic stroke, supported by the University of Zagreb (leader, J. Sertić).
- 2016-2020. EH-UH2 -Epidemiology of hypertension and intake of salt in Croatia, (HRZZ, HR, leader, B. Jelaković).
- 2017-2018. The role of genetic and biochemical markers in the development of monogenic diabetes, supported by the University of Zagreb (leader, J. Sertić).

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 8

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: assistant prof. Nino Sinčić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Epigenetics, Methods of investigation in vivo and in vitro ; Methods of molecular biology in medicine

BIOGRAPHY

Nino Sinčić graduated at the School of Medicine University of Zagreb in 2005 and enrolled in a postgraduate doctoral program "Biomedicine and Health". In 2006 he was elected as assistant at the Department of Biology School of Medicine University of Zagreb, where he remains to date. In 2012, he gained a Ph. D. in Biomedicine and Health Sciences from the field of Basic Medical Sciences and promoted in scientific associate in 2013 and in 2015 in assistant professor. His research primarily focuses on the research of genetics and epigenetics in experimental teratocarcinoma and teratoma obtained by transplantation of embryos or parts thereof into the ectopic site and testicular tumors in humans. Among many trainings and professional educations, most prominent are training in epigenetic analysis at International Agency for Research on Cancer - World Health Organization (FR) in 2008 and 2009, in stem cell biology at Cold Spring Harbor (USA) in 2012, and magment of cancer research during "IARC 50 for 50: Empowering future cancer research leaders" on a direct call from the organizer International Agency for Research on Cancer - World Health Organization (FR) in 2016. He has published 19 scientific articles with significant scientific contributions, of which 9 in CC, 8 in SCI, 1 in Index Medicus and 1 in Excer. Medica. His work was citated 179 times (153 without self-citations). He published 1 book chapter indexed in Scopus. He held 11 lectures at scientific conferences and participated in national and international scientific conferences with 64 congress poster presentations, 3 were indexed in CC base, 2 in SCI base and 1 in Scopus database. He is a member of numerous societies and the winner of ARCA awards.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 18.05.2015.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Buljubašić R, Buljubašić M, Bojanac AK, Ulamec M, Vlahović M, Ježek D, Bulić-Jakuš F, Sinčić N. Epigenetics and testicular germ cell tumors. *Gene*. 661:22-33, 2018.
- Sincic N, Herceg Z: DNA Methylation and Cancer: Searching for Ghosts and Angels above the Genes. *Curr Opin Oncol*, 23:69–76, 2011.
- Hernandez-Vargas H, Sincic N, Herceg Z: Epigenetic signatures in stem cells and cancer stem cells, *Epigenomics*. 1:261-280, 2009.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- Katusic Bojanac A, Rogosic S, Sincic N, Juric-Lekic G, Vlahovic M, Serman L, Jezek D, Bulic-Jakus F. Influence of hyperthermal regimes on experimental teratoma development in vitro. *Int J Exp Pathol*. 99:131-144, 2018.
- Buljubašić R, Buljubašić M, Bojanac AK, Ulamec M, Vlahović M, Ježek D, Bulić-Jakuš F, Sinčić N. Epigenetics and testicular germ cell tumors. *Gene*. 661:22-33, 2018.
- Bulic-Jakus F, Katusic Bojanac A, Juric-Lekic G, Vlahovic M, Sincic N. Teratoma: from spontaneous tumors to the pluripotency/malignancy assay. *Wiley Interdiscip Rev Dev Biol*. 5:186-209, 2016.

- Fabijanovic D, Serman A, Jezic M, Katusic A, Sincic N, Curkovic-Perica M, Bulic-Jakus F, Vlahovic M, Juric-Lekic G, Serman L. Impact of 5-azacytidine on rat decidual cell proliferation. *Int J Exp Pathol*.95:238-43, 2014.

- Mužić V, Katušić Bojanac A, Jurić-Lekić G, Himmelreich M, Tupek K, Šerman LJ, Sinčić N, Marn N, Vlahović M, Bulić-Jakuš F. Epigenetic drug 5-azacytidine impairs proliferation of rat limb buds in an organotypic model system in vitro. *CMJ* 54:489-495, 2013.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 2019-2023 Consultant in the project "Prevention of Hypoglycemia in Pregnant Woman with Type 1 Diabetes". School of Medicine, University of Zagreb financed by CSF.

- 2018-2023 PI in the project "Epigenetic Biomarkers in Prostate Cancer". School of Medicine, University of Zagreb financed by CSF.

- 2017-2022 PI of project element "Testicular Germ Cell Tumors Epigenetics" and associate on other elements "Reproductive and Regenerative Medicine - Exploring New Platforms and Potentials" The European Union through the European Regional Development Fund, Operational Programme Competitiveness and Cohesion, under grant agreement No. KK.01.1.1.01.0008, within the Center of Excellence for Reproductive and Regenerative Medicine (CERRM). School of Medicine, University of Zagreb.

- 2017-2021 Co-PI in the project "Epigenetic Biomarkers in Blood and Ejaculate of Patients with Testicular Seminoma". School of Medicine, University of Zagreb financed by CSF.

- 2013-2018 collaborator UNIZG projects.

- 2014. to date Scientific Center of Excellence for reproductive and regenerative medicine, research unit for biomedical research reproduction and development

- 2006-2013. Collaborator in the project "Experimental embryonic tumors and development of mammalian

embryos in vitro and in vivo." School of Medicine, University of Zagreb. MZOS.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 2019-2023 Consultant in the project "Prevention of Hypoglycemia in Pregnant Woman with Type 1 Diabetes". School of Medicine, University of Zagreb financed by CSF.

- 2018-2023 PI in the project "Epigenetic Biomarkers in Prostate Cancer". School of Medicine, University of Zagreb financed by CSF.

- 2017-2022 PI of project element "Testicular Germ Cell Tumors Epigenetics" and associate on other elements "Reproductive and Regenerative Medicine - Exploring New Platforms and Potentials" The European Union through the European Regional Development Fund, Operational Programme Competitiveness and Cohesion, under grant agreement No. KK.01.1.1.01.0008, within the Center of Excellence for Reproductive and Regenerative Medicine (CERRM). School of Medicine, University of Zagreb.

- 2017-2021 Co-PI in the project "Epigenetic Biomarkers in Blood and Ejaculate of Patients with Testicular Seminoma". School of Medicine, University of Zagreb financed by CSF.

- 2014. to date Scientific Center of Excellence for reproductive and regenerative medicine, research unit for biomedical research reproduction and development



- 2013-2018 collaborator UNIZG projects.
- 2006-2013. Collaborator in the project "Experimental embryonic tumors and development of mammalian embryos in vitro and in vivo." School of Medicine, University of Zagreb. MZOS.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Maja Sirotković Skerlev, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Molecular genetics of gastrointestinal tumors

BIOGRAPHY

Maja Sirotković-Skerlev, MBZ: 119524

Associate professor

Department of Pathophysiology, School of Medicine, University of Zagreb, KBC Zagreb, Kišpatićeva 12, 10 000 Zagreb, Croatia

e-mail: majas@irb.hr

Education

2001, Ph.D., School of Medicine, University of Zagreb

1990/1991, education in Dana Farber Cancer Institute, Harvard Medical School, Boston, USA

1990, specialization in internal medicine, (board examination in June 1990)

1985, M.sc., School of Medicine, University of Zagreb

1982-1984, postgraduate study: Preclinical Experimental Pharmacology, School of Medicine, University of Zagreb

1982, MD, School of Medicine, University of Zagreb

Work experience

1984 – today, School of Medicine, University of Zagreb, Department of Pathophysiology (october 1984: associate, 1986: assistant lecturer, 2002: assistant lecturer with PhD, 2008: asst.professor, 2014: associate professor)

1986-1990, specialization in internal medicine

1984, Črnomerec Community Health Plan, Zagreb, Croatia, general practitioner

1983-1984, Črnomerec Community Health Plan, Zagreb, Croatia, internship, Medical Licence in 1984

Teaching activities

Since 1984/85 Graduate study, Pathophysiology, School of Medicine, University of Zagreb

Since 1993/94 Elective course «Breast Cancer»

Since 1993/94 Elective course «Surgical treatment of acute ischemia»

2000/01- 2009/10 Postgraduate course «Acute ischemia in vascular surgery»

Since 2005/06 Medical studies in English, Pathophysiology

Since 2015/16 Doctoral study in Biomedicine and Health Sciences, School of Medicine,
University of Zagreb: Molecular genetics of gastrointestinal tumors

Since 2015/16 Postgraduate study: Dermatovenereology

Since 2016/17 Postgraduate study: Medical oncology

Since 2017/18 Postgraduate study: Vascular surgery

Scientific grants

1989-1995, collaborator of scientific project “Molecular characterisation of tumors-basic and clinical aspects “

1996-2002, collaborator of MZOS scientific project „Breast cancer-molecular characterization-clinical aspects“

2002-2006, collaborator of MZOS scientific project „Molecular and clinical characteristics of breast cancer “

2007-2014, collaborator of MZOS scientific project “Breast cancer- molecular, genetic and clinical characteristics”

2007-2014, collaborator of MZOS scientific project «Molecular genetics and pharmacogenetics of gastrointestinal tumors”

2015, principal investigator, Zagreb University fund for scientific research: «Circulating autoantibodies in early diagnosis of breast and colon cancer”

2016, principal investigator, Zagreb University fund for scientific research: «Significance of circulating autoantibodies in early diagnosis of breast and colon cancer”

Awards:

1979 and 1980. Dean’s award, School of Medicine

1980 and 1981. Rector’s Award for excellent credit (credit: 4,91= 98%)

1982. Annual University Award for two student’s research papers

Supervision

3 graduation thesis, School of Medicine, University of Zagreb

Scientific publications

21 (14 indexed in Current Contents)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

14.07.2014. Associate professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Sirotković-Skerlev M, Križanac Š, Kapitanović S, Husnjak K, Unušić J, Pavelić K. Expression of c-myc, erbB-2, p53 and nm23-H1 gene product in benign and malignant breast lesions: coexpression and correlation with clinicopathologic parameters. *Exp Mol Pathol*. 2005;79(1): 42-50. Epub 2005 Apr 7.

Belev B, Vrbanc D, Kralik M, Pleština S, Petričević B, Sirotković-Skerlev M. (Gastrointestinal stromal tumors (GIST)- a paradigm of successful targeted therapy of solid tumors.) *Acta Med Croatica*. 2006;60(5):471-475. Review, Croatian

Sirotković-Skerlev M, Čačev T, Kapitanović S. Tumor necrosis factor α and breast cancer. *Period biol*. 2006; 108 (5): 541-546. Short review

Sirotković-Skerlev M, Čačev T, Križanac Š, Kulić A, Pavelić K, Kapitanović S. TNF alpha promoter polymorphisms analysis in benign and malignant breast lesions. *Exp Mol Pathol*. 2007 Aug;83(1):54-58. Epub 2007 Jan 17.

Kulić A, Sirotković –Skerlev M, Jelisavac-Ćosić S, Herceg D, Kovač Z, Vrbanc D. Anti-p53 antibodies in serum: relationship to tumor biology and prognosis of breast cancer patients. *Med Oncol* 2010;27:887-893.

Jelisavac-Ćosić S, Sirotković- Skerlev M, Kulić A, Jakić-Razumović J, Kovač Z, Vrbanc D. Prognostic significance of urokinase-type plasminogen activator (uPA) and plasminogen activator inhibitor (PAI-1) in patients with primary invasive ductal breast carcinoma-a 7.5-year folow-up study. *Tumori* 2011;97:532-539.

Sirotković-Skerlev M, Kulić, A, Bradić L, Čačev T. Protumor effects of proinflammatory mediators in breast cancer. *Period. biol*. 2012;114:489-496.

Kulić A, Dedić Plavetić N, Vrbanc J, Sirotković-Skerlev M. Low serum MMP-1 in breast cancer: negative prognostic factor. *Biomarkers* 2012;17:416-421.

Kulić A, Sirotković-Skerlev M, Dedić Plavetić N, Belev B, Kralik-Oguić S, Ivić M, Vrbanc D. Sirtuins in tumorigenesis. *Period. biol*. 2014;116:381-386.

Dedić Plavetić N, Jakić-Razumović J, Kulić A, Sirotković-Skerlev M, Barić M, Vrbanc D. Prognostic Value of Ki-67 in Breast Carcinoma: Tissue Microarray Method Versus Whole Section Analysis- Potentials and Pitfalls. *Pathol Oncol Res* 2015;21:315-324, Epub 2014 Aug 6.

Barić M, Kulić A, Sirotković-Skerlev M, Dedić Plavetić N, Vidović M, Horvatić-Herceg G, Vrbanc D. Circulating Her-2/Neu Extracellular Domain in Breast Cancer Patients-Correlation with Prognosis and Clinicopathological Parameters Including Steroid Receptor, Her-2/Neu Receptor Coexpression. *Pathol Oncol Res* 2015;21:589-595, Epub 2014 Nov 4.

Kulić A, Dedić- Plavetić N, Gamulin S, Jakić-Razumović J, Vrbanc D, Sirotković-Skerlev M. Telomerase activity in breast cancer patients: association with poor prognosis and more aggressive phenotype. *Med Oncol*. 2016 Mar;33(3):23. Epub 2016 Jan 30.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Kulić A, Sirotković-Skerlev M, Dedić Plavetić N, Belev B, Kralik-Oguić S, Ivić M, Vrbanc D. Sirtuins in tumorigenesis. *Periodicum Biologorum* 2014;116:381-386.

Dedić Plavetić N, Jakić-Razumović J, Kulić A, Sirotković-Skerlev M, Barić M, Vrbanc D. Prognostic Value of Ki-67 in Breast Carcinoma: Tissue Microarray Method Versus Whole Section Analysis- Potentials and Pitfalls. *Pathol Oncol Res* 2015;21:315-324, Epub 2014 Aug 6.

Barić M, Kulić A, Sirotković-Skerlev M, Dedić Plavetić N, Vidović M, Horvatić-Herceg G, Vrbanc D. Circulating Her-2/Neu Extracellular Domain in Breast Cancer Patients-Correlation with Prognosis and Clinicopathological Parameters Including Steroid Receptor, Her-2/Neu Receptor Coexpression. *Pathol Oncol Res* 2015;21:589-595, Epub 2014 Nov 4.

Kulić A, Dedić- Plavetić N, Gamulin S, Jakić-Razumović J, Vrbanc D, Sirotković-Skerlev M. Telomerase activity in breast cancer patients: association with poor prognosis and more aggressive phenotype. *Med Oncol*. 2016 Mar;33(3):23. Epub 2016 Jan 30.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1989-1995, collaborator of scientific project “Molecular characterisation of tumors-basic and clinical aspects “

1996-2002, collaborator of MZOS scientific project „Breast cancer-molecular characterization-clinical aspects“

2002-2006, collaborator of MZOS scientific project „Molecular and clinical characteristics of breast cancer “

2007-2014, collaborator of MZOS scientific project “Breast cancer- molecular, genetic and clinical characteristics”

2007-2014, collaborator of MZOS scientific project «Molecular genetics and pharmacogenetics of gastrointestinal tumors”

2015, principal investigator, Zagreb University fund for scientific research: «Circulating autoantibodies in early diagnosis of breast and colon cancer”

2016, principal investigator, Zagreb University fund for scientific research: «Significance of circulating autoantibodies in early diagnosis of breast and colon cancer”

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2007-2014, collaborator of MZOS scientific project “Breast cancer- molecular, genetic and clinical characteristics”

2007-2014, collaborator of MZOS scientific project «Molecular genetics and pharmacogenetics of gastrointestinal tumors”

2015, principal investigator, Zagreb University fund for scientific research: «Circulating autoantibodies in early diagnosis of breast and colon cancer”

2016, principal investigator, Zagreb University fund for scientific research: «Significance of circulating autoantibodies in early diagnosis of breast and colon cancer”

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Associate Prof. Ivica Sjekavica

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine,
University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Liver transplantation in children

BIOGRAPHY

I was born on September 10, 1961 in Dubrovnik where I finished elementary and high school. In 1981 I entered the Faculty of Medicine of the University of Zagreb. In May 1987 I graduated. I did the internship at the Health Center "Novi Zagreb" and in November 1988 she passed a state exam.

In the school year 1987/88 I enrolled postgraduate studies from the direction of Epidemiology at the Faculty of Medicine, University of Zagreb. In September 1989 I graduated with the work "Frequency of malignant neoplasms of colon and colon."

From November 1989 until I went to specialization in December 1992, I worked as a physician of the General Hospital for Emergency Medical Services in Dubrovnik. I participated in the Homeland War, where besides the work in Emergency Medical Assistance I also performed the duties of the Mayor of the Home Defense Department of the 163th Croatian Brigade.

I was specializing in the Department of Diagnostic and Intervention Radiology of the Clinical Hospital "Sestre milosrdnice" in Zagreb from January 1993 to January 1996.

In February 1996, I passed a specialist examination in Radiology, and from March of the same year to this day, I work as a radiologist and vice president of the Clinical Institute for Diagnostic and Interventional Radiology, KBC Zagreb.

Since January 2001 I have been appointed Associate Professor in cumulative employment in the Department of Radiology and General Clinical Oncology MF in Zagreb and from May 2005 in Associate Professor of Senior Assistant at the same Chair.

In May 2005 I defended my doctoral dissertation titled "The Role of a Colored and Pulsed Doppler in the Evaluation of Crohn's Disease Activity by Flow in the Upper Mesenteric Artery and in the Dense Bowel Cluster".

In September 2009 I was elected a scientific associate and a professor of sciences in the Department of Radiology of MF University of Zagreb.

In December 2014 I was elected as a senior scientific associate in the scientific field of biomedicine and health - the field of clinical medical science.

In November 2015 I was elected as a professor of sciences and science.

As the first author or co-author I have published 30 papers, out of which 10 papers were published in CC quoted journals, 1 paper in SCI magazine, 12 papers in Medline / Scopus / Embase indexed journals, and 7 papers in non-indexed journals. As an author or co-author I have published 11 papers whose summaries were published in CC-indexed journals, 31 lectures at domestic and foreign professional and scientific meetings whose summaries were published, and 12 lectures whose summaries were not published. I am an active associate in 3 scientific projects and 2 multicentric clinical studies. I have published 6 textbooks in the textbooks "Radiology", "Seminars from Clinical Radiology", "Kidney Transplantation" and "Ultrasound Abdominal" and 3 textbooks related to postgraduate ultrasound courses of 1st category. Since December 2014, I am a subspecies of ultrasound radiology.

I am a member of the Croatian Chamber of Physicians, the Croatian Society of Radiologists, the Croatian Medical Association, the Croatian Society for Ultrasound in Medicine and Biology, the Croatian Society for Perinatal and Gynecology, the Croatian Society for Traumatology.

Since 2001 I have been a full member of the European Department of Gastrointestinal and Abdominal Radiology (ESGAR), since 2007 European Radiological Society (ESR), since 2010 European Federation of Ultrasound Associates in Medicine and Biology (EFSUMB) since 2012 World Interactive Focused on Critical Ultrasound (WINFOCUS)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1: Vukojević J, Siroglavić M, Kašnik K, Kralj T, Stančić D, Kokot A, Kolarić D, Drmić D, Sever AZ, Barišić I, Šuran J, Bojić D, Patrlj MH, Sjekavica I, Pavlov KH, Vidović T, Vlainić J, Stupnišek M, Seiwert S, Sikirić P. Rat inferior caval vein (ICV) ligature and particular new insights with the stable gastric pentadecapeptide BPC 157. *Vascul Pharmacol*. 2018 Jul;106:54-66.
- 2: Papeš D, Sršen Medančić S, Antabak A, Sjekavica I, Luetić T. What is the acceptable rate of negative appendectomy? Comment on "Prospective evaluation of the added value of imaging within the Dutch National Diagnostic Appendicitis Guideline--do we forget our clinical eye"? *Dig Surg*. 2015;32(3):181-2. doi: 10.1159/000380772. Epub 2015 Mar 28. PubMed PMID: 25833673.
- 3: Sjekavica I, Petrovecki M, Sunjara V, Pavlović M, Padovan RS. [Diffuse infantile hepatic hemangioendothelioma: a case report]. *Lijec Vjesn*. 2013 Sep-Nov;135(9-10):242-5. Croatian. PubMed PMID: 24364200.
- 4: Sjekavica I, Barbarić-Babić V, Šunjara V, Kralik M, Senečić-Čala I, Dujšin M, Stern-Padovan R. Resistance index in mural arteries of thickened bowel wall: predictive value for Crohn disease activity assessment in pediatric patients. *Wien Klin Wochenschr*. 2013 May;125(9-10):254-60. doi: 10.1007/s00508-013-0357-8. Epub 2013 Apr 13. PubMed PMID: 23584934.
- 5: Rados M, Sunjara V, Sjekavica I, Padovan RS. Post-traumatic high-flow priapism treated by endovascular embolization using N-butyl-cyanoacrylate. *Radiol Oncol*. 2010 Jun;44(2):103-6. doi: 10.2478/v10019-010-0024-x. Epub 2010 May 24. PubMed PMID: 22933899; PubMed Central PMCID: PMC3423678.
- 6: Sjekavica I, Barbarić-Babić V, Kralik M, Krznarić Z, Stern-Padovan R. [High resolution B-mode and Doppler ultrasound in diagnostic evaluation of Crohn's disease]. *Lijec Vjesn*. 2009 Jan-Feb;131(1-2):18-21. Croatian. PubMed PMID: 19348351.
- 7: Sjekavica I, Barbarić-Babić V, Krznarić Z, Molnar M, Cuković-Cavka S, Stern-Padovan R. Assessment of Crohn's disease activity by doppler ultrasound of superior mesenteric artery and mural arteries in thickened bowel wall: cross-sectional study. *Croat Med J*. 2007 Dec;48(6):822-30. PubMed PMID: 18074417; PubMed Central PMCID: PMC2213815.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Barbarić-Babić V, **Sjekavica I**, Jurca I, Čolić Ana. Conventional radiological diagnostics of the most common pathological conditions of the gastrointestinal tract in the newborns. *Gynaecol Perinatol* 2014; 23(1):6-13.

Antabak A, Papeš D, **Sjekavica I**, Luetić T, Andabak M, Bešlić I. Luksacija ramena s ozljedom aksilarne arterije u četrnaestogodišnjeg dječaka: prikaz bolesnika. *Paediatr Croat* 2014; 58;xx/dx.doi.org/10.13112/PC.2014.23.

Antabak A, Luetić T, **Sjekavica I**. Štitimo li djecu za vrijeme radiološkog snimanja? Paediatr Croat 2014; 58;xx/dx.doi.org/10.13112/PC.2014.29.

Šimunović M, **Sjekavica I**, Lemac M, Vrljić K. Spontaneous rupture of the renal collecting system in the posterior urethral valve in newborn. Gynaecol Perinatol 2014;23(4):131-134

Papeš.D, Sršen Medančić S, Antabak A, **Sjekavica I**, Luetić T. What is acceptable rate of negative appendectomy? Comment on prospective evaluation of the added value of imaging within the Dutch national diagnostic appendicitis guideline – do we forget our clinical eye? Dig Surg 2015; 32:181-182.

Ivica Sjekavica, Ino Kermc. Kako očitati rtg srca i pluća. Suplement časopisu Medicinar, vol 58.broj 2 (2016).

Vukojević J, Siroglavić M, Kašnik K, Kralj T, Stančić D, Kokot A, Kolarić D, Drmić D, Zenko Sever A, Barišić I, Šuran J, Bojić D, Hrelec Patrlj M, **Sjekavica I**, Horvat Pavlov K, Vidović T, Vlanić J, Stupnišek M, Seiwerth S, Sikirić P. Rat inferior caval vein (ICV) ligature and particular new insights with the stable gastric pentadecapeptide BPC 157.Vascular Pharmacology 106 (2018); 54-66.

Ivica Sjekavica. Radiološka dijagnostika u transplantaciji bubrega. Urednici: Nikolina Bašić Jukić i Željko Kaštelan i sur.: Transplantacija bubrega. Medicinska naklada Zagreb 2015. Poglavlje 30: 464-498.

Ivica Sjekavica: Ultrazvuk crijeva. Marko Duvnjak i sur.: Ultrazvuk abdomena. Medicinska naklada Zagreb 2015. Poglavlje 6: 114-120.

M.Skender, I.Jurca, **I.Sjekavica**: The use of contrast enhanced voiding ultrasonography in screening and follow-up of vesicoureteral reflux in pediatric patients: our experience. C-0665, ECR 2018.

M.Nizić, M.Šimunović, M.Jelić, **I.Sjekavica**: The patellar shape is independent of age, sex, laterality, the lateral patellar inclination angle and presence of trochlear dysplasia. C-2037. ECR 2018.

M.Nizić, M.Šimunović, M.Jelić, **I.Sjekavica**: The patellar shape is independent of age, sex, laterality, the lateral patellar inclination angle and presence of trochlear dysplasia. ESSR June 13-16. Amsterdam.

Sažetci kongresnih priopćenja

I.Sjekavica.Radiološka dijagnostika u transplantaciji jetre. Pozvano predavanje. Split 4.-7.Oct. 2018. Knjiga sažetaka.

I.Sjekavica, V. Barbarić-Babić, M.Rupčić, M.Kralik. Dijagnostička vrijednost visokorezolutnog ultrazvuka u detekciji patoloških procesa crijevnih vijuga. Split 4.-7.Oct. 2018. Knjiga sažetaka.

M.Šimunović,M.Muršić,D.Bošnjak,J.Grzelja,**I.Sjekavica**.Vrijednosti ultrazvučnog pregleda testisa i skrotuma. Split 4.-7.Oct. 2018. Knjiga sažetaka.

I.Sjekavica,M.Rupčić,A.Zec-Matković,K.Juzbašić,M.Zidanić.Klinička primjena kontrastnog ultrazvuka (CEUS). Split 4.-7.Oct. 2018. Knjiga sažetaka.

M.Skender-Žižek,M.Rupčić, I.Jurca, M.Zidanić, **I.Sjekavica**. Uloga kontrastnog ultrazvuka u otkrivanju i praćenju VUR-a kod djece. Split 4.-7.Oct. 2018. Knjiga sažetaka.

D.Bajramović, M.Čavka, M. Pervan, L.Kovačević, K.Potočki, **I. Sjekavica**. The use of tomosynthesis in musculoskeletal radiology - our experience. Knjiga sažetaka 7. kongresa Hrvatskog društva radiologa HLZ-a. Split, 2018. str. 122.

M.Čavka, V.Čavka, L.Kovačević, D.Bajramović, **I.Sjekavica**, K.Potočki. Hidradenitis suppurativa, prikaz dva sonografska slučaja. Knjiga sažetaka 7. kongresa Hrvatskog društva radiologa HLZ-a, Split 2018. str. 204.

A.Antabak, K.Bulić, S.Ćavar, T.Luetić, D.Papeš, R.Grizelj, **I.Sjekavica**. Politrauma of infants, the challenge of a multidisciplinary approach, the presentation of two cases. 8.Hrvatski kongres dječje kirurgije. Vodice, 3-6. Oct. 2018. Knjiga sažetaka.

D.Papeš, S.Ćavar, M.Pasini, I.Sabolić Pipinić, J.Vuković, M.Škegro, A.Gojević, Z.Fiolić, K.Bulić, A.Antabak, M.Aničić, L.Omerza, **I.Sjekavica**, T.Luetić. Vodice, 3-6. Oct. 2018. Knjiga sažetaka.

A.Antabak, K.Bulić, G.Augustin, R.Karlo, K.Bračić T.Luetić, D.Papeš, R.Grizelj, **I.Sjekavica**. Politrauma of infants, the challenge of a multidisciplinary approach, the presentation of two cases. 4.Congress of pediatric surgeons of Serbia with international participation and regional congerence: Multidisciplinary treatment of surgical diseases in children. Beograd 12-14.Apr.Abstract book, str.122.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Perception and prevention of risk factors for atherosclerosis in Croatia

Diagnosis and treatment of lymphoma

A review of perinatal factors relevant to long-term neurestopping outcomes

Inflammatory bowel disease (Crohn's disease and ulcerative colitis)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: PROF LEA SMIRCIC DUVNJAK, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb,
Vuk Vrhovac University Clinic-UH Merkur

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: METABOLIC SYNDROME

BIOGRAPHY

LEA SMIRCIC DUVNJAK

Meduliceva 18b, Zagreb

E-mail lduvnjak@idb.hr

mob:0989327573

Education:

MD- Medical School, University of Zagreb 1986;

speciality and subspeciality- internal medicine 1995, endocrinology and diabetology 2006;

Professional experience:

GP- Health Centre Tresnjevka, 1986-1989

residency in internal medicine, "KB Sestre milosrdnice" 1989-1995

specialist in internal medicine, "KB Sestre milosrdnice" 1996-1997

specialist in internal medicine, endocrinologist and diabetologist, Vuk Vrhovac University Clinic 1997-2010

head of the Department of Endocrinology and Deputy director of Vuk Vrhovac University Clinic 2010-2014

Director of Vuk Vrhovac University Clinic 2014

Academic achievements:

Master degree- 1991, Medical school University of Zagreb

Ph.D Thesis -1999, Medical school University of Zagreb

scientific advisor and full professor, 2013 Medical school University of Zagreb

Training:

Postgraduate study in Clinical pharmacology 1991, Medical school University of Zagreb

Postgraduate study in Diabetology in 1999, Medical school University of Zagreb

Postgraduated courses of I category in Abdominal and thyroid ultrasound in 1996, Medical school University of Zagreb

International Course of good Clinical Practice, 2001, Vuk Vrhovac Clinic.

Diabetes Specialist Training-1999, Indianapolis, USA

From glycemic monitoring to the therapeutical use- specialist training, 2004, Pisa, IT

Treatment of type 2 Diabetes- speakers training, 2007, Vilnius, Lithuania

RFMC, Department of Medicine, St Michael Hospital, 2014, University of Toronto, Canada

RFMC, Department of Medicine, St Michael Hospital, 2015, University of Toronto, Canada

Incretin Study Group Training, 2015, Copenhagen, Denmark

RFMC, Department of Medicine, St Michael Hospital, 2016, University of Toronto, Canada

Incretin Study Group Training, 2017, Pisa, IT

Publications:

scientific and professional papers: 52 indexed in Current Contents, 10 in SCIE, 31 in Index medicus and Excerpta Medica

73 abstracts indexed in Current Contents

29 congress proceedings

Book chapters:

1. Lea Smirčić Duvnjak "Bolesti spolnih žlijezda", "Poremećaji prometa vode i elektrolita", "Najučestalija akutna otrovanja" u Morović-Vergles J (ur) "Interna medicina-odabrana poglavlja", Naknada Slap, Zagreb, 2007, str. 394-402, 416-431,
2. Lea Smirčić Duvnjak "Hypertension and the metabolic syndrome", in: Topic, Brguljan, Blaton (eds), New trends in diagnosis, monitoring and management of metabolic syndrome, 6th FESCC Continuous Postgraduate Course in Clinical Chemistry Dubrovnik, 2007, p.53
3. Lea Smirčić Duvnjak „Diferencijalna dijagnoza hiperprolaktinemije“ u Gnjiđić Ž(ur). Prolaktinomi : Medikamentozno ili kirurško liječenje, Hrvatska akademija znanosti i umjetnosti – HAZU. Klinika za neurologiju KB "Sestre milosrdnice", Zagreb, 2010, str 65-79.
4. Lea Smirčić Duvnjak „Diabetes mellitus and dyspepsia“, in Duvnjak, Marko (ed) Dyspepsia in Clinical Practice, SpringerLink, London, 2011, p37-49.
5. Lea Smirčić Duvnjak "Diabetes mellitus" in Duvnjak, Marko, Smirčić-Duvnjak, Lea (eds) Gastrointestinal Complications of Diabetes, SpringerLink, London, 2018, p3-27

Scientific projects:

1989-1995 - investigator "Biološki markeri u dijagnostici i terapiji adenoma hipofize" (n. 3-01-435), Croatian Ministry of Science

1996-2002 - investigator "HBVx protein- karcinogeneza i genska terapija" (n. 134008), Croatian Ministry of Science .

2002-2007 - principal investigator "„Autonomic neuropathy and microvascular complications in type 1 diabetes“" (n. 045007), Croatian Ministry of Science

2007-2014 - principal investigator "Metabolic syndrome in type I diabetes" (n. 045- 1080230-0516), Croatian Ministry of Science

2014-2015 - principal investigator "“Predictive factors of Metabolic syndrome and microvascular complications in type 1 diabetic patients”"-University of Zagreb funded project

2015- 2018 - principal investigator Croatian Science Foundation «Relationship between endothelial dysfunction driven by adipocytokines and the development and progression of microvascular complications in patients with type 1 and type 2 diabetes»

2018 - investigator “MODY”-University of Zagreb funded project

International projects

2014-2015- principal investigator in CRO „Efficacy and Safety of co-administration of Rg3-Enriched Korean Red Ginseng (Panax Ginseng C.A. Meyer) and American Ginseng (Panax Quinquefolius in type 2 diabetic patients with hypertension“ in collaboration with Clinical Nutrition and Risk Factor Modification Centre, St. Michael’s Hospital, Faculty of Medicine, University of Toronto, Canada

2015- principal investigator in CRO «The International Diabetic Nephropathy (InterDiane) Study»: in collaboration with Department of Medicine, Division of Nephrology, Helsinki University Central Hospital, University of Helsinki, Finland.

2016-2018- principal investigator in CRO „ Co-administration of three complimentary therapies (viscous dietary fiber, whole grain and ginseng) for comprehensive risk reduction in type 2 diabetes mellitus“ in collaboration with Clinical Nutrition and Risk Factor Modification Centre, St. Michael’s Hospital, Faculty of Medicine, University of Toronto, Canada

2015- principal investigator in CRO, EUROPEAN TRAIN THE TRAINERS PROGRAM the Step by Step footproject, funded by EASD, DFSG (The Diabetic foot Study group) DESG – Diabetes education Study Group, FEND (The Federation of European Nurses in Diabetes) UNMF (Union Nationale des Medicines Federaux) IDF Eur. (European Wound Management Association)

Organization of scientific symposium and conferences:

1990-organizing committee member-znanstveni sastanak Suvremene spoznaje o patologiji stitnjace-Osteoporoza, Razred za medicinske znanosti JAZU, Zavod za Endokrinologiju KB Dr M.Stojanovic, Zagreb

2007-2014- scientific committee member hrvatskog dijabetoloskog kongresa s medunarodnim sudjelovanjem Brac, Rovinj, Pula

2007- 2013- scientific committee member hrvatskog endokrinoloskog kongresa s medunarodnim sudjelovanjem Brac, Rovinj, Pula

2007- 2013- scientific committee member hrvatskih dana dijabetologa s medunarodnim sudjelovanjem

2016-local host, co-chair Advances in Diabetes and Insulin Therapy- ADIT, Dubrovnik, CRO,

2017-Local host, co-chair ADIT Course in Clinical Diabetology, Dubrovnik, CRO

2018- Local host, co-chair Advances in Diabetes and Insulin Therapy- ADIT, Dubrovnik, CRO,

2005- 2011: head of 1st category postgraduate course "Bolesnik s metaboličkim sindromom u ordinaciji liječnika opće medicine": Vuk Vrhovac University Clinic, School of Medicine, University of Zagreb

2013-: head of 1st category international postgraduate course "The incretin story-from pathophysiology to treatment"Ustanova: Vuk Vrhovac University Clinic, School of Medicine, University of Zagreb

2014-: co-chair of 1st category postgraduate course “ Periferna arterijska bolest i šećerna bolest”
Ustanova: Vuk Vrhovac University Clinic, School of Medicine, University of Zagreb

2014- : head of postgraduate course "Dijagnostički i terapijski pristup kroničnim komplikacijama šećerne bolesti", Vuk Vrhovac University Clinic

2015- head of 1st category international postgraduate course "Cardiovascular approach to type 2 diabetes", Vuk Vrhovac University Clinic, School of Medicine, University of Zagreb

2017- head of 1st category international postgraduate course "Cardiovascular approach to type 2 diabetes", Vuk Vrhovac University Clinic, School of Medicine, University of Zagreb

2018- head of 1st category international postgraduate course "Cardiovascular approach to type 2 diabetes", Vuk Vrhovac University Clinic, School of Medicine, University of Zagreb

2018- co-chair of 1st category international postgraduate course "Diabetes and pregnancy", Vuk Vrhovac University Clinic, School of Medicine, University of Zagreb

2018- head of international symposium "Type 1 Diabetes- an update", Vuk Vrhovac University Clinic

Professional Activities

member of editorial board since 1999, editor of journal „Diabetologia Croatica“ since 2013

vice-president of Croatian Society of Endocrinologists and Diabetologists,

member EASD

member ADA

member -Ely-Lilly Advisory board for Eastern Europe

member Rising in Science in Eastern Europe

member -Bohringer Advisory board for Eastern Europe

reviewer:

1. Journal of the American College of Nutrition
2. Preventive Medicine
3. Diabetologia croatica
4. Acta clinica croatica
5. International Journal of Diabetes in developing countries
6. Endocrine
7. Journal of physiology and pharmacology
8. Journal of diabetes and its complications
9. Diabetes research and clinical practice

Scientific achievements:

Received Croatian Medical Chamber award for scientific contribution in 2016.

School of Medicine University of Zagreb award for supervision of one of the best doctoral thesis in 2017

RFMC, St.Michael Hospital, Faculty of Medicine, University of Toronto award for scientific collaboration
2014-2018

Invited speaker:

1. Medikamentna terapija prolaktinoma.

Prvi hrvatski znanstveni sastanak o tumorima hipofize: Prolaktinomi i hiperprolaktinemije. Zagreb, Palača HAZU, 1994.

2. Liječenje bolesnika s prolaktinskim tumorom bromokriptinom. 1.hrvatski endokrinološki kongres, Trakošćan, 1995

3. The relationship between AMBP and albuminuria in normotensive type 1 diabetics. 17th IDF, Mexico city, Mexico 2000.

4. Predictive factors of retinopathy in normoalbuminuric and normotensive type 1 diabetics. 37th EASD Annual Meeting, Glasgow, UK, 2001

5. Predictive factors of progression from normoalbuminuria to microalbuminuria in type 1 diabetic patients, 18th IDF Congress, Paris, France, 2003.

6. C-reactive protein is associated with high normal urinary albumin excretion in normotensive and normoalbuminuric type 1 diabetic patients. 41th EASD Annual Meeting, Athens, Greece, 2005.

7. Hypertension and the metabolic syndrome, 6th FESCC Continuous Postgraduate Course in Clinical Chemistry, New trends in diagnosis, monitoring and management of metabolic syndrome, Dubrovnik, 2007.

8. Metabolički sindrom u osoba sa šećernom bolešću tipa 1. 4.hrvatski endokrinološki kongres s međunarodnim sudjelovanjem, Rovinj, 2007.

9. Tijazidski diuretici u liječenju šećerne bolesti 63. Dani dijabetologa
Tuheljske toplice, 21.11.2008.

10. Metabolički sindrom, 62. Dani dijabetologa, Hvar, 29.5.-1.6.2008

11. The Metabolic Syndrome- an ongoing story. ICUR, Split, 2008.

12. Regeneracija beta stanice-izazovi i mogućnosti, 65. Dani dijabetologa
Plitvice, 27.11.2009

13. The Metabolic Syndrome-an ongoing story. 13th International Conference on Ulcer research (ICUR) Split, 10-16 September 2009.

14. Sindrom policističnih ovarija, 65. Dani dijabetologa, Plitvice, 26.11.2009

15. Neuroendokrini učinci GLP-1 i rezultati kliničkih ispitivanja s
analogom GLP-1, liraglutidom (osvrst na tjelesnu težinu), HKD IV. hrvatski kongres o debljini, Umag, 15-18.
travnja 2010

16. Utjecaj antidijabetičkih lijekova na srce, 67 Dani dijabetologa, Sv. Martin na Muri
25.11.2010
17. Liraglutid (Victoza®): višestruki klinički učinci u liječenju šećerne bolesti tipa 2 66. Dani
dijabetologa, Šibenik, 27-30. svibnja 2010.
18. Integrirani pogled na mehanizme smanjenja tjelesne težine
pomoću GLP-1 67. Dani dijabetologa, Sv. Martin na Muri, 25.11.2010

19. Diferencijalna dijagnoza hiperprolaktinemije. Znanstveni simpozij Prolaktinomi : Medikamentozno ili kirurško liječenje, Hrvatska akademija znanosti i umjetnosti – HAZU. Klinika za neurologiju KB "Sestre milosrdnice", 11/2010
20. Medikamentno liječenje prolaktinoma. Znanstveni simpozij Prolaktinomi : Medikamentozno ili kirurško liječenje, Hrvatska akademija znanosti i umjetnosti – HAZU. Klinika za neurologiju KB "Sestre milosrdnice", 11/2010
21. Blokatori kalcijevih kanala, 68. Dani dijabetologa, Vodice, 14.5.2011
22. Kardiovaskularni učinci GLP-1 analoga, 68. Dani dijabetologa, Vodice, 13.5.2011
23. Byetta kao pravi izbor u adipoznog bolesnika sa šećernom bolešću tipa 2
EAGE, Opatija 21.5.2011
24. Insulin sensitivity modifies the relationship between thyroid function and lipid profile in euthyroid type 1 diabetic patients. 71st ADA Scientific Session San Diego, USA, 2011.
25. Nonalcoholic fatty liver disease markers and insulin resistance in type 1 diabetes. EASD Lisbon, 2011
26. Metabolic Syndrome Management – a multifaceted Therapeutic Approach
FEND 16th Annual Conference, Lisbon, 2011
27. Značaj inzulinske rezistencije u šećernoj bolesti tipa 1. 5 hrvatski endokrinološki kongres s međunarodnim sudjelovanjem, Pula, 2011.
28. Šećerna bolest i karcinomi gušterače, 69 Dani dijabetologa, Sv. Martin na Muri, 25.11.2011.
29. Managing hypoglycaemia in diabetes. Advances in Diabetes and Insulin Therapy- ADIT, Ljubljana, Slovenia, 19.3. 2011.
30. Insulin sensitivity modifies the relationship between thyroid function and lipid profile in euthyroid type 1 diabetic patients. 71st ADA Scientific Session San Diego, USA, 26. June 2011.
31. Nove terapijske mogućnosti liječenja metaboličkog sindroma. Poslijediplomski tečaj trajnog usavršavanja liječnika I kategorije s međunarodnim sudjelovanjem, Medicinski fakultet Rijeka, Opatija, 13-15.9. 2012
32. Diabetes as a global health issue, Symposium on Diabetic Nephropathy- Croatian Society of Nephrology, Zagreb, 15.2.2013
33. Basal Insulin+GLP-1, a New Step in the Treatment Algorithm, Adriatic Diabetes Forum, Bled, Slovenija, 8-10.3.2013
34. Linagliptin-nova vrijednost u liječenju šećerne bolesti tipa 2, kongres obiteljske medicine-Zagreb, 16.3.2013
35. Inkretini u liječenju šećerne bolesti tipa 2, Kongres dijabetičkih bolesnika, Dubrovnik 4.-7. 4. 2013.
36. Glucose-Lowering Therapy in Patients with Chronic Kidney Disease: Implications for treatment-discussion, Advances in Diabetes and Insulin Therapy- ADIT, Sofia, Bulgaria ,11-14.4.2013
37. Dijabetičko stopalo-okrugli stol, IX susret Intervencijskih radiologa Hrvatske s međunarodnim sudjelovanjem, Trakoscan, 26-28.4.2013
38. Metabolički sindrom- nazavršena priča, 9. Hrvatski kongres o aterosklerozi, Rovinj, 9-11.5.2013

39. Bazalni inzulin + GLP-1, novi korak u algoritmu liječenja šećerne bolesti tipa 2, dijabetološki kongres Republike Srpske, Banja Luka, 22.3., 2013
40. Mjesto inkretina u algoritmu liječenja bolesnika sa šećernom bolešću tipa 2, 5. Hrvatski dijabetološki kongres Pula, Hrvatska, 17-19.5.2013
41. Incretin-based Concepts, 28th Congress of the Federation of the International Danube Symposia on Diabetes (FID) Belgrade, 5.7.2013
42. Povezanost adiponektina i GLP-1 s metaboličkim sindromom u šećernoj bolesti tipa 1 6. Hrvatski endokrinološki kongres, Poreč 9-13.10.2013
43. Kardiovaskularni učinci terapije temeljene na inkretinima, 3. hrvatski kongres o hipertenziji, Šibenik, Hrvatska, 17-20.10.2013.
44. Kardiovaskularni učinci inkretina 8. Srpski Dijabetološki Kongres, Beograd, 12.11.2013, 8. Srpski Dijabetološki Kongres Beograd, Srbija, 10-11.3. 2013.
45. Metabolic syndrome in type 1 diabetes, Mediterranean Group for the Study of Diabetes (MGSD) Postgraduate Course in Diabetology
Beograd, Srbija, 13-14.11. 2013.
46. Ateroskleroza i šećerna bolest- patofiziološka pozadina PAB
Tečaj trajnog usavršavanja liječnika I kategorije PAB i secerna bolest, Zagreb, 30.11.2013
47. Role of incretins in the pathogenesis of type 2 diabetes, School of Medicine University of Zagreb 1st category Postgraduate Course in Diabetology, Zagreb 2013
48. Incretin Based Therapies: the Knowns and the Unknowns
Questions Advances in Diabetes and Insulin Therapy- ADIT, Budapest, Hungary, 4-6.4.2014
49. New once daily prandial GLP-1 receptor agonist in clinical practice
Adriatic Forum, Budva, 10.5.2014
50. Lixisenatide-new GLP-1 agonist, 4. makedonski kongres endokrinologije i dijabetesa 1-4.10.2014
51. Regional Diabetes Forum: Economic Impact of Diabetes- panelist, 22. 10, 2014 Zagreb, Hrvatska, 22.10.2014
52. New Insights on Metabolic Syndrome, EAGEN COURSE Opatija, 24-26.10.2014
53. SGLT2-inhibitors, web cast for Eastern Europe, Budapest, 4-5.11.2014
54. Cardiovascular Prevention in Patients with Diabetes: Comprehensive Pharmacological Treatment, EASD Postgraduate Course on Clinical Diabetes and its complications, Zagreb, 12-14.10.2014
55. Uloga inkretina u patofiziologiji dislipidemije, Tečaj Dislipidemije, Medicinski fakultet Rijeka, Rovinj, 21.11.2014
56. Inkretini i kronične komplikacije šećerne bolesti, Dani dijabetologa 29-31.5.2014
57. Dijabetičko stopalo – jedna od najvažnijih kroničnih komplikacija
EUROPEAN TRAIN THE FOOT TRAINERS PROGRAM
Step by Step foot project, Zagreb, 10.2.2017
58. What to use after Metformin therapy /what to use when Metformin as mono therapy fails -DPP4, Advances in Diabetes and Insulin Therapy- ADIT, Belgrade, Serbia, 19-21.3.2015

59. Which Kind of Diabetes does Your Patient have?

Postgraduate Course Clinical Endocrinology, Zagreb, 27-28.3.2015

60. DPP4 inhibitors in Clinical practice, 1st Regional Diabetes Forum

Rovinj, 20.3.2015

61. Uloga referentnog centra za šećernu bolest u RH, 12. Kongres osoba sa šećernom bolešću, Mali lošinj, 16-19. 4.2015

62. Round table: "Periferal artery interventions, diabetes melitus and extremity amputation problems", X susret intervencijskih radiologa, Trakoscan, 17-18.04.2015.

63. Cardiovascular effects of Antidiabetic drugs: APPROACH TO CV RISK IN TYPE 2 DM 1st category
Postgraduate Course School of Medicine, University of Zagreb, 27-28.4.2015

64. Cardiovascular effects of Antidiabetic drugs, 1. sastanak hrvatskog društva endokrinologa i dijabetologa
Šibenik, 29-30.5.2015

65. Relationship between serum DPP-4 activity, insulin resistance and microvascular complications in type 1 diabetic patients, First EASD INCRETIN study group, Copenhagen, Danska, 15-17.1. 2015.

66. Diabetes- where we are and where we are headed?, Lilly Symposium, Opatija, 13-15.3.2015

67. Circulating dipeptidyl peptidase-4 activity is associated with metabolic syndrome prevalence in type 1 diabetic patients, ADA, Boston, SAD, 2015.

68. Relationship between Hashimoto's thyroiditis, autoimmune and metabolic markers in adult onset autoimmune diabetes, Stockholm, Švedska, 2015

69. Smjernice za liječenje šećerne bolesti tipa 2, 1. kongres HDED, Baška 2-4.10.2015

70. Cardiovascular safety of Antidiabetic drugs-do we know enough?

NO, Advances in Diabetes and Insulin Therapy- ADIT, Dubrovnik, 21-23.4.2016

71. Diabetes Treatment Targets 2016, 18th ESE Postgraduate Training Course on Endocrinology, Diabetes and Metabolism

Croatia, 25-28.2. 2016

72. SUs preference– are the cost savings medically justified?, 2nd REGIONAL DIABETES FORUM, Ljubljana, Slovenia 11-13.3. 2016

73. Dijabetički bolesnik s komplikacijama, Krka simpozij Novo Mesto, 2.4.2016

74. Dijabetičko stopalo, Javnozdravstvena tribina HZJZ, Zagreb, 11.5.2016

75. Karcinom gusterace i secerna bolest, 2. kongres HDED, Trakoscan, 14-16.10.2016

76. OAD add ons to metformin - time to move on beyond SU ?

SGLT2 inhibitors and SU

Advances in Diabetes and Insulin Therapy- ADIT, Belgrade, Serbia 11-13.5. 2017

77. GLP-1 RA and SGLT2 inhibitors combo therapy and CV risk, 1st. category postgraduate course in diabetology, School of Medicine University of Zagreb,

“Approach to CV risk in type 2 Diabetes”, Zagreb, 23.1.2017

78. Dijabetičko stopalo – jedna od najvažnijih kroničnih komplikacija

EUROPEAN TRAIN THE FOOT TRAINERS PROGRAM

Step by Step foot project, Zagreb, 10.2.2017

79.Smjernice za liječenje šećerne bolesti tipa 2. godišnji sastanak Hrvatskog društva za endokrinologiju i diabetologiju HLZ, Brijuni, 13-15.10.2017

80.Safety of new antidiabetic therapies: do we know enough?

Course in Clinical Diabetology, Agada institute, Dubrovnik, 9-10.10.2017

81.Cardiovascular effects of Incretin based-therapy, »6. Dan sladkorne bolesti«, Medicinski fakultet Ljubljana, 24.11.2017, Ljubljana, Slovenija

82.Glutamic Acid Decarboxylase Autoantibody is associated with Peripheral Neuropathy in Autoimmune Diabetes in Adults, oral presentation ADA, San Diego, USA, 12.6.2017

83.šećerna bolest i kronične komplikacije

EUROPEAN TRAIN THE FOOT TRAINERS PROGRAM

Step by Step foot project, Zagreb, 3.2.2018

84.How to balance efficacy and safety of new glucose lowering drugs-SGLT 2 inhibitors? Advances in Diabetes and Insulin Therapy- ADIT, Dubrovnik, Croatia, 15-17.4.2018

85.Pathogenesis of type 1 diabetes,

1st Category Postgraduate Course “Diabetes in woman” , School of Medicine,University of Zagreb, 16-17.3.2018

86.TARGETING GASTROINTESTINAL TRACT IN THE TREATMENT OF OBESITY AND TYPE 2 DM, 76th Croatian Congress of Obesity, Opatija, 26-28.4.2018

87.Prevention of CVD based on glucose treatment: the role of incretins, 4th EASD Educational Postgraduate Course DIABETES AND CARDIOVASCULAR DISEASES, Belgrade, Serbia, 31.5 – 2.6. 2018

88.The Future of Diabetes Management Stand-Alone Scientific Symposium-MSD, Dublin, Ireland, 9-10 June 2018

Teaching experience:

School of Medicine, University of Zagreb

1990-1995- Clinical propedeutics, Department of internal medicine KB "Sestre milosrdnice"

1997 - Clinical propedeutics,, Vuk Vrhovac University Clinic

2002 - internal medicine, Vuk Vrhovac University Clinic

2006 - internal medicine, medical studies in English, School of medicine, Zagreb.

2000- 2005 -PhD programme, "Bolesti hipotalamo-hipofizne zajednice", School of medicine, Zagreb.

2002-2011 - PhD Programme, "Diabetology" Vuk Vrhovac University Clinic, School of medicine, Zagreb.

2005-2012 -PhD Programme, "Znanstveni pristup u diabetologiji", School of medicine, Zagreb.

2005-2012 - PhD Programme, "Novije spoznaje o patofiziologiji i farmakologiji šećerne bolesti“, School of medicine, Zagreb

2005-2018 - postgraduate course for family practitioners Dijabetologija i endokrinologija ,School of medicine, Zagreb

2005- 2011 head of 1st category postgraduate course, "Bolesnik s metaboličkim sindromom u ordinaciji liječnika opće medicine", School of Medicine, University of Zagreb

2006- 2009- 1st category international postgraduate course, "Osoba sa šećernom bolesti u ordinaciji liječnika opće medicine", School of Medicine, University of Zagreb

2007-2018 PhD programme „Arterijska hipertenzija i šećerna bolest“, School of Medicine, University of Zagreb

2010- PhD programme, „Metabolički sindrom“, School of Medicine, University of Zagreb

2013-: head of 1st category international postgraduate course, "The incretin story-from pathophysiology to treatment" Vuk Vrhovac University Clinic, School of Medicine, University of Zagreb

2014-: co-chair of 1st category postgraduate course, " Periferna arterijska bolest i šećerna bolest", Vuk Vrhovac University Clinic, School of Medicine, University of Zagreb

2014- :head of postgraduate course "Dijagnostički i terapijski pristup kroničnim komplikacijama šećerne bolesti", Vrhovac University Clinic

From 2015- head of 1st category international postgraduate course "Cardiovascular approach to type 2 diabetes", Vuk Vrhovac University Clinic, School of Medicine, University of Zagreb

2015- pomoćnik voditelja Sveučilišnog poslijediplomskog stručnog studija Endokrinologija i diabetologija na Medicinskom fakultetu

head of postgraduate specialist studies in Endocrinology and Diabetology:

1. Epidemiologija, dijagnoza i klasifikacija šećerne bolesti
2. Etiologija i patogeneza šećerne bolesti
3. Liječenje šećerne bolesti
4. Komplikacije šećerne bolesti

2018- co-chair of the 1st category international postgraduate course "Diabetes and pregnancy", School of Medicine, University of Zagreb

Supervision of doctoral thesis:

Povezanost inzulinske rezistencije s hormonskim statusom štitne žlijezde i lipidnim profilom u eutireoidnih bolesnika sa šećernom bolešću tipa 1 - Tomislav Bulum, Prirodoslovno-matematički fakultet, Zagreb, 2010.

Značaj apoptoze i neurotrofina u bolnoj i bezbolnoj dijabetičkoj polineuropatiji u bolesnika s tipom 2 šećerne bolesti - Sandra Vučković Rebrina, Prirodoslovno-matematički fakultet, Zagreb, 2011.

Povezanost intermenstruacijskog raspona i metaboličkih obilježja u nehiperandrogenih žena s policističnom morfologijom jajnika - Miro Šimun Alebić, Medicinski fakultet Osijek, 2014.

Povezanost plazmatske koncentracije peptida 1 sličnog glukagonu i čimbenika rasta fibroblasta-21 s regulacijom glikemije, lipidemijom i mikrovaskularnim komplikacijama u bolesnika sa šećernom bolešću tipa - Karin Zibar, Medicinski fakultet Zagreb, 2015.

Povezanost serumske aktivnosti dipeptidil peptidaze-4 s inzulinskom rezistencijom, metaboličkim sindromom i mikrovaskularnim komplikacijama u osoba sa šećernom bolešću tipa 1 - Kristina Blaslov, Medicinski fakultet Zagreb, 2016.

Utjecaj polimorfizama gena za dopamin beta hidroksilazu i katekol-O-metil transferazu na učinkovitost liječenja inzulinom detemir u bolesnika s tipom 2 šećerne bolesti : disertacija - Tomislav Božek, Medicinski fakultet Zagreb, 2018.

Personal skills :

Languages: english, italian- understanding, speaking, writing,
german- understanding

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

13.11.2018- full professor-tenure position-

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

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- Vuksan V, Xu ZZ, Jovanovski E, Jenkins AL, Beljan-Zdravkovic U, Sievenpiper JL, Mark Stavro P, Zurbau A, Duvnjak L, Li MZC. Efficacy and safety of American ginseng (*Panax quinquefolius* L.) extract on glycemic control and cardiovascular risk factors in individuals with type 2 diabetes: a double-blind,

randomized, cross-over clinical trial. *Eur J Nutr.* 2018 Feb 24. doi: 10.1007/s00394-018-1642-0. [Epub ahead of print]

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LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Stojavljević S, Gomerčić Palčić M, Virović Jukić L, Smirčić Duvnjak L, Duvnjak M. Adipokines and proinflammatory cytokines, the key mediators in the pathogenesis of nonalcoholic fatty liver disease. *World J Gastroenterol.* 2014 Dec 28;20(48):18070-91. doi: 10.3748/wjg.v20.i48.18070. Review

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LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Scientific projects:

- 1989-1995 - investigator "Biološki markeri u dijagnostici i terapiji adenoma hipofize" (n. 3-01-435), Croatian Ministry of Science
- 1996-2002 - investigator "HBVx protein- karcinogeneza i genska terapija" (n. 134008), Croatian Ministry of Science .
- 2002-2007 - principal investigator "„Autonomic neuropathy and microvascular complications in type 1 diabetes“" (n. 045007), Croatian Ministry of Science
- 2007-2014 - principal investigator "Metabolic syndrome in type I diabetes" (n. 045- 1080230-0516), Croatian Ministry of Science
- 2014-2015 - principal investigator "“Predictive factors of Metabolic syndrome and microvascular complications in type 1 diabetic patients”"-University of Zagreb funded project
- 2015- 2018 - principal investigator Croatian Science Foundation «Relationship between endothelial dysfunction driven by adipocytokines and the development and progression of microvascular complications in patients with type 1 and type 2 diabetes»
- 2018 - investigator "MODY"-University of Zagreb funded project

International projects

- 2014-2015- principal investigator in CRO „Efficacy and Safety of co-administration of Rg3-Enriched Korean Red Ginseng (Panax Ginseng C.A. Meyer) and American Ginseng (Panax Quinquefolius in type 2 diabetic patients with hypertension“ in collaboration with Clinical Nutrition and Risk Factor Modification Centre, St. Michael’s Hospital, Faculty of Medicine, University of Toronto, Canada
- 2015- principal investigator in CRO «The International Diabetic Nephropathy (InterDiane) Study»: in collaboration with Department of Medicine, Division of Nephrology, Helsinki University Central Hospital, University of Helsinki, Finland.
- 2016-2018- principal investigator in CRO „ Co-administration of three complimentary therapies (viscous dietary fiber, whole grain and ginseng) for comprehensive risk reduction in type 2 diabetes mellitus“ in collaboration with Clinical Nutrition and Risk Factor Modification Centre, St. Michael’s Hospital, Faculty of Medicine, University of Toronto, Canada
- 2015- principal investigator in CRO, EUROPEAN TRAIN THE TRAINERS PROGRAM the Step by Step footproject, funded by EASD, DFSG (The Diabetic foot Study grupu) DESG – Diabetes education Study



Group, FEND (The Federation of European Nurses in Diabetes) UNMF (Union Nationale des Medicines Federaux) IDF Eur. (European Wound Management Association)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2014-2015 - principal investigator ““Predictive factors of Metabolic syndrome and microvascular complications in type 1 diabetic patients””-University of Zagreb funded project

2015- 2018 - principal investigator Croatian Science Foundation «Relationship between endothelial dysfunction driven by adipocytokines and the development and progression of microvascular complications in patients with type 1 and type 2 diabetes»

2018 - investigator “MODY”-University of Zagreb funded project

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

6

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Nikola Sobočan, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Clinical Hospital Merkur, Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Liver transplantation

BIOGRAPHY

PERSONAL DATA

DATE AND PLACE OF BIRTH: 23. 06. 1976, Čakovec, Croatia

CITIZENSHIP: Republic of Croatia

LANGUAGES: Croatian (native), English (active)

EDUCATION

- 2012 completed subspecialty – subspecialist for Gastroenterology and Hepatology
- 2011 PHD thesis: „The influence of PBN (N-tert-butyl- α -phenylnitron) on development of rat placenta and fetus treated with 5-azacytidine *in vivo* and *in vitro*“, Faculty of Science, University of Zagreb, Croatia
- 2009 Master of science thesis: „Proliferating Cell Nuclear Antigen (PCNA) Expression in Rat Fetuses Treated with Teratogen and Antioxidant“, Faculty of Science, University of Zagreb, Croatia
- 2007 completed residency program (internal medicine) – specialist for Internal Medicine
- 2002-2009 Postgraduate study in Physiology and Immunobiology, Faculty of Science, University of Zagreb
- 2002 Board exam – licence as MD
- 1994-2000 Medical School, University of Zagreb, Croatia

WORKING EXPERIENCE

- 2014 one-month stay at the Department of Gastroenterology, Hepatology and Endocrinology at MHH (Hannover Medical School, Germany) – prof. dr. Michael P. Manns
- 2012 onwards consultant in Internal medicine – gastroenterology and hepatology, University Hospital Merkur, Zagreb, Department of Gastroenterology and Hepatology
- 2010-2012 Attending physician, Internal Medicine specialist, University Hospital Merkur, Department of Gastroenterology and Hepatology (fellowship in gastroenterology and hepatology)
- 2007-2010 Attending physician, Internal Medicine specialist, Department of Internal Medicine, Division of Gastroenterology, County Hospital Cakovec
- 2003-2007 Residency of Internal Medicine (County Hospital Cakovec, University Hospital „Sestre milosrdnice“ Zagreb, Croatia)
- 2002 Attending physician, Emergency Unit „Dom zdravlja“ Cakovec
- 2000 Internship, County Hospital Cakovec, Croatia

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 14th July 2015.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Marić A, Katalinic D, Sobočan N, Vrkljan M, Solter M, Zjačić-Rotkvić V. Long – term octreotide treatment is an alternative to adrenalectomy in patients with pheochromocytoma in multiple endocrine neoplasia type 2A syndrome: Case report and literature review. (2008) *Endocrinologist*, 18 (5) pp 226-229.

Alfirevic Z, Simundić, A-M, Nikolac N, Sobočan N, Alfirević I, Stefanović M, Vučićević Z, Topić E. Frequency of factor II G20210A, factor V Leiden, MTHFR C677T and PAI-15G/4G polymorphism in patients with venous thromboembolism. Croatian case-control study (2010) *Biochemica Medica*, 20 (2), pp. 229-235.

Filipec Kanižaj T, Budimir J, Čolić-Cvrlje V, Kardum-Skelin I, Šušterčić D, Naumovski Mihalić S, Mrzljak A, Kolonić S O, Sobočan N, Bradić T, Dolić Z M, Kocman B, Katičić M, Židovec Iepej S, Vince A. Post – transplant lymphoproliferative disease in liver transplant recipients – Merkur University Hospital single center experience (Article Post – transplantacijska limfoproliferativna bolest u bolesnika s transplantacijom jetre – iskustvo KB Merkur) (2011) *Acta Medica Croatica*, 65 (SUPP 1) pp. 37-43

Bulum T, Prkačin I, Cavrić G, sobočan N, Škurla B, Duvnjak L, Bulimbašić S. Secondary (AA) amyloidosis in Crohn disease (Article Sekundarna (AA) amiloidoza u bolesnika s Crohnovom bolešću) (2011) *Acta Medica Croatica*, 65 (3), 271-278, 5

Mrzljak A, Sobočan N, Novačić K, Škegro D, Košuta I, Katičić M. Hemosuccus pancreaticus associated with splenic artery aneurysms and hepatic artery thrombosis late after liver transplantation (2012) *Journal of the Pancreas*, 13 (1), pp 115-117.

Mrzljak A, Dinjar Kujundžić P, Miletić M, Ostojić A, Košuta I, Kunac N, Filipec Kanižaj T, Sobočan N, Mišetić Dolić Z, Bogadi I, Lalovac M, Mikulić D, Pavičić Šarić J, Čakalo LJ, Kocman B: Transplantacija jetre donorima pozitivnim na antitijelana sržni antigen virusa hepatitisa B, CROCMID 2016

Filipec Kanižaj T, Mrzljak A, Sobočan N. Liječenje kroničnog hepatitisa C nakon transplantacije jetre. *Medix* 2016

Mikolašević I, Filipec Kanižaj T, Jakopčić I, Majurec I, Brnčić-Fischer A, Sobočan N, Hrštić I, Štimac T, Štimac D, Milić S. A challenging clinical issue: Liver disease during pregnancy *Medical Science Monitor* – manuscript #: 907723 (New York, December 15, 2017).

Mikolašević I, Filipec Kanižaj T, Mijić M, Jakopčić I, Milić S, Hrštić I, Sobočan N, Štimac D, Burra P. Nonalcoholic fatty liver disease and liver transplantation – Where do we stand ? (2018) *World Journal of Gastroenterology*, 24 (14): 1491-1506

Filipec Kanižaj T, Mijić M, Jelić A, Valetić J, Sobočan N, Mikolašević I. Trudnoća u bolesnika s cirozom jetre i nakon transplantacije jetre. *Medix*. 132 (2018) 32-35

Sobočan N, Katušić Bojanac A, Sinčić N, Himmelreich – Perić M, Krasić J, Majić Ž, Jurić-Lekić G, Šerman Lj, Vlahović M, Ježek D, Bulić – Jakuš F. A free radical scavenger ameliorates teratogenic activity of DNA hypomethylating hematological therapeutic . *Stem Cells and Development* 2018.0194

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Mrzljak A, Dinjar Kujundžić P, Miletić M, Ostojić A, Košuta I, Kunac N, Filipec Kanižaj T, Sobočan N, Mišetić Dolić Z, Bogadi I, Lalovac M, Mikulić D, Pavičić Šarić J, Čakalo LJ, Kocman B: Transplantacija jetre donorima pozitivnim na antitijelana sržni antigen virusa hepatitisa B, CROCMID 2016

Filipec Kanižaj T, Mrzljak A, Sobočan N. Liječenje kroničnog hepatitisa C nakon transplantacije jetre. Medix 2016

Mikolašević I, Filipec Kanižaj T, Jakopčić I, Majurec I, Brnčić-Fischer A, Sobočan N, Hrštić I, Štimac T, Štimac D, Milić S. A challenging clinical issue: Liver disease during pregnancy Medical Science Monitor – manuscript #: 907723 (New York, December 15, 2017).

Mikolašević I, Filipec Kanižaj T, Mijić M, Jakopčić I, Milić S, Hrštić I, Sobočan N, Štimac D, Burra P. Nonalcoholic fatty liver disease and liver transplantation – Where do we stand ? (2018) World Journal of Gastroenterology, 24 (14): 1491-1506

Filipec Kanižaj T, Mijić M, Jelić A, Valetić J, Sobočan N, Mikolašević I. Trudnoća u bolesnika s cirozom jetre i nakon transplantacije jetre. Medix. 132 (2018) 32-35

Sobočan N, Katušić Bojanac A, Sinčić N, Himmelreich – Perić M, Krasić J, Majić Ž, Jurić-Lekić G, Šerman Lj, Vlahović M, Ježek D, Bulić – Jakuš F. A free radical scavenger ameliorates teratogenic activity of DNA hypomethylating hematological therapeutic . Stem Cells and Development 2018.0194

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. project financed of School of Medicine, University of Zagreb: Genetic background of alcoholic liver disease

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. project financed of School of Medicine, University of Zagreb: Genetic background of alcoholic liver disease

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assistant professor Dragica Soldo Jureša, M.D., Ph.D.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb; University Hospital Merkur - University Clinic for diabetes, endocrinology and metabolic diseases Vuk Vrhovac

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Metabolic Syndrome

BIOGRAPHY

I was born on the 2nd of September 1967. In 1992 I graduated from the University of Zagreb School of Medicine. The state competence exam was done in 1993 following the medical internship in University Hospital Merkur. From 1994 to 1996 I worked as a junior researcher in the Department of Internal Medicine in the University Hospital Merkur. From 1996 till 2001 I specialized in internal medicine in the Department of Internal Medicine in the University Hospital Dubrava, and in 2001 I passed the internal medicine specialist exam. I also passed the exam in the specialist area of internal medicine of allergology and clinical immunology in 2007. Since 2007 I have been working in the University Hospital Merkur - the Vuk Vrhovac University Clinic for Diabetes, Endocrinology, and Metabolic Diseases. In 2010 I passed the exam in the specialist field of internal medicine of endocrinology and diabetology. Since 2014. until present I have been a Head of the Outpatient clinic of Diabetology at University clinic for diabetes, endocrinology and metabolic diseases Vuk Vrhovac. Between 1993 and 1994 I attended the postgraduate studies "Ultrasound in clinical medicine – course gastroenterology and hepatology" at the University of Zagreb School of Medicine, and in July 1995 I defended my thesis named "Significance of conventional and duplex-Doppler sonography in the diagnosis of diabetic nephropathy", and gained my Master of Science degree. In May 2012 I defended my thesis named "The role of the high-sensitivity C-reactive protein, a marker of inflammation in diabetic nephropathy", and gained my Doctor of Science degree. I have published 24 original scientific articles (first author and co-author), 13 of which in the magazines cited in the Current contents, and 43 summaries in the proceedings of international and domestic congresses. I am a lecturer at the undergraduate courses and also at postgraduate doctoral studies in Biomedicine and Health Sciences at the School of Medicine, University of Zagreb (courses Clinical propedeutics, Internal Medicine, Metabolic syndrome and Arterial hypertension and diabetes mellitus). Since April 2018 - Assistant professor of internal medicine, School of Medicine, University of Zagreb.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 9 April 2018 Assistant profesor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Brkljačić B, Mrzljak V, Drinković I, Soldo D, Sabljarić Matovinović M, Hebrang A. Renal vascular resistance in diabetic nephropathy: Duplex Doppler US evaluation. Radiology 1994;192:549-554.
2. Brkljačić B, Drinković I, Sabljarić Matovinović M, Soldo D, Morović-Vergles J, Viđak V, Hebrang A. Intrarenal duplex Doppler sonographic evaluation of unilateral native kidney obstruction. J Ultrasound Med 1994;13(3):197-204.
3. Soldo D, Brkljačić B, Božikov V, Drinković I, Hauser M. Diabetic nephropathy. Comparison of conventional and duplex Doppler ultrasonographic findings. Acta Radiol 1997;38(2):296-302.

4. Brkljačić B, Sabljarić-Matovinović M, Putarek K, Soldo D, Morović-Vergles J, Hauser M. Renal vascular resistance in autosomal dominant polycystic kidney disease. Evaluation with color Doppler ultrasound. *Acta Radiol* 1997;38(5): 840-846.
5. Laktašić-Žerjavić N, Babić-Naglić D, Ćurković B, Potočki K, Soldo-Jureša D. Septic acromioclavicular arthritis in a patient with diabetes mellitus. *Coll Antropol* 2005; 29(2): 743-6.
6. Cepika AM, Marinić I, Morović-Vergles J, Soldo-Jureša D, Gagro A. Effect of steroids on the frequency of regulatory T Cells and expression of FOXP3 in a patient with systemic lupus erythematosus: a two-year follow-up. *Lupus* 2007;16(5):374-7.
7. Radman M, Jurišić Eržen D, Ljutić D, Soldo D, Sinčić-Mijandrušić B, Jerković R. The rare side effect during microdialysis continuous subcutaneous glucose monitoring in type 1 diabetic patient. *The Endocrinologist* 2007;17(5):252-254.
8. Laktašić-Žerjavić N, Ćurković B, Babić-Naglić Đ, Potočki K, Prutki M, Soldo-Jureša D. Transient osteoporosis of the hip in pregnancy. Successful treatment with calcitonin: a case report. *Z Rheumatolo* 2007;66(6):510-3.
9. Soldo-Jureša D, Radman M, Laktašić N, Brkljačić B, Božikov V. How much do we know about human brucellosis? *Z Rheumatolo* 2009;68(6):495-7.
10. Soldo-Jureša D, Radman M, Pejša V, Božikov V. Reactive macrophage activation syndrome in a patient with parvovirus B19 infection, lymphocytic lichenoid vasculitis, urticaria and angioedema. *Ann Saudi Med* 2010;30(1):88-89.
11. Laktašić-Žerjavić N, Koršić M, Crnčević-Orlić Ž, Kovač Z, Polašek O, Soldo-Jureša D. Vitamin D status, dependence on age, and seasonal variation in the concentration of vitamin D in Croatian postmenopausal women initially screened for osteoporosis. *Clin Rheumatol* 2010;29(8):861-7.
12. Laktašić-Žerjavić N, Ćurković B, Babić-Naglić Đ, Potočki K, Prutki M, Soldo-Jureša D. Acute bilateral shoulder pain as initial presentation of ochronosis: a case report and literature review. *Z Rheumatolo* 2010;69(5):443-6.
13. Cepika AM, Soldo Jureša D, Morović Vergles J, Malenica B, Šantak M, Kapitanović S, Mayer M, Anić B, Sentić M, Gagro A. Decrease in circulating DNA, IL-10 and BAFF levels in newly-diagnosed SLE patients after corticosteroid and chloroquine treatment. *Cell Immunol* 2012;276(1-2):196-203.
14. Brkljačić B, Drinković I, Soldo D, Viđak V, Odak D, Hebrang A. Pulsed-wave and color-Doppler in the assessment of native kidneys with urinary tract obstruction. *Radiol Oncol* 1993;27:21-26.
15. Brkljačić B, Drinković I, Soldo D, Viđak V, Odak D, Hebrang A. Pulsed-wave and color-Doppler in the assessment of native kidneys with urinary tract obstruction. *Radiol Oncol* 1993;27:21-26.
16. Car N, Car A, Soldo D, Božikov V, Metelko Ž. The level of gastrin in patients with diabetic gastroparesis treated with cisapride. *Diabetologia Croatica* 1996;25-2:77-81.
17. Car N, Car A, Soldo D, Božikov V, Metelko Ž. Copper and calcium in the serum of patients with diabetes mellitus. *Diabetologia Croatica* 1996;25-4:179-181.
18. Sokol I, Kirin M, Vincelj J, Putarek K, Bergovec M, Soldo D, Alač M, Božikov V. Is Sotalol the Best Treatment for Omnisious Ventricular Arrhythmias in Hypertrophic Cardiomyopathy? *Croatian Medical Journal* 1997;38(2):157-160.
19. Putarek K, Vuk T, Soldo D, Šarlija D, Grgičević D, Jakšić B. Pseudothrombocytopenia caused by ethylenediaminetetraacetic acid (EDTA) (case report). *Liječnički vijesnik* 1997;119 (1):19-21.

20. Soldo-Jureša D, Morović-Vergles J, Čunović S, Galešić K, Trutin-Ostović K. Prikaz bolesnika s gonagrom. Reumatizam 2000;47 (1):20-24.
21. Žerjavić NL, Potočki K, Prutki M, Čurković B, Babić-Naglić Đ, Soldo-Jureša D. Late diagnosis of intraarticular osteoid osteoma treated as hip osteoarthritis – case report and review of the literature. Reumatizam 2006;53(1):33-6.
22. Šakić D, Badovinac O, Delija A, Amerl-Šakić V, Gerakarov S, Andrlon-Bušić D, Soldo-Jureša D. Prevalencija psorijaze i sporijatičnog artritisa u dvije fizijatrijske ambulante. Med Jad 2006;36(3-4):83-86.
23. Vergles D, Čulo MI, Đuršević Ž, Soldo-Jureša D, Galešić K, Morović-Vergles J. Vasculitis in rheumathoid arthritis – case report. Reumatizam. 2006;53(1):25-8.
24. Soldo-Jureša D, Metelko Ž. PPARγ – a new concept of treatment? Diabetologia Croatica 2009;38-2:23-29.
25. Laktašić-Žerjavić N, Rukavina K, Babić-Naglić Đ, Čurković B, Anić B, Soldo-Jureša D. Povezanost statusa vitamina D s mineralnom gustoćom kosti u hrvatskih žena u postmenopauzi. Reumatizam 2013;60(1):8-13.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Laktašić-Žerjavić N, Rukavina K, Babić-Naglić Đ, Čurković B, Anić B, Soldo-Jureša D. Povezanost statusa vitamina D s mineralnom gustoćom kosti u hrvatskih žena u postmenopauzi. Reumatizam 2013;60(1):8-13.
2. Soldo Jureša D. Nova grupa lijekova u liječenju šećerne bolesti tipa 2. Knjiga sažetaka, 5. Hrvatski dijabetološki kongres s međunarodnim sudjelovanjem, Pula, 15.-19.5.2013.;19-20
3. Soldo Jureša D, Brkljačić B, Smirčić Duvnjak L. The role of the high-sensitivity C-reactive protein, a marker of inflammation and Resistive Index in diabetic nephropathy. 17th International Congress of Endocrinology 15th Annual Meeting of Chinese Society of Endocrinology, Beijing, China, August 31-September 4, 2016.
4. Soldo Jureša D, Brkljačić B, Smirčić Duvnjak L. The Value of Renal Resistive Index as an Early Marker of Diabetic Nephropathy in Type 2 Diabetes Mellitus. Diabetes 2017;66(Supl.1):24-LB

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

She was a resarcher on the scientific project "Predictive factors of metablic syndrome and microvascular complications in type 1 diabetes mellitus"School of Medicine, University of Zagreb; 2013.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

She was a resarcher on the scientific project "Predictive factors of metablic syndrome and microvascular complications in type 1 diabetes mellitus"School of Medicine University of Zagreb; 2013.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Zdenko Sonicki, MD, PhD, Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Knowledge discovery in medical domains

Medical Informatics Methods

Statistical Analysis of Medical Data 1

Medical Statistics 2.1: Statistical tools for medical data analysis in planned experimental study design

Medical Statistics 2.2: Statistical tools for medical data analysis in quasi-experimental study design

Medical Statistics 2.3: Statistical tools for medical data analysis in observational study design with large samples

Medical Statistics 2.4: Statistical tools for medical data analysis in observational study design with small samples

BIOGRAPHY

I was born on 30 September 1960 in Zagreb where I attended elementary school, and then secondary school in the Mathematical-Informatics Educational Center. I graduated from the Faculty of Medicine of the University of Zagreb in 1989 with the graduate thesis "Informatic method of diagnosis of chronic obstructive pulmonary diseases". I passed the State exam in 1990. I also graduated from the Faculty of Medicine of the University of Zagreb with a master thesis "Methods of Inductive Learning in Medical Decisions and Predictions", under the mentorship of Prof.dr.sc. Josipa Kern, 1994. By defending the PhD thesis "Recognizing the CD4 + T lymphocyte profile and the amount of ribonucleic acid of the human immunodeficiency virus during the development of the infection as a basis for the classification of the patients", under the mentorship of Prof.dr.sc. Josipa Kern In 2002 I got an academic PhD degree in biomedicine and health sciences. I attended the Summer Institute for Statistical Genetics at the University of Washington, USA in 2007. I got the scientific title of Scientific Advisor on 13th of November 2013.

I worked at the Clinical Hospital "Sisters of Charity" from 1989-1992., first as a trainee, then as a novice scholar. Since 1992 I have been employed at the Department of Medical Statistics, Epidemiology and Medical Informatics of the School of Public Health "Andrija Štampar". On the 13th of September 2017 I was elected for full professor in the same Department, for the scientific field of Biomedicine and Health, the scientific field of Public Health and Health Care, Public health branch, for the subject of Medical Statistics. I am a tutor or co-tutor of 8 subjects on scientific doctoral studies, and I participate in graduate teaching and in teaching in professional and scientific doctoral studies. I participated in an international curriculum for the interdisciplinary group of students from the University of Georgia, USA, and was a local mentor for American students. I was a visiting scientist and invited lecturer at the University of Georgia, USA, and at the Medical University of South Carolina, USA. I participated in organizing several international scientific conferences. I participated in ERASMUS + teacher mobility program at Haifa University in Israel.

I participated in several scientific and technological projects funded by the Ministry of Science of Education and Sports of Croatia and led the project "Predictive Models in Healthcare". I participated in the international project "Fouille de données intelligente pour l'aide à la décision avec applications en médecine", funded by EGIDE, France, worked as a temporary advisor to the World Health Organization on projects "Development of a clinical prediction instrument and randomized trial of intramuscular or oral

antibiotics for the treatment of Group A Beta Haemolytic Streptococcal Pharyngitis in Children (GRASP, TOPS) "and" Clinical Predictors of Severity of Accidental Poisoning of Hydrocarbons, Organophosphates and Carbamates in Children Less than Five Years Old ". I participate in ERASMUS + project "KyrMedu - Advancing University Education in Biomedical Engineering and Health Management in Kyrgyzstan". I am a member of the International Commission for Dissertations at BarcelonaTech University in Spain. I am the head of the international EFMI working group: "Information and Decision Support in Biomedicine and Health Care - IdeS".

As part of my work on scientific projects, I have presented several papers at international scientific conferences, and have published 156 professional or scientific papers as the author or co-author, of which 54 were published in journals indexed in the Current Contents. I have 821 independent citations (WoS), and h-index 14 (WoS). I am a mentor of five defended doctoral dissertations and I have published 11 scientific papers published in CC journals with PhDs. I am a member of the editorial board of several scientific journals: the Central European Journal of Pediatrics, the Bosnian Journal of Basic Medical Science, Pediatrics Today, Acta Medica Academica, and the Liječnički vjesnik in which I am a reviewer. I am the President of the Croatian Biometric Society and the Vice President of the Croatian Society for Medical Informatics.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 13. September 2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Babić Leko M, Willumsen N, Nikolac Perković M, Klepac N, Borovečki F, Hof PR, Sonicki Z, Pivac N, de Silva R, Šimić G. Association of MAPT haplotype-tagging polymorphisms with cerebrospinal fluid biomarkers of Alzheimer's disease: A preliminary study in a Croatian cohort. *Brain Behav.* 2018 Nov;8(11)
- Leko MB, Skorić MK, Klepac N, Borovečki F, Horvat LL, Vogrinc Ž, Sonicki Z, Hof PR, Šimić G. Event-related Potentials Improve the Efficiency of Cerebrospinal Fluid Biomarkers for Differential Diagnosis of Alzheimer's Disease. *Curr Alzheimer Res.* 2018;15(13):1244-1260.
- Leci-Tahiri L, Kruslin B, Vucic M, Sonicki Z, Lovricevic I. Assessment of apoptosis in the native vein used for hemodialysis access. *Croat Med J.* 2016 Dec;57(6):540-7.
- Mazalin JP, Sonicki Z, Reiner Z. Cardiovascular disease (CVD) risk factors in older adults - Perception and reality. *Arch Gerontol Geriatr.* 2015 Jul-Aug; 61(1):88-92.
- Supanc V, Sonicki Z, Vukasovic I, Solter VV, Zavoreo I, Kes VB. The role of classic risk factors and prothrombotic factor gene mutations in ischemic stroke risk development in young and middle-aged individuals. *J Stroke Cerebrovasc Dis.* 2014 Mar;23(3):e171-6.
- Lakusic N, Mahovic D, Sonicki Z, Slivnjak V, Baborski F. Outcome of patients with normal and decreased heart rate variability after coronary artery bypass grafting surgery. *Int J Cardiol.* 2013 Jun 20;166(2):516-8.
- Šimurina T, Mraovic B, Skitarelić N, Andabaka T, Sonicki Z. Influence of the menstrual cycle on the incidence of nausea and vomiting after laparoscopic gynecological surgery: a pilot study. *J Clin Anesth.* 2012 May;24(3):185-92.
- Josipovic-Jelic Z, Sonicki Z, Soljan I, Demarin V; Collaborative Group for Study of Epilepsy Epidemiology in Sibenik-Knin County, Croatia. Prevalence and socioeconomic aspects of epilepsy in the Croatian county of Sibenik-Knin: community-based survey. *Epilepsy Behav.* 2011 Apr;20(4):686-90.

- Šimurina T, Mraović B, Mikulandra S, Sonicki Z, Sulen N, Dukić B, Gan TJ. Effects of high intraoperative inspired oxygen on postoperative nausea and vomiting in gynecologic laparoscopic surgery. *J Clin Anesth.* 2010 Nov;22(7):492-8.
- Reiner Z, Sonicki Z, Tedeschi-Reiner E. Public perceptions of cardiovascular risk factors in Croatia: the PERCRO survey. *Prev Med.* 2010 Dec;51(6):494-6.
- Reiner Z, Sonicki Z, Tedeschi-Reiner E. Physicians' perception, knowledge and awareness of cardiovascular risk factors and adherence to prevention guidelines: the PERCRO-DOC survey. *Atherosclerosis.* 2010 Dec;213(2):598-603.
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- Stimac G, Reljic A, Spajic B, Dimanovski J, Ruzic B, Ulamec M, Sonicki Z, Kraus O. Aggressiveness of inflammation in histological prostatitis--correlation with total and free prostate specific antigen levels in men with biochemical criteria for prostate biopsy. *Scott Med J.* 2009 Aug;54(3):8-12.
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- Bond GR, Pièche S, Sonicki Z, Gamaluddin H, El Guindi M, Sakr M, El Seddawy A, Abouzaid M, Youssef A; WHO EMRO Pediatric Insecticide Study Group. A clinical decision aid for triage of children younger than 5 years and with organophosphate or carbamate insecticide exposure in developing countries. *Ann Emerg Med.* 2008 Dec;52(6):617-22.
- WHO EMRO Pediatric Hydrocarbon Study Group, Cairo, Egypt, Bond GR, Pièche S, Sonicki Z, Gamaluddin H, El Guindi M, Sakr M, El Seddawy A, Abouzaid M, Youssef A. A clinical decision rule for triage of children under 5 years of age with hydrocarbon (kerosene) aspiration in developing countries. *Clin Toxicol (Phila).* 2008 Mar;46(3):222-9.
- Barisin S, Husedzinovic I, Sonicki Z, Bradic N, Barisin A, Tonkovic D. Levosimendan in off-pump coronary artery bypass: a four-times masked controlled study. *J Cardiovasc Pharmacol.* 2004 Dec;44(6):703-8.
- Gibert K, Sonicki Z, Martín JC. Impact of data encoding and thyroids dysfunctions. *Stud Health Technol Inform.* 2002;90:494-8.
- Sonicki Z, Morin A, Plasaj T, Sonicki D, Kusić Z. Redundant thyroid laboratory diagnostic modules in laboratory information system--a way to improve the performance. *Stud Health Technol Inform.* 2000;77:842-6.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- Babić Leko M, Willumsen N, Nikolac Perković M, Klepac N, Borovečki F, Hof PR, Sonicki Z, Pivac N, de Silva R, Šimić G. Association of MAPT haplotype-tagging polymorphisms with cerebrospinal fluid biomarkers of Alzheimer's disease: A preliminary study in a Croatian cohort. *Brain Behav.* 2018 Nov;8(11)
- Leko MB, Skorić MK, Klepac N, Borovečki F, Horvat LL, Vogrinc Ž, Sonicki Z, Hof PR, Šimić G. Event-related Potentials Improve the Efficiency of Cerebrospinal Fluid Biomarkers for Differential Diagnosis of Alzheimer's Disease. *Curr Alzheimer Res.* 2018;15(13):1244-1260.
- Kiđemet-Piskač S, Babić Leko M, Blažeković A, Langer Horvat L, Klepac N, Sonicki Z, Kolenc D, Hof PR, Boban M, Mimica N, Borovečki F, Šimić G. Evaluation of cerebrospinal fluid phosphorylated tau231 as a

biomarker in the differential diagnosis of Alzheimer's disease and vascular dementia. *CNS Neurosci Ther.* 2018 Aug;24(8):734-740.

- Leci-Tahiri L, Kruslin B, Vucic M, Sonicki Z, Lovricevic I. Assessment of apoptosis in the native vein used for hemodialysis access. *Croat Med J.* 2016 Dec;57(6):540-7.
- Vidakovic B, Uljanic I, Peric B, Grgurevic J, Sonicki Z. Myofascial Pain of The Head And Neck Among Croatian War Veterans Treated For Depression And Posttraumatic Stress Disorder. *Psychiatr Danub.* 2016; 28(1):73-6.
- Mazalin JP, Sonicki Z, Reiner Z. Cardiovascular disease (CVD) risk factors in older adults - Perception and reality. *Arch Gerontol Geriatr.* 2015 Jul-Aug; 61(1):88-92.
- Barisin A, Sonicki Z, Vincelj J, Sutlić Z, Barišin S. Does Diabetes Have an Influence on Regional Deformation Parameters in Patients with Normal Systolic Function during Off-Pump Coronary Artery Bypass Grafting? *Cardiology.* 2015; 132(1):34-44.
- Vidakovic B, Grgurevic J, Sonicki Z. Myofascial Pain in War Veterans with Post-Traumatic Stress Disorder. *J Musculoskelet Pain.* 2014 Jun; 22(2):182-6.
- Cvitkovic A, Sonicki Z, Babus V, Cvorisec D. The risk of developing endemic nephropathy in subjects with proteinuria. *Coll Antropol.* 2014 Mar;38(1):155-9.
- Supanc V, Sonicki Z, Vukasovic I, Solter VV, Zavoreo I, Kes VB. The role of classic risk factors and prothrombotic factor gene mutations in ischemic stroke risk development in young and middle-aged individuals. *J Stroke Cerebrovasc Dis.* 2014 Mar;23(3):e171-6.
- Fila B, Lovcic V, Sonicki Z, Magas S, Sudar-Magas Z, Malovrh M. Vein diameter after intraoperative dilatation with vessel probes as a predictor of success of hemodialysis arteriovenous fistulas. *Med Sci Monit.* 2014 Feb;20:191-8.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Collaborator of ERASMUS + project "KyrMedu - Advancing University Education and Biomedical Engineering and Health Management in Kyrgyzstan" (561894-EPP-1-2015-DE-EPPKA2-CBHE-JP)
- Project Leader of "Predictive Models in Health Care", funded by the Ministry of Science, Education and Sports of Croatia (108-0982560-0257).
- Researcher in the "Regionalism of cardiovascular behavioral risk - intervention model", funded by the Ministry of Science, Education and Sports (108-1080135-0264).
- The temporary advisor to the World Health Organization for the purpose of consultation and participation in the review and pre-processing of data collected on the project "Clinical predictors of the severity of accidental poisoning from hydrocarbons, organophosphates and carbamates and children below five years old" as well as participation in the statistical analysis, and planning statistics support to complete the analysis and development of algorithms poison hydrocarbons, organophosphates and carbamates in children younger than 5 years, in Cairo, Egypt, 12.12.2004.- 23.12.2004.
- Researcher at the project "Fouille de données intelligent pour l'aide à la décision avec applications en médecine", funded by EGIDE, France.
- Temporary Advisor to the World Health Organization for the purpose of preparing a project proposal on clinical predictors of the weight of hydrocarbon, organophosphate and carbamate poisoning in children

under the age of 5, and the proposal for methodological approach and data analysis design in Cairo, Egypt, 29.11.-3.12.2003.

- Temporary Advisor to the World Health Organization at the "Data Analysis and Manuscript Preparation Workshop" held on 19-22.10.2003. in Cairo, Egypt. Preparation and analysis of data collected in the multicenter study, entitled "Development of a clinical prediction tool and randomized trial of intramuscular vs. oral antibiotics for the treatment of Group A Beta haemolytica Streptococcal pharyngitis in children (GRASP, TOPS)".
- Researcher at the project "Genetic, social and behavioral determinants of health and diseases", financed by the Ministry of Science, Education and Sports of the Republic of Croatia (0108330).
- Consultant on the project "Hypertension Epidemiology in Croatia" financed by the Ministry of Science, Education and Sports of Croatia (0108109).
- Researcher at the project: "Information Technology and Medical Decisions" (108107) of the Ministry of Science and Technology of the Republic of Croatia.
- Researcher at the international project "Development of Clinical Prediction Instrument for Streptococcal Pharyngitis (GRASP)", WHO and Johns Hopkins Medical School.
- Project Leader: "Evaluation of Different Algorithms for Inductive Learning and Neural Neural Networks in Different Medical Domains" and "Adaptive Self-Adopting Modules of Trained Neural Neural Networks for Medical Information Systems", partially funded by the Open Society Institute - Croatia.
- Researcher at the project: "Heuristic Support Systems for Decision Making in Health Care" (3-01-026) of the Ministry of Science and Technology of the Republic of Croatia.
- Researcher at the project: "Epidemiology of gastric disorder in Croatia" (3-01-222) of the Ministry of Science and Technology of the Republic of Croatia.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- Collaborator of ERASMUS + project "KyrMedu - Advancing University Education and Biomedical Engineering and Health Management in Kyrgyzstan" (561894-EPP-1-2015-DE-EPPKA2-CBHE-JP)
- Project Leader of "Predictive Models in Health Care", funded by the Ministry of Science, Education and Sports of Croatia (108-0982560-0257).
- Researcher in the "Regionalism of cardiovascular behavioral risk - intervention model", funded by the Ministry of Science, Education and Sports (108-1080135-0264).

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Slavica Sović, MD, PhD, Assistant professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: 1. Statistical Analysis of Medical Data 1

2. Medical Statistics 2.1: Statistical tools for medical data analysis in planned experimental study design

3. Medical Statistics 2.2: Statistical tools for medical data analysis in quasi-experimental study design

4. Medical Statistics 2.3: Statistical tools for medical data analysis in observational study design with large samples

5. Medical Statistics 2.4: Statistical tools for medical data analysis in observational study design with small samples

BIOGRAPHY

Slavica Sović was born on May 9, 1976 in Zavidovići, B&H. She graduated from University of Zagreb School of Medicine in 2001 and obtained PhD degree in 2013. She completed specialization in public health in 2013. Since 2007 she has been working as a research fellow - assistant and since 2014 as a senior assistant in the Department of Medical Statistics, Epidemiology and Medical Informatics at the University of Zagreb School of Medicine. She is involved with teaching at graduate level in Medical Studies, Nursing Studies and Medical Studies in English and in the graduate study at the University of Zagreb School of Dental Medicine. Her scientific and professional interests are public health, social medicine and health care organizations, medical statistics and the quality in the family medicine. She has published 17 scientific and professional papers, 9 in journals referenced in Current Contents and was cited 11 times.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 18 May 2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Klobučar A, Folnegović-Šmalc V, Kocijan-Hercigonja D, Sović S, Gulić L. Clinical Characteristics and Comorbidity of Pediatric Trichotillomania: the Study of 38 Cases in Croatia. *Psychiatr Danub* 2018;30(1):79-84.

Vitale K, Sović S. pravednost i pravičnost i okoliš kao determinanta zdravlja – novi koncepti o kojima treba razmišljati. *Acta med croatica* 2018;72:247-50.

Murčić L, Hébert PC, Sović S, Pavleković G. Paternalism and autonomy: views of patients and providers in a transitional (post-communist) country. *BMC Med Ethics* 2015;16:65. DOI: 10.1186/s12910-015-0059-z

Brlić KČ, Holcer NJ, Sović S, Štimac D. Characteristics of self-medication for pain relief among first-year health care students in Zagreb, Croatia. *Psychiatr Danub* 2014;26(S3):459-65.

Keranović A, Džakula A, Vitale K, Domokuš AN, Bušić Bjelobaba L, Sović S. Remote patient monitoring system for older rural population—pilot project in Sisak Moslavina County. *Period Biol* 2013;115(4):545-8.

Sović Brkičić Lj, Godman B, Vončina L, Sović S, Relja M. Initiatives to improve prescribing efficiency for drugs to treat Parkinson Disease in Croatia: influence and future direction. *Expert Rev Pharmacoecon Outcomes Res* 2012;12(3):373-84.

Džakula A, Keranović A, Crnica V, Majer M, Janev Holcer N, Sović S, Bolić B, Domokuš AN, Dražić I, Vugrinčić M, Zibar D, Blažević N, Friščić T, Korać T, Bander I, Vuletić S. Risk Factors for Cardiovascular Disease in Rural Area of Croatia. *Coll Antrop* 2012;36(S1):245-9.

Milić M, Sović S, Vitale K, Džakula A. Could determinants of PCS and MCS serve for public health intervention regarding chronic diseases in Croatia?. *Coll Antrop* 2012;36(S1):195-200.

Sović S, Vitale K, Brborović O, Džakula A, Tiljak H. Association of Behavioral Cardiovascular Risk Factors with Mortality In Croatian Adult Population: The CroHort Study. *Coll Antrop* 2012;36(S1):177-182.

Vitale K, Brborović O, Sović S, Striehl Benčević H, Čivljak M. Five-years cumulative incidence of alcohol consumption in Croatian adult population: the study. *Coll Antrop* 2012;36(S1):105-8.

Vukušić Rukavina T, Brborović O, Fazlić H, Sović S, Čivljak M. Association of the Psychological Distress and Cardiovascular Risk Behaviors, Conditions and Disease: the CroHort Study. *Coll Antrop* 2012;36(S1):157-64.

Vitale K, Sović S, Vuletić S. Distribution of Changes in Systolic Blood Pressure and Waist Circumference – Indicators for Primary Prevention. *Coll Antrop* 2012;36(S1):241-44.

Vitale K, Sović S, Džakula A, Keranović A, Jelaković B. Is Salt Intake Hidden Risk for Rural Population: Case Study Village of Sjeverovac, County Sisačko-Moslavačka?. *Coll Antrop* 2012;36(S1):261-4.

Sović S, Vitale K, Keranović A, Dražić I, Džakula A, Jelaković B. Prevalence, awareness, treatment and control of hypertension and salt intake in some rural areas of Sisak- Moslavina County, Croatia. *Period Biol* 2011;113(3):321-6.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Klobučar A, Folnegović-Šmalc V, Kocijan-Hercigonja D, Sović S, Gulić L. Clinical Characteristics and Comorbidity of Pediatric Trichotillomania: the Study of 38 Cases in Croatia. *Psychiatr Danub* 2018;30(1):79-84.

Vitale K, Sović S. pravednost i pravičnost i okoliš kao determinanta zdravlja – novi koncepti o kojima treba razmišljati. *Acta med croatica* 2018;72:247-50.

Saric MS, Jurasic MJ, Sovic S, Kranjcec B, Glivetic T, Demarin V. Dyslipidemia in subclinical hypothyroidism requires assessment of small dense low density lipoprotein cholesterol (sdLDL-C). *Rom J Intern Med*. 2017;55(3):159-66.

Vodanović M, Sović S, Galić I. Occupational Health Problems among Dentists in Croatia. *Acta Stomatol Croat* 2016;50(4):310-20.

Murgić L, Hébert PC, Sović S, Pavleković G. Paternalism and autonomy: views of patients and providers in a transitional (post-communist) country. *BMC Med Ethics* 2015;16:65. DOI: 10.1186/s12910-015-0059-z

Vitale K, Munđar R, Sović S, Bergman-Marković B, Janev Holcer N. Use of complementary and alternative medicine among family medicine patients - example of the town of Čakovec. *Acta Med Croat* 2014;68(4-5):345-51.

Čivljak R, Bukovski S, Bambir I, Stanić M, Torić L, Sović S, Dumančić M, Tošev EČ. Postantimikrobni proljev i bolest povezana s *Clostridium difficile*: opservacijsko retrospektivno istraživanje u Klinici za infektivne bolesti "Dr. Fran Mihaljević" u Zagrebu. *Infektološki glasnik* 2014;34:133-43.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

In 2018. researcher at the scientific project of the University of Zagreb, School of medicine: Utvrđivanje prepreka u implementaciji strategije ulaganja u rani razvoj djece - analiza kapaciteta za implementaciju i umrežavanje partnera.

In 2017. researcher at the scientific project of the University of Zagreb, School of medicine: Razvoj metodologije oblikovanja nacionalne strategije ulaganja u rani razvoj djece kroz intersektorsku suradnju.

In 2016, researcher at the scientific project of the University of Zagreb, School of medicine: Razvoj nacionalnog registra vrednovanih preventivnih programa.

In 2015. researcher at the scientific project of the University of Zagreb, School of medicine: Razvoj nacionalnog registra vrednovanih preventivnih programa.

In 2014. researcher at the scientific project of the University of Zagreb, School of medicine: Prediktivna vrijednost procjene životnih navika i antropometrijskih obilježja u ranom otkrivanju srčano - žilnih bolesti u adolescenata (BM 1.26; 1101314).

From 2010. to 2013. researcher at the scientific project of the University of Zagreb, School of medicine (108-1080316-0299) Kako mjeriti zdravlje?, funded by the Ministry of Science, Education and Sports of Croatia.

In 2011. researcher at the project Finance and Mental Health Services Training in Czech Republic / Central Europe, Charles University in Prague, Faculty of Social Sciences, Center for Social and Economic Strategies, Prague, Czechia and University of California Berkeley, School of Public Health, Berkeley, SAD.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

In 2018. researcher at the scientific project of the University of Zagreb, School of medicine: Utvrđivanje prepreka u implementaciji strategije ulaganja u rani razvoj djece - analiza kapaciteta za implementaciju i umrežavanje partnera.

In 2017. researcher at the scientific project of the University of Zagreb, School of medicine: Razvoj metodologije oblikovanja nacionalne strategije ulaganja u rani razvoj djece kroz intersektorsku suradnju.

In 2016, researcher at the scientific project of the University of Zagreb, School of medicine: Razvoj nacionalnog registra vrednovanih preventivnih programa.

In 2015. researcher at the scientific project of the University of Zagreb, School of medicine: Razvoj nacionalnog registra vrednovanih preventivnih programa.

In 2014. researcher at the scientific project of the University of Zagreb, School of medicine: Prediktivna vrijednost procjene životnih navika i antropometrijskih obilježja u ranom otkrivanju srčano - žilnih bolesti u adolescenata (BM 1.26; 1101314).

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Patrik Stanić, Ph.D., research associate

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Clinic Repromed

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research methods in vitro and in vivo

BIOGRAPHY

Patrik Stanić, Ph.D.

Clinic Repromed, Gradišćanska ulica 36, Zagreb.

E-mail: patrik.stanic@mef.hr

Place and year of birth: Prague, Czech Republic, 1969.

Education: B.Sc., Faculty of Natural Sciences, University of Zagreb, field Molecular biology (1994), postgraduate program „Biomedicine and Health Sciences“, Zagreb University School of Medicine (1998–2001).

Work experience and academic degrees: assistant, Dpt. of Obstetrics and Gynecology, Zagreb University School of Medicine (1998-2009), Ph.D. thesis: “Effect of cryopreservation on human sperm morphology and motility“, Head of Division of Clinical Embryology, Department of Human Reproduction, University Hospital Centre Zagreb (2008-2016), now Head of IVF laboratory, Clinic Repromed (from 2016).

Teaching: graduate courses - School of Medicine and Faculty of Pharmacy and Biochemistry, University of Zagreb, and postgraduate courses – School of Medicine, University of Zagreb.

Research projects: collaborator-young researcher (1996-2002), collaborator-researcher (2002-2009).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 04. 06. 2013.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Stanić P, Sonicki Z, Suchanek E. Effect of pentoxifylline on motility and membrane integrity of cryopreserved human spermatozoa. *Int J Androl* 2002;25(3):186-90.
2. Stanić P, Tandara M, Sonicki Z, Šimunić V, Radaković B, Suchanek E. Comparison of protective media and freezing techniques for cryopreservation of human semen. *Eur J Obst Gyn Reprod Biol* 2000;91:65-70.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Ejubović E, Kasum M, Stanić P, Juras J, Čehić E, Orešković S. Current Preventive Strategies for Preovulatory Progesterone Elevation During Ovarian Stimulation for In Vitro Fertilization. *Acta Clin Croat*. 2016;55:453-8.
2. Kasum M, Pavičić-Baldani D, Stanić P, Orešković S, Sarić JM, Blajić J, Juras J. Importance of macroprolactinemia in hyperprolactinemia. *Eur J Obstet Gynecol Reprod Biol*. 2014;183:28-32.
3. Kasum M, Vrčić H, Stanić P, Ježek D, Orešković S, Beketić-Orešković L, Pekez M. Dopamine agonists in prevention of ovarian hyperstimulation syndrome. *Gynecol Endocrinol*. 2014; 5:1-5.
4. Kasum M, Šimunić V, Vrčić H, Stanić P, Orešković S, Beketić-Orešković L. Follicular progesterone elevations with ovulation induction for IVF. *Gynecological Endocrinology* 2014;19:1-5.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



Research project of the Ministry of Science and Education of the Republic of Croatia, "Biochemical and Molecular Diagnosis in Human Reproduction" (2002-2009)

Research project of the Ministry of Science and Education of the Republic of Croatia "Assisted Reproduction Methods" (1998-2002)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Milan Stanojević, Associate Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Retired

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Fetal and Neonatal Neurophysiology, Fetal Behavior

BIOGRAPHY

Head of the Department of Neonatology at the Department of Obstetrics and Gynecology Medical School University of Zagreb, “Sveti Duh” University Hospital, Zagreb, Croatia from 2007 till November 2018, when he was retired. Actively participating in the teaching of the graduate and postgraduate medical students at Medical School University of Zagreb. Associate professor at DIU Libertas International University from 2011. Assistant professor of pediatrics at The Teacher’s Faculty of Zagreb University from 2011. Published 304 papers (46 c/c), and 51 chapters in the books with more than 800 citations. A member of editorial board of two international journals and reviewer in ten. Participating as the researcher in scientific projects led by prof. Aida Salihagic-Kadic from Medical School University of Zagreb. President of the International Academy of Perinatal Medicine.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2013, associate professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Stanojevic M. Antenatal and postnatal assessment of neurobehavior: which one should be used?. Donald School Journal of Obstetrics and Gynecology 2015;9(1): 67-74.

Stanojevic M, Antsaklis P, Salihagic Kadic A, Predojevic M, Vladareanu R, Vladareanu S, Moreira Neto R. Is Kurjak Antenatal Neurodevelopmental test ready for routine clinical application: Bucharest consensus statement. Donald School Journal of Obstetrics and Gynecology 2015;9(3): 260-5.doi.10.5005/jp.journals-100009-1412.

Predojević M, Talić A, Stanojević M, Kurjak A, Salihagić Kadić A. Assessment of motoric and hemodynamic parameters in growth restricted fetuses - case study. J Matern Fetal Neonatal Med 2014;27(3):247-51. doi: 10.3109/14767058.2013.807241.

Kurjak A, Antsaklis P, Stanojevic M. Fetal neurology: past present and future. Donald School Journal of Ultrasound in Obstetrics and Gynecology 2015;9(1):6-29.

Kurjak A, Barisic Spalldi L, Stanojevic M, Salihagic Kadic A, Porovic S. Are we ready to investigate cognitive function of fetal brain? The role of advanced four-dimensional sonography. Donald School Journal of Ultrasound in Obstetrics and Gynecology 2016;10(2):116-24.

Kurjak A, Antsaklis P, Stanojević M, Vladareanu R, Vladareanu S, Moreiro Neto R, Spalldi Barišić L, Porović S, Delić T. Multicentric studies of the fetal neurobehavior by KANET test. J Perinat Med. 2017;45(6):717-727. doi. 10.1515/jpm-2016-0409.

Khalief Emir A, Andonotopo W, Adrianes Bachnas M, Sulistyowati S, Stanojevic M, Kurjak A. 4D assessment of motoric function in a singleton acephalous fetus: the role of the KANET test; Case Reports in Perinatal Medicine. 2017; 20170022

Kurjak A, Antsaklis P, Stanojevic M, Porovic S. Fetal behavior assessed by four-dimensional ultrasound. Donald School Journal of Ultrasound in Obstetrics and Gynecology 2017;11(2):169-73.

Moreira R, Kurjak A, Porovic S, Stanojevic M, Gaber G. Clinical study of fetal neurobehavior by the Kurjak Antenatal Developmental test. Donald School Journal of Ultrasound in Obstetrics and Gynecology 2017;11(4):355-61.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Stanojević M. Training of ultrasound in neonatology: global or local?. Donald School Journal of Obstetrics and Gynecology 2013;7 (3): 339-45.

Stanojevic M, Huges MK, Zaputovic S, Sanja Kupesic Plavcic, Plavcis B. The role of 2D and 3D ultrasound in the evaluation of fetal gastrointestinal anomalies. Donald School Journal of Obstetrics and Gynecology 2014;8(3): 316-20.

Stanojevic M. Antenatal and postnatal assessment of neurobehavior: which one should be used?. Donald School Journal of Obstetrics and Gynecology 2015;9(1): 67-74.

Stanojevic M, Antsaklis P, Salihagic Kadic A, Predojevic M, Vladareanu R, Vladareanu S, Moreira Neto R. Is Kurjak Antenatal Neurodevelopmental test ready for routine clinical application: Bucharest consensus statement. Donald School Journal of Obstetrics and Gynecology 2015;9(3): 260-5. doi:10.5005/jp.journals-100009-1412.

Stanojević M, Bilić E, Bucat M, Čulić S, Filipović Grčić B, Gverić Ahmetašević S, Krželj V, Meštrović J, Milas V, Roganović J. Smjernice za prevenciju hemoragijske bolesti novorođenčeta – krvarenja nastalog zbog nedostatka vitamina K. Gynaecol perinatol 2015;24:71-6.

Stanojevic M, Leko L. Early neonatal morbidity after term delivery: how should we respond? Donald School Journal of Ultrasound in Obstetrics and Gynecology 2016;10(2):180-4.

Predojević M, Talić A, Stanojević M, Kurjak A, Salihagić Kadić A. Assessment of motoric and hemodynamic parameters in growth restricted fetuses - case study. J Matern Fetal Neonatal Med 2014;27(3):247-51. doi: 10.3109/14767058.2013.807241.

Pavičić Bošnjak A, Stanojević M, Glavaš E. Odnos između samoefi kasnosti dojenja i teškoća pri dojenju tijekom boravka u rodilištu. Paediatr Croat. 2014;58:88-94.

Tikvica Luetić A, Habek D, Prka M, Stanojević M, Blažević T, Golub A, Djulabić L. Comparison of the effect of different vacuum cups on maternal and neonatal outcomes. Gynaecol Perinatol 2014;23(4):111-115.

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Aliyu LD, Kurjak A, Wataganara T, de Sá RA, Pooh R, Sen C, Ebrashy A, Adra A, Stanojevic M. Ultrasound in Africa: what can really be done? *J Perinat Med*. 2016;44(2);119-123. doi:10.1515/jpm-2015-0224.

Ebrashy A, Kurjak A, Adra A, Aliyu LD, Wataganara T, de Sa RAM, Pooh R, Sen C, Stanojevic M. Controversial ultrasound findings in mid trimester pregnancy: Evidence based approach. *J Perinat Med*. 2016;44(2);131-7. doi: 10.1515/jpm-2015-0223.

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Grguric J, Zakarija Grkovic I, Pavicic Bosnajak A, Stanojevic M. A multifaced approach to evitalizing the Baby-Friendly Hospiat Initiative in Croatia. *J Hum Lact* 2016;32 (3):568-73.

Grizelj R, Bojani K, Vukovic J, Novak M, Rodin U, Coric T, Stanojevic M, Schroeder DR, Weingarten TN, Sprung J, The Croatian Diaphragmatic Hernia Study Group. Epidemiology and Outcomes of Congenital Diaphragmatic Hernia in Croatia: A Population-Based Study. *Paediatric and Perinatal Epidemiology* 2016;30(4):336-45. doi: 10.1111/ppe.12289.

Barisic LS, Kurjak A, Pooh RK, Delic T, Stanojevic M, Porovic S. Antenatal Detection of Fetal Syndromes by Ultrasound: From a Single Piece to a Complete Puzzle. *Donald School J Ultrasound Obstet Gynecol* 2016;10(1):63-77.

Kurjak A, Barisic Spalldi L, Stanojevic M, Salihagic Kadic A, Porovic S. Are we ready to investigate cognitive function of fetal brain? The role of advanced four-dimensional sonography. *Donald School Journal of Ultrasound in Obstetrics and Gynecology* 2016;10(2):116-24.

Kurjak A. Spalldi Barisic L, Delic T, Porovic S, Stanojevic M. Facts and doubts about the beginning of human life and personality. *Donald School Journal of Ultrasound in Obstetrics and Gynecology* 2016;10(3):205-13.

Tikvica Luetic A, Habek D, Stanojevic M, Miric Tesanic D, Padovan Stern R. Prenatal diagnosis of prenatal epidural hematoma. *Z Geburthsh Neonatol* 2016;220:262-4. doi:10.1055/s-0042-113001

Spalldi Barišić L, Stanojević M, Kurjak A, Porović S, Gaber G. Diagnosis of fetal syndromes by three- and four-dimensional ultrasound: is there any improvement? *J Perinat Med*. 2017;45(6):651-665. doi: 10.1515/jpm-2016-0416.

Kurjak A, Antsaklis P, Stanojević M, Vladareanu R, Vladareanu S, Moreira Neto R, Spalldi Barišić L, Porović S, Delić T. Multicentric studies of the fetal neurobehavior by KANET test. *J Perinat Med*. 2017;45(6):717-727. doi: 10.1515/jpm-2016-0409.

Khalief Emir A, Andonotopo W, Adrianes Bachnas M, Sulistyowati S, Stanojevic M, Kurjak A. 4D assessment of motoric function in a singleton acephalous fetus: the role of the KANET test; Case Reports in Perinatal Medicine. 2017; 20170022

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Moreira R, Kurjak A, Porovic S, Stanojevic M, Gaber G. Clinical study of fetal neurobehavior by the Kurjak Antenatal Developmental test. *Donald School Journal of Ultrasound in Obstetrics and Gynecology* 2017;11(4):355-61.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



1997-2001: investigator on the scientific project: “Fetal hypoxia and cerebrovascular reactivity”, granted by Croatian Ministry of Science

2002-2006: investigator on the scientific project: “Fetal hypoxia index in prevention of perinatal brain damage”, granted by Croatian Ministry of Science

2007-2014: investigator on the scientific project: “C/U ratio and motor parameters in prevention of perinatal brain damage”, granted by Croatian Ministry of Science

2013-14: investigator on the scientific project „New algorithm for the prevention of neurological disabilities and damage in children with intrauterine growth restriction ", granted by University of Zagreb

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2007-2014: investigator on the scientific project: “C/U ratio and motor parameters in prevention of perinatal brain damage”, granted by Croatian Ministry of Science

2013-14: investigator on the scientific project „New algorithm for the prevention of neurological disabilities and damage in children with intrauterine growth restriction ", granted by University of Zagreb

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Vito Starčević, MD, assistant professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Clinical Medical Center Zagreb

Women Clinical Hospital, Clinical Medical Center Zagreb, Department for diabetes and fetal growth

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: "Diabetes and Pregnancy",
"Physiology and biochemistry of uterus in pregnancy and labour"

BIOGRAPHY

Vito Starčević graduated on the Zagreb University School of Medicine on the 24th of February 1992. and got the title of M.D. (physician). He continued his medical and professional specialization in the Clinical Hospital Center Zagreb. After having passed the specialist exam in Gynecology and obstetrics on the 31st of August 1998. he started working in the Clinical hospital for gynecology and obstetrics, Clinical Hospital Zagreb. But his professional promotion continued and on the 25th of June 1998. he obtained a title of the master of sciences title and the doctors of sciences title on the 29th of October 2008. on the Zagreb University. He obtained a title of the subspecialist from 2009. on the Zagreb University. Stupanj docenta stekao 2015. godine. During his professional career he published numerous scientific and expert works at the domestic and foreign magazines and conventions. He is also involved in the programme of postgraduate education as an author of the several chapters in the obligatory literature consisting of six books, as a lecturer on the international postgraduate course on diabetology organized in the Clinic Vuk Vrhovec. There he worked on the several themes like: "Diabetes and malformations", "The glycemia influence on the early embryonic development with mothers suffering from diabetes", "Placenta at the women suffering from diabetes". He is widely and often enrolled into the work of the international medical conventions and symposium, publishing articles and scientific papers for those occasions.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: MD, assistant professor from 20th.July 2015. /Klasa: 640-03/15-01/76/

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

The doctor of sciences on the 29th October 2008. (Date and place of the defense: 29thOctober 2008, University of Zagreb, Dpt. of Obst./Gyn. KBC-Zagreb, School of Medicine) Title of the doctoral thesis: The Content of Lipids in the Placenta of the Pregnant Women with Type 1 of the Diabetes Mellitus. Mentor Professor Josip Đelmiš MD, PhD; University of Zagreb, School of Medicine

Published chapters in Croatian and foreign books:

1. Đelmiš J, Ivanišević M, Mayer D, Tuzović L, Starčević V, Ilijić M. Placenta growth factor in healthy and diabetic mothers and their fetuses. Perinatology 2001; 433-438.
2. Publication of the book titled: "Diabetes and Pregnancy"; author: Josip Đelmiš et al, within a 1st category postgraduate training course of permanent training for doctors of medicine; the chapter in the book titled: Epidemiology, pathogenesis and prevention of inborn malformations"; published by Medias Inc, Zagreb, 2002.
3. Publication of the book titled: "Neurological disorders in pregnancy"; author: Josip Đelmiš et al, within a 1st category postgraduate training course of permanent training for doctors of medicine; the chapter in the book titled: "Lumbosacral syndrome and pregnancy"; authors: Marija Šoštarko and Vito Starčević; published by Prof. Josip Đelmiš, MD, PhD, Zagreb 2002.

4. Publication of the book titled: “Emergencies in gynecology and obstetrics” author: Josip Đelmiš et al, within the 1st category postgraduate training course of permanent training for doctors of medicine held on the 28th and the 29th March 2003, Zagreb; as the author of the following two chapters in the book: a) Vaginal secretion, b) Syphilis
5. Publication of the book titled: “Drugs in pregnancy”, author: Josip Đelmiš et al, within the 1st category postgraduate training course of permanent training for doctors of medicine held on the 24th and 25th October 2003; Zagreb; as the author of the following chapter in the book: “Use of plant medicines in pregnancy”.
6. Publication of the book titled: “Emergency cases in gynecology, obstetrics, anesthesia and neonatology”, author: Josip Đelmiš, Velimir Šimunić, Emilija Juretić, Slobodan Mihaljević; as the author of the following chapter in the book: “Vaginal discharge”.
7. Publication of the book titled: “Diabetes in women”, authors: Josip Đelmiš, Marina Ivanišević, Željko Metelko et al, as the author of the three following chapters in the book: „Metabolism of carbohydrates, lipids and aminoacids“; „Congenital malformations“ and „Placenta of diabetic pregnant women“ ISBN 978-953-176-430-8
8. Publication of the book titled: “Obstetrics” author: Ivan Kuvačić, Asim Kurjak, Josip Đelmiš et al; as the author of the following chapter in the book: “Anatomy of female genital tract”; 2009. ISBN 978-953-176-408-7
9. Publication of the book titled: “Fetal medicine and obstetrics” authors: Josip Đelmiš, Slavko Orešković et al; as the author of the following chapter in the book: “ Basic structure of female genital tract ”; 2009. ISBN 978-953-176-408-7

Papers published in cited journals:

1. Đelmiš Josip; Mayer Davor; Majerović Mate; Radanović Branko; Starčević Vito. Giant uterine leiomyoma devascularized by embolisation prior to surgical removal. *European Journal of Obstetrics and Gynaecology and Reproductive Biology* 92(2000), 2:225-227.
2. Ivanišević Marina; Buković Damir; Starčević Vito; Đelmiš Josip; Pfeifer Dina. Influence of hyperglycemia on early embryonal growth in IDDM pregnant women. *Coll Antropol* 1999 Jun;23(1):183-8.
3. Đelmiš Josip; Ivanišević Marina; Mayer Davor; Tuzović Lea; Starčević Vito; Ilijić Marcela. Placenta Growth Factor in Healthy and Diabetic Mothers and Their Fetuses. *World Congress of Perinatal Medicine, Barcelona 2001. Perinatology* 2001; 4443-438 i 671-674.
4. Starčević Vito; Đelmiš Josip; Ivanišević Marina; Mayer Davor. The effect of glycemia on early embryonic development in diabetic pregnancies. *Prenatal and Neonatal Medicine* 2001; 6:208-213.
5. Bljajić D, Ivanišević M, Đelmiš J, Majerović M, Starčević V. Splenic rupture in pregnancy – traumatic or spontaneous event? A case report. *Eur J Obstet Gynecol Reprod Biol.* 2004 Jul 15; 115(1): 113-114.
6. Starčević Vito, Đelmiš Josip. The effect of the regulation of glycemia on the frequency of preeclampsy in pregnant women with gestational diabetes. *Acta Medica Croatica* 2004; 58: 367-371.
7. Persec Zoran, Buković Damir, Persec Jasminka, Rako Duje, Ljubanović Danica, Starčević Vito, Župić Tomislav, Pavić Mato. Clear cell variant of urothelial carcinoma in urinary bladder. *Coll Antropol* 2012;3:1045-1047.
8. Vito Starčević, Mislav Herman, Marina Horvatiček, Josip Juras, Marina Ivanišević. Risk factors and diagnosis for preterm premature rupture of membranes. *Gynaecol Perinatol* 2012;21(4):141-145

9. Vito Starčević, Josip Đelmiš, Mislav Herman, Marina Ivanišević, Jozo Blajić, Josip Juras, Tea Starčević, Marina Horvatiček, Ksenija Tuškan. Preterm delivery in breech praesentation. *Gynaecol Perinatol* 2015;24(Suppl.1): S47-S50

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1) Utjecaj glikemije na rani embrionalni razvoj u trudnica dijabetičarki; autori: Vito Starčević, Josip Đelmiš, Marina Ivanišević, Mislav Herman, Josip Juras, Jozo Blajić, Marina Horvatiček; *Gynaecol Perinatol* Vol 23, No 1, pp 1-42 2014;

2) Postpartalne histerektomije u Klinici za ženske bolesti i porođaje KBC-a Zagreb u razdoblju od 2007. do 2009. godine; autori: Mislav Herman, Josip Đelmiš, Marina Ivanišević, Jozo Blajić i Vito Starčević; *Gynaecol Perinatol* Vol 23, No 1, pp 1-42 2014;

3) Krvarenje u babinju; autori: Jozo Blajić, Mato Pavić, Josip Juras, Vito Starčević, Mislav Herman; *Gynaecol Perinatol* Vol 23, No 1, pp 1-42 2014;

4) 4.-7.6.2014. XXIV European Congress of Perinatal Medicine, Florence, Italia; active participation, Volume 27, Number S1 (June 2014) XXIV European Congress of Perinatal Medicine Abstracts: <http://informahealthcare.com/toc/jmf/27/S1>;

2012 Impact Factor: 1.518* The Journal of Maternal-Fetal and Neonatal Medicine is the official journal of The European Association of Perinatal Medicine, The Federation of Asia and Oceania Perinatal Societies and The International Society of Perinatal Obstetricians.

- The differences between placental lipid contents in type-1 diabetic and healthy pregnancy; autori: Vito Starčević; Josip Djelmiš; Marina Ivanisevic; Mislav Herman; Josip Juras; Edina Berberovic; Jozo Blajic

- Perinatal outcomes in women with type-2 versus type-1 diabetes mellitus; autori: Vito Starčević; Marina Ivanisevic; Josip Djelmiš

- Pregnancy outcome of mothers with diabetic nephropathy; autori: Mislav Herman, Josip Đelmiš, Marina Ivanišević, Jozo Blajić, Vito Starčević

5) 24.-27.9.2014. Congress of the Croatian Society of Biochemistry and Molecular Biology; Zadar, Croatia; aktivno sudjelovanje s radom: Composition of free fatty acids in placenta of pregnant women with type 1 diabetes

6) 26.-27.9.2014. XXXVI Alpe Adria meeting of Perinatal Medicine (XXVIII Alpe Adria Perinatal Congress) Klagenfurt, Austria; active participation:

- Hypothyreosis Screening in Pregnant Women in Croatia; autori: Vito Starčević, Josip Đelmiš, Marina Ivanišević, Mislav Herman, Josip Juras (knjiga sažetaka)

- Gestational Diabetes in Women with PCOS; autori: Mislav Herman, Josip Đelmiš, Marina Ivanišević, Josip Juras, Vito Starčević (knjiga sažetaka)

7) 6.-8.11.2014. Zagreb, Hotel Aristos u Zagrebu, XXVIII Perinatalni dani „Ante Dražančić“; active participation

8) 27.5.2015. XXIII Savjetovanje o perinatalnom mortalitetu HLZ, Šubićeva 9, Zagreb; active participation: „Prijevremeni porođaj u stavu zatkom“; autori: Vito Starčević, Josip Đelmiš, Mislav Herman, Marina Ivanišević, Jozo Blajić, Josip Juras, Tea Starčević, Marina Horvatiček, Ksenija Tuškan. *Gynaecol Perinatol* 2015;24(Suppl.1): S47-S50

9) 13.-15.10.2016. XXXVIII Alpe Adria meeting of Perinatal Medicine, Zagreb, Hrvatska; active participation: A preterm birth in breech presentation; autori: V.Starčević, J.Đelmiš, J.Blajić, M.Herman, J.Juras, M.Ivanišević, M.Horvatiček

10) 8.-12.3.2017. The 9th International DIP Symposium on Diabetes, Hypertension, Metabolic Syndrome & Pregnancy of which Maternal Medicine meets Fetal Medicine. Barcelona, Spain.

M. Ivanišević, M. Horvatiček, J. Đelmiš, M. Herman, V. Starčević "State referral centre for diabetes in pregnancy biobank" Department of Obst.&Gynecol., University of Zagreb, School of Medicine, Croatia

11) 16.-17.3.2018. Medicinski fakultet Sveučilišta u Zagrebu, Šalata 3, dvorana Miroslav Čačković; tečaj I kategorije: Dijabetes i trudnoća/THE FIRST CATEGORY COURSE DIABETES IN WOMAN with special attention to new criteria for diabetes in pregnancy; Voditelji tečaja / Course Chairmen: prof. dr. sc. Marina Ivanišević, prof. dr. sc. Ivana Pavlić Renar, prof. dr. sc. Lea Smirčić Duvnjak, prof. emeritus Josip Đelmiš; povjerenstvo za medicinsku izobrazbu liječnika HLK kategoriziralo je i bodovalo stručni skup

12) 16.-18.11.2018. XXXII. Perinatalni dani "Ante Dražančić" i XXVI. Savjetovanje o perinatalnome mortalitetu za Republiku Hrvatsku u 2017. godinu u Šibeniku, „Amadria Park hotel Ivan“ Solaris; active participation: Retrospektivno istraživanje prijevremenih porođaja djece u stavu zatkom tijekom razdoblja od 26 godina; autori: Starčević Vito, Ivanišević Marina, Herman Mislav, Starčević Tea, Juras Josip, Tuškan Ksenija, Đelmiš Josip, Sokol-Karadjole Vesna, Horvatiček Marina

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Project "Chronic diseases", Orthopedic Clinic, Clinical Medical Center in Zagreb, subproject leader Prof. Ivo Ruzskowski, MD, PhD.
2. Project "Pfeizer", Prof. Vukičević , MD, PhD. A2181002
3. Project "Diabetes and pregnancy", Prof. Đelmiš, MD, PhD. 0108082 (108066)
4. Project „Metabolic and endocrinological changes in diabetic pregnancy“ Prof. Đelmiš, MD, PhD. (108-1080401-0386)
5. Project „Diabetes and metabolic syndrom after previous gestational diabetes“, Prof. Ivanišević, MD, PhD. (108-1080401-0385)
6. „Prevention of hypoglycemia in pregnant women and puerpera with type 1 diabetes", Support for scientific research (University of Zagreb) , PI prof. Marina Ivanišević, PhD

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Collaboration on projects:

1. Project "Chronic diseases", Orthopedic Clinic, Clinical Medical Center in Zagreb, subproject leader Prof. Ivo Ruzskowski, MD, PhD.
2. Project "Pfeizer", Prof. Vukičević , MD, PhD. A2181002
3. Project "Diabetes and pregnancy", Prof. Đelmiš, MD, PhD. 0108082 (108066)
4. Project „Metabolic and endocrinological changes in diabetic pregnancy“ Prof. Đelmiš, MD, PhD. (108-1080401-0386)
5. Project „Diabetes and metabolic syndrom after previous gestational diabetes“, Prof. Ivanišević, MD, PhD. (108-1080401-0385)



6. „Prevention of hypoglycemia in pregnant women and puerpera with type 1 diabetes“, Support for scientific research (University of Zagreb) , PI prof. Marina Ivanišević, PhD

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist.prof. prim. Mario Starešinić, MD, PD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Merkur

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Telemedicine

BIOGRAPHY

I was born on 8th of February 1972. in Zagreb, Croatia. After graduating on School of Medicine, University of Zagreb I did an internship and was enrolled in postgraduate study. I got my master's degree in 2001. and PD in 2007. I was a senior assistant from 2010. and became an assistant professor at Department of Surgery, School of Medicine, University of Zagreb in 2014.

Scientific Committee for Biomedicine and Healthcare of National Council for Science awarded me with the status of a science adviser.

I am listed as author or co-author of 42 scientific papers published in various international scientific journals.

As an assistant professor I am involved in teaching at The Department of Surgery and in two elective classes (Sports traumatology, Fracture treatment). I am General secretary of the AO Trauma Croatia and I'm actively taking part in courses organization and lecturing as a member of Educational Committee of AO Trauma Europe (had more than 60 course lectures abroad). I am also vice president of the Croatian Trauma Society of the Croatian Medical Association.

I am employee of the University Hospital Merkur since 1998. where I became a general surgeon in 2003., traumatology subspecialist in 2007. and hospital director in 2016. I received *primarius* title from the Ministry of Health in 2013. I did the fellowship at John Radcliffe Hospital, UK and in Hannover, Germany (AO Fellowship) in 2009. During my surgical training and education I participated in more than 40 international courses (Austria, Switzerland, Germany, Turkey, Greece, Israel, Slovenia, Hungary). The main fields of my professional and scientific interest are general and sports trauma, bone remodeling and healing disorders, hip and knee arthroplasty.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 19th of May 2014.
Assist. prof.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME AND LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Sikiric P, Rucman R, Turkovic B, Sever M, Klicek R, Radic B, Drmic D, Stupnisek M, Misic M, Vuletic LB, Pavlov KH, Barisic I, Kokot A, Peklic M, Strbe S, Blagaic AB, Tvrdeic A, Rokotov DS, Vrcic H, Staresinic M, Seiwerth S. Novel Cytoprotective Mediator, Stable Gastric Pentadecapeptide BPC 157. Vascular Recruitment and Gastrointestinal Tract Healing. Curr Pharm Des. 2018;24(18):1990-2001.
2. Seiwerth S, Rucman R, Turkovic B, Sever M, Klicek R, Radic B, Drmic D, Stupnisek M, Misic M, Vuletic LB, Pavlov KH, Barisic I, Kokot A, Japjec M, Blagaic AB, Tvrdeic A, Rokotov DS, Vrcic H, Staresinic M, Sebecic B, Sikiric P. BPC 157 and Standard Angiogenic Growth Factors. Gastrointestinal Tract Healing, Lessons from Tendon, Ligament, Muscle and Bone Healing. Curr Pharm Des. 2018;24(18):1972-1989.
3. Freimoser F, Grechenig S, Ofenhitzer A, Bakota B, Staresinic M, Pfeifer CG. Anatomical and radiological evaluation of less invasive stabilisation system (LISS) in correlation with knee lateral collateral ligament insertion. Injury. 2017 Nov;48 Suppl 5:S56-S60.

4. Holweg P, Hohenberger GM, Schwarz AM, Staresinic M, Krassnig R, Grechenig S. Comparison of volar and dorsal plate osteosynthesis for radial shaft fractures: an anatomical pilot study. *Injury*. 2017 Nov;48 Suppl 5:S38-S40.
5. Schwarz AM, Hohenberger GM, Weiglein AH, Riedl R, Staresinic M, Grechenig S. Avoiding radial nerve palsy in proximal radius shaft plating - a cadaver study. *Injury*. 2017 Nov;48 Suppl 5:S34-S37.
6. Bakota B, Chan G, Staresinic M, Rajput V, Phadnis J, Korac Z. Safe intramedullary fixation of displaced midshaft clavicle fractures with 2.5mm Kirschner wires - technique description and a two-part versus multifragmentary fracture fixation outcome comparison. *Injury*. 2017 Nov;48 Suppl 5:S27-S33.
7. Grechenig S, Hohenberger G, Bakota B, Staresinic M, Grechenig P, Ernstberger A. Humeral shaft cerclage wiring: a safe technique to prevent radial nerve injury. *Injury*. 2017 Nov;48 Suppl 5:S12-S14.
8. Sciacca S, Lidder SS, Grechenig C, Grechenig S, Staresinic M, Bakota B, Gänsslen A. Variations of treatment in selected proximal femur fractures among surgeons with different surgical experience-A survey at an international AO course. *Injury*. 2015 Nov;46 Suppl 6:S57-60. doi: 10.1016/j.injury.2015.10.066. Epub 2015 Nov 18.
9. Vrgoč G, Japjec M, Jurina P, Gulan G, Janković S, Šebečić B, Starešinić M. Operative treatment of acute acromioclavicular dislocations Rockwood III and V-Comparative study between K-wires combined with FiberTape(®) vs. TightRope System(®). *Injury*. 2015 Nov;46 Suppl 6:S107-12. doi: 10.1016/j.injury.2015.10.053. Epub 2015 Nov 14.
10. Japjec M, Starešinić M, Starjački M, Žgaljardić I, Štivičić J, Šebečić B. Treatment of proximal fifth metatarsal bone fractures in athletes. *Injury*. 2015 Nov;46 Suppl 6:S134-6. doi: 10.1016/j.injury.2015.10.052. Epub 2015 Nov 10.
11. Šebečić B, Japjec M, Janković S, Vencel Čuljak, Dojčinović B, Starešinić M. Is chronic groin pain a Bermuda triangle of sports medicine? *Acta Clin Croat*. 2014 Dec;53(4):471-8.
12. Staresinic M, Bakota B, Japjec M, Culjak V, Zgaljardic I, Sebecic B. Isolated inferior peroneal retinulum tear in professional soccer players. *Injury*. 2013 Sep;44 Suppl 3:S67-70. doi: 10.1016/S0020-1383(13)70202-X.
13. Bakota B, Vlahovic T, Staresinic M, Dobric I, Civaric T. The history of Croatian Trauma Society - a brief overview. *Injury*. 2013 Sep;44 Suppl 3:S1-2. doi: 10.1016/S0020-1383(13)00393-8.
14. De Faoite D, Bakota B, Staresinić M, Kopljar M, Cvjetko I, Dobrić I. Awareness, attitudes, and perceptions of Croatian-based orthopedic and trauma surgeons toward scientific manuscripts, publishing internationally and medical writing. Results of an online questionnaire. *Coll Antropol*. 2013 Mar;37(1):165-8.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME AND LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Asja Stipić Marković, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Special Hospital for Pulmonary Diseases, Rockefellerova 3, Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Mechanisms of allergic reactions

BIOGRAPHY

WORK EXPERIENCE

2018–present Special Hospital for Pulmonary Diseases

1978–2018 Head of Department for Clinical immunology, pulmonology, rheumatology University hospital Sveti Duh (Croatia)

Head of Referral Centre for Clinical immunology, Ministry of Health, Republic of Croatia

EDUCATION AND TRAINING

1971–1976 MD Medical School, University of Zagreb (Croatia)

1978–1983 Postgraduate study in Biomedicine and Health PRIRODOSLOVNO MATEMATIČKI FAKULTET

Master thesis - Determination of biological potency of pollen allergen *Ambrosia elatior* by biological standardization

1978–1982 Specialization in Internal medicine University hospital Sveti Duh (Croatia) Specialist in Internal medicine

1987. Scholarship of British Council, visit of National Heart and Lung Institute, London, England

1995. International course "European asthma school", Ghent, Belgium

1996. Management in health care, Dartmouth-Hitchcock Medical Center, Lebanon, USA

1997–1999 subspecialization in allergology and clinical immunologist Medical school University of Zagreb, subspecialist in allergology and clinical immunology

1997. International course "New technologies in asthma and COPD", Vienna, Austria

1998. International course about team work in Intensive care units (The American International Health Alliance), Zagreb

1999 Dissertation "Influence of specific bronchial hyperreactivity on cellular immunity changes"

2002 Summer school of European academy of Allergology and Clinical, Sofia, Bulgaria

2004 Summer school of European academy of Allergology and Clinical immunology Cavtat (Croatia)

2004 pulmonologist Medical school University of Zagreb, subspecialist in pulmonary diseases

2013 Management of pulmonary hypertension Europejskije Centrum Zdrowia, Medical University of Warsaw, Otwock (Poland)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: Dec 19, 2011.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Stipić-Marković A. Determination of biological potency of pollen allergen *Ambrosia elatior* by biological standardization (Master thesis). Zagreb: University of Zagreb; 1987, p.100. [in Croatian]
2. Stipić-Marković A. Effect of specific bronchial hyperreactivity upon changes in cellular immunity (Dissertation). Zagreb: University of Zagreb, 1998, p.98. [in Croatian]

3. Pevec B, Radulovic Pevec M, Stipic Markovic A, Batista I. House Dust Mite Subcutaneous Immunotherapy Does Not Induce New Sensitization to Tropomyosin: Does It Do the Opposite? *J Invest Allergol Clin Immunol* 2014;24:29-34.
4. Pevec B, Radulovic Pevec M, Stipic Markovic A, Batista I. House dust mite-specific immunotherapy and tropomyosin sensitizations: harm or benefit for patients? *Clin Translat Allergy* 2013 (Suppl 3):P44 DOI: 10.1186/2045-7022-3-S3-P44
5. Pevec B, Radulovic Pevec M, Stipic Markovic A, Batista I, Rijavec M, Silar M, Kosnik M, Korosec P. House dust mite-specific immunotherapy alters the basal expression of T regulatory and FcεRI pathway genes. *Int Arch Allergy Immunol* 2012;159:287-96.
6. Stipić Marković A. Investment in allergic diseases care in Republic of Croatia. Book of abstracts, symposium Croatian Society of Allergology Clin Immunology „Without allergens diagnostic and therapeutic procedures in allergy are not possible“, Zagreb, 2012, str.5-28. [in Croatian]
7. Pevec B, Radulović Pevec M, Stipić Marković A, Batišta I. Pathophysiologic mechanisms in development and therapy of allergic diseases [in Croatian]. *Acta Med Croatica* 2011;65:391-403.
8. Stipić Marković A. European declaration of immunotherapy. Book of abstracts, symposium Croatian Society of Allergology Clin Immunology „Specific immunotherapy“, Zagreb, 2011, pages 8-15 [in Croatian]
9. Stipić-Marković A. Asthma phenotypes and immunologic mechanisms homeostasis [in Croatian]. *Acta Med Croat* 2011;62:129-34.
10. Stipić-Marković A, Pevec B, Radulović Pevec M, Turkalj M, Zimić L, Čvorišćec B. High prevalence of skin sensitization to inhalant allergens in school children from Zagreb, Croatia. *Period Biol* 2007;109:161-4.
11. Stipić-Marković A, Pevec B, Radulović-Pevec M, Čustović A, Predović J. Allergic diseases in relationship with environmental factors in a population of school children in Zagreb, Croatia. *Arh Hig Rada Toksikol* 2004;55:221-8.
12. Stipić-Marković A, Čvorišćec B, Klobučar H, Stipić J. Effect of specific immunotherapy on the CD45RA molecule in peripheral blood lymphocytes. *Period Biol* 1999; 82:77-82.
13. Treščec A, Kolevska T, Čvorišćec B, Krnić B, Stipić-Marković A, Tuđman Z, Dekaris D. Characterisation and partial purification of an Croatian national standard Dermatophagoides pteronyssinus allergen extract. *Allergy* 1993;48:454-9.
14. Kljaić-Turkalj M, Čvorišćec M, Tudorić N, Stipić-Marković A, Rabatić S, Treščec A, Gagro A, Dekaris D. Decrease of CD23+ lymphocytes and clinical outcome in asthmatic patients receiving rush immunotherapy. *Int Arch Allergy Immunol* 1996;111:188-94.
15. Čvorišćec B, Ustar M, Pardon R, Paleček I, Stipić-Marković A, Zimic B. Oral immunotherapy of Chronic Bronchitis: A Double-Blind Placebo-Controlled Multicentre Study. *Respiration* 1989; 55:129-35.
16. Stipić-Marković A, Sket-Janković N, Čvorišćec B, Matijević Lj, Tuđman Z, Dekaris D. Reevaluation by biological standardization of known allergenic potency of a Dactylis glomerata extract. *Period Biol* 1986;88:198-9.
17. Sket-Janković N, Stipić-Marković A, Čvorišćec B, Tuđman Z, Paleček I, Reiner-Banovac Ž, Petrović S. Estimation of the allergenic activity of Dactylis glomerata pollen extract by inhibition of RAST assay. *Period Biol* 1986; 88:195-7.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Stipić Marković A, Valetić AM, Prkačin I. Sex-differentiated Incidence of Autoimmune Diseases in Women and Association with Cardiovascular Risk [in Croatian]. *Cardiologia Croatica*, 2018;13:263-9.
2. Pavliša G, Bulat Kardum Lj, Puretić H, Žuljević E, Stipić-Marković A, Barković I, Žagar M, Artuković M, Matijević M, Samaržija M. Guidelines for noninvasive mechanical ventilation for treatment of chronic respiratory failure [in Croatian]. *Liječ Vjesn* 2018;140:1–6.

3. Roginić S, Jelić A, Stipić-Marković A, Artukovic M, Nadinić Artuković I, Martinović-Kaliterna D. Autoimmune pitfalls of anti-TNF α therapy illustrated by a case report. IMAJ 2015;17:117-9.
4. Stipić Marković A, Ivković-Jureković I, Dodig S, Batišta I, Barberić M, Topalušić I, Bukovec Megla Ž, Žižić Vesna. Croatian Guidelines for in vitro Diagnosis of IgE Mediated Hypersensitivity [in Croatian]. Acta Meda Croat 2015;69:75-96.
5. Stipić Marković A, Rožmanić V, Anić B, Aberle N, Račić G, Novak S, Sunara D, Grdinić B, Karadža-Lapić Lj, Ražov Radas M, Karanović B, Kvenić B. Guidelines for the diagnosis and treatment of hereditary angioedema [in Croatian]. Liječn Vjesn 2014;136:117-29.
6. Pevec B, Radulovic Pevec M, Stipic Markovic A, Batista I. House Dust Mite Subcutaneous Immunotherapy Does Not Induce New Sensitization to Tropomyosin: Does It Do the Opposite? J Investig Allergol Clin Immunol 2014;24:29-34.
7. Pevec B, Radulovic Pevec M, Stipic Markovic A, Batista I. House dust mite-specific immunotherapy and tropomyosin sensitizations: harm or benefit for patients? Clin Translat Allergy 2013 (Suppl 3):P44 DOI: 10.1186/2045-7022-3-S3-P44.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Projects

1. "The biodiversity hypothesis in allergic diseases: prevalence of allergic symptoms in school children in region of natural park Lonjsko polje, Croatia", sponsored by trust fund Adris, Croatia, 2014
2. Collaborator on project „Characterisation of osteoclastic progenitors reaction in arthritis", 2014

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Projects

1. "The biodiversity hypothesis in allergic diseases: prevalence of allergic symptoms in school children in region of natural park Lonjsko polje, Croatia", sponsored by trust fund Adris, Croatia, 2014
2. Collaborator on project „Characterisation of osteoclastic progenitors reaction in arthritis", 2014

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Feodora Stipoljev, assoc.prof.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Clinical Hospital „Sveti Duh“

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Molecular and biochemical approach to genetic disorders; Methods of molecular biology in medicine

BIOGRAPHY

Born: Split, 1969. Education: Faculty for Natural Sciences, University of Zagreb (1988-1993.), Master's degree (1999.) and PhD (2006.) MF Zagreb. Training and work experience: 1995. Genetic Laboratory of the Department of Prenatal Diagnosis and Therapy, General Hospital Wien, Austria, 2006 European School of Genetic Medicine, Ljubljana, Slovenia, 2013 „Skills in medicine teaching process“, Medical Faculty University of Split, 1993-1994. Volunteer on an International project, Faculty of Veterinary Medicine, University of Zagreb; 1994. Head of Cytogenetic Laboratory, Clinical Hospital „Sveti Duh“, 2008-2009. senior assistant, 2009. Assist. Professor, Faculty of Medicine, University of Osijek, 2014. Associate professor. Projects: Collaborator on two projects. Teaching experience: Education and training of undergraduate and postgraduate students, leader of three elective courses, reviewer of articles, mentor of three Ph.D. theses. Scientific interest: Prenatal and postnatal diagnosis, genetics of sterility and infertility; screening methods of chromosomal and genetic diseases in prenatal diagnosis.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2014.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Spittel H, Kubek F, Kreskowski K, Ziegler M, Klein E, Hamid AB, Kosyakova N, Radhakrishnan G, Junge A, Kozlowski P, Schulze B, Martin T, Huhle D, Mehnert K, Rodríguez L, Ergun MA, Sarri C, Militaru M, Stipoljev F, Tittelbach H, Vasheghani F, de Bello Cioffi M, Hussein SS, Fan X, Volleth M, Liehr T. Mitotic stability of small supernumerary marker chromosomes: a study based on 93 immortalized cell lines. *Cytogenet Genome Res.* 2014;142(3):151-60.
2. Vlatkovic IB, Hafner T, Miskovic B, Vivic A, Poljak B, Stipoljev F. Prenatal diagnosis of sex chromosome aneuploidies and disorders of sex development- a retrospective analysis of 11- year data. *J Perinat Med.* 2014 Jan 17:1-6.
3. Stipoljev F, Vičić A, Matijević R. Prenatal diagnosis of pericentric inversion homozygosity for chromosome 9. *J Obstet Gynaecol.* 2014;34(2):189-90.
4. Stipoljev F, Miric-Tesanic D, Hafner T, Barbalic M, Logara M, Lasan-Trcic R, Vivic A, Gjergja-Juraski R. Prenatal diagnosis of complex phenotype in a 13-week-old fetus with an interstitial multigene deletion 20q13.13.-q13.2 by chromosomal microarray. *Eur J Med Genet.* 2017;60(11):589-594.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Spittel H, Kubek F, Kreskowski K, Ziegler M, Klein E, Hamid AB, Kosyakova N, Radhakrishnan G, Junge A, Kozlowski P, Schulze B, Martin T, Huhle D, Mehnert K, Rodríguez L, Ergun MA, Sarri C, Militaru M, Stipoljev F, Tittelbach H, Vasheghani F, de Bello Cioffi M, Hussein SS, Fan X, Volleth M, Liehr T. Mitotic stability of small supernumerary marker chromosomes: a study based on 93 immortalized cell lines. *Cytogenet Genome Res.* 2014;142(3):151-60.



2. Vlatkovic IB, Hafner T, Miskovic B, Vicic A, Poljak B, Stipoljev F. Prenatal diagnosis of seks chromosome aneuploidies and disorders of sex development- a retrospective analysis of 11- year data. J Perinat Med. 2014 Jan 17:1-6.
3. Stipoljev F, Vičić A, Matijević R. Prenatal diagnosis of pericentric inversion homozygosity for chromosome 9. J Obstet Gynaecol. 2014;34(2):189-90.
4. Stipoljev F, Miric-Tesanic D, Hafner T, Barbalic M, Logara M, Lasan-Trcic R, Vicic A, Gjergja-Juraski R. Prenatal diagnosis of complex phenotype in a 13-week-old fetus with an interstitial multigene deletion 20q13.13.-q13.2 by chromosomal microarray. Eur J Med Genet. 2017;60(11):589-594.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ranko Stojković, PhD, senior scientist, D.M.V

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Laboratory animals in biomedical research

BIOGRAPHY

Education:

1994. D. M. V. degree - Faculty of Veterinary Medicine, University of Zagreb - Croatia.

1999. M. Sc. - Faculty Science, University of Zagreb – Croatia; Field Biomedicine, oncology.

2003. Ph.D. - Faculty of Veterinary Medicine, University of Zagreb - Croatia; Field Natural science, Biomedicine and health, veterinary medicine.

2013. Certified GLP Manager - The Centre for Professional Innovation & Education, Inc. Malvern, PA 19355, USA

Scientific activities

Author/coauthor of 36 original scientific articles published in journals indexed in SCI Expanded -WOS.

Author/coauthor of 7 original scientific articles published in other journals. Author/coauthor in 2 book chapters. Author/coauthor of several scientific articles published in meeting proceedings. Cited 487 times, WOS, h-index 9.

Teaching Activities:

2003. – 2010. Lecturer on postgraduate course: “Laboratory Animals in Biomedical Research” - Medicinal Faculty University of Zagreb - Croatia.

2005. – 2010. Lecturer on postgraduate course: “Breeding and care for laboratory animals” - Faculty of Veterinary Medicine, University of Zagreb – Croatia.

2005. – 2010. Lecturer on postgraduate course: “Biology of laboratory animals” - Faculty of Veterinary Medicine, University of Zagreb – Croatia.

2008. Mentor of M.Sc. Thesis – Faculty of Science University of Zagreb - Croatia.

2010. – Present Director of: “Laboratory Animals in Biomedical Research” course on Doctoral PhD study - Medicinal Faculty University of Zagreb - Croatia.

2010. – 2018. Director of: “Use of animal models in experimental oncology” course on Doctoral PhD study - Medicinal Faculty University of Zagreb - Croatia.

2011. – 2014. Director of postgraduate course: “Breeding and care for laboratory animals” - Faculty of Veterinary Medicine, University of Zagreb – Croatia

2011. – 2014. Director of postgraduate course; “Biology of laboratory animals” - Faculty of Veterinary Medicine, University of Zagreb – Croatia.

2011. – 2014. Director of postgraduate course; “Genetics of Laboratory Animals” - Faculty of Veterinary Medicine, University of Zagreb – Croatia.

2011. Mentor of PhD. Thesis – Faculty of Science University of Zagreb - Croatia.

2012. –Present Director of postgraduate course "Laboratory animals and biomedical research" at the postgraduate interdisciplinary doctoral study - Molecular Biosciences, University of Josip Juraj Strossmayer in Osijek, Dubrovnik University and the Institute Ruđer Bošković Zagreb

2012. – Present. Director of postgraduate course "Animal models of rodents in experimental oncology," on Doctoral PhD study Faculty of Science, University of Zagreb – Croatia..

2012. – 2014. Director of postgraduate course "The well-being of experimental animals" - Faculty of Veterinary Medicine, University of Zagreb – Croatia.

Other scientific and professional activities:

2004. - 2009 Member of several committees for Legislation affairs regarding laboratory animals. - Ministry of agriculture, fisheries and water management of the Republic of Croatia.

2005 – 2010. Croatian coordinator in COST B-24 Initiative: Laboratory Animal Science and Welfare.

2005. – 2013. Member of working group for preparation of negotiations for Chapter 12. Food Safety, Veterinary and Phytosanitary Policy in Croatia – EU Accession Negotiations.

2008. Reviewer of Study programs on Croatian Universities.

2008. – 2014. European Science Foundation (EFS) – European Medical Research Councils member of Expert group for Animals in Biomedical Research.

2009. - Present Member of tithe committees for Legislation affairs regarding protection of animals used in scientific purposes. - Ministry of Agriculture, Fisheries and Rural Development – RH.

2010. - Present President of Bioethical committee on Ruđer Bošković Institute

2010. – 2014. Vice president of National Ethical committee – Ministry of Agriculture, Fisheries and Rural Development – RH.

2014. – 2018. President of National Ethical committee – Ministry of Agriculture – RH.

2018. EU Expert Evaluator H2020-JTI-IMI2-2018

Courses

2000. ICLAS/FELASA Education Program on Laboratory Animal Science (FELASA category C). Budapest – Hungary. 2000.

2000. Animal welfare course - Royal Society for the Prevention of Cruelty to Animals – GB.

2005. Eumorphia-EMBO Summer School “The Mouse as a Model for Human Disease”. Organization: Eumorphia-EMBO. Bischoffsheim, Strasbourg, France 17. – 23. 09. 2005.

2005. Eumorphia Training Course: Introduction to Mouse Pathology-Mouse Models of Human Cancer. The Netherlands Cancer Institute, Amsterdam. Netherland. 21. – 23. 11. 2005.

2010. Certified Course: Good Laboratory Practices (GLP) for Pre-Clinical Testing. The Center for Professional Innovation & Education, Malvern PA, USA. Malvern PA, USA 25. – 26. 01. 2010.

2010. Charles River Seminar - Quality considerations in drug discovery and drug development process - from early in-vivo research up to manufacturing, Budapest – Hungary 28. 05. 2010.

2010. Certified course: Writing Effective Standard Operating Procedures and Other Process Documents. The Center for Professional Innovation & Education, Malvern PA, USA. 27. – 28. 09. 2010.

2011. Certified course: Practical Methods for Project Management. The Center for Professional Innovation & Education, Malvern PA, USA. 12. –13. 05. 2011.

2012. Organization and procedures in the modern laboratory animal facility, Fondazione Guido Bernardini, Milano-Italia. 12.-15. 06. 2012.
2012. Facility planning, logistics and technological solutions, Fondazione Guido Bernardini, Milano-Italia. 29.-30. 11. 2012.
2013. Zebrafish: an animal model in biomedical research, London, GB, Organizers: King's College London GB, Fondazione Guido Bernardini IT, University College London GB, COST Action: BM 0804 European Network on Fish Biomedical Models (EuFishBioMed) 23.-24. 05.2013.
2013. Certified course: Clinical Trial Project Management for Phase 1 thru Phase 4: Best Practices. The Center for Professional Innovation & Education, Malvern PA, USA. 23. – 25. 10. 2013.
2014. Cryopreservation of Mouse Germplasm, Rim, Italia. 20. – 24. 10. 2014.
2016. Training in Systematic Reviews of Animal Studies. Bigugiate, Italia. 12. 04. 2016.

Invited lectures:

2016. 06.10. – Croatian Academy of Sciences and Arts and Department of Clinical and Transplantation Immunology and Molecular Medicine in Rijeka - Contemporary views on ethical principles in work with experimental animals.
2017. 10. 02. Croatian Society for Science on Laboratory Animals - How to apply for Research on Animals
2018. 12. 06. Croatian Chemical Society - Animal models in biomedical research

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2009.-Senior scientist 2016. - Titular docent

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Zaytseva, Olga; Jansen, Bas; Hanić, Maja; Mrčela, Mia; Razdorov, Genadij; Stojković, Ranko; Erhardt, Julija; Brizić, Ilija; Jonjić, Stipan; Pezer, Marija; Lauc, Gordan: MlgGly (mouse IgG glycosylation analysis) - a high-throughput method for studying Fc-linked IgG N-glycosylation in mice with nanoUPLC-ESI-MS. // Scientific Reports, 8 (2018), 13688, 9 doi:10.1038/s41598-018-31844-1
- Fučić, Aleksandra; Guszak, Vedrana; Keser, Toma; Wagner, Jasenka; Juretić, Emilija; Plavec, Davor; Stojković, Ranko; Gornik, Olga; Lauc, Gordan: Micronucleus, cell-free DNA and plasma glycan composition in the newborns of healthy and diabetic mothers. // Mutation research. Genetic toxicology and environmental mutagenesis, 815 (2017), 6-15 doi:10.1016/j.mrgentox.2017.01.002
- Stojković, Ranko; Fučić, Aleksandra; Ivanković, Dušica; Jukić, Zoran; Radulović, Petra; Grah, Josip; Kovačević, Nenad; Barišić, Lovro; Krušlin, Božo: Age and sex differences in genome damage between prepubertal and adult mice after exposure to ionising radiation. // Arhiv za higijenu rada i toksikologiju – Archives of Industrial Hygiene and Toxicology, 67 (2016), 4; 297-303 doi:10.1515/aiht-2016-67-2882
- Marković, Darko; Katić, Jelena; Stojković, Ranko; Borović, Suzana; Žarković, Neven; Fučić, Aleksandra : Lipid peroxidation, detoxification capacity, and genome damage in mice after transplacental exposure to pharmaceutical drugs. // Brazilian journal of medical and biological research, 46 (2013), 12; 1014-1020 doi:10.1590/1414-431X20132814
- Mišir, Krpan, Ana; Ivanković, Siniša; Krajina, Zdenko; Ivanković, Dušica; Stojković, Ranko: Tamoxifen in trimodal therapy with cytotoxic drugs and hyperthermia in vivo significantly enhance therapeutic efficacy against B16-F10 melanoma. // Tumori, 98 (2012), 2; 257-263 doi:10.1700/1088.11939

Fučić, Aleksandra; Stojković, Ranko; Miškov, Snježana; Želježić, Davor; Marković, Darko; Gjergja, Romana; Katić, Jelena; Jazbec, Anamarija; Ivičević Bakulić, Tomislav; Demarin, Vida: Transplacental genotoxicity of antiepileptic drugs: animal model and pilot study on mother/newborn cohort. // *Reproductive toxicology*, 30 (2010), 4; 613-618 doi:10.1016/j.reprotox.2010.08.008

Fučić, Aleksandra; Stojković, Ranko; Katić, Jelena; Marković, Darko; Ferenčić, Željko; Koršić, Mirko; Jazbec, Ana-Marija; Gamulin Marija: Animal model for age and sex related genotoxicity of diethylstilbestrol. // *Brazilian Journal of Medical and Biological Research*, 42 (2009), 11; 1090-1096

Fučić, Aleksandra; Marković, Darko; Herceg, Zdenko; Gamulin, Marija; Katić, Jelena; Stojković, Ranko; Ferenčić, Željko; Mildner, Boris; Jazbec Ana-Marija; Dobranić Tomislav: Developmental and transplacental genotoxicology: Fluconazole. // *Mutation research. Genetic toxicology and environmental mutagenesis*, 657 (2008), 1 Special Issue; 43-47 doi:10.1016/j.mrgentox.2008.08.008

Ivanković, Siniša; Stojković, Ranko; Jukić, Mila; Miloš, Mladen; Miloš, Mia; Jurin, Mislav: The antitumour activity of thymoquinone and thymohydroquinone in vitro and in vivo. // *Experimental oncology*, 28 (2006), 3; 220-224

Stojković, Ranko; Karminski-Zamola, Grace; Racane, Livio; Tralić-Kulenović, Vesna; Glavaš-Obrovac, Ljubica; Ivanković, Siniša; Radačić, Marko: Antitumour efficiency of novel fluoro substituted 6-amino-2-phenylbenzothiazole hydrochloride salts in vitro and in vivo. // *Methods and Findings in Experimental and Clinical Pharmacology*, 28 (2006), 6; 347-354

Stojković, Ranko; Radačić, Marko: Cell killing of melanoma B16 in vivo by hyperthermia and cytotoxins. // *International Journal of Hyperthermia*, 18 (2002), 1; 62-71

Pavelić, Krešimir; Katić, Maša; Šverko, Višnja; Marotti, Tanja; Bošnjak, Berislav; Balog, Tihomir; Stojković, Ranko; Radačić, Marko; Čolić, Miroslav; Poljak-Blaži, Marija: Immunostimulatory effect of natural clinoptilolite as a possible mechanism of its antimetastatic ability. // *Journal of Cancer Research Clinical Oncology*, 128 (2002), 37-44

Stojković, Ranko; Radačić Marko: Utjecaj hranidbe na uzgoj hrčaka. // *Krmiva*, 40 (1998), 1; 11-15

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Zaytseva, Olga; Jansen, Bas; Hanić, Maja; Mrčela, Mia; Razdorov, Genadij; Stojković, Ranko; Erhardt, Julija; Brizić, Ilija; Jonjić, Stipan; Pezer, Marija; Lauc, Gordan: MlgGGly (mouse IgG glycosylation analysis) - a high-throughput method for studying Fc-linked IgG N-glycosylation in mice with nanoUPLC-ESI-MS. // *Scientific Reports*, 8 (2018), 13688, 9 doi:10.1038/s41598-018-31844-1

Grienke, Ulrike; Radić Brkanac, Sandra; Vujčić, Valerija; Urban, Ernst; Ivanković, Siniša; Stojković, Ranko; Rollinger, Judith M.; Kralj, Juran; Brozović, Anamaria; Radić Stojković, Marijana: Biological Activity of Flavonoids and Rare Sesquiterpene Lactones Isolated From *Centaurea ragusina* L.. // *Frontiers in Pharmacology*, 9 (2018), 972, 15 doi:10.3389/fphar.2018.00972

Marasović Maja; Ivanković Siniša; Stojković Ranko; Đermić Damir; Galić Borivoj; Miloš Mladen: In vitro and in vivo antitumour effects of phenylboronic acid against mouse mammary adenocarcinoma 4T1 and squamous carcinoma SCCVII cells.. // *Journal of enzyme inhibition and medicinal chemistry*, 32 (2017), 1; 1299-1304 doi:10.1080/14756366.2017.1384823

Vujčić, Valerija; Radić Brkanac, Sandra; Radojčić Redovniković, Ivana; Ivanković, Siniša; Stojković, Ranko; Žilić, Irena; Radić Stojković, Marijana: Phytochemical and Bioactive Potential of in vivo and in vitro Grown Plants of *Centaurea ragusina* L. – Detection of DNA/RNA Active Compounds in Plant Extracts via Thermal

Denaturation and Circular Dichroism. // *Phytochemical analysis*, 28 (2017), 6; 584-592
doi:10.1002/pca.2708

Fučić, Aleksandra; Guszak, Vedrana; Keser, Toma; Wagner, Jasenka; Juretić, Emilija; Plavec, Davor; Stojković, Ranko; Gornik, Olga; Lauc, Gordan: Micronucleus, cell-free DNA and plasma glycan composition in the newborns of healthy and diabetic mothers. // *Mutation research. Genetic toxicology and environmental mutagenesis*, 815 (2017), 6-15 doi:10.1016/j.mrgentox.2017.01.002

Ivanković, Siniša; Stojković, Ranko; Maksimovic, Milka; Galić, Borivoj; Miloš, Mladen: Impact of calcium ion on cytotoxic effect of the boroxine derivative, K₂[B₃O₃F₄OH]. // *Journal of enzyme inhibition and medicinal chemistry*, 31 (2016), S3; 70-74 doi:10.1080/14756366.2016.1204611

Stojković, Ranko; Fučić, Aleksandra; Ivanković, Dušica; Jukić, Zoran; Radulović, Petra; Grah, Josip; Kovačević, Nenad; Barišić, Lovro; Krušlin, Božo: Age and sex differences in genome damage between prepubertal and adult mice after exposure to ionising radiation. // *Arhiv za higijenu rada i toksikologiju – Archives of Industrial Hygiene and Toxicology*, 67 (2016), 4; 297-303 doi:10.1515/aiht-2016-67-2882

Stojković, Ranko; Ivanković, Siniša; Ivanković, Dušica; Attias, Leonello; Mantovani, Alberto; Fučić, Aleksandra.: Testosterone-induced micronuclei and increased nuclear division rate in L929 cell line expressing the androgen receptor. // *Toxicology in vitro*, 29 (2015), 5; 1021-1025
doi:10.1016/j.tiv.2015.04.007

Kesić, Maja; Tvrdeić, Ante; Kolarić, Darko; Stojković, Ranko; Čičin-Šain, Lipa: Serotonergic modulation of pain and analgesic responses : a study in rats with constitutionally altered serotonin transporters. // *European journal of pain*, 19 (2015), 4; 508-515 doi:10.1002/ejp.574

Ivanković, Siniša; Stojković, Ranko; Galić, Zoran; Galić, Borivoj; Ostojić, Jelena; Marasović, Maja; Miloš, Mladen : In vitro and in vivo antitumor activity of the halogenated boroxine dipotassium-trioxohydroxytetrafluorotriborate (K₂[B₃O₃F₄OH]). // *Journal of enzyme inhibition and medicinal chemistry*, 30 (2015), 3; 354-359 doi:10.3109/14756366.2014.926344 (

Racane, Livio; Stojković, Ranko; Tralić- Kulenović, Vesna; Cerić, Helena; Đaković, Marijana; Ester, Katja; Mišir Krpan, Ana; Radić Stojković, Marijana: Interactions with polynucleotides and antitumor activity of amidino and imidazolynyl substituted 2-phenylbenzothiazole mesylates. // *European journal of medicinal chemistry*, 86 (2014), 406-419 doi:10.1016/j.ejmech.2014.08.072

Vulić, Ana; Pleadin, Jelka; Durgo, Ksenija; Scortichini, Giampiero; Stojković, Ranko: Comparison of clenbuterol and salbutamol accumulation in the liver of two different mouse strains. // *Journal of analytical toxicology*, 38 (2014), 5; 265-271 doi:10.1093/jat/bku022

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2002 - 2006 Project of the Ministry of Science and Technology of the Republic of Croatia: "Effects of new drugs and hyperthermia on tumor growth and human xenograft"

2007 - 2011 Project of the Ministry of Science and Technology of the Republic of Croatia: "New approaches to the treatment of malignant diseases".

2003. Project Principal Investigator: 90 Day Oral Toxicity Study in Mice Derived for Medigence LLC, Chapel Hill, U.S.A.

2004. Researcher on the project to determine the in vivo anti-tumor efficacy of N-sulfonylcytosine derivatives derived from Biozyne d.o.o.



2007 - 2014 Project of the Ministry of Science of Education and Sports of the Republic of Croatia "New therapeutic modalities in the treatment of malignant diseases." - director

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2018 - Today Molecular DNA Recognition: RNA Hybrid and Multi-Channel Structures in Bioanalytic and In Vitro Systems - IP Foundation of the Croatian Foundation for Science

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Marina Šagud, Assistant Professor, Psychiatrist

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb,
University Hospital Centre Zagreb, Department of Psychiatry

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research Methods of
Psychological Functions and Behavior ; Clinical psychopharmacology

BIOGRAPHY

Education and Training

- 1982-1988; School of Medicine, University of Zagreb
- 1989-1990; Rotating internship, Institute for Physical Medicine and Rehabilitation, Zagreb
- 1991-1993; Postgraduate study in Clinical Pharmacology, School of Medicine, University of Zagreb
- 1993-1997; Psychiatric Residency at University Hospital Center Zagreb, Department of Psychiatry
- April 2007; PhD Degree at School of Medicine, University of Zagreb, Thesis: "Platelet serotonin, platelet monoamine-oxidase and serum lipid levels in patients with affective disorders". Mentor: Professor Alma Mihaljević-Peleš

Professional Experience

- 1991-1993; Pharmaceutical Company „Pliva“
- 1993-1997; Psychiatric Resident at University Hospital Center Zagreb, Department of Psychiatry
- 1997-2008; Ward Physician at the Unit for Biological Psychiatry, Department of Psychiatry, University Hospital Center Zagreb
- 2009-2011; Chief of Unit for Schizophrenia and Other Psychotic Disorders as a part of Unit for Integrative Psychiatry, Department of Psychiatry, University Hospital Center Zagreb
- 2011-2014; Chief of Intensive Care Unit for Mood Disorders, Department of Psychiatry, University Hospital Center Zagreb
- 2014.; Head of Department for Schizophrenia, University Hospital Center Zagreb
- 2004-2014; Consultant for Croatian Department of Veteran Affairs
- 2008-; Assistant in Psychiatry, School of Medicine, University of Zagreb
- 2010-; Coordinator for e-learning in Psychiatry, School of Medicine, University of Zagreb
- 2012- Assistant Professor, School of Medicine, University of Zagreb

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: September, 2012

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Šagud M, Tudor L, Nikolac Perković M, Uzun S, Živković M, Konjevod M, Kozumplik O, Vuksan Ćusa B, Švob Štrac D, Mihaljević-Peleš A, Radoš I, Mimica N, Nedić Erjavec G, Pivac N. Haplotypic and genotypic association of catechol-O-methyltransferase rs4680 and rs4818 polymorphisms and treatment resistance in schizophrenia. *Front Pharmacology* 2018; 9:705. Mihaljević-Peleš A, Bajs Janović M, Stručić A, Šagud M, Skočić Hanžek M, Živković M, Janović Š. Electroconvulsive therapy - general considerations and experience in Croatia. *Psychiatr Danub* 2018;30(Suppl 4):188-91.

Šagud M, Vlatković S, Švob Štrac D, Sviben M, Živković M, Vilibić M, Vuksan-Ćusa B, Mihaljević-Peš A, Pivac N. Latent *Toxoplasma gondii* infection is associated with decreased serum triglyceride to high-density lipoprotein cholesterol ratio in male patients with schizophrenia. *Compr Psychiatry* 2018;82:115-20.

Šagud M, Vuksan-Ćusa B, Jakšić N, Mihaljević-Peš A, Živković M, Vlatković S, Prčić T, Marčinko D, Wang W. Nicotine dependence in Croatian male inpatients with schizophrenia. *BMC Psychiatry* 2018;18(1):18.

Sagud M, Mihaljevic-Peles A, Uzun S, Cusa BV, Kozumplik O, Kudlek-Mikulic S, Mustapic M, Barisic I, Muck-Seler D, Pivac N. The lack of association between components of metabolic syndrome and treatment resistance in depression. *Psychopharmacology* 2013; 230(1):15-21.

Sagud M, Mihaljevic-Peles A, Pivac N, Jakovljevic M, Muck-Seler D. Lipid levels in female patients with affective disorders. *Psychiatry Res.* 2009;168(3):218-21.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Šagud M, Petrović B, Vilibić M, Mihaljević-Peš A, Vuksan-Ćusa B, Radoš I, Greš A, Trkulja V. The relationship among psychopathology, religiosity, and nicotine dependence in Croatian war veterans with posttraumatic stress disorder. *Croat Med J* 2018;59(4):165-77.

2) Tudor L, Konjevod M, Nikolac Perković M, Svob Strac D, Nedic Erjavec G, Uzun S, Kozumplik O, Sagud M, Kovacic Petrovic Z, Pivac N. Genetic Variants of the Brain-Derived Neurotrophic Factor and Metabolic Indices in Veterans with Posttraumatic Stress Disorder. *Frontiers in Psychiatry* 2018;9:637.

3) Šagud M, Vuksan-Ćusa B, Jakšić N, Mihaljević-Peš A, Rojnić Kuzman M, Pivac N. Smoking in Schizophrenia: an Updated Review. *Psychiatr Danub* 2018;30Suppl 4:216-23.

4) Vuksan Ćusa B, Klepac N, Jakšić N, Bradaš Z, Božičević M, Palac N, Šagud M. The Effects of Electroconvulsive Therapy Augmentation of Antipsychotic Treatment on Cognitive Functions in Patients With Treatment-Resistant Schizophrenia. *J ECT* 2018;34(1):31-4.

8) Vlatković S, Šagud M, Švob Štrac D, Sviben M, Živković M, Vilibic M, Vuksan-Cusa B, Mihaljević-Peš A, Pivac N. Increased prevalence of *Toxoplasma gondii* seropositivity in patients with treatment-resistant schizophrenia. *Schizophr Res* 2018;93:480-81.

9) Šagud M, Jakšić N, Vuksan-Ćusa B, Lončar M, Lončar I, Peš AM, Miličić D, Jakovljević M. Cardiovascular Disease Risk Factors in Patients with Posttraumatic Stress Disorder (PTSD): A Narrative Review. *Psychiatr Danub* 2017;29(4):421-43.

10) Kudlek Mikulic S, Mihaljevic-Peles A, Sagud M, Bajs Janovic M, Ganoci L, Grubisin J, Kuzman Rojnic M, Vuksan Cusa B, Bradaš Z, Božina N. Brain-derived neurotrophic factor serum and plasma levels in the treatment of acute schizophrenia with olanzapine or risperidone: 6-week prospective study. *Nord J Psychiatry* 2017;71(7):513-20.

11) Ganoci L, Lovrić M, Živković M, Šagud M, Klarica Domjanović I, Božina N. The Role Of Cyp2d6, Cyp3a4/5, And Abcb1 Polymorphisms In Patients Using Long-Acting Injectable Risperidone. *Clin Ther.* 2016;38(10S):e10-e11.

12) Mihaljevic-Peles A, Sagud M, Filipčić IS, Grosic V, Pedisic I, Emsley R. Remission and employment status in schizophrenia and other psychoses: One-year prospective study in Croatian patients treated with risperidone long acting injection. *Psychiatr Danub* 2016; 28(3):263-72.

- 13) Šagud M, Vuksan-Ćusa B, Božina N, Lovrić M, Mihaljević-Peleš A, Kramarić M. Olanzapine Long-Acting Injections After Neuroleptic Malignant Syndrome: Two Case Reports. *J Clin Psychopharmacol* 2016; 36(6):733-35.
- 14) Sagud M, Nikolac Perkovic M, Vuksan-Cusa B, Maravic A, Svob Strac D, Mihaljevic Peles A, Zivkovic M, Kusevic Z, Pivac N. A prospective, longitudinal study of platelet serotonin and plasma brain-derived neurotrophic factor concentrations in major depression: effects of vortioxetine treatment. *Psychopharmacology* 2016; 233(17):3259-67.
- 15) Vuksan-Ćusa B, Šagud M, Radoš I. The role of dehydroepiandrosterone (DHEA) in schizophrenia. *Psychiatr Danub* 2016;28(1):30-3.
- 16) Šagud M. Treatment-resistant schizophrenia: challenges and implications for clinical practice. *Psychiatr Danub* 2015;27(3):319-2.
- 17) Lončar M, Plašć ID, Bunjevac T, Hrabač P, Jakšić N, Kozina S, Henigsberg N, Sagud M, Marčinko D. Predicting symptom clusters of posttraumatic stress disorder (PTSD) in Croatian war veterans: the role of socio-demographics, war experiences and subjective quality of life. *Psychiatr Danub* 2014;26(3):231-8.
- 18) Vuksan-Ćusa B, Sagud M, Mihaljević-Peleš A, Jakšić N, Jakovljević M. Metabolic syndrome and cortisol/DHEAS ratio in patients with bipolar disorder and schizophrenia. *Psychiatr Danub* 2014; 26(2):187-9.
- 19) Nikolac Perkovic M, Nedic Erjavec G, Zivkovic M, Sagud M, Uzun S, Mihaljevic-Peles A, Kozumplik O, Muck-Seler D, Pivac N. Association between the brain-derived neurotrophic factor Val66Met polymorphism and therapeutic response to olanzapine in schizophrenia patients. *Psychopharmacology* 2014;231(18):3757-64.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

“Neuropharmacology of serotonergic system” sponsored by Ministry of Science No. 0098088 (Dorotea Muck-Šeler, PhD), (2001- 2006)

“Biological parameters in psychiatric disorders” sponsored by Ministry of Science No. 0108106 (Miro Jakovljević, MD, PhD, Professor), (2001- 2006)

2014-2015 project leader: “Predictors of treatment response in schizophrenia”, sponsored by University of Zagreb, project code: BM106

2015-2017-project leader: “the influence of religiosity on treatment outcome in depression: clinical and biochemical parameters”, sponsored by University of Zagreb, project code: BM126

2018-project leader: the impact of acute stress reaction and depressive disorder on the pathology of cardiovascular system, sponsored by University of Zagreb ; the project is still ongoing,

Investigator in the project: “Biomarkers in schizophrenia – integration of complementary methods in longitudinal follow up of first episode psychosis patients”; project code: 1247; project leader: Martina Rojnić Kuzman, Assistant Professor, the project is still ongoing,

Investigator in the project: European Commission’s Horizon 2020 Research Framework

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2014-2015 project leader: “Predictors of treatment response in schizophrenia”, sponsored by University of Zagreb, project code: BM106



2015-2017-project leader: “the influence of religiosity on treatment outcome in depression: clinical and biochemical parameters”, sponsored by University of Zagreb, project code: BM126

2018-project leader: the impact of acute stress reaction and depressive disorder on the pathology of cardiovascular system, sponsored by University of Zagreb ; the project is still ongoing,

Investigator in the project: “Biomarkers in schizophrenia – integration of complementary methods in longitudinal follow up of first episode psychosis patients”; project code: 1247; project leader: Martina Rojnić Kuzman, Assistant Professor, the project is still ongoing,

Investigator in the project: European Commission’s Horizon 2020 Research Framework

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Melita Šalković-Petrišić, MD, PhD, tenured professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Medical School University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical Neuropharmacology, Methods of investigation in vivo and in vitro

BIOGRAPHY

Prof. dr. sc. Melita Šalković-Petrišić

Laboratory of Molecular Neuropharmacology, Department of Pharmacology, Medical School University of Zagreb, Šalata 11, HR-10 000 Zagreb, Croatia (melitas@mef.hr)

EDUCATION/academic titles (Medical School University of Zagreb): MD (1982), PhD (1992), assistant professor (1997), associate professor (2003), professor (2008), and tenured professor (2013) of Pharmacology. POSTDOCTORAL IMPERFECTION: The Babraham Institute, Cambridge, UK (1994-95), Psychiatry Clinic, Wuerzburg, Germany (2003, 2004, 2005). SCIENTIFIC PROJECTS: (PI) 2x HRZZ, 2x MZOŠ, 1x UKF, 9x DAAD. MENTORSHIP: 2x HRZZ project for mentorship of PhD student, 5 PhD Thesis (2/5 in progress), awards of the PhD students: 1x State Award for Science for Research Junior, 2x best PhD thesis topic in basic biomedical sciences at Medical School University of Zagreb, 2x best congress poster presentation. SCIENTIFIC PRODUCTIVITY: 50 papers, >100 abstracts, 1138 heterocitations (WoS), h-index 17. SCIENTIFIC INTEREST: neurosciences, neuropharmacology, experimental Alzheimer's disease. TEACHING ACTIVITIES: graduate: Pharmacology/ Medical studies in Croatian and English (cocordinator); Doctoral studies: Biomedicine and Health (lecturer): Research methods in vitro and in vivo, Clinical neuropharmacology; Doctoral Studies Neurosciences (organizer) Mechanisms of intracellular signalization of hormone receptors in the central nervous system. PROFESSIONAL ACTIVITIES: president of the Croatian Pharmacological Society 2016 – 2019, member of the Central Ethics Committee for approval of clinical trials in Croatia 2005-2018, member of the Ethical Advisory Board / Human Brain Project 2014- .

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: October 2013

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Selected important publications 2010- 2018:

1. Salkovic-Petrisic M, Knezovic A, Osmanovic-Barilar J, Smailovic U, Trkulja V, Riederer P, Amit T, Mandel S, Youdim MB. Multi-target iron-chelators improve memory loss in a rat model of sporadic Alzheimer's disease. *Life Sci.* 2015;136:108-19. (Q2)
2. Sun P, Knezovic A, Parlak M, Cuber J, Karabeg MM, Deckert J, Riederer P, Hua Q, Salkovic-Petrisic M, Schmitt AG. Long-Term Effects of Intracerebroventricular Streptozotocin Treatment on Adult Neurogenesis in the Rat Hippocampus. *Curr Alzheimer Res.* 2015;12:772-84. (Q1)
3. Sofic E, Salkovic-Petrisic M, Tahirovic I, Sapcanin A, Mandel S, Youdim M, Riederer P. Brain catalase in the streptozotocin-rat model of sporadic Alzheimer's disease treated with the iron chelator-monoamine oxidase inhibitor, M30. *J Neural Transm (Vienna).* 2015 ;122:559-64. (Q2)
4. Grünblatt E, Bartl J, Iuhos DI, Knezovic A, Trkulja V, Riederer P, Walitza S, Salkovic-Petrisic M. Characterization of cognitive deficits in spontaneously hypertensive rats, accompanied by brain insulin receptor dysfunction. *J Mol Psychiatry.* 2015;3:6.

5. Barilar JO, Knezovic A, Grünblatt E, Riederer P, Salkovic-Petrisic M. Nine-month follow-up of the insulin receptor signalling cascade in the brain of streptozotocin rat model of sporadic Alzheimer's disease. *Neural Transm (Vienna)*. 2015;122:565-76. (Q2)
6. Salkovic-Petrisic M, Knezovic A, Hoyer S, Riederer P. What have we learned from the streptozotocin-induced animal model of sporadic Alzheimer's disease, about the therapeutic strategies in Alzheimer's research. *J Neural Transm* 2013;120:233-252. (Q2)
7. Salkovic-Petrisic M, Osmanovic-Barilar J, Brückner MK, Hoyer S, Arendt T, Riederer P. Cerebral amyloid angiopathy in streptozotocin rat model of sporadic Alzheimer's disease: a long-term follow up study. *J Neural Transm* 2011;118:765-772. (Q2)
8. Plaschke K, Kopitz J, Siegelin M, Schliebs R, Salkovic-Petrisic M, Riederer P, Hoyer S. Insulin-resistant brain state after intracerebroventricular streptozotocin injection exacerbates Alzheimer-like changes in Tg2576 AbetaPP-overexpressing mice. *J Alzheimers Dis* 2010;19:691-704. (Q1)
9. Kuljiš RO, Salković-Petrišić M. Dementia, diabetes, Alzheimer's disease, and insulin resistance in the brain: progress, dilemmas, new opportunities, and a hypothesis to tackle intersecting epidemics. *J Alzheimers Dis*. 2011;25:29-41. (Q2)
10. Osmanovic J, Plaschke K, Salkovic-Petrisic M, Grünblatt E, Riederer P, Hoyer S. Chronic exogenous corticosterone administration generates an insulin-resistant brain state in rats. *Stress*. 2010;13:123-31. (Q2)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Babic Perhoc A, Osmanovic Barilar J, Knezovic A, Farkas V, Bagaric R, Svarc A, Grünblatt E, Riederer P, Salkovic-Petrisic M. Cognitive, behavioral and metabolic effects of oral galactose treatment in the transgenic Tg2576 mice. *Neuropharmacology* 2018;148:50-67. doi: 10.1016/j.neuropharm.2018.12.018. [Epub ahead of print] (Q1)
2. Knezovic A, Osmanovic Barilar J, Babic A, Bagaric R, Farkas V, Riederer P, Salkovic-Petrisic M. Glucagon-like peptide-1 mediates effects of oral galactose in streptozotocin-induced rat model of sporadic Alzheimer's disease. *Neuropharmacology* 2018 Jun;135:48-62. (Q1)
3. Hainsworth AH, Allan SM, Boltze J, Cunningham C, Farris C, Head E, Ihara M, Isaacs JD, Kalaria RN, Lesnik Oberstein SA, Moss MB, Nitzsche B, Rosenberg GA, Rutten JW, Salkovic-Petrisic M, Troen AM. Translational models for vascular cognitive impairment: a review including larger species. *BMC Med* 2017 Jan 25;15(1):16. doi: 10.1186/s12916-017-0793-9. Review. (Q1)
4. Knezovic A, Osmanovic-Barilar J, Curlin M, Hof PR, Simic G, Riederer P, Salkovic-Petrisic M. Staging of cognitive deficits and neuropathological and ultrastructural changes in streptozotocin-induced rat model of Alzheimer's disease. *J Neural Transm* 2015;122:577-92. (Q2)
5. Salkovic-Petrisic M, Osmanovic-Barilar, Knezovic A, Hoyer S, Mosetter K, Reutter W. Long-term oral galactose treatment prevents cognitive deficits in male wistar rats treated intracerebroventricularly with streptozotocin. *Neuropharmacology* 2014;77:68-80. (Q1)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1) MZOŠ scientific projects (PI) 2007-2012 „Brain, experimental and central diabetes, and cognitive and other related alterations“, 2002-2007 „Central Nervous System and diabetes mellitus (PI)
- 2) UKF scientific project (PI) 2010-2012 „Cytopathological characterization of the brain in a rat model of sporadic Alzheimer's disease“

3) DAAD/MZOŠ bilateral projects (PI) 2004 – 2010

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 1) HRZZ scientific projects (PI) 2018 – 2022 „Mechanisms of nutrient-mediated effects of endogenous glucagon-like peptide-1 on cognitive and metabolic alterations in experimental models of neurodegenerative disorders (NutrientGLP-1)“; 2015 - 2018 „Therapeutic potential of oral galactose in experimental Alzheimer's disease (GALAD)“
- 2) HRZZ projects for mentorship of PhD students (PI) 2017 – 2021; 2019 – 2023
- 3) DAAD/MZOŠ bilateral project (PI) 2017 – 2018 „Molecular characterization of the therapeutic galactose potential as a new strategy in Alzheimer's disease treatment“
- 4) Scientific centre of excellence for basic, clinical and translational neuroscience (co-worker) 2017 – 2022 (HIIM, project PI prof. M. Judaš), group leader „Modelling of insulin resistance in the brain as a trigger for sporadic Alzheimer's disease“, in Workpackage 2 „Novel biomarkers of aging, Alzheimer's disease, vascular dementia and cerebral conditions with insulin resistance“ (PI prof. G. Šimić)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

- 1) 2015: “Cholinergic transmission in the brain of a streptozotocin-induced rat model of sporadic Alzheimer's disease” (Knezović A)
- 2) 2013 “Insulin signaling in the brain in the experimental Alzheimer's disease” (Osmanović J)
- 3) 2006 “The role of azythromycine in the treatment of Campillobacter-induced gastroenterocolitis in children” (Vukelić D)

In progress:

2017 - “Therapeutic potential of oral galactose on cognitive and metabolic changes in two experimental models of Alzheimer's disease” (Babić A)

2015- “Early changes in rat and mouse brain induced by central administration of streptozotocin” (Lončar A)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ivan Šamija, Assistant Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital “Sestre milosrdnice”

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical laboratory diagnostics of malignant melanoma with special reference to molecular-biological diagnosis assesment

BIOGRAPHY

Ivan Šamija was born in Zagreb, Croatia in 1976. He studied molecular biology at the University of Zagreb, Faculty of Science and graduated in 2000 obtaining a degree of graduate engineer in biology, field of molecular biology. In 2006 he finished a postgraduate study of biology, field of study immunobiology and physiology at the same University and obtained a Ph.D. degree in the scientific area of natural sciences. Since 2017 he is scientific adviser in the scientific area of biomedicine and health, field of basic medical sciences. Since 2000 he has been employed at the Clinical Hospital Centre Sestre milosrdnice, Department of Oncology and Nuclear Medicine, Zagreb, Croatia, first as junior researcher, and since 2008 as staff scientist, molecular biologist. From 2008 till 2009 (12 months) he performed postdoctoral research at National Institutes of Health, National Cancer Institute, Bethesda, USA. He participated as a researcher in several scientific projects. He was awarded Rector’s Award of the University of Zagreb in 1997 and Postdoc stipend from the Croatian Science Foundation in 2008. He has participated at teaching several courses on undergraduate, graduate and postgraduate level at the University of Zagreb School of Medicine, School of Dental Medicine and Faculty of Science. He is a mentor of two defended doctoral dissertations. Since 2015 he is employed as Assistant Professor and Head of Chair of Immunology at University of Zagreb School of Dental Medicine. He is an author on 74 scientific papers including abstracts in conference books of abstracts, of which 13 full scientific papers published in Current Contents and Science Citation Index listed journals. He is a collaborator or chapter author in 12 scientific books of which 6 university textbooks. His main scientific interests are application of molecular biology and immunology in cancer diagnostics, monoclonal antibodies as drugs for cancer and cancer immunology.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: December 2nd, 2015.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Šamija I, Lukač J, Marić-Brozić J, Buljan M, Alajbeg I, Kovačević D, Šitum M, Kusić Z. Prognostic value of microphthalmia-associated transcription factor and tyrosinase as markers for circulating tumor cells detection in patients with melanoma. *Melanoma Res* 2010; 20(4):293-302.

Šamija I, Lukač J, Kusić Z, Šitum M, Šamija M. Detection of Disseminated Melanoma Cells by Reverse-Transcription – Polymerase Chain Reaction. *Coll Antropol* 2007;31(4):1187-1194.

Šamija I, Lukač J, Marić-Brozić J, Kusić Z. Microphthalmia transcription factor and tyrosinase as markers for detection of melanoma cells in the blood of melanoma patients by reverse transcription – polymerase chain reaction. *Croat Med J* 2004;45(2): 142-148.

Šamija I, Lukač J, Končar Mubrin M, Kirac I, Kovačević D, Kusić Z. Detection of cytokeratin-20-positive cells in preoperative and postoperative blood samples from colorectal cancer patients by real-time RT-PCR. *Int J Biol Markers* 2013; 28(2):174-181.

Šamija I, Mateša N, Lukac J, Kusic Z. Galectin-3 and CD44v6 as Markers for Preoperative Diagnosis of Thyroid Cancer by RT-PCR. *Diagn Mol Pathol* 2011; 20(4):233-241.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Kust D, Lucijanac M, Urch K, Samija I, Celap I, Kruljac I, Prpic M, Lucijanac I, Matesa N, Bolanca A. Clinical and prognostic significance of anisocytosis measured as a red cell distribution width in patients with colorectal cancer. QJM 2017;110(6):361-367.

Kust D, Šamija I, Kirac I, Radić J, Kovačević D, Kusić Z. Cytokeratin 20 positive cells in blood of colorectal cancer patients as an unfavorable prognostic marker. Acta Clin Belg 2016;71(4):235-43.

Radić J, Krušlin B, Šamija M, Ulamec M, Milošević M, Jazvić M, Šamija I, Grah JJ, Bolanča A, Kusić Z. Connexin 43 expression in primary colorectal carcinomas in patients with stage III and IV disease. Anticancer Res 2016;36(5):2189-96.

Kust D, Šamija I, Marić-Brozić J, Svetec B, Miletić M, Mamić G, Bolanča A, Kusić Z, Fröbe A. Use of alternative and complementary medicine in patients with malignant diseases in high-volume cancer center and future aspects. Acta Clin Croat 2016;55(4):585-592.

Krasic J, Sincic N, Samija I. Liquid biopsy for patients with cancer: different approaches and clinical applications. Mol Exp Biol Med 2018;2:1-8.

Šamija I. Molecular Markers for Personalized Approach to Patients with Melanoma. Rad 520, Medical Sciences 2014; 40:61-68.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Circulating tumor cells in patients with solid tumors , project no. 134-1342428-2427 Ministry of Science, education and sport Republic of Croatia

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Neuroectodermal differentiation potential of mesenchimal stem cells isolated from oral cavity, University of Zagreb

Prognostic value of TERT mutations in locoregional metastases of differentiated thyroid cancer, University of Zagreb

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Dragana Šegulja, Msc in Medical Biochemistry

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb, Department of Laboratory Diagnostics

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical Methods in Biomedical Research; Laboratory approach to transplantation of haematopoietic stem cells

BIOGRAPHY

Dragana Šegulja, a medical biochemistry and laboratory medicine specialist, works in Unit for Electrophoretic and Immunochemical Laboratory Diagnostics at the Department of Laboratory Diagnostics.

In 2004 she graduated Medical Biochemistry at the Faculty of Pharmacy and Biochemistry, University of Zagreb. She completed Postgraduate Specialist Study in 2015 and in 2016 she passed a specialist examination. Doctoral studies at the Faculty of Pharmacy and Biochemistry start in 2010.

Work experience gain from 2005-2010 in the medical-biochemical laboratory at the Clinic for Lung Diseases Jordanovac and from 2010 in the Department of Laboratory Diagnostics UHC Zagreb. Since 2014, she has been participating in teaching at the Department of Chemistry, Biochemistry and Clinical Chemistry at University of Applied Health Sciences.

The subject of her scientific interest are monoclonal gammopathies, hemoglobinopathies and laboratory diagnostics of malignant diseases.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Batinić J, Perić Z, Šegulja D, Last J, Prijić S, Dubravčić K, Volarić L, Sertić D, Radman I, Bašić-Kinda S, Matišić D, Batinić D, Labar B, Nemet D. Immunoglobulin heavy/light chain analysis enhances the detection of residual disease and monitoring of multiple myeloma patients. *Croat Med J.* 2015;56:263-71
2. Šegulja Dragana. Definiranje razreda i tipa monoklonskog imunoglobulina metodom imunoprecipitacije, Laboratorijska dijagnostika monoklonskih gamopatija 2014., Medicinska Naklada, 2014 (HKMB tečaj)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Šegulja, Dragana; Matišić, Danica; Honović, Lorena; Batinić, Josip; Rogić, Dunja. Unusual pattern in haemoglobin electrophoresis in Croatian population: a case report. *Biochemia Medica.* 3 (2016) ; 451-456
2. Miler, Marijana; Nikolac, Nora; Šegulja, Dragana; Kackov Maslac, Sanja; Čelap, Ivana; Altabas, Karmela; Šefer, S.; Šimundić, Ana-Marija. Is peritoneal dialysis causing a measurable burden of inflammatory and endothelial injury on top of metabolic syndrome?. *Journal of endocrinological investigation.* 40 (2016) , 2; 163-168
3. Batinić J, Perić Z, Šegulja D, Last J, Prijić S, Dubravčić K, Volarić L, Sertić D, Radman I, Bašić-Kinda S, Matišić D, Batinić D, Labar B, Nemet D. Immunoglobulin heavy/light chain analysis enhances the detection of residual disease and monitoring of multiple myeloma patients. *Croat Med J.* 2015;56:263-71

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mario Šekerija, MD, PhD, scientific associate

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Croatian Institute of Public Health; School of Public Health, University of Zagreb, School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Epidemiological research methods

BIOGRAPHY

Mario Šekerija is an epidemiologist currently working as the Head of the Croatian National Cancer Registry at the Croatian Institute of Public Health. He is also a post-doctoral researcher at Department of Medical Statistics, Epidemiology and Medical Informatics of the School of Public Health Andrija Štampar of the University of Zagreb School of Medicine.

He graduated from the University of Zagreb School of Medicine where he also obtained his PhD degree. His scientific interests include cancer epidemiology and epidemiological methods in research and is a member of the working groups in the major international cancer epidemiology studies, including IICC, EURO CARE and CONCORD. He co-authored over 50 scientific papers that are currently cited over 2,800 times (according to Google Scholar), with the h-index of 22.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: not applicable, date for last appointment to a research rank (scientific associate), 13.12.2013

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Allemani C, Weir HK, Carreira H, Harewood R, Spika D, Wang XS, et al. (Šekerija M). Global surveillance of cancer survival 1995-2009: analysis of individual data for 25,676,887 patients from 279 population-based registries in 67 countries (CONCORD-2). *Lancet*. 2015;385(9972):977-1010.
2. Anderson LA, Tavilla A, Brenner H, Luttman S, Navarro C, Gavin AT, et al. (Šekerija M). Survival for oesophageal, stomach and small intestine cancers in Europe 1999-2007: Results from EURO CARE-5. *Eur J Cancer*. 2015;51(15):2144-57.
3. Baili P, Di Salvo F, Marcos-Gragera R, Siesling S, Mallone S, Santaquilani M, et al. (Šekerija M). Age and case mix-standardised survival for all cancer patients in Europe 1999-2007: Results of EURO CARE-5, a population-based study. *Eur J Cancer*. 2015;51(15):2120-9.
4. Crocetti E, Mallone S, Robsahm TE, Gavin A, Agius D, Ardanaz E, et al. (Šekerija M). Survival of patients with skin melanoma in Europe increases further: Results of the EURO CARE-5 study. *Eur J Cancer*. 2015;51(15):2179-90.
5. De Angelis R, Minicozzi P, Sant M, Dal Maso L, Brewster DH, Osca-Gelis G, et al. (Šekerija M). Survival variations by country and age for lymphoid and myeloid malignancies in Europe 2000-2007: Results of EURO CARE-5 population-based study. *Eur J Cancer*. 2015;51(15):2254-68.
6. Francisci S, Minicozzi P, Pierannunzio D, Ardanaz E, Eberle A, Grimsrud TK, et al. (Šekerija M). Survival patterns in lung and pleural cancer in Europe 1999-2007: Results from the EURO CARE-5 study. *Eur J Cancer*. 2015;51(15):2242-53.
7. Gatta G, Botta L, Sanchez MJ, Anderson LA, Pierannunzio D, Licitra L, et al. (Šekerija M). Prognoses and improvement for head and neck cancers diagnosed in Europe in early 2000s: The EURO CARE-5 population-based study. *Eur J Cancer*. 2015;51(15):2130-43.
8. Holleccek B, Rossi S, Domenic A, Innos K, Minicozzi P, Francisci S, et al. (Šekerija M). On-going improvement and persistent differences in the survival for patients with colon and rectum cancer across Europe 1999-2007 - Results from the EURO CARE-5 study. *Eur J Cancer*. 2015;51(15):2158-68.

9. Karalexi MA, Papathoma P, Thomopoulos TP, Ryzhov A, Zborovskaya A, Dimitrova N, et al. (Šekerija M). Childhood central nervous system tumour mortality and survival in Southern and Eastern Europe (1983-2014): Gaps persist across 14 cancer registries. *Eur J Cancer*. 2015;51(17):2665-77.
10. Lepage C, Capocaccia R, Hackl M, Lemmens V, Molina E, Pierannunzio D, et al. (Šekerija M). Survival in patients with primary liver cancer, gallbladder and extrahepatic biliary tract cancer and pancreatic cancer in Europe 1999-2007: Results of EURO CARE-5. *Eur J Cancer*. 2015;51(15):2169-78.
11. Marcos-Gragera R, Mallone S, Kiemeny LA, Vilardell L, Malats N, Allory Y, et al. (Šekerija M). Urinary tract cancer survival in Europe 1999-2007: Results of the population-based study EURO CARE-5. *Eur J Cancer*. 2015;51(15):2217-30.
12. Papathoma P, Thomopoulos TP, Karalexi MA, Ryzhov A, Zborovskaya A, Dimitrova N, et al. (Šekerija M). Childhood central nervous system tumours: Incidence and time trends in 13 Southern and Eastern European cancer registries. *Eur J Cancer*. 2015;51(11):1444-55.
13. Pibernik-Okanovic M, Hermanns N, Ajdukovic D, Kos J, Prasek M, Sekerija M, et al. Does treatment of subsyndromal depression improve depression-related and diabetes-related outcomes? A randomised controlled comparison of psychoeducation, physical exercise and enhanced treatment as usual. *Trials*. 2015;16:305.
14. Rossi S, Baili P, Capocaccia R, Caldora M, Carrani E, Minicozzi P, et al. (Šekerija M). The EURO CARE-5 study on cancer survival in Europe 1999-2007: Database, quality checks and statistical analysis methods. *Eur J Cancer*. 2015;51(15):2104-19.
15. Sant M, Chirlaque Lopez MD, Agresti R, Sanchez Perez MJ, Holleczer B, Bielska-Lasota M, et al. (Šekerija M). Survival of women with cancers of breast and genital organs in Europe 1999-2007: Results of the EURO CARE-5 study. *Eur J Cancer*. 2015;51(15):2191-205.
16. Trama A, Foschi R, Larranaga N, Sant M, Fuentes-Raspall R, Serraino D, et al. (Šekerija M). Survival of male genital cancers (prostate, testis and penis) in Europe 1999-2007: Results from the EURO CARE-5 study. *Eur J Cancer*. 2015;51(15):2206-16.
17. Visser O, Ardanaz E, Botta L, Sant M, Tavilla A, Minicozzi P, et al. (Šekerija M). Survival of adults with primary malignant brain tumours in Europe; Results of the EURO CARE-5 study. *Eur J Cancer*. 2015;51(15):2231-41.
18. Vucemilo L, Znaor T, Kulis T, Sekerija M, Znaor A. Thyroid cancer incidence and mortality trends in Croatia 1988-2010. *Acta Clin Croat*. 2015;54(1):30-7.
19. Vucic Lovrencic M, Pibernik-Okanovic M, Sekerija M, Prasek M, Ajdukovic D, Kos J, et al. Improvement in Depressive Symptoms Is Associated with Reduced Oxidative Damage and Inflammatory Response in Type 2 Diabetic Patients with Subsyndromal Depression: The Results of a Randomized Controlled Trial Comparing Psychoeducation, Physical Exercise, and Enhanced Treatment as Usual. *Int J Endocrinol*. 2015;2015:210406.
20. Barbaric J, Sekerija M, Agius D, Coza D, Dimitrova N, Demetriou A, et al. Disparities in melanoma incidence and mortality in South-Eastern Europe: Increasing incidence and divergent mortality patterns. Is progress around the corner? *Eur J Cancer*. 2016;55:47-55.
21. Georgakis MK, Karalexi MA, Agius D, Antunes L, Bastos J, Coza D, et al. (Šekerija M). Incidence and time trends of childhood lymphomas: findings from 14 Southern and Eastern European cancer registries and the Surveillance, Epidemiology and End Results, USA. *Cancer Causes Control*. 2016;27(11):1381-94.
22. Karalexi MA, Baka M, Ryzhov A, Zborovskaya A, Dimitrova N, Zivkovic S, et al. (Šekerija M). Survival trends in childhood chronic myeloid leukaemia in Southern-Eastern Europe and the United States of America. *Eur J Cancer*. 2016;67:183-90.
23. Barbaric J, Coebergh JW, Sekerija M. Completeness of Data on Malignant Melanoma Skin Sites and Morphology in the Croatian National Cancer Registry 2000-2014: An Overview of Recent Progress. *Acta Dermatovenerol Croat*. 2017;25(4):285-91.
24. Bonaventure A, Harewood R, Stiller CA, Gatta G, Clavel J, Stefan DC, et al. (Šekerija M). Worldwide comparison of survival from childhood leukaemia for 1995-2009, by subtype, age, and sex (CONCORD-2): a population-based study of individual data for 89 828 children from 198 registries in 53 countries. *Lancet Haematol*. 2017;4(5):e202-e17.

25. Dal Maso L, Tavilla A, Pacini F, Serraino D, van Dijk BAC, Chirlaque MD, et al. (Šekerija M). Survival of 86,690 patients with thyroid cancer: A population-based study in 29 European countries from EUROCARE-5. *Eur J Cancer*. 2017;77:140-52.
26. Dimitrova N, Znaor A, Agius D, Eser S, Šekerija M, Ryzhov A, et al. Breast cancer in South-Eastern European countries since 2000: Rising incidence and decreasing mortality at young and middle ages. *Eur J Cancer*. 2017;83:43-55.
27. Gatta G, Capocaccia R, Botta L, Mallone S, De Angelis R, Ardanaz E, et al. (Šekerija M). Burden and centralised treatment in Europe of rare tumours: results of RARECAREnet-a population-based study. *Lancet Oncol*. 2017;18(8):1022-39.
28. Gatta G, Peris-Bonet R, Visser O, Stiller C, Marcos-Gragera R, Sanchez MJ, et al. (Šekerija M). Geographical variability in survival of European children with central nervous system tumours. *Eur J Cancer*. 2017;82:137-48.
29. Georgakis MK, Karalexi MA, Kalogirou EI, Ryzhov A, Zborovskaya A, Dimitrova N, et al. (Šekerija M). Incidence, time trends and survival patterns of childhood pilocytic astrocytomas in Southern-Eastern Europe and SEER, US. *J Neurooncol*. 2017;131(1):163-75.
30. Georgakis MK, Panagopoulou P, Papatoma P, Tragiannidis A, Ryzhov A, Zivkovic-Perisic S, et al. (Šekerija M). Central nervous system tumours among adolescents and young adults (15-39 years) in Southern and Eastern Europe: Registration improvements reveal higher incidence rates compared to the US. *Eur J Cancer*. 2017;86:46-58.
31. Georgakis MK, Papatoma P, Ryzhov A, Zivkovic-Perisic S, Eser S, Taraszkiwicz L, et al. (Šekerija M). Malignant central nervous system tumors among adolescents and young adults (15-39 years old) in 14 Southern-Eastern European registries and the US Surveillance, Epidemiology, and End Results program: Mortality and survival patterns. *Cancer*. 2017;123(22):4458-71.
32. Karalexi MA, Georgakis MK, Dessypris N, Ryzhov A, Zborovskaya A, Dimitrova N, et al. (Šekerija M). Mortality and survival patterns of childhood lymphomas: geographic and age-specific patterns in Southern-Eastern European and SEER/US registration data. *Hematol Oncol*. 2017;35(4):608-18.
33. Matz M, Coleman MP, Carreira H, Salmeron D, Chirlaque MD, Allemani C, et al. (Šekerija M). Erratum to "Worldwide comparison of ovarian cancer survival: Histological group and stage at diagnosis (CONCORD-2)" [*Gynecol. Oncol.* 144 (2017) 396-404]. *Gynecol Oncol*. 2017;147(3):725.
34. Matz M, Coleman MP, Carreira H, Salmeron D, Chirlaque MD, Allemani C, et al. (Šekerija M). Worldwide comparison of ovarian cancer survival: Histological group and stage at diagnosis (CONCORD-2). *Gynecol Oncol*. 2017;144(2):396-404.
35. Matz M, Coleman MP, Sant M, Chirlaque MD, Visser O, Gore M, et al. (Šekerija M). Erratum to "The histology of ovarian cancer: Worldwide distribution and implications for international survival comparisons (CONCORD-2)" [*Gynecol. Oncol.* 144 (2017) 405-413]. *Gynecol Oncol*. 2017;147(3):726.
36. Matz M, Coleman MP, Sant M, Chirlaque MD, Visser O, Gore M, et al. (Šekerija M). The histology of ovarian cancer: worldwide distribution and implications for international survival comparisons (CONCORD-2). *Gynecol Oncol*. 2017;144(2):405-13.
37. Minicozzi P, Innos K, Sanchez MJ, Trama A, Walsh PM, Marcos-Gragera R, et al. (Šekerija M). Quality analysis of population-based information on cancer stage at diagnosis across Europe, with presentation of stage-specific cancer survival estimates: A EUROCARE-5 study. *Eur J Cancer*. 2017;84:335-53.
38. Sabol I, Milutin Gasperov N, Matovina M, Bozinovic K, Grubisic G, Fistic I, et al. (Šekerija M). Cervical HPV type-specific pre-vaccination prevalence and age distribution in Croatia. *PLoS One*. 2017;12(7):e0180480.
39. Siroglavic KJ, Polic Vizintin M, Tripkovic I, Šekerija M, Kukulj S. Trends in incidence of lung cancer in Croatia from 2001 to 2013: gender and regional differences. *Croat Med J*. 2017;58(5):358-63.
40. Steliarova-Foucher E, Colombet M, Ries LAG, Moreno F, Dolya A, Bray F, et al. (Šekerija M). International incidence of childhood cancer, 2001-10: a population-based registry study. *Lancet Oncol*. 2017;18(6):719-31.
41. GBD 2017 SDG Collaborators (Šekerija M). Measuring progress from 1990 to 2017 and projecting attainment to 2030 of the health-related Sustainable Development Goals for 195 countries and

territories: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet*. 2018;392(10159):2091-138.

42. GBD 2017 Population and Fertility Collaborators (Čukelj P, Šekerija M). Population and fertility by age and sex for 195 countries and territories, 1950-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet*. 2018;392(10159):1995-2051.
43. GBD 2017 Risk Factor Collaborators (Šekerija M). Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet*. 2018;392(10159):1923-94.
44. GBD 2017 Disease and Injury Incidence and Prevalence Collaborators (Šekerija M). Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet*. 2018;392(10159):1789-858.
45. GBD 2017 Causes of Death Collaborators (Šekerija M). Global, regional, and national age-sex-specific mortality for 282 causes of death in 195 countries and territories, 1980-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet*. 2018;392(10159):1736-88.
46. GBD 2017 Mortality Collaborators (Šekerija M). Global, regional, and national age-sex-specific mortality and life expectancy, 1950-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet*. 2018;392(10159):1684-735.
47. Reljic A, Cukelj P, Tomaskovic I, Ruzic B, Sekerija M. Epidemiology of Prostate Cancer in Croatia - Situation and Perspectives. *Acta Clin Croat*. 2018;57(Suppl 1):27-34.
48. Juszcak A, Pavic T, Vuckovic F, Bennett AJ, Shah N, Medvidovic EP, et al. (Šekerija M). Plasma Fucosylated Glycans and C-Reactive Protein As Biomarkers of HNF1A-MODY in Young Adult-Onset Nonautoimmune Diabetes. *Diabetes Care*. 2018.
49. GBD 2017 DALYs and HALE Collaborators (Šekerija M). Global, regional, and national disability-adjusted life-years (DALYs) for 359 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet*. 2018;392(10159):1859-922.
50. Andabak Rogulj A, Tomasovic Loncaric C, Muller D, Blivajs I, Andabak M, Vucicevic Boras V, et al. (Šekerija M). Solid malignant metastases in the jaw bones. *Br J Oral Maxillofac Surg*. 2018;56(8):705-8.
51. Doganis D, Panagopoulou P, Tragiannidis A, Vichos T, Moschovi M, Polychronopoulou S, et al. (Šekerija M). Survival and mortality rates of Wilms tumour in Southern and Eastern European countries: Socioeconomic differentials compared with the United States of America. *Eur J Cancer*. 2018;101:38-46.
52. GBD 2016 Healthcare Access and Quality Collaborators (Šekerija M). Measuring performance on the Healthcare Access and Quality Index for 195 countries and territories and selected subnational locations: a systematic analysis from the Global Burden of Disease Study 2016. *Lancet*. 2018;391(10136):2236-71.
53. Panagopoulou P, Georgakis MK, Baka M, Moschovi M, Papadakis V, Polychronopoulou S, et al. (Šekerija M). Persisting inequalities in survival patterns of childhood neuroblastoma in Southern and Eastern Europe and the effect of socio-economic development compared with those of the US. *Eur J Cancer*. 2018;96:44-53.
54. Pavic T, Juszcak A, Pape Medvidovic E, Burrows C, Sekerija M, Bennett AJ, et al. Maturity onset diabetes of the young due to HNF1A variants in Croatia. *Biochem Med (Zagreb)*. 2018;28(2):020703.
55. Doganis D, Panagopoulou P, Tragiannidis A, Georgakis MK, Moschovi M, Polychronopoulou S, et al. (Šekerija M). Childhood nephroblastoma in Southern and Eastern Europe and the US: Incidence variations and temporal trends by human development index. *Cancer Epidemiol*. 2018;54:75-81.
56. Muhaxheri G, Vucicevic Boras V, Fucic A, Plavec D, Sekerija M, Filipovic M, et al. Multivariate analysis of preoperative and postoperative neutrophil-to-lymphocyte ratio as an indicator of head and neck squamous cell carcinoma outcome. *Int J Oral Maxillofac Surg*. 2018;47(8):965-70.
57. Nicolai N, BIASONI D, Catanzaro MA, Colecchia M, Trama A, RARECAREnet Working Group (Šekerija M). Testicular germ-cell tumours and penile squamous cell carcinoma: Appropriate management makes the difference. *Eur J Surg Oncol*. 2019;45(1):60-6.

58. Orlandi E, Alfieri S, Simon C, Trama A, Licitra L, RARECAREnet Working Group (Šekerija M). Treatment challenges in and outside a network setting: Head and neck cancers. *Eur J Surg Oncol.* 2019;45(1):40-5.
59. Imbimbo M, Maury JM, Garassino M, Girard N, RARECAREnet Working Group (Šekerija M). Mesothelioma and thymic tumors: Treatment challenges in (outside) a network setting. *Eur J Surg Oncol.* 2019;45(1):75-80.
60. Allemani C, Matsuda T, Di Carlo V, Harewood R, Matz M, Niksic M, et al. (Šekerija M). Global surveillance of trends in cancer survival 2000-14 (CONCORD-3): analysis of individual records for 37 513 025 patients diagnosed with one of 18 cancers from 322 population-based registries in 71 countries. *Lancet.* 2018;391(10125):1023-75.
61. Georgakis MK, Dessypris N, Baka M, Moschovi M, Papadakis V, Polychronopoulou S, et al. (Šekerija M). Neuroblastoma among children in Southern and Eastern European cancer registries: Variations in incidence and temporal trends compared to US. *Int J Cancer.* 2018;142(10):1977-85.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

As above.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018- Member of the Steering Committee of the European Network of Cancer Registries (ENCR)
2018-2021 innovative Partnership for Action Against Cancer (iPAAC, Joint Action, EU Health Programme) – leader of work package 3 (Evaluation)
2016- Joint Action on Rare Cancers (JARC, Joint Action, EU Health Programme), associate, project leader for Croatia
2014 International Incidence of Childhood Cancer; IICC-3, associate, project leader for Croatia, member of the working group
2014- cancer survival projects (EUROCARE, CONCORD) associate, project leader for Croatia, member of the working group
2014 – 2017 European Guide on Comprehensive Cancer Control (CANCON, Joint Action, EU Health Programme), task leader, project leader for Croatia, coauthor of the publication on screening programmes
2007-2011 Prevalence of chronic complications of diabetes in Croatia (MZOŠ, leader Željko Metelko), junior researcher

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2018- Member of the Steering Committee of the European Network of Cancer Registries (ENCR)
2018-2021 innovative Partnership for Action Against Cancer (iPAAC, Joint Action, EU Health Programme) – leader of work package 3 (Evaluation)
2016- Joint Action on Rare Cancers (JARC, Joint Action, EU Health Programme), associate, project leader for Croatia
2014 International Incidence of Childhood Cancer; IICC-3, associate, project leader for Croatia, member of the working group
2014- cancer survival projects (EUROCARE, CONCORD) associate, project leader for Croatia, member of the working group
2014 – 2017 European Guide on Comprehensive Cancer Control (CANCON, Joint Action, EU Health Programme), task leader, project leader for Croatia, coauthor of the publication on screening programmes

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

0; 2 ongoing mentorships

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mr.sc. Marijan Šember

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine, Central Medical Library (CML)

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Structure, methodology and functioning of scientific work 1

BIOGRAPHY

Marijan Šember was born in 1967. He attended elementary school in Jastrebarsko and completed secondary education at Technical School Ruđer Bošković in Zagreb. In 1994 he graduated from the archaeology and information sciences at the University of Zagreb Faculty of Humanities and Social Sciences. After a period of working in the elementary school he was employed at the Central Medical Library at the University of Zagreb School of Medicine. He regularly participates in teaching at undergraduate, graduate and postgraduate level. In 2007 he defended his Master of science thesis „Evaluation of biomedical open access journals using citation indicators“ and obtained the title Master of Science at the University of Zagreb Faculty of Humanities and Social Sciences.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Šember, M., Škorić, L., Petrak, J.

Current impact of ceased journals: are they still alive?

(2017) Malaysian Journal of Library and Information Science, 22 (1), pp. 15-27.

Šember, M., Petrak, J.

Publications in the croatian medical journals by doctoral candidates at University of Zagreb School of medicine [Radovi doktorskih kandidata s Medicinskog fakulteta Sveučilišta u Zagrebu u hrvatskim časopisima]

(2014) Liječnički vjesnik, 136 (1-2), pp. 18-21.

Markulin, H., Šember, M.

University of Zagreb Medical School repository: promoting institutional visibility

(2014) Croatian Medical Journal, 55 (2), pp. 89-92.

Markulin, H., Petrak, J., Šember, M.

Internet use among students at the University of Zagreb School of medicine: a comparative survey of three generations [Internet i studenti Medicinskog fakulteta u Zagrebu: analiza navika triju naraštaja studenata]

(2014) Vjesnik bibliotekara Hrvatske, 57 (4), pp. 65-78.

Škorić, L., Šember, M., Markulin, H., Petrak, J.

Information literacy in the graduate study curriculum at the School of medicine, University of Zagreb
[Informacijska pismenost u nastavnom programu diplomskog studija Medicinskog fakulteta Sveučilišta u Zagrebu]

(2012) Vjesnik bibliotekara Hrvatske, 55 (3-4), pp. 17-28.

Petrak, J., Šember, M., Granić, D.

Assessing research productivity in Department of internal medicine, University of Zagreb, School of medicine and University hospital centre Zagreb [Procjena publicističke produktivnosti Klinike za unutrašnje bolesti Medicinskog fakulteta i Kliničkoga bolničkog centra Zagreb]

(2012) Liječnički vjesnik, 134 (3-4), pp. 69-74.

Šember, M., Utrobičić, A., Petrak, J.

Croatian medical journal citation score in Web of Science, Scopus, and Google Scholar

(2010) Croatian Medical Journal, 51 (2), pp. 99-103.

Šember, M.

Medical journals and open access [Medicinski časopisi i otvoreni pristup]

(2008) Liječnički vjesnik, 130 (5-6), pp. 151-156.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Šember, M., Škorić, L., Petrak, J.

Current impact of ceased journals: are they still alive?

(2017) Malaysian Journal of Library and Information Science, 22 (1), pp. 15-27.

Šember, M., Petrak, J.

Publications in the Croatian medical journals by doctoral candidates at University of Zagreb School of medicine [Radovi doktorskih kandidata s Medicinskog fakulteta Sveučilišta u Zagrebu u hrvatskim časopisima]

(2014) Liječnički vjesnik, 136 (1-2), pp. 18-21.

Markulin, H., Šember, M.

University of Zagreb Medical School repository: promoting institutional visibility

(2014) Croatian Medical Journal, 55 (2), pp. 89-92.

Markulin, H., Petrak, J., Šember, M.



Internet use among students at the University of Zagreb School of medicine: a comparative survey of three generations [Internet i studenti Medicinskog fakulteta u Zagrebu: analiza navika triju naraštaja studenata]

(2014) Vjesnik bibliotekara Hrvatske, 57 (4), pp. 65-78.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ljiljana Šerman, MD PhD, Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of Molecular Biology in Medicine

BIOGRAPHY

Ljiljana Šerman graduated at the School of Medicine, University of Zagreb, in 1992, completed her internship in KB “Sestre Milosrdnice” from 1992 until 1993 and passed the professional exam in the same year. She holds a valid license issued by the Croatian Chamber of Physicians. In 1995 she started working as a assistant (research associate) in the Department of Biology, School of Medicine, University of Zagreb, where she graduated as a Master of Science (MSc) in 1999 (with the thesis “Glycolisation of the placental proteins in normal and pathological pregnancies”) and then earned a doctoral (PhD) degree in 2005 (with the thesis “The effect of 5-azacytidine on rat placenta”). She became an Assistant Professor in 2007 and Associate Professor in 2012, all at the Department of Biology, University of Zagreb School of Medicine. She did a professional training in glycobiology at the Department of biochemistry and molecular biology, Faculty of Pharmacy and Biochemistry, University of Zagreb and completed the following courses: “The art of teaching in medicine” (Zagreb); “Basic course in stereology” (Ljubljana); and “Basic and advanced genetic counselling” (Bertinoro). She participated in the work of 3 domestic and one international science and research projects, and has been the recipient and Principal Investigator (PI) of 4 University grants. At present, she is the leader of the working group “Placenta in pathological pregnancy” within the Scientific Center of Excellence for Reproductive and Regenerative Medicine (CERRM), Subunit: Biomedical research of reproduction and development, part of the European Structural and Investment Fund project, Competition and cohesion; European fond for regional development: Regenerative and reproductive medicine – investigation of new platforms and potentials (KK.01.1.1.01.0008.). She also participates in the HRZZ project “The role of Wnt signaling pathway in epithelial mesenchymal transition: WNT4EMT” and in the international project “The expression of the Hedgehog signaling pathway components Gli1, Gli3 and PTCH1 in invasive apocrine carcinoma of the breast”, in collaboration with Qatar University. Her scientific output consists of 44 publications, 18 of which are papers published in journals cited in Current Contents, 10 in journals cited in SCI, 10 in journals cited in other international indexes and 6 in non-indexed journals. She has presented her work on 50 international and domestic conferences. Her primary scientific interest is mammalian embryogenesis and carcinogenesis, specifically the differences in differentiation of trophoblast and tumors on epigenetic level, i.e., the differences in expression of specific proteins during implantation and placentation vs. tumorigenesis, with emphasis on their regulation through DNA methylation. She is the author and co-author of several teaching texts and book chapters. For her contribution to science she has received 9 awards and scholarships (10th Multinational Congress on Microscopy, Urbino, 2011: Award for best poster presentation). She teaches 8 undergraduate and 6 postgraduate courses at the School of Medicine and one undergraduate and one postgraduate course at the School of Dental Medicine. She has been the mentor of 5 students awarded with the Rector’s and Dean’s awards for their work as well as the mentor on 16 final and graduate theses and 3 doctoral dissertations. At the School of Medicine, she is a member of several committees: for graduate thesis, final exam and graduate exam; for teaching; and for enrollment in 1st semester and test exams. She is active in science popularization as part of the “Festival of science” event, held in Technical museum and as workshops at the Department of Biology, School of Medicine, and has written over 20 popular science articles for the Lijećnicke Novine (Physician’s Newsletter). She was a member of the editorial board that published the manual: “Croatian guidelines for genetic counselling and testing for hereditary breast and

ovarian cancers" (Brkljačić, Dedić-Plavetić, Haller, Levanat, Podolski, Šerman, Vrdoljak, Vukota, Žic and Žigman, eds., Medicinska Naklada, Zagreb, 2016). She is one of the authors of the on-line manual "Ask everything – Everything for her" (2016), aimed at women with breast cancer, and in 2014 and 2015 she volunteered as a psychotherapist in training in psychological and genetic counseling of women diagnosed with cancer and their family members. She has held a series of scientific and professional lectures, mostly those on the subject of genetic counseling. She has been on the editorial board since 2014 and an assistant editor for molecular medicine since 2018 of the Bosnian Journal of Basic Medical Sciences and a member of the Executive board of The Croatian society for clinical genetics.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: June 12th 2018;
Full Professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Skoda AM, Simovic D, Karin V, Kardum V, Vranic S, Serman L. The role of the Hedgehog signaling pathway in cancer: A comprehensive review. *Bosn J Basic Med Sci.* 18: 8-20, 2018
- Kardum V, Karin V, Glibo M, Skrtic A, Martic TN, Ibisevic N, Vranic S, Serman L. Methylation-associated silencing of SFRP1 gene in high-grade serous ovarian carcinomas. *Ann Diagn Pathol* 31:45-49, 2017
- Zmijanac Partl J, Karin V, Skrtic A, Nikuseva-Martic T, Serman A, Mlinarec J, Curkovic-Perica M, Vranic S, Serman L. Negative regulators of Wnt signaling pathway SFRP1 and SFRP3 expression in preterm and term pathologic placentas. *J Matern Fetal Neonatal Med* 7:1-9, 2017
- Jurkovic I, Gecek I, Skrtic A, Zmijanac Partl J, Nikuseva Martic T, Serman A, Galesic Ljubanovic D, Serman L. ELF5 transcription factor expression during gestation in humans and rats—an immunohistochemical analysis. *J Matern Fetal Neonatal Med* 30: 1261-66, 2017
- Fabijanovic D, Zunic I, Martic TN, Skenderi F, Serman L, Vranic S. The expression of SFRP1, SFRP3, DVL1, and DVL2 proteins in testicular germ cell tumors. *APMIS.* 124:942-949, 2016
- Serman L, Zunic I, Vrsaljko N, Grbesa D, Gjurcevic E, Matasin Z, Nikuseva Martic T, Bulic Jakus F, Tlak Gajger I, Serman A: Structural changes in the rat placenta during the last third of gestation discovered by stereology, *Bosn J Basic Med Sci* 15: 21-5, 2015
- Partl JZ, Fabijanovic D, Skrtic A, Vranic S, Martic TN, Serman L: Immunohistochemical Expression of SFRP1 and SFRP3 Proteins in Normal and Malignant Reproductive Tissues of Rats and Humans, *Appl Immunohistochem Mol Morphol* 22: 681-7, 2014
- Serman L, Nikuseva Martic T, Vranic S: T-cell factor 1 expression in germ cell tumors with trophoblastic differentiation, *Pathol Int* 64: 86-7, 2014
- Serman L, Nikuseva Martic T, Serman A, Vranic S. Epigenetic alterations of the Wnt signaling pathway in cancer: a mini review, *Bosn J Basic Med Sci* 14: 191-4, 2014
- Vukasovic A, Grbesa D, Nikuseva Martic T, Kusec V, Miskovic B, Serman A, Soken N, Serman L: Glycosylation pattern and axin expression in normal and IUGR placentae, *J Matern Fetal Neonatal Med* 18: 1-6, 2014
- Fabijanovic D, Serman A, Jezic M, Katusic A, Sincic N, Curkovic-Perica M, Bulic-Jakus F, Vlahovic M, Juric-Lekic G, Serman L: Impact of 5-azacytidine on rat decidual cell proliferation, *Int J Exp Pathol* 95: 238-43, 2014

Muzic V, Katusic Bojanac A, Juric-Lekic G, Himmelreich M, Tupek K, Serman L, Marn N, Sincic N, Vlahovic M, Bulic-Jakus F: Epigenetic drug 5-azacytidine impairs proliferation of rat limb buds in an organotypic model-system in vitro, *Croat Med J* 54: 489-95, 2013

Nikuševa-Martić T, Šerman L, Zeljko M, Vidas Ž, Gašparov G, Zeljko HM, Kosović M, Pećina-Šlaus N: Expression of Secreted Frizzled-Related Protein 1 and 3, T-cell Factor 1 and Lymphoid Enhancer Factor 1 in Clear Cell Renal Cell Carcinoma. *Pathol Oncol Res*, 2013

Serman A, Simon F, Fabijanovic D, Serman L. Epigenetic control of cell invasion – the trophoblast model. *BioMol Concepts* 3:487-94, 2012

Serman A, Serman L. Development of placenta in a rodent – model for human placentation. *Front Biosci (Elite Ed)* 3:233-9, 2011

Marinović-Kulišić S, Jurić-Lekić G, Vikić-Topić M, Lokošek V, Radujković V, Bulić-Jakuš F, Katušić A, Vlahović M, Šerman Lj, Sinčić N: 5-azacytidine enhances proliferation in transplanted rat fetal epiglottis. *Front Biosci (Elite Ed)* 3:581-90, 2011

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Katušić A, Jurić-Lekić G, Jovanov-Milošević N, Vlahović M, Ježek D, Šerman Lj, Sinčić N, Veljanovska B, Bulić-Jakuš F: Development of the fetal neural retina in vitro and in ectopic transplants in vivo. *Coll Antropol* 32 (1): 201-7, 2008

Šerman Lj, Šijan M, Kuzmić R, Sinčić N, Šerman A, Bulić-Jakuš F, Vlahović M, Jurić-Lekić G, Katušić A: Expressionsveränderungen von membranproteinen in mit 5-azacytidin behandelten rattenplazentas, *Tierärztliche Umschau* 63 (7): 391-5, 2008

Jurić-Lekić G, Rajduković V, Kancijan V, Bulić-Jakuš F, Lokosek V, Katusic A, Vlahovic M, Serman L. Differentiation of epiglottal epithelia during prenatal and postnatal human development. *Coll Antropol* 32 (4): 1150-20, 2008.

Vlahović, M., Bulić-Jakuš, F., Jurić-Lekić, G., Šerman, L., Sinčić, N., Katušić, A. Epigenetic deregulation through DNA demethylation seems not to interfere with the differentiation of epithelia from pre-gastrulating rat embryos in vitro. *Acta Dermatovenerol Croat* 16(4): 183-189, 2008

Bulić-Jakuš F, Jurić-Lekić G, Vlahović M, Rašić S, Lokošek V, Radujković V, Marinović-Kulišić S, Katušić A, Šerman Lj, Sinčić N. Development of epithelia in experimental teratomas derived from rodent embryos. *Acta Dermatovenerol Croat* 16(3): 119-22, 2008

Marinović-Kulišić S, Jurić-Lekić G, Bulić-Jakuš F, Radujković V, Parčetić I, Vlahović M, Katušić A, Sinčić N, Šerman Lj (2008): Development of epithelia in the ectopic transplant of the fetal rat epiglottis. *Acta Dermatovenerol Croat* 16(2): 55-59

Šerman Lj, Vlahović M, Šijan M, Bulić-Jakuš F, Šerman A, Sinčić N, Matijević R, Jurić-Lekić G, Katušić A: The impact of 5-azacytidine on placental weight, glycoprotein pattern and proliferating cell nuclear antigen expression in rat placenta. *Placenta* 28, 803-11, 2007

Šerman A., Vlahović M., Šerman Lj., Bulić-Jakuš F.: DNA methylation as a regulatory mechanism for gene expression in mammals, *Coll Antropol* 30 (3): 665-71, 2006

- Bulić-Jakuš, F., Ulamec, M., Vlahović, M., Sinčić, N., Katušić, A., Jurić-Lekić, G., Šerman, Lj., Krušlin, B., Belicza, M.: Of mice and men: Teratomas and teratocarcinomas, *Coll Antropol.*, 30 (4): 921-4, 2006
- Šerman A., Šerman Lj.: Glycosylation patterns of placental proteins in blighted ovum. *Gynaecol Perinatol* 15(4): 183-6, 2006
- Šerman Lj., Šerman A.: Uloga glikoproteina u procesima implantacije i placentacije. *Gynaecol Perinatol* 15(2): 82-8, 2006
- Šerman Lj., Sinčić N., Vlahović M., Bulić-Jakuš F., Jurić-Lekić G., Šerman A., Katušić A.: Foetal survival determined by 5-azacytidine impact on the placenta. *Acta Clin Croat* 45(2): 141-4, 2006
- Bulić-Jakuš F., Jurić-Lekić G., Vlahović M., Katušić A., Marinović-Kulišić S., Šerman Lj., Ježek D.: Survival of rat embryonic parts after ectopic transplantation. *Acta Clin Croat* 44(2): 211-5, 2005
- Katušić A., Šerman Lj., Bulić-Jakuš F., Jurić-Lekić G., Vlahović M., Kratochwil K.: The expression of proliferating cell nuclear antigen and retinoblastoma protein in transplanted fetal rat lacrimal gland. *Acta Clin Croat* 43 (2), 211-15, 2004
- Šerman Lj., Šerman A., Lauc G., Milić A., Latin V., Aleksandrova A., Šerman D.: Comparison of glycosylation patterns of placental proteins between normal pregnancy and missed abortion, *Coll Antropol* 28 (1): 301-8, 2004
- Sinčić N., Vlahović M., Bulić-Jakuš F., Šerman Lj., Šerman D.: Acetylsalicylic acid protects rat embryos from teratogenic effects of 5-azacytidine, *Periodicum Biologorum* 104 (4): 441-4, 2002
- Vlahović M., Sinčić N., Bulić-Jakuš F., Šerman Lj., Šerman D.: Acetylsalicylic acid seems to diminish teratogenic effects of 5-azacytidine, *Periodicum Biologorum* 103 (4): 343-6, 2001
- LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS**
- Skoda AM, Simovic D, Karin V, Kardum V, Vranic S, Serman L. The role of the Hedgehog signaling pathway in cancer: A comprehensive review. *Bosn J Basic Med Sci.* 18: 8-20, 2018
- Kardum V, Karin V, Glibo M, Skrtic A, Martic TN, Ibisevic N, Vranic S, Serman L. Methylation-associated silencing of SFRP1 gene in high-grade serous ovarian carcinomas. *Ann Diagn Pathol* 31:45-49, 2017
- Zmijanac Partl J, Karin V, Skrtic A, Nikuseva-Martic T, Serman A, Mlinarec J, Curkovic-Perica M, Vranic S, Serman L. Negative regulators of Wnt signaling pathway SFRP1 and SFRP3 expression in preterm and term pathologic placentas. *J Matern Fetal Neonatal Med* 7:1-9, 2017
- Jurkovic I, Gecek I, Skrtic A, Zmijanac Partl J, Nikuseva Martic T, Serman A, Galesic Ljubanovic D, Serman L. ELF5 transcription factor expression during gestation in humans and rats—an immunohistochemical analysis. *J Matern Fetal Neonatal Med* 30: 1261-66, 2017
- Fabijanovic D, Zunic I, Martic TN, Skenderi F, Serman L, Vranic S. The expression of SFRP1, SFRP3, DVL1, and DVL2 proteins in testicular germ cell tumors. *APMIS.* 124:942-949, 2016
- Serman L, Zunic I, Vrsaljko N, Grbesa D, Gjurcevic E, Matasin Z, Nikuseva Martic T, Bulic Jakus F, Tlak Gajger I, Serman A: Structural changes in the rat placenta during the last third of gestation discovered by stereology, *Bosn J Basic Med Sci* 15: 21-5, 2015
- Partl JZ, Fabijanovic D, Skrtic A, Vranic S, Martic TN, Serman L: Immunohistochemical Expression of SFRP1 and SFRP3 Proteins in Normal and Malignant Reproductive Tissues of Rats and Humans, *Appl Immunohistochem Mol Morphol* 22: 681-7, 2014
- Serman L, Nikuseva Martic T, Vranic S: T-cell factor 1 expression in germ cell tumors with trophoblastic differentiation, *Pathol Int* 64: 86-7, 2014

Serman L, Nikuseva Martić T, Serman A, Vranic S. Epigenetic alterations of the Wnt signaling pathway in cancer: a mini review, *Bosn J Basic Med Sci* 14: 191-4, 2014

Vukasovic A, Grbesa D, Nikuseva Martić T, Kusec V, Miskovic B, Serman A, Soken N, Serman L: Glycosylation pattern and axin expression in normal and IUGR placentae, *J Matern Fetal Neonatal Med* 18: 1-6, 2014

Fabijanovic D, Serman A, Jezic M, Katusic A, Sincic N, Curkovic-Perica M, Bulic-Jakus F, Vlahovic M, Juric-Lekic G, Serman L: Impact of 5-azacytidine on rat decidual cell proliferation, *Int J Exp Pathol* 95: 238-43, 2014

Muzic V, Katusic Bojanac A, Juric-Lekic G, Himmelreich M, Tupek K, Serman L, Marn N, Sincic N, Vlahovic M, Bulic-Jakus F: Epigenetic drug 5-azacytidine impairs proliferation of rat limb buds in an organotypic model-system in vitro, *Croat Med J* 54: 489-95, 2013

Nikuševa-Martić T, Šerman L, Zeljko M, Vidas Ž, Gašparov G, Zeljko HM, Kosović M, NivesPećina-Šlaus N: Expression of Secreted Frizzled-Related Protein 1 and 3, T-cell Factor 1 and Lymphoid Enhancer Factor 1 in Clear Cell Renal Cell Carcinoma. *Pathol Oncol Res*, 2013

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Investigator at the project: “Experimental embryonic tumours and development of the mammalian embryo invitro and invivo”, held by prof. dr. sc. Floriana Bulić-Jakuš and financed by Ministry of Science Republic of Croatia (2007-2013).

Investigator at the project: “Experimental approach on reproductive health in mammals”, held by prof. dr. sc. Floriana Bulić-Jakuš and financed by Ministry of Science Republic of Croatia (2002-2006).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2013-2018 The Role of Wnt signaling in Epithelial to Mesenchymal Transition (collaborator)

2014. Grant UNIZG 2014: Wnt signalisation in placentation and cancerogenesis (project leader)

2015. Grant UNIZG 2015: The role of Hedgehog signalling pathway in regulation of trophoblast and tumor invasiveness (project leader)

2016. Grant UNIZG 2016: The role of DNA methylation of Hedgehog signalling pathway genes in regulation of trophoblast and tumor invasiveness (project leader)

2017. Grant UNIZG 2017: DNA methylation of Patched-1, IHH i SHH genes in regulation of trophoblast and tumor invasiveness (project leader)

2017 - 2022 the leader of the working group “Placenta in pathological pregnancy” within the Scientific Center of Excellence for Reproductive and Regenerative Medicine (CERRM), Subunit: Biomedical research of reproduction and development, part of the European Structural and Investment Fund project, Competition and cohesion; European fond for regional development: Regenerative and reproductive medicine – investigation of new platforms and potentials (KK.01.1.1.01.0008.).

2017 - 2018 the international project “The expression of the Hedgehog signaling pathway components Gli1, Gli3 and PTCH1 in invasive apocrine carcinoma of the breast”, in collaboration with Qatar University (collaborator)

2018. Grant UNIZG 2017: The role of DNA methylation of Sufu gene in regulation of trophoblast and tumor invasiveness (project leader)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE 3



ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Diana Šimić, PhD, Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Faculty of Organization and Informatics,
University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: 1. Statistical Analysis of Medical Data 1

2. Medical Statistics 2.3: Statistical tools for medical data analysis in observational study design with large samples

3. Medical Statistics 2.4: Statistical tools for medical data analysis in observational study design with small samples

BIOGRAPHY

Born in Zagreb 4 Oct. 1958. Graduated from the Faculty of Natural Sciences and Mathematics in 1982. In 1994 received the M.Sc. degree in Mathematics from the same faculty. Defended doctoral thesis at the School of Medicine University of Zagreb in 2001. Between 1983 and 1985 worked as a computer programmer in RIZ Transmitter Factory. From 1985 to 2002 works at the Institute for Medical Research and Occupational Health. From 1995 she is Head Biomathematics Laboratory, and 1991 to 1992 Chair Management Board. From 2002 to 2004 she holds function of assistant minister for informatics at Ministry for Science and Technology. Between 2004 and 2008 she is deputy state secretary at Central State Administrative Office for e Croatia. During 2009 she works as a consultant for e-Government and e-Business at Infodom company. Since 2010 she is associate professor at Faculty of Organization and Informatics University of Zagreb. Between 2010 and 2014 she is Vice-Dean for Research. Since 2015 she is a full professor. She participated in 33 research projects, half of them international. She was a project leader on one IPA and several professional projects. She lectured in 18 courses at all levels of study from undergraduate to postgraduate doctoral level. She initiated and leads seven new university courses. She supervised four defended doctoral theses (School of Medicine and Faculty of Organization and Informatics). Her research interests comprise multivariate statistical methods, generalized linear and additive models, research methods and applications of ICT in public sector and healthcare. She published 18 papers in journals referenced in CC, 28 referenced in WoS, and 22 papers in extenso published in international and national conference proceedings. She authored or coauthored 13 books and two book chapters. She was a keynote speaker at more than 20 research and professional conferences. Her papers attracted 355 citations reported in WoS, and 598 citations reported in Google Scholar. She was a president and a secretary of the Croatian Biometric Society. She is a member of the American Statistical Association, Association for Computing Machinery, and the Croatian Statistical Association. She was awarded the plaque Informatics of the Croatian Informatics Association in 2007 for contribution to the development of information society in Croatia; recognition for special contribution to advancement and recognition of the University Computing Centre of the University of Zagreb (in 2011), Europe's Open Access Champion (2016), Dean's certificate of appreciation for contribution to the development of the doctoral study and research methodology at the Faculty of Organization and Informatics (in 2016).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 19 May 2015

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Žajdela Hrustek N, Šimić D, Vrček N. Electronic services with impact on quality of life-a survey of usage and attitudes of north-western Croatia. In: Hansen H; Muller-Torok R; Nemeslaki A; Pichler J; Prosser A; Scola D. Proceedings of the Central and Eastern European eDem and eGov Days 2017. Wien: Österreichische Computer Gesellschaft, 2017, pp. 29-41. (ISBN: 978-3-903035-14-0)
- Bakota B, M Kopljar, D Šimić, M Franić, M Starešinić, L Patrlj: Complications, Pain Control, and Patient Recovery After Local Versus General Anesthesia for Open Inguinal Hernia Repair in Adults—Systematic Review and Meta-analysis. *Int Surg* 101: 144-152, 2016.
- Mundar D, D Šimić: Croatian First Football League: Teams' performance in the championship. *Croatian Review of Economic, Business and Social Statistics (CREBSS)* 2(1): 15-23, 2016.
- Mundar D, Šimić D. Croatian First Football League: Predictions of team's ranking in the championship. In: Dumičić K, Erjavec N, Pejić Bach M (eds.) *New Challenges of Official and Applied Statistics in European Union*. Proceedings of the ISCCRO – International Statistical Conference in Croatia, Zagreb 5-6 May 2016. Zagreb: Croatian Statistical Association, 2016, pp. 221-227.
- Šimić D (ed.) *Medicinska informatika - kvalifikacije i zanimanja*. Varaždin: Fakultet organizacije i informatike, Sveučilište u Zagrebu, 2015. (ISBN: 978-953-6071-47-0)
- Hercigonja-Szekeres M, Šimić D, Božikov J, Vondra P. New Study Programme; Interdisciplinary Postgraduate Specialist Study in Medical Informatics. In: Stoicu-Tivadar L, de Lusignan S, Orel A, Engelbrecht R, Surján G (eds.) *Cross-Border Challenges in Informatics with a Focus on Disease Surveillance and Utilising Big-Data*. Proceedings of the 11th EFMI Special Topic Conference 27-29 April 2014 Budapest, Hungary. Amsterdam: IOS Press, 2014, pp. 115-119. (<http://ebooks.iospress.nl/volume/cross-border-challenges-in-informatics-with-a-focus-on-disease-surveillance-and-utilising-big-data-proceedings-of-the-efmi-special-topic-conference-27ndash29-ap>)
- Šimić D, Jovanović M, Vondra P. Curriculum Development for Interdisciplinary Postgraduate Specialist Study in Medical Informatics. In: Lovis C, Séroussi B, Hasman A, Pape-Haugaard L, Saka O, Andersen SK (eds.) *Conference on Medical Informatics in Europe 2014*, 31 August – 3 September 2014, Istanbul, Turkey. (http://person.hst.aau.dk/ska/MIE2014/ShortCommunications/S48_ShortComm_ID_485.pdf)
- Šimić D: ICT R&D Challenges for the Western Balkans. In: Nedkov P (ed.) *Research and Innovation Challenges in the EEMS*. Budapest, Hungary, 11.11.2011. (http://www.scholze-simmel.at/ipts/wp-content/uploads/2011/07/Diana_Simic_Budapest_2011-11-11.pdf)
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Bakota B, M Kopljar, D Šimić, M Franić, M Starešinić, L Patrlj: Complications, Pain Control, and Patient Recovery After Local Versus General Anesthesia for Open Inguinal Hernia Repair in Adults—Systematic Review and Meta-analysis. *Int Surg* 101: 144-152, 2016.

Mundar D, D Šimić: Croatian First Football League: Teams' performance in the championship. *Croatian Review of Economic, Business and Social Statistics (CREBSS)* 2(1): 15-23, 2016.

Mundar D, Šimić D. Croatian First Football League: Predictions of team's ranking in the championship. In: Dumičić K, Erjavec N, Pejić Bach M (eds.) *New Challenges of Official and Applied Statistics in European Union*. Proceedings of the ISCCRO – International Statistical Conference in Croatia, Zagreb 5-6 May 2016. Zagreb: Croatian Statistical Association, 2016, pp. 221-227.

Šimić D (ed.) *Medicinska informatika - kvalifikacije i zanimanja*. Varaždin: Fakultet organizacije i informatike, Sveučilište u Zagrebu, 2015. (ISBN: 978-953-6071-47-0)

Hercigonja-Szekeres M, Šimić D, Božikov J, Vondra P. New Study Programme; Interdisciplinary Postgraduate Specialist Study in Medical Informatics. In: Stoicu-Tivadar L, de Lusignan S, Orel A, Engelbrecht R, Surján G (eds.) *Cross-Border Challenges in Informatics with a Focus on Disease Surveillance and Utilising Big-Data*. Proceedings of the 11th EFMI Special Topic Conference 27-29 April 2014 Budapest, Hungary. Amsterdam: IOS Press, 2014, pp. 115-119. (<http://ebooks.iospress.nl/volume/cross-border-challenges-in-informatics-with-a-focus-on-disease-surveillance-and-utilising-big-data-proceedings-of-the-efmi-special-topic-conference-27ndash29-ap>)

Šimić D, Jovanović M, Vondra P. Curriculum Development for Interdisciplinary Postgraduate Specialist Study in Medical Informatics. In: Lovis C, Séroussi B, Hasman A, Pape-Haugaard L, Saka O, Andersen SK (eds.) *Conference on Medical Informatics in Europe 2014, 31 August – 3 September 2014, Istanbul, Turkey*. (http://person.hst.aau.dk/ska/MIE2014/ShortCommunications/S48_ShortComm_ID_485.pdf)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2015 – 2018 e-Škole: Uspostava sustava razvoja digitalno zrelih škola (pilot projekt) (ESF, članica tima)

2015 – 2018 "KyrMedu / Advancing University Education in Biomedical Engineering and Health Management in Kyrgyzstan" (Erasmus+, voditeljica FOI tima)

2015 – 2016 Stand4INFO - Razvoj visokoobrazovnih standarda zanimanja, standarda kvalifikacija i studijskih programa na osnovama Hrvatskog kvalifikacijskog okvira u području informatike (ESF, članica tima)

2015 – 2016 Razvoj studija ekologije, računarstva i matematike uz primjenu Hrvatskoga kvalifikacijskog okvira – EkoRaMa (ESF, vanjski ekspert)

2014 – 2016 "Share – PSI 2.0 Shared Standards for Open Data and Public Sector Information" collaboration network, EU CIP ICT programmes (članica tima)

2013 – 2015 "MEDINFO – Curriculum Development for Interdisciplinary Postgraduate Specialist Study in Medical Informatics / MEDINFO – Razvoj kurikuluma za Interdisciplinarni poslijediplomski specijalistički studij medicinske informatike", IPA BGUE 04 06 – Human Resources Development, Further development and implementation of the Croatian Qualifications Framework, GRANT CONTRACT NO. IPA4.1.3.1.06.01.c12 (voditeljica projekta)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2015 – 2018 e-Škole: Uspostava sustava razvoja digitalno zrelih škola (pilot projekt) (ESF, članica tima)



2015 – 2018 "KyrMedu / Advancing University Education in Biomedical Engineering and Health Management in Kyrgyzstan" (Erasmus+, voditeljica FOI tima)

2015 – 2016 Stand4INFO - Razvoj visokoobrazovnih standarda zanimanja, standarda kvalifikacija i studijskih programa na osnovama Hrvatskog kvalifikacijskog okvira u području informatike (ESF, članica tima)

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NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

4

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Goran Šimić MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb Medical School

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Neurobiology of aging; Selected chapters in epileptology in developmental age

BIOGRAPHY

Goran Šimić is a tenured Professor of Neuroscience and Anatomy, and the Head of Neuroscience Department at the Croatian Institute for Brain Research of the University of Zagreb Medical School. In the department, prof. Šimić also leads the Laboratory for Developmental Neuropathology. He graduated from the University of Zagreb Medical School in 1992, where he, after three research fellowships from Karolinska Institute in Stockholm, also received PhD in 1998. His laboratory has extensive expertise in the neuropathology of developmental and neurodegenerative disorders and has established an international cooperation on biomarkers for brain diseases, especially Alzheimer's disease. Prof. Šimić was the Editor-in-Chief and Managing Editor of Translational Neuroscience journal from 2010-2016. For his work on etiopathogenesis of spinal muscular atrophy he received The Kurt Jellinger Prize from Acta Neuropathologica and Springer-Verlag in 2008.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2016

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Ilić, K., Mlinac-Jerković, K., Jovanov-Milošević, N., Šimić, G., Habek, N., Bogdanović, N., Kalanj-Bognar, S. Hippocampal expression of cell-adhesion glycoprotein neuropilin is altered in Alzheimer's disease (2018) Journal of Cellular and Molecular Medicine doi: 10.1111/jcmm.13998. [Epub ahead of print]
2. Boban, M., Babić Leko, M., Miškić, T., Hof, P.R., Šimić, G. Human neuroblastoma SH-SY5Y cells treated with okadaic acid express phosphorylated high molecular weight tau-immunoreactive protein species (2018) Journal of Neuroscience Methods doi: 10.1016/j.jneumeth.2018.09.030. [Epub ahead of print]
3. Babić Leko, M., Župunski, V., Kirincich, J., Smilović, D., Hortobágy, T., Hof, P.R., Šimić, G. Molecular mechanisms of neurodegeneration related to C9ORF72 hexanucleotide repeat expansion (2018) Behavioral Neurology, in press.
4. Babić Leko, M., Willumsen, N., Nikolac Perković, M., Klepac, N., Borovečki, F., Hof, P.R., Sonicki, Z., Pivac, N., de Silva, R., Šimić, G. Association of MAPT haplotype-tagging polymorphisms with cerebrospinal fluid biomarkers of Alzheimer's disease: a preliminary study in a Croatian cohort (2018) Brain and Behavior, e01128.
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6. Jazvinščak Jembrek M., Slade N., Hof P.R., Šimić G. The interactions of p53 with tau and Aβ represent potential therapeutic targets for Alzheimer's disease (2018) Progress in Neurobiology 168: 104-127.
7. Kiđemet-Piskač S., Babić Leko M., Blažeković A., Langer Horvat L., Klepac N., Sonicki Z., Kolenc D., Hof P.R., Boban M., Mimica N., Borovečki F., Šimić G. Evaluation of cerebrospinal fluid phosphorylated

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8. Mihelčić M., Šimić G., Babić Leko M., Lavrač N., Džeroski S., Šmuc T., Alzheimer's Disease Neuroimaging Initiative. Using redescription mining to relate clinical and biological characteristics of cognitively impaired and Alzheimer's disease patients (2017) *PLoS One* 12(10): e0187364.
9. Charvet C.J., Šimić G., Kostović I., Kovačević V., Vukšić M., Babić Leko M., Takahashi E., Sherwood C.C., Wolfe M.D., Finlay B.L. Co-evolution in the timing of GABAergic and pyramidal neuron maturation in primates (2017) *Proceedings of the Royal Society of London B: Biological Sciences* 284 (1861): 20171169.
10. Molina-Herrera, R., Mlinac Jerković, K., Ilić, K., Stöber F., Vemula S.K., Sandoval M., Jovanov Milošević N., Šimić, G., Smalla K-H., Goldschmidt J., Kalanj Bogner S., Montag D. Neuroplastin deletion in glutamatergic neurons impairs selective brain functions and calcium regulation: implication for cognitive deterioration (2017) *Scientific Reports* 7 (1): 7273.
11. Šimić, G., Babić Leko, M., Wray, S., Harrington, C., Delalle, I., Jovanov-Milošević, N., Bažadona, D., Buée, L., de Silva, R., Di Giovanni, G., Wischik, C., Hof, P.R. Monoaminergic neuropathology in Alzheimer's disease (2017) *Progress in Neurobiology*, 151: 101-138.
12. Mladinov, M., Sedmak G., Fuller H.R., Babić Leko, M., Mayer, D., Kirincich, J., Štajduhar, A., Borovečki, F., Hof, P.R., Šimić, G. Gene expression profiling of the dorsolateral and medial orbitofrontal cortex in schizophrenia (2016) *Translational Neuroscience*, 7: 139-150.
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14. Šimić, G., Babić Leko, M., Wray, S., Harrington, C., Delalle, I., Jovanov-Milošević, N., Bažadona, D., Buée, L., de Silva, R., Di Giovanni, G., Wischik, C., Hof, P.R. Tau protein hyperphosphorylation and aggregation in Alzheimer's disease and other tauopathies, and possible neuroprotective strategies (2016) *Biomolecules*, 6(1), E6.
15. Fuller, H.R., Slade, R., Jovanov-Milošević, N., Babić, M., Sedmak, G., Šimić, G., Fuszard, M.A., Shirran, S.L., Botting, C.H., Gates, M.A. Stathmin is enriched in the developing corticospinal tract (2015) *Molecular and Cellular Neuroscience*, 69: 12-21.
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23. Jazvinščak Jembrek, M., Babić, M., Pivac, N., Hof, P.R., Šimić, G. Hyperphosphorylation of tau by GSK-3 β in Alzheimer's disease: the interaction of A β and sphingolipid mediators as a therapeutic target (2013) *Translational Neuroscience*, 4 (4), pp. 466-476.
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27. Radoš, M., Nikić, I., Radoš, M., Kostović, I., Hof, P.R., Šimić, G. Functional reorganization of the primary motor cortex in a patient with a large arteriovenous malformation involving the precentral gyrus (2013) *Translational Neuroscience*, 4 (2), pp. 269-272.
28. Babić, M., Vogrinc, Z., Diana, A., Klepac, N., Borovečki, F., Hof, P.R., Šimić, G. Comparison of two commercial enzyme-linked immunosorbent assays for cerebrospinal fluid measurement of amyloid β 1-42 and total tau (2013) *Translational Neuroscience*, 4 (2), pp. 234-240.
29. Jovanov Milošević, N., Petrović, D., Sedmak, G., Vukšić, M., Hof, P.R., Šimić, G. Human fetal tau protein isoform: possibilities for Alzheimer's disease treatment (2012) *International Journal of Biochemistry and Cell Biology*, 44 (8), pp. 1290-1294.
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33. Šarac, H., Hajnšek, S., Bašić, S., Telarović, S., Markeljević, J., Vukić, M., Radoš, M., Bošnjak-Pašić, M., Žarković, K., Hof, P.R., Šimić, G. Giant cavernoma of the skull and skeletal-extraskeletal angiomatosis associated with paraproteinemia (2011) *Translational Neuroscience*, 2 (3), pp. 265-269.
34. Petanjek, Z., Judaš, M., Šimić, G., Rašin, M.R., Uylings, H.B.M., Rakic, P., Kostović, I. Extraordinary neoteny of synaptic spines in the human prefrontal cortex (2011) *Proceedings of the National Academy of Sciences of the United States of America*, 108 (32), pp. 13281-13286.

35. Raghanti, M.A., Šimić, G., Watson, S., Stimpson, C.D., Hof, P.R., Sherwood, C.C. Comparative analysis of the nucleus basalis of Meynert among primates (2011) *Neuroscience*, 184, pp. 1-15.
36. Judaš, M., Šimić, G., Petanjek, Z., Jovanov Milošević, N., Pletikos, M., Vasung, L., Vukšić, M., Kostović, I. The Zagreb Collection of human brains: a unique, versatile, but underexploited resource for the neuroscience community (2011) *Annals of the New York Academy of Sciences*, 1225 (SUPPL. 1), pp. E105-E130.
37. Špeljko, T., Jutric, D., Šimić, G. HSV1 in Alzheimer's disease: myth or reality? (2011) *Translational Neuroscience*, 2 (1), pp. 61-68.
38. Šarac, H., Henigsberg, N., Markeljević, J., Pavliša, G., Hof, P.R., Šimić, G. Fragile X-premutation tremor/ataxia syndrome (FXTAS) in a young woman: clinical, genetics, MRI and 1H-MR spectroscopy correlates [Fragilni X-vezani tremor/ataxia sindrom (FXTAS) u mlade žene: klinička, genetska, MRI and 1H-MR spektroskopska korelacija] (2011) *Collegium Antropologicum*, 35 (SUPPL. 1), pp. 327-332.
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40. Mladinov, M., Mayer, D., Brčić, L., Wolstencroft, E., Man, N.T., Holt, I., Hof, P.R., Morris, G.E., Šimić, G. Astrocyte expression of D2-like dopamine receptors in the prefrontal cortex (2010) *Translational Neuroscience*, 1 (3), pp. 238-243.
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55. Šimić, G., Bexheti, S., Kelović, Z., Kos, M., Grbić, K., Hof, P.R., Kostović, I. Hemispheric asymmetry, modular variability and age-related changes in the human entorhinal cortex (2005) *Neuroscience*, 130 (4), pp. 911-925.
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65. Krušlin, B., Jukić, S., Delija-Presečki, Z., Šimić, G., Kos, M., Tkalčević, T. Congenital anomalies of the central nervous system 1990-1993 [Kongenitalne anomalije središnjega živčanog sustava u razdoblju od 1990. do 1993. godine.] (1996) Liječnički Vjesnik, 118 (7-8), pp. 152-154.
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LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

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2. Boban, M., Babić Leko, M., Miškić, T., Hof, P.R., Šimić, G. Human neuroblastoma SH-SY5Y cells treated with okadaic acid express phosphorylated high molecular weight tau-immunoreactive protein species (2018) Journal of Neuroscience Methods doi: 10.1016/j.jneumeth.2018.09.030. [Epub ahead of print]
3. Babić Leko, M., Župunski, V., Kirincich, J., Smilović, D., Hortobágy, T., Hof, P.R., Šimić, G. Molecular mechanisms of neurodegeneration related to C9ORF72 hexanucleotide repeat expansion (2018) Behavioral Neurology, in press.
4. Babić Leko, M., Willumsen, N., Nikolac Perković, M., Klepac, N., Borovečki, F., Hof, P.R., Sonicki, Z., Pivac, N., de Silva, R., Šimić, G. Association of MAPT haplotype-tagging polymorphisms with cerebrospinal fluid biomarkers of Alzheimer's disease: a preliminary study in a Croatian cohort (2018) Brain and Behavior, e01128.
5. Babić Leko, M., Krbot Skorić, M., Klepac, N., Borovečki, F., Langer Horvat, L., Vogrinc, Ž., Sonicki, Z., Hof, P.R., Šimić, G. Event-related potentials improve the efficiency of cerebrospinal fluid biomarkers for differential diagnosis of Alzheimer's disease (2018) Current Alzheimer Research 15: 1244-1260.
6. Jazvinščak Jembrek M., Slade N., Hof P.R., Šimić G. The interactions of p53 with tau and Aβ represent potential therapeutic targets for Alzheimer's disease (2018) Progress in Neurobiology 168: 104-127.

7. Kiđemet-Piskač S., Babić Leko M., Blažeković A., Langer Horvat L., Klepac N., Sonicki Z., Kolenc D., Hof P.R., Boban M., Mimica N., Borovečki F., Šimić G. Evaluation of cerebrospinal fluid phosphorylated tau231 as a biomarker in the differential diagnosis of Alzheimer's disease and vascular dementia (2018) *CNS Neuroscience & Therapeutics* 23 (8): 734-740.
8. Mihelčić M., Šimić G., Babić Leko M., Lavrač N., Džeroski S., Šmuc T., Alzheimer's Disease Neuroimaging Initiative. Using redescription mining to relate clinical and biological characteristics of cognitively impaired and Alzheimer's disease patients (2017) *PLoS One* 12(10): e0187364.
9. Charvet C.J., Šimić G., Kostović I., Kovačević V., Vukšić M., Babić Leko M., Takahashi E., Sherwood C.C., Wolfe M.D., Finlay B.L. Co-evolution in the timing of GABAergic and pyramidal neuron maturation in primates (2017) *Proceedings of the Royal Society of London B: Biological Sciences* 284 (1861): 20171169.
10. Molina-Herrera, R., Mlinac Jerković, K., Ilić, K., Stöber F., Vemula S.K., Sandoval M., Jovanov Milošević N., Šimić, G., Smalla K-H., Goldschmidt J., Kalanj Bogner S., Montag D. Neuroplastin deletion in glutamatergic neurons impairs selective brain functions and calcium regulation: implication for cognitive deterioration (2017) *Scientific Reports* 7 (1): 7273.
11. Šimić, G., Babić Leko, M., Wray, S., Harrington, C., Delalle, I., Jovanov-Milošević, N., Bažadona, D., Buée, L., de Silva, R., Di Giovanni, G., Wischik, C., Hof, P.R. Monoaminergic neuropathology in Alzheimer's disease (2017) *Progress in Neurobiology*, 151: 101-138.
12. Mladinov, M., Sedmak G., Fuller H.R., Babić Leko, M., Mayer, D., Kirincich, J., Štajduhar, A., Borovečki, F., Hof, P.R., Šimić, G. Gene expression profiling of the dorsolateral and medial orbitofrontal cortex in schizophrenia (2016) *Translational Neuroscience*, 7: 139-150.
13. Babić Leko, M., Borovečki, F., Dejanović, N., Hof. P.R., Šimić, G. Predictive value of cerebrospinal fluid visinin-like protein-1 levels for Alzheimer's disease early detection and differential diagnosis in patients with mild cognitive impairment (2016) *Journal of Alzheimer's Disease*, 50: 765-778.
14. Šimić, G., Babić Leko, M., Wray, S., Harrington, C., Delalle, I., Jovanov-Milošević, N., Bažadona, D., Buée, L., de Silva, R., Di Giovanni, G., Wischik, C., Hof, P.R. Tau protein hyperphosphorylation and aggregation in Alzheimer's disease and other tauopathies, and possible neuroprotective strategies (2016) *Biomolecules*, 6(1), E6.
15. Fuller, H.R., Slade, R., Jovanov-Milošević, N., Babić, M., Sedmak, G., Šimić, G., Fuszard, M.A., Shirran, S.L., Botting, C.H., Gates, M.A. Stathmin is enriched in the developing corticospinal tract (2015) *Molecular and Cellular Neuroscience*, 69: 12-21.
16. Jazvinščak Jembrek, M., Šimić, G., Hof P.R., Šegota S. Atomic force microscopy as an advanced tool in neuroscience (2015) *Translational Neuroscience*, 6: 117-130.
17. Jazvinščak Jembrek, M., Hof P.R., Šimić, G. Ceramides in Alzheimer's disease: key mediators of neuronal apoptosis induced by oxidative stress and A β accumulation (2015) *Oxidative Medicine and Cellular Longevity*, 346783, 1-17.
18. Knezović, A., Osmanović-Barilar, J., Ćurlin, M., Hof P.R., Šimić, G., Riederer P., Šalković-Petrišić, M. Staging of cognitive deficits and neuropathological and ultrastructural changes in streptozotocin-induced rat model of Alzheimer's disease (2015) *Journal of Neural Transmission*, 122 (4), 577-592.
19. Šimić, G., Hof, P.R. In search of the definitive Brodmann's map of cortical areas in human (2015) *Journal of Comparative Neurology*, 523 (1), 5-14.

20. Krušlin, B., Džombeta, T., Bezjak, M., Sedmak, G., Petanjek, Z., Šimić, G., Judaš, M., Kostović, I. Congenital brain anomalies and chromosomal aberrations from the Zagreb Collection of the human brains (2014) *Translational Neuroscience*, 5 (4), 293-301.
21. Babić, M., Švob Štrac, D., Mück-Šeler, D., Pivac, N., Stanić, G., Hof, P.R., Šimić, G. Update on the core and developing cerebrospinal fluid biomarkers for Alzheimer's disease (2014) *Croatian Medical Journal*, 55 (4), 347-365.
22. Šimić, G., Babić, M., Borovečki, F., Hof, P.R. Early failure of the default-mode network and the pathogenesis of Alzheimer's disease (2014) *CNS Neuroscience and Therapeutics*, 20 (7), pp. 692-698.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2017-2022: The European Union through the European Regional Development Fund, Operational Programme Competitiveness and Cohesion, grant agreement no. KK.01.1.1.01.0007, CoRE – Neuro, Scientific Centre for Excellence in Basic, Clinical and Translational Neuroscience, <http://zci.hiim.hr/index.php/en/zci-neuro>

2017-2021: H2020 SC1-2017: Alliance4Life, <http://alliance4life.ceitec.cz/>

2015-2019: HRZZ IP-2014-09-9730 Croatian Science Foundation: "Tau protein hyperphosphorylation, aggregation and trans-synaptic transfer in Alzheimer's disease: cerebrospinal fluid analysis and assessment of potential neuroprotective compounds" <http://alztauprotect.hiim.hr/>

2016-2018: HAMAG-BICRO: "A non-invasive hidden-goal test for spatial navigation impairment detection" SPOT-ALZ / ALZENTIA www.alzentia.com www.alzentia.eu

2018: University of Zagreb project BM103/2018 „Pilot investigation on Alzheimer's disease diagnosis in preclinical stage using a combination of biomarkers from blood and cerebrospinal fluid"

2017: University of Zagreb project BM82/2017 „Determination of blood-brain permeability in Alzheimer's disease"

2016: University of Zagreb project BM112/2016 „Mechanisms of neurofibrillary degeneration in vitro and in vivo"

2011-2015: COST Action CM1103: „Structure-based drug design for diagnosis and treatment of neurological diseases: dissecting and modulating complex function in the monoaminergic systems of the brain", http://www.cost.eu/domains_actions/cmst/Actions/CM1103

2015: University of Zagreb project BM112/2015 „Biomarkers of Alzheimer's disease in cerebrospinal fluid"

2012-2014: Croatian Science Foundation "Detecting and tracking of biological markers for early detection for early therapeutic intervention in Alzheimer's disease", <http://alzbiotrack.hiim.hr/>

2007-2012: „Phosphorylation of tau proteins in development and Alzheimer's disease", Croatian Ministry of Science, Education and Sports, grant no. 108-1081870-1942

2008 (1st Jan - 31st Dec): „Outinstitutional care for patients with Alzheimer's disease", National Foundation for Civil Society, grant PP-2

2002-2006: „Reactivation of fetal plasticity in Alzheimer's disease", Croatian Ministry of Science, Education and Sports, grant no. 108-258

2001-2003: „Abnormal polysialylation in spinal muscular atrophy: clues for possible new role of survival motor neuron protein", Academic links and interchange scheme, British Council grant no. 220



1997-2001: „Tau and neurofilament proteins, and nitric oxide synthetase, as markers of hippocampal neurons' vulnerability in Alzheimer's disease“, Croatian Ministry of Science and Technology, grant no. 108-503

1997-2001: Croatian Ministry of Science and Technology: „Development of the human cerebral cortex of the frontal lobe“

1993-1996: Croatian Ministry of Science and Technology: „Postnatal development of the human cerebral cortex“

1992-1993: MZT RH: „Reorganization of the human cerebral cortex during lifetime“

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

<http://zci.hiim.hr/index.php/en/zci-neuro>

<http://alztauprotect.hiim.hr/>

<http://alzbiotrack.hiim.hr/>

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

4

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mirjana Šimić, Ph.D.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Andrija Štampar Teaching Institute of Public Health, Department of Clinical Microbiology

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods of molecular biology in medicine

BIOGRAPHY

Mirjana Šimić born on 25 January 1964 Graduated in 1988 at the Faculty of Food Technology and Biotechnology of the University of Zagreb, Biochemical Engineering. Professional Exam: 1990. Professional Ability to Work, Healthcare Worker, Clinical Laboratory Diagnostic Institute, (KZLD), Clinical Hospital Center, Zagreb. She graduated in 1998 as Master of Biotechnical Sciences, Biotechnology Biomedical Science, Master's Thesis entitled "Influence of Immunoglobulin Preparation Methods on Activity and Concentration of Specific Antibodies", made at the Institute of Immunology and Faculty of Food Technology and Biotechnology, University of Zagreb. She received her PhD in 2007 from the field of Biotechnical Sciences, Biotechnology, Biomedical Sciences, Biochemical Engineering, Biophysical Biotechnology Faculty of the University of Zagreb. Dissertation titled "Multiple Sclerosis and Role of Apolipoprotein E Genotype". Work done in the Immunological Institute, the Hospital of the Sveti Duh and the KZLD. Scientific title: 2014 Scientific associate, Faculty of Food Technology and Biotechnology, University of Zagreb, scientific area - biotechnical sciences, scientific field - biotechnology. Membership in Croatian Microbiological, Society - Immunological Section. Work experience: 2015.-Andrija Štampar Teaching Institute of Public Health, Department of Clinical Microbiology, 2010 - 2015 Institute of Immunology, Head of Plasma Processing Department, 1993 - 2010 Institute of Immunology, Plasma Processing Department - Head of Department, 1992 - 1993 Health Center Velika Gorica, Medical Biochemist Position, 1989. - 1991. Clinical Hospital Center Zagreb, Clinical Institute for Laboratory Diagnosis. Teaching activity: 2010 - 2013 Faculty of Food Technology and Biotechnology, University of Zagreb Graduate study program: Molecular biotechnology, Immunology; 2016. - Medical School, University of Zagreb, PhD program, Biomedicine and Health Sciences: Methods of molecular biology in medicine. 2018 - Health Polytechnic, Department of Microbiology, Study of Sanitary Engineering.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 22.05.2014.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Markeljević J, Sarac H, Božina N, Henigsberg N, Simić M, Cicin Sain L. Serotonin transporter gene polymorphisms: Relation with platelet serotonin level in patients with primary Sjögren's syndrome. J Neuroimmunol. 2015;282: 104-09.
2. Vuković I, Karanović S, Matišić D, Kuzmanić D, Ćorić M, Šimić M, Jelaković B. Factitious proteinuria - the most dominant feature in a young female patient with Munchausen syndrome. Clin Nephrology. 2013;79:166-70.
3. Vrdoljak A, Treščec A, Benko B, Hećimović D, Šimić M. In vitro Glycation of Human Immunoglobulin G. Clin Chem Acta. 2004;345:105-11.
4. Vrdoljak A, Treščec A, Benko B, Šimić M. A microassay for measurement of Fc function of human immunoglobulin preparations using tetanus toxoid as antigen. Biologicals. 2004;32:78-83.

5. Gebauer B, Šimić M, Branović K, Treščec A, Benko B. Ion-exchange chromatography separation of the detergent and the solvent from immunoglobulins after solvent-detergent treatment. *J Chromatography*. 1999;852:83-6.

6. Treščec A, Šimić M, Branović K, Gebauer B, Benko B. Removal of detergent and solvent from solvent-detergent-treated immunoglobulins. *J Chromatography*. 1999; 852: 87-91.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Markeljević J, Sarac H, Božina N, Henigsberg N, Simić M, Cicin Sain L. Serotonin transporter gene polymorphisms: Relation with platelet serotonin level in patients with primary Sjogren's syndrome. *J Neuroimmunol*. 282 (2015); 104-09.

2. Šimić M. PCR / RFLP: Apo E genotyping. In: *Methods of molecular biology in medicine*. Bulić-Jakuš F, Sertić J (ed.) Zagreb: University of Zagreb, School of Medicine; 2016. p. 148.

3. Šimić M, Pulanić D. Human immunoglobulins as a pharmaceutical composition and clinical application of intravenous immunoglobulins. In: *Clinical chemistry and molecular diagnostics in clinical practice*. Sertić J (ed.) Zagreb: Medicinska naklada; 2014. p.623-32.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2003-2006. Technological procedure for the production of a new generation of immunoglobulins for intravenous administration, (MZOS, RH, leader A.Treščec).

2003-2006. Production of antitoxin against botulism, (MZOS, RH, leader S. Rabatić).

2007-2013. New Antigen and immunostimulator formulations - impact on immunoreactivity, (MZOS, RH, leader R. Frkanec).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Mirna Šitum, academician; Full member of Croatian Academy of Sciences and Arts; full professor of dermatology and venereology, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb, School of Dental Medicine; Department of Dermatology and Venereology, Sestre milosrdnice University Hospital Centre, Zagreb, Croatia

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical-laboratory diagnostics of malignant melanoma with special reference to molecular-biological diagnostic capabilities

BIOGRAPHY

Academician Mirna Šitum was born in 1962. In 1985 she graduated in University of Zagreb, Medical School. As a general practitioner she worked 1986-1991 at Emergency Medicine Department in Split. In 1991 she voluntarily attended to 4th Guardian Brigade of Croatian Army as a colonel where until 1993 she performed duty of a Head of medical corps as well as medical doctor.

In 1996 she finished residency training at Department of Dermatology and Venereology, University Hospital Centre Zagreb while in 2004 she became Subspecialist of Dermatological oncology at Sestre milosrdnice University Hospital Centre, Zagreb.

Nowadays she is a leading Croatian dermatooncologist with prominent international scientific and professional reputation. Since 2000 she is performing duty of Head of the Department of Dermatology and Venereology at Sestre milosrdnice University Hospital Centre Zagreb, Croatia. In 1999 she became Head of the Department of Dermatovenereology, School of Dental Medicine, University of Zagreb, Croatia and in the same institution in 2007 she became a scientific consultant and in 2012 a full professor.

As a postdoctoral programme coordinator she is managing several courses in University of Zagreb: Medical School, School of Dental Medicine and Faculty of Pharmacy and Biochemistry. In May 2018 she was elected as a Full member of Croatian Academy of Sciences and Arts.

From 2009-2018 she was a President of the Croatian Dermatovenereological Society of the Croatian Medical Association. So far she was a president of 23 international congresses, 7 national congresses and 17 international symposiums. She is author and co-author of 695 scientific publications: 197 scientific papers of which 102 cited in Current Contents. She is editor of 23 books and as author in 38 books she wrote 104 book chapters. As a Head researcher and Associate researcher she contributed in 17 national and international scientific projects. She is Head coordinator of « Euromelanoma day organization » in Croatia as well as a member of Scientific Advisory Board of Vitiligo Research Foundation. She was a founder of several subspecialist activities in fields of dermatooncology, dermatosurgery and psychodermatology.

She is a founder and Head of the Croatian Referral Centre for Melanoma and Croatian Referral Centre for Chronic Wounds of the Ministry of Health of the Republic of Croatia. Since 2010 she is a visiting professor at the Josip Juraj Strossmayer University of Osijek Faculty of Medicine. At the University of Mostar, School of medicine during two mandates she was performing duty of Head of the Department of Dermatovenereology and since 2007 she is a full professor. In numerous international and national symposiums she was invited lecturer. She is a member of 7 Editorial Boards in national and international

scientific journals as well as a member of 10 international professional scientific associations. She was a mentor of a 20 doctoral dissertations.

She is a Head of the Specialist Training Programme in Dermatology and venereology and a chairwoman of the Dermatology and venereology Commission of the Ministry of Health of the Republic of Croatia, as well as a member of several expert committees of the Ministry of Health of the Republic of Croatia

In the field of dermatooncology, she the most productive and the most cited author in Croatia. Her scientific research regarding to molecular and genetic basis of the development of familial malignant skin tumors became standard part of clinical practice of prediction of disease development among family members. Also, she was a founder of vitiligo Biobank Croatia and she was the first physician in Croatia who performed melanocyte transplantation. Her scientific work in the psychodermatology area is also worldwide appreciated and results of her scientific experience became a part of clinical practice as an interdisciplinary collaboration among dermatologists, psychologists and Liason psychiatrists.

With her scientific and professional reputation, national and international recognition, continuous promotion of scientific and professional topics in the field of dermatovenerology and public health, she is placed among the most prominent and most successful persons of her generation in Croatian and international medical science. She made a major step in the perception of dermatovenerology profession in Croatia, translating it from a conservative internist profession into a functional interdisciplinary science that insists on a holistic approach to the patient, and in the first place puts prevention, education and science into the service of human being.

Regarding to her scientific and professional activities she has received numerous honors; in 1991 City of Split Award related to the contribution in organizing and founding of field hospitals during Croatian War of Independence and in 1992 President of Croatia honored her with Memorial and Medal of Croatian War of Independence as well as with Medals related to battles of Croatian War of Independence, 4th Guardian Brigade Plaque of Croatian army and “Pauk” medal. In 2005 she received Croatian Academy of Sciences and Arts award in the field of medical sciences, in 2011 Croatian Medical Association awarded her with Diploma and the Ladislav Rakovac Award and in 2016 she received National Science award for popularization and promotion of science

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: full professor of dermatology and venereology (may 1st, 2012); academician; Full member of Croatian Academy of Sciences and Arts (june 14th, 2018)

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Borki Vučetić, Sunčica Andreja Rogan, Antonija Balenović, Mirko Ivkić, Mirna Šitum, Narcis Hudorović, Zvonko Kusić. The role of lymphoscintigraphy in surgery planning for sentinel lymph node biopsy in malignant melanoma. Wien Klin Wochen Schr 2006; 118/9-10:286-93.
2. Davor Tomas, Majda Vučić, Mirna Šitum, Božo Krušlin. The expression of syndecan-1 in psoriatic epidermis. Arch Dermatol Res 2008;300:393-5.
3. Šamija I, Lukač J, Marić-Brozić J, Buljan M, Alajbeg I, Kovačević D, Šitum M, Kusić Z. Prognostic value of microphthalmia-associated transcription factor and tyrosinase as markers for circulating tumor cells detection in patients with melanoma. Melanoma Res 2010;20(4):293-302.
4. van der Leest RJ, de Vries E, Bulliard JL, Paoli J, Peris K, Stratigos AJ, Trakatelli M, Maselis TJ, Situm M, Pallouras AC, Hercogova J, Zafirovik Z, Reusch M, Olah J, Bylaite M, Dittmar HC, Scerri L,

- Correia O, Medenica L, Bartenjev I, Guillen C, Cozzio A, Bogomolets OV, Del Marmol V. The Euromelanoma skin cancer prevention campaign in Europe: characteristics and results of 2009 and 2010. *JEADV* 2011;2 (12):1455-65.
5. Živković MV, Dediol I, Ljubičić I, Šitum M. Sun behaviour patterns and perception of illness among melanoma patients. *JEADV* 2012;26 (6):724-9.
 6. Buljan M, Šitum M, Tomas D, Milošević M, Krušlin B. Prognostic value of galectin-3 in primary cutaneous melanoma. *JEADV* 2011;25 (10):1174-81.
 7. Sonja Levanat, Mirna Šitum, Ivana Crnić, Dujomir Marasović, Neira Puizina Ivić. Alterations in CDKN2A locus as potential indicator of melanoma predisposition in relatives of non-familial melanoma cases. *Cro Med J* 2003;44(4):418-24.
 8. Ivan Šamija, Josip Lukač, Zvonko Kusić, Mirna Šitum, Mirko Šamija. Detection of disseminated melanoma cells by reverse-transcription-polymerase chain reaction. *Coll Antropol* 2007; 31(suppl 4):1187-94.
 9. Mirna Šitum, Marija Buljan, Suzana Ožanić Bulić, Dubravka Šimić. The mechanisms of UV radiation in the development of malignant melanoma. *Coll Antropol* 2007; 31(suppl 1):13-6.
 10. Liborija Lugović, Mirna Šitum, Marija Buljan, Sanja Poduje, Klaudija Šebetić. Results of determination of serum markers in patients with malignant melanoma. *Coll Antropol* 2007;31(suppl 1):7-11.
 11. Maja Vurnek, Marija Buljan, Mirna Šitum. Psychological status and coping with illness in patients with malignant melanoma. *Coll Antropol* 2007; 31(suppl 1):53-6.
 12. Mirna Šitum, Željana Bolanča, Marija Buljan, Davor Tomas, Marijana Ivančić: Nevus Spitz - Everlasting Diagnostic Difficulties - The Review. *Coll Antropol* 2008;32 (Suppl 2):171-6.
 13. Mirna Šitum, Marija Buljan, Vedrana Bulat, Liborija Lugović Mihić, Željana Bolanča, Dubravka Šimić: The role of UV Radiation in the Development of Basal Cell Carcinoma. *Coll Antropol* 2008;32(Suppl 2):167-70.
 14. Liborija Lugović Mihić, Vedrana Bulat, Mirna Šitum, Vlatka Čavka, Iva Krolo: Allergic Hypersensitivity Skin Reactions Following Sun Exposure. *Coll Antropol* 2008;32(Suppl 2):153-7.
 15. Željana Bolanča, Ivan Bolanča, Marija Buljan, Iva Blajić, Jasna Penavić Zeljko, Mirna Šitum: Trends, Habits and Attitudes towards Suntanning. *Coll Antropol* 2008;32 (Suppl 2):143-6.
 16. Maja Vurnek Živković, Marija Buljan, Iva Blajić, Mirna Šitum. Psychological Status and Illness Perceptions in Patients with Melanoma. *Coll Antropol* 2008;32(Suppl 2): 75-8.
 17. Marija Buljan, Nada Rajačić, Maja Vurnek Živković, Iva Blajić, Zvonko Kusić, Mirna Šitum. Epidemiological Data on Melanoma from the Referral Centre in Croatia (2002-2007). *Coll Antropol* 2008;32(Suppl 2):47-51.
 18. Damir Homolak, Borki Vučetić, Zvonimir Puljiz, Iva Blajić, Maja Vurnek Živković, Mirna Šitum. Our Experiences of Melanoma Thickness as a Predictor of Outcome of Sentinel Node Biopsy. *Coll Antropol* 2008;32(Suppl 2):57-60.
 19. Mirna Šitum, Maja Vurnek Živković, Iva Dediol, Jasna Zeljko Penavić, Dubravka Šimić. Knowledge and Attitudes towards Sun Protection in Croatia. *Coll Antropol* 2010;34 (Suppl 1):141-6.
 20. Marija Buljan, Mirna Šitum, Željana Bolanča, Maja Vurnek Živković, Liborija Lugović Mihić. Multiple Primary Melanoma. Epidemiological and Prognostic Implications; Analysis of 36 cases. *Coll Antropol* 2010; 34 (Suppl 2):131-4.
 21. Tarbuk A, Grancarić AM, Šitum M, Martinis M. UV clothing and skin cancer. *Coll Antropol* 2010;34(Suppl 2):179-83.
 22. Ines Sjerobabski Masnec, Lena Kotrulja, Mirna Šitum, Sanja Poduje: New Options in Photoprotection. *Coll Antropol* 2010;34 (Suppl 2):257-61.
 23. Lena Kotrulja, Suzana Ožanić Bulić, Ines Sjerobabski Masnec, Mirna Šitum, Sanja Poduje. Photosensitivity Skin Disorders in Childhood. *Coll Antropol* 2010;34(Suppl 2):263-6.
 24. Mirna Šitum, Željana Bolanča, Marija Buljan: Lentigo Maligna Melanoma - The Review. *Coll Antropol* 2010;34 (Suppl 2):299-301.
 25. Liborija Lugović Mihić, Vedrana Bulat, Mirna Šitum, Iva Krolo, Ana Šešerko. The Role of Apoptosis in the Pathogenesis of Malignant Melanoma. *Coll Antropol* 2010; 34(Suppl 2):303-6.

26. Marija Buljan, Mirna Šitum, Davor Tomas, Vlatka Čavka, Sanja Poduje, Slavko Gašparov. A Case Report of an Unrecognized Nevoid Melanoma in Young Woman - Clinicopathological Diagnostic Challenge. *Coll Antropol* 2010; 34 (Suppl 2): 307-11.
27. M. Šitum, Ž. Bolanča, M. Kolić, S. Jerković Gulin, D. Gulin. Ten-Year Study in the Correlation of Clinical and Patohistological Diagnosis of Dysplastic Nevi. *Coll Antropol* 2011;35(Suppl 2):107-9.
28. Dediol, V. Bulat, M. Vurnek Živković, B. Mišanović Marković, M. Šitum. Dysplastic Nevus – Risk factor or Disguise for Melanoma. *Coll Antropol* 2011; 35(Suppl 2): 311-3.
29. N. Pustišek, M. Šitum: UV-Radiation, Apoptosis and Skin. *Coll Antropol* 2011; 35(Suppl 2):339-41.
30. N. Pustišek, M. Šitum: Protection against Solar Ultraviolet Radiation in Childhood. *Coll Antropol* 2011;35(Suppl 2):343-6.
31. D. Šimić, M. Šitum, I. Marijanović, N. Hadžigrahić. Most common skin tumors in correaltion with solar ultraviolet radiation in the area of west Herzegovina. *Coll Antropol* 2011;35(4):1129-34.
32. Zivkovic, MV; Dediol, I; Ljubicic, I; Situm, M. Sun behaviour patterns and perception of illness among melanoma patients. *JEADV* 2012;26(6):724-9.
33. Pustišek N., Šitum M., Mataija M., Vurnek Živković M., Bolanča Ž: Malignant melanoma in childhood and adolescence. *JEADV* 2013;27(2):256-7.
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36. Mirna Šitum, Marija Buljan, Maja Kolić, Majda Vučić: Melanoma - clinical, dermatoscopic and histpathological morphological characteristics. *Acta Dermatovenerol Croat* 2014;22(1):1-12.
37. Mirna Šitum, Zlatko Marušić, Željana Bolanča, Marija Buljan. Malignant Blue Nevus Arising in a Congenital Cellular Blue Nevus in a Young Woman: Case Report and Review of Literature. *Pigmentary Disorders* 2014;1(2):116. doi:10.4172/jpd.1000116.
38. Damir Homolak, Mirna Šitum, Hrvoje Čupić. Clinico-pathohistological features of patients with melanoma and positive sentinel lymph node biopsy: a single institution experience. *Acta Dermatovenerol Croat* 2015;23(2):122-9.
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40. Anita Tarbuk, Ana Marija Grancarić, Mirna Šitum: Skin cancer and UV protection. *AUTEX Research Journal* 2016;16(1):19-28.
41. Delas Azdajic M, Lovric I, Franceschi N, Situm M, Vucic M, Buljan M. Early subungual melanoma: a diagnostic and treatment challenge *Dermatol Ther* 2018; DOI: 10.1111/dth.12706.
42. Buljan M, Arzberger E, Franceschi N, Situm M. The use of dermoscopy in differentiating Sister Mary Joseph nodule and cutaneous endometriosis-case reports and review of literature *Austral J Dermatol* 2018; DOI: 10.1111/ajd.12980.
43. Mirna Šitum i sur. Melanom. Zagreb: Hrvatska akademija znanosti i umjetnosti, Medicinska naklada; 2016.
44. S. Poduje, M. Buljan, M. Šitum. *Dermatoskopija 1. Klinika za kožne i spolne bolesti KBC Sestre milosrdnice*. Zagreb, 2018. Priručnik: 38 str.
45. S. Poduje, M. Buljan, M. Šitum. *Dermatoskopija 2. Klinika za kožne i spolne bolesti KBC Sestre milosrdnice*. Zagreb, 2018. Priručnik: 28 str.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Pustišek N, Šitum M, Vurnek Živković M, Ljubojević Hadžavdić S, Vurnek M, Niseteo T. The significance of structured parental educational intervention on childhood atopic dermatitis: a randomized controlled trial. *JEADV* 2016;30(5):806-12.

2. Pustišek N, Vurnek Živković M, Šitum M. Quality of life in families with children with atopic dermatitis. *Pediatr Dermatol* 2016;33(1):28-32.
3. Stanimirović A, Kovačević M, Korobko I, Šitum M, Lotti T. Combined therapy for resistant vitiligo lesions: NB-UVB, microneedling, and topical latanoprost, showed no enhanced efficacy compared to topical latanoprost and NB-UVB. *Dermatol Ther* 2016;29(5):312-6.
4. Bolanča Ž, Goren A, Getaldić-Švarc B, Vučić M, Šitum M. Platelet-rich plasma as a novel treatment for lichen planopilaris. *Dermatol Ther* 2016;29(4):233-5.
5. Kovačević M, Stanimirović A, Vučić M, Goren A, Šitum M, Lukinović Škudar V, Lotti T. Mixed vitiligo of Blaschko lines: a newly discovered presentation of vitiligo responsive to combination treatment. *Dermatol Ther* 2016;29(4):240-3.
6. McCoy J, Kovačević M, Šitum M, Stanimirović A, Bolanča Z, Goren A. Doppler laser imaging predicts response to topical minoxidil in the treatment of female pattern hair loss. *J Biol Regul Homeost Agents* 2016;30(1):131-4.
7. Kovačević M, Goren A, Shapiro J, Sinclair R, Lonky NM, Šitum M, Bulat V, Bolanča Z, McCoy J. Prevalence of hair shedding among women. *Dermatol Ther* 2017;30(1). doi: 10.1111/dth.12415. Epub 2016 Oct 6.
8. Goren A, McCoy J, Kovačević M, Šitum M, Lonky N. Potential risk of developing herpes simplex encephalitis in patients treated with sildenafil following exposure to genital herpes. *J Biol Regul Homeost Agents* 2017;31(3):679-82.
9. Anita Tarbuk, Ana Marija Grancarić, Mirna Šitum: Skin cancer and UV protection. *AUTEX Research Journal* 2016;16(1):19-28.
10. Goren A, Bolanca Z, Lotti T, Situm M. Novel technique for repigmentation of senescent grey hair. *Dermatol Ther* 2017;30(2):124-36.
11. Goren A, McCoy J, Kovacevic M, Situm M, Chitalia J, Dhurat R, Naccarato T, Lotti T. The effect of topical minoxidil treatment on follicular sulfotransferase enzymatic activity. *J Biol Regul Homeost Agents* 2018 Jul-Aug;32(4):937-40.
12. Goren A, Sharma A, Dhurat R, Shapiro J, Sincliar R. Situm M, Kovacevic M, Skudar LV, Goldust M, Lotti T, McCoy J. Low dose daily aspirin reduces topical minoxidil efficacy in androgenetic alopecia patients. *Dermatol Ther* 2018; DOI:10.1111/dth. 12741.
13. Chitalia J, Dhurat R, Goren A, McCoy J, Kovacevic M, Situm M, Naccarato T, Lotti T. Characterization of follicular minoxidil sulfotransferase activity in a cohort of pattern hair loss patients from Indian subcontinent. *Dermato Ther* 2018; DOI:10.1111/dth.12688.
14. Delas Azdajic M, Lovric I, Franceschi N, Situm M, Vucic M, Buljan M. Early subungual melanoma: a diagnostic and treatment challenge *Dermatol Ther* 2018; DOI: 10.1111/dth.12706.
15. Goren A, McCoy J, Situm M, Dhurat R, Kovacevic M, Bolanca Z. Controversies in the treatment of androgenetic alopecia: The history of finasteride. *Dermatol Ther* 2018; DOI:10.1111/dth.12647.
16. Buljan M, Arzberger E, Franceschi N, Situm M. The use of dermoscopy in differentiating Sister Mary Joseph nodule and cutaneous endometriosis-case reports and review of literature *Austral J Dermatol* 2018; DOI: 10.1111/ajd.12980.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. “Vitiligo Biobank Croatia”
2. „Study of Vitiligo Stability Time to Relapse“.
3. „European Network for Skin Cancer Detection using Laser Imaging“ (COST Action BM1205).
4. “EORTC 18961 SIGNATURE LOG”, project of the European Organization for Research and Treatment of Cancer
5. “Molecular-genetic basis of the Gorlin syndrome”, Croatian-French bilateral project
6. „Psychological status of patients with different dermatoses and malignant tumours of the skin“, scientific project funded by the Croatian Ministry of Science, Education and Sports



7. “Genetic research of the Gorlin syndrome”, scientific project funded by the Croatian Ministry of Science, Education and Sports
8. “ SHH/PTCH/SMO signal pathways in tumours and malformations”, scientific project funded by the Croatian Ministry of Science, Education and Sports
9. “Photodynamic therapy”, scientific project funded by the Croatian Ministry of Science, Education and Sports

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEAR

1. „Psychological status of patients with different dermatoses and malignant tumours of the skin“, scientific project funded by the Croatian Ministry of Science, Education and Sports (2007- 2013)
2. “Vitiligo Biobank Croatia” (2013)
3. „Clinical Study of Dermalroller Efficiency in Vitiligo Treatment“ (2014)
4. “Study of Vitiligo Stability Time to Relapse“ (2014)
5. „European Network for Skin Cancer Detection using Laser Imaging“ (COST Action BM1205) (2011-2017).

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 20

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Siniša Škokić, Ph.D.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Morphological Methods in Biomedical Research

BIOGRAPHY

Siniša Škokić was born in Zagreb in 1978, where he finished school and graduated from Faculty of Electrical Engineering and Computing. He got his M.Sc. and Ph.D. titles from the same affiliation in 2005 and 2009, respectively. For this doctoral thesis entitled "Analysis of Reflector Antenna Systems by Means of New Conical Wave objects" he received the "Josip Lončar" Silver Plaque for an outstanding PhD dissertation.

From 2001-2013 he worked as a research assistant at the Faculty of Electrical Engineering and Computing. For the "Antennas and Propagation" course, he wrote the textbook "Antenna Basics - Theory and Examples". He is also a co-author of a workbook "Lines and Antennas - Exercises", written for the Polytechnic of Zagreb (TVZ).

Since 2013, he has been employed at the University of Zagreb School of Medicine. He first participated in the EU FP7 project "Glowbrain" as an expert engineer, coordinating the development and construction of a new laboratory dedicated to preclinical neurological research, with special in-vivo imaging equipment such as a small animal magnetic resonance imager (MRI) and in vivo optical imager of bioluminescence and fluorescence. After "Glowbrain", he continued to work at UZSM as a research collaborator specializing in medical imaging and image post-processing techniques.

He was involved in several national and international research projects: «Adaptive Antennas in Communication and Radar Systems» (MZOŠ, 2002-2006), «Electromagnetic Phenomena and Structures in Communication Systems» (MZOŠ, 2007-2012), «Antenna Center of Excellence» (FP6 NoE, 2004-2007), EU FP7 «GlowBrain» (FP7 REGPOT, 2012-2016), EU ESF «Young Brain» (ASOO, 2016-2017), and «RepairStroke» (HRZZ 1892, 2018-2021). He also collaborated with a number of other projects, performing all magnetic resonance imaging for projects EU H2020 "Biochip", EU FP7 "FlexiOscar", HRZZ IP 5699 "Copera" etc.

He has thus far authored or co-authored over 40 research papers, of which 8 are indexed in Web of Science Core Collection database. For his work, he received the international award "URSI Young Scientist Award" (2008), as well as several "best paper" awards at international conferences (EuCAP 2010, MMET 2012, EMIM 2019). He was appointed Senior Research Collaborator rank in November 2018., for the field of Technical Sciences - Electrical Engineering.

He speaks English, French, Italian and Russian.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: -

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Pongrac, I. M., Dobrivojević Radmilović, M., Brkić Ahmed, L., Mlinarić, H., Regul, J., Škokić, S., Babic, M., Horak, D., Hoehn, M., Gajović, S., "D-mannose-Coating of Maghemite Nanoparticles Improved Labeling of Neural Stem Cells and Allowed Their Visualization by ex vivo MRI after Transplantation in the Mouse Brain", Cell Transplantation, 2019.

2. Gorup, D., Škokić, S., Križ, J., Gajović, S., "TLR2-Deficiency Is Associated With Enhanced Elements of Neuronal Repair and Caspase 3 Activation Following Brain Ischemia", Scientific Reports, 2019.
3. Kostiva, U., Patsulaa, V., Šloufa, M., Pongrac, I. M., Škokić, S., Dobrivojević Radmilović, M., Pavičić, I., Vinković Vrček, I., Gajović, S., Horák, D., "Physico-chemical characteristics, biocompatibility, and MRI applicability of novel monodisperse PEG-modified magnetic Fe₃O₄&SiO₂ core-shell nanoparticles", RSC Advances, 2017.
4. Hammelrath, L., Škokić, S., Khmelinskii, A., Hess, A., van der Knaap, N., Staring, M., Lelieveldt, B., Wiedermann, D., Hoehn, M., "Morphological maturation of the mouse brain: An in vivo MRI and histology investigation", Neuroimage, 2015.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Pongrac, I. M., Dobrivojević Radmilović, M., Brkić Ahmed, L., Mlinarić, H., Regul, J., Škokić, S., Babic, M., Horak, D., Hoehn, M., Gajović, S., "D-mannose-Coating of Maghemite Nanoparticles Improved Labeling of Neural Stem Cells and Allowed Their Visualization by ex vivo MRI after Transplantation in the Mouse Brain", Cell Transplantation, 2019.
2. Gorup, D., Škokić, S., Križ, J., Gajović, S., "TLR2-Deficiency Is Associated With Enhanced Elements of Neuronal Repair and Caspase 3 Activation Following Brain Ischemia", Scientific Reports, 2019.
3. Kostiva, U., Patsulaa, V., Šloufa, M., Pongrac, I. M., Škokić, S., Dobrivojević Radmilović, M., Pavičić, I., Vinković Vrček, I., Gajović, S., Horák, D., "Physico-chemical characteristics, biocompatibility, and MRI applicability of novel monodisperse PEG-modified magnetic Fe₃O₄&SiO₂ core-shell nanoparticles", RSC Advances, 2017.
4. Hammelrath, L., Škokić, S., Khmelinskii, A., Hess, A., van der Knaap, N., Staring, M., Lelieveldt, B., Wiedermann, D., Hoehn, M., "Morphological maturation of the mouse brain: An in vivo MRI and histology investigation", Neuroimage, 2015

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- a. EU FP7 grant 316120 „GlowBrain“
- b. EU H2020 grant 681103 „Bio-Chip“
- c. EU ESF/ASOO projekt „Mladi mozak“
- d. EU ESI grant KK.01.1.1.01.0007 "ZCI-Neuro" (Eksperimentalna i klinička istraživanja hipoksijsko-ishemijskog oštećenja mozga u perinatalnoj i odrasloj dobi, Znanstveni centar izvrsnosti)
- e. HRZZ IP 5699 „COPERA“
- f. HRZZ IP 1892 „RepairStroke“
- g. MZO bilateralna suradnja s Austrijom, „High field MRI to measure efficacy of extracellular vesicle therapy after spinal cord injury in a rat contusion model“

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- a. EU FP7 grant 316120 „GlowBrain“
- b. EU H2020 grant 681103 „Bio-Chip“
- c. EU ESF/ASOO projekt „Mladi mozak“
- d. EU ESI grant KK.01.1.1.01.0007 "ZCI-Neuro" (Experimental and Clinical Assessment of hypoxic-ischemic brain lesions in perinatal and adult age, Research Center of Excellence)



e. HRZZ IP 5699 „COPERA“

f. HRZZ IP 7406 „MEFRA“

g. HRZZ IP 1892 „RepairStroke“

h. HRZZ UIP 8082 „BradIschemia“

i. MZO bilateral collaboration with Austria, „High field MRI to measure efficacy of extracellular vesicle therapy after spinal cord injury in a rat contusion model“

j. MZO bilateral collaboration with Serbia, "Primjena matičnih stanica za eksperimentalno liječenje amiotrofične lateralne skleroze“

k. Czech Science Foundation, "Lečba glioblastomu pomoci superparamagnetických nanočástic na bazi oxidu železa s povrchove konjugovaných léčivem“

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

-

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Lea Škorić, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Structure, methodology and functioning of scientific work 1

BIOGRAPHY

Lea Škorić (born Pulišelić) was born in 1979 in Supetar on the island of Brač. She attended elementary school in Pučišća, and completed secondary education at Vladimir Nazor grammar school in Split. In 2013 she graduated from the study of history and comparative literature at the University of Zagreb Faculty of Humanities and Social Sciences, and in 2004 graduated from an additional study of librarianship at the same school.

Since 2004 she has been employed at the Central Medical Library at the University of Zagreb School of Medicine, and in 2014 she takes over as the head of the library. Her core tasks are planning, organization and management of the work of the Central Medical Library (including selection, procurement, formal and subject cataloging of library materials in printed and electronic form, complex database searches for the purpose of supporting scientific research work, compiling and interpreting specialized bibliographic analyzes, development, organization and improvement of the work of particular library departments, preparation and implementation of various forms of user education, etc.). In addition, she is involved in scientific research work, and regularly participates in teaching activities on undergraduate, graduate and postgraduate level.

In 2013, she defended her dissertation "MeSH thesaurus as a framework for the analysis of subject approach to Croatian medical literature" and obtained the title of the Ph.D. in the PhD School of Information and Communication Sciences at the University of Zagreb Faculty of Humanities and Social Sciences. During the same year, the Ministry of Culture awarded her the title of a higher librarian, and in 2018 she was awarded the highest professional degree - the title of a librarian's advisor.

Lea Škorić has published several scientific and professional papers in journals, she has actively participated in international and domestic professional conferences and reviewed papers for Croatian scientific journals. She is a member of several expert committees at the School of Medicine, and works on projects at the University of Zagreb and at the national level. As a fellow of the Ian Mowat Foundation, she spent some time in vocational training at the Edinburgh University Library.

She is a member of the Commission for Medical Libraries at the Croatian Library Association since 2010, and has represented Croatia in the Council of the International Association for Health Information and Libraries (EAHIL) in two mandates.

Her scientific interests include scientific publishing, methods of quantitative and qualitative evaluation of scientific papers, open access, biomedical information systems organization and characteristics, and the theory and practice of subject cataloging.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: /

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Vrkić, Dina; Škorić, Lea; Petrak, Jelka. Altmetrics of papers from scientific periphery reflect global trends: A case study of publications by Zagreb University School of Medicine // Journal of academic librarianship, 43 (2017), 6; 479-486. doi:10.1016/j.acalib.2017.08.014

Škorić, Lea; Petrak, Jelka. Hrvatski medicinski časopisi i standardi dobre uređivačke prakse: analiza uputa autorima // Liječnički vjesnik : glasilo Hrvatskoga liječničkog zbora, 139 (2017), 7-8; 204-210

Škorić, Lea; Vrkić, Dina; Petrak, Jelka. Current state of open access to journal publications from the University of Zagreb School of Medicine // Croatian medical journal, 57 (2016), 1; 71-76. doi: 10.3325/cmj.2016.57.71

Markulin, Helena; Škorić, Lea; Petrak, Jelka. Informacijska pismenost u visokoškolskom kurikulumu: sustavni pristup Medicinskog fakulteta Sveučilišta u Zagrebu // Čitalište, 24 (2014), maj 2014; 9-15

Škorić, Lea; Šember, Marijan; Markulin, Helena; Petrak, Jelka. Informacijska pismenost u nastavnom programu diplomskog studija Medicinskog fakulteta Sveučilišta u Zagrebu // Vjesnik bibliotekara Hrvatske, 55 (2012), 3/4; 17-28

Škorić, Lea. Tezaurus Medical Subject Headings – MeSH // Vjesnik bibliotekara Hrvatske, 54 (2011), 4; 95-114.

Pulišelić, Lea; Petrak, Jelka. Is it enough to change the language? A case study of Croatian biomedical journals // Learned publishing, 19 (2006), 4; 299-306

Škorić, Lea; Markulin Helena. Otvoreni repozitorij – Repozitorij Medicinskog fakulteta Sveučilišta u Zagrebu // Otvorenost u znanosti i visokom obrazovanju / ur. Ivana Hebrang Grgić. Zagreb: Školska knjiga, 2018.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Škorić, Lea; Markulin Helena. Otvoreni repozitorij – Repozitorij Medicinskog fakulteta Sveučilišta u Zagrebu // Otvorenost u znanosti i visokom obrazovanju / ur. Ivana Hebrang Grgić. Zagreb: Školska knjiga, 2018.

Vrkić, Dina; Škorić, Lea; Petrak, Jelka. Altmetrics of papers from scientific periphery reflect global trends: A case study of publications by Zagreb University School of Medicine // Journal of academic librarianship, 43 (2017), 6; 479-486. doi:10.1016/j.acalib.2017.08.014

Škorić, Lea; Petrak, Jelka. Hrvatski medicinski časopisi i standardi dobre uređivačke prakse: analiza uputa autorima // Liječnički vjesnik : glasilo Hrvatskoga liječničkog zbora, 139 (2017), 7-8; 204-210

Šember, Marijan; Škorić, Lea; Petrak, Jelka. Current impact of ceased journals: are they still alive? // Malaysian Journal Of Library & Information Science, 22 (2017), 1; 15-27. doi:10.22452/mjlis.vol22no1.2

Škorić, Lea; Vrkić, Dina; Petrak, Jelka. Current state of open access to journal publications from the University of Zagreb School of Medicine // Croatian medical journal, 57 (2016), 1; 71-76. doi: 10.3325/cmj.2016.57.71

Kirilova, Savina; Skoric, Lea. International Trends in Health Science Librarianship Part 19: The Balkan States // Health Information & Libraries Journal, 33 (2016), 3; 244-248. doi:10.1111/hir.12150

Markulin, Helena; Škorić, Lea; Petrak, Jelka. Informacijska pismenost u visokoškolskom kurikulumu: sustavni pristup Medicinskog fakulteta Sveučilišta u Zagrebu // Čitalište, 24 (2014), maj 2014; 9-15

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Snježana Škrablin Kučić, MD, PhD; permanent tenure

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb; Clinical Hospital Center Zagreb, Croatia

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: “Biomaterial Infections”.

BIOGRAPHY

Born in 1956 in Zagreb. Medical School, University of Zagreb starting in 1975 ended in 1980. After passing the State exam worked two years in primary care, then a year in the Department of Nephrology at “Sveti Duh” Hospital, and specialized Gynecology and Obstetrics at the University Hospital of Gynecology and Obstetrics, Zagreb, Croatia (1985-1989). That same year she was elected assistant in the Department of Gynecology and Obstetrics, at University of Zagreb Medical School. During 1980 attended and completed graduate studies in oncology, and in 1984 defended master thesis entitled “Meaning of eosinophilia in the peripheral blood after irradiation of malignant tumors”. In 1994 defended PhD Thesis. After habilitation lecture in 1996, elected assistant professor and in the year 2000 professor of ob/gyn in the Department of Gynecology and Obstetrics, Medical School, University of Zagreb. In 2007 elected full professor.

Since the beginning of specialization takes part in scientific research in the field of perinatal medicine: programs to prevent premature birth, disturbances in fetal growth, the area of prenatal diagnosis of congenital malformations and diseases of the child. She has published over 100 scientific and professional papers, and regularly participates in the professional and scientific conferences and meetings in Croatia and abroad. Organized 9 training courses for doctors. Member of the Section on Perinatal Medicine of the Croatian Medical Association and the Governing Board of the Croatian society for gynecologic endocrinology and human reproduction. Awarded with Acknowledgement to the long-standing professional and scientific activity in the field of maternity protection in the Republic of Croatia, 1999. Head of the Department of Pathology of pregnancy II Reference Center of Perinatal Medicine of Croatia. Since 2015 - Head of Department of Perinatal Medicine at University Medical School of Zagreb.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2012, tenured professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Kuvačić I, Škrablin S, et al. Sexually transmitted diseases and preterm delivery. Gynecol Perinatol 1999; 8 (Supl 1): 38-41.
2. Juretić E, Tkalčević T, Vukelić V, Škrablin S, Užarević B, Petrovečki M. Lymphocyte phenotype characteristics in parturient women. A possible explanation for suppressed immunoreactivity? Obstet Gynecol 1999; 8: 129-32.
3. Škrablin S, Kuvačić I, Goluža T, Kalafatić D. Infekcija i prijevremeni porod. Gynecol Perinatol 2001 (Supl. 1); 10: 6-9.
4. Škrablin S., Goluža T, Kuvačić, I, et al. First trimester microbiology of the cervix and the outcome of pregnancies at high risk for prematurity. Gynecol Perinatol 2002; 11: 143-9.
5. Škrablin S. Lovrić H. Majka je izvor konatalne infekcije novorodjenčeta. Gynecol Perinatol 2003; (Supl 1.): 85-91.
6. Kuvačić I, Škrablin S, ed. Perinatologija danas. Zagreb: Matica Hrvatska, 2003.
7. Škrablin Kučić S. Infekcije povezane s uporabom intrauterinog uložka. U: Vraneš J, ur. Infekcije biomaterijala. Osijek: Medicinski fakultet Sveučilišta Josipa J. Strossmayera, 2003;61-63.

8. Belder N, Škrablin Kučić S, Mihaljević S, Veir Z. Uloga IgG avidnosti u dijagnostici citomegalovirusne infekcije tijekom trudnoće. *Gynecol Perinatol* 2009;3:151-155.
9. Škrablin S. Perinatalna infekcija. *Gynecol Perinatol* 2010; 19 (Suppl 1): 53-60.
10. Elvedi Gašparović V, Škrablin S, Gverić Ahmetašević S, Trpimir G, Veček N, Beljan P. Uloga antibiotske profilakse u prijevremenom prsnuću vodenjaka prije termina. *Gynecol Perinatol* 2013;22:109

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Banović V, Škrablin S, Banović M, Radoš M, Gverić-Ahmetašević S, Babić I. Fetal brain magnetic resonance imaging and long-term neurodevelopmental impairment. *Int J Gynaecol Obstet*. 2014 Jun;125(3):237-40. doi: 10.1016/j.ijgo.2013.12.007. Epub 2014 Mar 5
2. Hadzimuratovic E, Škrablin S, Hadzimuratovic A, Dinarevic SM. [Postasphyxial renal injury in newborns as a prognostic factor of neurological outcome](#). *J Matern Fetal Neonatal Med*. 2014 Mar;27(4):407-10.
3. Elvedi Gašparović V, Beljan P, Gverić Ahmetašević S, Schuster S, Škrablin S. Maternal and fetal complications and their association with gestational thrombocytopenia", *Gynecol Pol*, 2016; 87 (6): 454-459.
4. Beljan P, Elvedi-Gašparović V, Kralik S, Radošević V, Škrablin S: Can first trimester placental biomarkers copeptin and PP13 predict preeclampsia in advanced age nulliparous women? *Signa Vitae* 2017; 13 (S3): 65-69.
5. Škrablin S. Ekosistem rodnice – normalna vaginalna mikroflora.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Croatian Ministry of Health: "Čimbenici prijevremenog poroda", project No. 123 032
2. Croatian Ministry of Health: Project No. 0108 261, "Utjecaj antenatalnih zbivanja na dugoročni neonatalni ishod"
3. International project DFG Ve 174/1-I-5 "Investigation on immunogenic factors in normal and abnormal pregnancy" (project leader: K. Van der Ven, Bonn), collaborator
4. Croatian Ministry of Health: "Prikaz perinatalnih čimbenika značajnih za dugoročni neurorazvojni ishod", project No. 108-1081870-1947.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

University of Zagreb Short-term scientific grants (2014, 2015, 2016, 2017, 2018), collaborator.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Asst. Prof. Lana Škrgatić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Human Reproduction

BIOGRAPHY

Education

2017. Human reproduction specialist, Clinical Hospital Centre Zagreb

2011 Ph.D. in Medical Sciences, School of Medicine, University of Zagreb

2009. Obstetrics and Gynaecology specialist, Clinical Hospital Centre Zagreb

2000 M. D. degree, School of Medicine, University of Zagreb

Position

Since 2017. Assistant Professor; 2012. Senior Assistant; 2011 Assistant; 2001-2011 Scientific novice - assistant, University of Zagreb, School of Medicine, Zagreb, Croatia

Since 2009. Clinical Hospital Centre Zagreb

Scholarships

2007. Scholarship of the Ministry of Higher Education, Science and Technology of Slovenia at the Department of Obstetrics and Gynecology, Division of Medical Genetics, University Medical Centre Ljubljana. Mentor: Ksenija Geršak.

Mentorships and teaching

Integrated Undergraduate and Graduate Program School of Medicine at University of Zagreb curriculums obstetrics and gynaecology (Croatian and English) and curriculum Fundamentals of Medical Skills.

Specialist postgraduate studies of Family medicine, School medicine, Laboratory medicine and Obstetrics and Gynaecology at the Medical School of the University of Zagreb

Mentorship of 7 students graduate thesis, 2 thesis in process.

Administrative activities

6/2018 Dean's assistant for Graduate Program of Studies in Nursing University of Zagreb School of Medicine

2013.-2015. member of the Faculty Council of the University of Zagreb School of Medicine

2013. - Member of the University of Zagreb School of Medicine Textbooks Committee

Awards

2008. "Pearl of Wisdom" European parliament award for best organized campaign for primary prevention of cervical cancer – team member

The article „The efficacy and safety of local estrogen treatment in patients with urogenital symptoms" recieved IJGO Prize Paper Award – best clinical article in developing countries for year 2003.

Memberships in Professional Associations

Member of administrative committee of the Croatian Society of Human reproduction and Gynaecological endocrinology, Croatian Medical Chamber.

Secretary of the Association: National Committee for the Promotion of Cervical Cancer Prevention "For All Women".

Member of the Croatian Society of Gynaecologists and Obstetricians, Croatian Medical Chamber

Member of the Croatian Menopausal Society, Croatian Medical Chamber

Member of the Croatian Andrology Society, Croatian Medical Chamber

Publications

Original scientific papers in WoS-indexed (15) and other (14) scientific journals

Total citations excluding self-citations: 193

Congress communications (abstracts) in SCI/CC-indexed journals (7), other (9)

Book chapters and textbook chapters (10)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: January 16th 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Pavicic Baldani D, **Škrkatic L**, Kasum M, Zlopasa G, Kralik Oguic S, Herman M. Altered leptin, adiponectin, resistin and ghrelin secretion may represent an intrinsic polycystic ovary syndrome abnormality. *Gynecol Endocrinol*. 2019;9:1-5.
2. Baldani DP, **Škrkatic L**, Ougouag R, Kasum M. The cardiometabolic effect of current management of polycystic ovary syndrome: strategies of prevention and treatment. *Gynecol Endocrinol*. 2018 Feb;34(2):87-91.
3. Kasum M, Kurdija K, Orešković S, Čehić E, Pavičić-Baldani D, **Škrkatic L**. Combined ovulation triggering with GnRH agonist and hCG in IVF patients. *Gynecol Endocrinol*. 2016 Jun 8:1-5.
4. Pavicic Baldani D, **Škrkatic L**, Oguang R. Polycystic Ovary Syndrome: Important Underrecognised Cardiometabolic Risk Factor in Reproductive-Age Women. *Int J Endocrinol*/2015;2015:786363;doi 10.1155/2015/786362
5. Pavičić Baldani D, **Škrkatic L**, Simunic V, Zlopasa G, Canic T, Trgovcic I. Characteristics of different phenotypes of polycystic Ovary Syndrome based on the Rotterdam criteria in Croatian population. *Coll Antropol* 2013;37 (2):477-82.
6. Pavičić Baldani D, **Škrkatic L**, Sprem Goldstajn M, Vrcic H, Canic T, Strelec M. Clinical, hormonal and metabolic characteristics of polycystic ovary syndrome among obese and non obese women in Croatian population. *Coll Antropol* 2013;37 (2): 465–470.
7. **Škrkatic L**, Pavicic Baldani D, Gersak K, Cerne JZ, Ferk P, Coric M. Genetic polymorphism of *INS*, *INSR* and *IRS-1* genes are not associated with polycystic ovary syndrome in Croatian women. *Coll Antropol* 2013;37 (1):141-146.
8. Pavičić Baldani D, **Škrkatic L**, Sprem Goldstajn M, Zlopasa G, Kralik Oguic S, Canic T, Piljek AN. Clinical and Biochemical Characteristics of Polycystic Ovary Syndrome in Croatian population. *Coll Antropol* 2012;36(4);1413-1418.
9. **Škrkatic L**, Pavicic Baldani D, Cerne JZ, Ferk P, Gersak K. CAG polymorphism in androgen receptor gene is not directly associated with polycystic ovary syndrome but influences serum testosterone levels. *J Steroid Biochem Mol Biol* 2012;36:345-349.
10. Pavicic Baldani D, **Škrkatic L**, Cerne JZ, Kralik Oguic S, Gersak B, Gersak K. Association of pentanucleotide polymorphism in *SHBG* gene with serum levels and cardiovascular risk factors in women with PCOS. *Mol Med Rep* 2015;11:3941-3947.
11. Pavičić Baldani D, **Škrkatic L**, Bukvic Z, Trgovcic I. Association between hyperandrogenemia and acne and hirsutism severity in Croatian women with polycystic ovary syndrome. *Acta Dermatovenerol Croatica* 2013; 21 (2):105-12.
12. Pavicic Baldani D, **Škrkatic L**, Sprem Goldstajn M, Simunic V, Gasparovic V. Hormone replacement therapy and venous thromboembolism. *Lijec Vjes*, 2015;137: 34-40.

13. Pavić Baldani D, **Škrđatić L**, Cerne JZ, Ferk P, Simunić V, Gersak K. Association of PPARG Pro12Ala polymorphism with insulin sensitivity and body mass index in patients with polycystic ovary disease. Biomed Rep. 2014;2(2):199-206.
14. Sprem Goldstajn M, Pavičić Baldani D, **Škrđatić L**, Radaković B, Vrcić H, Canić T. Ulipristale acetate in emergency contraception. Coll Antropol 2014;38 (1):377-382.
15. Crumbach, ME, **Škrđatić L**, Goluza T, Pavić Baldani D. Long-term consequences of polycystic ovary syndrome. Gynaecol Perinatol 2016;25(2):53-58.
16. Ćorić M., **Škrđatić L.**, Gregov M, Baldani DP, Radošević V, Karadža M. Laparoscopic extirpation of cervical endometriosis in 28-year patient with persistent dyspareunia. Gynaecol Perinatol 2016;25(1):20-22.
17. Baldani DP, **Škrđatić L**, Goldštajn MŠ Kasum M, Orešković S. Ethinylestradiol/chlormadinone acetate- A contraceptive with additional noncontraceptive benefits. Gynaecol Perinatol 2015;24(4):164-173..
18. **Škrđatić L.**, Pavić Baldani D, Karadža M, Ćorić M, Goluza T, Herman M. The effect of ulipristal acetate treatment on fibroid volume and quality of life among women of reproductive age. Gynaecol Perinatol 2015;24(4):139-145.
19. **Škrđatić L**, Pavić Baldani D, Barišić D, Ćorušić A, Ćorić M. Uterine perforation with levonorgestrel-releasing intrauterine system: Case report. Gynaecol Perinatol 2014;23(1):35–37.
20. Šimunić V, Baldani DP, Goldštajn MŠ, **Škrđatić L**. Hormone replacement therapy: Benefits and risks. Gynaecol Perinatol 2013;22(2):116-123.
21. Ćorić, M., Škrđatić, L., Gregov, M., Mišan, M.M., Sokol, V., Jurić, G. Laparoscopic treatment of rectovaginal septum endometriosis – A case report. Gynaecol Perinatol 2012;21(4):156-160.
22. Ćorušić A., Karadža M., Planinić P., **Škrđatić L.**, Ljubojević-Grgec D., Juras J., Blajić J. Pharmacological cost-benefit analysis of vaccination of adolescents by cervarix. Gynaecol Perinatol 2011;20(1):21-29.
23. Pavičić Baldani D, Šimunić V, Šprem Goldštajn M, Čanić T, **Škrđatić L**. New options in combined hormonal contraception. Gynaecol Perinatol 2011;20(4):192-200.
24. Šimunić V., **Jeren L**. What are real cardiovascular risks with HRT? Gynaecol Perinatol 2005;14 (1):7-11.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Pavić Baldani D, **Škrđatić L**, Kasum M, Zlopasa G, Kralik Oguć S. Herman M. Altered leptin, adiponectin, resistin and ghrelin secretion may represent an intrinsic polycystic ovary syndrome abnormality. Gynecol Endocrinol. 2019;9:1-5.
2. Baldani DP, **Škrđatić L**, Ougouag R, Kasum M. The cardiometabolic effect of current management of polycystic ovary syndrome: strategies of prevention and treatment. Gynecol Endocrinol. 2018 Feb;34(2):87-91.
3. Kasum M, Kurdija K, Orešković S, Čehić E, Pavičić-Baldani D, **Škrđatić L**. Combined ovulation triggering with GnRH agonist and hCG in IVF patients. Gynecol Endocrinol. 2016 Jun 8:1-5.
4. Pavić Baldani D, **Škrđatić L**, Oguć R. Polycystic Ovary Syndrome: Important Underrecognised Cardiometabolic Risk Factor in Reproductive-Age Women. Int J Endocrinol/2015;2015:786363;doi 10.1155/2015/786362
5. Pavić Baldani D, **Škrđatić L**, Cerne JZ, Kralik Oguć S, Gersak B, Gersak K. Association of pentanucleotide polymorphism in *SHBG* gene with serum levels and cardiovascular risk factors in women with PCOS. Mol Med Rep 2015;11:3941-3947.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018. - Assessment of daily exposure to metals and maternal individual susceptibility as factors of developmental origins of health and disease, HRZZ No. 1998, associate



2015.- The Research Center of Excellence for Reproductive and Regenerative Medicine. Research units Biomedical Research of Reproduction. Epigenetic biomarkers in the blood and ejaculate of patients with testicular seminoma, HRZZ No. 3692, associate

2006 – 2013 Etiology and pathogenesis of PCOS – treatment selection and metabolic consequences. Ministry of Science and Education of Republic of Croatia grant, associate (MZOS 108-0000000-0388)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018. - Assessment of daily exposure to metals and maternal individual susceptibility as factors of developmental origins of health and disease, HRZZ No. 1998, associate

2015.- The Research Center of Excellence for Reproductive and Regenerative Medicine. Research units Biomedical Research of Reproduction. Epigenetic biomarkers in the blood and ejaculate of patients with testicular seminoma, HRZZ No. 3692, associate

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: prof.dr.sc.Zvonko Šošić

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: retired

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Epidemiological research methods

BIOGRAPHY

Born on 12. travnja 1942 in Zagreb. In 1952. he finished elementary school, 1960. was graduated from the Classical High School, and in the 1967 he graduated from the Medical University of Zagreb. After military service (1969) completed an internship and 1971. passed state exam. He finished postgraduate studies in Public Health at the School of Public Health "Andrija Štampar" School of Medicine, University of Zagreb in the 1971. year. He passed specialistic exam in social medicine with the organization of health services in 1980. He also was training in the U.S. the School of Physiological Hygiene, University of Minnesota in Minneapolis, while attending summer graduate course in general epidemiology and the epidemiology of cardiovascular disease (1977). During his stay in the United States introduced the work of a number of centers of the Multiple Risk Factor Intervention Trial (MRFIT) at the Northwestern University, Rush Presbyterian School of Public Health and Saint Joseph's Hospital in Chicago. He worked from 1969. until his retirement in 2007, at the Medical University of Zagreb School of Public Health "Andrija Štampar". He was assistant at the Department of Hygiene, Social Medicine and Epidemiology and in 1971 got Degree of Master of Science scored the 1979th with the theme "Epidemiological characteristics of adulthood obesity people in our rural and urban populations." He got Doctor of Science degree in 1991. with dissertation titled "Predictive value of complex variables in the epidemiology of arterial hypertension." In 1979. he was chosen for the research assistant, 1992. Assistant Professor and in 1998. Associate Professor, Department of Hygiene, Social Medicine and Epidemiology. From 2003. he is a Head of the Department of Social Medicine and Organization of health care since 2006. when he became Director of School of Public Health Andrija Štampar. From 1994. he was the head of the Department of Hygiene, Social Medicine and Epidemiology, Faculty of Dentistry, University of Zagreb. Since 1999. to 2007. President of the Croatian Society for Public Health, the Croatian Medical Association, 2004. to 2005 Vice President European Public Health Association.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 16.12.2003.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. MORAVEC BERGER D, STARE J, **ŠOŠIĆ Z**, FLORJANČIČ M. Povezanost med dejavniki tveganja in prevalenco klinično očitne ateroskleroze pri 3781 prebivalcih Slovenije. Zdrav Var 1998; 37:455-460
2. **ŠOŠIĆ Z**. Prehrana i rak. u: Milivoj Boranić i suradnici: Karcinogeneza - Suvremena gledišta o podrijetlu malignih tumora. Medicinska naklada; Zagreb 2000.
3. ULOVEC Z, ŠKRINJARIĆ I, **ŠOŠIĆ Z**, SZIROVICZA L, JUKIĆ J. The prevalence of minor physical anomalies in mentally retarded children. Coll Antropol 2002;26:119-28.
4. ULOVEC Z, **ŠOŠIĆ Z**, ŠKRINJARIĆ I, ČATOVIĆ A, ČIVLJAK M, SZIROVICZA L. Prevalence and significance of minor anomalies in children with impaired development. Acta paediatrica 2004; 6:836-840.
5. DŽAKULA A, POLAŠEK O, **ŠOŠIĆ Z**, VONČINA L, PAVLEKOVIĆ G, BRBOROVIĆ O. Importance of Health Care Issues in 2005 Presidential Elections in Croatia. Croatian medical journal. 2006; 8:499-499.
6. VONČINA L, PRISTAŠ I, MASTILICA M, POLAŠEK O, **ŠOŠIĆ Z**, STEVANOVIĆ R. Use of Preventive Health Care Services among the Unemployed in Croatia. Croatian Medical Journal. 2007, 5: 667-674.
7. **ŠOŠIĆ Z**, ULOVEC Z, BOZIKOV J. Obesity and elevated blood pressure among students of the Zagreb University School of Dentistry // European Journal of Public Health, Volume 17, Supplement 2 / Keskimäki, Ilmo ; Vader, Jean - Paul ; Zeegers Paget, Dineke(ur.). Helsinki : Oxford Journals, 2007. 154-154 (poster,međunarodna recenzija,sažetak,znanstveni).
8. JUREŠA V, MUSIL V, **ŠOŠIĆ Z**. Innovative way of teaching in community health course // International Conference of Education, Research and Innovation 2009 Proceedings / IATED (ur.). 2009. 1324-1332 (poster,međunarodna recenzija,objavljeni rad,znanstveni).
9. JUREŠA V, MUSIL V, **ŠOŠIĆ Z**, MAJER M. Community health course at School of Public Health "Andrija Štampar" School of medicine, University of Zagreb // Proceedings of INTED2010 Conference / Gomez Chova, L ; Belenguer, Mart D ; Torres, Candel I. (ur.). Valencia, Spain : International Association of Technology, Education and Development, 2010. 5585-5595 (poster,međunarodna recenzija,objavljeni



rad).

10. Nelken-Bestvina D, Kurc-Bionda A, Vojvodić Z, Babić I, Pavleković G, **Sošić Z**. Trends in preventive activities for the adult population in family medicine in Croatia: 1995-2012. Coll Antropol. 2014 Dec;38 Suppl 2:61-6.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. JUREŠA V, MUSIL V, **ŠOŠIĆ Z**, MAJER M. Community health course at School of Public Health “Andrija Štampar” School of medicine, Univeristy of Zagreb // Proceedings of INTED2010 Conference / Gomez Chova, L ; Belenguer, Mart D ; Torres, Candel I. (ur.). Valenca, Spain : International Association of Technology, Education and Development, 2010. 5585-5595 (poster, međunarodna recenzija, objavljeni rad).
2. Nelken-Bestvina D, Kurc-Bionda A, Vojvodić Z, Babić I, Pavleković G, **Sošić Z**. Trends in preventive activities for the adult population in family medicine in Croatia: 1995-2012. Coll Antropol. 2014 Dec;38 Suppl 2:61-6.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Utjecaj organizacije na kvalitetu i efikasnost zdravstvene zaštite

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Marina Šprem Goldštajn, full professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department for Gynecology and Obstetrics, Medical School University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Diagnostics and treatment of female urinary incontinence

BIOGRAPHY

Born March 4, 1967 in Zagreb. Married, mother one son .

Education:

1986-1991 School of Medicine, University of Zagreb, undergraduate study.

1997- Master degree

2002 - PhD: Medical School University of Zagreb

1994- 1998. Research fellow in Obstetrics and Gynaecology, School of Medicine, University of Zagreb

1998-2002. Clinical hospital centre Zagreb / Department of Obstetrics and Gynaecology - specialization in gynaecology and obstetrics

2002-nowadays Gynecology and Obstetrics specialist, Department for Gynecology and Obstetrics, Medical School University of Zagreb , Human reproduction and Gynecology Endocrinology Unit

2012 – subspecialist of human reproduction, gynaecological endocrinology and menopause

2015- Cohead Referral Centre for human reproduction and gynecological endocrinology, Ministry of Health, Croatia

2015.- 2016. Head of Human Reproduction and gynecological endocrinology, Department for Gynecology and Obstetrics, Zagreb

2013 scientific adviser

2018- Full professor

Organisation of scientific congresses

1. 1st International Brijuni Congress on Reproductive Medicine, 11th Croatian Congress on Gynaecological Endocrinology, Human Reproduction and Menopause, 4th Congress of Croatian Society of Clinical Embryologists with international participation, Brijuni, Croatia, 7-10.09. 2017. – Organizacijski odbor

2. First category postgraduate course «Controversies in Reproductive Medicine, Gynaecologic Endocrinology, Contraception and Menopausal Medicine», Zagreb, Hrvatska 2017. – VODITELJ TEČAJA

3. Hrvatski kongres menopauzalne medicine s međunarodnim sudjelovanjem. Zagreb, Hrvatska 18-19.11.2016. – PREDSEDNIK KONGRESA

4. ISGE Annual Meeting & 4 Croatian congress on minimally invasive gynecological surgery. Opatija, Hrvatska 25-28.5.2016. – organizacijski odbor

5. 7. hrvatski kongres ginekologa i opstetričara s međunarodnim sudjelovanjem, Osijek, Hrvatska, 19-22.5.2016. – znanstveni odbor

6. Hrvatski kongres o reproduktivskom zdravlju, planiranju obitelji, kontracepciji i IVF-u s međunarodnim sudjelovanjem, Šibenik, Hrvatska, 21-23.4. 2016. – organizacijski odbor

7. 10. Hrvatski kongres o ginekološkoj endokrinologiji, humanoj reprodukciji i menopauzi s međunarodnim sudjelovanjem Brijuni, Hrvatska 10-13.9.2015. – organizacijski odbor

8. 3. Hrvatski kongres o reproduktivskom zdravlju, kontracepciji i IVF-u s međunarodnim sudjelovanjem. Šibenik, Hrvatska, 15-17.5.2014. - organizacijski odbor

9. 1. Hrvatski kongres menopauzalne medicine s međunarodnim sudjelovanjem Zagreb, Hrvatska, 20-21.11.2014. – PREDSEDNIK KONGRESA

10. 9. Hrvatski kongres o ginekološkoj endokrinologiji, humanoj reprodukciji i menopauzi s međunarodnim sudjelovanjem. Brijuni, Hrvatska, 5-8.9.2013. – organizacijski odbor

11. 8. Hrvatski kongres o ginekološkoj endokrinologiji, humanoj reprodukciji i menopauzi s međunarodnim sudjelovanjem. Brijuni, Hrvatska, 8-11.9.2011. – organizacijski odbor

12. 7. Hrvatski kongres o ginekološkoj endokrinologiji, humanoj reprodukciji i menopauzi s međunarodnim sudjelovanjem. Brijuni, Hrvatska, 2009 – organizacijski odbor

13. 5th Slovene-Croatian Symposium on Menopause and Andropause, Bled, Slovenia, 2009. – organizacijski odbor

14. 5. hrvatski kongres o reprodukcijskom zdravlju, planiranju obitelji, kontracepciji i IVF-u s međunarodnim sudjelovanjem, Šibenik, Hrvatska, 2018. – POTPREDSJEDNIK KONGRESA
15. TOP 40 meeting Regional Leading Lights in Urogynecology and Urology. Plitvice 2013- organizacijski odbor
16. TOP 40 meeting Regional Leading Lights in Urogynecology and Urology. Gospić 2015- organizacijski odbor
17. 10. hrvatski kongres o osteoporozi, Trakošćan 2016. – znanstveni odbor
18. Drugi hrvatski kongres o reprodukcijskom zdravlju, planiranju obitelji i kontracepciji, Zadar 2012.
19. Osmi hrvatski kongres o ginekološkoj endokrinologiji, humanoj reprodukciji i menopauzi s međunarodnim sudjelovanjem, Brijuni 2011.
20. Prvi hrvatski kongres o pomognutoj oplodnji, Plitvice 2010.
21. Prvi hrvatski simpozij ginekologa i urologa, Plitvice 2010. Organizacijski i znanstveni odbor
21. Sedmi hrvatski kongres o ginekološkoj endokrinologiji, humanoj reprodukciji i menopauzi s međunarodnim sudjelovanjem, Brijuni 2009.- organizacijski odbor
22. Peti slovensko hrvatski simpozij o menopauzi i andropauzi, Bled 2009. – znanstveni odbor
23. Četvrti slovensko hrvatski simpozij menopauze i andropauze, Opatija, 2007. Organizacijski odbor
24. Treći slovensko hrvatski simpozij menopauze i andropauze, Rogaška Slatina, 2005. Znanstveni odbor
25. Šesti hrvatski kongres o ginekološkoj endokrinologiji, humanoj reprodukciji i menopauzi, Brijuni 2007. Organizacijski odbor
26. Četvrti hrvatski konsenzus o hormonskom nadomjesnom liječenju u klimakteriju i postmenopauzi, Šibenik, 2005.
- E. Member of Editorial board Gynecologia et Perinatologia from 2012
- F.Membership and function in scientific and professional
- Croatian Medical Chamber
- President of Croatian Menopausal Society
- Board Member Croatian society for human reproduction and gynaecological endocrinology
- Secretary of Croatian society for urogynecology
- Member of Croatian Society for Gynecology and Obstetrics
- Member of European Society for human reproduction and embryology
- Member of European society for menopause and andropause
- Member of CAMS and IMS
- 2017 Award of Croatian Medical Chamber

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 10/2018

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Šprem M, Miličić D, Orešković S, Ljubojević N, Kalafatić D. Intravesically administered ketoprofen in a treatment of detrusor instability: cross-over study. Croat Med J. 2000;41:423-7.
- But I, Orešković S, Bratuš D, Šprem Goldštajn M, Hlebič G. Patient-reported outcome of solifenacin treatment among women experiencing urinary urgency and urgency incontinence. Int J Gynaecol Obstet. 2014 Jan;124(1):19-23. doi: 10.1016/j.ijgo.2013.07.013. Epub 2013 Sep 25.
- Orešković S, But I, Banović M, Šprem Goldštajn M. The efficacy and safety of solifenacin in patients with overactive bladder syndrome. Coll Antropol 2012; 1:243-8.
- But I, Šprem Goldštajn M, Orešković S. Comparison of two selective muscarinic antagonist (solifenacin and darifenacin) in women with overactive bladder (the SOLIDAR study). Coll Anthropol 2012; 36:1347-53.
- Šimunić V, Banović I, Ciglar S, Jeren L, Pavičić-Baldani D, Šprem M. Local estrogen treatment in patients with urogenital symptoms. Int J Gynecol Obstet 2003; 82; 187-97.
- Miličić D, Šprem M, Bagović D. A method for the repair of vesicovaginal fistulas. Int J Gynecol Obstet 2001; 73:35-41.
- Simunic V, Pavicic Baldani D, Sprem Goldstajn M. Hormone replacement therapy: benefits, risks and recommendations. Gynecol Perinatol 2013;22 (2):116-123.
- . Šimunić V, Šprem M. Urogenital atrophy in postmenopause. Gynaecol Perinatol 2005;14:25-28.

Šprem M. Novosti u konzervativnom liječenju poremećaja mokrenja u žena. *Gynaecol Perinatol* 2004; 13: 68-74.

Šprem M, Miličić D. Lokalna primjena estrogenskih pripravaka u liječenju simptoma urogenitalnog starenja. *Gynaecol Perinatol* 1999; 8 (1) :15-20.

Šprem M, Miličić D. Intravesical instillation of lidocaine and gentamycin in treatment of patients with unstable bladder. *Gynaecol Perinatol* 1997; 6: 7-13.

Miličić D, Šprem M. Farmakoterapija nestabilnog detruzora. *Gynaecol Perinatol* 1996; 5: 149-55.

Miličić D, Šprem M. Endometrioza mokraćnog mjehura. *Gynaecol Perinatol* 1995; 4: 161-3.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Pavičić Baldani D, Škratić L, Šprem Goldštajn M, Goluža L, Flisar I, Pagon S. Questionnaire on knowledge of midwives about oral emergency contraception. *Acta Clin Cro* 2018; 57:1-7.
2. Borovečki A, Braš M, Brkljačić B, Canki Klajn N, Dedić Plavetić N, Šprem Goldštajn M et al. Smjernice za genetičko savjetovanje i testiranje na nasljedni rak dojke i jajnika. *Lij Vjes* 2017; 139:5-6:107-117.
3. Šprem Goldštajn M, Polančec Z. Usporedba transdermalne i oralne primjene HNL-a kod žena u postmenopauzi. *Medix*, 2017, broj 126.
4. Šprem Goldštajn M Toljan K, Grgić F, Pavičić Baldani D, Jurković I. Sex hormone binding globulin (SHBG) as a marker of clinical disorders. *Coll Antropol* 2016;40:199- 209.
5. Pavičić Baldani D, Škratić L, Šprem Goldštajn M, Kasum M, Orešković S. Ethynil estradiol/Chlormadinon acetate - contraceptive with additional noncontraceptive benefits. *Gynecol Perinatol* 2015; 24(4);164-173.
6. Toljan K, Banović M, Juković I, Pavičić Baldani D, Šprem Goldštajn M. The linkage of insulin and regulation of sex-hormone-binding globulin levels. *Gynaecol Perinatol* 2015;24(4):174-180.
7. Šemnički N, Šprem Goldštajn M. Akupunktura kao opcija za liječenje dismenoreje i akutne zdjelice boli u pacijentica s endometriozom: prikaz slučaja. *Gynecol Perinatol* 2016;25(4):164-167.
8. Pavičić Baldani D, Šprem Goldštajn M, Šimunić V, Škratić L, Smiljan Severinski S, Alebić MŠ, Šijanović S, Šunj M, Strelec M, Radaković B, Kasum M, Kuna K, Pavelić Turudić T, Vujić G. Oralna hitna kontracepcija. Izjava hrvatskog društva za ginekološku endokrinologiju i humanu reprodukciju hrvatskog liječničkog zbora. *Gynaecol Perinatol* 2014;23(3)91-96.
9. But I, Orešković S, Bratuš D, Šprem-Goldštajn M, Hlebić G. Patient-reported outcome of solifenacin treatment among women experiencing urinary urgency and urgency incontinence. *Int J Gynaecol Obstet*. 2014 Jan;124(1):19-23. doi: 10.1016/j.ijgo.2013.07.013. Epub 2013 Sep 25.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1994 - 1996 Neurourology and urodynamics, Ministry of science, education and sport, Croatia

1996 - 1998 Problem of female urinary incontinence in older women, Ministry of science, education and sport, Croatia

2014 - Assessment of Microbiota, Inflammatory Markers, Nutritional and Endocrinological Status in IBD Patients (Acronym MINUTE for IBD) Croatia

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2014 - Scientific center for reproductive and regenerative medicine. Biomedical research of reproduction and development. Ministry of science, education and sport, Croatia

2014 - Reproductive and regenerative medicine –research of new platforms and potentials

2016 - "*Diminish of ovarian reserve after ovarian surgery the importance of AMH*", UKC Maribor, Slovenia

2016 – danas „Reprodukcija človeka- laboratorijski in eksperimentalni vidiki“, znanstveni projekt UKC Maribor, Slovenija- istraživač

2014. - Assessment of Microbiota, Inflammatory Markers, Nutritional and Endocrinological Status in IBD Patients (Acronym MINUTE for IBD) Croatia

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: assistant professor Krešimir Štambuk, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Clinic “Magdalena”

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Telemedicine

BIOGRAPHY

Date and place of birth: 19.09.1969, Zagreb

Qualification: Doctor of Medicine, specialist in internal medicine, subspecialist cardiologist

Academic title: Doctor of Science

Scientific-teaching: Docent

Occupation of Head of Department of Cardiology

Education

- graduated from the Faculty of Medicine in Zagreb in 1994 as Academic Achievement
- 2003-2011 Assistant
- 2011 Senior Assistant
- 2013. Assistant Professor

Training and Work Experience

- 1994th scholar at the Internal Clinic of KBC "Sestre Milosrdnice"
- 2002 completed internal medicine specialization
- Completed subspecialization of cardiology in 2007
- 2011. She holds the title of Doctor of Science - Dissertation from the Percutaneous Coronary Intervention

- until 2011 at the Institute for Cardiovascular Diseases of KBC "Sestre milosrdnice"

Clinical Skills and Competences

- Primary professional interest is invasive cardiology that includes all aspects of diagnostic and invasive therapy of coronary disease, valvular pathology including TAB, closure of ASD and PFO
- interventions on peripheral arteries and endovascular aortic disease treatment
- long-term experience in clinical echocardiography, treatment of heart failure
- was a member of the heart transplant team

Additional information

- Thirty-five papers published in journals quoted in CC or other quoted publications and more than thirty lectures at international congresses
- Participation in 8 major international multicentric studies in cardiology and rheumatology as a principal or auxiliary researcher
- Editor of the Department of Cardiology and author of two textbooks in the IV edition of Internal Medicine (2008) which is also an official textbook of Internal Medicine for students of the Faculty of Medicine in Zagreb

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2013

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1: Schwartz GG, Steg PG, Szarek M, Bhatt DL, Bittner VA, Diaz R, Edelberg JM, Goodman SG, Hanotin C, Harrington RA, Jukema JW, Lecorps G, Mahaffey KW, Moryusef A, Pordy R, Quintero K, Roe MT, Sasiela WJ, Tamby JF, Tricoci P, White HD, Zeiher AM; ODYSSEY OUTCOMES Committees and Investigators. Alirocumab and Cardiovascular Outcomes after Acute Coronary Syndrome. N Engl J Med. 2018 Nov 29;379(22):2097-2107. doi: 10.1056/NEJMoa1801174. Epub 2018 Nov 7. PubMed PMID: 30403574.

- 2: Piršić A, Šipić T, Štambuk K, Budinčević H. Acute ischemic stroke mimicking subarachnoid hemorrhage after coronary angioplasty. *Rom J Intern Med*. 2017 Sep 26;55(3):175-177. doi: 10.1515/rjim-2017-0013. PubMed PMID: 28306544.
- 3: Šipić T, Stambuk K, Trbović A, Kapov-Svilčić K, Szavits-Nossan J, Bernat R. Echocardiographic assessment of revascularization completeness impact on diastolic dysfunction in ischemic heart disease. *Coll Antropol*. 2013 Dec;37(4):1299-305. PubMed PMID: 24611348.
- 4: Pavlović N, Stambuk K, Gabrić ID, Trbusić M, Krcmar T, Manola S, Pintarić H, Radeljić V, Delić-Brkljajić D, Vinter O. Repetitive stent fractures with diffuse coronary artery microaneurysm formation--sirolimus eluting stent hypersensitivity? *Acta Clin Croat*. 2011 Dec;50(4):609-13. PubMed PMID: 22649895.
- 5: Stambuk K, Pavlović N, Gabrić ID, Krčmar T, Trbušić M, Manola S. Coronary artery stent fracture with in-stent restenosis and aneurysm formation: diagnosis and successful treatment with graft stent implantation. *Int J Cardiol*. 2011 Apr 14;148(2):253-5. doi: 10.1016/j.ijcard.2010.04.087. PubMed PMID: 20537416.
- 6: Manola S, Pintarić H, Pavlović N, Stambuk K. Coronary artery stent fracture with aneurysm formation and in-stent restenosis. *Int J Cardiol*. 2010 Apr 15;140(2):e36-9.
- 7: Stambuk K, Pavlović N, Manola S, Krcmar T, Pintarić H, Delić-Brkljajić D. Wellens' syndrome in a female patient presenting to emergency room after resolving exercise-induced chest pain. *Acta Clin Croat*. 2010 Mar;49(1):73-6. PubMed PMID: 20635588.
- 8: Delić-Brkljajić D, Galesić K, Ivanac G, Manola S, Pintarić H, Stambuk K, Gaćina P, Radeljić V. Influence of ATII blockers and calcium channel blockers on renal vascular resistance in patients with essential hypertension. *Coll Antropol*. 2009 Dec;33(4):1129-38. PubMed PMID: 20102058.
- 9: Manola S, Pavlović N, Radeljić V, Delić Brkljajić D, Pintarić H, Stambuk K, Bulj N, Trbusić M, Krcmar T, Lukinac L. B-type natriuretic peptide as predictor of heart failure in patients with acute ST elevation myocardial infarction, single-vessel disease, and complete revascularization: follow-up study. *Croat Med J*. 2009 Oct;50(5):449-54. PubMed PMID: 19839068; PubMed Central PMCID: PMC2765742.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- 1: Schwartz GG, Steg PG, Szarek M, Bhatt DL, Bittner VA, Diaz R, Edelberg JM, Goodman SG, Hanotin C, Harrington RA, Jukema JW, Lecorps G, Mahaffey KW, Moryusef A, Pordy R, Quintero K, Roe MT, Sasiela WJ, Tamby JF, Tricoci P, White HD, Zeiher AM; ODYSSEY OUTCOMES Committees and Investigators. Alirocumab and Cardiovascular Outcomes after Acute Coronary Syndrome. *N Engl J Med*. 2018 Nov 29;379(22):2097-2107. doi: 10.1056/NEJMoa1801174. Epub 2018 Nov 7. PubMed PMID: 30403574.
- 2: Piršić A, Šipić T, Štambuk K, Budinčević H. Acute ischemic stroke mimicking subarachnoid hemorrhage after coronary angioplasty. *Rom J Intern Med*. 2017 Sep 26;55(3):175-177. doi: 10.1515/rjim-2017-0013. PubMed PMID: 28306544.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: KATARINA, ŠTINGL JANKOVIĆ, ASST. PROF., PHD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: UNIVERSITY HOSPITAL CENTRE ZAGREB

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: ULOGA IMUNOGENETIKE U TRANSPLANTACIJI (ROLE OF IMMUNOGENETICS IN TRANSPLANTATION)

BIOGRAPHY

Katarina Štingl Janković was born on July 21st, 1977.g. in Sisak. She graduated at the Faculty of Sciences, University of Zagreb (Biology Department, course: Molecular Biology) in 2000. She gained her PhD degree in 2009 (Doctoral Study in Biomedicine and Health Sciences, School of Medicine, University of Zagreb). In the period 2001-2010 she worked as a scientific researcher of the School of Medicine in Zagreb at scientific projects „Immunomolecular studies of the histocompatibility complex HLA“ (no: 0108123, leader: Prof. Andrija Kaštelan) and “Studies of microsatellites within the Major Histocompatibility Complex region“ (no: 214-0000000-3354, leader: Prof. Zorana Grubić). Since 2009 she participates in conducting the course “Transplantation immunology” (Faculty of Sciences, University of Zagreb). She is the author at 47 scientific articles out of which 35 have been indexed in CC.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 30.11.2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Grubic Z., Jankovic K.S., Maskalan M., Serventi-Seiwerth R., Mikulic M., Kamenaric M.B., Nemet D., Zunec R. HLA allele and haplotype polymorphisms among Croatian patients in an unrelated hematopoietic stem cell donor search program. *Transpl Immunol* 2014, 31(3), 119-124.
2. Grubic Z., Stingl Jankovic K., Maskalan M., Serventi-Seiwerth R., Mikulic M., Nemet D., Burek Kamenaric M., Labar B., Zunec R. The effect of HLA allele and haplotype polymorphisms on donor matching in hematopoietic stem cell transplantation - Croatian experience. *Hum Immunol* 2016, 77(12), 1120-1127.
3. Burek Kamenaric M., Stingl Jankovic K., Grubic Z., Serventi Seiwerth R., Maskalan M., Nemet D., Mikulic M., Zunec R. The impact of KIR2DS4 gene on clinical outcome after hematopoietic stem cell transplantation. *Hum Immunol.* 2016, 78(2), 95-102.
4. Burek Kamenaric M., Maskalan M., Grubic Z., Mikulic M., Serventi Seiwerth R., Durakovic N., Vrhovac R., Stingl Jankovic K., Zunec R. HLA-DPB1 matching in unrelated hematopoietic stem cell transplantation program contributes to a higher incidence of disease relapse. *Hum Immunol.* 2017, 78(11-12):665-671.
5. Stingl Jankovic K., Grubic Z., Jakupic J., Burek Kamenaric M., Maskalan M., Zunec R. The distribution of HLA-DRB3 alleles among HLA-DRB1*03:01-positive haplotypes. *HLA.* 2018, 92(3):160-163.
6. Grubic Z., Maskalan M., Radmanic L., Stingl Jankovic K., Burek Kamenaric M., Zunec R. The distribution of the DRB4*01:03:01:02N null allele in HLA-DRB1~DQB1 haplotypes in the Croatian population. *HLA.* 2018, 91(1):23-28.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Grubic Z., Jankovic K.S., Maskalan M., Serventi-Seiwerth R., Mikulic M., Kamenaric M.B., Nemet D., Zunec R. HLA allele and haplotype polymorphisms among Croatian patients in an unrelated hematopoietic stem cell donor search program. *Transpl Immunol* 2014, 31(3), 119-124.

2. Grubic Z., Burek Kamenaric M., Maskalan M., Stingl Jankovic K., Zunec R. Nonfrequent but well-documented, rare and very rare HLA alleles observed in the Croatian population. *Tissue Antigens* 2014, 84(6), 560-564.
3. Grubic Z., Stingl Jankovic K., Kelecic J., Batinic D., Dubravac K., Zunec R. A case of maternal-foetal chimerism identified during routine histocompatibility testing for hematopoietic stem cell transplantation. *Int J Immunogenet* 2016, 43(1), 1-7.
4. Stingl Jankovic K., Hudolin T., Kastelan Z., Zunec R., Grubic Z. The possible role of the tumour necrosis factor polymorphisms and human leucocyte antigens in the development of prostate cancer. *Int J Immunogenet* 2016, 43(3), 143-50.
5. Grubic Z., Maskalan M., Svilicic D., Stingl Jankovic K., Zunec R. Determination of HLA-A, -B, and -DRB1 Allele and Haplotype Frequencies in the Croatian Population Based on a Family Study. *Arch Immunol Ther Exp (Warsz)* 2016, 64(1), 83-88.
6. Maskalan M., Grubic Z., Jankovic K.S., Cepulic B.G., Zunec R. Identification of the novel HLA-A*01:200 allele by sequence-based typing in a Croatian individual. *HLA* 2016, 87(5), 381-382.
7. Grubic Z., Stingl Jankovic K., Maskalan M., Serventi-Seiwerth R., Mikulic M., Nemet D., Burek Kamenaric M., Labar B., Zunec R. The effect of HLA allele and haplotype polymorphisms on donor matching in hematopoietic stem cell transplantation - Croatian experience. *Hum Immunol* 2016, 77(12), 1120-1127.
8. Grubic Z., Maskalan M., Stingl Jankovic K., Zvecic S., Dumic Kubat K., Krnic N., Zunec R., Ille J., Kusec V., Dumic M. Association of HLA alleles and haplotypes with CYP21A2 gene p. V282L mutation in the Croatian population. *HLA*, 2016, 88(5), 239-244.
9. Burek Kamenaric M., Stingl Jankovic K., Grubic Z., Serventi Seiwerth R., Maskalan M., Nemet D., Mikulic M., Zunec R. The impact of KIR2DS4 gene on clinical outcome after hematopoietic stem cell transplantation. *Hum Immunol*. 2016, 78(2), 95-102.
10. Dumic K.K., Grubic Z., Yuen T., Wilson R.C., Kusec V., Barisic I., Stingl K., Sansovic I., Skrabic V., Dumic M., New M.I. Molecular genetic analysis in 93 patients and 193 family members with classical congenital adrenal hyperplasia due to 21-hydroxylase deficiency in Croatia. *J Steroid Biochem Mol Biol* 2017, 165, 51-56.
11. Burek Kamenaric M, Maskalan M, Grubic Z, Mikulic M, Serventi Seiwerth R, Durakovic N, Vrhovac R, Stingl Jankovic K, Zunec R. HLA-DPB1 matching in unrelated hematopoietic stem cell transplantation program contributes to a higher incidence of disease relapse. *Hum Immunol*. 2017, 78(11-12):665-671.
12. Stingl Jankovic K, Grubic Z, Jakupic J, Burek Kamenaric M, Maskalan M, Zunec R. The distribution of HLA-DRB3 alleles among HLA-DRB1*03:01-positive haplotypes. *HLA*. 2018, 92(3):160-163.
13. Grubic Z, Rojnic Putarek N, Maskalan M, Zunec R, Stingl Jankovic K, Burek Kamenaric M, Knezevic-Cuca J, Spehar Uroic A, Dumic M. Human Leukocyte Antigen class II polymorphisms among Croatian patients with type 1 diabetes and autoimmune polyglandular syndrome type 3 variant. *Gene*. 2018, 674:93-97.
14. Grubic Z, Maskalan M, Radmanic L, Stingl Jankovic K, Burek Kamenaric M, Zunec R. The distribution of the DRB4*01:03:01:02N null allele in HLA-DRB1~DQB1 haplotypes in the Croatian population. *HLA*. 2018, 91(1):23-28.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



“Immunomolecular studies of the histocompatibility complex HLA” (No: 0108123)

“Studies of microsatellites within the Major Histocompatibility Complex region “ (No: 214-0000000-3354)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: assistant professor Tajana Štoos Veić

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of Pathology and Cytology, University Hospital Dubrava, Department of Anatomic and Forensic Pathology, Medical Faculty, University of Osijek

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Molecular hematology, Advanced ultrasonography in gastroenterology and hepatology

BIOGRAPHY

Graduated from University of Zagreb School of Medicine in 1988. Board certificate in Clinical Cytology 1995. Head of Cytology, Department of Pathology and Cytology, University Hospital Dubrava. PhD thesis defended University of Zagreb School of Medicine in 2011. Assistant professor Medical Faculty, University of Osijek. Published 36 articles in scientific journals (29 in CC), 60 congress summaries, several book chapters, 15 invited lectures and several workshops in the field of pancreato-biliary cytology. Teaches at postgraduate courses at University of Zagreb School of Medicine. Member of International Academy of Cytology, European Association of Hematopathology, Croatian Society of Gastroenterology and board member of Croatian Society of Clinical Cytology.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: June 2018

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Stoos-Veic T, Livun A, Ajdukovic R, Pejša V, Jaksic O, Kusec R. Detection of t(14;18) by PCR of IgH/BCL2 fusion gene in follicular lymphoma from archived cytological smears. Coll Antropol 2010; 34: 425-429.
- Tadic M, Stoos-Veic T, Kusec R. Endoscopic ultrasound guided fine needle aspiration and useful ancillary methods. World J Gastroenterol. 2014; 20:14292-300.
- Lucijanić M, Pejša V, Mitrović Z, Štoos-Veić T, Livun A, Jakšić O, Vasilj T, Piršić M, Hariš V, Prka Ž, Kušec R. Hemochromatosis gene mutations may affect the survival of patients with myelodysplastic syndrome. Hematology. 2016; 21:170-4.
- Lucijanic M, Pejša V, Jaksic O, Mitrovic Z, Tomasovic-Loncaric C, Stoos-Veic T, Prka Z, Pirsic M, Haris V, Vasilj T, Kusec R. The Degree of Anisocytosis Predicts Survival in Patients with Primary Myelofibrosis. Acta Haematol. 2016; 136:98-100.
- Lucijanic M, Livun A, Tomasovic-Loncaric C, Stoos-Veic T, Pejša V, Jaksic O, Prka Z, Kusec R. Canonical Wnt/β-Catenin Signaling Pathway Is Dysregulated in Patients With Primary and Secondary Myelofibrosis. Clin Lymphoma Myeloma Leuk. 2016; 16:523-526.
- Lucijanic M, Livun A, Tupek KM, Stoos-Veic T, Aralica G, Gecek I, Pejša V, Kusec R. Heat shock protein 27 (HSP27/HSPB1) expression is increased in patients with primary and secondary myelofibrosis and may be affecting their survival, Leukemia & Lymphoma 2017. dx.doi.org/10.1080/10428194.2017.1296146
- Lucijanic M, Livun A, Stoos-Veic T, Pejša V, Jaksic O, Cicic D, Lucijanic J, Romic Z, Orehovec B, Aralica G, Miletic M, Kusec R. High absolute basophil count is a powerful independent predictor of inferior overall survival in patients with primary myelofibrosis. Hematology 2018; 23:201-207.

- Lucijanic M, Mitrovic Z, Cicic D, Prka Z, Pejsa V, Livun A, Stoos-Veic T, Romic Z, Zivkovic M, Lucijanic I, Fabris Z, Kusec R. Increased mean platelet volume (MPV) is an independent predictor of inferior survival in patients with primary and secondary myelofibrosis. *Int J Hematol*. 2018; 107:166-172.
- Lucijanic M, Veletic I, Rahelic D, Pejsa V, Cicic D, Skelin M, Livun A, Tupek KM, Stoos-Veic T, Lucijanic T, Maglicic A, Kusec R. Assessing serum albumin concentration, lymphocyte count and prognostic nutritional index might improve prognostication in patients with myelofibrosis. *Wien Klin Wochenschr*. 2018; 130:126-133.
- Lucijanic M, Prka Z, Pejsa V, Stoos-Veic T, Lucijanic J, Kusec R. Prognostic implications of low transferrin saturation in patients with primary myelofibrosis. *Leuk Res*. 2018; 66:89-95.
- Lucijanic M, Livun A, Tupek KM, Stoos-Veic T, Pejsa V, Kusec R. Higher Sclerostin/SOST expression is associated with lower percentage of circulatory blasts and better prognosis in patients with myelofibrosis. *Ann Hematol*. 2018; 97:1293-1294.
- Lucijanic M, Cicic D, Stoos-Veic T, Pejsa V, Lucijanic J, Fazlic Dzankic A, Vlasac Glasnovic J, Soric E, Skelin M, Kusec R. Elevated Neutrophil-to-Lymphocyte-ratio and Platelet-to-Lymphocyte Ratio in Myelofibrosis: Inflammatory Biomarkers or Representatives of Myeloproliferation Itself? *Anticancer Res*. 2018;38:3157-3163.
- Lucijanic M, Cicic D, Stoos-Veic T, Pejsa V, Rahelic D, Lucijanic T, Vasilj T, Ivic M, Sedinic M, Kusec R. Combining information on C reactive protein and serum albumin into the Glasgow Prognostic Score strongly discriminates survival of myelofibrosis patients. *Blood Cells Mol Dis*. 2018. doi: 10.1016/j.bcmd.2018.06.001.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- Lucijanić M, Pejša V, Mitrović Z, Štoos-Veić T, Livun A, Jakšić O, Vasilj T, Piršić M, Hariš V, Prka Ž, Kušec R. Hemochromatosis gene mutations may affect the survival of patients with myelodysplastic syndrome. *Hematology*. 2016; 21:170-4.
- Lucijanic M, Pejsa V, Jaksic O, Mitrovic Z, Tomasovic-Loncaric C, Stoos-Veic T, Prka Z, Pirsic M, Haris V, Vasilj T, Kusec R. The Degree of Anisocytosis Predicts Survival in Patients with Primary Myelofibrosis. *Acta Haematol*. 2016; 136:98-100.
- Lucijanic M, Livun A, Tomasovic-Loncaric C, Stoos-Veic T, Pejsa V, Jaksic O, Prka Z, Kusec R. Canonical Wnt/ β -Catenin Signaling Pathway Is Dysregulated in Patients With Primary and Secondary Myelofibrosis. *Clin Lymphoma Myeloma Leuk*. 2016; 16:523-526.
- Lucijanic M, Livun A, Tupek KM, Stoos-Veic T, Aralica G, Gecek I, Pejsa V, Kusec R. Heat shock protein 27 (HSP27/HSPB1) expression is increased in patients with primary and secondary myelofibrosis and may be affecting their survival, *Leukemia & Lymphoma* 2017. dx.doi.org/10.1080/10428194.2017.1296146
- Lucijanic M, Livun A, Stoos-Veic T, Pejsa V, Jaksic O, Cicic D, Lucijanic J, Romic Z, Orehovec B, Aralica G, Miletic M, Kusec R. High absolute basophil count is a powerful independent predictor of inferior overall survival in patients with primary myelofibrosis. *Hematology* 2018; 23:201-207.
- Lucijanic M, Mitrovic Z, Cicic D, Prka Z, Pejsa V, Livun A, Stoos-Veic T, Romic Z, Zivkovic M, Lucijanic I, Fabris Z, Kusec R. Increased mean platelet volume (MPV) is an independent predictor of inferior survival in patients with primary and secondary myelofibrosis. *Int J Hematol*. 2018; 107:166-172.
- Lucijanic M, Veletic I, Rahelic D, Pejsa V, Cicic D, Skelin M, Livun A, Tupek KM, Stoos-Veic T, Lucijanic T, Maglicic A, Kusec R. Assessing serum albumin concentration, lymphocyte count and prognostic

nutritional index might improve prognostication in patients with myelofibrosis. *Wien Klin Wochenschr.* 2018; 130:126-133.

- Lucijanic M, Prka Z, Pejisa V, Stoos-Veic T, Lucijanic J, Kusec R. Prognostic implications of low transferrin saturation in patients with primary myelofibrosis. *Leuk Res.* 2018; 66:89-95.
- Lucijanic M, Livun A, Tupek KM, Stoos-Veic T, Pejisa V, Kusec R. Higher Sclerostin/SOST expression is associated with lower percentage of circulatory blasts and better prognosis in patients with myelofibrosis. *Ann Hematol.* 2018; 97:1293-1294.
- Lucijanic M, Cicic D, Stoos-Veic T, Pejisa V, Lucijanic J, Fazlic Dzankic A, Vlasac Glasnovic J, Soric E, Skelin M, Kusec R. Elevated Neutrophil-to-Lymphocyte-ratio and Platelet-to-Lymphocyte Ratio in Myelofibrosis: Inflammatory Biomarkers or Representatives of Myeloproliferation Itself? *Anticancer Res.* 2018;38:3157-3163.
- Lucijanic M, Cicic D, Stoos-Veic T, Pejisa V, Rahelic D, Lucijanic T, Vasilj T, Ivic M, Sedinic M, Kusec R. Combining information on C reactive protein and serum albumin into the Glasgow Prognostic Score strongly discriminates survival of myelofibrosis patients. *Blood Cells Mol Dis.* 2018. doi: 10.1016/j.bcmd.2018.06.001

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2002-2006 Scientific Research Project No. 0198007 of the Ministry of Science and Technology:
“Significance of sentinel lymph node biopsy in melanoma and breast cancer”

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

University of Zagreb (MF): Research Support Program: Genetics and Microenvironment of Chronic Myeloproliferative Neoplasms, 2014 - Now.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Alan Šućur, MD, PhD postdoc

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Selected topics in transplantation immunology, Immunocytokines

BIOGRAPHY

Alan Šućur, MD, PhD, postdoc: Born in Zagreb Croatia, 03.07.1987. Education: 2011. – MD – Zagreb University School of medicine, Zagreb Croatia. 2017 – defended PhD thesis at Zagreb University school of medicine. Employments: 2018-present postdoc at the Department of Physiology and Immunology, University of Zagreb School of Medicine, 2012-2018 assistant at the Department of Physiology and Immunology, University of Zagreb School of Medicine. Teaching and mentoring: Since 2012 participates in teaching at School of medicine and School of dental medicine in Zagreb (both Croatian and English studies). Research activity: Co-investigator on projects of Croatian Science Foundation: “Notch signaling in osteoclast progenitors induced by rheumatoid arthritis” (project nr. 2414, principal investigator Danka Grcevic), 2018-2022; “Molecular mediators of Fas-driven osteoresorption in arthritis (MEFRA)” (project nr. 7406, principal investigator Natasa Kovacic), 2015-2019; “Characterization of osteoclast progenitor responses to arthritis (COPERA)” (project nr. 5699, principal investigator Danka Grcevic), 2014-2017; and University of Zagreb project grants "Role of Notch signaling in osteoclast activation in arthritis" (project nr. BM037, principal investigator Danka Grcevic), 2018-2019; Role of the proinflammatory molecule pentraxin 3 in the regulation of bone metabolism, (project nr. BM041, principal investigator Danka Grcevic), 2015-2018. Invited lecturer at 2016 Croatian Immunological Society lecture series, topic “Characterization of osteoclast progenitors in patients with rheumatoid arthritis”, Zagreb, Croatia; 2015 International Postgraduate Conference, topic “Chemokine receptor profile of osteoclast progenitor cells in patients with rheumatoid arthritis”, Hradec Kralove, Czech Republic; and 2015 PhD Day, University of Zagreb Medical School, topic “Chemokine receptor profile of osteoclast progenitor cells in patients with rheumatoid arthritis”. Memberships: member of Croatian Immunological Society, Croatian Physiological Society, Doctors Against Forced Organ Harvesting and European Calcified Tissue Society. Publications: 9 original scientific papers, cited 33 times (WoS).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 1 FEB 2018

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Lazic Mosler E, Lukac N, Flegar D, Fadljevic M, Radanović I, Cvija H, Kelava T, Ivcevic S, Sucur A, Markotic A, Katavic V, Marusic A, Grcevic D, Kovacic N. Fas receptor induces apoptosis of synovial bone and cartilage progenitor populations and promotes bone loss in antigen-induced arthritis. FASEB J. 2018 Nov 1:fj201801426R.
2. Sucur A, Jajic Z, Artukovic M, Ikic Matijasevic M, Anic B, Flegar D, i sur. Chemokine signals are crucial for enhanced homing and differentiation of circulating osteoclast progenitor cells. Arthritis Res Ther. 2017;19(1):142.
3. Sucur A, Gajovic S. Nobel Peace Prize nomination for Doctors Against Forced Organ Harvesting (DAFOH) - a recognition of upholding ethical practices in medicine. Croat Med J. 2016 Jun 30;57(3):219-22.
4. Ikic Matijasevic M, Flegar D, Kovacic N, Katavic V, Kelava T, Sucur A, Ivcevic S, Cvija H, Lazic Mosler E, Kalajzic I, Marusic A, Grcevic D. Increased chemotaxis and activity of circulatory myeloid progenitor cells

may contribute to enhanced osteoclastogenesis and bone loss in the C57BL/6 mouse model of collagen-induced arthritis. Clin Exp Immunol. 2016 Dec;186(3):321-335.

5. Mitrovic S, Kelava T, Sucur A, Grcevic D. Levels of Selected Aqueous Humor Mediators (IL-10, IL-17, CCL2, VEGF, FasL) in Diabetic Cataract. Ocul Immunol Inflamm. 2016 Apr;24(2):159-66.
6. Flegar D, Sucur A, Markotic A, Kovačić N, Grčević D. Osteoporosis in the View of Osteoimmunology: Common Feature Underlined by Different Pathogenic Mechanisms. Period Biol. 2015 May;117(1).
7. Kuzmac S, Grcevic D, Sucur A, Ivcevic S, Katavic V. Acute hematopoietic stress in mice is followed by enhanced osteoclast maturation in the bone marrow microenvironment. Exp Hematol. 2014 Nov;42(11):966-75.
8. Sucur A, Katavic V, Kelava T, Jajic Z, Kovacic N, Grčević D. Induction of osteoclast progenitors in inflammatory conditions: key to bone destruction in arthritis. Int Orthop. 2014 Sep;38(9):1893-903.
9. Kelava T, Sucur A, Kuzmac S, Katavic V. Interactions between bone and immune systems: A focus on the role of inflammation in bone resorption and fracture healing. Period Biol. 2014 Mar;116(1):45-52.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Lazic Mosler E, Lukac N, Flegar D, Fadljevic M, Radanović I, Cvija H, Kelava T, Ivcevic S, Sucur A, Markotic A, Katavic V, Marusic A, Grcevic D, Kovacic N. Fas receptor induces apoptosis of synovial bone and cartilage progenitor populations and promotes bone loss in antigen-induced arthritis. FASEB J. 2018 Nov 1:fj201801426R.
2. Sucur A, Jajic Z, Artukovic M, Ikic Matijasevic M, Anic B, Flegar D, i sur. Chemokine signals are crucial for enhanced homing and differentiation of circulating osteoclast progenitor cells. Arthritis Res Ther. 2017;19(1):142.
3. Sucur A, Gajovic S. Nobel Peace Prize nomination for Doctors Against Forced Organ Harvesting (DAFOH) - a recognition of upholding ethical practices in medicine. Croat Med J. 2016 Jun 30;57(3):219-22.
4. Ikic Matijasevic M, Flegar D, Kovacic N, Katavic V, Kelava T, Sucur A, Ivcevic S, Cvija H, Lazic Mosler E, Kalajzic I, Marusic A, Grcevic D. Increased chemotaxis and activity of circulatory myeloid progenitor cells may contribute to enhanced osteoclastogenesis and bone loss in the C57BL/6 mouse model of collagen-induced arthritis. Clin Exp Immunol. 2016 Dec;186(3):321-335.
5. Mitrovic S, Kelava T, Sucur A, Grcevic D. Levels of Selected Aqueous Humor Mediators (IL-10, IL-17, CCL2, VEGF, FasL) in Diabetic Cataract. Ocul Immunol Inflamm. 2016 Apr;24(2):159-66.
6. Flegar D, Sucur A, Markotic A, Kovačić N, Grčević D. Osteoporosis in the View of Osteoimmunology: Common Feature Underlined by Different Pathogenic Mechanisms. Period Biol. 2015 May;117(1).
7. Kuzmac S, Grcevic D, Sucur A, Ivcevic S, Katavic V. Acute hematopoietic stress in mice is followed by enhanced osteoclast maturation in the bone marrow microenvironment. Exp Hematol. 2014 Nov;42(11):966-75.
8. Sucur A, Katavic V, Kelava T, Jajic Z, Kovacic N, Grčević D. Induction of osteoclast progenitors in inflammatory conditions: key to bone destruction in arthritis. Int Orthop. 2014 Sep;38(9):1893-903.
9. Kelava T, Sucur A, Kuzmac S, Katavic V. Interactions between bone and immune systems: A focus on the role of inflammation in bone resorption and fracture healing. Period Biol. 2014 Mar;116(1):45-52.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Croatian Science Foundation: “Notch signaling in osteoclast progenitors induced by rheumatoid arthritis” (project nr. 2414, principal investigator Danka Grcevic), 2018-2022, role: project team member

Croatian Science Foundation: “Molecular mediators of Fas-driven osteoresorption in arthritis (MEFRA)” (project nr. 7406, principal investigator Natasa Kovacic), 2015-2019, role: project team member

Croatian Science Foundation: “Characterization of osteoclast progenitor responses to arthritis (COPERA)” (project nr. 5699, principal investigator Danka Grcevic), 2014-2017, role: project team member

University of Zagreb: Role of Notch signaling in osteoclast activation in arthritis, (project nr. BM037, principal investigator Danka Grcevic), 2018-2019, role: project team member

University of Zagreb: Role of the proinflammatory molecule pentraxin 3 in the regulation of bone metabolism, (project nr. BM041, principal investigator Danka Grcevic), 2015-2018, role: project team member

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Croatian Science Foundation: “Notch signaling in osteoclast progenitors induced by rheumatoid arthritis” (project nr. 2414, principal investigator Danka Grcevic), 2018-2022, role: project team member

Croatian Science Foundation: “Molecular mediators of Fas-driven osteoresorption in arthritis (MEFRA)” (project nr. 7406, principal investigator Natasa Kovacic), 2015-2019, role: project team member

Croatian Science Foundation: “Characterization of osteoclast progenitor responses to arthritis (COPERA)” (project nr. 5699, principal investigator Danka Grcevic), 2014-2017, role: project team member

University of Zagreb: Role of Notch signaling in osteoclast activation in arthritis, (project nr. BM037, principal investigator Danka Grcevic), 2018-2019, role: project team member

University of Zagreb: Role of the proinflammatory molecule pentraxin 3 in the regulation of bone metabolism, (project nr. BM041, principal investigator Danka Grcevic), 2015-2018, role: project team member

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

-

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Associate Professor Goran Tešović, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital for Infectious Diseases, Chair for Infectious Diseases

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Selected chapters in epileptology in developmental age

BIOGRAPHY

Surname(s) / First name(s) Goran Tešović

Address(es) Ul. Pavla Šubića 21, 10 000 Zagreb, CROATIA; University Hospital for Infectious Diseases, Mirogojska cesta 8, 10 000 Zagreb, CROATIA;

Telephone(s) ++385(91) 40 12 605; ++385(1)28 26 156;

Fax(es) ++385(1)28 26 158;

E-mail(s), Web address(s) gtesovic@bfm.hr

Nationality(-ies) Croatian

Date of birth April, 11th 1965

Identification number from Records of Scientific Workers 185924

WORK EXPERIENCE

- Dates (from – to) 1990 - 1991

Name and address of employer University Hospital Center, Zagreb, Croatia

Type of business or sector Medicine

Occupation or position held Physician - intern

Main activities and responsibilities Physician - intern

WORK EXPERIENCE

- Dates (from – to) 1991 - 1993

Name and address of employer University Hospital for Infectious Diseases, Zagreb, Croatia

Type of business or sector Medicine (Infectious Diseases)

Occupation or position held Junior researcher

Main activities and responsibilities Junior researcher

WORK EXPERIENCE

- Dates (from – to) 1993 - 1998

Name and address of employer University Hospital for Infectious Diseases, Zagreb, Croatia

Type of business or sector Medicine (Infectious Diseases)

Occupation or position held Physician - intern

Main activities and responsibilities Physician on internship of infectology

WORK EXPERIENCE

- Dates (from – to) 1998 - 2005

Name and address of employer University Hospital for Infectious Diseases, Zagreb, Croatia

Type of business or sector Medicine (Infectious Diseases)

Occupation or position held Specialist in infectious diseases

Main activities and responsibilities Physician at Division for Pediatric Infectious Diseases

WORK EXPERIENCE

- Dates (from – to) January, 16th 2006 - today

Name and address of employer University Hospital for Infectious Diseases, Zagreb, Croatia

Type of business or sector Medicine (Infectious Diseases)

Occupation or position held Specialist in infectious diseases/Specialist in pediatric infectious diseases (since 2013)

Main activities and responsibilities Head of Division for Pediatric Infectious Diseases

WORK EXPERIENCE

- Dates (from – to) 1998 - 2008

Name and address of employer University of Zagreb School of Medicine

Type of business or sector Medicine (Infectious Diseases)

Occupation or position held lecturer

Main activities and responsibilities lecturer

WORK EXPERIENCE

- Dates (from – to) 2008 - 2013

Name and address of employer University of Zagreb School of Medicine

Type of business or sector Medicine (Infectious Diseases)

Occupation or position held Assistant Professor

Main activities and responsibilities Organizing and performing lectures for medical students (Clinical Infectious Diseases);

Organizing and performing lectures for interns in infectology and pediatrics (Pediatric Infectious Diseases)

WORK EXPERIENCE

- Dates (from – to) 20013 - today

Name and address of employer University of Zagreb School of Medicine

Type of business or sector Medicine (Infectious Diseases)

Occupation or position held Associate Professor

Main activities and responsibilities Organizing and performing lectures for medical students (Clinical Infectious Diseases);

Organizing and performing lectures for interns in infectology and pediatrics (Pediatric Infectious Diseases)

EDUCATION

Date 1984 - 1989

Place of education Zagreb

Name and type of organisation providing education University of Zagreb School of Medicine

Title or qualification awarded M. D.

EDUCATION

Date 2004

Place of education Zagreb

Name and type of organisation providing education University of Zagreb School of Medicine

Title or qualification awarded MSc

EDUCATION

Date 2006

Place of education Zagreb

Name and type of organisation providing education University of Zagreb School of Medicine

Title or qualification awarded PhD

TRAINING

Year 1997 - 1998

Place of training Zagreb

Name and type of organisation providing training University of Zagreb School of Medicine,
University Hospital Center, Zagreb, Croatia

Principal subjects/Occupational skills covered Clinical pediatrics

TRAINING

Year 1998

Place of training Rome, Italy

Name and type of organisation providing training IRCCS «Lazaro Spallanzani»

Principal subjects/Occupational skills covered epidemiology, diagnostics, therapy and prevention of HIV-
infection/disease

PERSONAL SKILLS AND COMPETENCIES

Mother tongue(s) croatian

Other language(s)

Language English, italian

Speaking English, italian

Writing English, italian

Understanding (listening and reading) English, italian

SOCIAL SKILLS AND COMPETENCIES Member of:

European Society for Pediatric Infectious Diseases, European Society for Clinical Microbiology and Infectious Diseases; Croatian Medical Association, Croatian Medical Chamber, Croatian Society for Infectious Diseases, Croatian Society for Intensive Medicine

ORGANISATIONAL SKILLS AND COMPETENCIES Leading the lectures for medical students and interns in pediatrics and infectious diseases

Head of department in a university hospital

ADDITIONAL INFORMATION Scientific projects – principal investigator:

2008 – 2013: New laboratory methods in diagnostics of acute non-bacterial CNS inflammation in children – project number: (Croatian Ministry for Education and Science)

2012 – 2016: The burden of acute rotavirus gastroenteritis in Croatian children” (GSK Bio)

2018 – onward: The Croatian pneumococcal carriage study (Pfizer Scientific Foundation)

Number of published articles: 75 (Scopus); 52 (Web of Science, WoS); 39 (Pubmed/Medline); 33 (Current Contents); H-index 12 (Scopus); 10 (WoS); Number of citations: 378 (Scopus); 281 (WoS).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Židovec-Lepej S, Tešović G, Ljubin-Sternak S, Jeren T. Naive and Memory CD4+ T-cells in the Cerebrospinal Fluid of Children with Aseptic Meningitis Following Measles-Mumps-Rubella Vaccination and Enteroviral Meningitis. *Immunol Invest* 2007;36(3):321-35.
2. Čavčić A, Tešović G, Gorenec L, Grgić I, Benić B, Židovec-Lepej S. Concentration gradient of CXCL10 and CXCL11 between the cerebrospinal fluid and plasma in children with enteroviral aseptic meningitis. *Eur J Paediatr Neurol* 2011;15(6):502-7.
3. Ivančić-Jelečki J, Baričević M, Šantak M, Harcet M, Tešović G, Marušić Della Marina B, Forčić D. The first genetic characterization of a D4 measles virus strain derived from a patient with subacute sclerosing panencephalitis. *Infect Genet Evol* 2013.
4. Marić LS, Lepej SZ, Gorenec L, Grgić I, Trkulja V, Rode OD, Roglić S, Grmoja T, Barišić N, Tešović G. Chemokines CXCL10, CXCL11, and CXCL13 in acute disseminated encephalomyelitis, non-polio enterovirus aseptic meningitis, and neuroborreliosis: CXCL10 as initial discriminator in diagnostic algorithm? *Neurol Sci*.2018;39:471-479. doi: 10.1007/s10072-017-3227-8.
5. Stevanović V, Barušić Z, Višković K, Rode OD, Tešović G. Acute necrotizing encephalopathy of childhood associated with human herpes virus 6 in Croatia. *Neurol Sci*.2018 Oct 29. doi: 10.1007/s10072-018-3623-8.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Zavadzka D, Anca I, André F, Bakir M, Chlibek R, Čížman M, Ivaskeviciene I, Mangarov A, Mészner Z, Pokorn M, Prymula R, Richter D, Salman N, Simurka P, Tamm E, Tešović G, Urbancikova I, Usonis V. Recommendations for tick-borne encephalitis vaccination from the Central European Vaccination Awareness Group (CEVAG). *Hum Vaccin Immunother* 2013;9(2):362-74.
2. Mészner Z, Anca I, André F, Chlibek R, Čížman M, Grzesiowski P, Mangarov A, Pokorn M, Prymula R, Richter D, Salman N, Šimurka P, Tamm E, Tešović G, Urbancikova I, Usonis V, Zavadzka D; Central European Vaccine Awareness Group (CEVAG). Rotavirus vaccination in Central Europe. *J Pediatr Gastroenterol Nutr* 2013;56:586-96.
3. Richter D, Anca I, André FE, Bakir M, Chlibek R, Čížman M, Mangarov A, Mészner Z, Pokorn M, Prymula R, Salman N, Simurka P, Tamm E, Tešović G, Urbančíková I, Usonis V, Wysocki J, Zavadzka D, Central European Vaccination Awareness Group. Immunization of high-risk paediatric populations: Central

European Vaccination Awareness Group recommendations. *Expert Rev Vaccines* 2014;13(6):801-15. doi: 10.1586/14760584.2014.897615.

4. Marić LS, Knezović I, Papić N, Miše B, Roglić S, Markovinović L, Tešović G. Risk factors for coronary artery abnormalities in children with Kawasaki disease: a 10-year experience. *Rheumatol Int*. 2015;35:1053-8. doi: 10.1007/s00296-014-3186-9.
5. Ivančić-Jelečki J, Forčić D, Mlinarić-Galinović G, Tešović G, Nikić Hecar A. Early Evolution of Human Respiratory Syncytial Virus ON1 Strains: Analysis of the Diversity in the C-Terminal Hypervariable Region of Glycoprotein Gene within the First 3.5 Years since Their Detection. *Intervirology*. 2015;58:172-80. doi: 10.1159/000382018.
6. Ivančić-Jelečki J, Slović A, Šantak M, Tešović G, Forčić D. Common position of indels that cause deviations from canonical genome organization in different measles virus strains. *Virol J* 2016;13:134. doi: 10.1186/s12985-016-0587-2.
7. Stemberger Marić L, Papić N, Šestan M, Knezović I, Tešović G. Challenges in early diagnosis of Kawasaki disease in the pediatric emergency department: differentiation from adenoviral and invasive pneumococcal disease. *Wien Klin Wochenschr*. 2018;130:264-272. doi: 10.1007/s00508-018-1324-1.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2008 – 2013: New laboratory methods in diagnostics of acute non-bacterial CNS inflammation in children – (Croatian Ministry for Education and Science)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Genomic and molecular epidemiology of human paramyxoviruses in Croatia (principal investigator: Dubravko Forčić, PhD)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

„The role of chemokynes CXCL 10 i CXCL 11 in enteroviral aseptic meningitis pathogenesis“ – candidate Anamarija Čavčić, mD ,PhD thesis defended on September 25th, 2015

„The role of chemokynes CXCL10, CXCL11 i CXCL13 in aseptic meningitis, neuroborreliosis and acute disseminated encephalomyelitis in childre“ – candidate Lorna Stemberger Marić, MD , PhD thesis defended on March 24th, 2017

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist.Prof. Stanko Težak

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Medical Image Analysis

BIOGRAPHY

2005 – 2017 Head Division of scintigraphy, Department of nuclear medicine and radiation protection, Clinical Medical Centre Zagreb

2015. Assoc Prof. School of Medicine University of Zagreb

2005. PhD degree in medical sciences at School of medicine, University of Zagreb Dissertation title: Regional myocardial perfusion in patients with coronary artery disease before and after revascularisation

1982. Specialist in nuclear medicine

1979. Postgraduate programme "Nuclear medicine, School of medicine, University of Zagreb

1976 Medical doctor, School of Medicine University of Zagreb

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: May, 15 th 2015.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Hör G., Standke R., Klepzig H. jr., Maul F.D., Tüngerthal S., I. Težak S., Reifarth N., Kanemoto N., Happ J., Baum R.P.: Äquilibrium-Radionuklid-Ventrikulographie: Vergleich mit Echokardiographie und digitaler Subtraktionsangiokardiographie; Multi-Parameterbewertung. Der nuklearmediziner 1986; 9: 211-234.
2. Klepzig, H. jr; Standke, R; Baum, R, P; Težak, Stanko; Mildemberger, D; Maul, F, D; Hör, G; Kaltenbach M.Vergleich von Belastungs-EKG und Radionuklid-Ventrikulographie bezüglich des Nachweises einer Myokardischämie bei isolierten Stenosen des Ramus interventricularis anterior.. Nuklearmedizin. 27 (1988) ; 57-62
3. Dodig, Damir; Popović, Slavko; Poropat, Mirjana; Težak, Stanko; Šimonović, Ivan. Detection of diffuse skeletal lesions by monitoring the kinetics of labeled phosphonate.. // Nuklearmedizin. 33 (1994) ; 30-32
4. Poropat, Mirjana; Batinić, Danica; Bašić, Mario; Nižić, Lj.; Dodig, Damir; Milošević, D.; Votava, Ana; Težak, Stanko; Vrljićak, K.; Huić, Dražen; Medvedec, Mario. Tc-99m DTPA renal scyntygraphy using deconvolution analysis with six function images of the mean time to evaluate acute pyelonephritis. // Clinical nuclear medicine. 24 (1999) , 2; 120-124
5. Malčić, Ivan; Senečić, Irena; Težak, Stanko; Ivančević, Darko; Kniewald, Hrvoje. Radioangioscintigraphy and doppler echocardiography in the quantification of left-to-right shunt. Pediatric cardiology. 21 (2000) , 3; 240-243
6. Garkavij, M; Samaržija, Miroslav; Ewers, S, B; Jakopović, Marko; Težak, Stanko, Tennvall, J. 1. Garkavij, M; Samaržija, Miroslav; Ewers, S, B; Jakopović, Marko; Težak, Stanko, Tennvall, J. Concurrent radiotherapy and tumor targeting with ¹¹¹In-HMFG1-F(ab')₂ in patients with MUC1-positive non-small cell lung cancer. Anticancer research. 25 (2005), 6C; 4663-4671
7. Težak S., Samaržija M., Lončarić S., Popović S., Tomić-Brzac H., Krpan N.: Stupanj akumulacije ^{99m}Tc pertehnetata kod scintigrafski hladnih čvorova u štitnjači Radiol Iugosl 1984; 18: 401-403.

8. Lončarić S., Samaržija M., Popović S., Težak S.: 99mTc uptake in thyroid; Pinhole collimator nonuniformity correction. Radiol Jugosl 1990; 24: 241-244.
- 9.. Huić D. Dodig D., Jurašinović Ž., Težak S et al: Simple quantitative analysis of Ga-67 scintigraphy normal values. Radiol Oncol 1995, 29:12-4.
10. Standke R., Težak S., Baum R.P. Hör G.: Multiharmonisch Analyse der regionalen linksventrikulären Volumenfunktion unter Belastung. in "Radioaktive Isotope in Klinik und Forschung" 17. Band 1. Teil (ed. R. Höfer and H. Bergman), H. Egermann Vienna, 1986. p. 241-247.
11. Lončarić S., Samaržija M., Popović S., Težak S., Krpan N.: Thyroid ^{99m}Tc uptake measurement with pinhole planar non-uniformity correction. Eur J Nucl Med 1984; 9: A 302
12. Dodig D., Ivičević E., Poropat M., Težak S. Bračić I.: Determination of pulmonary Sarcoidosis Activity with Quantitative Ga-67 Citrate Scan. Eur.Journ. of Nucl. Med. 16:7,1990:729.
13. Samardžić T, Petrović R, Relja M, Telarović S, Miletić V, Težak S. I-123 Ioflupane Brain SPECT and I-131 MIBG Myocardial Scintigraphy as Complementary Diagnostic Tools in Parkinsonism. Eur J Nucl Med Mol Imaging (2013) 40 (Suppl 2):S348
14. Lončarić, Srećko; Težak, Stanko; Dodig, Damir. Interactive Fine Adjustment Of Gamma-Variate Fit For Cardiac Shunt Calculation // *Book of Abstracts, 7th International Congress Of The Croatian Society Of Nuclear Medicine*. Zagreb, 2011. 84-84 (poster, međunarodna recenzija, sažetak, znanstveni).
- 15, "Regional myocardial perfusion in patients with coronary artery disease before and after revascularisation" Dissertation 2005. School of medicine, University of Zagreb

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Trogrlic M, Težak S. Incremental value of 99mTc-HYNIC-TOC SPECT/CT over whole-body planar scintigraphy and SPECT in patients with neuroendocrine tumours. Nuklearmedizin. 2017 Jun 12;56(3):97-107. doi: 10.3413/Nukmed-0851-16-10. Epub 2017 Feb 6.
2. Malčić, Ivan; Kniewald, Hrvoje; Buljević, Bruno; Ferek-Petrić, Božidar; Boban, Marko; Hrabak Paar, Maja; Težak, Stanko; Strozzi, Maja; Dilber, Daniel Medicinski aspekti. // Prirodne srčane greške od dječje do odrasle dobi – smjernice za liječenje odraslih s prirođenim srčanim greškama (OPSG) / Malčić, Ivan ; Šmalcelj, Anton ; Anić, Darko ; Planinc, Danijel (ur.). Zagreb: Medicinska naklada, 2017. str. 23-111
3. Kralik, Ivana; Štefanić, Mario; Brkić, Hrvoje; Šarić, Gordan; Težak, Stanko; Grbac Ivanković, Svjetlana; Giroto, Neva; Štimac, Damir; Rubin, Otmar; Ivanišević, Zrinka et al. Estimated collective effective dose to the population from nuclear medicine diagnostic procedures in Croatia: A comparison of 2010 and 2015. // PLoS One, 12 (2017), 6; e0180057-e0180057 doi:10.1371/journal.pone.0180057 (međunarodna recenzija, članak, znanstveni)
4. Težak, Stanko. Scintigrafija skeleta u pedijatriji. // Pedijatrijska reumatologija / Jelušić, Marija ; Malčić, Ivan (ur.). Zagreb: Medicinska naklada, 2014. str. 118-122
5. Anić, Branimir; Padjen, Ivan; Barešić, Marko; Težak, Stanko The lobster sign in SAPHO syndrome : unusually extensive osteitis of the anterior chest wall partially responsive to infliximab. // Rheumatology international, 34 (2014), 2; 281-282 doi:10.1007/s00296-012-2606-y (podatak o recenziji nije dostupan, pismo uredniku, stručni)
6. Težak, Stanko; Trogrlić, Mate; Žuvić, Marijan; Belev, Boris The Value of 99mTc EDDA/HYNIC-TOC SPECT/CT in the Assessment of Patients with Metastatic Neuroendocrine Tumors of Unknown Primary. // 8th International Congress of the Croatian Society of Nuclear Medicine with 10th Alpe Adria Nuclear medicine Symposium Šibenik, 2014. (predavanje, međunarodna recenzija, sažetak, ostalo)



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

0

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

0

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1. Somatostatin receptor scintigraphy in neuroendocrine tumour patients using Technetium-99m octreotide. Dissertation defence, November 28, 2017. School of Medicine, University of Zagreb

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Vladimir Trkulja, MD, PhD, Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Zagreb University School of Medicine, Dept. Pharmacology

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Structure, Methodology and Functioning of scientific research 2 - co-coordinator; Structure, Methodology and Functioning of scientific research 1; Selected chapters in epileptology in developmental age; Medical Statistics 2.1: Statistical tools for medical data analysis in planned experimental study design; Medical Statistics 2.2: Statistical tools for medical data analysis in quasi-experimental study design; Proteomics in biomedical research

BIOGRAPHY

Education:

1988 – MD (Zagreb University School of Medicine)

1995 – MSc (biomedicine) (Faculty of Science, Zagreb University)

1997 – PhD (pharmacology) (Zagreb University School of Medicine)

Employments:

1994– Department of Pharmacology, School of Medicine

1991-1994 (May – Croatian Army

1990-1991 – GP

1989-1990 – Intern

Current teaching : undergraduate medical students - Pharmacology, Essentials of evidence based medicine (Medical studies in English); electives (Croatian studies): "Važno je naći valjan dokaz"; "Kako napisati diplomski rad";, PhD program "Biomedicine and healthcare: Structure 1, Selected topics in pediatric epileptology (lecturer); Structure 2 (co-chair); Specialistic postgraduate studies in Clinical pharmacology and toxicology (coordinator of 2 courses); Specialistic postgraduate studies in dermatology (lecturer); Specialistic postgraduate studies in drug development (Faculty of Pharmacy and Biochemistry) (coordinator of 1 course).

I have published 88 papers in index biomedical journals (around 900 citations). Co-editor of the Croatian editions of "Basic and clinical pharmacology" (Official textbooks in Pharmacology at Medical Schools in Croatia). I have published 8 chapters in different books. Between 2015 and 2017 - editor for systematic reviews and meta-analyses at Croatian Medical Journal. Member of the Editorial board of Advances In Therapy and Drug, Healthcare and Patient Safety. Peer-reviewer for some 30 biomedical journals.. Member of the Committee for human medicines - Croatian Agency for Medicines and Medical Devices (2005-2015). Consultant to Medicines Agencies of the Republic of Macedonia and Republic of Montenegro..

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Lodeta B, Benko G, Trkulja V. Increasing prostate specific antigen levels differently influence prostate cancer detection rates of two different 12-core prostate biopsy schemes. Urol Int 2013; 91:75-80.

2. Pikija S, Trkulja V, Šimundić AM, Vrčec E, Bošković K, Baćani S. Is on-admission capillary blood beta-hydroxybutyrate concentration associate with the acute stroke severity and short-term functional outcome? *Neurol Res* 2013; 35:959-967.
3. Milošević D, Trkulja V, Turudić D, Batinić D, Spajić B, Tešović G. Ultrasound bladder wall thickness measurement in diagnosis of recurrent urinary tract infections and cystitis cystica in prepubertal girls. *J Pediatr Urol* 2013; 9(6PtB):1170-1177.
4. Oremuš K, Šoštarić S, Trkulja V, Hašpl M. Influence of tranexemic acid on postoperative autologous blood retransfusion in primary total hip and knee arthroplasty: a randomized controlled trial. *Transfusion* 2014; 54:31-41.
5. Trkulja V, Lalić Z, Nađ-Škegro S, Lebo A, Granić P, Lovrić M, Pasini J, Božina N. Effect of cyclosporine on steady-state pharmacokinetics of mycophanolic acid (MPA) in renal transplant recipients is not affected by the MPA formulation: analysis based on therapeutic drug monitoring. *Ther Drug Monit* 2014; 36:456-464.
6. Milas M, Devedjija S, Trkulja V. Single incision versus standard multiport laparoscopic cholecystectomy: up-dated systematic review and meta-analysis of randomized trials. *Surgeon* 2014; 12:271-289.
7. Skuhala T, Trkulja V, Runje M, Vukelić D, Desnica B. Albendazolesuphoxide concentrations in plasma and hydatid cyst and prediction of parasitological and clinical outcomes in patients with liver hydatidosis caused by *Echinococcus granulosus*. *CMJ* 2014; 55:146-155.
8. Šmigovec I, Đapić T, Trkulja V. Ultrasound screening for decentered hips in children with severe cerebral palsy: a preliminary evaluation. *Pediatr Radiol* 2014; 44:1101-1109.
9. Lodeta B, Trkulja V. Septic complications and hospital admissions after transrectal ultrasound-guided prostate biopsy: incidence rates and outcomes in 913 consecutive biopsies. *Int Urol Nephrol* 2014; 46:2335-2336.
10. Daka Q, Trkulja V. Efficacy and tolerability of mono-compound topical treatments for reduction of intraocular pressure in patients with primary open angle glaucoma or ocular hypertension: an overview of reviews. *CMJ* 2014; 55:468-480.
11. Čengić T, Trkulja V, Pavelić SK, Ratkaj I, Markova-Car E, Mikolaučić M, Kolundžić R. Association of TGFB1 29C/T and IL6 -572G/C polymorphisms with developmental hip dysplasia: a case-control study in adults with severe osteoarthritis. *Int Orthop* 2015; 39:793-798.
12. Grunblatt E, Bartl J, Iuhos DI, Knezović A, Trkulja V, Riederer P, Walitza S, Šalković-Petrišić M. Characterization of cognitive deficits in spontaneously hypertensive rats, accompanied by the brain insulin receptor dysfunction. *J Mol Psychiatry* 2015; 3:6 doi: 10.1186/s40303-015-0012-6.
13. Šalković-Petrišić M, Knezović A, Osmanović-Barilar J, Smailović U, Trkulja V, Riederer P, Amit T, Mandel S, Youdim MB. Multi-target iron-chelators improve memory loss in a rat model of sporadic Alzheimer's disease. *Life Sci* 2015; doi: 10.1016/j.lfs.2015.06.026.
14. Pikija S, Trkulja V, Majočić B, Mutzenbach JS, Sellner J. A high burden of ischemic stroke in regions of Eastern/Central Europe is largely due to modifiable risk factors. *Curr Neurovasc Res* 2015; 12:341-352.
15. Grgurević I, Bokun T, Mustapić S, Trkulja V, Heinzl R, Banić M, Puljiz Z, Lukšić B, Kujundžić M. Real-time two-dimensional shear wave ultrasound elastography of the liver is a reliable predictor of clinical outcomes and the presence of esophageal varices in patients with compensated liver cirrhosis. *CMJ* 2015; 56:470-81.

16. Crnković T, Trkulja V, Bilić R, Gašpar D, Kolundžić R. Carpal tunnel and median nerve volume changes after tunnel release in patients with the carpal tunnel syndrome: a magnetic resonance imaging (MRI) study. *Int Orthop* 2016; 40:981-987.
17. Trkulja V. Safety of apixaban for venous thromboembolism (VTE) prophylaxis: the evidence to date. *Drug Healthcare Pat Saf* 2016; 8:25-38.
18. Milošević D, Batinić D, Trkulja V, Andrašević AT, Grčić BF, Vrljićak K, Nogalo B, Turudić D, Spajić M. Rational therapy of urinary tract infections in children in Croatia. *Acta Clin Croat* 2016; 55:428-439.
19. Gregurić T, Trkulja V, Baudoin T, Grgić M, Šmigovec I, Kalogjera L. Differences in sino-nasal outcome test 22 and visual analogue scale symptom scores in chronic rhinosinusitis with and without nasal polyps. *Am J Rhinol Allergol* 2016; 30:107-112.
20. Dubravčić M, Cukon P, Car S, Puljević D, Trkulja V. Croatia needs a registry of patients undergoing direct current cardioversion for persistent atrial fibrillation/flutter. *CMJ* 2016; 31: 403-405.
21. Pikija S, Trkulja V, Mutzenbach SJ, McCoy MR, Ganger P, Sellner J. Fibrinogen consumption is related to intracranial clot burden in acute ischemic stroke: a retrospective hyperdense artery study. *J Translational Med* 2016; 14: doi 10.1186/s12967-016-1006-6.
22. Pikija S, Magdić J, Trkulja V, Unterkreuter P, Mutzenbach JS, Novak HF, Wymayr F, Hauer L, Sellner J. Intracranial thrombus morphology and composition undergoes time-dependent changes in acute ischemic stroke: a CT densitometry study. *Int J Mol Sci* 2016; 23:17(11= pii:E1959.
23. Gregurić T, Trkulja V, Baudoin T, Grgić MV, Šmigovec I, Kalogjera L. Association between computed tomography findings and clinical symptoms in chronic rhinosinusitis with and without nasal polyps. *Eur Arch Otorhinolaryngol* 2017; doi: 10.1007/s00405-016-4446-y
24. Božina N, Lalić Z, Nađ-Škegro S, Borić-Bilušić A, Božina T, Kaštelan Ž, Trkulja V. Steady-state pharmacokinetics of mycophenolic acid in renal transplant patients: exploratory analysis of the effects of cyclosporine, recipients' and donors' ABCC2 gene variants, and their interactions. *Eur J Clin Pharmacol* 2017; doi: 10.1007/s00228-017-2285-4.
25. Kelava L, Barić H, Bupić M, Čima I, Trkulja V. Monovision versus multifocality for presbyopia: systematic review and meta-analysis of randomized controlled trials. *Adv Ther* 2017; 34:1815-1839.
26. Štemberger Marić L, Židovec Lepej S, Gorenec L, Grgić I, Trkulja V, Đaković Rode O, Roglić S, Grmoja T, Barišić N, Tešović G. Chemokines CXCL10 CXCL11 and CXCL13 in acute disseminated encephalomyelitis, non-polio enterovirus aseptic meningitis, and neuroborreliosis: CXCL10 as initial discriminator in diagnostic algorithm? *Neurol Sci* 2018; 39:471-479.
27. Barić H, Đorđević V, Cerovečki I, Trkulja V. Complementary and alternative medicine treatments for Generalized anxiety disorder: systematic review and meta-analysis of randomized controlled trials. *Adv Ther* 2018; 35:261-288.
28. Domjanović IK, Lovrić M, Trkulja V, Petelin-Gadže Ž, Ganoci L, Čajić I, Božina N. Interaction between ABCG2 421C>A polymorphism and valproate in their effect on steady-state disposition of lamotrigine in adults with epilepsy. *Br J Clin Pharmacol* 2018; 84:2106-2119.
29. Šagud M, Petrović B, Vilibić M, Mihaljević-Peleš A, Vuksan-Ćusa B, Radoš I, Greš A, Trkulja V. The relationship among psychopathology, religiosity, and nicotine dependence in Croatian war veterans with posttraumatic stress disorder. *Croat Med J* 2018; 31:165-177.

30. Pikija S, Trkulja V, Pamesmayer C, Mutzenbach JS, Killer-Oberpfalzer M, Hecker C, Bubel N, Fussel MU, Sellner J. Higher blood pressure during endovascular thrombectomy in anterior circulation stroke is associated with better outcomes. *J Stroke* 2018; 20:373-384.
31. Trkulja V. Is escitalopram really relevantly superior to citalopram in treatment of major depressive disorder? A meta-analysis of randomized head-to-head trials. *CMJ* 2010; 15: 61-73.
32. Trkulja V, Kolundžić R. Rivaroxaban and dabigatran etexilate for thromboprophylaxis after joint-replacement surgery: an exploratory indirect comparison based on meta-analysis of pivotal efficacy/safety trials. *CMJ* 2010; 51:113-123.
33. Trkulja V, Lacković Z. Vagal influence on compensatory ovarian growth is important only briefly after hemicastration. *Exp Biol Med* 2001; 226:776-781.
34. Trkulja V, Crljen-Manestar V, Banfić H, Lacković Z. Involvement of the peripheral cholinergic/muscarinic system in the compensatory ovarian hypertrophy in the rat. *Exp Biol Med* 2004; 229:793-805
35. Kolundžić R, Šlentić M, Smerdelj M, Orlić D, Trkulja V. Stability of Endler cementless polyethylene acetabular cup: long term follow-up. *CMJ* 2005; 46:261-267
36. Pikija S, Milevčić D, Trkulja V, Kiđmet-Piskač S, Pavliček I, Sokol N. Higher serum triglyceride level in patients with acute ischemic stroke is associated with lower infarct volume on CT brain scans. *Eur Neurol* 2006;55:89-92.
37. Dobec-Meić B, Pikija S, Cvetko D, Trkulja V, Pažanin L, Kudelić N, Rotim K, Kostanjevec R. Intracranial tumors in adult population of the Varaždin County (Croatia) 1996-2004: a population-based retrospective incidence study. *J Neurol Oncology* 2006;78:303-310.
38. Milutinović S, Trkulja V. Reduced responsiveness to epoetin at re-exposure after prolonged epoetin-free period in anemic hemodialysis patients with end-stage renal disease. *CMJ* 2006;47:424-432.
39. Milutinović S, Plavljančić Đ, Trkulja V. Comparison of two epoetin brands in anemic hemodialysis patients: results of two efficacy trials and a single-dose pharmacokinetic study. *Fundam Clin Pharmacol* 2006; 20:493-502.
40. Madjarević M, Kolundžić R, Matek D, Šmigovec I, Crnković T, Trkulja V. Mitchell and Wilson metatarsal osteotomies for the treatment of hallux valgus: comparison of outcomes two decades after the surgery. *Foot Ankle Int* 2006; 27:877-882.
41. Kolundžić R, Orlić D, Trkulja V, Pavelić K, Gall Trošelj K. Single nucleotide polymorphisms in the interleukin-6 gene promoter, tumor necrosis factor- α gene promoter, and transforming growth factor β 1 signal sequence as predictors of time to onset of aseptic loosening after total hip arthroplasty: preliminary study. *J Orthop Sci* 2006; 11:592-600.
42. Klepac N, Pikija S, Kraljić T, Relja M, Trkulja V, Juren S, Pavliček I, Babić T. Association of rural life setting and poorer quality of life in Parkinson's disease patients: a cross-sectional study in Croatia. *Eur J Neurol* 2007; 14:194-198.
43. Telarović S, Relja M, Trkulja V. Restless legs syndrome in hemodialysis patients: association with the use of calcium antagonists - a preliminary report. *Eur Neurol* 2007; 58:166-169.
43. Klepac N, Relja M, Klepac R, Hećimović S, Babić T, Trkulja V. Oxidative stress parameters in plasma of Huntington's disease patients, asymptomatic Huntington's disease gene carriers and healthy subjects: a cross-sectional study. *J Neurology* 2007; 254:1676-1683.

44. Klepac N, Trkulja V, Relja M, Babić T. Is quality of life in non-demented Parkinson's disease patients related to cognitive performance? A clinic-based cross-sectional study. *Eur J Neurol* 2008; 15:128-133.
45. Klepac N, Trkulja V, Relja M. Nondemented Parkinson's disease patients: is cognitive performance associated with depressive difficulties? *Cog Behav Neurol* 2008; 21:87-91.
46. Madjarević M, Kolundžić R, Trkulja V, Pećina M. Biomechanical analysis of functional adaptation of metatarsal bones in statically deformed feet. *Int Orthop* 2009; 33:157-163.
47. Klepac N, Trkulja V. Education effect on depression and quality of life in non-demented Parkinson's disease patients. *J Neuropsychiatry Clin Neurosci* 2009; 21:314-322.
48. Pikija S, Cvetko D, Hajduk M, Trkulja V. Higher mean platelet volume determined shortly after the symptom onset in acute ischemic stroke patients is associated with a larger infarct volume on CT brain scans and with worse clinical outcome. *Clin Neurol Neurosurg* 2009; 111:568-573.
49. Kovjanić J, Bilić R, Kolundžić R, Bilić L, Trkulja V. Corrective osteotomy of the malunited distal radius fracture: use of periosteal bed may reduce the extent of postoperative graft resorption. *Int Orthop* 2010; 34:525-529.
50. Car S, Trkulja V. Higher serum uric acid on admission is associated with higher short-term mortality and poorer long-term survival after myocardial infarction: Retrospective prognostic study. *CMJ* 2009; 50:559-566.
51. Klepac N, Hajnšek S, Trkulja V. Impact of pre-morbid depression on health-related quality of life in non-demented Parkinson's disease patients. *Park Relat Dis* 2010; 16:21-27.
52. Klepac N, Hajnšek S, Trkulja V. Cognitive performance in nondemented nonpsychotic Parkinson disease patients with or without a history of depression prior to the onset of motor symptoms. *J Geriatr Psychiatry Neurol* 2010; 23:15-26.
53. Vukelić D, Trkulja V, Šalković-Petrišić M. Single oral dose of azithromycin versus five days of oral erythromycin or no antibiotic in treatment of *Campylobacter* enterocolitis in children: a prospective randomized assessor-blind study. *J Paediat Gastroenerol Nutrition* 2010; 50:404-410.
54. Trkulja V, Car S. On-admission serum uric acid predicts outcomes after acute myocardial infarction: systematic review and meta-analysis of prognostic studies. *CMJ* 2012; 53:162-172.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Lodeta B, Benko G, Trkulja V. Increasing prostate specific antigen levels differently influence prostate cancer detection rates of two different 12-core prostate biopsies schemes. *Urol Int* 2013; 91:75-80.
2. Pikija S, Trkulja V, Šimundić AM, Vrček E, Bošković K, Baćani S. Is on-admission capillary blood beta-hydroxybutyrate concentration associate with the acute stroke severity and short-term functional outcome? *Neurol Res* 2013; 35:959-967.
3. Milošević D, Trkulja V, Turudić D, Batinić D, Spajić B, Tešović G. Ultrasound bladder wall thickness measurement in diagnosis of recurrent urinary tract infections and cystitis cystica in prepubertal girls. *J Pediatr Urol* 2013; 9(6PtB):1170-1177.
4. Oremuš K, Šošćarić S, Trkulja V, Hašpl M. Influence of tranexemic acid on postoperative autologous blood retransfusion in primary total hip and knee arthroplasty: a randomized controlled trial. *Transfusion* 2014; 54:31-41.
5. Trkulja V, Lalić Z, Nađ-Škegro S, Lebo A, Granić P, Lovrić M, Pasini J, Božina N. Effect of cyclosporine on steady-state pharmacokinetics of mycophanolic acid (MPA) in renal transplant recipients is not affected

- by the MPA formulation: analysis based on therapeutic drug monitoring. *Ther Drug Monit* 2014; 36:456-464.
6. Milas M, Devedjija S, Trkulja V. Single incision versus standard multiport laparoscopic cholecystectomy: up-dated systematic review and meta-analysis of randomized trials. *Surgeon* 2014; 12:271-289.
 7. Skuhala T, Trkulja V, Runje M, Vukelić D, Desnica B. Albendazolesuphoxide concentrations in plasma and hydatid cyst and prediction of parasitological and clinical outcomes in patients with liver hydatidosis caused by *Echinococcus granulosus*. *CMJ* 2014; 55:146-155.
 8. Šmigovec I, Đapić T, Trkulja V. Ultrasound screening for decentered hips in children with severe cerebral palsy: a preliminary evaluation. *Pediatr Radiol* 2014; 44:1101-1109.
 9. Lodeta B, Trkulja V. Septic complications and hospital admissions after transrectal ultrasound-guided prostate biopsy: incidence rates and outcomes in 913 consecutive biopsies. *Int Urol Nephrol* 2014; 46:2335-2336.
 10. Daka Q, Trkulja V. Efficacy and tolerability of mono-compound topical treatments for reduction of intraocular pressure in patients with primary open angle glaucoma or ocular hypertension: an overview of reviews. *CMJ* 2014; 55:468-480.
 11. Čengić T, Trkulja V, Pavelić SK, Ratkaj I, Markova-Car E, Mikolaučić M, Kolundžić R. Association of TGFβ1 29C/T and IL6 -572G/C polymorphisms with developmental hip dysplasia: a case-control study in adults with severe osteoarthritis. *Int Orthop* 2015; 39:793-798.
 12. Grunblatt E, Bartl J, Iuhos DI, Knezović A, Trkulja V, Riederer P, Walitza S, Šalković-Petrišić M. Characterization of cognitive deficits in spontaneously hypertensive rats, accompanied by the brain insulin receptor dysfunction. *J Mol Psychiatry* 2015; 3:6 doi: 10.1186/s40303-015-0012-6.
 13. Šalković-Petrišić M, Knezović A, Osmanović-Barilar J, Smailović U, Trkulja V, Riederer P, Amit T, Mandel S, Youdim MB. Multi-target iron-chelators improve memory loss in a rat model of sporadic Alzheimer's disease. *Life Sci* 2015; doi: 10.1016/j.lfs.2015.06.026.
 14. Pikija S, Trkulja V, Majočić B, Mutzenbach JS, Sellner J. A high burden of ischemic stroke in regions of Eastern/Central Europe is largely due to modifiable risk factors. *Curr Neurovasc Res* 2015; 12:341-352.
 15. Grgurević I, Bokun T, Mustapić S, Trkulja V, Heinzl R, Banić M, Puljiz Z, Lukšić B, Kujundžić M. Real-time two-dimensional shear wave ultrasound elastography of the liver is a reliable predictor of clinical outcomes and the presence of esophageal varices in patients with compensated liver cirrhosis. *CMJ* 2015; 56:470-81.
 16. Crnković T, Trkulja V, Bilić R, Gašpar D, Kolundžić R. Carpal tunnel and median nerve volume changes after tunnel release in patients with the carpal tunnel syndrome: a magnetic resonance imaging (MRI) study. *Int Orthop* 2016; 40:981-987.
 17. Trkulja V. Safety of apixaban for venous thromboembolism (VTE) prophylaxis: the evidence to date. *Drug Healthcare Pat Saf* 2016; 8:25-38.
 18. Milošević D, Batinić D, Trkulja V, Andrašević AT, Grčić BF, Vrljićak K, Nogalo B, Turudić D, Spajić M. Rational therapy of urinary tract infections in children in Croatia. *Acta Clin Croat* 2016; 55:428-439.
 19. Gregurić T, Trkulja V, Baudoin T, Grgić M, Šmigovec I, Kalogjera L. Differences in sino-nasal outcome test 22 and visual analogue scale symptom scores in chronic rhinosinusitis with and without nasal polyps. *Am J Rhinol Allergol* 2016; 30:107-112.

20. Dubravčić M, Cukon P, Car S, Puljević D, Trkulja V. Croatia needs a registry of patients undergoing direct current cardioversion for persistent atrial fibrillation/flutter. *CMJ* 2016; 31: 403-405.
21. Pikija S, Trkulja V, Mutzenbach SJ, McCoy MR, Ganger P, Sellner J. Fibrinogen consumption is related to intracranial clot burden in acute ischemic stroke: a retrospective hyperdense artery study. *J Translational Med* 2016; 14: doi 10.1186/s12967-016-1006-6.
22. Pikija S, Magdić J, Trkulja V, Unterkreuter P, Mutzenbach JS, Novak HF, Wymayr F, Hauer L, Sellner J. Intracranial thrombus morphology and composition undergoes time-dependent changes in acute ischemic stroke: a CT densitometry study. *Int J Mol Sci* 2016; 23:17.
23. Gregurić T, Trkulja V, Baudoin T, Grgić MV, Šmigovec I, Kalogjera L. Association between computed tomography findings and clinical symptoms in chronic rhinosinusitis with and without nasal polyps. *Eur Arch Otorhinolaryngol* 2017; doi: 10.1007/s00405-016-4446-y
24. Božina N, Lalić Z, Nađ-Škegro S, Borić-Bilušić A, Božina T, Kaštelan Ž, Trkulja V. Steady-state pharmacokinetics of mycophenolic acid in renal transplant patients: exploratory analysis of the effects of cyclosporine, recipients' and donors' ABCC2 gene variants, and their interactions. *Eur J Clin Pharmacol* 2017; doi: 10.1007/s00228-017-2285-4.
25. Kelava L, Barić H, Bupić M, Čima I, Trkulja V. Monovision versus multifocality for presbyopia: systematic review and meta-analysis of randomized controlled trials. *Adv Ther* 2017; 34:1815-1839.
26. Štemberger Marić L, Židovec Lepej S, Gorenec L, Grgić I, Trkulja V, Đaković Rode O, Roglić S, Grmoja T, Barišić N, Tešović G. Chemokines CXCL10 CXCL11 and CXCL13 in acute disseminated encephalomyelitis, non-polio enterovirus aseptic meningitis, and neuroborreliosis: CXCL10 as initial discriminator in diagnostic algorithm? *Neurol Sci* 2018; 39:471-479.
27. Barić H, Đorđević V, Cerovečki I, Trkulja V. Complementary and alternative medicine treatments for Generalized anxiety disorder: systematic review and meta-analysis of randomized controlled trials. *Adv Ther* 2018; 35:261-288.
28. Domjanović IK, Lovrić M, Trkulja V, Petelin-Gadžić Ž, Ganoci L, Čajić I, Božina N. Interaction between ABCG2 421C>A polymorphism and valproate in their effect on steady-state disposition of lamotrigine in adults with epilepsy. *Br J Clin Pharmacol* 2018; 84:2106-2119.
29. Šagud M, Petrović B, Vilibić M, Mihaljević-Peleš A, Vuksan-Ćusa B, Radoš I, Greš A, Trkulja V. The relationship among psychopathology, religiosity, and nicotine dependence in Croatian war veterans with posttraumatic stress disorder. *Croat Med J* 2018; 31:165-177.
30. Pikija S, Trkulja V, Pamesmayer C, Mutzenbach JS, Killer-Oberpfalzer M, Hecker C, Bubel N, Fussel MU, Sellner J. Higher blood pressure during endovascular thrombectomy in anterior circulation stroke is associated with better outcomes. *J Stroke* 2018; 20:373-384.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Diana Trnski, Ph.D.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Methods in molecular oncology

BIOGRAPHY

I was born in 1985 in Rijeka, Croatia. I obtained my Diploma in molecular biology in 2008 at the Faculty of Science, University of Zagreb, Croatia. In 2015 I obtained my PhD degree in biomedicine and health at the Doctoral Study of Molecular Biosciences at J. J. Strossmayer University of Osijek, Croatia. I am an employee of the Division of Molecular Medicine at the Ruđer Bošković Institute since 2009, where I was an assistant/PhD student until 2015 and since then I am a senior assistant/postdoc in the Laboratory for Hereditary Cancer. I was a visiting scientist in the Group for Experimental Tumor Pathology at the University Hospital Erlangen, Germany. I participate in several postgraduate courses. I am a member of the Croatian and European Association for Cancer Research as well as the Croatian Association for Biochemistry and Molecular Biology. My main research topic is the Hedgehog-Gli signaling pathway and mechanisms of its activation in different cancer types. Methodologically, my main focus is on in vitro research, but most recently I also started in vivo analyses of tumor cell growth, invasion and metastasis using the chick chorioallantoic membrane assay.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 16/05/2018

Research Associate

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Sabol M, Trnski D, Musani V, Ozretić P, Levanat S. Role of Gli transcription factors in pathogenesis and their potential as new therapeutic targets. *Int J Mol Sci.* 2018; 19(9):2562.
2. Levanat S, Sabol M, Musani V, Ozretić P, Trnski D. Hedgehog signaling pathway as genetic and epigenetic target in ovarian tumors. *Curr Pharm Design.* 2017; 23(1):73-94.
3. Ozretić P*, Trnski D*, Musani V, Maurac I, Kalafatić D, Orešković S, Levanat S, Sabol M. Non-canonical Hedgehog signaling activation in ovarian borderline tumors and ovarian carcinomas. *Int J Oncol.* 2017; 51(6):1869-1877.
4. Trnski D, Sabol M, Gojević A, Martinić M, Ozretić P, Musani V, Ramić S, Levanat S. GSK3B and Gli3 play a role in activation of Hedgehog-Gli pathway in human colon cancer – Targeting GSK3 β downregulates the signaling pathway and reduces cell proliferation. *BBA - Mol Basis Dis.* 2015; 1852(12):2574-2584.
5. Ozretić P, Bisio A, Musani V, Trnski D, Sabol M, Levanat S, Inga A. Regulation of human PTCH1b expression by different 5' untranslated region cis-regulatory elements. *RNA Biol.* 2015; 12(3):290-304.
6. Sabol M*, Trnski D*, Uzarevic Z, Ozretic P, Musani V, Rafaj M, Cindric M, Levanat S. Combination of cyclopamine and tamoxifen promotes survival and migration of MCF-7 breast cancer cells - Interaction of Hedgehog-Gli and estrogen receptor signaling pathways. *Plos One.* 2014; 9(12):E114510.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Sabol M, Trnski D, Musani V, Ozretić P, Levanat S. Role of Gli transcription factors in pathogenesis and their potential as new therapeutic targets. *Int J Mol Sci.* 2018; 19(9):2562.
2. Levanat S, Sabol M, Musani V, Ozretić P, Trnski D. Hedgehog signaling pathway as genetic and epigenetic target in ovarian tumors. *Curr Pharm Design.* 2017; 23(1):73-94.

3. Ozretić P*, Trnski D*, Musani V, Maurac I, Kalafatić D, Orešković S, Levanat S, Sabol M. Non-canonical Hedgehog signaling activation in ovarian borderline tumors and ovarian carcinomas. *Int J Oncol.* 2017; 51(6):1869-1877.
4. Trnski D, Sabol M, Gojević A, Martinić M, Ozretić P, Musani V, Ramić S, Levanat S. GSK3B and GLI3 play a role in activation of Hedgehog-GLI pathway in human colon cancer – Targeting GSK3 β downregulates the signaling pathway and reduces cell proliferation. *BBA - Mol Basis Dis.* 2015; 1852(12):2574-2584.
5. Sabol M*, Trnski D*, Uzarevic Z, Ozretic P, Musani V, Rafaj M, Cindric M, Levanat S. Combination of cyclopamine and tamoxifen promotes survival and migration of MCF-7 breast cancer cells - Interaction of Hedgehog-GLI and estrogen receptor signaling pathways. *Plos One.* 2014; 9(12):E114510.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- from 01/2019 – associate on the Croatian Science Foundation research project “GLIcode - Differential regulation of the GLI code in BRAF/NRAS driven tumors” / PI Maja Sabol
- 2018 – principal investigator (together with Maja Sabol) on research project “How to kill a prostate cancer cell?” (dm-drogerie markt Ltd donation)
- from 05/2017 – associate on the Croatian Science Foundation research project “MIRnaGLI - Novel molecular mechanisms for new therapeutic approaches: Interactions of microRNAs and Hedgehog-GLI signaling pathway in serous ovarian carcinoma”; [HRZZ IP-2016-06-1268] / PI Sonja Levanat
- from 2017 – associate on research project “Interaction of HH-GLI signaling pathway and androgen receptor in prostate cancer” (dm-Drogerie Markt donation) / PI Sonja Levanat
- 2017/18 – associate on research project “Discovery of new biomarkers for melanoma development” (the City of Zagreb donation) / PI Sonja Levanat
- 2016/17 – associate on research project “Apoptotic pathways and role of BIRC5 (survivin) in breast cancer development” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2015 – associate on research project “InnoMol - New molecular solutions in research and development for innovative drugs”, FP7-Regpot, PI Oliver Vugrek
- 2014 - 2019 – associate on the Croatian Science Foundation research project “ProNetNel - New protein networks for novel therapeutic avenues in human melanoma”; [HRZZ IP-2013-11-1615] / PI Neda Slade
- 2012 – associate on research project “Role of survivin as a predictive and prognostic marker in breast cancer” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2009 – associate on research project “Genetic testing of inherited predisposition to breast and ovarian cancer” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2006 – 2013 – assistant on MZOŠ research project “Signal transduction in tumors: HH-GLI pathway, interactions and therapeutic potential”; [098-0982464-2461] / PI Sonja Levanat

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- from 01/2019 – associate on the Croatian Science Foundation research project “GLIcode - Differential regulation of the GLI code in BRAF/NRAS driven tumors” / PI Maja Sabol
- 2018 – principal investigator (together with Maja Sabol) on research project “How to kill a prostate cancer cell?” (dm-drogerie markt Ltd donation)



- from 05/2017 – associate on the Croatian Science Foundation research project “MIRnaGLI - Novel molecular mechanisms for new therapeutic approaches: Interactions of microRNAs and Hedgehog-GLI signaling pathway in serous ovarian carcinoma”; [HRZZ IP-2016-06-1268] / PI Sonja Levanat
- from 2017 – associate on research project “Interaction of HH-GLI signaling pathway and androgen receptor in prostate cancer” (dm-Drogerie Markt donation) / PI Sonja Levanat
- 2017/18 – associate on research project “Discovery of new biomarkers for melanoma development” (the City of Zagreb donation) / PI Sonja Levanat
- 2016/17 – associate on research project “Apoptotic pathways and role of BIRC5 (survivin) in breast cancer development” (the Terry Fox Foundation donation) / PI Sonja Levanat
- 2015 – associate on research project “InnoMol - New molecular solutions in research and development for innovative drugs”, FP7-Regpot, PI Oliver Vugrek
- 2014 - 2019 – associate on the Croatian Science Foundation research project “ProNetNel - New protein networks for novel therapeutic avenues in human melanoma”; [HRZZ IP-2013-11-1615] / PI Neda Slade

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: MSc Gordana Turkalj

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: State Intellectual Property Office of Republic Croatia (SIPO)

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Structure, methodology and functioning of scientific work 2

BIOGRAPHY

1992 Graduated at Faculty of Chemical Engineering and Technology, University of Zagreb.

In 2003 gained MSc at Faculty of Science and Mathematics, University of Zagreb, field: chemistry, sub-field: organic chemistry.

In 2007 passed patent attorney's qualifying examination and registered at State Intellectual Property Office of Republic Croatia. In 2008 entered at the list of professional representatives of the European Patent Office (EPO).

In 1992 employed by Pliva d.d., Research institute as a scientist and in 2002 moved to Pliva d.d. Intellectual Property Department and started to work as a patent associate. From 2006 employed by GlaxoSmithKline istraživački centar Zagreb d.o.o., Corporate IP, and in 2009 promoted to patent manager position. In 2010 employed by Galapagos istraživački centar d.o.o. and in 2012 promoted to Senior Patent Counsel position. In 2013 co-founded Callidea d.o.o. providing advice and representation in the field of intellectual property. From 01.02.2017. employed by State Intellectual Property Office of Republic Croatia (SIPO) where as patent examiner for field of chemistry and biotechnology works in Chemistry and chemical technology Department as higher advisor.

From 2002 till today continuously specializes in the field of intellectual property at respectable international institutions: 2018 Novelty and Inventive Step (advanced level), EPO-European Patent Academy, Munich, DE; 2018 Clarity and Unity (advanced level), EPO-European Patent Academy, Munich, DE; 2014 Praktika Intern, EPO-European Patent Academy, Munich, DE; 2009 CEIPI, Preparation Seminar for EQE, Strasbourg, FR; and seminars in organization of Management Forum: 2002 London UK: "Patent SummerSchool Working with Patents" and 2003 "European Claim Drafting"; and 2002 Darby & Darby, Professional Corporation, Intellectual Property Law, New York, US.

Until started to work in SIPO she was member of the Institute of Professional Representatives before the European Patent Office (EPI), where she was Republic Croatia representative in the European Patent Practice Committee, and Croatian chambers of patent and trademark attorneys, where she was member of the Senat, and before that member of Disciplinary Court.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Oliver Vasilj, Phd MD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Clinical Hospital Sveti Duh, Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Reprodukcijsko i radno mjesto

BIOGRAPHY

I was born in Mostar, Bosnia and Herzegovina in 1977. **Education:** School of Medicine, University of Zagreb, 2003; Specialist in Gynaecology and Obstetrics of 2011. In 2018 I passed my subspecialty in Fetal maternal medicine. **Work experience:** 2004-2007 Research Assistant School of Medicine in Zagreb, University Hospital, Sveti Duh, resident from 2006 to 2011 University Hospital, Sveti Duh. Since 2011 I am working as a specialist of OBGYN. **Research activities:** Doctorate of Science in 2014, research associate 2015. I worked as a scientific collaborator on research projects: Diagnosis and treatment of late miscarriage and premature birth, New algorithm for the prevention of neurological disorders and impairments in children with intrauterine growth restriction, Health survey of school children and young people, Croatian Health Survey 2003. Lecturer in elective course for undergraduate students, Pregnancy why we call the other condition, lecturer at the postgraduate course of Continuing Medical Education "Ultrasound in obstetrics and gynecology", School of Medicine, University of Zagreb. So far I have published 26 scientific articles, 15 of which are cited in Current Contents. Author or coauthor of 5 book chapters. Up to date the papers have been cited a total of 182 times. Main research interests: study of fetal behavior using four ultrasound in various pathological conditions during pregnancy.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

Since 2015, I am working as a higher assistant at Medical School of Zagreb, Clinic for OBGYN.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Matijevic R; Grgic O, Vasilj O. Is sonographic assessment of cervical length better than digital examination in screening for pre term delivery in low risk population. Acta Obstetrica et Gynecologica Scand 85 pp.1342-1347. 2006
2. Miskovic, B., Vasilj, O., Stanojevic, M., Ivankovi, D., Kerner, M., Tikvica, A. The comparison of fetal behavior in high risk and normal pregnancies assessed by four dimensional ultrasound. Journal of Maternal-Fetal and Neonatal Medicine, 23 (12), pp. 1461-1467. 2010.
3. Vasilj O., Matijevic R., Blagaic V., Miskovic B. Do we sometimes see too much? Prenatal diagnosis of a true umbilical cord knot European Journal of Obstetrics & Gynecology and Reproductive Biology, 187:73-4. 2015
4. Hanaoka, U., Hata, T., Kanenishi, K., Mostafa AboEllail, M.A., Uematsu, R., Konishi, Y., Kusaka, T., Noguchi, J., Marumo, G., Vasilj, O., Kurjak, A. Does ethnicity have an effect on fetal behavior? A comparison of Asian and Caucasian populations (2016) Journal of Perinatal Medicine, 44 (2), pp. 217-221.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Hanaoka, U., Hata, T., Kanenishi, K., Mostafa AboEllail, M.A., Uematsu, R., Konishi, Y., Kusaka, T., Noguchi, J., Marumo, G., Vasilj, O., Kurjak, A. Does ethnicity have an effect on fetal behavior? A

comparison of Asian and Caucasian populations (2016) *Journal of Perinatal Medicine*, 44 (2), pp. 217-221.

2. Galić, E., Gulin, D., Kordić, K., Mišković, B., Vasilj, O., Šikić, J. Reversible peripartum cardiomyopathy in a triplet pregnancy (2015) *Signa Vitae*, 10 (2), pp. 216-223.
3. Vasilj, O. Is in utero fetal neurological assessment comparable to postnatal neurological assessment? (2015) *Donald School Journal of Ultrasound in Obstetrics and Gynecology*, 9 (1), pp. 91-95. Cited 3 times.
4. Vasilj, O., Matijević, R., Blagaic, V., Miskovic, B. Do we sometimes see too much? Prenatal diagnosis of a true umbilical cord knot (2015) *European Journal of Obstetrics Gynecology and Reproductive Biology*, 187, pp. 73-74.
5. Ivkošić, I.E., Bauman, R., Ujević, B., Vasilj, O., Kojić, I.P., Ivkošić, A., Vukušić, D., Turudić, T.P. Spontaneous heterotopic, ectopic cervical and ectopic tubal pregnancy - ever present diagnostic difficulty: Three case reports (2015) *Acta Clinica Croatica*, 54 (3), pp. 367-370.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Research of fetal behaviour in cooperation with Japanese colleagues which resulted in publication of a scientific paper.

Hanaoka, U., Hata, T., Kanenishi, K., Mostafa AboEllail, M.A., Uematsu, R., Konishi, Y., Kusaka, T., Noguchi, J., Marumo, G., Vasilj, O., Kurjak, A. Does ethnicity have an effect on fetal behavior? A comparison of Asian and Caucasian populations (2016) *Journal of Perinatal Medicine*, 44 (2), pp. 217-221

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2016. member of international expert group form Invasive Placenta Previa. Conclusions of the exoert group were published in:

Alfirevic Z Tang AW1, Collins SL, Robson SC, Palacios-Jaraquemada J; Ad-hoc International AIP Expert Group. Pro forma for ultrasound reporting in suspected abnormally invasive placenta (AIP): an international consensus. *Ultrasound Obstet Gynecol*. 2016;47(3):276-8.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Donatella, Verbanac, Associate Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb Faculty of Pharmacy and Biochemistry

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Structure, methodology and functioning of Scientific work 2

BIOGRAPHY

Donatella Verbanac completed undergraduate studies in 1984 at the Faculty of Pharmacy and Biochemistry, University of Zagreb. She obtained MSc degree in 1990 at the Faculty of Science University of Zagreb. In 1993 she obtained doctoral degree with the work completed at the University of Trieste. In 1996 she completed postdoctoral specialization at the Immunology & Ageing Department of INRCA, Ancona, Italy. After completing her internship in 1985 at the Clinics for Infection Diseases Zagreb, she got young assistant position at the School of Medicine in Rijeka. She joined PLIVA Research Institute in 1998 at the time when she held assistant professor position. She started her work at PLIVA Research Institute as Laboratory Coordinator and Project Manager of a joint research project with US-based Biotech Company and afterward Head of Screening Unit. From 2006, after GlaxoSmithKline's acquisition of PLIVA Research Institute, she was responsible for establishing the Screening Unit and Compound Library, managing projects in anti-infective and anti-inflammatory area as Project Manager. She received PLIVA and GSK awards for the achievements in Drug Discovery and Development. From 2009 – until Sept 2018 she worked at the School of Medicine University of Zagreb as Assistant Professor. Currently she is Associate Professor at the University of Zagreb Faculty of Pharmacy and biochemistry. She participates in European and national funded scientific projects, as well as in education activities for the graduate and post-graduate students. She is a member of Council for the University of Zagreb's Postgraduate Specialist Study Intellectual Property, where she actively participates as a teacher. She has published more than 50 scientific and professional papers. Co-inventor is on one patent, co-author of several chapters in the books, author of three professional books on nutrition and one textbook. She acts as a reviewer, monitor and vice-chair for the projects funded within different European Commission, international and national calls for proposals. She is a member of the Croatian Council for GMOs and involved in EC&JRC working group on Nutritional Challenges. She is member of Croatian Chemical Society, Croatian Biochemical and Molecular Biology Society, Croatian Pharmacological Society, European Society for Clinical Nutrition and Metabolism and British Biochemical Society.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: July, 2nd 2018
Associate Professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Verbanac D., Jelić D., Štepanić V., Tatić I., Žihor D., Koštrun S.: Combined in silico and in vitro approach to drug screening, *Croatica Chemica Acta*, Feature article; 78 (2)133-139, 2005. (IF=0,936)
2. Jelić D., Mildner B., Koštrun S., Nujić K., Verbanac D., Culić O., Antolović R., Brandt W.: Homology modeling of human fyn kinase structure: discovery of rosmarinic acid as a new fyn kinase inhibitor and in silico study of its possible binding modes, *J Med Chem*. 2007 Mar 22;50(6):1090-100. (IF=4,895)
3. Verbanac, Donatella. Predictive methods as a powerful tool in drug discovery. *Biochemia medica*, 20 (2010) , 3; 314-318. (IF=1,085)

4. Bosnar M, Kragol G, Koštrun S, Vujašinović I, Bošnjak B, Bencetić Mihaljević V, Marušić Ištuk Z, Kapić S, Hrvačić B, Brajša K, Tavčar B, Jelić D, Glojnarčić I, Verbanac D, Culić O, Padovan J, Alihodžić S, Eraković Haber V, Spaventi R, N'-Substituted-2'-O,3'-N-carbonimidoyl Bridged Macrolides: Novel Anti-inflammatory Macrolides without Antimicrobial Activity. *J Med Chem*. 2012 Jun 25. (IF=5,614)
5. Matijašić M, Munić Kos V, Nujić K, Cužić S, Padovan J, Kragol G, Alihodžić S, Mildner B, Verbanac D, Eraković Haber V. Fluorescently labeled macrolides as a tool for monitoring cellular and tissue distribution of azithromycin. *Pharmacol Res*. 2012 Oct;66(4):332-42. (IF= 4,346)
6. Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, Pauk M, Erjavec I, Francetic I, Dumic-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikic-Topic S, Peric M, Pecina M, Grgurevic L. The clinical use of bone morphogenetic proteins revisited: a novel biocompatible carrier device OSTEOGROW for bone healing. *Int Orthop*. 2014 Mar;38(3):635-47. (IF=2,110)
7. Peric M, Dumic-Cule I, Grcevic D, Matijasic M, Verbanac D, Paul R, Grgurevic L, Trkulja V, Bagi CM, Vukicevic S. The rational use of animal models in the evaluation of novel bone regenerative therapies. *Bone* 70 (2015) 73-86. (IF=3,736)
8. Čipčić Paljetak, H., D. Verbanac, J. Padovan, M. Dominis-Kramarić, Ž. Kelnerić, M. Perić, M. Banjanac, G. Ergović, N. Simon, J. Broskey, D. J. Holmes, and V. Eraković Haber. 2016. Macrolones - novel class of macrolide antibiotics active against key resistant respiratory pathogens in vitro and in vivo. *Antimicrob. Agents Chemother*. 2016, 60(9):5337-48. (IF 4,302)
9. Verbanac D, Malik R, Chand M, Kushwaha K, Vashist M, Matijašić M, Stepanić V, Perić M, Čipčić Paljetak H, Saso L, Jain SC. Synthesis and evaluation of antibacterial and antioxidant activity of novel 2-phenyl-quinoline analogs derivatized at position 4 with aromatically substituted 4H-1,2,4-triazoles. *J Enzyme Inhib Med Chem*. 2016, (IF 4,293)

Book chapters:

1. Čikeš N, Vikić-Topić S, Verbanac D: Translational Science and Personalized Medicine Approach, Person in Medicine and Healthcare; Đorđević, Veljko ; Braš, Marijana ; Miličić, Davor (Ed.). Zagreb : Medicinska naklada, 2012.
2. Verbanac D, Stepanić V, Lučić B, Amić D, "The Must" of the Drug Discovery and Development is - Interdisciplinarity, Proceedings, New achievements of Croatian scientists in bioinformatics and biophysics, Croatian Academy of Arts and Science, V. Paar (Ed.) 2013, 179-189.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, Pauk M, Erjavec I, Francetic I, Dumic-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikic-Topic S, Peric M, Pecina M, Grgurevic L. The clinical use of bone morphogenetic proteins revisited: a novel biocompatible carrier device OSTEOGROW for bone healing. *Int Orthop*. 2014 Mar;38(3):635-47. (IF=2,110)
2. Peric M, Dumic-Cule I, Grcevic D, Matijasic M, Verbanac D, Paul R, Grgurevic L, Trkulja V, Bagi CM, Vukicevic S. The rational use of animal models in the evaluation of novel bone regenerative therapies. *Bone* 70 (2015) 73-86. (IF=3,736)
3. Stolić I, Čipčić Paljetak H, Perić M, Matijašić M, Stepanić V, Verbanac D, Bajić M. Synthesis and structure–activity relationship of amidine derivatives of 3, 4-ethylenedioxythiophene as novel antibacterial agents. *Eur J Med Chem*. 90 (2015);68-81. (IF=3,902)

4. Maračić, Silvija; Gazivoda Kraljević, Tatjana; Čipčić Paljetak, Hana; Perić, Mihaela; Matijašić, Mario; Verbanac, Donatella; Cetina, Mario; Raić-Malić Silvana. 1, 2, 3-Triazole pharmacophore-based benzofused nitrogen/sulfur heterocycles with potential anti- *Moraxella catarrhalis* activity. / *Bioorganic & medicinal chemistry*. 23 (2015) ; 7448-7463. (IF=2,923)
5. Matijašić M, Meštrović T, Perić M, Čipčić Paljetak H, Panek M, Vranešić Bender D, Ljubas Kelečić D, Krznarić Ž, Verbanac D. Modulating Composition and Metabolic Activity of the Gut Microbiota in IBD Patients. *Int. J. Mol. Sci.* 2016, 17, 578; (IF 3,226)
6. Čipčić Paljetak, H., D. Verbanac, J. Padovan, M. Dominis-Kramarić, Ž. Kelnerić, M. Perić, M. Banjanac, G. Ergović, N. Simon, J. Broskey, D. J. Holmes, and V. Eraković Haber. 2016. Macrolones - novel class of macrolide antibiotics active against key resistant respiratory pathogens in vitro and in vivo. *Antimicrob. Agents Chemother.* 2016, 60(9):5337-48. (IF 4,302)
7. Verbanac D, Malik R, Chand M, Kushwaha K, Vashist M, Matijašić M, Stepanić V, Perić M, Čipčić Paljetak H, Saso L, Jain SC. Synthesis and evaluation of antibacterial and antioxidant activity of novel 2-phenyl-quinoline analogs derivatized at position 4 with aromatically substituted 4H-1,2,4-triazoles. *J Enzyme Inhib Med Chem.* 2016, (IF 4,293)
8. Perin N, Starčević K, Perić M, Čipčić Paljetak H, Matijašić M, Stepanić V, Verbanac D, Karminski-Zamola G, Hranjec M. Synthesis and SAR Study of Novel Amidino 2-substituted Benzimidazoles as Potential Antibacterial Agents. *Croat. Chem. Acta* 2017, 90(2), (IF=0,586)
9. Grgurevic L, Erjavec I, Grgurevic I, Dumic-Cule I, Brkljacic J, Verbanac D, Matijasic M, Paljetak HC, Novak R, Plecko M, Bubic-Spoljar J, Rogic D, Kufner V, Pauk M, Bordukalo-Niksic T, Vukicevic S. Systemic inhibition of BMP1-3 decreases progression of CCl4-induced liver fibrosis in rats. *Growth Factors*. 2018 Feb 27:1-15. (IF=1,400)
10. Cindrić M, Perić M, Kralj M, Martin-Kleiner I, David-Cordonnier MH, Paljetak HČ, Matijašić M, Verbanac D, Karminski-Zamola G, Hranjec M. Antibacterial and antiproliferative activity of novel 2-benzimidazolyl- and 2-benzothiazolyl-substituted benzo[b]thieno-2-carboxamides. *Mol Divers*. 2018. (IF=1,752)
11. Panek M, Čipčić Paljetak H, Barešić A, Perić M, Matijašić M, Lojkić I, Vranešić Bender D, Krznarić Ž, and Verbanac D. Methodology challenges in studying human gut microbiota – effects of collection, storage, DNA extraction and next generation sequencing technologies. *Sci Rep*. 2018. (IF=4,259)
12. Gumerova NI, Al-Sayed E, Krivosudský L, Čipčić-Paljetak H, Verbanac D, Rompel A. Antibacterial Activity of Polyoxometalates Against *Moraxella catarrhalis*. *Front Chem*. 2018 (IF=4,155)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

INDUSTRIAL PROJECTS- PLIVA RESEARCH INSTITUTE / GSK ZAGREB RESEARCH CENTER 1998-2008

Position: Project Manager

2007-2008 New anti-inflammatory macrolides

2007-2008 New macrolides for malaria

2005-2008 New class of antibiotics

Position: Project Head

2004-2005 Platform for the Establishment of New Drug Discovery Programs

1998-2001 Thrombopoietin Receptor Activating Peptide

Position: Member of the Project Team

1998-2000 Tyrosine phosphorylation

At the UniZg School of Medicine

1. Hrvatska zaklada za znanost/Croatian Science Foundation – HRZZ -Project for the development of young researchers' career - training which includes the PhD program and PhD defence - (2015-2019) – Project Head

2. Horizon 2020 Prof. S. Vukičević Coordinator „OSTEOproSPINE“ - (2018-2022)- Team member

3. IPA project "Building Innovation Support through More Effectively Connected Collaboration ", Acronym BISTEC, University of Zagreb (2013-2015) - Coordinator from MEF/Institution Representative

4. FP-7 project Prof S. Vukičević Coordinator "OSTEOGROW" (2011-2016) -Team member

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. Hrvatska zaklada za znanost/Croatian Science Foundation – HRZZ - „ Assessment of Microbiota, Inflammatory Markers, Nutritional and Endocrinological Status in IBD Patients – Acronym - MINUTE for IBD)- (2014-2018) - Project Head

2. Hrvatska zaklada za znanost/Croatian Science Foundation – HRZZ -Project for the development of young researchers' career - training which includes the PhD program and PhD defence - (2015-2019) – Project Head

3. Horizon 2020 Prof. S. Vukičević Coordinator „OSTEOproSPINE“ - (2018-2022)- Team member

4. EU regional fund „Croatian Scientific center of Excellence for Reproductive and Regenerative Medicine“ Prof. S. Vukičević i Prof. D. Ježek Coordinators (2015 – 2019) -Team member

7. IPA project "Building Innovation Support through More Effectively Connected Collaboration ", Acronym BISTEC, University of Zagreb (2013-2015) - Coordinator from MEF/Institution Representative

8. FP-7 project, Prof S. Vukičević Coordinator "OSTEOGROW" (2011-2016) -Team member

9. Hrvatska zaklada za znanost/Croatian Science Foundation – HRZZ, Prof. S. Vukičević Coordinator- „ BONE6-BIS“ - (2012-2014) - Project Manager

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2010. - Hana Čipčić-Paljetak: New class of antibiotics: 4 " - ester macrolide derivatives with quinolone subunit; University of Zagreb Faculty of Natural Sciences

2011 - Mario Matijašić: Monitoring the distribution of azithromycin in cells and tissues using fluorescently labeled macrolides; University of Zagreb Faculty of Natural Sciences;

2018. - Marina Panek: Determination of intestinal microbial and inflammatory markers in patients with inflammatory bowel disease; University of Zagreb Medical School;

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Smiljka Vikić-Topić, M. Sc.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Structure, methodology and functioning of Scientific work 2

BIOGRAPHY

Smiljka Vikić-Topić, M. Sc. is head of the Research and Technology Transfer Office, University of Zagreb, School of Medicine (UZSM) since 2009. She is participating in project proposals writing, preparation of the budget plans, project management and reporting, as well as helping in tech transfer activities from invention recognition to the protection and commercialization and collaborations with industry.

S. Vikić-Topić obtained Chemical Engineering degree and Master's degree in Molecular Biology from the Faculty of Science, University of Zagreb. She worked at the Department of Biochemistry, Faculty of Science, University of Zagreb and spent over 3 years in the USA working in molecular biology labs: Bowman Gray School of Medicine, 1984; National Institutes of Health, 1991-93; Mayo Clinic and Foundation, 1993-94). Her 13 years' experience in pharmaceutical industry (PLIVA Research Institute, later became GlaxoSmithKline Research Centre Zagreb) includes work at research labs as well as at managerial positions in contract research and as head of laboratory. During the work at industry she gained a lot of experience in the field of intellectual property rights protection, legal aspects of collaborations, teamwork, negotiation skills, finances, leadership and Project Management. She is co-author at six scientific, three professional papers and one book chapter.

S. Vikić-Topić participates at the doctoral studies at UZSM teaching about technology transfer and project proposal writing. In addition, she holds various courses on collaboration with industry, technology transfer process, IP rights and documentation.

S. Vikić-Topić spent 5 weeks in 2011 as a trainee at NIH Office of Technology Transfer and 5 weeks in 2014 at Edinburgh Bioquarter through ENTENTE project professional exchange. Through these collaborations and as a member of ASTP-Proton, association of technology transfer professionals, she has a network of colleagues offering help and support for TT processes at UZSM. S. Vikić-Topić actively participates in several projects where she is involved in technology transfer activities and IP protection. She enrolled in PhD studies at the University of Zagreb School of Medicine in 2016.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Čikeš, Nada; Vikić-Topić, Smiljka; Verbanac, Donatella. Translational Science and Personalized Medicine Approach // Person in Medicine and Healthcare / Đorđević, Veljko ; Braš, Marijana ; Miličić, Davor (ur.). Zagreb : Medicinska naklada, 2012. Str. 45-52.
2. S. Vikić-Topić: Outsourcing in Pharmaceutical Research and Development. Opportunities and Challenges, feature article, Croatica Chemica Acta 78, 333-336 (2005), Citations 1, IF (2005) 0,936, Q2

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Slobodan Vukicevic et al. The clinical use of bone morphogenetic proteins revisited: a novel biocompatible carrier device OSTEOGROW for bone healing, International Orthopaedics (SICOT) (2014) 38:635–647, Citations 42, IF 2.319; Q1



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

FP7 – OSTEOGROW - Novel Bone Morphogenetic Protein-6 Biocompatible Carrier Device for Bone Regeneration“, 1.1.2012 – 31.12.2017; funding 5.6 mil EUR

FP7 - GLOWBRAIN,): „Combining Stem Cells and Biomaterials for Brain Repair - Unlocking the Potential of the Existing Brain Research through Innovative In Vivo Molecular Imaging, 1.10.2012 – 31.3.2016., funding 3.5 mil EUR

H2020 – OSTEOproSPINE, Novel Bone Regeneration Drug Osteogrow: Therapeutic Solution for Lumbar Back Pain, 1.1.2018 - 31.12.2022; funding 6 mil EUR

H2020 - Alliance4life - Life Science Alliance: Closing Research and Innovation Divide in the EU, 1.1.2018 - 31.12.2019; funding 944,652.5 EUR

HAMAG BICRO Support for Technology Transfer Offices: Test prostornog snalaženja za rano otkrivanje Alzheimerove bolesti (SPOT-ALZ), funded through University of Zagreb (6/2016 - 11/2017)

HAMAG BICRO Support for Technology Transfer Offices: Genomski testovi za dijagnostiku neurorazvojnih bolesti, osnivanje spin-out tvrtke (GENOMA-TEH), funded through University of Zagreb (6/2016 - 11/2017)

HAMAG BICRO Proof of concept projects; PoC6 1_206: „Pomična naprava za obnovu hrskavice koljena FlexiOscar“; 1.6.2016 - 31.10.2017.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Adriana Vince, MD, PhD, Full professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Viral Hepatitis

BIOGRAPHY

Full Professor, School of Medicine, University of Zagreb, specialist in infectious diseases.

Born in 1958, graduated from the School of Medicine University of Zagreb in 1982, obtained MSc degree in 1991, and PhD in 1999.

Employed at the School of Medicine, University of Zagreb and the University Hospital for Infectious Diseases "Dr. Fran Mihaljevic " in Zagreb (head of Department for Gastrointestinal Infections / Division of Viral Hepatitis), was holding the position of Hospital Director 2013-2016. Also Head of molecular laboratory from 1994-2005. Author of Croatian guidelines for the treatment of viral hepatitis from 2013-2018.

Principal researcher in numerous scientific research projects, mentor to residents and doctoral students, has published more than 100 scientific and professional papers indexed in the Current Contents and web of science PubMed and Scopus databases, with more than 1400 citations .

Head of the Croatian National Reference Center for Diagnosis and Treatment of Viral Hepatitis of the Ministry of Health. Member of the Ministry of Health National Committee for specialist training of medical doctors. Secretary general of the Croatian Medical Association. Member of the Drug Committee of Croatian Health Insurance Fund.

Member of international societies UEMS-ID, EASL, ESCMID.

Areas of scientific interest: viral hepatitis, treatment and clinical research of infectious diseases, molecular diagnostics of infectious diseases, infections in the immunocompromised hosts, human papillomaviruses, etc.

Tel. 091 4012 603; e-mail. avince@bfm.hr

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

10.12.2013

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Blach S, Zeuzem S, Manns M, Altraif I, Duberg AS, DH Muljono, Waked I, et al. Global prevalence and genotype distribution of hepatitis C virus infection in 2015: a modelling study. The Lancet Gastroenterology & Hepatology 2017; 2 :161-176.
3. Maaroufi A, Vince A, Himatt SM, Mohamed R, Fung S, Opare-Se Om, et al. Historical epidemiology of hepatitis C virus in select countries—volume 4 Journal of viral hepatitis 2017; 24: 8-24.
4. Papic N, Maric LS, Vince A. Efficacy of oral vancomycin in primary prevention of *Clostridium Difficile* infection in elderly patients treated with systemic antibiotic therapy. Infectious Diseases 2018; 50 :483-486..
5. Vince A, Papic N. Unresolved issues in hepatitis C: The role of liver non-parenchymal cells and semaphorins. *Infect Dis Rep*. 2018;10(1):7232. Published 2018 Mar 29. doi:10.4081/idr.2018.7651

6. Grgić I, Planinic A, Santak M, Gorenec L, Zidovec Lepej S, Vince A. High Prevalence of Q80K Among NS3 Resistance-Associated Substitutions in Subtype 1a Patients with Chronic Hepatitis C Prior to Treatment with Direct Acting Antivirals: The Croatian Data. *Hepatitis Monthlu* 2017, in press.
7. Oktavija Đaković Rode, Lorena Jemeršić, Adriana Vince. Hepatitis E u Hrvatskoj – smjernice za dijagnostiku i liječenje. *Liječ Vjesn* 2016;138:289–296.
8. Gorenec L, Zidovec Lepej S, Grgić I, Planinic A, Isčić Bes J, Vince A, Begovac J. The comparison of Th1, Th2, Th9, Th17 and Th22 cytokine profiles in acute and chronic HIV-1 infection. *Microb Pathog.* 2016; 97:125-30.
8. Hermans LE, Svicher V, Pas SD, Salpini R, Alvarez M, ... Vince A..., et al; HEPVIR working group of the European Society for Translational Antiviral Research (ESAR). Combined Analysis of the Prevalence of Drug-Resistant Hepatitis B Virus in Antiviral Therapy-Experienced Patients in Europe (CAPRE). *J Infect Dis* 2016;213(1):39-48.
9. Đaković Rode O1, Jemeršić L, Brnić D, Pandak N, Mikulić R, Begovac J, Vince A. Hepatitis E in patients with hepatic disorders and HIV-infected patients in Croatia: is one diagnostic method enough for hepatitis E diagnosis? *Eur J Clin Microbiol Infect Dis* 2014;33:2231-6.
10. Vince A, Hrštić I, Begovac J, i sur. Virusni hepatitis - Hrvatska konsenzus konferencija 2013. *Acta Med Croatica* 2013;67(4):263-72.
11. Sikić J, Sicaja M, Starcevic B, Miklec MN, **Vince A**. H1N1 Influenza pneumonia as early complication after Heart Transplantation. Experience from the Dubrava University Hospital. *Coll Antropol* 2013; 37 309-311.
12. Grgić I, Židovec-Lepej S, Lunar MM, Poljak M, **Vince A**, Baća-Vrakela I, Planinić A, Seme K, Begovac J. The prevalence of transmitted drug resistance in newly diagnosed HIV-infected individuals in Croatia: the role of transmission clusters of men who have sex with men carrying the T215S surveillance drug resistance mutation. *AIDS Res Hum Retroviruses* 2013;29:329-36.
13. 16. Papić N, Židovec-Lepej S, Kurelac I, Čajić V, Budimir J, Dušek D, **Vince A**. Treatment of chronic hepatitis C in Croatian war veterans: experiences from Croatian reference center for viral hepatitis. *Croat Med J* 2011;50:35-40.
14. Papić N, Pangerčić A, Vargović M, Baršić B, **Vince A**, Kuzman I. Liver involvement during influenza infection: perspective on the 2009 influenza pandemic. *Influenza Other Resp Viruses* 2012;6:e2-e5.
15. Vilibić-Čavlek T, Gjenero-Margan I, Židovec-Lepej S, Kolarić B, **Vince A**. Seroprevalence, risk factors, and hepatitis C virus genotypes in groups with high-risk sexual behavior in Croatia. *J Med Virol* 2009;81(8):1348-53.
16. 8. **Vince A**, Duvnjak M. Liječenje kroničnog hepatitisa C u neliječenih (naivnih) bolesnika. *Acta Med Croat* 2009;63:409-15.
17. Deterding K, Constantinescu I, Nedelcu FD, Gervain J, Nemecek V, Srtunecy O, **Vince A.**, et al. Prevalence of HBV genotypes in Central and Eastern Europe *J Med Virol.* 2008 Oct;80(10):1707-11.
18. **Vince A**, Lepej SZ, Kurelac I, Barsic B, Kozic S, Klinar I, Zarkovic K. Virological and immunological characteristics of fatal Epstein-Barr mononucleosis in a 17-year-old Caucasian male presenting with meningoencephalitis and hemophagocytic syndrome. *J Neurovirol* 2007;13:389-396.

19. **Vince A**, Iscić-Bes J, Zidovec Lepej S, Baca-Vrakela I, Bradaric N, Kurelac I, Vince DB. Distribution of hepatitis C virus genotypes in Croatia: a 10 year retrospective study of four geographic regions. *Coll Antropol* 2006;30:139-143.
20. Grgurevic I, **Vince A**, Buljevac M, Banic M, Jeren- Strujic B, Kes P, Kujundzic M, Leko N, Lukic IK, Slavicek J. Efficacy of interferon-alpha in the treatment of chronic hepatitis C in dialysis patients: two therapeutic protocols compared. *Nephron Clin Pract.* 2006;103:c8-11.
21. Seme K, Poljak M, Babic DZ, Mocilnika T, **Vince A**. The role of core antigen detection in management of hepatitis C: a critical review. *J Clin Virol.* 2005;32:92-101.
22. Palmović D, **Vince A**, Kurelac I, Crnjaković-Palmović J. Akutni hepatitis C - nerazjašnjena pitanja. *Acta Med Croat* 2004;58:335-9C in Croatia.
23. 24. Vucelić B, Hrstić I, Begovac J, Bradarić N, Burek V, Čolić-Cvrlje V, Duvnjak M, Kekez AJ, Kes P, Lesnikar V, Miše S, Morović M, Ostojić R, Pavić I, Štimac D, Včev A, **Vince A**. Virusni hepatitis: Hrvatska konsenzus konferencija. *Acta Med Croat* 2005;59(5):359-75
24. Seme K, Poljak M, Begovac J, **Vince A**, Tomazic J, Vidmar L, Kniewald T. Low prevalence of hepatitis C virus infection among human immunodeficiency virus type 1-infected individuals from Slovenia and Croatia. *Acta Virol.* 2002;46:91-4.
25. **Vince A**, Palmović D, Kutela N, Sonicky Z, Jeren T, Radovani M. HCV Genotypes in Patients with Chronic Hepatitis . *Infection* 1998;26:173-177

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Papic N, Zidovec Lepej S, Gorenec L, Grgic I, Gasparov S, Filipec Kanizaj T, Vince A. The association of semaphorins 3C, 5A and 6D with liver fibrosis stage in chronic hepatitis C. *PLoS One.* 2018 Dec 28;13(12):e0209481.
2. **Vince A**, Papic N. Unresolved issues in hepatitis C: The role of liver non-parenchymal cells and semaphorins. *Infect Dis Rep.* 2018;10:7232
3. Jakupi X, M. Lunar M, Mlakar J, Matković I, P. Tavakoli N, Poljak M, **Vince A**. HCV Infection among Injecting Drug Users in Prishtina, Kosovo, *Hepat Mon.* 2018 ; 18(10):e80189.
4. Jakupi X, Lunar M, Mlakar J, Seme K, Rudhani I, **Vince A**, Poljak M. A very high prevalence of hepatitis C virus infection among patients undergoing hemodialysis in Kosovo: a nationwide study. *BMC Nephrology* 2018;19:304-310.
5. The Polaris Observatory collaborators. (...Vince A...) Global Prevalence, Treatment and Prevention of Hepatitis B Virus Infection in 2016: a modelling study. *The Lancet Gastroenterology* 2018;3: 383-403.
6. Colagrossi L, Hermans LE, Salpini R, Di Carlo, D; Pas, SD, Alvarez M...**Vince A**..et al. Immune-escape mutations and stop-codons in HBsAg develop in a large proportion of patients with chronic HBV infection exposed to anti-HBV drugs in Europe. *BMC Infectious Diseases* 2018; *BMC Infectious Diseases* 2018;251
7. **Papić N**, Budimir J, Kurelac I, Dušek D, Jugović D, Krajcar N, i **Vince A**. Treatment of Elderly Patients with Chronic Hepatitis C: A Retrospective Cohort Study. *Acta clinica Croatica* 2018; 57:61-70.
8. Papić N, Dušek D, Nemeth Blažić T, Kurelac I, Krznarić J, **Vince A**. Rezultati liječenja 3D-terapijom i model eliminacije infekcije HCV-om u republici hrvatskoj. *Liječ Vjesn* 2018 ;140(7-8):0-0. dostupno na: <https://hrcak.srce.hr/205703>

9. Cunningham E.B, Nielsen S, Aghemo A, Alho H, Backmund M, ...**Vince A** et al. Restrictions for reimbursement of interferon-free direct-acting antiviral drugs for HCV infection in Europe.*The Lancet Gastroenterology and Hepatology* 2018; 3; 125-133.
10. Raci Zejneulahu P, Hosnjak L, Poljak M, Lepej Zidovec S, **Vince A**. Pre-vaccination prevalence of high-risk human papillomaviruses (HPV) in women from Kosovo and their related sociodemographic characteristics. *Ginekologia Polska* 2018;88:485-494.
11. Grgić I, Planinic A, Santak M, Gorenec L, Zidovec Lepej S, **Vince A**. High Prevalence of Q80K Among NS3 Resistance-Associated Substitutions in Subtype 1a Patients with Chronic Hepatitis C Prior to Treatment with Direct Acting Antivirals: The Croatian Data. *Hepatitis Monthly* 2017;5;
12. Blach S, Zeuzem S, Manns M, Altraif I, Duberg AS, DH Muljono, Waked I,...**Vince A** et al. Global prevalence and genotype distribution of hepatitis C virus infection in 2015: a modelling study.*The Lancet Gastroenterology & Hepatology* 2017; 2 :161-176.
13. **Vince A**, Lepej Zidovec S, Bingulac popovic J, Miletic M, Kuret S et al. Distribution of Hepatitis C Virus Genotypes and Subtypes in Croatia: 2008-2015-Centr Europ J Pub Health 2018; 26; 159-163.
14. Leblebicioglu H, Arends JE, Ozaras R, Corti G, Santos L...**Vince A**..et al. Availability of Hepatitis C Diagnostics and Therapeutics in European and Euroasian Countries. *Antiviral research* 2018; 150: 9-14.
15. Papic N, Maric LS, **Vince A**. Efficacy of oral vancomycin in primary prevention of *Clostridium Difficile* infection in elderly patients treated with systemic antibiotic therapy-*Infectious Diseases* 2018; 50:483-486.
16. Maaroufi A, **Vince A**, Himatt SM, Mohamed R, Fung S, Opare-Se Om, et al. Historical epidemiology of hepatitis C virus in select countries. *Journal of Viral Hepatitis* 2017; 24: 8-24. *DOPRINOS: Ko-autor ideje, prikupljanje i analiza podataka za Hrvatsku, pisanje rada*
17. Chan HLY, Chen CJ, Omede O, Al Qamish J,..**Vince A**..et al.The present and future disease burden of hepatitis C virus infections with today's treatment paradigm: Volume 4. *Journal of Viral hepatitis* 2017; 24: 25-43.
18. Chen DS, Hamoudi W, Mustapha B, Layden B,...**Vince A** et al. Strategies to manage hepatitis C virus infection disease burden.Volume 4. *Journal of Viral Hepatitis* 2017; 24: 44-63.
19. Gorenec L, Zidovec Lepej S, Grgic I, Planinic A, Isic Bes J, *Vince A*, Begovac J. The comparison of Th1, Th2, Th9, Th17 and Th22 cytokine profiles in acute and chronic HIV-1 infection. *Microb Pathog.* 2016; 97:125-30.
20. Hermans LE, Svicher L, Diepstraten Pas S, Salpini R, ...Vince A. et al. Combined Analysis of the Prevalence of Drug-Resistant Hepatitis B Virus in Antiviral Therapy–Experienced Patients in Europe (CAPRE). *J Infect Dis* 2015;213:39-48.
21. Đaković Rode O1, Jemeršić L, Brnić D, Pandak N, Mikulić R, Begovac J, Vince A. Hepatitis E in patients with hepatic disorders and HIV-infected patients in Croatia: is one diagnostic method enough for hepatitis E diagnosis? *Eur J Clin Microbiol Infect Dis* 2014;33:2231-6.

22. Hatzakis A, van Damme P, Alcorn K, Gore C. , Benazzouz M , G. ...**Vince A** et al. 2013, The State of Hepatitis B and C in the Mediterranean and Balkan Countries: Report from a Summit Conference. J Viral Hepat, 20: 1-20.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2002-2006	"Molecular diagnostics of Epstein-Barr and Cytomegalovirus infection, MZOŠ Croatian Ministry of Science, šifra projekta 0143001
2007-2013 143-0000000-0117	"Immunopathogenesis of hepatitis B i C", Croatian Ministry of Science, šifra
2014-	"Infectomics Study of Human Liver Non-parenchymal Cells in chronic hepatitis C, HRZZ, šifra projekta 4241
2015-	Partner u znanstvenom Centru izvrsnosti za Virusnu imunologiju i Cjepiva, CerVirVac, voditelj radnog paketa 6, "Regulatori stečene imunosti u odgovoru na HCV infekciju"

međunarodni projekti:

2001-2003	"Prediction of clinical rules in diagnosis of streptococcal pharyngitis in children", WHO, coordinator for Croatia
2002-2006 Ministarstvo	"Optimization of molecular methods for HCV RNA Isolation from blood" Ministry of Health of Croatia and Austria
2010-2013	"Pre-vaccination distribution of HPV genotypes in women with cervical cancer in Croatia (Investigator initiated Project, MSD, USA), project lead

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2017-2022 "Strengthening the capacity of CerVirVac for research in virus immunology and vaccinology", KK.01.1.1.01.0006, awarded to Scientific Centre of Excellence for Virus Immunology and Vaccines and co-financed by the European Regional Development Fund, Project Lead for the WP6 "Regulators of cellular immunity n hepatitis C"

2014-2019 "Infectomics study of human liver non-parenchymal cells in chronic hepatitis C, Croatian Science Foundation, Project lead

(NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE 3

- Kurelac Ivan:** "Cellular immunity during treatment of chronic hepatitis C" PhD thesis, 2013. Medical School, University of Zagreb 2013.
- Papić Neven:** The role of liver sinusoidal endothelial cells in HCV infection. Doktorska disertacija, Medical School, University of Zagreb 2015
- Jakupi Xhevat:** Molecular epidemiology of Hepatitis C Virus in Prishtina Region in Priština. PhD Thesis, Medical School, University of Zagreb, Zagreb 2018

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist. Prof. Lucija Virović Jukić, M.D., Ph.D.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine, Sestre milosrdnice University Hospital Center, Department of Internal Medicine, Division of Gastroenterology and Hepatology

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Viral hepatitis

BIOGRAPHY

Personal: born in Zagreb, Croatia, May 14th, 1973

Scientist number: 317943

Education

1987-1991. High School for Languages, Zagreb

1991-1997. University of Zagreb School of Medicine

1997-1998. internship

2000-2003. Postgraduate Doctoral Program Biomedicine and Health, University of Zagreb School of Medicine

2004-2010. residency in Internal Medicine

2013-2015. fellowship in Gastroenterology

Titles

June 30, 1997. Medical Doctor (University of Zagreb, School of Medicine)

July 14, 2009. Ph.D. Degree. Thesis: Ribavirin Modification for Targeted Delivery to Hepatocytes for Improved Hepatitis C Treatment. University of Zagreb School of Medicine

July 9, 2010. Internal Medicine specialist

March 24, 2011. Scientific Associate

September 25, 2012. Senior Assistant, Department of Internal Medicine

December 8, 2015. Specialist of Gastroenterology

May 2, 2016. Assistant Professor at the Department of Internal Medicine

February 1, 2017. Assistant Professor at the Department of Internal Medicine, University of Zagreb School of Medicine

Work experience

1997-1998. internship, DZ Željezničara, Zagreb

1998-1999. general practice, several clinics in Zagreb and surroundings

2000-2004. research fellow, projects: Hepatitis B Virus X-protein – Carcinogenesis and Gene Therapy and The Role of Hepatitis Viruses in the Development of Liver Carcinoma and Potential Therapy. Department of Gastroenterology and Hepatology, Sestre milosrdnice University Hospital Center, Zagreb

2004–2005. postdoctoral fellow, project: Targeting of Ribavirin to Hepatocytes by Receptor-Mediated Endocytosis. Department of Gastroenterology-Hepatology, University of Connecticut Health Center, Farmington, Connecticut, USA

2004–2010. resident in Internal Medicine, Department of Internal Medicine, Sestre milosrdnice University Hospital Center, Zagreb

2010-2015. specialist of Internal Medicine, Department of Internal Medicine, Sestre milosrdnice University Hospital Center, Zagreb

2015- now specialist of Internal Medicine, subspecialist in Gastroenterology, Department of Internal Medicine, Division of Gastroenterology and Hepatology, Sestre milosrdnice University Hospital Center, Zagreb

Teaching experience

University of Zagreb School of Medicine Graduate Program: History Taking and Physical Examination, Internal Medicine, Fundamentals of Medical Skills

University of Zagreb School of Medicine Postgraduate Doctoral Program Biomedicine and Health: Viral Hepatitis, Diseases of the Pancreas

Specialist Postgraduate Program: Internal Medicine, Gastroenterology

Postgraduate Courses: Abdominal Ultrasound

Scientific activity

2000-2002. Hepatitis B Virus X-protein – Carcinogenesis and Gene Therapy – scientific project of Ministry of Science (project number 134008), principal investigator Prof. Marko Duvnjak (research fellow)

2002–2004. The Role of Hepatitis Viruses in the Development of Liver Carcinoma and Potential Therapy – scientific project of Ministry of Science (project number 0134016), principal investigator Prof. Marko Duvnjak (research fellow)

2004–2005. Targeting of Ribavirin to Hepatocytes by Receptor-Mediated Endocytosis - University of Connecticut Health Center, Farmington, Connecticut, USA, principal investigator Prof. George Y. Wu (postdoctoral fellow)

2009-2013. Nonalcoholic fatty liver disease within the metabolic syndrome – scientific project of Ministry of Science (project number 108-1080230-0143), principal investigator Prof. Marko Duvnjak (investigator)

2016-2017. Influence of metabolic syndrome and insulin resistance on colon adenomas, University of Zagreb School of Medicine, principal investigator Prof. Marko Duvnjak

2017-2018. Metabolic syndrome and risk for the development of colon adenomas, University of Zagreb, School of Medicine, principal investigator Prof. Marko Duvnjak

2018-2019. Components of the metabolic syndrome as risk factors for the development of malignant tumors of GI tract, University of Zagreb, School of Medicine, principal investigator Prof. Marko Duvnjak

2018-2019. The impact of the radiofrequency ablation on survival of patients with inoperable cholangiocellular carcinoma - scientific project with the support of the University of Zagreb, School of Dental Medicine, principal investigator Prof. Neven Ljubičić (investigator)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: January 16, 2017.
Assistant Professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Kralj D, Virović Jukić L, Stojavljević S, Duvnjak M, Smolić M, Bilić Čurčić I. Hepatitis C Virus, Insulin Resistance, and Steatosis. *Journal of Clinical and Translational Hepatology* 2016;4:66-75.

Virović Jukić L, Duvnjak M, Wu CH, Wu GY. Human uridine-cytidine kinase phosphorylation of ribavirin: a convenient method for activation of ribavirin for conjugation to proteins. *J Biomed Sci* 2008;15:205-213.

Virović L, Wu CH, Konishi M, Wu GY. Novel delivery methods for treatment of viral hepatitis: an update. *Expert Opin Drug Deliv.* 2005;2:707-17.

Duvnjak M, Baršić N, Tomašić V, Virović Jukić L, Lerotić I, Pavić T. Adjusted blood requirement index as indicator of failure to control acute variceal bleeding. *Croat Med J.* 2006;47:398-403.

Duvnjak M, Pavić T, Virović L, Hrabar D. Terapija interferonom-alfa i ribavirinom bolesnika s kroničnim hepatitisom C i normalnim vrijednostima alaninaminotransferaze. *Acta med Croatica* 2003;57:159-162.

Duvnjak M, Pavić T, Tomašić V, Lerotić I, Virović L. Hepatitis C – terapijski pristup neliječenim (naivnim) bolesnicima. *Acta Med Croatica* 2005;59:453-461.

Duvnjak M, Blažević N, Virović Jukić L. Hepatitis C Virus Treatment in Croatia: Recent Advances and Ongoing Obstacles. U: Včev A, urednik: Update on Hepatitis C. IntechOpen, 2017, str. 17-26.

Virović Jukić L, Kralj D. Extrahepatic Manifestations of Hepatitis C Virus Infection. U: Včev A, urednik: Update on Hepatitis C. IntechOpen, 2017, str. 111-124.

Duvnjak M, Virović Jukić L. Indikacije za liječenje bolesnika s ekstrahepatičnim manifestacijama kroničnoga hepatitisa C. *Medix* 2016;123:126-132.

Virović Jukić L. Hepatitis C virus and liver steatosis. 1st International Monothematic Conference on Viral Hepatitis C, Opatija, Croatia, September 11-14, 2014. Abstract Book, p. 36.

Virović Jukić L. Perspectives of hepatitis C virus treatment in Croatia. 2nd International Monothematic Conference on Viral Hepatitis C, Lug, Croatia, September 24-27, 2015. Abstract Book, p. 38.

Virović Jukić L. Extrahepatic manifestations of HCV infection. 3rd International Monothematic Conference on Viral Hepatitis C, Orahovica, Croatia, September 29 – October 1, 2016. Abstract Book, p. 32-33.

Virović Jukić L, Stojšavljević S. Extrahepatic manifestation of HCV infection in the era of direct-acting antiviral therapy. 4th International Monothematic Conference on Viral Hepatitis C, Virovitica, Croatia, October 5-7, 2017. Abstract Book, p. 21-22.

Virović Jukić L, Kralj D. Effects of Direct-Acting Antiviral Treatment on Extrahepatic Manifestations of Hepatitis C Virus Infection. 5th International Monothematic Conference on Viral Hepatitis C, Ilok, Croatia, October 4-6, 2018. Abstract Book, p. 22-23.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Stojšavljević S, Gomerčić Palčić M, Virović Jukić L, Smirčić Duvnjak L, Duvnjak M. Adipokines and proinflammatory cytokines, the key mediators in the pathogenesis of nonalcoholic fatty liver disease. *World J Gastroenterol* 2014;20(48):18070-18091.

Kralj D, Virović Jukić L, Stojšavljević S, Duvnjak M, Smolić M, Bilić Čurčić I. Hepatitis C Virus, Insulin Resistance, and Steatosis. *Journal of Clinical and Translational Hepatology* 2016;4:66-75.

Margetić S, Čelap I, Dukić L, Vukasović I, Virović Jukić L. Interference of M-protein on prothrombin time test – case report. *Biochemia Medica* 2016;26(2):248-54.

Mikolašević I, Virović Jukić L, Grgurević I, Filipec Kanižaj T, Bokun T, Ugljarević M i dr. Bolesti jetre povezane s trudnoćom. *Medix* 2018;132:18-22.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME



2000-2002. Hepatitis B Virus X-protein – Carcinogenesis and Gene Therapy – scientific project of Ministry of Science (project number 134008), principal investigator Prof. Marko Duvnjak (research fellow)

2002–2004. The Role of Hepatitis Viruses in the Development of Liver Carcinoma and Potential Therapy – scientific project of Ministry of Science (project number 0134016), principal investigator Prof. Marko Duvnjak (research fellow) 2000-2002.

2004–2005. „Targeting of Ribavirin to Hepatocytes by Receptor-Mediated Endocytosis“ - University of Connecticut Health Center, Farmington, Connecticut, SAD, voditelj prof. dr. sc. George Y. Wu (postdoctoral fellow)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2015-2016. Metabolic syndrome and colon adenomas - scientific project with the support of the University of Zagreb, School of Medicine, principal investigator Prof. Marko Duvnjak

2016-2017. Influence of metabolic syndrome and insulin resistance on colon adenomas, University of Zagreb School of Medicine, principal investigator Prof. Marko Duvnjak

2017-2018. Metabolic syndrome and risk for the development of colon adenomas, University of Zagreb, School of Medicine, principal investigator Prof. Marko Duvnjak

2018-2019. Components of the metabolic syndrome as risk factors for the development of malignant GI tumors, University of Zagreb, School of Medicine, principal investigator Prof. Marko Duvnjak

2018-2019. The impact of the radiofrequency ablation on survival of patients with inoperable cholangiocellular carcinoma - scientific project with the support of the University of Zagreb, School of Dental Medicine, principal investigator Prof. Neven Ljubičić (investigator)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Dora Višnjić, MD, PhD, Full Professor of Physiology & Immunology

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research methods in vitro and in vivo, Immunological recognition

BIOGRAPHY

DATE AND PLACE OF BIRTH: : 25.5.1965, Osijek

EDUCATION

1980.-1984. V gimnazija, Zagreb

1984.-1989. School of Medicine University of Zagreb; MD

1992.-1996. School of Medicine University of Zagreb, postgraduate „Immunology“; PhD

1996.-1998. postdoctoral Fogarty fellowship, UCONN Health Center, Department of Genetics and Developmental Biology, Farmington, CT, USA

EMPLOYMENT

2013 – Full Professor of Physiology and Immunology, School of Medicine, University of Zagreb

2008-2013 Associate Professor of Physiology and Immunology, School of Medicine, University of Zagreb

2008. visiting professor, Fred Hutchinson Cancer Research Center, Seattle, USA

2003-2008 Assistant Professor of Physiology and Immunology, School of Medicine, University of Zagreb

2000. visiting scientist, UCONN Health Center, Farmington, CA, USA

1996-2003 Senior Research Assistant (Senior Instructor), Physiology and Immunology, School of Medicine, University of Zagreb

1996-1998 Fogarty fellow, UCONN Health Center, Farmington, CA, USA

1995-1996 Research Assistant (Instructor), Physiology and Immunology, School of Medicine, University of Zagreb

1992-1995 Research Novice, Physiology and Immunology, School of Medicine, University of Zagreb

1990-1991 Intern, Clinical Hospital Zagreb

SCIENTIFIC TRAINING

3.9.1996.-3.9.1998. Fogarty fellow, University of Connecticut Health Center, Farmington, SAD.

1.5.2000.-25.7.2000. visiting scientist, UCONN, Farmington, SAD

28.3.2008.-5.5.2008. visiting professor, Fred Hutchinson Cancer Research Center, Seattle, SAD

AWARDS

2012. Award for Scientific Achievements, University of Zagreb School of Medicine

1998. Young Investigator Award of American Society for Bone and Mineral Research and International Bone Society

1997. Annual Award of Croatian Immunological Society 1997.

1996. Fogarty Fellowship Award

TEACHING AND MENTORSHIP

Teaching experience: more than 300 hr per year in obligatory courses Physiology, Immunology and several electives at the Medical School in Zagreb and Medical Studies in English, collaborator at several postgraduate courses of Doctoral Studies Biomedicine and Neuroscience at Medical School in Zagreb.

Mentorship:

B Tomić, MD, PhD student, four PhD thesis (V. Dembitz 2017, H. Lalić 2015, K. Matković 2010, V. Lukinović-Škudar 2005), four student Rector awards

RESEARCH INTERESTS

signaling mechanisms in the regulation of differentiation and cell cycle, hematopoiesis

MAJOR SCIENTIFIC ACHIEVEMENTS

- PI of several projects awarded by the Croatian science foundation, University of Zagreb, MZOS and NIH, Croatian coordinator of the bilateral project between Croatia and Italy, collaborator on UKF project and other national and international scientific projects

- head of Laboratory for Cell Biology, Croatian Institute for Brain Research, School of Medicine, University of Zagreb

NUMBER OF PUBLICATIONS/ CITATIONS: 30 (CC23)/ CITATIONS 953

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 10th December 2013.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Lalić H, Lukinović-Škudar V, Banfić H, Višnjić D. Rapamycin enhances dimethyl sulfoxide-mediated growth arrest in human myelogenous leukemia cells. *Leuk Lymphoma* 53:2253-2261, 2012.
2. Miše J, Dembitz V, Banfić H, Višnjić D. Combined Inhibition of PI3K and mTOR Exerts Synergistic Antiproliferative Effect, but Diminishes Differentiative Properties of Rapamycin in Acute Myeloid Leukemia Cells. *Pathol Oncol Res.* 17:645-656, 2011.
3. Matković K, Lukinović-Škudar V, Banfić H, Višnjić D. The activity of extracellular signal-regulated kinase is required during G2/M phase before metaphase-anaphase transition in synchronized leukemia cell lines. *Int J Hematol* 89:159-166, 2009.
4. Lukinović-Škudar V, Matković K, Banfić H, Višnjić D. Two waves of the nuclear phospholipase C activity in serum-stimulated HL-60 cells during G1 phase of the cell cycle. *Biochim Biophys Acta.* 1771:514-521, 2007.
5. Matković K, Brugnoli F, Bertagnolo V, Banfić H, Višnjić D. The role of the nuclear Akt activation and Akt inhibitors in all-trans-retinoic acid - differentiated HL-60 cells. *Leukemia*, 20:941-951, 2006.
6. Lukinović-Škudar V, Đonlagić L, Banfić H, Višnjić D. Nuclear phospholipase C-β1b activation during G2/M and late G1 phase in nocodazole-synchronized HL-60 cells. *Biochim Biophys Acta* 1733:148-156, 2005.
7. Višnjić D, Kalajzić Z, Rowe DW, Katavić V, Lorenzo J, Aguila HL. Hematopoiesis is severely altered in mice with an induced osteoblast deficiency. *Blood* 103:3258-64, 2004.

8. Višnjić D, Ćurić J, Crljen V, Batinić D, Volinia S, Banfić H. Nuclear phosphoinositide 3-kinase C2beta activation during G2/M phase of the cell cycle in HL-60 cells. *Biochim. Biophys. Acta* 1631:61-71, 2003.
9. Višnjić D, Crljen V, Ćuruć J, Batinić D, Volinia S, Banfić H. The activation of nuclear phosphoinositide 3-kinase C2 β in all-trans-retinoic acid-differentiated HL-60 cells. *FEBS Lett* 529:268-274, 2002.
10. Višnjić D, Kalajzić I, Gronowicz G, Aguila HL, Clark SH, Lichtler AC, Rowe DW. Conditional ablation of the osteoblast lineage in Col2.3deltatk transgenic mice. *J Bone Miner Res.* 16:2222-2231, 2001.
11. Đačić S, Kalajzić I, Višnjić D, Lichtler AC, Rowe DW. Col1a1-driven transgenic markers of osteoblast lineage progression. *J Bone Miner Res.* 16:1228-1236, 2001.
12. Višnjić D, Batinić D, Banfić H. Arachidonic acid mediates interferon-gamma-induced sphingomyelin hydrolysis and monocyte marker expression in HL-60 cell line. *Blood* 89:81-91, 1997.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Visnjic D, Dembitz V, Lalic H. The role of AMPK/mTOR modulators in therapy of acute myeloid leukemia. *Curr Med Chem.* 25:1-20, 2018.
2. Dembitz V, Lalic H, Visnjic D. 5-Aminoimidazole-4-carboxamide ribonucleoside-induced autophagy flux during differentiation of monocytic leukemia cells. *Cell Death Discov.* 2017 Oct 2;3:17066. doi: 10.1038/cddiscovery.2017.66. eCollection 2017.
3. Dembitz V, Lalic H, Ostojic A, Vrhovac R, Banfic H, Visnjic D. The mechanism of synergistic effects of arsenic trioxide and rapamycin in acute myeloid leukemia cell lines lacking typical t(15;17) translocation. *Int J Hematol.* 102:12-24, 2015.
4. Lalic H, Dembitz V, Dembitz V, Lukinovic-Skudar V, Banfic H, Visnjic D. 5-Aminoimidazole-4-carboxamide ribonucleoside induces differentiation of acute myeloid leukemia cells. *Leuk Lymphoma* 55:2375-83, 2014.
5. Banfić H, Bedalov A, York JD, Višnjić D. Inositol pyrophosphates modulate S phase progression after pheromone-induced arrest in *Saccharomyces cerevisiae*. *J Biol Chem* 288:1717-1725, 2013.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Principal investigator:

2017-. HRZZ IP-06-2016-4581 Signalling mechanisms and metabolic changes in differentiation of acute myeloid leukemia cells

2015. University of Zagreb project: „The role of Vps34 in metformin-mediated effects on leukemia cell lines“ 2015

2014. University of Zagreb project: „The role of phosphatidyl -3-kinases in differentiation of leukemia cell lines“ 2014

2013-2014. University of Zagreb project: „Signalling pathways in regulation of proliferation and differentiation of leukemia cells“

2009-2010: Inositide-dependent signal transduction: molecular targets for novel therapies in acute myeloid leukemia. Significant bilateral projects (“progetti di grande rilevanza”) within the III Executive programme of scientific and technological co-operation between Croatia and Italy. (co-investigator: V. Bertagnolo)

2007-2013. The role of PLC and Akt in the cell cycle and differentiation. MZOS 1081347-1448;



2002-2007. The role of protein kinase B/Akt in differentiation of HL-60 leukemia cells, MZOS 0108-281;

1997. Analysis of osteoblast progression lineage by use of transgenes. National Institute of Health, USA, 5F05TW005309-02;

1996. Analysis of osteoblast progression lineage by use of transgenes. National Institute of Health, USA, 1F05TW005309-01;

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2017-. HRZZ IP-06-2016-4581 Signalling mechanisms and metabolic changes in differentiation of acute myeloid leukemia cells

2015. University of Zagreb project: „The role of Vps34 in metformin-mediated effects on leukemia cell lines“ 2015

2014. University of Zagreb project: „The role of phosphatidyl -3-kinases in differentiation of leukemia cell lines“ 2014

2013-2014. University of Zagreb project: „Signalling pathways in regulation of proliferation and differentiation of leukemia cells“

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

4

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: STJEPAN VIŠNJIĆ, Assistant Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Children's Hospital Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: ENDOSKOPY IN
PAEDIATRIC SURGERY

BIOGRAPHY

Phone number: 01 7779533

Cell phone number: 098 500442

e-mail address: stjepan.visnjic@gmail.com

Date of birth:

12.01.1963. Training:

Secondary school: V Gymnasium, Zagreb 1977-1981.

Faculty: Faculty of Medicine, University of Zagreb 1982-

1988. Diploma: Faculty of Medicine, University of Zagreb,

1988. Preparatory Exercise: Clinic for Traumatology Zagreb 1988-1989.

State exam: Ministry of Health of the Republic of Croatia 1999

Specialization: Children's Surgery 1995-1999. CSHR

Special Exam: Ministry of Health of the Republic of Croatia

1999. Postgraduate Study: MEF: Protection of Mother and Child 1999

MEF: Biomedicine and Health 2003

Doctorate; Medical Faculty of the University of Zagreb 2008

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

14.7.2014.

**LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE
PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME**

Višnjić, S., Bastić, M., Marčec, M., Mesić, M. Short-term “double natural orifice catheterization”:
Nonoperative management of hydrocolpos in persistent cloaca patients – case series, 2018, Journal
of Pediatric Surgery: 53(4), pp. 718-721

Župančić, B., Bašković, M., Višnjić, S., Vukasović, I. Minimalno invazivna urološka kirurgija dječje dobi -
Što možemo učiniti danas? 2016, Paediatrica Croatica: 60(3), pp. 91-96

Karadjole, T., Maćešić, N., Bačić, G., Karadjole, M., Višnjić, S. Laparoscopic ovariohysterectomy in a
bitch with endometrial hyperplasia, 2012, Veterinarski Arhiv: 82(3), pp. 311-318

Augustin, G., Zupancic, B., Zupancic, V., Visnjic, S. Calyceal plication with Anderson-Hynes pyeloplasty in a 7- year-old boy with giant hydronephrosis of a single right kidney 2009 European Journal of Pediatric Surgery:19(4), pp. 255-257

Župančić, B., Štampalija, F., Popović, L., Višnjić S, Nikolić, H., Župančić, V. Liječenje nespuštenih testisa - Vrijeme za promjene u pristupu i načinu kirurškog liječenja,2009,Paediatrica Croatica:53(1), pp. 13-18

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Višnjić, S., Bastić, M., Marčec, M., Mesić, M. Short-term “double natural orifice catheterization”: Nonoperative management of hydrocolpos in persistent cloaca patients – case series,2018,Journal of Pediatric Surgery: 53(4), pp. 718-721

Baškovic, M., Župancic, B., Car, A., Višnjic, S., Ježek, D. Nekrotizirajući enterokolitis - prikaz slucajeva i pregled literature,2018;Paediatrica Croatica:62(2), pp. 89-95

Višnjić, S., Car, A., Žganjer, M., (...), Sović, L., Župančić, B. Smjernice za uspostavu kontinuiteta crijeva u prevenciji i liječenju sindroma blind loop u djece;2018,Paediatrica Croatica:62(1), pp. 43-47

Gliha, A., Car, A., Višnjić, S., Kondza, K., Petravic, I. Rare Abdominal Wall Malformation: Case Report of Umbilical Cord Hernia,2017,Acta medica (Hradec Kralove):60(3), pp. 127-130

Župančić, B., Bašković, M., Višnjić, S., Vukasović, I. Minimalno invazivna urološka kirurgija dječje dobi - Što možemo učiniti danas?2016,Paediatrica Croatica:60(3), pp. 91-96

Višnjić, S., Župančić, B., Žganjer, M. Predictors of pediatric surgeons' career satisfaction: A national survey,2016,Annals of Pediatric Surgery :12(3), pp. 77-81

Višnjić, S., Kralj, R., Župančić, B. Isolated fallopian tube torsion with partial hydrosalpinx in a premenarcheal girl: A case report,2014,Journal of Medical Case Reports :8(1),197

Bastić, M., Kralj, R., Jaklin Kekez, A., Višnjić S, Car, A., Zupančić, B. Giant choledochal cyst in a child,2013; Paediatrica Croatica:57(3), pp. 264-267

Višnjić, S., Car, A., Kralj, R. Stenosis of the small intestine after reduction of strangulated Littre hernia in an infant ,2013,Hernia :17(2), pp. 285-288

Župančić, B., Štampalija, F., Lesjak, N., Višnjić, S., Župančić, V. Dilemmas and difficulties in the surgical treatment of acute abdominal syndrome in children,2013,Paediatrica Croatica, Supplement 57(SUPPL. 1), pp. 139-145

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Project Coordinator of the Ministry of Science of the Republic of Croatia No. 098-0000000-3530
»Molecular basis of aseptic necrosis of the hook.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 1 - Antun Kljenak:
Zagreb's Surgical protocol for reconstruction of hand deformity in patients with bullous epidermolysis



ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof Ksenija Vitale

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Health and public health risks management in crisis situations

BIOGRAPHY

Education

- 2001 M.P.H., International Master of Public Health from Braun School of Public Health and Community Medicine, Hebrew University, Jerusalem Israel
- 2000 Ph.D., Biology, from the Faculty of Mathematics and Natural Sciences, University of Zagreb, Croatia
- 1994 M.S., Biology, from the Faculty of Mathematics and Natural Sciences, University of Zagreb, Croatia
- 1990 B.Sc. from the Faculty of Food Technology and Biotechnology, University of Zagreb, Croatia

Postgraduate Courses and Continuous Education

Dublin Institute for Tehnology, Društvo za oblikovanje održivog razvoja, Fakultet elektronike i računarstva, Sveučilišta u Zagrebu, "Rješenja za bolju zajednicu - energetska siromaštvo", Dublin, 2018.

- International federation of Environmental Health. Environmental Health Disaster Management Course, Zagreb, 2015.
- Experience at the service of the city – management of the hazardous waste, practical course, Department for the economy, French Embassy, Pariz, October 2005.
- Ecole Nationale de la Sante Publique, Rennes, France, Risk Assessment, risk management and communication, development of teaching moduel, February-March 2004.
- Fogarty International Center and National Institutes for Health; Ethical Issues in Health Research, Sofija May 2003.
- Ministry of Defense of Republic of Croatia and United States Partnership Program; seminar in Medical Preventive Activities Concerning Bio-Terrorism, 2003 Zagreb Croatia
- PH-SEE Zagreb Winter School for Public Health Professionals: Training of Teachers in Planning and Management of Public Health, 2002 Zagreb Croatia

Important relevant conference organization

- 2011 Director, member country NATO Science for Peace and Security ARW Environmental and Food Safety and Security for South-East Europe and Ukraine – 16-19 May, Dnepropetrovsk, Ukraine
- 2008 Co-director, partner country: Advanced research workshop: Water Treatment Technologies for the Removal of High-Toxicity Pollutants, NATO Science for Peace and Security, Kosice, Slovacka September 12-17 number of participants:70, number of countries: 13,

Work experience

- 1997-now School of Public Health, Medical School, University of Zagreb
- current position: full professor at the Department of Environmental and Occupational health and sports medicine

- Main activities: research in the field of public health and environmental health, teaching, field work with students, mentoring
- 1990-1996 Institute for Anthropological Research, University of Zagreb, participation in the field research, working on master thesis.
- International consultant in the field of medical waste
- Member of South East Europe Forum on Climate change: Report writer
- Member of NATO Science for Peace forum.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: October 2017.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Vitale K. Zdravstvena zaštita u izvanrednim okolnostima (spremnost za katastrofe) u Šogorić ur.

Organizacija zdravstvene zaštite i zdravstvena ekonomika, Medicinska naklada, Zagreb 2016:110-114.

Vitale K, Sović S, PRAVEDNOST I PRAVIČNOST I OKOLIŠ KAO DETERMINANTA ZDRAVLJA – NOVI KONCEPTI O KOJIMA TREBA RAZMIŠLJATI KSENIJA VITALE i SLAVICA SOVIĆ Acta Med Croatica, 72 (2018) 247-250.

Vesela Radovic, Ksenija Vitale, Paul B. Tchounwou. Health facilities safety in natural disasters: experiences and challenges from South East Europe. Int. J. Environ. Res. Public ealth 2012, 9, 1677-1686; doi:10.3390/ijerph9051677.

Marinković N, Vitale K, Janev Holcer N, Džakula A. Management of hazardous medical waste in Croatia. Waste Manag 2008;28(6):1049-56

Saranča V, Vitale K, Orešković S, Sulyma V. Life Cycle Assessment in Healthcare System Optimization . Introdution. Bulletin of Taras Shevchenko national University of Kyiv, Economics, 2015 1 (166): 39-44. DOI:dx.doi.org/10.17721/1728-2667.2015/166-14

Vitale K, Afrić I, Šuljić P, Pavić T. Uloga sanitarno inspekcijskog nadzora vode u osiguranju javnozdravstvene zaštite u Republici Hrvatskoj. Medica Jadertina 40:75-83 2010.

Marinković N, Vitale K, Afric I, Janev Holcer N. Javnozdravstveni aspekti gospodarenja opasnim medicinskim otpadom. Arh. Hig. Toksikol. 56:21-32; 2005.

Dadić Z. Vitale K., Ujević M. Integral management of water resources in Croatia: step towards water security and safety for all. NATO Advanced Research Workshop “Threats to Food and Water Chain Infrastructure NATO Science for Peace and Security Series: C – Environmental Security. Springer Science and Business Media, Dordrecht (NL). Ed. V. Koukoulou. 2010. p.129-138.

Vitale K, Janev-Holcer N, Marinković N, Pavić T, "Water and Public Health: Legislation as a Tool for Improving Living Standards" pp 295-306 in Proceedings of the NATO Advanced Research Workshop. “Modern tools and methods of water treatment for improving living standards”. NATO Science Series Editors: A. Omelchenko, A.A. Pivovarov, and W.J. Swindall. Springer, Amsterdam 2004

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Nika PAVLOVIC, Ksenija VITALE, Ivan MISKULIN, Oliver PAVLOVIC, Maja MISKULIN Foodstuff Storage and Phthalates: Effects on Human Health, Agriculturae Conspectus Scientificus, Vol 83, No 4 (2018), 277-284.

Vitale K, Sović S, PRAVEDNOST I PRAVIČNOST I OKOLIŠ KAO DETERMINANTA ZDRAVLJA – NOVI KONCEPTI O KOJIMA TREBA RAZMIŠLJATI KSENIJA VITALE i SLAVICA SOVIĆ Acta Med Croatica, 72 (2018) 247-250.

Šogorić S, Sanković M, Štefančić V, Vitale K Osobe s invaliditetom – test pristupačnosti sustava zdravstva, *Acta Med Croatica*, 72 (2018) 199-205.

Jonjic D, Vitale K. (2014) Issues around household pharmaceutical waste disposal through community pharmacies in Croatia. *Int J clin Pharm* 36: 556-563.

Ivkovic V, Karanovic S, Fištrek Prlić M, Misic M, Kos J, Juric D, Vukovic Lela I, Vitale K, Cvitkovic A, Laganovic M, Fodor Lj, Edwards K, Grollman AP, Jelakovic B. Is herbal tea consumption a factor in endemic nephropathy? (2014) *Eur J Epidemiol* 29(3):221-4. doi: 10.1007/s10654-014-9886-3.

Sarancha V, Vitale K, Orešković S, Sulyma V. Life Cycle Assessment in Healthcare System Optimization . Introduction. *Bulletin of Taras Shevchenko national University of Kyiv, Economics*, 2015 1 (166): 39-44. DOI:dx.doi.org/10.17721/1728-2667.2015/166-14

Vitale K, Munđar R, Sović S, Bergman-Marković B, Janev Holcer N. Upotreba komplementarne i alternativne medicine kod pacijenata u obiteljskoj medicine – primjer grada Čakovca. *Acta med Croatica*, 68 (2014) 345-351.

Vrdoljak A, Vrkić TZ, Kos J, Vitale K, Premuzić V, Laganović M, Jelaković B. Blood pressure measurement--do not sweat the small stuff and it is all small stuff?! Position paper of the Croatian national referral center for hypertension, center of excellence of the European Society of Hypertension. *Lijec Vjesn*. 2014 Jan-Feb;136(1-2):33-43. Croatian.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Nacionalni program „Živjeti zdravo“, komponenta „Zdravlje i okoliš“, Vlada Republike Hrvatske, 2015.

My homeland – Gradusa without i mines (Utjecaj onečišćenja nastalih uništavanjem eksplozivnih sredstava na okoliš i zdravlje stanovnika). *International Rescue Committee*. 2004-2006.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Nacionalni program „Živjeti zdravo“, komponenta „Zdravlje i okoliš“, Vlada Republike Hrvatske, 2015.

Epidemiologija hipertenzije i unos kuhinjske soli u Hrvatskoj, Sveučilišna potpora 2015-2016.

Zdravlje na radu i radni okoliš, 1080316-0300 Ministarstvo znanosti, obrazovanja i sporta Republike Hrvatske 2007-2012.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assistant professor Anton Vladić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital “Sveti Duh”

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pathophysiology of the brain and CSF

BIOGRAPHY

2010 assistant professor the Faculty of Medicine of the University of Josip Juraj Strossmayer in Osijek;
since 1992 - now: neurologist at the University Hospital Sveti Duh,
area of expertise: multiple sclerosis

Education:

1985. School of Medicine,

1995. Doctoral thesis

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2010

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Strikić N, Klarica M, Vladić A, Bulat M. Effect of active transport on distribution and concentration gradients of 3H-benzylpenicillin in the cerebrospinal fluid. *Neuroscience Letters* 1994; 169: 159-162.

Vladić A, Strkić N, Jurčić D, Zmajević M, Klarica M, Bulat M. Homeostatic role of the active transport in elimination of ³H-benzylpenicillin out of the cerebrospinal fluid system. *Life Sciences* 2000; 67 (19): 2375-2385.

Vladić A, Klarica M, Bulat M. dynamics of distribution of 3H-inulin between the cerebrospinal fluid compartments. *Brain Research* 2009; 1248: 127-135.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1: Rolla S, De Mercanti SF, Bardina V, Horakova D, Habek M, Adamec I, Cocco E, Annovazzi P, Vladic A, Novelli F, Durelli L, Clerico M. Lack of CD4+ T cell percent decrease in alemtuzumab-treated multiple sclerosis patients with persistent relapses. *J Neuroimmunol*. 2017 Dec 15;313:89-91. doi: 10.1016/j.jneuroim.2017.10.009. Epub 2017 Oct 17. PubMed PMID: 29153614.

2: De Mercanti S, Rolla S, Cucci A, Bardina V, Cocco E, Vladic A, Soldo-Butkovic S, Habek M, Adamec I, Horakova D, Annovazzi P, Novelli F, Durelli L, Clerico M. Alemtuzumab long-term immunologic effect: Treg suppressor function increases up to 24 months. *Neurol Neuroimmunol Neuroinflamm*. 2016 Jan 21;3(1):e194. doi: 10.1212/NXI.0000000000000194. eCollection 2016 Feb. Erratum in: *Neurol Neuroimmunol Neuroinflamm*. 2016 Aug;3(4):e273. PubMed PMID: 26819963; PubMed Central PMCID: PMC4723135.

3: Bačić Baronica K, Mlinac K, Petlevski R, Ozretić D, Vladić A, Kalanj-Bognar S, Zuntar I. Progression of multiple sclerosis is associated with gender differences in glutathione S-transferase P1 detoxification pathway. *Acta Neurobiol Exp (Wars)*. 2014;74(3):257-65. PubMed PMID: 25231845.

4: Daniels GH, Vladic A, Brinar V, Zavalishin I, Valente W, Oyuela P, Palmer J, Margolin DH, Hollenstein J. Alemtuzumab-related thyroid dysfunction in a phase 2 trial of patients with relapsing-remitting multiple sclerosis. *J Clin Endocrinol Metab*. 2014 Jan;99(1):80-9. doi: 10.1210/jc.2013-2201. Epub 2013 Dec 20. PubMed PMID: 24170099.



LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

The role of membrane lipids in brain development, aging and neurodegeneration
Glutathione S-transferase and superoxide dismutase in the etiopathogenesis of the disease
Pathophysiology of cerebrospinal fluid and intracranial pressure
Antioxidative and prooxidative effect of heparocyte herbal species
Hydrodynamics of cerebrospinal fluid

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

The role of membrane lipids in brain development, aging and neurodegeneration
Glutathione S-transferase and superoxide dismutase in the etiopathogenesis of the disease
Pathophysiology of cerebrospinal fluid and intracranial pressure
Antioxidative and prooxidative effect of heparocyte herbal species
Hydrodynamics of cerebrospinal fluid

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Tomislav Vladušić, doc.dr.sc.

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department of Biochemical Engineering, Faculty of Food Technology and Biotechnology, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Genomic Instability

BIOGRAPHY

Tomislav Vladušić was born on September 29, 1978 in Munich, Germany. In 1998. he enrolled in the molecular biology study at the Faculty of Science University of Zagreb. He got his Bc.Sc. degree in 2005, graduating with excellence with the diploma thesis „Molecular typing of clinical isolates of *Salmonella enterica* (ex Kauffmann and Edwards 1952) Le Minor and Popoff 1987 bacterium“. The thesis has been made under the mentorship of Prof. dr. sc. Vanda Plečko, M.D. from the Clinical Hospital Center Zagreb and Prof. dr. sc. Mladen Krajačić from the Botanical Department, Faculty of Science, Zagreb. While studying he received scholarships from the Municipality of Jasenovac and the Sisak-Moslavina County. In 2008 he enrolled into Pedagogy and Psychology course at the Faculty of Teacher Education in Zagreb and the postgraduate study of molecular and cellular biology at the Faculty of Science in Zagreb. He obtained the PhD title in 2013. The doctoral thesis „Structural alterations of selected genes in human testicular germ cell tumours“ has been made under the mentorship of Prof. dr. sc. Reno Hrašćan from the Faculty of Biotechnology and Food Technology in Zagreb. Since 2007 he has been working as an assistant researcher (Scientist Register No. 292383) at the Faculty of Biotechnology and Food Technology research project no. 058-0582261-2246 entitled Influence of Mutagens and Antimutagens on Molecular Processes in a Cell, in the Biology and Microbial Genetics Laboratory, under supervision of Prof. dr. sc. Jasna Franekić and Prof. dr. sc. Reno Hrašćan. Within the project he was investigating structural genetic alterations of various genes involved in testicular germ cell cancer pathology. He is employed at the Department of Biochemical Engineering, Faculty of Food Technology and Biotechnology, University of Zagreb and is engaged in student laboratory works for modules Biology I, Biology II and Human physiology. Recently (23. svibnja 2017) he was elected assistant professor at the Department of Biochemical Engineering, Faculty of Food Technology and Biotechnology. He is the author of 7 original scientific papers and 15 abstracts. He is a member of the Croatian Genetics Society and the Croatian Society for Biochemistry and Molecular Biology.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 23. svibnja 2017.
Assistant professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Vladusic T, Hrascan R, Pecina-Slaus N, Vrhovac I, Gamulin M, Franekic J, Kruslin B. Radiol Oncol 44; 168-173, 2010.

Vladušić T, Hrašćan R, Vrhovac I, Krušlin B, Gamulin M, Grgić M, Pećina-Šlaus N, Franekić Čolić J. Pathol Res Practice 206; 163-167; 2010.

Vladusic T, Hrašćan R, Krušlin B, Pećina-Šlaus N, Perica K, Bićanić A, Vrhovac I, Gamulin M, Franekić J. Anticancer Research 34: 4005-4012, 2014.

Bielen, Ana; Vladusic, Tomislav; Kuharic, Nikolina; et al. First evidence of the presence of Multixenobiotic Resistance Mechanism activity in freshwater invasive species, signal crayfish *Pacifastacus leniusculus* (Dana, 1852) PERIODICUM BIOLOGORUM 116 :267-273, 2014.

Pećina-Šlaus N, Kafka A, Vladušić T, Tomas D, Logara M, Skoko J, Hrašćan R. *Int J Exp Pathol* 2016; 97(2):159-69. doi: 10.1111/iep.12186.

Pećina-Šlaus N, Kafka A, Vladušić T, Pećina, HI, Hrašćan R. *Anticancer Research*, 2016; 36: 4583-4594.

Pećina-Šlaus N, Kafka A, Bukovac A, Vladušić T, Tomas D, Hrašćan R. *Tumor Biol* 2017. 39(7):1010428317705791. doi: 10.1177/1010428317705791; IF 2.926, Q2

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Vladusic T, Hrašćan R, Krušlin B, Pećina-Šlaus N, Perica K, Bićanić A, Vrhovac I, Gamulin M, Franekić J. *Anticancer Research* 34: 4005-4012, 2014.

Bielen, Ana; Vladusic, Tomislav; Kuharic, Nikolina; et al. First evidence of the presence of Multixenobiotic Resistance Mechanism activity in freshwater invasive species, signal crayfish *Pacifastacus leniusculus* (Dana, 1852) *PERIODICUM BIOLOGORUM* 116 :267-273, 2014.

Pećina-Šlaus N, Kafka A, Vladušić T, Tomas D, Logara M, Skoko J, Hrašćan R. *Int J Exp Pathol* 2016; 97(2):159-69. doi: 10.1111/iep.12186.

Pećina-Šlaus N, Kafka A, Vladušić T, Pećina, HI, Hrašćan R. *Anticancer Research*, 2016; 36: 4583-4594.

Pećina-Šlaus N, Kafka A, Bukovac A, Vladušić T, Tomas D, Hrašćan R. *Tumor Biol* 2017. 39(7):1010428317705791. doi: 10.1177/1010428317705791; IF 2.926, Q2

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2014.-2018. projekt Hrvatske zaklade za znanost „Uloga signalnog puta Wnt u epitelno-mezenhimskoj tranziciji“. WNT4EMT (6625)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2014.-2018. projekt Hrvatske zaklade za znanost „Uloga signalnog puta Wnt u epitelno-mezenhimskoj tranziciji“. WNT4EMT (6625) (PI–Nives Pećina-Šlaus).

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Kristian Vlahoviček, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Faculty of Sciences, University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY:

BIOGRAPHY

Professor Kristian Vlahoviček holds a PhD in Bioinformatics and works as a Professor in Computational Biology at the University of Zagreb, Croatia. He won the EMBO Young Investigators Programme installation grant and has been running an internationally competitive research group in Croatia for past 15 years. He had several international appointments, including the 10 year stay at the International Center for Genetic Engineering in Trieste, Italy and a 4-year adjunct professorship at the University of Oslo, Norway. His bioinformatics group develops computational tools and uses machine learning techniques to tackle open questions in developmental genomics and metagenomics.

Kristian is a strong proponent of science reforms in Croatia and evidence-based policy making. He served in the steering committee of Croatia's successful science funding body, the Unity through Knowledge Fund (UKF) and has participated in several strategy-drafting panels at the university and national level. He was also one of the independent experts for the World Bank regional R&D strategy for innovation and data provider for the Croatia's Smart Specialisation Strategy.

Kristian is the owner of Exaltum – a research intensive company focused on knowledge management and the author of the Croatian Scientific landscape project (sci.bioinfo.hr). **DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:** 18.06.2016.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Flemr, M., Malik, R., Franke, V., Nejepinska, J., Sedlacek, R., Vlahoviček, K., and Svoboda, P. A retrotransposon-driven Dicer isoform directs endogenous siRNA production in mouse oocytes, *Cell* 2013. 155(4):807-16. [IF 32.401; Q1]

Roller M, Lucić V, Nagy I, Perica T, and Vlahoviček, K. Environmental shaping of codon usage and functional adaptation across microbial communities, *Nucleic Acids Res*, 2013. 41(19):8842-52. [IF 8.808; Q1]

Supek, F., N. Škunca, J. Repar, K. Vlahoviček, and T. Šmuc, Translational selection is ubiquitous in prokaryotes. *PLoS Genet*, 2010. 6(6): p. e1001004. [IF 9.543; Q1]

Karlič, R., H.R. Chung, J. Lasserre, K. Vlahoviček, and M. Vingron, Histone modification levels are predictive for gene expression. *Proc Natl Acad Sci U S A*, 2010. 107(7): p. 2926-31. [IF 9.771; Q1]

Harcet, M., M. Roller, H. Četković, D. Perina, M. Wiens, W.E. Muller, and K. Vlahoviček, Demosponge EST sequencing reveals a complex genetic toolkit of the simplest metazoans. *Mol Biol Evol*, 2010. 27(12): p. 2747-56. [IF 14.308; Q1]

Šikić, M., S. Tomić, and K. Vlahoviček, Prediction of protein-protein interaction sites in sequences and 3D structures by random forests. *PLoS Comput Biol*, 2009. 5(1): p. e1000278. [IF 5.759; Q1]

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Franke V, Ganesh S, Karlic R, Malik R, Pasulka J, Horvat F, Kuzman M, Fulka H, Cernohorska M, Urbanova J, Svobodova E, Ma J, Suzuki Y, Aoki F, Schultz RM, Vlahovick K, Svoboda P, Long terminal repeats power

evolution of genes and gene expression programs in mammalian oocytes and zygotes. *Genome Res.* 2017 Aug;27(8):1384-1394. [IF 10.101; Q1]

Abe KI, Yamamoto R, Franke V, Cao M, Suzuki Y, Suzuki MG, Vlahoviček K, Svoboda P, Schultz RM, Aoki F The first murine zygotic transcription is promiscuous and uncoupled from splicing and 3' processing. *The EMBO journal* 2015, 34(11):1523-1537.[IF 10.748; Q1]

Polak P, Karlić R, Koren A, Thurman R, Sandstrom R, Lawrence MS, Reynolds A, Rynes E, Vlahoviček K, Stamatoyannopoulos JA, Sunyaev SR Cell-of-origin chromatin organization shapes the mutational landscape of cancer. *Nature* 2015 518: 360-364 [IF 42.351; Q1]

Yukawa M, Akiyama T, Franke V, Mise N, Isagawa T, Suzuki Y, Suzuki MG, Vlahoviček K, Abe K, Aburatani H, Aoki F Genome-wide analysis of the chromatin composition of histone H2A and H3 variants in mouse embryonic stem cells. *PLoS One*, 2014 9: e92689 [IF 3.534; Q1]

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 2008-2010 ICGEB collaborative research grant, PI (24.000 euro)
- 2006-2012 EMBO Young Investigator Programme installation grant, PI (250.000 euro)
- 2006-2009 FP6 CCompSolLS, collaborator (salary for one student)
- 2006- Croatian ministry of science 119-0982913-1211, PI (10.000 euro p/a)
- 2005-2006 Croatian ministry of science 0119161, PI (5.000 euro p/a)
- 2004 Croatian IT grant 090/2004, PI (15.000 euro)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 2018- European Commission H2020 Marie Currie International Training Network (ITN) IGNITE, WP leader (240.000 euro)
- 2018-2019 Croatia – China bilateral grant on science and technology exchange, Croatian PI (10.000 euro)
- 2015- Croatian National Science Foundation, PI (130.000 euro)
- 2015- Members of two CoRE National Centers of Research Excellence (each CoRE total funding ~5M euro):
 - CoRE for Personalised Health Care
 - CoRE for Data Science and Cooperative Systems
- 2015-2017 ADRIS Group, private charity, PI (30.000 euro)
- 2013-2016 INTEGRA-Life, Seventh framework programme, co-PI, (600.000 euro, project total 3.2M euro)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

4

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Full professor Maja Vlahović , PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Epigenetics; Isotransplantation of Mammalian Organ Primordia ; Methods of investigation in vivo and in vitro; Methods of molecular biology in medicine

BIOGRAPHY

Maja Vlahović was born 17.04.1956. in Zagrebu. Education: 1980. Graduated engineer in biology, Faculty of Natural Sciences, Department of Biology, Zagreb. 1987. mr.sc. Faculty of Natural Sciences Zagreb; 1997. Phd Faculty of Natural Sciences, zagreb Employment: from 1983. till today Department of Medical Biology , School of medicine, University of Zagreb. From 2002. till today deputy of the Head of Department of Medical Biology. Positions : 1983 investigator, 1989 assistant, 1997 higher assistant, 2002. assistant professor, 2007. associate professor, 2009 scientific advisor, 2012. full professor. Research education in the field of mammalian developmental biology at Zagreb Embryology School (mentor Nikola Škreb). Scientific interest and achivement: epigenetics, mammalian developmental biology, differential gene activity in development and tumorigenesis, teratogenes, teratoma, teratocarcinoma, transplantation, in vitro culture of postimplantation mammalian embryos in chemically defined media. Publications (Scopus) 37 scientific articles , 311 cit, h-index 9. Participation in the organization of scientific meetings: 2003. Memorial Symposium Nikola Škreb, Experimental mammalian Embryology at the Turn of the Century, School of Medicine, Zagreb; 2013. Memorial Symposium Nikola Škreb: Development and Stem Cells at the Beginning of New Millennium, School of Medicine, Zagreb; 2018. Memorial Symposium Nikola Škreb "New platforms in developmental biology- towards the clinical application“ School of Medicine, Zagreb; Mentor: 8 BSc , 2 Phd, Membership: Croatian Society for clinical genetics, Croatian Society for Human genetics, HBD, Hrvatsko mikroskopijsko društvo, ISDB, ESHG. Awards: from 2006 to 2009. ARCA, Zagreb. Teaching in croatian and english: School of Medicine, School of dental medicine; before ZVU, from 2002. -2008. EMBO course, Zagreb, School of Medicine.Foreign langauges: english, italian, german.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2012. Full professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Katusic Bojanac A, Rogosic S, Sincic N, Juric-Lekic G, Vlahovic M, Serman L, Jezek D, Bulic-Jakus F. Influence of hyperthermal regimes on experimental teratoma development in vitro. Int J Exp Pathol. 99:131-144, 2018.
- Buljubašić R, Buljubašić M, Bojanac AK, Ulamec M, Vlahović M, Ježek D, Bulić-Jakuš F, Sinčić N.Epigenetics and testicular germ cell tumors. Gene. 661:22-33, 2018.
- Bulic-Jakus F, Katusic Bojanac A, Juric-Lekic G, Vlahovic M, Sincic N. Teratoma: from spontaneous tumors to the pluripotency/malignancy assay. Wiley Interdiscip Rev Dev Biol. 5:186-209, 2016.
- Mužić V, Katušić Bojanac A, Jurić-Lekić G, Himmelreich M, Tupek K, Šerman LJ, Sinčić N, Marn N, Vlahović M, Bulić-Jakuš F. Epigenetic drug 5-azacytidine impairs proliferation of rat limb buds in an organotypic model system in vitro. CMJ 54:489-495, 2013.

- Šerman LJ., Vlahović M., Šijan M., Bulić-Jakuš F., Šerman A., Sinčić N., Matijević R., Jurić-Lekić G., Katušić A. The Impact of 5-azacytidine on Placental Weight, Glycoprotein Pattern and Proliferating Cell Nuclear Antigen Expression in Rat Placenta. *Placenta*. 2007, 28:803-811.
- Bulić-Jakuš F, Ulamec M, Vlahović M, Sinčić N, Katušić A, Jurić-Lekić G, Šerman LJ, Krušlin B, Belicza M. Of mice and men: Teratomas and teratocarcinomas. *Coll Antropol* 2006. 30: 921-924.
- Šerman, A., Vlahović, M., Šerman, L., Bulić-Jakuš, F. DNA methylation as a regulatory mechanism for gene expression in mammals. *Coll Antropol* 2006, 30: 665-671.
- Marić S, Bulić-Jakuš F, Ježek D, Jurić-Lekić G, Kos M, Vlahović M (2004): Expression of the proliferating cell nuclear antigen and protein products of tumor suppressor genes in the human fetal testis. *Andrologia* 36:24-30.
- Bulić-Jakuš F, Strahinić-Belovari T, Marić S, Ježek D, Jurić-Lekić G, Vlahović M, Šerman D. (2001): Chemically defined protein-free in vitro culture of mammalian embryo does not restrict its developmental potential for differentiation of skin appendages. *Cells Tissues Organs* 169, 134-143.
- Bulić-Jakuš F, Vlahović M, Jurić-Lekić G, Crnek-Kunstelj V, Šerman, D. Gastrulating rat embryo in a serum-free culture model: Changes of development caused by teratogen 5-azacytidine. *ATLA Alternatives to Laboratory Animals*, 1999, 27: 925-933.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

- Katusic Bojanac A, Rogosic S, Sincic N, Juric-Lekic G, Vlahovic M, Serman L, Jezek D, Bulic-Jakus F. Influence of hyperthermal regimes on experimental teratoma development in vitro. *Int J Exp Pathol*. 99:131-144, 2018.
- Buljubašić R, Buljubašić M, Bojanac AK, Ulamec M, Vlahović M, Ježek D, Bulić-Jakuš F, Sinčić N. Epigenetics and testicular germ cell tumors. *Gene*. 661:22-33, 2018.
- Bulic-Jakus F, Katusic Bojanac A, Juric-Lekic G, Vlahovic M, Sincic N. Teratoma: from spontaneous tumors to the pluripotency/malignancy assay. *Wiley Interdiscip Rev Dev Biol*. 5:186-209, 2016.
- Fabijanovic D, Serman A, Jezic M, Katusic A, Sincic N, Curkovic-Perica M, Bulic-Jakus F, Vlahovic M, Juric-Lekic G, Serman L. Impact of 5-azacytidine on rat decidual cell proliferation. *Int J Exp Pathol*.
- Mužić V, Katušić Bojanac A, Jurić-Lekić G, Himelreich M, Tupek K, Šerman LJ, Sinčić N, Marn N, Vlahović M, Bulić-Jakuš F. Epigenetic drug 5-azacytidine impairs proliferation of rat limb buds in an organotypic model system in vitro. *CMJ* 54:489-495, 2013.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

from 1983.-2002. participation at scientific projects: NIH, Bethesda, USA; WHO Geneva, Switzerland; Cancerfonden; UNESCO, MZOS

2002-2006. investigator at the MZOŠ project „Experimental approach on mammalian reproductive health“

2007-2013. investigator at the MZOŠ project “ Experimental embryonic tumors and mammalian development in vivo and in vitro“

- 2014. to date Scientific Center of Excellence for reproductive and regenerative medicine, research unit for biomedical research reproduction and development

- 2017-2022 PI of project element "Testicular Germ Cell Tumors Epigenetics" and associate on other elements "Reproductive and Regenerative Medicine - Exploring New Platforms and Potentials" The



European Union through the European Regional Development Fund, Operational Programme Competitiveness and Cohesion, under grant agreement No. KK.01.1.1.01.0008, within the

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- 2017-2022 PI of project element "Testicular Germ Cell Tumors Epigenetics" and associate on other elements "Reproductive and Regenerative Medicine - Exploring New Platforms and Potentials" The European Union through the European Regional Development Fund, Operational Programme Competitiveness and Cohesion, under grant agreement No. KK.01.1.1.01.0008, within the Center of Excellence for Reproductive and Regenerative Medicine (CERRM). School of Medicine, University of Zagreb.

- 2017-2021 investigator at the project "Epigenetic Biomarkers in Blood and Ejaculate of Patients with Testicular Seminoma". School of Medicine, University of Zagreb financed by CSF.

- 2014. to date Scientific Center of Excellence for reproductive and regenerative medicine, research unit for biomedical research reproduction and development

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 2

- Ljiljana Šerman, University of Zagreb, Impact of the teratogen 5-azacytidine on rat placenta, Faculty of Natural Sciences Zagreb, doctoral dissertation 2005

- Nino Sinčić, University of Zagreb, Impact of 5-azacytidine on the development of experimental mouse teratocarcinoma, School of medicine, University of Zagreb, doctoral dissertation 2012

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Ass. Prof. Zlatko Vlajcic, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital „Dubrava“, Department of Plastic, Reconstructive and Aesthetic Surgery, Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Hand surgery

BIOGRAPHY

Born September 16, 1965 Fojnica

Works at: University Hospital „Dubrava“, Department of Plastic, Reconstructive and Aesthetic Surgery

Zagreb University School of Medicine, Referral Centre for Breast Surgery and Hand Surgery of the Ministry of Health of the Republic Croatia, EBOPRAS Accreditation Center (the European Board of Plastic, Reconstructive and Aesthetic Surgery) Av. Gojka Suska 6, 10 000 Zagreb, Croatia.

Phone: +385 1 290 38 31, Fax: +385 1 2863 695

E-mail: zvlajcic@kdb.hr

Languages: Croatian, English

April 29, 2004: IELTS - International English Language Testing System, British Council Academic level, Overall score 7.0

Education:

1985-1991: University of Sarajevo, Faculty of Medicine (IMED), FAIMER School ID: F000089, graduated on the 20th of April 1992

1988-1991: School of Foreign Languages, Sarajevo 1988 to 1991 (EFL)

1995-1999: Residence in General Surgery, University Hospital „Dubrava“, Zagreb

2000-2003: Residence in Plastic Surgery, University Hospital „Dubrava“, Zagreb,

1998-2000: Postgraduate study „Medical Science“, University of Zagreb School of Medicine (IMED), FAIMER School ID: F0001784

Academic degrees:

April 20, 1992: Graduated at Sarajevo University School of Medicine

July 13, 1994: Passed the State Exam in Medicine, Ministry of Health, Republic Croatia (GP License Exam)

July 21, 1999: Passed the Exam in General Surgery, University Hospital „Dubrava“

December 15, 2003: Passed the Exam in Plastic Surgery, University Hospital „Dubrava“

April 29, 2004: IELTS - International English Language Testing System, British Council Academic level, Overall score 7.0

March 18, 2005: M.Sc. (Master of Science) at Zagreb University School of Medicine, Theme: “Nipple-areola complex preservation: predictive factors of neoplastic nipple-areola complex invasion”,

December 17, 2009: Ph.D. at Zagreb University School of Medicine, Theme: “Biomechanical trial of modified flexor tendon sutures – in vitro study”

May 28, 2010: Promoted in status: “Research Associate” by Croatian National Council in Science due to the proposal of Zagreb University School of Medicine

May 31, 2011: Inaugurated in status: “Primarius” by Ministry of Health, Republic Croatia

December 13, 2013: Promoted in status: “Senior Research Associate” by Croatian National Council in Science due to the proposal of Zagreb University School of Medicine

March 27, 2017: Promoted in scientist teaching title: Ass.prof., University School of Medicine in Osijek, Croatia,
Scientific Area: Biomedicine and Healthcare, Science field: Clinical Medical Science; Scientific branch: Surgery.

Working experience:

- 1992-1994: Assistant Surgeon in Field hospitals during the war in Bosnia and Croatia
1999-2001: IOM, Medical Escort Service, Zagreb, Croatia
1999-2005: Licensed General Surgeon, Private Hospital „Medicus 2000“, Sesvete, Zagreb
2005-present: Expert Court Witness in General Surgery, County Court in Zagreb
2006-present: Licensed Plastic Surgeon, University Hospital „Dubrava“, Department of Plastic, Reconstructive and Aesthetic Surgery, Zagreb University School of Medicine

Invited visits to foreign institutions:

2004. godine - visitor-St.Andrew's Centre for Plastic Surgery and Burns, Hand Surgery Department, UK,
2011. godine - visitor-Department of Plastic Surgery, Georgetown University Hospital, Washington, DC, USA,
2013. godine - visitor-Hand Surgery Department, Gentofte Hospital, Denmark,
2013. godine - visitor-AKADEMIKLINIKEN-Aesthetic Plastic Surgery, Stockholm, Sweden,
2013. godine - visitor-Rigshospitalet, Hand Surgery, Copenhagen, Denmark,
2014. godine - visitor-Department of Plastic Surgery, Georgetown University Hospital, Washington, DC, USA.

Teaching activities:

Undergraduate education:

Zagreb University School of Medicine: Breast Surgery, Hand Surgery, Reconstruction Procedures in Plastic Surgery, Procedures in Aesthetic Plastic Surgery

Postgraduate education:

Zagreb University School of Medicine: PhD study “Biomedicine and Health”: Microsurgical transfer of the tissue, Dermatotomy, Hand Surgery, Breast Surgery

June 15, 2009: Promoted in “Mentor” status for Court Experts Educational Program in field of Plastic Surgery by Croatian Medical Chamber

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 27 March 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Current Contents: 12

1. Stanec Z, Žic R, Budi S, Stanec S, Milanović R, Vlajčić Z, Roje Z, Rudman F, Martić K, Held R, Božo G. Skin and nipple-areola complex sparing mastectomy in breast cancer patients: 15-year experience. Ann Plast Surg. 2014 Nov;73(5):485-91.
2. Zic R, Vlajčić Z, Dewing D, Zambelli M, Stanec Z. The "dermal cage": a modification of the inferior pedicle breast reduction. Aesthetic Plast Surg. 2013 Apr;37(2):364-71.
3. Vlajčić Z, Zic R, Skenderi Z, Bilic-Zulle L, Martić K, Stanec Z. Biomechanical trial of modified flexor tendon sutures: an in vitro study. J Plast Surg Hand Surg. 2012; 46: 222-8.
4. Martić K, Vlajčić Z, Rudman F, Lambaša S, Tomasović-Lončarić Č, Stanec Z. Tumor and breast volume ratio as a predictive factor for axillary lymph node metastases in T1c ductal invasive breast cancer: prospective observational clinico-pathological study. Jpn J Clin Oncol 2011; 41:1322-6

5. Vlajcic Z, Zic R, Stanec Z. Has the time come to change the breast-conserving treatment for skin and nipple-areola complex-sparing mastectomy? *Plast Reconstr Surg.* 2010; 25:1043-4; 1044-5.
6. Milanovic R, Vlajcic Z, Zic R, Stanec S, Rudman F, Stanec Z. Alveolar rhabdomyosarcoma of the hand in a 2 year-old child. *J Hand Surg Eur Vol.* 2007; 32:109-10. Epub 2006 Oct 17.
7. Vlajcic Z, Zic R, Stanec S, Stanec Z. Algorithm for classification and treatment of poststernotomy wound infections. *Scand J Plast Reconstr Surg Hand Surg.* 2007; 41:114-9.
8. Vlajcic Z, Rado Z, Stanec S, Stanec Z. Nipple-areola complex preservation. *Plast Reconstr Surg.* 2006; 118:1493-5; 1495-6.
9. Vlajcic Z, Zic R, Stanec S, Lambasa S, Petroveckii M, Stanec Z. Nipple-areola complex preservation: predictive factors of neoplastic nipple-areola complex invasion. *Ann Plast Surg.* 2005; 55:240-4.
10. Milanovic R, Martic K, Stanec S, Zic R, Vlajcic Z, Stanec Z. Surgical treatment of nevroid hyperkeratosis of the areola by removal of the areola and reconstruction with a skin graft. *Ann Plast Surg.* 2005; 54:667-9.
11. Vlajcic Z, Zic R, Stanec S, Stanec Z. Areola-sparing mastectomy with immediate breast reconstruction. *Ann Plast Surg.* 2005; 54:581.
12. Vlajcic Z, Zic R, Stanec S, Stanec Z. Omega and inverted omega incision: a concept of uniform incision in breast surgery. *Ann Plast Surg.* 2004; 53:31-8.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Gastrostomy under paravertebral block in high-risk patients with esophageal cancer - Two case reports (2017) *Acta Clinica Croatica*
2. The Inguinal Adipodermal Graft: a Single-Stage Technique for Cranial Linear Groove-like Defects Correction (2016) *Medical archives (Sarajevo, Bosnia and Herzegovina)*
3. PRESSURE ULCER TREATMENT EXPERIENCE AT CLINICAL DEPARTMENT OF PLASTIC, RECONSTRUCTIVE AND AESTHETIC SURGERY, DUBRAVA UNIVERSITY HOSPITAL: COMPARISON OF RESULTS RECORDED IN THE 2011-2016 AND 2003-2008 PERIOD (2016) *Acta medica Croatica : casopis Hrvatske akademije medicinskih znanosti*
4. Substitute and alternative forms of treatment of skin defects, Supstitutivni i alternativni oblici liječenje defekata kože (2015) *Acta Medica Croatica*

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- 1998-1999: Project No.0198007 by Ministry of Science and Technology, Project Manager: S.Stanec: "SLNB at melanoma and breast cancer patients",
- 2003-2005: Project Manager: Vukicevic S, "Prefabrication of pedicle epigastric superf. flap with BMP-7 in the rat model for femoral defects reconstruction".

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Željka Vogrinc, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Center Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Biochemical Methods in Biomedical Research; Molecular and biochemical approach to genetic disorders

BIOGRAPHY

Željka Vogrinc, PhD, a medical biochemistry specialist, is head of Division for General Clinical Biochemistry and CSF analyses, Department of Laboratory Diagnostics, University Hospital Center Zagreb, Croatia. The area of her professional and research interest are analyses of cerebrospinal fluid and other special body fluids and also the research of specific proteins and lipoproteins. She teaches in undergraduate and postgraduate courses at Faculty of Pharmacy and Biochemistry, and at School of Medicine, University of Zagreb, in the field of neurochemistry and CSF diagnostics. She has published a number of research and professional papers and held many lectures at various national and international scientific meetings. She is a member of the editorial board of the journal *Neurologia Croatica*, Croatian chamber of medical biochemists and Croatian society of medical biochemistry and laboratory medicine.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Babić Leko M, Krbot Skorić M, Klepac N, Borovečki F, Langer Horvat L, Vogrinc Ž, Sonički Z, Hoff RP, Šimić G. Event-related potentials improve the efficiency of cerebrospinal fluid biomarkers for differential diagnosis of Alzheimer's disease. *Current Alzheimer Research* 2018;15:1244-60
2. Krilov D, Kosović M, Brnjas-Kraljević J, Serec K, Vogrinc Ž. Structural and oxidation properties of plasma lipoproteins from different phenotypes: FT-IR and ESR study. *Croat Chem Acta* 2013;86:265-72
3. Karmelić I, Lovrić J, Božina T, Ljubić H, Vogrinc Ž, Božina N, Sertić J. Adiponectin level and gene variability are obesity and metabolic syndrome markers in young population. *Archives of Medical Research* 2012;43:143-53

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Babić Leko M, Krbot Skorić M, Klepac N, Borovečki F, Langer Horvat L, Vogrinc Ž, Sonički Z, Hoff RP, Šimić G. Event-related potentials improve the efficiency of cerebrospinal fluid biomarkers for differential diagnosis of Alzheimer's disease. *Current Alzheimer Research* 2018;15:1244-60
2. Mlinarić A, Vogrinc Ž, Drenšek Z. Effect of sample processing and time delay on cell count and chemistry tests in cerebrospinal fluid collected from drainage systems. *Biochemia Medica* 2018; 28:430-8
3. Rojnić Kuzman M, Bošnjak D, Kekić I, Makarić P, Madžarac Z, Korijanić Makar A, Kudlek Mikulić S, Bajić Ž, Bistović P, Bonacin D, Vogrinc Ž. Effects of long-term multimodal psychosocial treatment on antipsychotic-induced metabolic changes in patients with first episode psychosis. *Front Psychiatry* 2018;9:488
4. Karaica D, Breljak D, Lončar J, Lovrić M, Micek V, Vrhovac Madunić I, Brzica H, Herak-Kramberger CM, Ivković Dupor J, Ljubojević M, Smital T, Vogrinc Ž, Burckhardt G, Burckhardt BC, Sabolić I. Sex-independent expression of chloride/formate exchanger Cfex (Slc26a6) in rat pancreas, small intestine, and liver, and male-dominant expression in kidneys. *Arch Hig Rada Toksikol* 2018;69:286-303



5. Milevoj Kopčinović L, Vogrinc Ž, Kocijan I, Culej J, Aralica M, Jokić A. et al. Laboratory testing of extravascular body fluids in Croatia: a survey of the Working group for extravascular body fluids in Croatian Society of Medical Biochemistry and Laboratory Medicine. *Biochemia Medica* 2016;26:395-407
6. Vogrinc Ž. Izoelektrično fokusiranje proteina likvora, in: Debeljak Ž, ed. *Analitičke tehnike u kliničkom laboratoriju: elektroforetske i kromatografske separacije*, Medicinska naklada, Zagreb, 2018:41-51
7. Vogrinc Ž. Fenotipizacija proteina i lipoproteina, in: Lovrić J, Rogić D, ed. *Biokemijske metode u biomedicinskim istraživanjima*. Medicinska naklada, Zagreb, 2015:147-52

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Funkcijska genomika i proteomika rizičnih čimbenika ateroskleroze» (108-1080134-0136)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

- Biomarkeri u shizofreniji – integracija komplementarnih pristupa u praćenju osoba s prvom psihotičnom epizodom (project number: 1245)
- Funkcijska genomika i proteomika rizičnih čimbenika ateroskleroze» (108-1080134-0136)

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Jasmina Vranes, MD, PhD, - permanent tenure

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine; University of Zagreb Teaching Institute of Public Health “Dr. Andrija Stampar”, Zagreb, Croatia

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: “Pathogenesis of infectious diseases”, “Biomaterial infections”, “Multiresistant bacteria-causative agents of hospital infections”

BIOGRAPHY

Born: Gospic, 1961. Education: Zagreb University Medical School (1984), M.Sc. (1989) Ph.D. (1993). Specialization: Postgraduate Study in Clinical Paediatrics at Zagreb University Medical School (1984–1985), Postgraduate Study in Medical Microbiology at Zagreb University Medical School (1986–1987), specialization in Medical Microbiology and Parasitology (1986–1989), Professional training at Medical Microbiology and Immunology Department at University Medical School of Pecs (1997), and at Microbiology, Immunology and Molecular Genetics Department at University of Kentucky, USA (2003). Employment and duties: intern at Osijek General Hospital (1985), staff associate at Bacteriology, Virology and Parasitology Department at Zagreb University Medical School (1986–1989), assistant (1989–1997), assistant professor (1997–2001), associate professor (2001–2006), professor (2007-) and tenured professor (2013-) at Microbiology and Parasitology Department at Zagreb University Medical School; first head and founder of Bacteriology, Virology and Parasitology Department at Osijek University Medical School (1998- 2003); first head and founder of Molecular Microbiology Department (2004-2013) and head of Clinical Microbiology Department at Zagreb Institute of Public Health (2005-). Head of Medical Microbiology and Parasitology Department at School of Medicine, University of Zagreb (2016-). Scientific interests: antimicrobial chemotherapy and pathogenesis of infectious diseases, urogenital infections, biofilm infections. Awards: International Society for Chemotherapy Young Scientists Award (1993), Hospital Infection Society Young Scientists Award (1994) and European Society for Clinical Microbiology and Infectious Diseases Award for an excellent research project (1997), etc. Publications: more than 100 scientific and professional papers, more than 30 papers in CC indexed journals, author of one and co-author of six books, and participant in more than 50 international meetings. Memberships: Croatian Medical Association (1985-), International Society for Infectious Diseases (1993-), European Society for Clinical Microbiology and Infectious Diseases (1996-) and New York Academy of Sciences (1996-). Postgraduate teaching experience: lecturer (1989-) and course leader (2008-) at postgraduate study in Medical Microbiology and in General Surgery at Zagreb University Medical School (2017-), and course leader of two courses at Doctoral Postgraduate Study at Zagreb University Medical School (2002-).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 10.12.2013.,
tenured professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME:

1. Žagar Ž, Vraneš J, Beader N. Severe urinary tract infections. J Chemother 1991;3 (Suppl. 1): 19-23.
2. Vraneš J, Žagar Ž. Biološka uloga Tamm-Horsfallova glikoproteina - i dalje nepoznanica. Liječ Vjesn 1993; 115:247-250.
3. Vraneš J. Bakterijska adherencija i njezino značenje u patogenezi infekcija. Liječ Vjesn 1994; 116:211-215.
4. Vraneš J, Schoenwald S, Žagar Ž. Udruženost između P-fimbrija i rezistencije na amoksisilin, karbenicilin i tetraciklin uropatogenih sojeva Ešerihije koli. Liječ Vjesn 1994; 116:178-181.

5. Vraneš J, Žagar Ž, Kurbel S. Influence of subinhibitory concentrations of ceftazidime, cipro-floxacin and azithromycin on the morphology and adherence of P-fimbriated *Escherichia coli*. J Chemother 1996; 8: 254-260.
6. Vraneš J. Sprječavanje bakterijske adherencije - mogućnosti preventivnog i terapijskog djelovanja. Liječ Vjesn 1996; 118:171-177.
7. Vraneš J, Schoenwald S. Adhesins of uropathogenic strains of *Escherichia coli* and susceptibility to urinary tract infections. Acta clin Croat 1996; 35: 9-12.
8. Vraneš J. Effect of subinhibitory concentrations of ceftazidime, ciprofloxacin and azithromycin on hemagglutination and adherence of uropathogenic *Escherichia coli* strains. Chemotherapy 1996; 42: 177-185.
9. Vraneš J. Utjecaj pH i vrste upotrijebljenih bujona na vrijednosti minimalnih inhibitornih koncentracija azitromicina in vitro. Pharmaca 1996; 34:27-35.
10. Vraneš J. Hemagglutination ability and adherence to the Buffalo green monkey kidney cell line of uropathogenic *Escherichia coli*. APMIS 1997; 105:831-837.
11. Vraneš J. Virulence properties of *Escherichia coli* strains isolated in different forms of urinary tract infection. In: Fünfstück R, Straube E, Stein G, ed. Harnwegsinfektion. Pathogenetische, klinische und therapeutische Aspekte. Lengerich: Pabst Science Publishers, 1997; 36 -43.
12. Vraneš J. Effect of subminimal inhibitory concentrations of azithromycin on adherence of *Pseudomonas aeruginosa* to polystyrene. J Chemother 2000; 12:280-285.
13. Hećimović I, Dmitrović B, Kurbel S, Blagus G, Vraneš J, Rukovanjski M. Intracranial infection after missile brain wound: 15 war cases. Zentralbl Neurochir 2000; 61:95-102.
14. Vraneš J, Brkić I, Horonitz M. Differences in the antigenic structure and production of hemolysin of *Pseudomonas aeruginosa* strains isolated from a variety of isolation sites. Acta clin Croat 2001; 40:85-91.
15. Vraneš J, Drenjančević D. Nove terapijske mogućnosti i buduće smjernice u terapiji sepsa. Pharmaca 2001; 39:97-109.
16. Vraneš J, Schoenwald S, Šterk-Kuzmanović N, Ivančić B. Low virulence of *Escherichia coli* strains causing exacerbation of chronic pyelonephritis. Acta clin Croat 2001; 40:165-170.
17. Vraneš J. Bioterrorizam. Liječ Vjesn 2002; 124(Supl. 2):74-77.
18. Vraneš J, Drenjančević D. Antibiotici i antimikotici u liječenju infekcija dijabetičkog stopala. U: Hančević J, Coce F, Božikov V, ur. Dijabetičko stopalo. Zagreb: Medicinska naklada, 2002:163-73.
19. Vraneš J. Etiopatogeneza i dijagnostika infekcije dekubitalnih vrijedova. U: Hančević J, i sur. Dekubitus, etiologija, profilaksa i liječenje. Zagreb: Medicinska naklada, 2003:89-105.
20. Vraneš J, Drenjančević D. Zbrinjavanje infekcije. U: Hančević J, i sur. Dekubitus, etiologija, profilaksa i liječenje. Zagreb: Medicinska naklada, 2003:107-116.
21. Vraneš J, Kružić V, Schoenwald S. Virulence characteristics of *Escherichia coli* strains causing asymptomatic bacteriuria. Infection 2003; 31:216-220.
22. Bedenić B, Vraneš J. Post-exposure effects of cefepime and ceftazidime on isogenic *Escherichia coli* hosts producing SHV-extended-spectrum β -lactamases. J Chemother 2003;15:342-349.
23. Vraneš J, Tješić-Drinković D, Žulj I, Kružić V, Turković B, Marić S. *In vitro* adherence ability of *Pseudomonas aeruginosa* strains isolated from patients with cystic fibrosis. Coll Antropol 2004;28:675-680.
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31. Marijan T, Vraneš J, Bedenić B, Mlinarić-Džepina A, Plečko V, Kalenić S. Emergence of uropathogenic extended-spectrum β lactamases-producing *Escherichia coli* strains in the community. *Coll Antropol* 2007; 31:1:227-233.
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LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS:

1. Ljubin-Sternak S, Marijan T, Vraneš J. *Mycoplasma genitalium*- uzročnik spolno prenosivih bolesti kojeg se ne smije zanemariti. Infektološki glasnik. 2014; 34(4):183-87.
2. Bedenić B, Zujić-Atalić V, Jajić I, Đuras-Cuculić B, Godić-Torkar K, Vraneš J, Zarfel G, Grisold A. Clonal spread of *Klebsiella pneumoniae* producing KPC-2 beta -lactamase in Croatian University Hospital. J Chemother 2015; 27:241-245.
3. Bedenić B, Beader N, Godić-Torkar K, Prahin E, Mihaljević Lj, Čačić M, Vraneš J. Postantibiotic effect of colistin alone and combined with vancomycin or meropenem against *Acinetobacter* spp. with well defined resistance mechanisms. J Chemother 2015 Aug 28:1973947815Y0000000062.
4. Vraneš J, Lukšić I, Knežević J, Ljubin-Sternak S. Health care associated cutaneous abscess – A rare form of primary gonococcal infection. AJMCR 2015; 3:88-90.
5. Vilibić-Čavlek T, Vilibić-Cavlek T, Kucinar J, Kaic B, Vilibić M, Pandak N, Barbic J, Stevanović V, Vranes J. Epidemiology of hepatitis C in Croatia in the European context. World Journal of Gastroenterology 2015;21:9476-9493.
6. Meštrović T, Ljubin-Sternak S, Sviben M, Bedenić B, Vraneš J, Markotić A, Škerk V. Antimicrobial sensitivity profile of *Chlamydia trachomatis* isolates from Croatia in McCoy cell culture and comparison with the literature. Clin Lab 2016;62:357-364.
7. Bedenić B, Firis N, Elvedi-Gašparović V, Krilanović M, Matanović K, Štimac I, Luxner J, Vraneš J, Meštrović T, Zarfel G, Grisold A. Emergence of multidrug-resistant *Proteus mirabilis* in a long-term care facility in Croatia. Wien Klin Wochenschr 2016; 128:404-413.
8. Ljubin-Sternak S, Marijan T, Ivković-Jureković I, Čepin-Bogović J, Gagro A, Vraneš J. Etiology and clinical characteristics of single and multiple respiratory virus infections diagnosed in Croatian children in two respiratory seasons. Journal of Pathogens 2016: <http://dx.doi.org/10.1155/2016/2168780>
9. Ljubin-Sternak S, Meštrović T, Kolarić B, Jarža-Davila N, Marijan T, Vraneš J. Assessing the need for routine screening for *Mycoplasma genitalium* in the low-risk female population: A prevalence and co-infection study on women in Croatia. Int J Prev Med 2017;8:51.
10. Sviben M, Ljubin-Sternak S, Meštrović T, Vraneš J. Sociodemographic, sexual behavior, and microbiological profiles of men attending public health laboratories for testing for sexually transmitted diseases. Acta Dermatovenereol Croat 2017;25(2):125-132.
11. Ljubin-Sternak S, Meštrović T, Ivković-Jureković I, Tešović G, Mlinari-Galinović G, Lukšić I, Tabain I, Tot T, Mijač M, Vraneš J. High detection rates of human bocavirus in infants and small children with lower respiratory tract infection from Croatia. Clin Lab 2019;65:101-107.
12. Mijač M, Ljubin-Sternak S, Ivković-Jureković I, Tot T, Lukić-Grlić A, Kale I, Slaćanac D, Vraneš J. Human bocavirus in nasopharyngeal secretion of hospitalized children with acute respiratory tract infection - first year results of four-year prospective study. Infektološki glasnik. 2018;- u tisku.

13. Civiljak R, Ljubić Sternak S, Falsey A, Tot T, Vranes J. The role of Pneumoviruses in acute respiratory illness in adults and elderly patients – report from Croatia. J Med Virol 2019, - in press.
14. Drenjančević D, Vraneš J. Pseudomonas, acinetobakter i srodne bakterije. U: Kalenić S, ur. Medicinska mikrobiologija, 2. izd., Zagreb: Medicinska naklada, 2019:241-252.
15. Kalenić S, Vraneš J. Spirochete. U: Kalenić S, ur. U: Kalenić S, ur. Medicinska mikrobiologija, 2. izd., Zagreb: Medicinska naklada, 2019:301-314.
16. Kalenić S, Vraneš J. Mikoplazme i ureaplazme. U: Kalenić S, ur. Medicinska mikrobiologija, 2. izd., Zagreb: Medicinska naklada, 2019:310-314.
17. Vraneš J. Patogeneza bakterijskih infekcija. U: Kalenić S, ur. Medicinska mikrobiologija, 2. izd., Zagreb: Medicinska naklada, 2019:100-110.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME:

1. Project entitled: “Wound – biomechanical and biochemical characteristics” (Croatian Ministry for Science and Education), participant-collaborator, project leader prof. dr. sc. Janko Hancevic, 1986-1990,
2. Project entitled: “Improvement of health and preventive care” (Croatian Ministry for Science and Education), participant-collaborator, project leader prof. dr. sc. Luka Kovacic, 1991-1996,
3. Project entitled: “Oral geriatric diseases” (Croatian Ministry for Science and Education - MZOS, Nr. 065-008), consultant, project leader prof. dr. sc. Ana Cekic-Arambasin, 1997-2001,
4. Project entitled: “Immunoreaction on intracellular pathogens” (MZOS, Nr.0021-005), consultant, project leader Alemka Markotic PhD, 2002-2005,
5. Project entitled: “Oral precancerous and paraneoplastic lesions” (MZOS, Nr. 065-008), participant-collaborator, project leader prof. dr. sc. Ana Cekic-Arambasin, 2002-2005,
6. Project entitled: “Effect of subinhibitory concentrations of antibiotics” (MZOS, Br. 0219-281), project leader, 2002-2006,
7. Project entitled: “Effect of antibiotics on causative agents of biofilm infections” (MZOS, Br. 121-1080114-0306), project leader, 2007-2013,
8. Project entitled: “Resistance of Gram-negative bacteria” (MZOS, Br. 108-1080114-0015), participant-collaborator, project leader Assist. Prof. Branka Bedenic, 2007-2013.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS:

1. Zagreb University Short-term Scientific Grant for project entitled: “Biofilm infections in children with cystic fibrosis”, project leader 2014,
2. Zagreb University Short-term Scientific Grant for project entitled: “Carbapenemase-productive Gram-negative bacteria in hospitals and care homes”, participant-collaborator, project leader prof. Branka Bedenic, 2015,
3. Zagreb University Short-term Scientific Grant for project entitled: “Carbapenemases in hospitals and in care homes”, participant-collaborator, project leader prof. Branka Bedenic, 2016,
4. Zagreb University Short-term Scientific Grant for project entitled: “Spreading mechanisms of OXA-48 carbapenemases”, participant-collaborator, project leader prof. Branka Bedenic, 2017,
5. COST Program – European Cooperation in Science and Technology CA1514 „Anti-Microbial Coating Innovations to prevent infectious diseases (AMiCI), -member of scientific board, 2016-2020,



6. FAPIC (Fast Assay for Pathogen Identification and Characterization), Horizon 2020 project PHC10, – supervisor, (project leader for Croatia - prof. Branka Bedenic,), 2016-2020,
7. HRZZ project Nr. IP-2016-06-7556 “New and neglected respiratory viruses in vulnerable groups of patients” , participant-collaborator, project leader assoc. prof. Suncanica Ljubin-Sternak, 2017-2021,
8. The City of Zagreb three-year grant for project: “Screening of student population on sexually-transmitted pathogens: *Mycoplasma genitalium* and *Chlamydia trachomatis*”, project leader, 2017-2020,
9. Zagreb University Short-term Scientific Grant for project entitled: “Antimicrobial mechanisms of resistance of the most common genitourinary pathogens”, project leader 2018.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Darija Vranešić Bender, BSc, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Clinical Nutrition

BIOGRAPHY

Darija Vranešić Bender, PhD was born 1976 iz Zagreb, Croatia. She graduated from Faculty of Food Technology and Biotechnology in 2000. She obtained PhD degree in Nutrition from the same Faculty in 2005. She is Assistant Professor in the field of nutrition since 2012, and professor from 2018.

Since the year 2008. she is employed by University Hospital Centre Zagreb as a clinical nutrition at the Department of internal medicine, Unit of Clinical Nutrition. She teaches diet therapy and clinical nutrition at Zagreb School of Medicine (regular and study in english language) and Faculty of Food Technology and Biotechnology University of Zagreb.

Her special interest is diet therapy in dyspepsia, IBD, IBS and coeliac disease as she works in inpatient and outpatient settings educating patients diagnosed with diseases of GI tract. She is an active member and president of several Societies in the country and region spreading knowledge in the field of nutrition and clinical nutrition.

She published 14 papers indexed in Current Contents and SCI Expanded, 17 papers indexed in Scopus and Medline, she is co-author of several chapters in 6 textbooks and 3 handbooks of Zagreb School of Medicine. She is a co-author of Handbook of Clinical nutrition (used for postgraduate Course of Clinical Nutrition).

She participated at several research projects financed by Croatian Ministry of Science and Technology as well as international projects endorsed by ESPEN: „LLL programme in Clinical Nutrition and Metabolism“ and „Nutrition day“. She wrote 2 popular books about nutrition sold in more than 6.000 copies.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: October 17th 2018

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Vranešić Bender, D., Ljubas Kelečić, D., Barišić, A., Karas, I., Domislović, V., Oroz, V., Krznarić, Ž. Review of recommendations for supplementation of vitamin D in children and adolescents. Central Eur J Paed 2018;14(2):123-129.

Pavić, T., Tomek Roksandić, S., Vranešić Bender, D., Krznarić, Ž. Enteralna prehrana – gdje smo danas u farmakonutriciji? Liječ Vjesn 2018; 76:50-56

Vranešić Bender D, Krznarić Z. Nutritional and behavioral modification therapies of obesity: facts and fiction. Dig Dis. 2012;30(2):163-7.

Benković V, Kolčić I, Ivičević Uhernik A, Vranešić Bender D, Oreb I, Stevanović R, Krznarić Z. The economic burden of disease-related undernutrition in selected chronic diseases. Clin Nutr. 2014 Aug;33(4):689-693.

Krznarić, Ž; Vranešić Bender, D; Ljubas Kelečić, D; Brinar, M (2011) Wernicke's encephalopathy during parenteral nutrition in a Crohn's disease patient Nutrition 27:503–504

Vranešić Bender D, Krznarić Ž, Colić Barić I. (2010) Assessment of Nutritional Status of Gastroenterology Patients in Croatia Coll. Antropol. 34(4):1329-1334

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Leskovar D, Meštrović T, Barešić A, Kraljević I, Panek M, Čipčić Paljetak H, Perić M, Matijašić M, Rogić D, Barišić A, Ljubas Kelečić D, Vranešić Bender D, Krznarić Ž, Verbanac D. The Role of Vitamin D in Inflammatory Bowel Disease—Assessing Therapeutic and Preventive Potential of Supplementation and Food Fortification. *Food Technology and Biotechnology*, Vol. 56 No. 4, 2018.

Panek M, Čipčić Paljetak H, Barešić A, Perić M, Matijašić M, Lojkić I, Vranešić Bender D, Krznarić Ž, Verbanac D. Methodology challenges in studying human gut microbiota - effects of collection, storage, DNA extraction and next generation sequencing technologies. *Sci Rep*. 2018 23;8(1):5143. doi: 10.1038/s41598-018-23296-4.

Vranešić Bender D, Kovačević M, Hanževački M, Vrabec B, Benković B, Domislović V, Krznarić Ž. Nutritional issues and nutrition support in older home care patients in the city of Zagreb. *Acta Clin Croat* 2017; 56(4): 689-697. doi: 10.20471/acc.2017.56.04.17

Vranešić Bender D, Nutrizio M, Jošić M, Ljubas Kelečić D, Karas I, Premužić M, Domislović V, Rotim C, Krznarić Ž. Nutritional status and nutrition quality in patients with non-alcoholic fatty liver disease. *Acta Clin Croat* 2017; 56(4): 625-634. doi: 10.20471/acc.2017.56.04.07

Matijašić M, Meštrović T, Perić M, Čipčić Paljetak H, Panek M, Vranešić Bender D, Ljubas Kelečić D, Krznarić Ž, Verbanac D. Modulating Composition and Metabolic Activity of the Gut Microbiota in IBD Patients. *Int J Mol Sci*. 2016 Apr 19;17(4). pii: E578. doi: 10.3390/ijms17040578.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2013-2018 HRZZ code 5467 Assessment of Microbiota, Inflammatory Markers, Nutritional and Endocrinological Status in IBD Patients; Acronym: MINUTE for IBD

0034207 Assessment of impact of physical exercise on somatic and health status

072-1083107-2054 Coeliac disease in children, primary prevention and pathogenesis of chromosomal instability

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2013-2018 HRZZ code 5467 Assessment of Microbiota, Inflammatory Markers, Nutritional and Endocrinological Status in IBD Patients; Acronym: MINUTE for IBD

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Dina Vrkić, MLIS

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Structure, methodology and functioning of scientific work 1

BIOGRAPHY

Dina Vrkić graduated librarianship from the Faculty of Faculty of Humanities and Social Sciences. She started her professional work at the Central Library at the Faculty of Electrical Engineering and Computing at the University of Zagreb where she participated in the graduate teaching. 2014 she started to work in the Central Medical Library where she is in charge of dealing with specific information through advanced and complex searches, evaluation of specific information, citation analysis, bibliometric and altmetrics analysis for individuals, departments and institutions. She participates in the teaching at integrated undergraduate and graduate studies in English and Croatian, and also postgraduate programs studies in Croatian and English. She participates in numerous local and international conferences. She is a recipient of few scholarships and awards. Her professional and scientific interests are information literacy, open access, scholarly communication, bibliometrics, altmetrics and learning assessment. She is an Information and communication sciences PhD candidate at University of Zagreb Faculty of Humanities and Social Sciences.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Vrkić, Dina; Škorić, Lea; Petrak, Jelka. Altmetrics of Papers From Scientific Periphery Reflect Global Trends: A Case Study of Publications by Zagreb University School of Medicine. // The Journal of Academic Librarianship. 43, 6 (2017), str. 479-486. URL: <https://doi.org/10.1016/j.acalib.2017.08.014>

Škorić, Lea; Vrkić, Dina; Petrak, Jelka. Current state of open access to journal publications from the University of Zagreb School of Medicine. // Croatian Medical Journal. 57, 1 (2016), str. 71-76. DOI: 10.3325/cmj.2016.57.71

Vrkić, Dina. Are they a perfect match? Analysis of usage of author suggested keywords, IEEE terms and social tags. // 37th International Convention on Information and Communication Technology, Electronics and Microelectronics: Proceedings. / 37th International Convention on Information and Communication Technology, Electronics and Microelectronics – MIPRO 2014. Opatija, Croatia: MIPRO, 2014, str. 732–7.

Vrkić, Dina; Pavlovski, Marko. The evocation of creativity and critical thinking: Analysis of information competencies and behaviour among students of electrical engineering and computing. // 37th International Convention on Information and Communication Technology, Electronics and Microelectronics: Proceedings. / 37th International Convention on Information and Communication Technology, Electronics and Microelectronics – MIPRO 2014. Opatija, Croatia: MIPRO, 2014, str. 623-627

Vrkić, Dina; Lisek, Jadrnaka; Glavica, Marijana. Zaplesala je ovo ljeto: Implementacija Kohe u knjižnični sustav Fakulteta elektrotehnike i računarstva: prvi dio. // Vjesnik bibliotekara Hrvatske. 55, 3-4 (2013), str. 1-16. URL: <https://hrcak.srce.hr/106570>

Jelić, Ivan; Vrkić, Dina. QR codes in library - Does anyone use them? // 36th International Convention on Information and Communication Technology, Electronics and Microelectronics: Proceedings. / 36th

International Convention on Information and Communication Technology, Electronics and Microelectronics – MIPRO Opatija, Croatia: MIPRO, 2013. str. 695–699.

Lisek, Jadranka; Vrkić, Dina; Jelić, Ivan. Community management in informal e-learning environment - Analysis and vision of Facebook in Central Library of Faculty of Electrical Engineering and Computing. // 35th International Convention on Information and Communication Technology, Electronics and Microelectronics: Proceedings / 35th International Convention on Information and Communication Technology, Electronics and Microelectronics – MIPRO 2012. Opatija, Croatia: MIPRO, 2012. str. 1189–1192.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Vrkić, Dina; Škorić, Lea; Petrak, Jelka. Altimetrics of Papers From Scientific Periphery Reflect Global Trends: A Case Study of Publications by Zagreb University School of Medicine. // The Journal of Academic Librarianship. 43, 6 (2017), str. 479-486. URL: <https://doi.org/10.1016/j.acalib.2017.08.014>

Škorić, Lea; Vrkić, Dina; Petrak, Jelka. Current state of open access to journal publications from the University of Zagreb School of Medicine. // Croatian Medical Journal. 57, 1 (2016), str. 71-76. DOI: 10.3325/cmj.2016.57.71

Vrkić, Dina. Are they a perfect match? Analysis of usage of author suggested keywords, IEEE terms and social tags. // 37th International Convention on Information and Communication Technology, Electronics and Microelectronics: Proceedings. / 37th International Convention on Information and Communication Technology, Electronics and Microelectronics – MIPRO 2014. Opatija, Croatia: MIPRO, 2014, str. 732–7.

Vrkić, Dina; Pavlovski, Marko. The evocation of creativity and critical thinking: Analysis of information competencies and behaviour among students of electrical engineering and computing. // 37th International Convention on Information and Communication Technology, Electronics and Microelectronics: Proceedings. / 37th International Convention on Information and Communication Technology, Electronics and Microelectronics – MIPRO 2014. Opatija, Croatia: MIPRO, 2014, str. 623-627

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Oliver Vugrek, PhD, senior research advisor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Institut Ruđer Bošković

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Translational medicine – from disease to gene

BIOGRAPHY

Oliver Vugrek (OV) graduated in Biology at the Albert Einstein University of Ulm (Germany) in 1992, and received a PhD in Natural Sciences in 1995 at the Karl Ruprechts University of Heidelberg (Germany). After another year as postdoctoral fellow at Max Planck Institute for Cellbiology he was awarded a 2-year postdoctoral fellowship at the Australian National University in Canberra. After the postdoc term he was employed as assistant at the Ruđer Bošković Institute (RBI) in 1999, and in 2006 he established his own laboratory. From 2012 to 2015 he was appointed Head of the Department of Molecular Medicine. At present moment he is leading the Laboratory for Advanced Genomics at RBI.

OV is highly familiar with recombinant DNA technology, and new technologies such as microarrays, and next-generation sequencing. OV's main research interests and expertise are within molecular genetics of rare inherited metabolic diseases. Throughout his research he participated in the discovery of a new metabolic disease in human, S-Adenosylhomocysteine hydrolase (SAHH) deficiency. Now he is intensively involved in elucidation of the adverse pathological processes in regard to methylation, and methylation errors as a cause of the disease.

Worthwhile to mention is that OV led 7 research projects (EU, national and international level). The greatest achievement so far is the FP7 project InnoMol, the largest project ever conducted in Croatia in Natural Sciences, with a budget of 4.8 Mil EUR. By contracting EU funded projects worth altogether 5.3 million EUR OV has helped to introduce new technologies and valuable infrastructure in several life science departments at RBI. Subsequently, he has assembled a State-of-the-Art operational Next-Generation-Sequencing facility bringing genomics research at RBI to a new level.

OV is actively participating in academic activities such as member of the FEBS Fellowships Committee (January 1st 2017 till December 31st 2020), and Committee member of Croatian Science foundation for project monitoring and follow-up procedures (since 2015). OV was also member of the Croatian Science foundation board for research project selection in Natural Sciences (2013-2015).

Recently, he has organized the International Conference 'Game of Epigenomics, April 24 - 28, 2016, Dubrovnik, Croatia, and several workshops and minisymposia at Ruđer Bošković Institute, Zagreb, Croatia. OV is organizing courses for postgraduate studies at the Faculty of Science and Faculty of Medicine in Zagreb.

So far, he has mentored three doctorates and six graduate theses. Other activities include memberships in RBI Committees, Croatian Societies and editorial boards of scientific journals.

In 2010, he has received the Annual Award of the RBI director for outstanding scientific achievement. So far, OV has published 36 papers, of which 30 are peer-reviewed papers with a total of 650/678 citations (WoS/SCOPUS) with a h-index of 11.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 4.July, 2018
teaching rank: senior scientist (znanstveno zvanje znanstvenog savjetnika)

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Barić I, Fumić K, Glenn B, Čuk M, Schulze A, Finkelstein J D, Jill James S, Mejaški-Bošnjak V, Pažanin L, Pogribny I P, Radoš M, Sarnavka V, Šćukanec-Špoljar M, Allen R H, Stabler S, Uzelac L, Vugrek O, Wagner C, Zeisel S, Mudd H (2004). S-adenosylhomocysteine hydrolase deficiency in a human: A genetic disorder of methionine metabolism. *PNAS USA* 101(12): 4234-4239.
2. Belužić R, Čuk M, Pavkov T, Fumić K, Barić I, Mudd SH, Jurak I, Vugrek O* (2006). A single mutation at tyrosine 143 of human S-adenosylhomocysteine hydrolase renders the enzyme thermosensitive and effects the oxidation state of bound co-factor NAD. *Biochemical J* 2006: 400: 245-253.
3. Fumić K, Belužić R, Čuk M, Pavkov T, Kloor D, Barić I, Mijić I, Vugrek O* (2007). Functional analysis of human S-adenosylhomocysteine hydrolase isoforms SAHH-2 and SAHH-3. *Eur J Hum Gen* 2007: 15, 347-351.
4. Beluzic,R., Cuk,M., Pavkov,T., Baric,I., and Vugrek O*. (2008). S-Adenosylhomocysteine hydrolase (AdoHcyase) deficiency: Enzymatic capabilities of human AdoHcyase are highly effected by changes to codon 89 and its surrounding residues. *Biochem Biophys. Res. Commun.*, 368: 30-36.
5. Vugrek O*, Belužić R, Nakić N, Mudd SH: (2009). S-Adenosylhomocysteine hydrolase (AHCY) deficiency: Two novel mutations with lethal outcome. *Human Mut.*, 2009: 30, (4), E555-E565.
6. Honzik T; Magner M; Krijt J; Sokolova J; Vugrek O; Beluzic R; Baric I; Hansikova H; Elleder M; Vesela K; Bauerova L; Ondruskova N; Jesina P; Zeman J; Kozich V: Clinical picture of S-adenosylhomocysteine hydrolase deficiency resembles phosphomannomutase 2 deficiency. *Molecular Genetics and Metabolism* (2012); 107 (3), 611–613.
7. Geyer H, Hartung E, Mages H W, Weise C, Beluzic R, Vugrek O, Jonjic S, Kroczeck R A, Voigt S (2014). Cytomegalovirus expresses the chemokine homologue vXCL1 capable of attracting XCR1+CD4-dendritic cells. *Journal of Virology* 10/2013; DOI:10.1128/JVI.02330-13.
8. Strauss KA, Ferreira C, Bottiglieri T, Zhao X, Arning E, Zhang S, Zeisel SH, Escolar ML, Presnick N, Puffenberger EG, Vugrek O, Kovacevic L, Wagner C, Mazariegos GV, Mudd SH, Soltys K. Liver transplantation for treatment of severe S-adenosylhomocysteine hydrolase deficiency. *Mol Gen and Metabolism* 116 (2015), 44-52.
9. Motzek A, Knežević J, Switzeny OJ, Barić I, Beluzić R, Strauss KA, Puffenberger EG, Mudd SH, Vugrek O*, Zechner U (2016). Abnormal hypermethylation at imprinting control regions in patients with S-adenosylhomocysteine hydrolase (AHCY) deficiency, *PLoS ONE* 11 (3):e0151261. Q1
10. Muñoz-Torres P M, Rokić F, Belužić R, Grbeša I, Vugrek O* (2016). msBiodat analysis tool, big data analysis for high-throughput experiments. *BioData Mining* (2016) 9:26. DOI 10.1186/s13040-016-0104-6
11. Lepur A, Kovačević K, Belužić R, Vugrek O* (2016). Combining Unique Multiplex Gateway Cloning and Bimolecular Fluorescence Complementation (BiFC) for High-Throughput Screening of Protein–Protein Interactions. *Journal of Biomolecular Screening*, 21 (10), 1100-1111. DOI: 10.1177/1087057116659438
12. Grbeša I, Kalo A, Belužić R, Kovačević L, Lepur A, Rokić F, Hochberg H, Kanter I, Simunović V, Muñoz-Torres PM, Shav-Tal Y, Vugrek O* (2017). Mutations in S-adenosylhomocysteine hydrolase (AHCY) effect its nucleocytoplasmic distribution and capabilities for interaction with S-adenosylhomocysteine hydrolase-like 1 protein. *European Journal of Cell Biology*, 96(6):579-590. doi: 10.1016/j.ejcb.2017.05.002.
13. Mikačić I, Belužić R, Vugrek O, and Plavljanić Đ (2018). A Proximity Extension Assay (PEA)-based method for quantification of bevacizumab. *J Pharma Tox Meth*; 92, 20–23.
<https://doi.org/10.1016/j.vascn.2018.02.008>

14. Cokarić Brdovčak, M., Zubković, A., Ferenčić, A., Šoša, I., Stemberga, V., Cuculić, D., Rokić F, Vugrek O, Hackenberg M, Jurak, I. (2018). Herpes simplex virus 1 miRNA sequence variations in latently infected human trigeminal ganglia. *Virus Research*, 256, 90–95.
<http://doi.org/https://doi.org/10.1016/j.virusres.2018.08.002>
15. Belužić, L., Grbeša, I., Belužić, R., Park, J. H., Kong, H. K., Kopjar, N., ... Vugrek, O*. (2018). Knock-down of AHCY and depletion of adenosine induces DNA damage and cell cycle arrest. *Scientific Reports*, 8(1), 14012. <http://doi.org/10.1038/s41598-018-32356-8>.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Strauss KA, Ferreira C, Bottiglieri T, Zhao X, Arning E, Zhang S, Zeisel SH, Escolar ML, Presnick N, Puffenberger EG, Vugrek O, Kovacevic L, Wagner C, Mazariegos GV, Mudd SH, Soltys K. Liver transplantation for treatment of severe S-adenosylhomocysteine hydrolase deficiency. *Mol Gen and Metabolism* 116 (2015), 44-52.
2. Motzek A, Knežević J, Switzeny OJ, Barić I, Belužić R, Strauss KA, Puffenberger EG, Mudd SH, Vugrek O*, Zechner U (2016). Abnormal hypermethylation at imprinting control regions in patients with S-adenosylhomocysteine hydrolase (AHCY) deficiency, *PLoS ONE* 11 (3):e0151261. Q1
3. Muñoz-Torres P M, Rokić F, Belužić R, Grbeša I, Vugrek O* (2016). msBiodat analysis tool, big data analysis for high-throughput experiments. *BioData Mining* (2016) 9:26. DOI 10.1186/s13040-016-0104-6
4. Lepur A, Kovačević K, Belužić R, Vugrek O* (2016). Combining Unique Multiplex Gateway Cloning and Bimolecular Fluorescence Complementation (BiFC) for High-Throughput Screening of Protein–Protein Interactions. *Journal of Biomolecular Screening*, 21 (10), 1100-1111. DOI: 10.1177/1087057116659438
5. Grbeša I, Kalo A, Belužić R, Kovačević L, Lepur A, Rokić F, Hochberg H, Kanter I, Simunović V, Muñoz-Torres PM, Shav-Tal Y, Vugrek O* (2017). Mutations in S-adenosylhomocysteine hydrolase (AHCY) effect its nucleocytoplasmic distribution and capabilities for interaction with S-adenosylhomocysteine hydrolase-like 1 protein. *European Journal of Cell Biology*, 96(6):579-590. doi: 10.1016/j.ejcb.2017.05.002.
6. Mikačić I, Belužić R, Vugrek O, and Plavljanić Đ (2018). A Proximity Extension Assay (PEA)-based method for quantification of bevacizumab. *J Pharma Tox Meth*; 92, 20–23.
<https://doi.org/10.1016/j.vascn.2018.02.008>
7. Belužić, L., Grbeša, I., Belužić, R., Park, J. H., Kong, H. K., Kopjar, N., ... Vugrek, O*. (2018). Knock-down of AHCY and depletion of adenosine induces DNA damage and cell cycle arrest. *Scientific Reports*, 8(1), 14012. <http://doi.org/10.1038/s41598-018-32356-8>.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018-2020: Integrated Test to Identify Genetic Changes Causing Infertility (Genom-IGT)"; Ph.D. Oliver Vugrek, in project partner status. Total funds contracted: HRK 928,819.30. Duration 31.05.2018. to 05/30/2020.

2013-2016: FP7-REGPOT-2012-2013-1 Project Coordinator - 'Enhancement of the Innovation Potential in SEE through New Molecular Solutions in Research and Development' (project start 01/06/2013; EUR 4,738,978).



2010-2012: Project Leader: 'Creation of Research-Related Infrastructure for Translational Medicine and Applied Genomics' under the Science and Innovation Investment Fund Grant Scheme (IPA2007 / HR / 16IPO / 001-0403). 491.485,24 EUR.

2009-2011: International Research Project Leader: Molecular Dynamics of S-Adenosylhomocystein Hydrolase (SAHH) and the Role in Gene Expression Regulation '(No 03-1209 / 1-2009) within the framework of Croatian-Israeli cooperation. \$100,000.00.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2018-2020: Integrated Test to Identify Genetic Changes Causing Infertility (Genom-IGT) "; Oliver Vugrek, PhD in project partner status. Total funds contracted: HRK 928,819.30. Duration 31.05.2018. to 05/30/2020.

2013-2016: FP7-REGPOT-2012-2013-1 InnoMol Project Coordinator - 'Enhancement of the Innovation Potential in SEE through New Molecular Solutions in Research and Development' (project start 1.6.2013; EUR 4,738,978).

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

3

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Željka Vukelić, Associate Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine, University of Zagreb,
Department of Chemistry and Biochemistry

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Research methods in vivo and in vitro

BIOGRAPHY

Received master's degree in Biology and Chemistry from the Faculty of Science, University of Zagreb (1988). After completion of scientific postgraduate study at the same Faculty, earned MSc (1997) and PhD title (2002) in the field of Chemistry, Biochemistry.

Employed at the Department of Chemistry and Biochemistry, School of Medicine, Zagreb University: from 1989 at assistant positions, from 2007 as Assistant Professor, and from 2012 as Associate Professor.

Scientific trainings (specialization) acquired abroad: Institute of Physiological Chemistry, Medical Faculty, Bonn University, Germany (1993-1995; 7.5 months); Department for Cell Culture Techniques, Technical Faculty, Bielefeld University, Germany (1994; 2 weeks); Institute of Neuropathology, University Hospital Bonn, Germany (1994, 5 weeks); University Hospital Eppendorf, Medical Faculty, Hamburg University, Germany (1999; 4 weeks); Laboratory for Biomedical Analytics, Institute of Medical Physics and Biophysics, Medical Faculty, Münster University, Germany (1999, 2000, 2003-2005; 15 months); Institute of Analytical Chemistry and Center of Mass Spectrometry, Faculty of Chemistry, Vienna University, Austria (2010., Erasmus exchange); and Laboratory for Biomolecule Mass Spectrometry, National Institute for Research and Development in Electrochemistry and Condensed Matter, Timisoara, Romania (2008, 2011; 1 month) where appointed as visiting professor in 2006.

Awarded research scholarships: Jülich Scholarship (Federal Ministry of Education and Research, Germany; 1993-1995); DAAD Scholarship, Germany (1999); Scholarship of the "Miroslav Čačković" Foundation, School of Medicine, Zagreb University (2004).

Scientific work focused on topics in the field of neuro(bio)chemistry, particularly glycomics and lipidomics of human brain in health and disease, brain tumors and cell cultures as in vitro models, using advanced methods of mass spectrometry and complementary techniques for biomolecule analyses. Besides structural characterization, investigates roles and metabolism of nervous system glycolipids and sphingolipids.

Leaded 4 national scientific projects and was co-leader of international scientific project: 1 project supported by Croatian Ministry of Science, Education and Sports (2007.-2014.); 3 short-term projects supported by University of Zagreb; collaborative project „Research of Excellence“, CEx 14, supported by Romanian Ministry of Education and Research from EU funds (2005.-2008.). Currently, leads short-term project supported by University of Zagreb and participates as active collaborator in two projects supported by Croatian Science Foundation. Additionally, as a junior researcher or researcher participated in 6 national projects and 5 international collaborative projects. Has long-term and ongoing collaboration with foreign and Croatian researchers.

Co-author of 41 scientific articles (34 CC, 1 SCI-Expanded) and around 100 conference reports, including invited lectures.

Mentor of 2 doctoral thesis and 1 diploma work; also, supervised research work of motivated students.

Extensively participates in teaching of basic courses within the graduate and doctoral medical studies programs, including the Medical Studies in English (coordinator of the course Medical Chemistry and Biochemistry II from 2007). Also, participates in teaching programs for students of Dental Medicine in Croatian and English language (coordinator of the course Chemistry from 2017).

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 28.02.2012

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Osmak M., Vukelić Ž., Francetić B., Ferle-Vidović A., Beketić L. Multiple irradiation with gamma rays changes the sensitivity of mammalian cells to chemotherapeutic drugs. *Radiol. Iugoslav.*, 24: 71-74, 1990.

Vukičević S., Kračun I., Vukelić Ž., Krempien B., Rösner H., Čosović Č. 24R,25-dihydroxyvitamin D3 prevents aluminium-induced alteration of brain gangliosides in uremic rats by keeping the metal within perivascular astrocytes of the blood-brain barrier. *Neurochem. Int.*, 20(3): 391-399, 1992. (IF 1993=1.855; IF 2016=3.262) Q3 1997, Q2 2016

Ježek D., Schulze W., Kalanj-Bognar S., Vukelić Ž., Milavec-Puretić V., Krhen I. Effects of various cryopreservation media and freezing-thawing on the morphology of the rat testicular biopsy. *Andrologia*, 33(6): 368-378, 2001. (IF 2001=0.732; IF 2016=1.458) Q3

Vukelić Ž., Metelmann W., Müthing J., Kos M., Peter-Katalinić J. Anencephaly: Structural characterization of gangliosides in defined brain regions. *Biol. Chem.*, 382: 259-274, 2001. (IF 2001=2.606; IF 2016=3.273) Q2

Vukelić Ž., Kalanj-Bognar S. Cell density-dependent changes of glycosphingolipid biosynthesis in cultured human skin fibroblasts. *Glycoconjugate J.*, 18(6): 429-437, 2001. (IF 2001=1.585; IF 2016=2.186) Q3

Ježek D., Knežević N., Kalanj-Bognar S., Vukelić Ž., Krhen I. From testicular biopsy to human embryo. *Verh. Dtsch. Ges. Pathol.*, 88: 136-143, 2004.

Vukelić Ž., Zarei M., Peter-Katalinić J., Zamfir A.D. Analysis of human hippocampus gangliosides by fully-automated chip-based nanoelectrospray tandem mass spectrometry. *J. Chromatogr. A*, 1130(2): 238-245, 2006. (IF 2006=3.554) Q1 (6/68)

Vukelić Ž., Kalanj-Bognar S., Froesch M., Bindila L., Radić B., Allen M., Peter-Katalinić J., Zamfir A.D. Human gliosarcoma-associated ganglioside composition is complex and distinctive as evidenced by high-performance mass spectrometric determination and structural characterization. *Glycobiology*, 17(5): 504-515, 2007. (IF 5-y-2007=4.087) Q2

Kalanj-Bognar S., Foretić B., Vukelić Ž., Gulin T., Ježek D. Cytotoxicity of selected pyridinium oximes in human SH-SY5Y neuroblastoma cell line. *Croat. Chem. Acta*, 81(1): 67-71, 2008. (IF 5-y-2008=1.000) Q3

Schiopu C., Flangea C., Capitan F., Serb A., Vukelić Ž., Kalanj-Bognar S., Sisu E., Przybylski M., Zamfir A.D. Determination of ganglioside composition and structure in human brain hemangioma by chip-based nanoelectrospray ionization tandem mass spectrometry. *Anal. Bioanal. Chem.*, 395(8): 2465-77, 2009. (IF 2009=3.480) Q1 (6/70)

Zamfir A.D., Serb A., Vukelić Ž., Flangea C., Schiopu C., Fabris D., Kalanj-Bognar S., Capitan F., Sisu E. Assessment of the molecular expression and structure of gangliosides in brain metastasis of lung adenocarcinoma by an advanced approach based on fully automated chip-nanoelectrospray mass spectrometry. *J. Am. Soc. Mass Spectrom.*, 22(12): 2145-59, 2011. (IF 2011=4.002) Q1 (4/42)

Schiopu C., Vukelić Ž., Capitan F., Kalanj-Bognar S., Sisu E., Zamfir A.D. Chip-nanoelectrospray quadrupole time-of-flight tandem mass spectrometry of meningioma gangliosides: a preliminary study. *Electrophoresis*, 33(12): 1778-86, 2012. (IF 2012=3.261) Q1

Mlinac K., Fabris D., Vukelić Ž., Rožman M., Heffer M., Kalanj Bognar S. Structural analysis of brain ganglioside acetylation patterns in mice with altered ganglioside biosynthesis. *Carbohydrate Res.*, 382: 1-8, 2013. (IF 2013=2.148) Q2

Zamfir A.D., Fabris D., Capitan F., Munteanu C., Vukelić Ž., Flangea, C. Profiling and sequence analysis of gangliosides in human astrocytoma by high-resolution mass spectrometry. *Anal. Bioanal. Chem.*, 405: 7321-7335, 2013. (IF 2013=3.578) Q1 (51/506)

Robu A.C., Vukelić Ž., Schiopu C., Capitan F., Zamfir A.D. Mass spectrometry of gangliosides in extracranial tumors: application to adrenal neuroblastoma. *Anal. Biochem.*, 509: 1-11, 2016. (IF 2016=2.334) Q2

Fabris D., Rožman M., Sajko T., Vukelić Ž. Aberrant ganglioside composition in glioblastoma multiforme and peritumoral tissue: a mass spectrometry characterization. *Biochimie*, 137: 56-68, 2017. (IF 2017=3.188) Q2

Sarbu M., Vukelić Ž., Clemmer D.E., Zamfir A.D. Electrospray ionization ion mobility mass spectrometry provides novel insights into the pattern and activity of fetal hippocampus gangliosides. *Biochimie*, 139: 81-94, 2017. (IF 5-y=3.188) Q2

Sarbu M., Vukelić Ž., Clemmer D.E., Zamfir A.D. Ion mobility mass spectrometry provides novel insights into the expression and structure of gangliosides in the normal adult human hippocampus. *Analyst*, 143: 5234-5246, 2018. (IF 2017=3.864) Q1

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Flangea C., Fabris D., Vukelić Ž., Zamfir A.D. Mass spectrometry of gangliosides from human sensory and motor cortex. *Australian J. Chem.*, 66: 781-790, 2013. (IF 2013=1.644) Q2

Zamfir A.D., Fabris D., Capitan F., Munteanu C., Vukelić Ž., Flangea, C. Profiling and sequence analysis of gangliosides in human astrocytoma by high-resolution mass spectrometry. *Anal. Bioanal. Chem.*, 405: 7321-7335, 2013. (IF 2013=3.578) Q1 (51/506)

Mlinac K., Fabris D., Vukelić Ž., Rožman M., Heffer M., Kalanj Bognar S. Structural analysis of brain ganglioside acetylation patterns in mice with altered ganglioside biosynthesis. *Carbohydrate Res.*, 382: 1-8, 2013. (IF 2013=2.148) Q2

Ghiulai R.M., Sarbu M., Vukelić Ž., Ilie C., Zamfir A.D. Early stage fetal neocortex exhibits a complex ganglioside profile as revealed by high resolution tandem mass spectrometry. *Glycoconj. J.*, 31(3): 231-245, 2014. (IF 2014=2.520) Q3

Rožman M., Fabris D., Mrla T., Vukelić Ž. Database and data analysis application for structural characterization of gangliosides and sulfated glycosphingolipids by negative ion mass spectrometry. *Carbohydrate Res.*, 400: 1-8, 2014. (IF 5-y=2.133) Q2

Capitan F., Robu A.C., Popescu L., Flangea C., Vukelić Ž., Zamfir, A.D. B subunit monomers of cholera toxin bind g1 ganglioside class as revealed by chip-nanoelectrospray multistage mass spectrometry. *J. Carbohydrate Chem.*, 34(7): 388-408, 2015. (IF 5-y=0.962) Q4

Sarbu M., Robu A.C., Ghiulai R.M., Vukelić Ž., Clemmer D.E., Zamfir A.D. Electrospray ionization ion mobility mass spectrometry of human brain gangliosides. *Anal. Chem.*, 88(10): 5166-78, 2016. (IF 2016=6.32) Q1 (4/76)

Robu A.C., Vukelić Ž., Schiopu C., Capitan F., Zamfir A.D. Mass spectrometry of gangliosides in extracranial tumors: application to adrenal neuroblastoma. *Anal. Biochem.*, 509: 1-11, 2016. (IF 2016=2.334) Q2

Sarbu M., Dehelean L., Munteanu C.V., Vukelić Ž., Zamfir A.D. Assessment of ganglioside age-related and topographic specificity in human brain by Orbitrap mass spectrometry. *Anal. Biochem.*, 521: 40-54, 2017. (IF 2017=2.275) Q2

Fabris D., Rožman M., Sajko T., Vukelić Ž. Aberrant ganglioside composition in glioblastoma multiforme and peritumoral tissue: a mass spectrometry characterization. *Biochimie*, 137: 56-68, 2017. (IF 2017=3.188) Q2

Sarbu M., Vukelić Ž., Clemmer D.E., Zamfir A.D. Electrospray ionization ion mobility mass spectrometry provides novel insights into the pattern and activity of fetal hippocampus gangliosides. *Biochimie*, 139: 81-94, 2017. (IF 5-y=3.188) Q2

Sarbu M., Vukelić Ž., Clemmer D.E., Zamfir A.D. Ion mobility mass spectrometry provides novel insights into the expression and structure of gangliosides in the normal adult human hippocampus. *Analyst*, 143: 5234-5246, 2018. (IF 2017=3.864) Q1

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2018: project „Further characterization of composition of glycolipids and sphingolipid metabolites as human brain tumor markers“(Zagreb University); principal investigator

2017: project „Characterization of composition of glycolipids and sphingolipid metabolites as human brain tumor markers“(Zagreb University); principal investigator

2017.-2021: Project "Molecular markers of neuronal vulnerability, adaptation and plasticity in acute and chronic brain lesion", NeuroReact (Croatian Science Foundation, P.I. - S. Kalanj Bognar), collaborator

2016: project „Influence of ganglioside composition changes on neuroplastin expression in brain tumors in human“ (Zagreb University); principal investigator

2015.-2019: project "Pathophysiological consequences of changed composition of lipid rafts" (P.I.- M. Heffer; Croatian Science Foundation); collaborator

2015: project "Characterization of gangliosides and neuroplastin as potential markers of human brain tumors" (Zagreb University); principal investigator

2014: bilateral German/Croatian DAAD project "Gangliosides and neuroplastin in organization of synaptic membrane" (P.I. - K. Mlinac); collaborator

2013.-2015: EU FP7 RegPot „Combining Stem Cells and Biomaterials for Brain Repair - Unlocking the Potential of the Existing Brain Research through Innovative In Vivo Molecular Imaging; GlowBrain“ (P.I. - S. Gajović); collaborator

2012-2015: “Detection and tracking of biological markers for early therapeutic intervention in sporadic Alzheimer's disease”, supported by Croatian Science Foundation; collaborator

2007-2014: “Structure-to-function glycolipidomics of brain development and malignant alteration”, supported by Croatian Ministry of Science, Education and Sports, grant No. 108-1081870-2415; principal investigator.

2007-2014: “Role of membrane lipids in brain development, aging and neurodegeneration”, supported by Croatian Ministry of Science, Education and Sports, grant No. 108-1081870-1877; collaborator (researcher)

2006-2007: "Reinke's crystals in healthy and infertile man", Croatian-Austrian bilateral collaborative project; collaborator (researcher)

2005-2008: "High-performance mass spectrometric study of gangliosides from defined regions of human brain: composition, structure and functional interactions", collaborative project "Research of Excellence", CEx 14, supported by Romanian Ministry of Education and Research from EU funds, Romania; co-leader

2002-2006: "Glycosphingolipids in brain development, aging and neurodegeneration", supported by Croatian Ministry of Science, Education and Sports, grant No. 0108120; collaborator (researcher)

2002-2006: "Investigation of men reproductive gland", supported by Croatian Ministry of Science, Education and Sports, grant No. 0108113; collaborator (researcher)

2003-2004: "Genetic regulation of cholesterol metabolism in mouse brain tissue", Croatian-Slovenian bilateral collaborative project; collaborator (researcher)

2003-2004: "Histophysiological regulation of Leydig cells function in men", Croatian-Slovenian bilateral collaborative project; collaborator (researcher)

1998-2002: "Sphingolipids of hippocampal neurons in Alzheimer's disease, supported by Croatian Ministry of Science, Education and Sports, grant No. 108121, collaborator (researcher)

1991-1998: "Human brain gangliosides", supported by Croatian Ministry of Science and Technology, grant No. 108136, junior researcher

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2018: project „Further characterization of composition of glycolipids and sphingolipid metabolites as human brain tumor markers“(Zagreb University); principal investigator

2017: project „Characterization of composition of glycolipids and sphingolipid metabolites as human brain tumor markers“(Zagreb University); principal investigator

2017.-2021: Project "Molecular markers of neuronal vulnerability, adaptation and plasticity in acute and chronic brain lesion", NeuroReact (Croatian Science Foundation, P.I. - S. Kalanj Bognar), collaborator

2016: project „Influence of ganglioside composition changes on neuroplastin expression in brain tumors in human“ (Zagreb University); principal investigator

2015.-2019: project "Pathophysiological consequences of changed composition of lipid rafts" (P.I.- M. Heffer; Croatian Science Foundation); collaborator

2015: project "Characterization of gangliosides and neuroplastin as potential markers of human brain tumors" (Zagreb University); principal investigator

2014: bilateral German/Croatian DAAD project "Gangliosides and neuroplastin in organization of synaptic membrane" (P.I. - K. Mlinac); collaborator

2013.-2015: EU FP7 RegPot „Combining Stem Cells and Biomaterials for Brain Repair - Unlocking the Potential of the Existing Brain Research through Innovative In Vivo Molecular Imaging; GlowBrain“ (P.I. - S. Gajović); collaborator

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2007-2014: “Role of membrane lipids in brain development, aging and neurodegeneration”, supported by Croatian Ministry of Science, Education and Sports, grant No. 108-1081870-1877; collaborator (researcher)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Slobodan Vukicevic, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Bone morphogenetic proteins in regeneration of bone and cartilage, Doctoral postgraduate study in the field of Biomedicine and public health

BIOGRAPHY

Slobodan Vukicevic, MD, PhD, is a full professor and head of the Laboratory for Mineralized Tissues at the Center for Translational and Clinical Research, University of Zagreb School of Medicine.

Dr. Vukicevic has published more than 200 publications and book chapters in scientific journals with high impact factors, which have been cited more than 7500 times, (h-index 45) in Web of Knowledge, and more than 11000 times (h-index of 52) in Google Scholar. He is the editor of four books on BMPs published by Birkhauser (Springer) Verlag in 2002, 2004, 2008 and 2017.

Vukicevic is recognized as a leader in regeneration of tissues by bone morphogenetic proteins (BMPs), specifically bone, cartilage and kidney regeneration. Since the discovery of BMPs in the late 80s Vukicevic significantly contributed from basic discoveries to clinical applications of BMPs which are today commercially used as first human recombinant proteins for accelerating and inducing bone formation in patients with skeletal defects. As a visiting scientist at NIH (1988-1994) he discovered that bone cells recognize discrete domains of laminin and collagen type IV which influence their differentiation and proliferation, suggesting that in vivo smallest blood vessels comprising only of basement membranes regulate bone growth and repair via stimulating specific cell receptors and providing to bone cells growth factors bound to type IV collagen, in particular TGF β 1, EGF and PDGF. In collaboration with biotechnology (Genzyme Corp., Creative Biomolecules, Stryker Biotech) and pharmaceutical (Pfizer Inc., Wyeth Pharmaceuticals) companies Vukicevic contributed to the discovery of new drugs and to execution of successful clinical trials. Vukicevic and colleagues found that the thyroid stimulating hormone (TSH) released by the pituitary gland directly regulates the bone volume without affecting the thyroid gland activity. In collaboration with scientists from Harvard Medical School, his group significantly contributed to discoveries regarding iron regulation with BMP6 using Bmp6 $^{-/-}$ mice and recombinant BMP6 produced in his laboratory for the Osteogrow project. The discovery that whole blood derived coagulum serves as a biocompatible carrier for osteogenic proteins led to clinical testing of a new BMP based bone implant OSTEOGROW supported by a FP7 HEALTH collaborative program coordinated by Vukicevic (7 states, 11 partners, 5.9 mil €), the project which was recently successfully finalized. Since January 2018 he is coordinating the newly approved program OSTEOproSPINE funded from HORIZON2020 (6 states, 13 partners, 6 mil €) to test Osteogrow safety and efficacy in patients with lumbar back pain. Since 2015 he coordinates the Scientific Center of Excellence for Regenerative Medicine funded via European regional funds with the aim to create new scientific evidence as a basis for better patient health care and therapeutic possibilities.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 1991 - full professor

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Grgurevic L, Macek B, Healy DR, Brault AL, Erjavec I, Cipic A, Grgurevic I, Rogic D, Galesic K, Brkljacic J, Stern-Padovan R, Paralkar VM, Vukicevic S. Circulating bone morphogenetic protein 1-3 isoform increases renal fibrosis. *Journal of the American Society of Nephrology* 22:681-9, 2011.

2. Grgurevic L, Macek B, Mercep M, Jelic M, Smoljanovic T, Erjavec I, Dumic-Cule I, Prgomet S, Durdevic D, Vnuk D, Lipar M, Stejskal M, Kufner V, Brkljacic J, Maticic D, Vukicevic S. Bone morphogenetic protein (BMP)1-3 enhances bone repair. **Biochemical and Biophysical Research Communications** 408:25-31, 2011.
3. Corradini E, Schmidt PJ, Meynard D, Garuti C, Montosi G, Chen S, Vukicevic S, Pietrangelo A, Lin HY, Babitt JL. BMP6 treatment compensates for the molecular defect and ameliorates hemochromatosis in Hfe knockout mice. **Gastroenterology** 139:1721-9, 2010.
4. Song K, Krause C, Shi S, Patterson M, Sutto R, Grgurevic L, Vukicevic S, van Dinther M, Falb D, ten Dijke P, Alaoui-Ismaili MH. Identification of a key residue mediating bone morphogenetic protein (BMP)-6 resistance to noggin inhibition allows for engineered BMPs with superior-agonist activity. **Journal of Biological Chemistry** 285:12169-80, 2010.
5. Andriopoulos Jr B, Corradini E, Xia Y, Faasse SA, Chen S, Grgurevic L, Knutson MD, Pietrangelo A, Vukicevic S, Lin HY, Babitt JL. BMP-6 is a Key Endogenous Regulator of Hepcidin Expression and Iron Metabolism. **Nature Genetics** 41:482-487, 2009.
6. Vukicevic S, Simic P, Grgurevic L, Borovecki F, Sampath K. Systemic administration of bone morphogenetic proteins. In: Bone Morphogenetic Proteins: From Local to Systemic Therapeutics (Editors: Vukicevic S, Sampath TK), PIR Series, **Birkhauser Verlag AG**, Basel, Boston, Berlin, pp 317-337, 2008.
7. Vukicevic S, Sampath TK (editors). Bone Morphogenetic Proteins: From Local to Systemic Therapeutics. PIR Series, **Birkhauser Verlag AG**, Basel, Boston, Berlin, 2008.
8. Pecina M, Vukicevic S (editors). Biological regeneration of bone, cartilage and tendon [special issue]. **International Orthopaedics** 31(6), 2007.
9. Grgurevic L, Macek B, Durdevic D, Vukicevic S. Detection of bone and cartilage-related proteins in plasma of patients with a bone fracture using liquid chromatography-mass spectrometry. **International Orthopaedics** 31:743-751, 2007.
10. Simic P, Buljan Culej J, Orlic I, Grgurevic L, Draca N, Spaventi R, Vukicevic S. Systemically administered bone morphogenetic protein-6 restores bone in aged ovariectomized rats by increasing bone formation and suppressing bone resorption. **Journal of Biological Chemistry** 281:25509-21, 2006.
11. Anticevic D, Jelic M, Vukicevic S. Treatment of a congenital pseudarthrosis of the tibia by osteogenic protein-1 (bone morphogenetic protein-7): a case report. **Journal of Pediatric Orthopaedics B** 15:220-1, 2006.
12. Bilic R, Simic P, Jelic M, Stern-Padovan R, Dodig D, Pompe H, Martinovic S, Ivankovic D, Pecina M, Vukicevic S. Osteogenic protein-1 (BMP-7) accelerates healing of scaphoid non-union with proximal pole sclerosis. **International Orthopaedics** 30:128-34, 2006.
13. Simic P, Vukicevic S. Bone morphogenetic proteins in development and homeostasis of kidney. **Cytokine and Growth Factor Reviews** 16:299-308, 2005.
14. Borovecki F, Simic P, Grgurevic L, Vukicevic S. BMPs in regeneration of kidney. In: Bone Morphogenetic Proteins: Regeneration of Bone and Beyond (Editors: Vukicevic S, Sampath TK), PIR Series, **Birkhauser Verlag AG**, Basel, Boston, Berlin, pp 213-244, 2004.
15. Simic P, Vukicevic S. BMPs in development. In: Bone Morphogenetic Proteins: Regeneration of Bone and Beyond (Editors: Vukicevic S, Sampath TK), PIR Series, **Birkhauser Verlag AG**, Basel, Boston, Berlin, pp 73-108, 2004.
16. Martinovic S, Simic P, Borovecki F, Vukicevic S. Biology of Bone Morphogenetic Proteins. In: Bone Morphogenetic Proteins: Regeneration of Bone and Beyond (Editors: Vukicevic S, Sampath TK), PIR Series, **Birkhauser Verlag AG**, Basel, Boston, Berlin, pp 45-72, 2004.

- 17.Paralkar VM, Grasser WA, Riccardi KA, Thompson DD, Vukicevic S. Bone Healing: Bone Morphogenetic Proteins and beyond. In: Bone Morphogenetic Proteins: Regeneration of Bone and Beyond (Editors: Vukicevic S, Sampath TK), PIR Series, **Birkhauser Verlag AG**, Basel, Boston, Berlin, pp 293-304, 2004.
- 18.Mihelic R, Pecina M, Jelic M, Zoricic S, Kusec V, Simic P, Bobinac D, Lah B, Legovic D, Vukicevic S. BMP-7 (OP-1) promotes tendon graft integration in anterior cruciate ligament reconstruction in sheep. **American Journal of Sports Medicine** 32:1619-1625, 2004.
- 19.Maric I,, Poljak Lj, Zoricic S, Bobinac D, Bosukonda D, Sampath TK, Vukicevic S. BMP-7 reduces the severity of colon tissue damage and accelerates the healing of inflammatory bowel disease in rats. **Journal of Cellular Physiology** 196:258-264, 2003.
- 20.Pecina M, Jelic M, Martinovic S, Haspl M, Vukicevic S. Articular cartilage repair: the role of bone morphogenetic proteins. **International Orthopaedics (SICOT)** 26:131-136, 2002.
- 21.Paralkar VM, Grasser W, Baumann A, Castleberry T, Owen T, Vukicevic S. Prostate-derived factor and growth and differentiation factor-8: Newly discovered members of the TGF-beta superfamily. In: Bone Morphogenetic Proteins: From Laboratory to Clinical Practice (Editors: Vukicevic S, Sampath TK), PIR Series, **Birkhauser Verlag AG**, Basel, Boston, Berlin, pp 19-30, 2002.
- 22.Jelic M, Pecina M, Haspl M, Brkic A, Vukicevic S. BMPs in articular cartilage repair. In: Bone Morphogenetic Proteins: From Laboratory to Clinical Practice (Editors: Vukicevic S, Sampath TK), PIR Series, **Birkhauser Verlag AG**, Basel, Boston, Berlin, pp 249-262, 2002.
- 23.Martinovic S, Borovecki F, Sampath TK, Vukicevic S. Biology of bone morphogenetic proteins. In: Bone Morphogenetic Proteins: From Laboratory to Clinical Practice (Editors: Vukicevic S, Sampath TK), PIR Series, **Birkhauser Verlag AG**, Basel, Boston, Berlin, pp 87-119, 2002.
- 24.Borovecki F, Basic N, Jelic M, Rogic D, Dorai H, Stavljenic-Rukavina A, Sampath TK, Vukicevic S. The role of bone morphogenetic proteins in kidney development and repair. In: Bone Morphogenetic Proteins: From Laboratory to Clinical Practice (Editors: Vukicevic S, Sampath TK), PIR Series, **Birkhauser Verlag AG**, Basel, Boston, Berlin pp 263-288, 2002.
- 25.Jelic M, Pecina M, Haspl M, Kos J, Taylor K, Maticic D, McCartney J, Yin S, Rueger D, Vukicevic S. Regeneration of articular cartilage chondral defects by osteogenic protein-1 (bone morphogenetic protein-7) in sheep. **Growth Factors** 19:101-113, 2001.
- 26.Vukicevic S, Basic V, Rogic D, Basic N, Shih MS, Shepard A, Jin D, Dattatreymurthy B, Jones W, Dorai H, Ryan S, Griffiths D, Maliakal J, Jelic M, Pastorcic M, Stavljenic A, Sampath TK. Osteogenic protein-1 (bone morphogenetic protein-7) reduces severity of injury after ischemic acute renal failure in rat. **Journal of Clinical Investigation** 102:202-214, 1998.
- 27.Vukicevic S, Kopp J.B, Luyten, FP, Sampath TK. Induction of nephrogenic mesenchyme by osteogenic protein 1 (bone morphogenetic protein 7). **Proceedings of the National Academy of Sciences of the USA** 93:9021-9026, 1996.
- 28.Helder MN, Özkaynak E, Sampath TK, Luyten FP, Oppermann H, Vukicevic S. Expression pattern of osteogenic protein-1 (bone morphogenetic protein-7) in human and mouse development. **Journal of Histochemistry and Cytochemistry** 43:1035-1044, 1995.
- 29.Chang SC, Hoang B, Thomas TJ, Vukicevic S, Luyten FP, Ryba NJP, Kozak CA, Reddi AH, Moos M. Cartilage derived morphogenetic proteins, New members of the TGF-beta superfamily predominantly expressed in long bones during human embryonic development. **Journal of Biological Chemistry** 269:28227-28234, 1994.
- 30.Vukicevic S, Luyten FP, Kleinman HK, Reddi AH. Differentiation of canalicular cell processes in bone cells by basement membrane matrix components: Regulation by discrete domains of laminin. **Cell** 63:437-445, 1990.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Vukicevic S, Oppermann H, Verbanac D, Jankolija M, Popek I, Curak J, Brkljacic J, Pauk M, Erjavec I, Francetic I, Dumic-Cule I, Jelic M, Durdevic D, Vlahovic T, Novak R, Kufner V, Bordukalo Niksic T, Kozlovic M, Banic Tomisic Z, Bubic-Spoljar J, Bastalic I, Vikic-Topic S, Peric M, Pecina M, Grgurevic L. The clinical use of bone morphogenetic proteins (BMPs) revisited: A novel BMP6 biocompatible carrier device OSTEOGROW for bone healing. **Int Orthop** 38:635-47, 2014.
2. Pecina M, Vukicevic S. Tissue engineering and regenerative orthopaedics (TERO). **Int Orthop** 38:1757-60, 2014.
3. Pecina M, Vukicevic S (editors). Tissue engineering and regenerative orthopaedics (TERO) [special issue]. **Int Orthop** 38(9), 2014.
4. Dumic-Cule I, Brkljacic J, Rogic D, Bordukalo Niksic T, Tikvica Luetic A, Draca N, Kufner V, Trkulja V, Grgurevic L, Vukicevic S. Systemically available bone morphogenetic protein two and seven affect bone metabolism. **Int Orthop** 38:1979-85, 2014.
5. Jelic M, Grgurevic L, Vukicevic S. Scaffold-free Endogenous Healing of the Articular Cartilage Lesion. In: Sports Injuries, Springer Verlag, 2015.
6. Peric M, Dumic-Cule I, Grcevic D, Matijasic M, Verbanac D, Paul R, Grgurevic L, Trkulja V, Bagi CM, Vukicevic S. The rational use of animal models in the evaluation of novel bone regenerative therapies. **Bone** 70:73-86, 2015.
7. Pauk M, Grgurevic L, Brkljacic J, Kufner V, Bordukalo-Niksic T, Grabusic K, Razdorov G, Rogic D, Zuvic M, Oppermann H, Babitt J, Lin H, Volarevic S, Vukicevic S. Exogenous BMP7 corrects the plasma iron overload and bone loss in *Bmp6*^{-/-} mice. **Int Orthop** 39:161-72, 2015.
8. Dumic-Cule I, Pecina M, Jelic M, Jankolija M, Popek I, Grgurevic L, Vukicevic S. Biological aspects of segmental bone defects management. **Int Orthop** 39:1005-11, 2015.
9. Vukicevic S, Grgurevic L. Bone morphogenetic proteins in inflammation. In: Compendium of Inflammatory Diseases, Springer Verlag, pp 229-242, 2016.
10. Grgurevic L, Christensen GL, Schulz TJ, Vukicevic S. Bone morphogenetic proteins in inflammation, glucose homeostasis and adipose tissue energy metabolism. **Cytokine Growth Factor Rev** 27:105-1810, 2016.
11. Benn A, Bredow C, Casanova I, Vukicevic S, Knaus P. VE-cadherin facilitates BMP-induced endothelial cell permeability and signaling. **J Cell Sci** 129:206-18, 2016. (doi: 10.1242/jcs. 179960)
12. Erjavec I, Bordukalo-Niksic T, Brkljacic J, Grcevic D, Mokrovic G, Kesic M, Rogic D, Zavadovski W, Paralkar V, Grgurevic L, Trkulja V, Cicin-Sain L, Vukicevic S. Constitutively elevated blood serotonin is associated with bone loss and type 2 diabetes in rats. **PLoS One** 11:e0150102, 2016. (
13. Vukicevic S. Current Challenges and Hurdles in New Drug Development. **Clin Ther** 38(10S):e3, 2016. (doi: 10.1016/j.clinthera.2016.07.019)
14. Vukicevic S, Sampath TK (editors). Bone Morphogenetic Proteins: Systems Biology Regulators. PIR Series, **Springer International Publishing** 2017.
15. Grgurevic L, Erjavec I, Dumic-Cule I, Bordukalo-Niksic T, Pauk M, Trkulja V, Maticic D, Pecin M, Lipar M, Peric M, Vukicevic S. Osteogrow: A novel bone graft substitute for orthopedic reconstruction. In: Vukicevic S, Sampath TK (editors). Bone Morphogenetic Proteins: Systems Biology Regulators. PIR Series, **Springer International Publishing** pp. 215-228, 2017.
16. Sampath TK, Grgurevic L, Vukicevic S. Bone morphogenetic protein-7 and its role in acute kidney injury and chronic kidney failure. In: Vukicevic S, Sampath TK (editors). Bone Morphogenetic Proteins: Systems Biology Regulators. PIR Series, **Springer International Publishing** pp. 271-291, 2017.
17. Grgurevic L, Dumic-Cule I, Vukicevic S. BMPs in inflammation. In: Vukicevic S, Sampath TK (editors). Bone Morphogenetic Proteins: Systems Biology Regulators. PIR Series, **Springer International Publishing** pp. 357-366, 2017.

- 18.Grgurevic L, Pecina M, Vukicevic S, Marshall R. Urist and the discovery of bone morphogenetic proteins. *Int Orthop* 41:1065-1069, 2017.
- 19.Vukicevic S, Grgurevic L, Pecina M. Clinical need for bone morphogenetic proteins. *Int Orthop* 41:2415-2416, 2017.
- 20.Grgurevic L, Erjavec I, Grgurevic I, Dumic-Cule I, Brkljacic J, Verbanac D, Matijasic M, Cipic Paljetak H, Novak R, Plecko M, Bubic J, Rogic D, Kufner V, Pauk M, Bordukalo Niksic T, Vukicevic S. Systemic inhibition of BMP1-3 decreases progression of CCl4-induced liver fibrosis in rats. *Growth Factors* 35:201-215, 2017. (doi: 10.1080/08977194.2018.1428966)
- 21.Eddowes LA, Al-Hourani K, Ramamurthy N, Frankish J, Baddock HT, Sandor C, Ryan JD, Fusco DN, Arezes J, Giannoulitou E, Boninsegna S, Chevaliez S, Owens BMJ, Chi Sun C, Fabris P, Giordani MT, Martines D, Vukicevic S, Crowe J, Lin HY, Rehwinkel J, McHugh PJ, Binder M, Babbit JL, Chung RT, Lawless MW, Armitage AE, Webber C, Klenerman P, Drakesmith H. Antiviral activity of bone morphogenetic proteins and activins. *Nat Microbiol*, doi: 10.1038/s41564-018-0301-9
- 22.Dumic-Cule I, Peric M, Kucko L, Grgurevic L, Pecina M, Vukicevic S. Bone morphogenetic proteins in fracture repair. *Int Orthop* 42:2619-2626, 2018. doi: 10.1007/s00264-018-4153-y
- 23.Grgurevic L, Pecin M, Erjavec I, Capag H, Pauk M, Kufner V, Lipar M, Bubic Spoljar J, Bordukalo-Niksic T, Maticic D, Oppermann H, Peric M, Sampath TK, Vukicevic S. Recombinant human bone morphogenetic protein 6 delivered within autologous blood coagulum restores critical size segmental defects of ulna in rabbits. *J Bone Miner Res Plus*, doi: 10.1002/jbm4.10085
- 24.Pauk M, Bordukalo-Niksic T, Brkljacic J, Paralkar V, Brault AL, Dumic-Cule I, Borovecki F, Grgurevic L, Vukicevic S. A novel role of bone morphogenetic protein-6 (BMP-6) in glucose homeostasis. *Acta Diabetologica*, doi: 10.1007/s00592-018-1265-1
- 25.Vukicevic S, Grgurevic L, Erjavec I, Oppermann H, Pecin M, Bordukalo-Niksic T, Stokovic N, Lipar M, Vnuk D, Capak H, Bubic Spoljar J, Farkas V, Maticic D, Peric M, Windhager R, Sampath KT, Gupta M. Autologous Blood Coagulum is a native carrier for BMP6 to induce new bone formation and promote posterolateral lumbar spine fusion in Rabbits and Sheep. *J Bone Joint Surg*, in press.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. "Reproductive and regenerative medicine – research of new platforms and potentials" part of the Croatian Scientific Center of Excellence in Regenerative Medicine, 2017-2022 (European Union through the European Regional Development Fund) [37.999.993,39 HRK (37.569.493,39 HRK financed by EU)]
2. "OSTEOproSPINE - Novel Bone Regeneration Drug "Osteogrow": Therapeutic Solution for Lumbar Back Pain" 2017 – 2022 (European Commission, HORIZON 2020 program, Grant Agreement No. 779340) [6.000.000,00 €]
3. BMP6Fe3 - Development of novel antibodies (biologics) that will selectively inhibit hepcidin expression in the liver for the Treatment of Anemia of Chronic Disease 2017 – 2021 (Croatian Science Foundation) [133.000,00 €]
4. Croatian Scientific Centre of Excellence for Regenerative Medicine 2015-2019 (European Union through the European Regional Development Fund) [4.200.000,00 €]
5. "OSTEOGROW - Novel Bone Morphogenetic Protein 6 Biocompatible Carrier Device for Bone Regeneration" 2012 – 2017 (European Commission, FP7 HEALTH program, Grant Agreement No. 279239) [5.683.000,00 €]
6. "A novel anabolic targeted therapy for osteoporosis: BONE-BIS" 2012-2014 (Croatian Science Foundation) [195.000,00 €]

7. "New interventional procedure by introducing technology improved cardiac function after myocardial infarction" 2012 -2013 (BICRO PoC 4 project) [25.000,00 €]
8. "Bone morphogenetic protein-1 isoforms in bone regeneration" UKF Research Cooperability Program – "Crossing Borders" Grant 2010-2012 (Ministry of Science, Education and Sport and UKF) [180.000,00 €]
9. "BMP in kidney development" (NIH grant joint USA-Croatian scientific board)
10. TEST project "Osteoinductive molecule" 2004-2006 (Ministry of Science, Education and Sport and Institute for Technology) [90.000,0 €]
11. "BMP-6 efficacy and mode of action in osteoporosis treatment" 2002-2006 (Ministry of Science, Education and Sport) [120.000,00 €]
12. "Prostaglandin mode of action in bone formation" 2002-2004 (Pfizer Inc., USA – University of Zagreb School of Medicine) [90.00,00 €]
13. "Oral use of BMP for systemic bone growth" 1999-2003 (PLIVA—School of Medicine, University of Zagreb) [700.000,00 €]
14. "Cartilage regeneration by usage of BMP-7 " 1997-2000 (Stryker Biotech, USA – University of Zagreb School of Medicine) [170.000,00 €]
15. "BMP-7 (OP-1) in protection and treatment of kidney diseases" 1996-2002 (Ministry of Science, Education and Sport) [120.000,00 €]
16. "The role of extracellular matrix in cartilage and bone morphogenesis" 1990-1995 (Ministry of Science, Education and Sport) [60.000,00 €]

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. "Reproductive and regenerative medicine – research of new platforms and potentials" part of the Croatian Scientific Center of Excellence in Regenerative Medicine, 2017-2022 (European Union through the European Regional Development Fund) [37.999.993,39 HRK (37.569.493,39 HRK financed by EU)]
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3. BMP6Fe3 - Development of novel antibodies (biologics) that will selectively inhibit hepcidin expression in the liver for the Treatment of Anemia of Chronic Disease 2017 – 2021 (Croatian Science Foundation) [133.000,00 €]
4. Croatian Scientific Centre of Excellence for Regenerative Medicine 2015-2019 (European Union through the European Regional Development Fund) [4.200.000,00 €]
5. "OSTEOGROW - Novel Bone Morphogenetic Protein 6 Biocompatible Carrier Device for Bone Regeneration" 2012 – 2017 (European Commission, FP7 HEALTH program, Grant Agreement No. 279239) [5.683.000,00 €]

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 31

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: associate professor Miroslav Vukić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine,
University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Pathophysiology of the brain and CSF

BIOGRAPHY

Miroslav Vukić was born on 20.04.1966 in Karlovac where he attended and gained elementary school education. He has completed secondary school education at the Pedagogical Education Centre in Zagreb, today's V high school. In 1991 he graduated from the Faculty of Medicine in Zagreb and from 1992 until 2002 he was employed at the Clinical Hospital "Sestre milosrdnice" in Zagreb first as a neurosurgical specialist and later from 1999 as a neurosurgeon specialist. From September 2002 until today she has been permanently employed at KBC Zagreb Neurosurgery Clinic. Since 2011, he is the Head of the Institute for Spinal Neurosurgery and Traumatology of the Clinic for Neurosurgery of KBC Zagreb.

The degree of master of science was obtained in 1997, and he became doctor of science in 2002. In 2003 he was elected for the cumulative professor at the Faculty of Medicine, Josip Juraj Strossmayer University of Osijek, and in that same year she became the head of the Neurosurgery Department of Neurosurgery MF Osijek and the holder of the Neurosurgery course, which she is doing today. From 2004-2014. he served as Head of Department for Neurosurgery at the Faculty of Medicine in Osijek, and since September 2014 he is the head of neurosurgical teaching within the Department of Surgery and Neurosurgery of MF Osijek. In 2007 he was elected as an associate professor and in 2011 he was a full professor at the Faculty of Medicine of the University of Osijek. In 2015 he was elected for the title lecturer at MF Zagreb University in Zagreb and in 2019 as a tenured associate professor.

He has been participating in the teaching of students since 1997, first of all for students at the University of Zagreb School of Dental Medicine and since 2002 she has been teaching for students at the Faculty of Medicine, University of Zagreb. From 2003-2012 she participated in the teaching of the Anatomy of the Polytechnic of Zagreb. He published 122 scientific and professional papers, of which 2 were qualified, 19 in CC, 10 in SCI publications, 37 abstracts with international indexing and 54 congressional press releases. He is the author of two books and four textbooks. He was a mentor in two doctoral dissertations and three graduate theses. He has been an independent scientific project funded by the Ministry of Science of Croatia from 2009-2015. He was the coordinator for the Republic of Croatia in two international clinical research projects co-funded by the Soros Foundation and the European Union funds.

Except in Croatia, he has been trained in international neurosurgeon facilities in Europe and the USA, and has been awarded the International Scholarship of the Congress of American Neurosurgery for 2006. He is a member of the Education Committee at the European Association of Neurosurgical Societies since 2006. Member of the International Committee of the Congress of Neurological Surgeons of America 2006-2011. and from 2009-2013. was a representative of the European Association of Neurosurgeons at the World Association of Neurosurgical Societies. In the period 2013-2017. He is also a member of the Executive Committee of the European Association of Neurosurgeons.

Prof. Vukic was elected as President of the Croatian Neurosurgical Society and the Croatian Association for Medical Examination of the Croatian Medical Association in the period 2013-2017. Deputy Chairman of the Professional Counselor of the Croatian Medical Association. He is engaged in scientific research of the physiology of cerebrospinal fluid, and in the surgical sense a narrow area of interest is his surgery of

degenerative diseases of the cervical spine, surgery of the skull base, neurocology and neurotraumatology. From his field he has held several invited lectures at home and abroad, and in 2011 he was also a visiting professor in the United States of America, Birmingham, the Federal State of Alabama in 2011.

He is married and the father of four children. In his spare time he reads historical books, dabbles in entrepreneurship and tries to play golf.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2019

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Maraković J, Orešković D, Radoš M, Vukić M, Jurjević I, Chudy D, Klarica M. Effect of osmolarity on CSF volume during ventriculo-aqueductal and ventriculo-cisternal perfusions in cats. *Neurosci Lett* 2010; 484: 93-7.

Vukić M, Walters BC, Radić A, Jurjević I, Marasanov SM, Rožanković M, Jednačak H. Hydroxyapatite Ceramics in Multilevel Cervical Interbody Fusion – Is There a Role? *Coll. Antropol* 2011, 35: Suppl. 1: 275–9.

Jednačak H, Paladino J, Miklić P, Mrak G, Vukić M, Štimac T, Klarica M. The Application of Ultrasound in Neuroendoscopic Procedures: First Results with the New Tool “NECUP-2”. *Coll. Antropol* 2011; 35 (1): 45–9.

Cervical Disc Replacement With Discover Versus Fusion In A Single Level Cervical Disc Disease: A Prospective Single Center Randomized Trial With A Minimum Two-Year Follow - Up. Rožanković M, Marasanov SM, Vukić M. *J Spinal Disord Tech.* 2014. Sep 8.

Šarac H, Hajnšek S, Bašić S, Telarović S, Markeljević J, Vukić M, Radoš Ma, Bošnjak Pašić M, Žarković K, Hof P, Šimić G: Giant cavernoma of the skull and skeletal-extraskelatal angiomatosis associated with paraproteinemia. *Translational Neuroscience* 2011, 2 (3); 265-9.

Recommendations for the management of medical complications in patients following aneurysmal subarachnoid hemorrhage. Solter VV, Roje-Bedeković M, Breitenfeld T, Supanc V, Lovrenčić-Huzjan A, Serić V, Antončić I, Basić S, Beros V, Bielen I, Soldo SB, Kadojić D, Lusić I, Maldini B, Marović A, Paladino J, Poljaković Z, Radanović B, Rados M, Rotim K, Vukić M, Zdravce D, Kes VB. *Acta Clin Croat.* 2014 Mar;53(1):113-38.

General recommendations for the management of aneurysmal subarachnoid hemorrhage. Solter VV, Breitenfeld T, Roje-Bedeković M, Supanc V, Lovrenčić-Huzjan A, Serić V, Antončić I, Basić S, Beros V, Bielen I, Soldo SB, Kadojić D, Lusić I, Maldini B, Marović A, Paladino J, Poljaković Z, Radanović B, Rados M, Rotim K, Vukić M, Zdravce D, Kes VB. *Acta Clin Croat.* 2014 Mar;53(1):139-52.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1: Stienen MN, Bartek J Jr, Czabanka MA, Freyschlag CF, Kolas A, Krieg SM, Moojen W, Renovanz M, Sampron N, Adib SD, Schubert GA, Demetriades AK, Ringel F, Regli L, Schaller K, Meling TR; EANS Young Neurosurgeons and EANS Training Committee. Neurosurgical procedures performed during residency in Europe-preliminary numbers and time trends. *Acta Neurochir (Wien).* 2019 Mar 29. doi: 10.1007/s00701-019-03888-3. [Epub ahead of print] PubMed PMID: 30927157.

2: Perin A, Galbiati TF, Gambatesa E, Ayadi R, Orena EF, Cuomo V, Riker NI, Falsitta LV, Schembari S, Rizzo S; European Neurosurgery Simulation Study Group (ENSSG), Luciano C, Cappabianca P, Meling TR, Schaller

- K, DiMeco F. Filling the gap between the OR and virtual simulation: a European study on a basic neurosurgical procedure. *Acta Neurochir (Wien)*. 2018 Nov;160(11):2087-2097.
- 3: Domazet I, Pašalić I, Nemir J, Peterković V, Vukić M. Predictors of Functional Outcome after Spinal Ependymoma Resection. *J Neurosci Rural Pract*. 2018 Jul-Sep;9(3):354-358.
- 4: Stambolija V, Miklič Bubić M, Lozić M, Gužvinac Z, Vukić M. Analgosedation With Dexmedetomidine in a Patient With Superior Vena Cava Syndrome in Neurosurgery. *J Neurosurg Anesthesiol*. 2018 Jan;30(1):79-80. doi: 10.1097/ANA.0000000000000390. PubMed PMID: 27851694.
- 5: Nemir J, Peterković V, Trninić I, Domazet I, Barić H, Vukić M. Intracranial Epidural Haematoma following Surgical Removal of a Giant Lumbosacral Schwannoma: A Case Report and Literature Review. *Pediatr Neurosurg*. 2018;53(2):89-93. doi: 10.1159/000481916. Epub 2017 Nov 11. Review. PubMed PMID: 29131086.
- 6: Rožanković M, Marasanov SM, Vukić M. Cervical Disk Replacement With Discovery Versus Fusion in a Single-Level Cervical Disk Disease: A Prospective Single-Center Randomized Trial With a Minimum 2-Year Follow-up. *Clin Spine Surg*. 2017 Jun;30(5):E515-E522.
- 7: Nikić I, Radoš M, Frobe A, Vukić M, Orešković D, Klarica M. The effects of lumboperitoneal and ventriculoperitoneal shunts on the cranial and spinal cerebrospinal fluid volume in a patient with idiopathic intracranial hypertension. *Croat Med J*. 2016 Jun 30;57(3):293-7. PubMed PMID: 27374831; PubMed Central PMCID: PMC4937228.
- 8: Maraković J, Vukić M, Radoš M, Chudy D, Klarica M, Orešković D. Monoamine Neurotransmitter Metabolite Concentration as a Marker of Cerebrospinal Fluid Volume Changes. *Acta Neurochir Suppl*. 2016;122:283-6. doi: 10.1007/978-3-319-22533-3_56. PubMed PMID: 27165922.
- 9: Solter VV, Breitenfeld T, Roje-Bedeković M, Supanc V, Lovrenčić-Huzjan A, Serić V, Antončić I, Basić S, Beros V, Bielen I, Soldo SB, Kadojić D, Lusić I, Maldini B, Marović A, Paladino J, Poljaković Z, Radanović B, Rados M, Rotim K, Vukić M, Zadravec D, Kes VB. General recommendations for the management of aneurysmal subarachnoid hemorrhage. *Acta Clin Croat*. 2014 Mar;53(1):139-52.
- 10: Solter VV, Roje-Bedeković M, Breitenfeld T, Supanc V, Lovrenčić-Huzjan A, Serić V, Antončić I, Basić S, Beros V, Bielen I, Soldo SB, Kadojić D, Lusić I, Maldini B, Marović A, Paladino J, Poljaković Z, Radanović B, Rados M, Rotim K, Vukić M, Zadravec D, Kes VB. Recommendations for the management of medical complications in patients following aneurysmal subarachnoid hemorrhage. *Acta Clin Croat*. 2014 Mar;53(1):113-38. PubMed PMID: 24974675.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Jurica Vuković, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University of Zagreb School of Medicine,
University Hospital Centre Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Liver transplantation in children

BIOGRAPHY

1979 - 84 Faculty of Medicine, University of Zagreb, doctor of medicine

1985 - 86 Postgraduate study in Clinical Pediatrics, MF, University of Zagreb

1989 - 94 specialization from pediatrics at the Pediatric Clinic MF, KBC Zagreb

1990 - 91 Postgraduate Study Pediatric Endocrinology, Diabetes and Metabolism, University of Zagreb

1991 European Summer School of Pediatric Endocrinology, Foehr Island, Germany

1991 Master of Science in Medicine, University of Zagreb

1992 Combined Postgraduate Program in Immunology and Endocrinology, Erasmus University,
Rotterdam, Netherlands

1994 Specialist examination, pediatrician

1994 - 2009 Department Physician at the Department of Pediatric MG Rehabilitation Gastroenterology
Department

1995. postgraduate course in ultrasound abdominal organs MF in Zagreb, authorized echosonographer

1996 -97 one-year scholarship of the French government for pediatric improvement hepatology, Hopital
Bicetre, Paris, France (mentor Prof. Olivier Bernard)

1998 Assistant MF at the Department of Pediatrics

1999 Secretary of the Department of Pediatrics at MF University of Zagreb

1999 secretary of the Croatian Society for Pediatric Gastroenterology, Nutrition and Hepatology

2000 one - month Training at the Department of Transplant Surgery, Childrens Hospital of Pittsburgh

2001 pediatric liver transplant team coordinator for children

2002 doctor of medicine sciences, University of Zagreb

2003 Senior Assistant MF at Pediatric Departments

2004 - 05 East Head of Neonatology and Intensive Care

2004 to 2005 co-supervisor / head of a subject's subject Liver transplantation in children of doctoral
postgraduate study in Biomedicine and Health MF, University of Zagreb

2007. assit. professor MF at the Department of Pediatrics

2008. subspecialist pediatric gastroenterologist

2009 Head of the Institute for Gastroenterology, Hepatology and Nutrition

2009 Coordinator of the College of Pediatrics at the English Undergraduate Study

2011 Pediatric Gastroenterology at Postgraduate Specialist

Pediatric MF University of Zagreb

2012. Associate Professor MF at the Department of Pediatrics

2014. leader of the liver transplant team in children licensed by the Ministry of Health of the Republic of Croatia

2017. Head of the Department of Pediatrics at the Faculty of Medicine of the University of Zagreb

In 2017, Head of the Pediatric Clinic of Zagreb University of Zagreb and MF University of Zagreb

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2012

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- Vuković J, Grizelj Šovagović R. Nekrotizirajući enterokolitis – od bazičkih istraživanja do kliničkih ispitivanja. U Neonatologija 2003. Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2003: 42-6.
- Vuković J. Poremećeni hepatogram. U Votava-Raić A, Marinović B, Dumić M, ur. Pedijatrija danas. Nespecifični simptomi u pedijatrijskoj dijagnostici-odabrana poglavlja. Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2004: 94-7.
- Vuković J, Votava-Raić A. Prehrana nedonoščadi vrlo niske rodne težine. U Neonatologija 2004. Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2004: 75-8.
- Vuković J. Novorođenačka kolestaza. U Batinica S, ur. Novorođenačka žutica – kirurško-pedijatrijski aspekti. Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2004: 9-14.
- Vuković J, Omerza L, Senečić-Čala I, Tješić-Drinković D, Dujšin M, Votava-Raić A. Značenje prolongiranog ikterusa u ranoj dojenačkoj dobi. U Votava-Raić A, Dumić M, Tješić-Drinković D, ur. Dojenče. Trajni medicinski izazov-odabrana poglavlja. Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2006: 49-53.
- Vuković J, Senečić-Čala I, Dujšin M. Bolesti hepato-bilijarnog sustava. U Votava-Raić A, Dumić M, Tješić-Drinković D, ur. Pedijatrija danas. Dijete s dugotrajnim bolovima u trbuhu-uvijek prisutan problem. Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2006: 98-100.
- Vuković J, Omerza L, Senečić-Čala I, Tješić-Drinković D, Dujšin M, Votava-Raić A. Kronični hepatitis. U Votava-Raić A, Dumić M, Tješić-Drinković D, ur. Dijete s kroničnom bolešću. Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2007: 39-47.
- Vuković J. Specifičnosti kroničnog virusnog hepatitisa u djece. U Kronične bolesti jetre u djece. Medicinski fakultet Sveučilišta u Zagrebu 2008: 39-41.
- Vuković J. Kolestaza uzrokovana potpunom parenteralnom prehranom. U Neonatologija 2008. Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2008: 54-57.
- Vuković J, Batinica S. Transplantacija jetre. U Votava-Raić A, Dumić M, Tješić-Drinković D, ur. Pedijatrija danas. Nove spoznaje o starim temama - 20 godina poslije, Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2008; 81-4.
- Vuković J, Omerza L, Senečić-Čala I, Tješić-Drinković D, Dujšin M, Votava-Raić A. Koliko traje fiziološka žutica? U Votava-Raić A, Dumić M, Tješić-Drinković D, Vuković J, ur. Česti poremećaji probavnog sustava u djece - pristup u praksi. Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2009: 1-5.
- Vuković J, Omerza L, Senečić-Čala I, Tješić-Drinković D, Dujšin M, Votava-Raić A. Krvarenje iz probavnog sustava. U Votava-Raić A, Dumić M, Tješić-Drinković D, Vuković J, ur. Česti poremećaji

probavnog sustava u djece - pristup u praksi. Medicinski fakultet Sveučilišta u Zagrebu, Zagreb 2009: 107-110.

- Vuković J. Povraćanje - često recidivirajuće, rijetko cikličko i obično pomalo acetonemičko. U Barić I, ur. Nasljedne metaboličke bolesti 2010. Česti pedijatrijski problemi - metabolički pristup. Medicinski fakultet Sveučilišta u Zagrebu, 2010: 56-60.
- Vuković J, Omerza L, Senečić-Čala I, Tješić-Drinković D, Dujšin M, Votava-Raić A. Kronični virusni hepatitis - pogled pedijatra. U Tješić-Drinković D, Vuković J, Barišić N, ur. Prepoznamo jetrene bolesti na vrijeme. Medicinski fakultet Sveučilišta u Zagrebu 2010: 77-80
- Vuković J, Barić I. Detaljna obrada bolesnika s povišenim aminotransferazama - pro et contra. U Tješić-Drinković D, Vuković J, Barišić N, ur. Prepoznamo jetrene bolesti na vrijeme. Medicinski fakultet Sveučilišta u Zagrebu 2010: 137-140.
- Vuković J, Omerza L. Brojna lica i dijagnostički izazovi Wilsonove bolesti. U Barić I, ur. Nasljedne metaboličke bolesti 2011. Djeca, metali i nove bolesti. Medicinski fakultet Sveučilišta u Zagrebu, 2011: 68-70.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Vuković J, Grizelj R, Bojanić K, Čorić M, Luetić T, Batinica S, Kujundžić-Tiljak M, Schroeder DR, Sprung J. Ductal plate malformation in patients with biliary atresia. *Eur J Pediatr*. 2012;171(12):1799-804.

Cullinane AR, Straatman-Iwanowska A, Zaucker A, Wakabayashi Y, Bruce CK, Luo G, Rahman F, Gurakan F, Utine E, Ozkan TB, Denecke J, Vukovic J, Di Rocco M, Mandel H, Cangul H, Matthews RP, Thomas SG, Rappoport JZ, Arias IM, Wolburg H, Knisely AS, Kelly DA, Muller F, Maher ER, Gissen P. Mutations in VIPAR cause arthrogryposis, renal dysfunction and cholestasis syndrome phenotype with defects in epithelial polarization. *Nat Genet* 2010; 42(4): 303-12.

Grizelj R, Vuković J, Šarić D, Luetić T. Giant Mycotic Right Atrial Thrombus Due to *Candida dubliniensis* Septicemia in a Premature Infant. *Pediatr Infect Dis J* 2010; 29(8): 785-6.

Grizelj R, Vuković J, Novak M, Batinica S. Biliary atresia: the Croatian experience 1992-2006. *Eur J Pediatr* 2010; 169: 1529-1534.

Grizelj R, Vuković J, Bilić E, Štern-Padovan R. Massive retroperitoneal haemorrhage in a neonate with severe haemophilia A. *Haemophilia*. 2011; 17: 547-8.

Grgurić J, Hegeduš-Jungvirth M, Palčevski G, Mišak Z, Peršić M, Barbarić I, Dujšin M, Jelić N, Jurčić Z, Kolaček S, Pinotić Lj, Radman D, Tješić-Drinković D, Vuković J. Dijagnostički postupnik za recidivirajuću abdominalnu bol u djece. *Paediatr Croat* 2008; 52: 111-5.

Malčić I, Vidaković M, Kniewald H, Dilber D, Vuković J, Dasović-Buljević A. Mowat-Wilsonov sindrom. *Pediatr Croat* 2010; 54: 105-9.

Vukovic J. Autoimmune liver disease: children vs. adults. *Med Razgl* 2011, 50 (S5): 53-7.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

- chapters in 4 university course books.
- Five published works in co-authorship with the student.
- Twelve published works in co-authorship with a student who has completed a doctoral degree
- More than a hundred press releases at scientific conferences, of which about forty are international. Six invited lectures at international conferences.
- co-editor of 5 publications from the series of Pediatrics conferences today.
- A reviewer of twenty manuscripts for journals (Liječnički vjesnik, Peditria Croatica, Journal of Inherited Metabolic Diseases, Acta Medica Academica (BiH), Acta Medica Croatica, Fluminensis Medicine)
- Nearly two decades of collaborator in the projects of prof. Emertin M. Dumić.
- Since 2017, the Head of the Foundation for the Project of Cholestatic Disorders in Children.
- For years, research associate and regional expert in the EuroWilson project.
- Collaborative researcher in several international projects and trials (last - Prof. Tribelli Trieste, Italy - prevalence of phenotypic benign non-conjoint hyperbilirubinemia in different parts of Europe)

How to measure health?

The inherited metabolic and other monogenic diseases of children

A common molecular basis for the etiopathogenesis of bone disorders in humans

Hepatocelular tumors

Celiac disease in children: primary prevention and pathogenesis of chromosomal instability

Diagnosis and treatment of lymphoma

Longitudinal study on the growth and development of pre-school children in Croatia

Male and female sexual system: development, normal histophysiology and infertility

Endocrine Inheritance In Children

Determinants and early diagnosis of motor neuronal diseases in the Croatian population

Application of the principle of medicine founded on scientific knowledge in the general hospital

Malignant diseases in children

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

How to measure health?

The inherited metabolic and other monogenic diseases of children

A common molecular basis for the etiopathogenesis of bone disorders in humans

Hepatocelular tumors

Celiac disease in children: primary prevention and pathogenesis of chromosomal instability

Diagnosis and treatment of lymphoma

Longitudinal study on the growth and development of pre-school children in Croatia

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Endocrine Inheritance In Children

Determinants and early diagnosis of motor neuronal diseases in the Croatian population



Application of the principle of medicine founded on scientific knowledge in the general hospital

Malignant diseases in children

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 0

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Professor Mario Vukšić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine University of Zagreb,
Croatian Institute for Brain Research (CIBR)

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Synaptic plasticity and mind

BIOGRAPHY

Education/Training

1997 MD degree, School of Medicine University of Zagreb (SMZ)
1998–2000 Postgraduate study *Medical Sciences-Biomedicine*, SMZ
2002 MSci Thesis, ***Perinatal development of pyramidal neurons layer IIIc in prefrontal cortex in children with Down syndrome***, SMZ
2003–2005 Graduate Program *Neural plasticity: Molecules, Structures, Functions*, School of Medicine University of Frankfurt, Germany
2006 PhD Thesis, ***Time-dependent changes of granule cell dendritic plasticity in the mouse following entorhinal cortex lesion***, SMZ

Positions & Employment

1998–2007 Research Assistant, Croatian Institute for Brain Research (CIBR), SMZ
2001–2002 Research Assistant, *Neuroembryonic Research Laboratory*, University of Rostock, Germany
2003–2005 Postdoctoral Fellow, *Institute of Clinical Neuroanatomy*, University of Frankfurt, Germany
2007–2012 Assistant Professor of Neuroscience, CIBR, SM
2008 Head of Laboratory for Confocal Microscopy, CIBR, SMZ
2012 Associate Professor of Neuroscience, CIBR, SMZ
2013–2015 Acting director of CIBR
2015–2017 Deputy director of CIBR
2019 Visiting Professor, *Institute of Anatomy*, University of Frankfurt, Germany
2019 Full Professor of Neuroscience & Anatomy, CIBR, SMZ

Teaching

1998 *Neuroscience*, SMZ
1999–2001 *Neuroscience*, Faculty of Psychology, Croatian Studies, University of Zagreb
2001–2002 *Anatomy, Histology and Embryology* at the School of Medicine University of Rostock, Germany
2005 Postgraduate study *Medical Sciences-Biomedicine*, SMZ
2005 *Fundamentals of neuroscience*, Medical studies in English, SMZ
2007 *Neurophysiotherapy*, University of Applied Health Studies in Zagreb
2007 *PhD Programme in Neuroscience*, SMZ
2019 *Anatomy, Histology and Embryology* at the School of Medicine in Frankfurt, Germany

Other Experience & Professional Memberships

2007 Treasurer of *Croatian Society for Neuroscience*
2007–2013 Vice-Coordinator of *PhD Programme in Neuroscience*, SMZ
2009–2013 Head of *Centre for Clinical Research in Neuroscience*, CIBR
2013 Coordinator of *PhD Programme in Neuroscience*, SMZ

Scientific interests

Human neuroanatomy, developmental neurobiology, neurobiological basis of mental retardation, human hippocampal development, brain plasticity, dendritic and spine reorganization following injury, dentate gyrus plasticity in rodent brain

Methodology

Immunocytochemistry, neuromorphometry, 3D-reconstruction of neurons using confocal microscopy, stereotaxic neurosurgical operations, neurophysiological techniques (extracellular recordings), transection of the perforant pathway in experimental animals *in vivo* (entorhinal cortex lesion)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 22. January 2019.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Vukšić M, Petanjek Z, Rašin R, Kostović I (2002) Perinatal growth of prefrontal layer III pyramids in Down's syndrome. *Pediatric Neurology* 27: 36-38. (IF=1.505; Clinical Neurology Q3, Pediatrics Q2)

Schwarzacher SW*, Vukšić M*, Haas CA, Burbach GJ, Sloviter RS and Deller T (2006) Neuronal hyperactivity induces astrocytic expression of neurocan in the adult rat hippocampus. *Glia* 53:704-714. (IF=6.031; Neurosciences Q1)
*equally contribution

Kienzler F, Jedlicka P, Vukšić M, Deller T, Schwarzacher SW (2006) Excitotoxic hippocampal neuron loss following sustained electrical stimulation of the perforant pathway in the mouse. *Brain Research* 1085:195-198. (IF=2.843; Neurosciences Q2)

Vukšić M, Del Turco D, Bas-Orth C, Burbach GJ, Feng G, Müller CM, Schwarzacher SW, Deller T (2008). 3D-Reconstruction and functional properties of GFP-positive and GFP-negative granule cells in the fascia dentata of the Thy1-GFP mouse. *Hippocampus* 18(4):364-75. (IF=5.492; Neurosciences Q1)

Vukšić M, Del Turco D, Vlachos A, Schuldt G, Müller CM, Schneider G, Deller T (2011) Unilateral entorhinal denervation leads to long-lasting dendritic alterations of mouse hippocampal granule cells. *Experimental Neurology* 230(2):176–185. (IF=4.699; Neuroscience Q1)

Platschek S, Cuntz H, Vukšić M, Deller T, Jedlicka P (2016) A general homeostatic principle following lesion induced dendritic remodeling. *Acta Neuropathologica Communications* Feb 25;4(1):19. doi: 10.1186/s40478-016-0285-8. (IF=5.414; Pathology Q1, Clinical Neurology Q1, Neuroscience Q1).

Knezović V, Kasprian G, Štajduhar A, Schwartz E, Weber M, Gruber GM, Brugger PC, Prayer D, Vukšić M (2019) Underdevelopment of the human hippocampus in callosal agenesis: an in vivo fetal MRI study, in press *American Journal of Neuroradiology* (IF = 3.653; Radiology, Nuclear Medicine & Medical Imaging Q1; Clinical Neurology Q2, Neuroimaging Q2).

Bobić M, Orešković D, Knezović V, Pogledić I, Pupačić D, Vukšić M, Brugger PC, Prayer D, Petanjek Z, Jovanov Milošević N (2019) Histological and MRI study of the development of human indusium griseum. *Cerebral Cortex* Feb 4. doi: 10.1093/cercor/bhz004. (IF = 6.308; Neurosciences Q1).

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Slade N, Zorić A, Horvat B, Vukšić M, Kostović I, Poljak L (2015) Suppression of Smad-1 mRNA expression level by Smad-2 likely control dichotomy of NF-κB and Smads mediated activation. *Immunobiology*. 220(1):48-53 (IF=3.356; Immunology Q2)

Kostović I, Sedmak G, Vukšić M, Judaš M (2015) The relevance of human fetal subplate zone for developmental neuropathology of neuronal migration disorders and cortical dysplasia. *CNS Neuroscience & Therapeutics* 21(2):74-82. (IF=4.458; Pharmacology & Pharmacy Q1; Neuroscience Q1)

Platschek S, Cuntz H, Vukšić M, Deller T, Jedlicka P (2016) A general homeostatic principle following lesion induced dendritic remodeling. *Acta Neuropathologica Communications* Feb 25;4(1):19. doi: 10.1186/s40478-016-0285-8. (IF=5.414; Pathology Q1, Clinical Neurology Q1, Neuroscience Q1).

Charvet CJ, Šimić G, Kostović I, Kovačević V, Vukšić M, Babić Leko M, Takahashi E, Sherwood CS, Wolfe M, Finlay BL (2017) Co-evolution in the timing of GABAergic and pyramidal neuron maturation in primates. *Proceedings of the Royal Society B - Biological Sciences* DOI: 10.1098/rspb.2017.1169 (IF=4.94; Biology Q1, Ecology Q1, Evolutionary Biology Q1).

Hrabač P, Jaguš A, Trupković M, Vukšić M, Kostović I, Krsnik Ž (2018) The Zagreb Collection of human brains enters a virtual world. *Croatian Medical Journal* 59(6):283-287. (IF = 1.422; Medicine, General & Internal Q3)

Knezović V, Kasprian G, Štajduhar A, Schwartz E, Weber M, Gruber GM, Brugger PC, Prayer D, Vukšić M (2019) Underdevelopment of the human hippocampus in callosal agenesis: an in vivo fetal MRI study, in press. *American Journal of Neuroradiology* (IF = 3.653; Radiology, Nuclear Medicine & Medical Imaging Q1; Clinical Neurology Q2, Neuroimaging Q2).

Bobić M, Orešković D, Knezović V, Pogledić I, Pupačić D, Vukšić M, Brugger PC, Prayer D, Petanjek Z, Jovanov Milošević N (2019) Histological and MRI study of the development of human indusium griseum. *Cerebral Cortex* Feb 4. doi: 10.1093/cercor/bhz004. (IF = 6.308; *Neurosciences* Q1).

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2003-2005 *Molecular and cellular bases of neuronal reorganizational processes following lesioning of the central nervous system*, project leader T. Deller, funded by DFG, Germany

2008-2012 *Neuroimaging, neurogenomics and pharmacogenomics of the frontal lobe connectivity: normal development and abnormalities in developmental cognitive disorders*, UKF project, project leader I. Kostović, funded by Croatian Ministry for Science and Technology (CMST)

2013-2014 *Perinatal reorganization of the human medial (limbic) cortex*, project leader M. Vuksic, funded by University of Zagreb

2014-2018 *Histological, MRI and gene expression analysis of the reorganizational processes in the medial (limbic) wall of developing human cerebrum*, project leader M. Vukšić, funded by Croatian Science Foundation

2017-2019 *Analysis of the structural reorganization of hippocampal granule cells dendrites in mouse mutants following entorhinal cortex lesion using the fixed-slice intracellular injection technique*, project leader M. Vukšić, bilateral project MZOŠ-DAAD (prof. T. Deller, Goethe University, Frankfurt/Main)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2013-2014 *Perinatal reorganization of the human medial (limbic) cortex*, project leader M. Vuksic, funded by University of Zagreb

2014-2018 *Histological, MRI and gene expression analysis of the reorganizational processes in the medial (limbic) wall of developing human cerebrum*, project leader M. Vukšić, funded by Croatian Science Foundation

2017-2019 *Analysis of the structural reorganization of hippocampal granule cells dendrites in mouse mutants following entorhinal cortex lesion using the fixed-slice intracellular injection technique*, project leader M. Vukšić, bilateral project MZOŠ-DAAD (prof. T. Deller, Goethe University, Frankfurt/Main)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Renata Zadro, Professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital Center Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Laboratory approach to haematopoietic stem cells transplantation; Methods of molecular biology in medicine

BIOGRAPHY

Head of Hematology and Coagulation Division at Department of Laboratory Diagnostics, University Hospital Center Zagreb, Renata Zadro is specialist in medical biochemistry whose activities at work include implementation of the program of highly differentiated laboratory diagnostics in hematology and coagulation, development of molecular methods for the diagnosis of leukemias, lymphomas and hereditary coagulation disorders and organization and participation in continuous education courses in clinical laboratory diagnostics. She is a Full Prof teaching in undergraduate and postgraduate courses (Hematology, Coagulation, Molecular diagnostics) at Zagreb University Faculty of Pharmacy and Biochemistry and School of Medicine.

Renata Zadro graduated in 1978 at the Zagreb University Faculty of Pharmacy and Biochemistry; Internship at Clinic for Traumatology (1979); Postgraduate study in Medical Biochemistry at the University of Zagreb. Master's Thesis at Rudjer Bošković Institute (1981); Specialist exam and Ph.D. Thesis in Medical Biochemistry in 1992; Postdoctoral study at University of Texas Health Science Center at San Antonio, Texas, USA (1992-1994); Since 1995 Head of the Hematology and Coagulation Division at Department of Laboratory Diagnostics, University Hospital Center Zagreb. Also, since 1997, Full Professor at Faculty of Pharmacy and Biochemistry, courses Hematology, Immunohematology and Coagulation. Participation and organization of over 50 national and international scientific meetings. Author of 60 scientific papers and 25 chapters in books and textbooks used in university teaching and continuous education. Membership in Croatian Society and Chamber of Medical biochemists, International Society on Thrombosis and Hemostasis, Croatian Society for Hematology, European Leukemia Network and Croatian Cooperative Group for Hematologic Diseases.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 11.10.2106.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Zadro R, Sučić M, Aurer I, Metelko-Kovačević J, Labar B, Stavljenić Rukavina A. Analysis of clonality in T-lymphoproliferative diseases by multiplex PCR. Clin Chem Lab Med 1998;36(8):637-9.

Pavlin D, Dove SB, Zadro R, Gluhak-Heinrich J. Mechanical loading stimulates differentiation of periodontal osteoblasts in a mouse osteoinduction model: effect on type 1 collagen and alkaline phosphatase genes. Calcif Tissue Int 2000;67:163-72.

Pavlin D, Goldman ES, Gluhak-Heinrich J, Magness M, Zadro R. Orthodontically stressed periodontium of transgenic mouse as a model for studying mechanical response in bone: the effect on the number of osteoblasts. Clin Orthod Res 2000;3(2):55-66.

Coen D, Zadro R, Honović L, Banfić Lj, Stavljenić Rukavina A. Prevalence of association of the factor V Leiden and prothrombin G20210A in healthy subjects and patients with venous thromboembolism. Croat Med J 2001;42(4):488-92

Pavlin D, Zadro R, Gluhak-Heinrich J. Temporal pattern of stimulation of osteoblast-associated genes during mechanically-induced osteogenesis in vivo: early responses of osteocalcin and type I collagen. *Connect Tissue Res* 2001;42:135-48.

Sučić M, Zadro R, Burazer B, Labar B, Nemet D, Mrsić M, Aurer I, Mrsić S, Hitrec V, Boban D, Marković-Glamočak M, Batinić D, Užarević B, Stavljenić Rukavina A. Acute promyelocytic leukemia M3: cytomorphic, immunophenotypic, cytogenetic, and molecular variants. *J Hematotherapy & Stem Cell Research* 2002;11:941-50.

Klein CL, Márki-Záy J, Corbisier P, Gancberg D, Cooper, Gemmati D, Halbmayer W-M, Kitchen S, Melegh B, Neumaier M, Oldenburg J, Oppliger Leibundgut E, Reitsma PH, Rieger S, Schimmel HG, Spannagl M, Tordai A, Tosetto A, Visvikis S, Zadro R, Mannhalter C. Reference materials (RMs) for analysis of the human factor II (prothrombin) gene G20210A mutation. *Clin Chem Lab Med* 2005;43:862-8.

Golemovic M, Sucic M, Zadro R, Masic S, Mikulic M, Labar B, Rajic LJ, Batinic D. IgH and TCR-gamma gene rearrangements, cyclin A1 and HOXA9 gene expression in biphenotypic acute leukemias. *Leuk Res* 2006;30:211-21.

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Lower contribution of Factor V Leiden or G20210A mutations to ischemic stroke in patients with clinical risk factors: pair-matched case-control study. *Clin Appl Thromb Hemost*. 2007;13:188-93.

Coen Herak D, Radic Antolic M, Lenicek-Krleza J, Pavic M, Dodig S, Duranovic V, Basnec Brkic A, Zadro R. Inherited prothrombotic risk factors in children with stroke, transient ischemic attack and migraine. *Pediatrics*, 2009;123(4):e653-60

Bronić A, Ferenčak G, Zadro R, Stavljenić-Rukavina A, Bernat R. Impact of FXIII-A Val34Leu polymorphism on coronary artery disease in Croatian patients. *Mol Biol Rep*. 2009;36:1-5.

Boban A, Radman I, Zadro R, Dubravčić K, Maretić T, Civiljak R, Lisic M, Begovac J. Acute promyelocytic leukemia after whole brain irradiation of primary brain lymphoma in an HIV-infected patient. *Eur J Med Res* 2009;14:1-2.

Lenicek-Krleza J, Duranovic V, Lujic L, Coen Herak D, Mejaski-Bosnjak V, Nakic M, Zadro R. The burden of pediatric stroke and cerebrovascular disorders in Croatia. *Int J Stroke* 2009;4(5):390-4.

Basic-Jukic N, Radic-Antolic M, Hudolin T, Coric M, Zadro R, Pasini J, Kastelan Z, Kes P. Immunolocalization and mRNA Expression of Bone Morphogenetic Protein-6 in Human Clear Cell Renal Carcinoma. *Kidney Blood Press Res* 2009 17;32:445-50.

Pavic M, Zadro R, Coen Herak D, Radic Antolic M, Dodig S. Gene frequencies of platelet-specific antigens in Croatian population. *Trans Med* 2010;20:73-7.

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Muačević-Katanec D, Kekez T, Fumić K, Barić I, Merkle M, Jakić-Razumović J, Krznarić Z, Zadro R, Katanec D, Reiner Z. Spontaneous perforation of the small intestine, a novel manifestation of classical

homocystinuria in an adult with new cystathionine beta-synthetase gene mutations. *Coll Antropol* 2011;35:181-5.

Lenicek Krleza J, Duranovic V, Bronic A, Coen Herak D, Mejaski-Bosnjak V, Zadro R. Multiple presence of prothrombotic risk factors in Croatian children with arterial ischemic stroke and transient ischemic attack. *Croat Med J* 2013;54(4):346-54.

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Prijic S, Ugrina I, Labar B, Nemet D, Batinic J, Zadro R, Ries S, Gjadrov-Kuvedžić K, Davidović S, Batinić D. Prognostic significance of constitutive phosphatidylinositol 3-kinase/Akt and mitogen-activated protein kinase phosphorylation in acute myeloid leukemia. *Leuk Lymphoma* 2015;56(8):2281-8.

Cross NC, White HE, Ernst T, Welden L, Dietz C, Saglio G, Mahon FX, Wong CC, Zheng D, Wong S, Wang SS, Akiki S, Albano F, Andrikovics H, Anwar J, Balatzenko G, Bendit I, Beveridge J, Boeckx N, Cerveira N, Cheng SM, Colomer D, Czurda S, Daraio F, Dulucq S, Eggen L, El Housni H, Gerrard G, Gniot M, Izzo B, Jacquin D, Janssen JJ, Jeromin S, Jurcek T, Kim DW, Machova-Polakova K, Martinez-Lopez J, McBean M, Mesanovic S, Mitterbauer-Hohendanner G, Mobtaker H, Mozziconacci MJ, Pajič T, Pallisgaard N, Panagiotidis P, Press RD, Qin YZ, Radich J, Sacha T, Touloumenidou T, Waits P, Wilkinson E, Zadro R, Müller MC, Hochhaus A, Branford S. Development and evaluation of a secondary reference panel for BCR-ABL1 quantitation on the International Scale. *Leukemia* 2016;30(9):1844-52.

Ostojic A, Sertic D, Roncevic P, Peric Z, Granic P, Matic N, Basic-Kinda S, Serventi-Seiwerth R, Radman I, Zadro R, Nemet D. Comparison of branded and generics imatinib plasma concentrations in patients with chronic myelogenous leukemia - unicentric study. *Clin Lymphoma, Myeloma Leuk* 2016;16(8):472-6.

Coen Herak D, Lenicek-Krleza J, Radic Antolic M, Horvat I, Djuranovic V, Zrinski Topic R, Zadro R. Association of polymorphisms in coagulation factor genes and enzymes of homocysteine metabolism with arterial ischemic stroke in children. *Clin Appl Thromb/Hemost*, 2017;23(8):1042-51

Švabek ŽT, Josipović M, Horvat I, Zadro R, Davidović-Mrsić S. The incidence of atypical patterns of BCR-ABL1 rearrangement and molecular-cytogenetic response to tyrosine kinase inhibitor therapy in newly diagnosed cases with chronic myeloid leukemia (CML). *Blood Res.* 2018;53:152-9.

Krecak I, Gveric-Krecak V, Roncevic P, Basic-Kinda S, Gulin J, Lopic I, Fumic K, Ilic I, Horvat I, Zadro R, Holik H, Coha B, Peran N, Aurer I, Durakovic N. Serum chitotriosidase: a circulating biomarker in polycythemia vera. *Hematology* 2018;23(10):793-802.

Horvat I, Boban A, Radic Antolic M, Serventi-Seiwerth R, Roncevic P, Radman I, Sertic D, Vodanovic M, Pulanic D, Basic-Kinda S, Durakovic N, Zupancic-Salek S, Vrhovac R, Aurer I, Nemet D, Zadro R, Labar B. The influence of blood count, cardiovascular risks, inherited thrombophilia and JAK2 V617F burden allele on

the type of thrombosis in patients with Ph(-) myeloproliferative Neoplasms. *Clin Lymphoma Myeloma Leuk*. 2018; DOI: <https://doi.org/10.1016/j.clml.2018.08.020>

Ceri A, Pavic M, Horvat I, Radic Antolic M, Zadro R. Development and validation of a rapid method for genotyping three P-selectin gene polymorphisms based on high resolution melting analysis. *J Clin Lab Anal* 2018 Oct 23:e22698. doi: 10.1002/jcla.22698

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White H, Deprez L, Corbisier P, Hall V, Lin F, Mazoua S, Trapmann S, Aggerholm A, Andrikovics H, Akiki S, Barbany G, Boeckx N, Bench A, Catherwood M, Cayuela JM, Chudleigh S, Clench T, Colomer D, Daraio F, Dulucq S, Farrugia J, Fletcher L, Foroni L, Ganderton R, Gerrard G, Gineikienė E, Hayette S, El Housni H, Izzo B, Jansson M, Johnels P, Jurcek T, Kairisto V, Kizilers A, Kim DW, Lange T, Lion T, Polakova KM, Martinelli G, McCarron S, Merle PA, Milner B, Mitterbauer-Hohendanner G, Nagar M, Nickless G, Nomdedéu J, Nymoen DA, Leibundgut EO, Ozbek U, Pajič T, Pfeifer H, Preudhomme C, Raudsepp K, Romeo G, Sacha T, Talmaci R, Touloumenidou T, Van der Velden VH, Waits P, Wang L, Wilkinson E, Wilson G, Wren D, Zadro R, Ziermann J, Zoi K, Müller MC, Hochhaus A, Schimmel H, Cross NC, Emons H. A certified plasmid reference material for the standardisation of BCR-ABL1 mRNA quantification by real time quantitative PCR. *Leukemia* 2015 Feb;29(2):369-76.

Prijic S, Ugrina I, Labar B, Nemet D, Batinic J, Zadro R, Ries S, Gjadrov-Kuvedžić K, Davidović S, Batinić D. Prognostic significance of constitutive phosphatidylinositol 3-kinase/Akt and mitogen-activated protein kinase phosphorylation in acute myeloid leukemia. *Leuk Lymphoma* 2015;56(8):2281-8.

Cross NC, White HE, Ernst T, Welden L, Dietz C, Saglio G, Mahon FX, Wong CC, Zheng D, Wong S, Wang SS, Akiki S, Albano F, Andrikovics H, Anwar J, Balatzenko G, Bendit I, Beveridge J, Boeckx N, Cerveira N, Cheng SM, Colomer D, Czurda S, Daraio F, Dulucq S, Eggen L, El Housni H, Gerrard G, Gniot M, Izzo B, Jacquin D, Janssen JJ, Jeromin S, Jurcek T, Kim DW, Machova-Polakova K, Martinez-Lopez J, McBean M, Mesanovic S, Mitterbauer-Hohendanner G, Mobtaker H, Mozziconacci MJ, Pajič T, Pallisgaard N, Panagiotidis P, Press RD, Qin YZ, Radich J, Sacha T, Touloumenidou T, Waits P, Wilkinson E, Zadro R, Müller MC, Hochhaus A, Branford S. Development and evaluation of a secondary reference panel for BCR-ABL1 quantitation on the International Scale. *Leukemia* 2016;30(9):1844-52.

Ostojic A, Sertic D, Roncevic P, Peric Z, Granic P, Matic N, Basic-Kinda S, Serventi-Seiwerth R, Radman I, Zadro R, Nemet D. Comparison of branded and generics imatinib plasma concentrations in patients with chronic myelogenous leukemia - unicentric study. *Clin Lymphoma, Myeloma Leuk* 2016;16(8):472-6.

Coen Herak D, Lenicek-Krleza J, Radic Antolic M, Horvat I, Djuranovic V, Zrinski Topic R, Zadro R. Association of polymorphisms in coagulation factor genes and enzymes of homocysteine metabolism with arterial ischemic stroke in children. *Clin Appl Thromb/Hemost*, 2017;23(8):1042-51

Švabek ŽT, Josipović M, Horvat I, Zadro R, Davidović-Mrsić S. The incidence of atypical patterns of BCR-ABL1 rearrangement and molecular-cytogenetic response to tyrosine kinase inhibitor therapy in newly diagnosed cases with chronic myeloid leukemia (CML). *Blood Res*. 2018;53:152-9.

Krecak I, Gveric-Krecak V, Roncevic P, Basic-Kinda S, Gulin J, Lopic I, Fumic K, Ilic I, Horvat I, Zadro R, Holik H, Coha B, Peran N, Aurer I, Durakovic N. Serum chitotriosidase: a circulating biomarker in polycythemia vera. *Hematology* 2018;23(10):793-802.

Horvat I, Boban A, Radic Antolic M, Serventi-Seiwerth R, Roncevic P, Radman I, Sertic D, Vodanovic M, Pulanic D, Basic-Kinda S, Durakovic N, Zupancic-Salek S, Vrhovac R, Aurer I, Nemet D, Zadro R, Labar B. The influence of blood count, cardiovascular risks, inherited thrombophilia and JAK2 V617F burden allele on

the type of thrombosis in patients with Ph(-) myeloproliferative Neoplasms. Clin Lymphoma Myeloma Leuk. 2018; DOI: <https://doi.org/10.1016/j.clml.2018.08.020>

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Molecular pathobiochemistry of hepatocyte proliferation, project 3-01-253 Ministry of Science, Education and Sport (principal investigator Professor Elizabeta Topić), 1989-1992.

Expression of COL1A1 in periodontal osteoblasts (University of Texas Health Science Center at San Antonio, Texas, USA – principal investigator Dubravko Pavlin, PhD) 1992-1994.

Biological parameters of cells growth and differentiation in vitro in acute mixed lineage leukemias in adults: importance for classification and biological characteristics of disease, project Ministry of Science, Education and Sport, No. 214006 (principal investigator Professor Drago Batinić) 2002-2006.

Leukemia and stem cell transplantation, project Ministry of Science, Education and Sport, No. 108-1081872-1913 (principal investigator Professor Boris Labar) 2007-2010.

Prothrombotic risk factors in cerebrovascular diseases in children, Ministry of Science, Education and Sport, No. 214212, 2002-2006. (principal investigator)

Clinical and biological factors determining severity and activity of chronic graft-versus-host disease after allogeneic hematopoietic stem cell transplantation. Unity Through Knowledge (principal investigators: Professor D. Nemet, Professor S. Pavletić) 2013-2015.

Gene polymorphisms and ischemic and ischemic stroke in children, Croatian Scientific Foundation, No. 2047 2015-2019. (principal investigator)

New biomarkers in chronic Graft-versus-Host disease, Croatian Scientific Foundation, IP-2016-06-8046 (principal investigator Assist Professor Dražen Pulanić), 2017-2020.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Clinical and biological factors determining severity and activity of chronic graft-versus-host disease after allogeneic hematopoietic stem cell transplantation. Unity Through Knowledge (principal investigators: Professor D. Nemet, Professor S. Pavletić) 2013-2015.

Gene polymorphisms and ischemic and ischemic stroke in children, Croatian Scientific Foundation, No. 2047 2015-2019. (principal investigator)

New biomarkers in chronic Graft-versus-Host disease, Croatian Scientific Foundation, IP-2016-06-8046 (principal investigator Assist Professor Dražen Pulanić), 2017-2020.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Vanja Zjačić Rotkvić, MD, PhD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: retired

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Endocrine tumors of gastrointestinal tract and pancreas

BIOGRAPHY

Education

Faculty of Medicine, University of Zagreb, 1969

Specialist in Internal Medicine since 1976; subspecialist for endocrinology and diabetology since 1995.
Associate Professor since 1993, full professor since 2010.

Work experience

Internship Hospital "Dr. Mladen Stojanovic ", Zagreb 1971.

Department of Endocrinology, Diabetes and Metabolism, Department of Internal Diseases Hospital "Sisters of Charity", Zagreb 1971-

Member of the Department of Internal Medicine, School of Medicine, University of Zagreb since 1980, Associate Professor since 1993, full professor since 2010

Research activities

MA-1971, Faculty of Medicine, University of Zagreb

PhD thesis 1984 Faculty of Medicine, University of Zagreb

Research associate since 1992. Participated in numerous projects of the Ministry of Science as a PI and coinvestigator, 2007-2010 Project Neuroendocrine tumors of the gastrointestinal tract and pancreas (134-1342428-0491).

Publications

More than 200 scientific articles published in CC and other secondary publications

Personal data

Born in Zagreb, 1946. Mother of a daughter and son.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2010

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Cigrovski Berkovic M, Jokic M, Marout J, Radošević S, Zjačić-Rotkvić V, Kapitanović S. IL-2-330 T/G SNP and serum values-potential new tumor markers in neuroendocrine tumors of the gastrointestinal tract and pancreas (GEP-NETs). J Mol Med 2010;88:423-429.

Cigrovski Berković M, Catela Ivković T, Marout J, Zjačić-Rotkvić V, Kapitanović S. Interleukin 1 β gene single-nucleotide polymorphisms and susceptibility to pancreatic neuroendocrine tumors. DNA Cell Biol 2012;31(4):531-6.

ORIGIN Trial Investigators, Bosch J, Gerstein HC, Dagenais GR, Díaz R, Dyal L, Jung H, Maggiono AP, Probstfield J, Ramachandran A, Riddle MC, Rydén LE, Yusuf S. n-3 fatty acids and cardiovascular outcomes in patients with dysglycemia. N Engl J Med. 2012;367(4):309-18.

ORIGIN Trial Investigators, Gerstein HC, Bosch J, Dagenais GR, Díaz R, Jung H, Maggioni AP, Pogue J, Probstfield J, Ramachandran A, Riddle MC, Rydén LE, Yusuf S. 1. Basal insulin and cardiovascular and other outcomes in dysglycemia. *N Engl J Med.* 2012;367(4):319-28.

Cigrovski Berkovic M, Cacev T, Catela Ivkovic T, Zjadic-Rotkvic V, Kapitanovic S. New insights into the role of chronic inflammation and cytokines in the etiopathogenesis of gastroenteropancreatic neuroendocrine tumors. *Neuroendocrinology.* 2014;99(2):75-84.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Cigrovski Berković M, Čačev T, Catela Ivković T, Marout J, Ulamec M, Zjačić-Rotkvić V, Kapitanović S. High VEGF serum values are associated with locoregional spread of gastroenteropancreatic neuroendocrine tumors (GEP-NETs). *Mol Cell Endocrinol.* 2016 Apr 15;425:61-8.

Cigrovski Berkovic M, Jokic M, Marout J, Radošević S, Zjadic-Rotkvic V, Kapitanovic S. IL-2-330 T/G SNP and serum values-potential new tumor markers in neuroendocrine tumors of the gastrointestinal tract and pancreas (GEP-NETs). *J Mol Med* 2010;88:423-429.

Cigrovski Berković M, Catela Ivković T, Marout J, Zjačić-Rotkvić V, Kapitanović S. Interleukin 1 β gene single-nucleotide polymorphisms and susceptibility to pancreatic neuroendocrine tumors. *DNA Cell Biol* 2012;31(4):531-6.

ORIGIN Trial Investigators, Bosch J, Gerstein HC, Dagenais GR, Díaz R, Dyal L, Jung H, Maggiono AP, Probstfield J, Ramachandran A, Riddle MC, Rydén LE, Yusuf S. n-3 fatty acids and cardiovascular outcomes in patients with dysglycemia. *N Engl J Med.* 2012;367(4):309-18.

ORIGIN Trial Investigators, Gerstein HC, Bosch J, Dagenais GR, Díaz R, Jung H, Maggioni AP, Pogue J, Probstfield J, Ramachandran A, Riddle MC, Rydén LE, Yusuf S. 1. Basal insulin and cardiovascular and other outcomes in dysglycemia. *N Engl J Med.* 2012;367(4):319-28.

Cigrovski Berkovic M, Cacev T, Catela Ivkovic T, Zjadic-Rotkvic V, Kapitanovic S. New insights into the role of chronic inflammation and cytokines in the etiopathogenesis of gastroenteropancreatic neuroendocrine tumors. *Neuroendocrinology.* 2014;99(2):75-84.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

1

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Zoran Zorica

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Croatian Institute for Emergency Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Telemedicine

BIOGRAPHY

My name is Zoran Zorica. I was born on August 30, 1984 in Zagreb. I graduated from primary and secondary school in Zagreb. After finishing secondary school I enrolled undergraduate studies at the Zagreb University of Applied Sciences with major in IT. During my studies I worked on various IT jobs involving companies such as INA and VIP. After finishing my undergraduate studies I continued my graduate studies at the same university. During the course of the graduate study, or more precisely in 2009, I became employee of the Croatian Institute of Telemedicine where I work today. The graduate study ends in 2011 and I gained a title as Master of Information Technology. I am appointed Assistant Director for IT Affairs of the Croatian Institute of Telemedicine in 2012. During the work at the Institute, I am improving in the field of IT technology with special emphasis on telemedicine technologies applicable in the health system of the Republic of Croatia. To date, we have established a network of telemedicine centers that now has over 130 centers in more than 60 healthcare institutions. The number of telemedicine services performed through the telemedicine network has reached 35000 services annually. Also, I have given lectures at national and international conferences, where I have presented the telemedicine system of the Republic of Croatia. I also participated in several EU healthcare projects related to telemedicine. During all 10 years at the Institute my daily work involves the design and implementation of a network of telemedicine centers. I am responsible for IT jobs, as well as for the organization and education of healthcare workers in the use of telemedicine services, including daily communication with healthcare providers, healthcare workers and 24/7 support for the day-to-day telemedicine services in the Croatian health system.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK:

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. "Telemedicine in Croatia" (article), Volume 49: Benchmarking Telemedicine: Improving Health Security in the Balkans, 2017

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. "Telemedicine in Croatia" (article), Volume 49: Benchmarking Telemedicine: Improving Health Security in the Balkans, 2017

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. "Implementation of telemedicine into Croatian healthcare system", NeurNet – Care management network for patients with pharmaco-resistant epilepsy and patients with late stage Parkinson's disease, Zadar, Croatia, 2018
2. "Telemedicine in Croatia", NATO Advanced Research Workshop (ARW) on Benchmarking Telemedicine: Improving Health Security in the Balkans, Skopje, Macedonia, 2016
3. "Teleradiology and telemedicine possibilities in Croatia", International Workshop on the Mobility of Patients at Cross Border Level between EU and non-EU Countries, Mali Lošinj, Croatia, 2015



4. "Bridging the human resource gaps in healthcare delivery", 1. Croatian-Sweden SymbioCare Seminar, Zagreb, Croatia, 2015
5. "Croatian Institute of Telemedicine - the increase of the availability of specialized health services", ICT & Bio-Medical Technologies in HEALTH TOURISM, Mali Lošinj, Croatia, 2015
6. "Telemedicine in Croatia", 4. Congressional coordination of Croatian family medicine, Šibenik, Croatia, 2013

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

1. "Implementation of telemedicine into Croatian healthcare system", NeurNet – Care management network for patients with pharmacoresistant epilepsy and patients with late stage Parkinson's disease, Zadar, Croatia, 2018
2. "Telemedicine in Croatia", NATO Advanced Research Workshop (ARW) on Benchmarking Telemedicine: Improving Health Security in the Balkans, Skopje, Macedonia, 2016
3. "Teleradiology and telemedicine possibilities in Croatia", International Workshop on the Mobility of Patients at Cross Border Level between EU and non-EU Countries, Mali Lošinj, Croatia, 2015
4. "Bridging the human resource gaps in healthcare delivery", 1. Croatian-Sweden SymbioCare Seminar, Zagreb, Croatia, 2015
5. "Croatian Institute of Telemedicine - the increase of the availability of specialized health services", ICT & Bio-Medical Technologies in HEALTH TOURISM, Mali Lošinj, Croatia, 2015

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Prof. Dr. Neven Žarković

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Ruđer Bošković Institute

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Experimental oncology: Cancer as persistent oxidative stress

BIOGRAPHY

Education/Titles:

- M.D. - Medical Faculty, Zagreb - 1984
- M.Sc. - Faculty of Natural Sciences, Zagreb - 1986
- Ph.D. - University in Zagreb - 1989

Employment and Positions:

1984 - M.D. - Medical Faculty, Zagreb

1984/85 - Inner practice at the Clinical Hospital Centre, Zagreb

Since 1985 - Rudjer Boskovic Institute (RBI)

1986 – M.Sc. - Faculty of Natural Sciences, Zagreb

1986 - assistant 1989 - Ph.D. - University in Zagreb

1989 - senior assistant

1992/94 - postdoctoral fellowship at the Institute of Biochemistry of the University in Graz, Austria

1993 - research associate (assistant professor)

Since 1994 – permanent guest scientist at the Institute of Biochemistry of the University in Graz, Austria

1996 – associate researcher at the University Department of Neuropathology, Clinical Hospital Centre, Zagreb

1997 - senior research associate (associate professor) RBI

1998 - affiliate teacher Medical faculty, Zagreb

2000 - affiliate teacher Faculty of Natural Sciences and Mathematics, Zagreb

2001 - head of Laboratory for Oxidative Stress RBI

2002 - senior scientist (full professor) RBI

2003/2004 - associate director for science RBI

2003 - RBI associate project co-ordinator for the co-operation with the World Bank

2003. - Initiator and author of the agreement on postgraduate studies between RBI and the Medical Faculty

2003 – Ph.D. study co-ordinator of the “Molecular Medicine” field of study within the Ph.D. study program "Medicine and public health" at the Medical Faculty in Zagreb

2003 - course convenor of the postgraduate course: "Project Management in Science" at the Medical Faculty in Zagreb

2004 - author of the agreement on postgraduate studies between RBI and Dubrovnik University

2004 - author of the agreement on graduate studies between RBI and the College for Business and Management "Baltazar Adam Krcelic", Zapresic, Zagreb

2004 - co-author of the co-operation agreement between RBI and Brodarski Institute

2004/2005 - Advisor to the acting director general of RBI

2005 – Counsellor for the international affairs at RBI

2005 - Affiliate lecturer at the College for Business and Management "Baltazar Adam Krcelic", Zapresic, Zagreb

2005 – Study director of the M.Sc. studies in Project Management, joint study of the Rudjer Boskovic Institute and the College for Business and Management "Baltazar Adam Krcelic", Zapresic, Zagreb

2006 – Study director for the Ph.D. studies in Molecular Biosciences (University of Osijek, University of Dubrovnik and Rudjer Boskovic Institute)

2006 – Chairman of the COST (European Cooperation in Science and Technical Research) Action B35 «Lipid Peroxidation Associated Disorders»

2006 - COST expert for Molecular Sciences - Domain Committee Biomedicine & Molecular Biosciences

2006 - National delegate to the COST Domain Committee Chemistry and Molecular Sciences and Technologies

2006 – Vice-chair of the Ph.D. Study Council in Biology of Neoplasms

2007 - Permanent position of the Senior Scientist at the Rudjer Boskovic Institute

- 2008. – National representative and the Board member of the European Association of Research and Technological Organisations (EARTO)

- 2008 – Co-founder and director of the Company „Ideje i projekti“ d.o.o.

- 2009 - Vice-chair of the Interdisciplinary Ph.D. Study Council, University of Osijek

- 2009 – College Professor of Economy (Administration & Management)

- 2013 - Affiliate Professor University for Applied Sciences Technikum Wien

- 2013 - Affiliate Professor at the PhD Study program of Management Faculty of Economy University of Osijek

- 2013 - Visiting Professor at the University of Bialystok

- 2014 - Associate Professor of Biology and Medicine, University of Osijek

- 2014 - Member of the European Knight's Order of St. George

- 2017 – Coordinator of the Offest Project CRO-A-00033

- 2017 – Member of the Royal Society of Medicine (Overseas Fellow)

Projects:

- Principal investigator or project co-ordinator of 43 international and national projects

- Co-ordinator of the COST (European Cooperation in Science and Technical Research) Action B35 “Lipid Peroxidation Associated Disorders”

- Project reviewer for the: Ministry of Science, Education and Sports; Association for the International Research in Cancer (AICR); Cancer Research UK Project Grant Applications; Slovenian Research Agency; Ministry of Education of the Slovak Republic and of the Slovak Academy of Sciences; EC/COST; World

Cancer Research Fund International, European Science Foundation (ESF); European Space Agency (ESA); Grant Agency, Academy of Sciences of the Czech Republic, Hungarian Scientific Research Fund (OTKA), French National Research Agency, Foundation for Polish Science, Irish Research Council for Science, Engineering and Technology, COMUE - Université de Toulouse; Italian Ministry of Education, University and Research; Agence Nationale de la Recherche (ANR) France; Chilean National Science and Technology Commission; National Science Centre (Narodowe Centrum Nauki) Krakow; Der Wissenschaftsfonds (FWF) Austria; Latvian Science Council; Istituto Pasteur Italia - Fondazione Cenci Bolognetti; Natural Sciences and Engineering Research Council of Canada (NSERC)

Awards and acknowledgements:

- Sergey Saltikow Award for the best annual work in pathology – 1984
- Young Investigator Award, 10th European Immunology Congress, Edinburgh, Scotland, 10-12 September 1990
- Postdoctoral Fellowship – Austrian Science Foundation 1992
- Lise Meitner Fellowship Award – FWF – 1993, 1994
- International Leadership Award - American Biographical Institute - 1996
- Member of the Research Board of Advisers of the American Biographical Institute - since 1997
- Chairman of the Scientific Session of the Croatian-Austrian Society - since 1997, President of the Society since 2012
- Member of the Editorial Board of Acta Neurologia Croatica
- Member of the Editorial Board of Hungarian Medical Journal
- Member of the Advisory Board of Türkiye Klinikleri Journal of Medical Sciences
- Co-Editor in Chief of the Clinical and Experimental Medicine Journal
- Member of the Editorial Board of the Nursing Journal
- Member of the Editorial Board of the journal Cells
- Member of the Editorial Board of the journal Antioxidants
- Guest Editor of the journals: Free Radical Biology and Medicine, Oxidative Stress and Cellular Longevity; Antioxidants, Cells
- President and a Member of the Steering Committee of the HNE-Club (International Society for Free Radicals Research) – since 2000
- Medal of the College of Business and Administration
- Award of the City of Zapresic 2007
- National award for excellence in scientific achievements 2007
- Emblem of the City of Zapresic 2009
- Peer reviewer for Wiley-Blackwell books and journals: Cancer Detection & Prevention, Free Radical Biology & Medicine, Indian Journal of Cancer, Clinical Chemistry & Laboratory Medicine, Chemotherapy, Biofactors, Nephron, General Physiology and Biophysics, Periodicum Biologorum, The Tohoku Journal of Experimental Medicine, Cancer Letters, Evidence-based Complementary and Alternative Medicine, Central European Journal of Medicine, FEMS Yeast Research, European Journal of Pharmacology, Free Radical Research, Gut, American Journal of Physiology, Plant Foods for Human Nutrition, British Journal of

Pharmacology, European Journal of Cell Biology, Medical Science Monitor, Archives of Physiology and Biochemistry, OMICS: A Journal of Integrative Biology, International Journal of Cancer, Redox Report, Life Sciences, Clinical Neurology Neurosurgery, Biological Trace Element Research, Talanta, Research in Sports Medicine, Acta Biochimica et Biophysica Sinica, Cell Biochemistry and Function, European Journal of Gastroenterology & Hepatology, Heart and Vessels, Cancer Biotherapy & Radiopharmaceuticals, Fertility & Sterility, Clinical and Experimental Medical Journal, Cell Biology International, European Surgical Research, International Journal of Biomaterials, Apoptosis, International Journal of Biomaterials, Molecular Nutrition & Food Research, Psychiatria Danubina, Tumor Biology, Biophysica et Biochimica Acta, Frontiers in Toxicogenomics, Journal of Neurochemistry, Molecular Nutrition & Food Research, Lipids in Health and Disease, Pakistan Journal of Pharmaceutical Sciences, Molecular and Cellular Biochemistry, ACS Applied Materials & Interfaces, Cell Biochemistry and Biophysics, The Journal of Physiology, Medical Science Monitor, Journal of Investigative Dermatology, Carcinogenesis, Journal of Proteomics & Bioinformatics; Oxidative Medicine and Cellular Longevity; PLOS One; Journal of Pharmaceutical and Biomedical Analysis; Diabetologia; Current Medicinal Chemistry; Chemico-Biological Interactions; Frontiers; Experimental Gerontology; AIMS Genetics; Archives of Dermatological Research; Bioscience Reports; Pharmacological Reports; Microchemical Journal; Oncotarget; Biochemical and Biophysical Research Communications; Lipids; European Food Research and Technology; American Chemical Science Journal; New Zealand Veterinary Journal; Neuroscience; Journal of Physiology and Biochemistry; Biochimie; ACS Applied Materials & Interfaces; Cellular and Molecular Neurobiology; Cancer Cell International

Memberships: Croatian Biophysical Society, Croatian Immunological Society, European Association for Cancer Research (EACR), American Association for the Advancement of Science (AAAS), The New York Academy of Sciences (NYAS), Society for Free Radical Research Europe (SFFR);

Publications (until December 2017): Conference abstracts + 252 research articles (published or in press), > 4300 citations (Scopus, WoS), > 6000 (Google Scholar)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 29/11/2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Papers selected from those published in the last 10 years only:

Ana Cipak Gasparovic, Neven Zarkovic, Serge P. Bottari (2018) Biomarkers of nitro-oxidation and oxidative stress. *Curr Opin Toxicol*, 7: 73-80

Cherkas A., Zarkovic K., Cipak Gasparovic A., Jaganjac M, Milkovic L., Abrahamovych O., Yatskevych O., Waeg G., Yeliseyeva O., Zarkovic N. (2018) Amaranth oil reduces accumulation of 4-hydroxynonenal-histidine adducts in gastric mucosa and improves heart rate variability in duodenal peptic ulcer patients undergoing *Helicobacter pylori* eradication. *Free Radic Res*, 52: 135-149

Koji Uchida, Takahiro Shibata, Shinya Toyokuni, Bareket Daniel, Kamelija Zarkovic, Neven Zarkovic, Shlomo Sasson (2018) Development of a novel monoclonal antibody against 4-hydroxy-2E,6Z-dodecadialenal (4-HDDE)-protein adducts: Immunochemical application in quantitative and qualitative analyses of lipid peroxidation in vitro and ex vivo. *Free Radic Biol Med*, 124:12-20

Dubravka Špoljarić Maronić, Ivna Štolfa Čamagajevac, Janja Horvatić, Tanja Žuna Pfeiffer, Filip Stević, Neven Žarković, Georg Waeg, Morana Jaganjac (2018) S-metolachlor promotes oxidative stress in green microalga *Parachlorella kessleri* - A potential environmental and health risk for higher organisms. *Sci Total Environ*, 637–638: 41-49

Neven Zarkovic (2018) Antioxidants and Second Messengers of Free Radicals. *Antioxidants* 2018, 7(11), 158; <https://doi.org/10.3390/antiox7110158>

Vera Cesar, Iva Jozić, Lidija Begović, Tea Vuković, Selma Mlinarić, Hrvoje Lepeduš, Suzana Borović Šunjić and Neven Žarković (2018) Cell-Type-Specific Modulation of Hydrogen Peroxide Cytotoxicity and 4-Hydroxynonenal Binding to Human Cellular Proteins In Vitro by Antioxidant Aloe vera Extract. *Antioxidants* 2018, 7(10), 125; <https://doi.org/10.3390/antiox7100125>

Luka Andrisic, Danuta Dudzik, Coral Barbas, Lidija Milkovic, Tilman Grune, Neven Zarkovic (2018) Short overview on metabolomics approach to study pathophysiology of oxidative stress in cancer. *Redox Biology* 14: 47-58

Ana Cipak Gasparovic, Neven Zarkovic, Kamelija Zarkovic, Khrystyna Semen, Danylo Kaminsky, Olha Yelisyeyeva and Serge P. Bottary (2017) Biomarkers of redox signalling, oxidative and nitro-oxidative stress: Conventional and novel approaches. *British J Pharmacology*, 174: 1771-83

Kamelija Zarkovic, Antonia Jakovcevic, Neven Zarkovic (2017) Contribution of the HNE-Immunohistochemistry to Modern Pathological Concepts of Major Human Diseases. *Free Radic Biol Med*, 111: 110-125

Ana Cipak-Gasparovic; Lidija Milkovic; Suzana Borovic-Sunjic; Neven Zarkovic (2017) Cancer Growth Regulation by 4-Hydroxynonenal Article Type. *Free Radic Biol Med*, 111: 226-234

Milkovic, L., Zarkovic, N., Saso, L.(2017) Controversy about pharmacological modulation of Nrf2 for cancer therapy. *Redox Biology*, 12: 727-732

Agnieszka Gęgotek, Jacek Nikliński, Neven Žarković, Kamelija Žarković, Georg Waeg, Wojciech Łuczaj, Radosław Charkiewicz, Elżbieta Skrzydlewska (2016) Lipid mediators involved in the oxidative stress and antioxidant defence of human lung cancer cells. *Redox Biology*, 9:210-219

Huiqin Zhong, Mengqing Xiao, Kamelija Zarkovic, Mingjiang Zhu, Rina Sa, Jianhong Lu, Yongzhen Tao, Qun Chen, Lin Xia, Shuqun Cheng, Georg Waeg, Neven Zarkovic, Huiyong Yin (2017) Mitochondrial Control of Apoptosis through Modulation of Cardiolipin Oxidation in Hepatocellular Carcinoma: A Novel Link between Oxidative Stress and Cancer. *Free Radical Biology and Medicine*, 176: 67-76

Koraljka Gall Troselj, Francoise Gueraud, Tanja Matijevic Glavan, Fabrice Pierre, Neven Zarkovic (2017) A Review on Food Associated Carcinogenesis. In: *Food Toxicology* (Debasis Bagchi, Anand Swaroop, Eds.), CRC Press/Taylor & Francis, Boca Raton, New York, London, p.35-56

Nevenka Piskač Živković, Mladen Petrovečki, Čedna Tomasović Lončarić, Igor Nikolić, Georg Waeg, Morana Jaganjac, Kamelija Žarković, Neven Žarković (2017) Positron Emission Tomography-Computed Tomography and 4-Hydroxynonenal-histidine Immunohistochemistry Reveal Differential Onset of Lipid Peroxidation in Primary Lung Cancer and in Pulmonary Metastasis of Remote Malignancies, *Redox Biology*, 11: 600-605

Astrida Velena, N. Zarkovic, Koraljka Gall Troselj, Egils Bisenieks, A. Krauze, Janis Poikans and Gunars Duburs (2016) 1,4-Dihydropyridine Derivatives – Dihyronicotinamide Analogues: Model Compounds Targeting Oxidative Stress. *Oxid Med Cellular Longev*, <http://dx.doi.org/10.1155/2016/1892412>

Frijhoff J, Winyard PG, Zarkovic N, Davies S, Stocker R, Cheng D, Knight A, Taylor EL, Oettrich J, Ruskovska T, Cipak Gasparovic A, Cuadrado A, Weber D, Poulsen HE, Grune T, Schmidt HH, Ghezzi P. (2015) Clinical relevance of biomarkers of oxidative stress. *Antioxid Redox Signal.*, 23: 1144-1170

Morana Jaganjac Ana Cipak, Rudolf Joerg Schaur, Neven Zarkovic (2015) Pathophysiology of Neutrophil-mediated Extracellular Redox Reactions. *Frontiers in Bioscience-LANDMARK*, 29:839-855

Suzana Borovic, Ana Cipak, Tea Vukovic, Ivo Soldo, Nikola Djakovic, Thomas Weiss, Elisabeth Susman Weiss, Tomislav Zarkovic, Neven Zarkovic (2015) Adjuvant cancer biotherapy by Visum album extract: Overview of evidence based medicine findings. *Collegium Antropologicum*, 39: 701-708

Françoise Guéraud, Sylviane Taché, Jean-Paul Steghens, Lidija Milkovic, Suzana Borovic-Sunjic, Neven Zarkovic, Eric Gaultier, Nathalie Naud, Cécile Héliès-Toussaint, Fabrice Pierre and Nathalie Priymenko (2015) Dietary polyunsaturated fatty acids and heme iron induce oxidative stress biomarkers and a cancer promoting environment in the colon of rats. *Free Radical Biology and Medicine*, 83: 192-200

Yael Riahi, Nurit Kaiser, Guy Cohen, Ihab Abd-Elrahman, Galia Blum, Oz M. Shapira, Tomer Koler, Maya Simonescu, Anca V. Sima, Neven Zarkovic, Kamelija Zarkovic, Marica Orioli, Giancarlo Aldini, Erol Cerasi, Gil Leibowitz, Shlomo Sasson (2015) Foam cell-derived 4-hydroxynonenal induces endothelial cell senescence in a TXNIP-dependent manner. *Journal of Cellular and Molecular Medicine*, 18: 1887-99

Bauer, G., Zarkovic, N. (2015) Revealing mechanisms of selective, concentration-dependent potentials of 4-hydroxy-2-nonenal to induce apoptosis in cancer cells through inactivation of membrane-associated catalase. *Free Radical Biology and Medicine*, 81:128-144

Višnja Stepanić, Ana Čipak Gašparović, Koraljka Gall Trošelj, Dragan Amić, Neven Žarković (2015) Selected attributes of polyphenols in targeting oxidative stress in cancer. *Current topics in Medicinal Chemistry*.15: 496-509

Lidija Milkovic, Ana Cipak Gasparovic, Neven Zarkovic (2015) Overview on major lipid peroxidation bioactive factor 4-hydroxynonenal as pluripotent growth regulating factor. *Free Radical Research*, 49: 850-860

Kujundžić, R.N., Žarković, N., Trošelj, K.G.(2014) Pyridine nucleotides in regulation of cell death and survival by redox and Non-redox reactions. *Critical Reviews in Eukaryotic Gene Expression*, 24: 287-309.

Milkovic, L., Siems, W., Siems, R, Zarkovic, N (2014) Oxidative stress and antioxidants in carcinogenesis and integrative therapy of cancer. *Current Pharmaceutical Design*. 20: 6529-6542

Lidija Milkovic, Alexander Hoppe, Rainer Detsch, Aldo R. Boccaccini, Neven Zarkovic (2014) Effects of Cu-doped 45S5 bioactive glass on the lipid peroxidation-associated growth of human osteoblast-like cells in vitro. *Journal of Biomedical Materials Research: Part A*, 102: 3556-3561

Gasparovic, A.C., Jaganjac, M., Mihaljevic, B., Sunjic, S.B., Zarkovic, N. (2013) Assays for the measurement of lipid peroxidation. *Methods in Molecular Biology* (Clifton, N.J.), 965: 283-296

Neven Zarkovic, Ana Cipak, Morana Jaganjac, Suzana Borovic, Kamelija Zarkovic (2013) Pathophysiological relevance of aldehydic protein modifications. *J Proteomics*, 92: 239-247

Daniela Weber, Lidija Milkovic, Stuart J. Bennett, Helen R. Griffiths, Neven Zarkovic, and Tilman Grune (2013) Measurement of HNE protein adducts in human plasma and serum by ELISA - Comparison of two primary antibodies. *Redox Biology*, 1: 226-233

Vistoli, G., De Maddis, D., Cipak, A., Zarkovic, N., Carini, M., Aldini, G. (2013) Advanced glycoxidation and lipoxidation end products (AGEs and ALEs): An overview of their mechanisms of formation. *Free Radic Res*: 47: 3-27

Marijana Burum, Romano Šnajder, Neven Žarković (2012) Patofiziologija prekanceroza usne šupljine. *Sestrinski glasnik*, 17:169-173

Morana Jaganjac, Tamara Čačev, Ana Čipak, Sanja Kapitanović, Koraljka Gall Trošelj, Neven Žarković (2012) Even stressed cells are individuals: Second messengers of free radicals in pathophysiology of cancer. *Croatian Medical Journal*, 53:304-309

Gunars Duburs, Denis Neibecker, Neven Žarković (2012) Chemistry and personalized medicine – the research and development future of Europe. *Croatian Medical Journal*, 53:291-293

Morana Jaganjac, Iva Ozana Prah, Ana Cipak, Marina Cindric, Lidija Mrakovcic, Franz Tatzber, Petar Ilincic, Vinko Rukavina, Branka Spehar, Jelena Parlov Vukovic, Sanda Telen, Koji Uchida, Zoran Lulic, Neven Zarkovic (2012) Effects of bioreactive acrolein from automotive exhaust gases on human cells in vitro. *Environmental Toxicology*, 27:644-657

Morana Jaganjac, Marija Poljak-Blazi, Kamelija Zarkovic, Rudolf Joerg Schaur, Suzana Borovic, Tanja Matijevic, Ana Cipak, Marina Cindric, Koji Uchida, Georg Waeg, Neven Zarkovic (2012) Elevated neutrophil elastase and acrolein-protein adducts are associated with W256 regression. *Clinical & Experimental Immunology*, 170:178-185

Verónica R. Vásquez-Garzón, Patrick Rouimi, Isabelle Jouanin, Georg Waeg, Neven Zarkovic, Saul Villa-Treviño, Françoise Guéraud (2012) Evaluation of three simple direct or indirect carbonyl detection methods for characterization of oxidative modifications of proteins. *Toxicology Mechanisms and Methods*, 22:1–9.

Lovakovic Tomislava, Poljak-Blazi Marija, Duburs Gunars, Cipak Ana, CindriC Marina, Vigante Brigita, Bisenieks Egils, Jaganjac Morana, Mrakovcic Lidija, Dedic Azra, Zarkovic Neven (2011) Growth Modulation of Human Cells in vitro by Mild Oxidative Stress and 1,4-Dihydropyridine Derivative Antioxidants. *Collegium Antropologicum*, 35: 137-141

S Sobocanec, T Balog, A Saric, Z Macak Safranko, M Stroser, K Zarkovic, N Zarkovic, R Stojkovic, S Ivankovic, T Marotti (2011) Antitumor effect of Croatian propolis as a consequence of diverse sex-related dihydropyrimidine dehydrogenase (DPD) protein expression, *Phytomedicine*, 18:852-858

Morana Jaganjac, Marija Poljak-Blaži, Iva Kirac, Suzana Borović, Rudolf Joerg Schaur, Neven Žarković (2010) Granulocytes as effective anticancer agent in experimental solid tumor models. *Immunobiology*. 215: 1015-1020

Marina Cindrić, Ana Čipak, Julianna Serly, Aiva Plotniece, Morana Jaganjac, Lidija Mrakovčić, Tomislava Lovaković, Azra Dedić, Ivo Soldo, Gunars Duburs, Neven Žarković and Jozsef Molnar (2010) Reversal of Multidrug Resistance in Murine Lymphoma Cells by Amphiphilic Dihydropyridine Antioxidant Derivative. *Anticancer Research*, 30: 4063-4070

Marija Poljak Blaži, Morana Jaganjac, Neven Žarković (2010) Cell Oxidative Stress: Risk of Metal Nanoparticles,. In. *Handbook of Nanophysics* (Klaus D. Sattler, Ed.) CRC Press, 16-1-16-17

Ana Čipak Gašparović, Tomislava Lovaković and Neven Žarković (2010) Oxidative Stress and Antioxidants: Biological Response Modifiers of Oxidative Homeostasis in Cancer. *Periodicum biologorum*, 112:433-439

Agnieszka Augustyniak, Grzegorz Bartosz, Ana Čipak, Gunars Duburs, Ľubica Horáková, Wojciech Łuczaj, Magdalena Majekova, Andreani D. Odysseos, Lucia Rackova, ElŜbieta Skrzydlewska, Milan Stefek, Miriam Štrosová, Gunars Tirzitis, Petras Rimantas Venskutonis, Jana Viskupicova, Panagiota S. Vranka, Neven Žarković (2010) Natural and synthetic antioxidants – an updated overview. *Free Radical Research*, 44:1216-1262

Anne Negre-Salvayre, Nathalie Auge, Victoria Ayala, Huveyda Basaga, Jordi Boada, Rainer Brenke, Sarah Chapple, Guy Cohen, Janos Feher, Tilman Grune, Gabriella Lengyel, Giovanni E. Mann, Reinald Pamplona,

Giuseppe Poli, Manuel Portero-Otin, Yael Riahi, Robert Salvayre, Shlomo Sasson, Jose Serrano, Ofer Shamni, Werner Siems, Richard C. M. Siow, Ingrid Wiswedel, Kamelija Žarković, Neven Žarković (2010) Pathological aspects of lipid peroxidation. *Free Radical Research*, 44:1125-1171

Corinne M. Spickett, Ingrid Wiswedel, Werner Siems, Kamelija Zarkovic and Neven Žarković (2010) Advances in methods for the determination of biologically relevant lipid peroxidation products. *Free Radical Research*, 44:1172-1202

Ana Čipak, Suzana Borovic, Morana Jaganjac, Nikolaus Bresgen, Iva Kirac, Ivana Grbesa, Lidija Mrakovčić, Marina Cindrić, Mira Šćukanec-Špoljar, Koraljka Gall-Trošelj, Marijana Ćorić, Peter Eckl and Neven Žarković (2010) Influence of 4-hydroxynonenal and spleen cells on primary hepatocyte culture and a novel liver-derived cell line resembling hepatocyte stem cells. *Acta Biochimica Polonica*, 57:185-191

José Serrano, Ana Čipak, Jordi Boada, Hugo Gonzalo, Daniel Cacabelos, Anna Cassanye, Reinald Pamplona, Neven Žarković and Manuel Portero-Otin (2010) Double edged sword behavior of Gallic Acid and its interaction with peroxidases in Human Endothelial Cell culture (HMEC). Antioxidant and pro-oxidant effects. *Acta Biochimica Polonica*, 57:193-198

Ana Čipak, Lidija Mrakovčić, Milan Čiz, Antonin Lojek, Boryana Mihaylova, Ivan Goshev, Morana Jaganjac, Marina Cindric, Sanda Šitić, Marko Margaritoni, Georg Waeg, Marija Balic, Neven Žarković (2010) Growth suppression of human breast carcinoma stem cells by lipid peroxidation product 4-hydroxy-2-nonenal and hydroxyl radical - modified collagen. *Acta Biochimica Polonica*, 57:165-171

Gordana Jurić-Sekhar, Kamelija Žarković, Georg Waeg, Ana Čipak, Neven Žarković (2009) Distribution of 4-Hydroxynonenal-Protein Conjugates as a Marker of Lipid Peroxidation and Parameter of Malignancy in Astrocytic and Ependymal Tumors of the Brain, *Tumori*, 95:762-768

Marquez-Quiñones, Adriana, Ana Čipak, Kamelija Žarković, Fattel-Fazenda, S., Villa-Treviño S., Neven Žarković and Guéraud, F. (2010) HNE-protein adducts formation in different pre-carcinogenic stages of hepatitis in LEC rats. *Free Radical Research*, 44:119-127

Sobočanec Sandra, Balog Tihomir, Šarić Ana, Šverko, Višnja, Žarković Neven; Čipak Gašparović Ana, Žarković Kamelija, Waeg Georg, Mačak Šafranko Željka, Kušić Borka, Marotti Tatjana (2010) Cyp4a14 overexpression induced by hyperoxia in female CBA mice as a possible contributor of increased resistance to oxidative stress. *Free Radical Research*, 44:181-190

Zajim Čustović, Kamelija Žarković, Marina Cindrić, Ana Čipak, Ilija Jurković, Zdenko Sonicki, Koji Uchida, Neven Žarković (2010) Lipid peroxidation product acrolein as predictive biomarker of prostate carcinoma relapse after radical surgery. *Free Radical Research*, 45:497-504

Marija Poljak-Blaži, Darko Kolarić, Morana Jaganjac, Kamelija Žarković, Karolj Skala, Neven Žarković (2009) Specific thermographic changes during Walker 256 carcinoma development: differential infrared imaging of tumour, inflammation and haematoma. *Cancer Detection & Prevention*, 32: 92-97

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Luka Andrisic, Danuta Dudzik, Coral Barbas, Lidija Milkovic, Tilman Grune, Neven Zarkovic (2018) Short overview on metabolomics approach to study pathophysiology of oxidative stress in cancer. *Redox Biology* 14: 47-58

Nedic Erjavec G, Konjevod M, Nikolac Perkovic M, Svob Strac D, Tudor L, Barbas C, Grunec T, Zarkovic N, Pivac N (2018) Short overview on metabolomic approach and redox changes in psychiatric disorders. *Redox Biology* 14: 178-186

- Kamelija Zarkovic, Antonia Jakovcevic, Neven Zarkovic (2017) Contribution of the HNE-Immunohistochemistry to Modern Pathological Concepts of Major Human Diseases. *Free Radic Biol Med*, 111: 110-125
- Ana Cipak-Gasparovic; Lidija Milkovic; Suzana Borovic-Sunjic; Neven Zarkovic (2017) Cancer Growth Regulation by 4-Hydroxynonenal Article Type. *Free Radic Biol Med*, 111: 226-234
- Astrida Velen, N. Zarkovic, Koraljka Gall Troselj, Egils Bisenieks, A. Krauze, Janis Poikans and Gunars Duburs (2016) 1,4-Dihydropyridine Derivatives – Dihyronicotinamide Analogues: Model Compounds Targeting Oxidative Stress. *Oxid Med Cellular Longev*, <http://dx.doi.org/10.1155/2016/1892412>
- Anna Moniuszko-Malinowska, Wojciech Łuczaj, Iwona Jarocka-Karpowicz, Sławomir Pancewicz, Joanna Zajkowska, Luka Andrisic, Neven Zarkovic, Elżbieta Skrzydlewska (2016) Lipid peroxidation in the pathogenesis of neuroborreliosis. *Free Radic Biol Med*, 96: 255-263
- Pierre-Alexis Mouthuy, Sarah JB Snelling, Stephanie G Dakin, Lidija Milković, Ana Čipak Gašparović, Andrew J Carr, Neven Žarković (2016) Biocompatibility of implantable materials: An oxidative stress viewpoint. *Biomaterials*, 109; 55-68
- Agnieszka Gęgotek, Jacek Nikliński, Neven Žarković, Kamelija Žarković, Georg Waeg, Wojciech Łuczaj, Radosław Charkiewicz, Elżbieta Skrzydlewska (2016) Lipid mediators involved in the oxidative stress and antioxidant defence of human lung cancer cells. *Redox Biology*, 9:210-219
- Huiqin Zhong, Mengqing Xiao, Kamelija Zarkovic, Mingjiang Zhu, Rina Sa, Jianhong Lu, Yongzhen Tao, Qun Chen, Lin Xia, Shuqun Cheng, Georg Waeg, Neven Zarkovic, Huiyong Yin (2017) Mitochondrial Control of Apoptosis through Modulation of Cardiolipin Oxidation in Hepatocellular Carcinoma: A Novel Link between Oxidative Stress and Cancer. *Free Radical Biology and Medicine*, 176: 67-76
- Koraljka Gall Troselj, Francoise Gueraud, Tanja Matijevic Glavan, Fabrice Pierre, Neven Zarkovic (2017) A Review on Food Associated Carcinogenesis. In: *Food Toxicology (Debasis Bagchi, Anand Swaroop, Eds.)*, CRC Press/Taylor & Francis, Boca Raton, New York, London, p.35-56
- Nevenka Piskač Živković, Mladen Petrovečki, Čedna Tomasović Lončarić, Igor Nikolić, Georg Waeg, Morana Jaganjac, Kamelija Žarković, Neven Žarković (2017) Positron Emission Tomography-Computed Tomography and 4-Hydroxynonenal-histidine Immunohistochemistry Reveal Differential Onset of Lipid Peroxidation in Primary Lung Cancer and in Pulmonary Metastasis of Remote Malignancies, *Redox Biology*, 11: 600-605
- Mohamed A Elrayess, Shamma Almuraikhy, Wael Kafienah, Afnan Al-Menhali, Fatima Alkhelaifi, Moataz Bashah, Kamelija Zarkovic, Neven Zarkovic, Georg Waeg, Mohammed Alsayrafi, Morana Jaganjac (2017) 4-Hydroxynonenal causes impairment of human subcutaneous adipogenesis and induction of adipocyte insulin resistance. *Free Radic Biol Med*, 104;129-137
- Morana Jaganjac, Shamma Almuraikhy, Fatima Al-Khelaifi, Mashaal Al-Jaber, Moataz Bashah, Nayef A. Mazloun, Kamelija Zarkovic, Neven Zarkovic, Georg Waeg, Wael Kafienah (2017) Combined metformin and insulin treatment reverses metabolically impaired omental adipogenesis and accumulation of 4-hydroxynonenal in obese diabetic patients. *Redox Biology* 12: 483-490
- Milkovic, L., Zarkovic, N., Saso, L.(2017) Controversy about pharmacological modulation of Nrf2 for cancer therapy. *Redox Biology*, 12: 727-732
- Pierre-Alexis Mouthuy, Maja Somogyi Škoc, Ana Čipak Gašparović, Lidija Milković, Andrew J Carr, Neven Žarković (2017) Investigating the use of curcumin-loaded electrospun filaments for soft tissue repair applications. *International Journal of Nanomedicine*, 12: 3977-3991

- Łuczaj, W., Gindzienska-Sieskiewicz, E., Jarocka-Karpowicz, I., Andrisic, L., Sierakowski, S., Zarkovic, N., Waeg, G., Skrzydlewska, E. (2016) The onset of lipid peroxidation in rheumatoid arthritis: Consequences and monitoring. *Free Radical Research*, 50:304-313
- Frijhoff J, Winyard PG, Zarkovic N, Davies S, Stocker R, Cheng D, Knight A, Taylor EL, Oettrich J, Ruskovska T, Cipak Gasparovic A, Cuadrado A, Weber D, Poulsen HE, Grune T, Schmidt HH, Ghezzi P. (2015) Clinical relevance of biomarkers of oxidative stress. *Antioxid Redox Signal.*, 23: 1144-1170
- Morana Jaganjac Ana Cipak, Rudolf Joerg Schaur, Neven Zarkovic (2015) Pathophysiology of Neutrophil-mediated Extracellular Redox Reactions. *Frontiers in Bioscience-LANDMARK*, 29:839-855
- Kamelija Zarkovic, Pauline Larroque-Cardoso, Mélanie Pucelle, Robert Salvayre, Georg Waeg, Anne Nègre-Salvayre, Neven Zarkovic (2015) Elastin aging and lipid oxidation products in human aorta. *Redox Biology*, 4: 109-117
- Bauer, G., Zarkovic, N. (2015) Revealing mechanisms of selective, concentration-dependent potentials of 4-hydroxy-2-nonenal to induce apoptosis in cancer cells through inactivation of membrane-associated catalase. *Free Radical Biology and Medicine*, 81:128-144
- Višnja Stepanić, Ana Čipak Gašparović, Koraljka Gall Trošelj, Dragan Amić, Neven Žarković (2015) Selected attributes of polyphenols in targeting oxidative stress in cancer. *Current topics in medicinal chemistry*.15: 496-509
- Lidija Milkovic, Ana Cipak Gasparovic, Neven Zarkovic (2015) Overview on major lipid peroxidation bioactive factor 4-hydroxynonenal as pluripotent growth regulating factor. *Free Radical Research*,49: 850-860
- Cherkas A, Abrahamovych O, Golota S, Nersesyan A, Pichler C, Serhiyenko V, Knasmüller S, Zarkovic N, Eckl P. (2015) The correlations of glycated hemoglobin and carbohydrate metabolism parameters with heart rate variability in apparently healthy sedentary young male subjects. *Redox Biology*, 5: 301-307
- Françoise Guéraud, Sylviane Taché, Jean-Paul Steghens, Lidija Milkovic, Suzana Borovic-Sunjic, Neven Zarkovic, Eric Gaultier, Nathalie Naud, Cécile Héliès-Toussaint, Fabrice Pierre and Nathalie Priymenko (2015) Dietary polyunsaturated fatty acids and heme iron induce oxidative stress biomarkers and a cancer promoting environment in the colon of rats. *Free Radical Biology and Medicine*,83: 192-200
- Yael Riahi, Nurit Kaiser, Guy Cohen, Ihab Abd-Elrahman, Galia Blum, Oz M. Shapira, Tomer Koler, Maya Simonescu, Anca V. Sima, Neven Zarkovic, Kamelija Zarkovic, Marica Orioli, Giancarlo Aldini, Erol Cerasi, Gil Leibowitz, Shlomo Sasson (2015) Foam cell-derived 4-hydroxynonenal induces endothelial cell senescence in a TXNIP-dependent manner. *Journal of Cellular and Molecular Medicine*, 18: 1887-99
- Lidija Milkovic, Alexander Hoppe, Rainer Detsch, Aldo R. Boccaccini, Neven Zarkovic (2014) Effects of Cu-doped 45S5 bioactive glass on the lipid peroxidation-associated growth of human osteoblast-like cells in vitro. *Journal of Biomedical Materials Research: Part A*, 102: 3556-3561
- Ana I. Rojo, Gethin McBean, Marina Cindric, Javier Egea, Manuela G. López, Patricia Rada, Neven Zarkovic and Antonio Cuadrado (2014) Redox control of microglial function: molecular mechanisms and functional significance. *Antioxidants and Redox Signaling*, 21: 1766-1801
- Kujundžić, R.N, Žarković, N., Trošelj, K.G.(2014) Pyridine nucleotides in regulation of cell death and survival by redox and non-redox reactions. *Critical Reviews in Eukaryotic Gene Expression*, 24: 287-309.
- Milkovic, L., Siems, W., Siems, R, Zarkovic, N (2014) Oxidative stress and antioxidants in carcinogenesis and integrative therapy of cancer. *Current Pharmaceutical Design*. 20: 6529-6542

Vistoli, G., De Maddis, D., Cipak, A., Zarkovic, N., Carini, M., Aldini, G. (2013) Advanced glycoxidation and lipoxidation end products (AGEs and ALEs): An overview of their mechanisms of formation. *Free Radic Res*: 47: 3-27

Morana Jaganjac, Oren Tirosh, Guy Cohen, Shlomo Sasson, Neven Zarkovic, (2013) Reactive aldehydes - second messengers of free radicals in diabetes mellitus. *Free Radic Res*, 47: 39-48

Gasparovic, A.C., Jaganjac, M., Mihaljevic, B., Sunjic, S.B., Zarkovic, N. (2013) Assays for the measurement of lipid peroxidation. *Methods in Molecular Biology* (Clifton, N.J.), 965: 283-296

Neven Zarkovic, Ana Cipak, Morana Jaganjac, Suzana Borovic, Kamelija Zarkovic (2013) Pathophysiological relevance of aldehydic protein modifications. *J Proteomics*, 92: 239-247

Milan Rudić, Lidija Milković, Kamelija Žarković, Suzana Borović-Šunjić, Olivier Sterkers, Evelyne Ferrary, Alexis Bozorg Grayeli, Neven Žarković (2013) The effects of angiotenzin II and oxidative stress mediator 4-hydroxynonenal on the human osteoblast-like cell growth: Possible relevance for otosclerosis. *Free Radical Biology Medicine*, 57:22-28

Daniela Weber, Lidija Milkovic, Stuart J. Bennett, Helen R. Griffiths, Neven Zarkovic, and Tilman Grune (2013) Measurement of HNE protein adducts in human plasma and serum by ELISA - Comparison of two primary antibodies. *Redox Biology*, 1: 226-233

Cindric M., Cipak A., Zapletal E., Jaganjac M., Milkovic L., Waeg G., Stolc S., Zarkovic N., Suzana Borovic, S. (2013) Stobadine attenuates impairment of an intestinal barrier model caused by 4-hydroxynonenal. *Toxicology in vitro*, 27: 427-432

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Oksidativni stres i zloćudne bolesti (00981113)

Morfološke i funkcionalne osobine adenoma hipofize (3-103-030)

Endokrini i parakrini mehanizmi u patogenezi tumora hipofize (108116)

Lipidi, slobodni radikali i njihovi glasnici u integrativnoj onkologiji

Oksidacijski stres i tumori središnjeg živčanog sustava

The role of reactive aldehydes and tumor basic protein in tumor growth control - "Lise Meitner" research grant

Effects of the Lipid Peroxidation Product 4-Hydroxynonenal on Primary Hepatocytes

Lipid Peroxidation Associated Disorders LPO – COST B35

Chemistry of non-enzymatic protein modification - modulation of protein structure and function

EU-ROS

Strengthening the research and innovative capacities of the Latvian Institute of Organic Synthesis, the leading Baltic regional centre for drug discovery (InnovaBalt)

Horizon 2020 Framework Programme — BIOXYARN

Technology & Know-how Transfer in Metabolomics and establishment of latest scientific equipment in Zagreb – CROA_A-00033

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS



Uloga produkata lipidne peroksidacije i novih vrsta Cu-biostakla u regulaciji rasta stanica kosti

Pathophysiology of oxidative stress and lipid peroxidation in atherosclerosis and cancer - experimental integrative biomedical treatments by natural substances affecting 4-hydroxy-2-nonenal (HNE) bioactivities

Strengthening the research and innovative capacities of the Latvian Institute of Organic Synthesis, the leading Baltic regional centre for drug discovery (InnovaBalt)

Horizon 2020 Framework Programme — BIOXYARN

Technology & Know-how Transfer in Metabolomics and establishment of latest scientific equipment in Zagreb – CROA_A-00033

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

7

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Associate Professor Rado Žić

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital "Dubrava", Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Hand Surgery, Microvascular tissue transfer

BIOGRAPHY

Contact information

Address: Trg. I Mažuranića 8

tel.: 00 385 98 418771

E-mail: rado.zic@zg.htnet.hr

Date and place of birth: 24.04.1966, Zagreb, Croatia

Education

1980-1983 Gymnasium Maribor, Slovenia

1983-1984 San Dieguito High School, San Diego, California, USA (Graduated with honors)

1984-1989 School of Medicine, University of Zagreb, Croatia

1989-1990 Internship University hospital "Rebro" Zagreb, Croatia

1992-1996 General Surgery Training Department of Surgery, University Hospital "Rebro" Zagreb, Croatia

Plastic Surgery Training:

11/1996 - 10/1998 Plastic and Reconstructive surgery unit, Department of Surgery, University Hospital "Zagreb" Zagreb, Croatia

11/1998 - 10/1999 Plastic and Reconstructive surgery, Department of Surgery, University Hospital "Dubrava" Zagreb, Croatia

11/1999 - 10/2000 Plastic Surgery Unit, Queen Victoria Hospital, East Grinstead, England

11/2000 - 05/2003 Plastic and Reconstructive surgery, Department of Surgery, University Hospital "Dubrava" Zagreb, Croatia

Work experience

2011- present Chief of Unit for Hand and Reconstructive surgery, Department of

Plastic, Reconstructive and Aesthetic Surgery, University Hospital "Dubrava" Zagreb, Croatia

11/2000- 2011 Department of Plastic and Reconstructive and Aesthetic Surgery University Hospital "Dubrava" Zagreb, Croatia

11/1999 - 10/2000 Plastic Surgery Unit, Queen Victoria Hospital, East Grinstead, Great Britain

10/1998 - 10/1999 Plastic and Reconstructive Surgery Unit, Department of Surgery,

University Hospital " Dubrava" Zagreb, Croatia

11/1996 -10/1998 Plastic and Reconstructive Surgery Unit, Department of Surgery,

University Hospital "Rebro" Zagreb, Croatia

6/1992 - 11/1996 Department of Surgery, University Hospital "Rebro" Zagreb, Croatia

9/1989 - 6/1992 Department of Anatomy, School of Medicine, University of Zagreb

9/1989 - 10/1990 Internship University Hospital "Rebro" Zagreb, Croatia

1991 - 1995 Six months experience in war surgery in War Hospitals in Croatia and Bosnia and Herzegovina

POSTGRADUATE STUDIES AND DEGREES:

1989-1992 Biomedicine, School of medicine, University of Zagreb

1995 Ph.D. in medical sciences

2002 Scientific title: Science fellow

2005 Scientific title: Science advisor (highest possible scientific title in Croatia)

2001 Academic title: Senior assistant School of Medicine University of Zagreb

2005 Academic title: Assistant Professor School of Medicine University of Zagreb

2012 Academic title Associate Professor School of Medicine University of Zagreb

Memberships

1996- present Member of the Croatian Society of Plastic, Reconstructive and Aesthetic Surgery

2000-present Member of the Croatian Senologic Society

2001- present Delegate of the Croatian Society of Plastic, Reconstructive and Aesthetic Surgery to the EBOPRAS and UMSE

2002 Vice-president of Croatian Society of Plastic, Reconstructive and Aesthetic Surgery

2004 Reelected Vice-president of Croatian Society of Plastic, Reconstructive and Aesthetic Surgery

2006- present Member of the Pyrenean Club of Plastic Surgery

2008- present Member of ISAPS (International Society of Aesthetic Plastic Surgery)

2008- present Corresponding member of ASPS (American Society of Plastic Surgery)

2008 Reelected Vice-president of Croatian Society of Plastic, Reconstructive and Aesthetic Surgery until 2012

2009 Secretary General of ESPRAS (European Society of Plastic, Reconstructive and Aesthetic Surgery)

2010 Chairmen of Accreditation committee of EBOPRAS (European Board of Plastic, Reconstructive and Aesthetic Surgery)

2012 President of Croatian Society of Plastic, Reconstructive and Aesthetic Surgery

2014 Secretary General of ESPRAS (European Society of Plastic, Reconstructive and Aesthetic Surgery) until 2018

2014 Reelected Chairmen of Accreditation committee of EBOPRAS (European Board of Plastic, Reconstructive and Aesthetic Surgery)

2015 Member of the editorial board of European Journal of Plastic Surgery

2017 Reelected President of the Croatian Society of Plastic, Reconstructive and Aesthetic Surgery

2018 Member of the Editorial board of Turkish Journal of Plastic Surgery

2018 President of ESPRAS (European Society of Plastic, Reconstructive and Aesthetic Surgery)

Personal information

Married, two children

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2012

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Vljacic Z, Zic R, Skenderi Z, Bilic-Zulle L, Martic K, Stanec Z. Biomechanical trial of modified flexor tendon sutures: an in vitro study. *J Plast Surg Hand Surg*. 2012 Sep;46(3-4):222-8. doi: 10.3109/2000656X.2012.686916.

2. Žic R, Gorjanc B, Stanec Z, Budi S, Milanović R, Vljčić Z, Rudman F, Martić K, Roje Ž, Held R. Kirurška iskustva u liječenju komplikacija vrijeda. *Acta Med Croatica*, 2016. 70; 19-22.

3. Budi S, Gorjanc B, Žic R, Martić K, Rudman F, Vljčić Z, Roje Ž, Milanović R, Stanec Z. Substitute and alternative forms of treatment of skin defects. (Supstitutivni i alternativni oblici liječenja defekata kože). *Acta Med Croatica*, 2015. 69 (Supl. 1) 99-101. Extracellular matrix supports healing of transected rabbit Achilles tendon.

4. Lipar M, Zdilar B, Kreszinger M, Ćorić M, Radišić B, Samardžija M, Žic R, Pećin M. *Heliyon*. 2018 Sep 10;4(9):e00781. doi: 10.1016/j.heliyon.2018.e00781. eCollection 2018 Sep

5. Techniques for Revascularisation and Replantation of the Hand, Forearm and Arm. Ahmed Tarek Emam, Rado Zic e-LPRAS session British Association of Plastic, Reconstructive and Aesthetic Surgeons BAPRAS (in final stage before E publication)

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1) Sinus pericranii in the left frontal region involving the superior eyelid: a case report. Grahovac G, Rajappa P, Vilendecic M, Zic R, Lambasa S, Prgommet S. *J Neurol Surg A Cent Eur Neurosurg*. 2013 Dec;74 Suppl 1:e166-9.

2) Skin and nipple-areola complex sparing mastectomy in breast cancer patients: 15-year experience. Stanec Z, Žic R, Budi S, Stanec S, Milanović R, Vljčić Z, Roje Z, Rudman F, Martić K, Held R, Božo G. *Ann Plast Surg*. 2014 Nov;73(5):485-91

3) Focal myositis of lower extremity responsive to botulinum A toxin. Mitrovic J, Prka Z, Zic R, Marusic S, Morovic-Vergles J. *Clin Neuropharmacol*. 2014 Mar-Apr;37(2):55-7.

4) Surgical experiences in the treatment of ulcer complications. Rado Žic, Bozo Gorjanc, Zdenko Stanec, Srećko Budi, Rudolf Milanović, Zlatko Vlajčić, Franjo Rudman, Kresimir Martić, Zeljka Roje, Rebeka Held. Acta Med Croatica. 2016 Mar;70(1):19-22. Croatian

5) The Inguinal Adipodermal Graft: a Single-Stage Technique for Cranial Linear Groove-like Defects Correction. Vlajcic Z, Zic R. Med Arch. 2016 Jun;70(3):217-8. doi: 10.5455/medarh.2016.70.217-218

6) Extracellular matrix supports healing of transected rabbit Achilles tendon. Lipar M, Zdilar B, Kreszinger M, Ćorić M, Radišić B, Samardžija M, Žic R, Pećin M. Heliyon. 2018 Sep 10;4(9):e00781. doi: 10.1016/j.heliyon.2018.e00781. eCollection 2018 Sep.

7) Bone Cancer in the Lower Limb. Rado Zic e-LPRAS session British Association of Plastic, Reconstructive and Aesthetic Surgeons BAPRAS (in final stage before E publication)

8) Techniques for Revascularisation and Replantation of the Hand, Forearm and Arm. Ahmed Tarek Emam, Rado Zic e-LPRAS session British Association of Plastic, Reconstructive and Aesthetic Surgeons BAPRAS (in final stage before E publication)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1985-present Laboratory for Calcified Tissue Research under the mentorship of Prof. dr. S. Vukičević

1989-1998 research fellow in the scientific project on BMP-s chaired by Prof. S. Vukicevic MD PhD and funded by the Ministry of Science, of Republic of Croatia

2000- 2008 research fellow on the scientific project: surgery of peripheral nerves chaired by Prof. Z. Stanec MD PhD and funded by the Ministry of Science, of Republic of Croatia

2002- 2008 Chairman of Scientific project: Prefabrication of tissues in Plastic Surgery

2017-present Co-chairman of the Scientific project in Breast Cancer Diagnosis and Treatment funded by the Ministry of Science, of Republic of Croatia

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Research project of Hrvatske zaklade za znanost HRZZ-IP-06-2997 Sonoelastografy and i magnetic rezonance in diagnostics and treatment of breast cancer (EL-MR-BREAST)

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

2

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assist. Prof. Snježana Židovec Lepej, MD, PhD, research advisor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: University Hospital for Infectious Diseases "Dr. Fran Mihaljević", Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Viral hepatitis

BIOGRAPHY

Name and surname: Snježana Židovec Lepej

Date/Place of birth: January 11th, 1971, Zagreb, Croatia

Scientific number: 228 211

Research and teaching rank: associate professor (Faculty of Science, University of Zagreb, December 20th 2016)

Research rank: scientific advisor (University of Zagreb School of Medicine, February 2nd 2012)

Education:

2000-2003, PhD in Natural Sciences (Biology), Faculty of Science, University of Zagreb, Croatia (Thesis title: The effect of highly active antiretroviral therapy on T-cell markers in persons infected with human immunodeficiency virus, mentor Prof. Josip Begovac, MD, PhD, thesis defended on September 10th 2003)

1994-1997, Master of Science, Biomedicine, Faculty of Science, University of Zagreb,

1989-1993, graduate studies in Biology (molecular biology), Faculty of Science, University of Zagreb

Employment:

2006- Head of Department of Immunological and Molecular Diagnostics, University Hospital for Infectious Diseases „Dr. F. Mihaljević“, Zagreb, Croatia

1998-2006 Head of Laboratory for Flow Cytometry, University Hospital for Infectious Diseases „Dr. F. Mihaljević“, Zagreb, Croatia

1993-1998 Head of Interferon Department, Institute of Immunology, Inc., Zagreb

Additional selected professional activities (current):

- member of the Committee for the postgraduate studies, Department of Biology, Faculty of Science, University of Zagreb
- Deputy Head of the Croatian Reference Center for Diagnostics and Treatment of Viral Hepatitis, Ministry of Health, Republic of Croatia and an associate of the Croatian Reference Center for Diagnostics and Treatment of HIV/AIDS
- Expert in accreditation procedures for clinical laboratories for the Croatian Accreditation Agency, areas: immunology and molecular diagnostics

Scientific publications:

90 scientific papers (55 papers in journals cited in the Current Contents, 5 papers in Science Citation Index journals, 5 papers in Medline journals, 13 papers in journals cited in Scopus/Embase)

Number of citations: 824

Author's h-index: 14

Membership of Editorial board in scientific journals:

Molecular and Experimental Biology in Medicine, member of the Editorial board

Selected memberships in professional societies:

National

- Croatian Society of Biologists in Health (member of the Board, since 2014)
- Croatian Society of Biologists (member, since 2002)
- Croatian Medical Chamber (since 2009, associate member)
- Croatian Society for Infectious Diseases (member, since 2009)
- Croatian Society for travel, tropical and migration medicine (member, since 2014)
- Croatian Society for biosafety and bioprotection

International

- European Society for Clinical Microbiology and Infectious Disease (member of the Educational Committee, od 2016)
- European Society for Antiviral Research (Council member for Croatia, od 2010.g.)

Awards:

The award „Dr. Ante Šercer“ of the Croatian Academy of Medical Sciences for the best national scientific paper in medicine published in 2007

Teaching (course coordinator)

Postgraduate specialist studies in infectious diseases, University of Zagreb School of Medicine, Course title: Diagnostics of human infectious diseases, course coordinator since 2008

Teaching (lecturer)

- graduate studies in medicine (in English), University of Zagreb, School of Medicine, MD in English
- graduate studies in biology, Faculty of Science, University of Zagreb, Courses: Molecular diagnostics, Research methods in molecular biology
- graduate studies in medical biochemistry and pharmacy, Faculty of Pharmacy and Biochemistry, University of Zagreb, course title: Viruses
- postgraduate specialist studies in infectious diseases, University of Zagreb School of Medicine
- postgraduate specialist studies in medical microbiology with parasitology, University of Zagreb School of Medicine
- postgraduate PhD (doctoral) studies in biomedicine and health, course title „Viral hepatitis“, University of Zagreb School of Medicine

Memberships in organising and scientific boards of scientific meetings (since 2016)

- 2st South-East European Conference on Travel, Tropical, Migration Medicine & HIV, 4.-7.4.2019., Dubrovnik, member of the scientific board
- 13. Hrvatski biološki kongres s međunarodnim sudjelovanjem, Poreč, 19.-23.09.2018., članica organizacijskog odbora

- 1st South-East European Conference on Travel, Tropical, Migration Medicine & HIV, 28th September 28-1st October, 2017, Dubrovnik, member of the scientific board
 - The 8th National HIV /AIDS Congress and 3rd Central European HIV Forum, Sibiu, 5-7th May 2016, member of the scientific board
 - 5th Croatian Congress of Clinical Cytology, 2nd Croatian Symposium of Analytical Cytology and 3rd Croatian Symposium of Cytotechnology.21.-23.04.2016, Opatija, member of the scientific board (for Analytical Cytology)
 - 8. Hrvatski kongres o urogenitalnim i spolno prenosivim infekcijama s međunarodnim sudjelovanjem, 13.-15.2016., Opatija, članica organizacijskog odbora
- Abstract reviewer for international scientific meetings (since 2016.g.)
- 26th European Conference on Clinical Microbiology and Infectious Diseases ECCMID April 6th-9th 2016, Amsterdam
 - 27th ECCMID April 22nd-25th 2017, Vienna
 - 28th ECCMID April 21th-24th 2018, Madrid
 - 29th ECCMID 2019, April 13th-16th 2019, Amsterdam

Grant reviewer:

- reviewer of grant proposals for the Ministry of Science, Education and Sports R. of Croatia recenztentica (2006.g.), Slovenian Research Agency (2014.g.), The Romanian National Authority for Scientific Research and Innovation RUTE (2015.g.), and Croatian Science Foundation for periodic grant reviews, 2015-2018.g.
- reviewer for the European Society for Clinical Microbiology and Infectious Diseases ESCMID research grants (2014 and 2018)

PhD mentorships:

Ivana Grgić (2012), Faculty of Science, University of Zagreb, Croatia, Thesis title: Primary resistance of human immunodeficiency virus type 1 to antiretroviral drugs«

Ana Planinić (2014), Faculty of Science, University of Zagreb, Croatia, Thesis title: »Mutations associated with resistance of human immunodeficiency virus type 1 to antiretroviral drugs«.

Lana Gorenc (2015) Faculty of Science, University of Zagreb, Croatia, Thesis title: »Cytokines in human immunodeficiency virus infection«

Anamarija Čavčić (2015) University of Zagreb School of Medicine, Thesis title: »The role of chemokines in the pathogenesis of enteroviral aseptic meningitis« (mentor Goran Tešović, co-mentor S. Židovec Lepej)

Lorna Stemberger Marić (2017) University of Zagreb School of Medicine, Thesis title: »Chemokines CXCL10, CXCL11 and CXCL13 in aseptic meningitis, neuroborreliosis and acute disseminated encephalomyelitis in children« (mentor Goran Tešović, co-mentor S. Židovec Lepej)

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 20.12.2016.

Associate professor, Faculty of Science, University of Zagreb

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Current Content papers

1. Papic N, Zidovec Lepej S, Gorenec L, Grgic I, Gasparov S, Filipec Kanizaj T, Vince A. The association of semaphorins 3C, 5A and 6D with liver fibrosis stage in chronic hepatitis C. *PLOS One* 2019; 13(12):e0209481
2. Vince A, Židovec Lepej S, Bingulac-Popović J, Miletić M, Kuret S, Sardelić S, Vrakela IB, Kurelac I. Distribution of hepatitis C virus genotypes and subtypes in Croatia: 2008-2015. *Cent Eur J Public Health* 2018;26:159-136.
3. Colagrossi L, Hermans LE, Salpini R, Di Carlo D, Pas SD, Alvarez M, Ben-Ari Z, Boland G, Bruzzone B, Coppola N, Seguin-Devaux C, Dyda T, Garcia F, Kaiser R, Köse S, Krarup H, Lazarevic I, Lunar MM, Maylin S, Micheli V, Mor O, Paraschiv S, Paraskevis D, Poljak M, Puchhammer-Stöckl E, Simon F, Stanojevic M, Stene-Johansen K, Tihic N, Trimoulet P, Verheyen J, Vince A, Lepej SZ, Weis N, Yalcinkaya T, Boucher CAB, Wensing AMJ, Perno CF, Svicher V; HEPVIR working group of the European Society for translational antiviral research (ESAR). Immune-escape mutations and stop-codons in HBsAg develop in a large proportion of patients with chronic HBV infection exposed to anti-HBV drugs in Europe. *BMC Infect Dis*. 2018 Jun 1;18(1):251. doi: 10.1186/s12879-018-3161-2.
4. Hermans LE, Svicher V, Pas SD, Salpini R, Alvarez M, Ben Ari Z, Boland G, Bruzzone B, Coppola N, Seguin-Devaux C, Dyda T, Garcia F, Kaiser R, Köse S, Krarup H, Lazarevic I, Lunar MM, Maylin S, Micheli V, Mor O, Paraschiv S, Paraskevis D, Poljak M, Puchhammer-Stöckl E, Simon F, Stanojevic M, Stene-Johansen K, Tihic N, Trimoulet P, Verheyen J, Vince A, Weis N, Yalcinkaya T, Lepej SZ, Perno C, Boucher CA Wensing AM; HEPVIR Working Group of the European Society for Translational Antiviral Research. Combined Analysis of the Prevalence of Drug-Resistant Hepatitis B Virus in Antiviral Therapy-Experienced Patients in Europe (CAPRE). *J Infect Dis*. 2016;213:39-48.
5. Bozicevic I, Lepej SZ, Rode OD, Grgic I, Jankovic P, Dominkovic Z, Lukas D, Johnston LG, Begovac J. Prevalence of HIV and sexually transmitted infections and patterns of recent HIV testing among men who have sex with men in Zagreb, Croatia. *Sex Transm Infect* 2012;88:539-44.
6. Kurelac I, Židovec Lepej S, Grgić I, Gorenec L, Papić N, Dušek D, Baršić B, Vince A. Chemokine CXCL10 at week 4 of treatment predicts sustained virological response in patients with chronic hepatitis C. *J Interferon Res Hum Retroviruses* 2012;32:386-91.
7. Papić N, Židovec Lepej S, Kurelac I, Čajić V, Budimir J, Dušek D, Vince A. Treatment of chronic hepatitis C in Croatian war veterans: experiences from Croatian reference center for viral hepatitis. *Croat Med J* 2011;52:35-40.
8. Božičević I, Rode OD, Lepej SZ, Johnston LG, Stulhofer A, Dominković Z, Bačak V, Lukas D, Begovac J. Prevalence of sexually transmitted infections among men who have sex with men in Zagreb, Croatia. *AIDS Behav* 2009;13:303-9.
9. Čavlek TV, Margan IG, Lepej SZ, Kolarić B, Vince A. Seroprevalence, risk factors, and hepatitis C virus genotypes in groups with high-risk sexual behavior in Croatia. *J Med Virol* 2009;81:1348-53.

Medline papers

1. Vince A, Hrštić I, Begovac J, Bradarić N, Duvnjak M, Đaković Rode O, Filipec Kanižaj T, Grgurević I, Jaklin Kekez A, Kaić B, Kes P, Kurelac I, Milić S, Morović M, Mrzljak A, Ostojić R, Poljak M, Slaviček J, Smolić M, Smolić R, Štimac D, Včev A, Vucelić B, Židovec Lepej S. Viral hepatitis. Croatian Consensus Statement 2013. *Acta Medica Croatica* 2013;67:263-273.
2. Poljak M, Židovec Lepej S, Rode O. Novosti u serološkoj i molekularnoj dijagnostici hepatitisa B i C. *Acta Medica Croatica* 2013;67:281-291.

3. Filipec-Kanižaj T, Budimir J, Čolić-Cvrlje V, Kardum-Skelin I, Šušterčić D, Naumovski-Mihalić S, Mrzljak A, Ostojić Kolonić S, Sobočan N, Bradić T, Mišetić Dolić Z, Kocman B, Katičić M, Židovec Lepej S, Vince A. Post-transplantacijska limfoproliferativna bolest u bolesnika s transplantacijom jetre – iskustvo KB Merkur. *Acta Med Croat* 2011;65(Supl 1):37-44.

4. Židovec Lepej S, Dušek D, Budimir J, Vince A. [Molecular diagnosis of hepatitis C and hepatitis B infection]. *Acta Med Croatica*. 2009;63:361-9.

5. Ostojić R, Vince A, Hrستیć I, Židovec Lepej S, Begovac J, Bradarić N, Burek V, Čolić-Cvrlje V, Duvnjak M, Horvat J, Jaklin Kekez A, Kes P, Lesnikar V, Mikulić R, Milić S, Miše S, Morović M, Pavić I, Sakoman S, Slaviček J, Štimac D, Včev A, Vucelić B. [Viral hepatitis. Croatian consensus conference--2009]. *Acta Med Croatica* 2009;63:349-57.

EMBASE / Scopus papers

1. Židovec Lepej S, Gužvinac M. Molekularna dijagnostika infektivnih bolesti u pedijatrijskih bolesnika. *Paediatr Croat* 2018;62 (Supl 1):176-181.

2. Grgić I, Židovec Lepej S, Planinić A, Gorenec L, Vince A. High prevalence of Q80K among NS3 resistance-associated substitutions in subtype 1a patients with chronic hepatitis C prior to treatment with direct acting antivirals: the Croatian data. *Hepato Monthly* 2017; 17(5):e45543.

3. Grgić I, Gorenec L, Gašpar M, Čerina M, Planinić A, Trupković M, Vince A, Židovec Lepej S. Polimorfizam interleukina 28B u osoba s kroničnim hepatitisom C u Hrvatskoj. *Infektološki glasnik* 2016;35:73-77.

4. Grgurević I, Kozić Dokmanović S, Šćukanec-Špoljar M, Kurelac I, Sonicki Z, Kirin M, Štoković N, Židovec Lepej S, Vince A. Interleukin-1 β gene promoter polymorphism is associated with higher liver fibrosis progression rate in Croatian patients with biochemically active chronic hepatitis C. *Med Jad* 2017;47:13-21.

5. Kurelac I, Papić N, Židovec Lepej S, Dušek D, Čajić V, Vince A. Uspješnost liječenja kroničnog hepatitisa C kombinacijom pegiliranog interferona alfa-2 i ribavirina u bolesnika s niskom viremijom i genotipom 1. *Infektološki glasnik* 2013;33:5-9.

6. Vince A, Židovec Lepej S, Kurelac I, Čajić V, Burek V, Dušek D, Budimir J. Suvremena dijagnostika i liječenje hepatitisa C. *Infektološki glasnik* 2009;29:49-56.

Other papers

1. Židovec Lepej S, Vince A. Molekularna dijagnostika u eri liječenja hepatitisa C novim lijekovima. 2016 *Medix*, god. 22, broj 121, 141-147.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

Current Content papers

1. Marevic S, Jozsef P, Popović Grle S, Cepelak I, Grgić I, Gorenec L, Stjepanović G, Laskaj R, Židovec Lepej S. Cytokines and statin therapy in chronic obstructive pulmonary disease patients. *Scand J Clin Lab Invest* 2018 (accepted, in press)

2. Papić N, Židovec Lepej S, Gorenec L, Grgić I, Gasparov S, Filipec Kanižaj T, Vince A. The association of semaphorins 3C, 5A and 6D with liver fibrosis stage in chronic hepatitis C. *PLOS One* 2019; 13(12):e0209481

3. Zejnullahu Raci P, Hošnjak L, Poljak M, Lepej SŽ, Vince A. Pre-vaccination prevalence of high-risk human papillomaviruses (HPV) in women from Kosovo and their related sociodemographic characteristics. *Ginekol Pol* 2018;89:485-494.

4. Vince A, Židovec Lepej S, Bingulac-Popović J, Miletić M, Kuret S, Sardelić S, Vrakela IB, Kurelac I. Distribution of hepatitis C virus genotypes and subtypes in Croatia: 2008-2015. *Cent Eur J Public Health* 2018;26:159-136.
5. Hafner D, Zivkovic SV, Bauman R, Tiljak K, Papić N, Lepej SZ. Follicular fluid vascular endothelial growth factor is associated with type of infertility and interferon alpha correlates with endometrial thickness in natural cycle in vitro fertilization. *Reprod Biol.* 2018 Sep;18(3):289-294.
6. Colagrossi L, Hermans LE, Salpini R, Di Carlo D, Pas SD, Alvarez M, Ben-Ari Z, Boland G, Bruzzone B, Coppola N, Seguin-Devaux C, Dyda T, Garcia F, Kaiser R, Köse S, Krarup H, Lazarevic I, Lunar MM, Maylin S, Micheli V, Mor O, Paraschiv S, Paraskevis D, Poljak M, Puchhammer-Stöckl E, Simon F, Stanojevic M, Stene-Johansen K, Tihic N, Trimoulet P, Verheyen J, Vince A, Lepej SZ, Weis N, Yalcinkaya T, Boucher CAB, Wensing AMJ, Perno CF, Svicher V; HEPVIR working group of the European Society for translational antiviral research (ESAR). Immune-escape mutations and stop-codons in HBsAg develop in a large proportion of patients with chronic HBV infection exposed to anti-HBV drugs in Europe. *BMC Infect Dis.* 2018 Jun 1;18(1):251. doi: 10.1186/s12879-018-3161-2.
7. Višković K, Židovec Lepej S, Gorenec A, Grgić I, Lukas D, Zekan Š, Dragobratović A, Trupković M, Begovac J. Cardiovascular markers of inflammation and serum lipid levels in HIV-infected patients with undetectable viremia. *Sci Rep.* 2018 Apr 17;8(1):6113. doi: 10.1038/s41598-018-24446-4
8. Lunar MM, Židovec Lepej S, Tomažič J, Vovko TD, Pečavar B, Turel G, Maver M, Poljak M. HIV-1 transmitted drug resistance in Slovenia and its impact on predicted treatment effectiveness: 2011-2016 update. *PLoS One.* 2018 Apr 26;13(4):e0196670.
9. Gjurasin B, Zidovec Lepej S, Michelle J. Cole, Rachel Pitt, Josip Begovac. Chlamydia trachomatis in cervical lymph node of man with lymphogranuloma venereum, Croatia, 2014. *Emerg Infect Dis* 2018; 24;806-808
10. Maric LS, Lepej SZ, Gorenec L, Grgic I, Trkulja V, Rode OD, Roglic S, Grmoja T, Barisic N, Tesovic G. Chemokines CXCL10, CXCL11, and CXCL13 in acute disseminated encephalomyelitis, non-polio enterovirus aseptic meningitis, and neuroborreliosis: CXCL10 as initial discriminator in diagnostic algorithm? *Neurol Sci* 2018;39:471-479.
11. Gorenec L, Zidovec Lepej S, Grgic I, Planinic A, Iscic Bes J, Vince A, Begovac J. The comparison of Th1, Th2, Th9, Th17 and Th22 cytokine profiles in acute and chronic HIV-1 infection. *Microb Pathog.* 2016 Jun 4;97:125-130
12. Hofstra LM, Sauvageot N, Albert J, Alexiev I, Garcia F, Struck D, Van de Vijver DA, Åsjö B, Beshkov D, Coughlan S, Descamps D, Griskevicius A, Hamouda O, Horban A, Van Kasteren M, Kolupajeva T, Kostrikis LG, Liitsola K, Linka M, Mor O, Nielsen C, Otelea D, Paraskevis D, Paredes R, Poljak M, Puchhammer-Stöckl E, Sönnernborg A, Staneková D, Stanojevic M, Van Laethem K, Zazzi M, Zidovec Lepej S, Boucher CA, Schmit JC, Wensing AM; SPREAD Program. Transmission of HIV Drug Resistance and the Predicted Effect on Current First-line Regimens in Europe. *Clin Infect Dis* 2016;62:655-63. doi: 10.1093/cid/civ963.
13. Hermans LE, Svicher V, Pas SD, Salpini R, Alvarez M, Ben Ari Z, Boland G, Bruzzone B, Coppola N, Seguin-Devaux C, Dyda T, Garcia F, Kaiser R, Köse S, Krarup H, Lazarevic I, Lunar MM, Maylin S, Micheli V, Mor O, Paraschiv S, Paraskevis D, Poljak M, Puchhammer-Stöckl E, Simon F, Stanojevic M, Stene-Johansen K, Tihic N, Trimoulet P, Verheyen J, Vince A, Weis N, Yalcinkaya T, Lepej SZ, Perno C, Boucher CA Wensing AM; HEPVIR Working Group of the European Society for Translational Antiviral Research. Combined Analysis of the Prevalence of Drug-Resistant Hepatitis B Virus in Antiviral Therapy-Experienced Patients in Europe (CAPRE). *J Infect Dis.* 2016;213:39-48.

14. Swartz J, Vandekerckhove L, Ammerlaan H, de Vries A, Begovac J, Bierman W, Boucher C, van der Ende M, Grossman Z, Kaiser R, Levy I, Mudrikova T, Paredes R, Perez-Bercoff D, Pronk M, Richter C, Schmit J-C, Vercauteren J, Zazzi M, Zidovec Lepej S, De Luca A, Wensing A. Efficacy of tenofovir and efavirenz in combination with lamivudine or emtricitabine in antiretroviral-naïve patients in Europe. *J Antimicrob Chemother* 2015;70:1850-7. doi: 10.1093/jac/dkv033.

15. Angelis K, Albert J, Mamais I, Magiorkinis G, Hatzakis A, Hamouda O, Struck D, Vercauteren J, Wensing AM, Alexiev I, Åsjö B, Balotta C, Camacho RJ, Coughlan S, Griskevicius A, Grossman Z, Horban A, Kostrikis LG, Lepej S, Liitsola K, Linka M, Nielsen C, Otelea D, Paredes R, Poljak M, Puchhammer-Stöckl E, Schmit JC, Sönnernborg A, Staneková D, Stanojevic M, Boucher CA, Kaplan L, Vandamme AM, Paraskevis D. Global Dispersal Pattern of HIV Type 1 Subtype CRF01_AE: A Genetic Trace of Human Mobility Related to Heterosexual Sexual Activities Centralized in Southeast Asia. *J Infect Dis* 2015;211:1735-44. doi: 10.1093/infdis/jiu666.

Science Citation Index Expanded papers

1. Boras VV, Židovec-Lepej S, Marinović B, Seiwert S, Škrinjar I, Pulanić D, Juras DV. Drug-induced oral ulcerations: case report. *Acta Clin Croat*. 2016 Jun;55(2):334-7.

EMBASE / Scopus papers

1. Židovec Lepej S, Gužvinac M. Molekularna dijagnostika infektivnih bolesti u pedijatrijskih bolesnika. *Paediatr Croat* 2018;62 (Supl 1):176-181.

2. Grgić I, Židovec Lepej S, Planinić A, Gorenec L, Vince A. High prevalence of Q80K among NS3 resistance-associated substitutions in subtype 1a patients with chronic hepatitis C prior to treatment with direct acting antivirals: the Croatian data. *Hepatol Monthly* 2017; 17(5):e45543.

3. Grgić I, Gorenec L, Gašpar M, Čerina M, Planinić A, Trupković M, Vince A, Židovec Lepej S. Polimorfizam interleukina 28B u osoba s kroničnim hepatitisom C u Hrvatskoj. *Infektološki glasnik* 2016;35:73-77.

4. Grgurević I, Kozić Dokmanović S, Šćukanec-Špoljar M, Kurelac I, Sonicki Z, Kirin M, Štoković N, Židovec Lepej S, Vince A. Interleukin-1 β gene promoter polymorphism is associated with higher liver fibrosis progression rate in Croatian patients with biochemically active chronic hepatitis C. *Med Jad* 2017;47:13-21.

5. Magiorkinis G, Angelis K, Mamais I, Katzourakis A, Hatzakis A, Albert J, Lawyer G, Hamouda O, Struck D, Vercauteren J, Wensing A, Alexiev I, Åsjö B, Balotta C, Gomes P, Camacho RJ, Coughlan S, Griskevicius A, Grossman Z, Horban A, Kostrikis LG, Lepej SJ, Liitsola K, Linka M, Nielsen C, Otelea D, Paredes R, Poljak M, Puchhammer-Stöckl E, Schmit JC, Sönnernborg A, Staneková D, Stanojevic M, Stylianou DC, Boucher CA; SPREAD program, Nikolopoulos G, Vasylyeva T, Friedman SR, van de Vijver D, Angarano G, Chaix ML, de Luca A, Korn K, Loveday C, Soriano V, Yerly S, Zazzi M, Vandamme AM, Paraskevis D. The global spread of HIV-1 subtype B epidemics. *Infect Genet Evol* 2016;48:169-179.

Other papers

1. Židovec Lepej S, Škerk V. X hrvatski kongres o urogenitalnim i spolno prenosivim infekcijama. *MEDIX* 2018;24:61-66.

2. Planinic A, Oroz M, Begovac J, Zidovec Lepej S. Resistance of human immunodeficiency virus type 1 to integrase strand transfer inhibitors in Croatia: the first report. *Molecular and Experimental Biology in Medicine* 2019 (accepted)

3. European Centre for Disease Prevention and Control. Pilot of enhanced lymphogranuloma venereum (LGV) surveillance in Europe, Stockholm: ECDC, 2017

(member of the European LGV collaboration group)

4. Grgić I, Žunec R, Gorenec L, Begovac J, Židovec Lepej S. Pharmacogenetic testing for HLA-B*57:01 allele by screening assays and high resolution HLA-typing: results form a complete national HIV cohort, Croatia. *Molecular and Experimental Biology in Medicine*, 2017:1:26-29.
5. Židovec Lepej S, Vince A. Molekularna dijagnostika u eri liječenja hepatitisa C novim lijekovima. 2016 *Medix*, god. 22, broj 121, 141-147
6. Židovec Lepej S. Nove strategije liječenja HIV infekcije. Godišnje izvješće za zdravstvene djelatnike. Hrvatska udruga za borbu protiv HIV-a i virusnog hepatitisa 2015. str. 16-22.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

Project title: “Strengthening the capacity of CerVirVac for research in virus immunology and vaccinology“, KK.01.1.1.01.0006, awarded to the Scientific Centre of Excellence for Virus Immunology and Vaccines and co-financed by the European Regional Development Fund, project period: 2017-2022, funding: Ministry of Science, R. of Croatia and European Regional Development Fund, researcher

Project title: Infectomics study of human liver non-parenchymal cells in chronic hepatitis C, project period: 2014-2019, Funding by the Croatian Science Foundation, researcher

Project title: Immunopathogenesis of hepatitis B and C (project code 143-0000000-0117), project period: 2007-2013, Funding by the Croatian Ministry of Science, researcher

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Project title: “Strengthening the capacity of CerVirVac for research in virus immunology and vaccinology“, KK.01.1.1.01.0006, awarded to the Scientific Centre of Excellence for Virus Immunology and Vaccines and co-financed by the European Regional Development Fund, project period: 2017-2022, funding: Ministry of Science, R. of Croatia and European Regional Development Fund, researcher

Project title: Molecular, epidemiological and clinical features of HIV infection in Croatia, project period: 2015-2019, Funding by the Croatian Science Foundation, researcher

Project title: Infectomics study of human liver non-parenchymal cells in chronic hepatitis C, project period: 2014-2019, Funding by the Croatian Science Foundation, researcher

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE: 5

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: prof. dr. sc. Mirza Žižak, MD, associate professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: School of Medicine

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Reproduction and work place, Telemedicine

BIOGRAPHY

I am associate professor at the Department of Physiology and Immunology and Head of e-Learning Office, School of Medicine University of Zagreb (MEF). Area of my scientific interest are the transport processes through the cell membrane especially the structure, function and regulation of the Na⁺/H⁺ transport through the cell membrane. I am the holder of the Fogarty scholarship for postdoctoral research at The Johns Hopkins University (JHU). I have had postdoctoral training at JHU and UCLA (1995-98.). I won several international awards for the best paper at scientific congresses (GRG/AGA Travel Award for the one of the 10 best papers at DDW, San Diego (2000); Poster of distinction at DDW, Orlando (2003.); awarded abstract at DDW, Chicago (2011.)). I was head of FIRCA (Fogarty International Collaborative Award project (2001. -2004) and several national projects. Over the last 15 years, I have been on a number of occasions visiting scientists at The Johns Hopkins University, Gastroenterology Division, Baltimore, USA. For the last 12 year I am active in the implementation and integration of ICT in medical studies. Since 2001st I am editor of a website STUDMEF which is part of the of School of Medicine web portal. From 2001.-03. I lead the e-project of the Ministry of Science and Technology entitled "Interactive Physiology: Biological membranes and signal transduction" which was base for creating the simulation program for learning the functions of biological membranes and signal transduction. 2003rd I mentored a group of students who won the Rector's Award. With group of the medical students I created an interactive simulation program entitled "PROSIG –interactive simulation program for learning membrane potential". Since 2004th this program has been used in the teaching of physiology and/or neuroscience at four School of Medicine in the Croatia and School of medicine in Mostar, BIH. Since 2006th I am editor for multimedia in the Croatian Medical Journal (CMJ). From 2007.-2009th I was a member of the University Committee for developing e-learning strategy at our University of Zagreb. Since 2007th I have been the president of the School of Medicine committee for developing e-learning.

2008th I accomplished e-Learning Academy program for E-learning Management. That same year I accomplished the CARNet's online e-course for e-mentors. I was initiator for establishing Coordination of four biomedical Faculty at University of Zagreb (School of dentistry, School of Pharmacy, School of Veterinary medicine and School of Medicine) that cooperate on developing and implementing e-learning in education. Since 2008th I have been head of an e-elective course "Membrane potential". 2012th our e-course was awarded as the best e-course at the University of Zagreb. Since 2008, I am the Head of the E-Learning Office that coordinates the work and development of all four LMS systems within the School of Medicine. Within the framework of the further development of e-learning and telemedicine at the School of Medicine and other related Faculties within the University of Zagreb, I have organized and conducted over 30 courses for teachers to apply e-learning in their teaching process.

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2012.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Zizak M, Lamprecht G, Steplock G, Tariq N, Shenolikar S, Donowitz M, Yun CHC, Weinman EJ. (1999) cAMP-induced phosphorylation and inhibition of Na⁺/H⁺ exchanger 3 (NHE3) are dependent on the presence but not the phosphorylation of NHE regulatory factor. J. Biol. Chem. 274. 24753.
2. Donowitz M, Janecki A, Akhter S, Cavet ME, Sanchez F, Lamprecht G, Zizak M, Kwon WL, Khurana S, Yun CHC, Tse M. (2000) Short-term regulation of NHE3 by EGF and protein kinase C but not protein kinase A involves vesicle trafficking in epithelial cells and fibroblasts. Ann NY Acad. Sci. 915: 30-42.
3. Zizak M, Cavet ME, Bayle D, Tse CM, Hallen S, Sachs G, Donowitz M. (2000) Na⁺/H⁺ Exchanger NHE3 has 11 membrane spanning domains and a cleaved signal peptide: Topology analysis using in vitro transcription/translation. Biochemistry. 39. 8102-8112

4. Cha B, Kim JH, Hut H, Hogema BM, Nadarja J, Zizak M, Cavet M, Lee-Kwon W, Lohmann SM, Smolenski A, Tse CM, Yun C, de Jonge HR, Donowitz M. (2005) cGMP inhibition of Na⁺/H⁺ antiporter 3 (NHE3) requires PDZ. *J Biol Chem.* 280(17):16642-50
5. Troskot R, Šimurina T, Žižak M, Majstorović K, Marinac I, Mrakovčić-Šutić I. (2010) Prognostic value of venoarterial carbon dioxide gradient in patients with severe sepsis and septic shock. *Croat Med J.* 51(6):501-8.
6. Sarker R, Valkhoff VE, Zachos NC, Lin R, Cha B, Chen TE, Guggino S, Zizak M, de Jonge H, Hogema B, Donowitz M. (2011). NHERF1 and NHERF2 are necessary for multiple but usually separate aspects of basal and acute regulation of NHE3 activity. *Am J Physiol Cell Physiol.* 300(4):C771-82.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Zizak M, Chen T, Bartonicek D, Sarker R, Zachos N, Cha B, Kovbasnjuk O, Korac J, Mohan S, Cole R, Chen Y, Tse CM, Donowitz M. (2012). Calmodulin kinase II constitutively Binds, phosphorylates, and inhibits the brush border Na⁺/H⁺ exchanger NHE3 by a NHERF2 dependent process. *J Biol Chem.* 287(16): 13442-56

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

2000. - the head of a three-year international collaboration project "Fogarty International Research Collaboration Award" (FIRCA) in which investigations on cell cultures and exchange of Na/H through cell membranes were carried out.
2000. - head of the IT project of the Ministry of Science and Technology (MZT) under the title "Interactive Physiology: Biological Membranes and Signal Transmission". Based on the project result we developed an interactive simulation program "PROSIG" for learning the cell membrane potential that is now used in teaching physiology and neuroscience on four School of Medicine.
2002. - head of the three-year MZT project titled "Membrane Topology of Epithelial Na/H Exchanger NHE3",
2006. - head of a four-year scientific project of the MZOŠ entitled "Regulation of the Na/H Exchanger isoform 3 (NHE3) mediated by CaM Kinase II".

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

2016. a collaborator on the project „Molekularni mehanizmi protektivnog učinka proupalnih čimbenika u apoptotičkom oštećenju jetara“ which had University grant for 2016.
2017. a collaborator on the project „Uloga STAT3 signalnog puta u protektivnom učinku imunskih medijatora na apoptozu hepatocita izazvanu aktivacijom Fas receptora u miševa“ which had University grant for 2017.
2018. a collaborator on the project „Uloga Notch signalnog puta u patogenezi jetrene fibroze“ which had University grant for 2018.
2018. a collaborator on the two-year international education project "Internationalization of Higher Education" funded by the European Social Fund.

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Assistant Professor RENATA ŽUNEC, PHD

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: UNIVERSITY HOSPITAL CENTRE ZAGREB

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: THE ROLE OF IMMUNOGENETICS IN TRANSPLANTATION

BIOGRAPHY

Born 22.09.1960., Zagreb

Education:

1984 PMF-Zagreb dipl.ing. experimental biology;

1994 PMF-Zagreb MSc;

1998 PMF-Zagreb PhD ;

2006. Medicinski fakultet, Zagreb znanstveno zvanje: znanstveni savjetnik u zn.području biomedicine i zdravstva-polje kliničke medicinske znanosti;

2010 naslovno znanstveno nastavno zvanje docenta na Medicinskom fakultetu u Osijeku

Work:

1984 – KBC Zagreb, Tissue Typing centre

2009 – Tissue Typing director

Usavršavanja:

1985-1986 Human Polymorphism Study Center, Paris;

1992 Institut für Immunologie der Universität München;

2001-2002 Uppsala University, Rudbeck Laboratories, Dept. of Genetics and Pathology;

Membership:

European Federation of Immunogenetics, Croatian Immunology Society, Croatian Genetic Society (secretary 1987-1989), Croatian Society of Biologist in Healthcare (vice-president), Croatian Society of Nephrology, Dialysis and Transplantation (Board member). Eurotransplant Tissue Typing Advisory Committee (Croatian representative) i Ministry of Health – member of National Committee for Transplantation

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 25.01.2010.

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Grubic Z., Stingl Jankovic K., Maskalan M., Serventi-Seiwerth R., Mikulic M., Nemet D., Burek Kamenaric M., Labar B., Zunec R. The effect of HLA allele and haplotype polymorphisms on donor matching in hematopoietic stem cell transplantation - Croatian experience. Hum Immunol 2016, 77(12), 1120-1127.
2. Burek Kamenaric M., Stingl Jankovic K., Grubic Z., Serventi Seiwerth R., Maskalan M., Nemet D., Mikulic M., Zunec R. The impact of KIR2DS4 gene on clinical outcome after hematopoietic stem cell transplantation. Hum Immunol. 2016, 78(2), 95-102.
3. Burek Kamenaric M, Maskalan M, Grubic Z, Mikulic M, Serventi Seiwerth R, Durakovic N, Vrhovac R, Stingl Jankovic K, Zunec R. HLA-DPB1 matching in unrelated hematopoietic stem cell transplantation program contributes to a higher incidence of disease relapse. Hum Immunol. 2017, 78(11-12):665-671.

4. Salamunovic S., Burek Kamenaric M., Maskalan M., Svilicic D., Clekovic D., Grubic Z., Zunec R. Polymorphism of HLA-A, -B, -DRB1 allele groups among kidney transplant list patients in Croatia. HLA 2017, 88, 399.

5. Stingl Jankovic K, Grubic Z, Jakupic J, Burek Kamenaric M, Maskalan M, Zunec R. The distribution of HLA-DRB3 alleles among HLA-DRB1*03:01-positive haplotypes. HLA. 2018, 92(3):160-163.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Grubic Z., Stingl Jankovic K., Kelecic J., Batinic D., Dubravac K., Zunec R. A case of maternal-foetal chimerism identified during routine histocompatibility testing for hematopoietic stem cell transplantation. Int J Immunogenet 2016, 43(1), 1-7.

2. Stingl Jankovic K., Hudolin T., Kastelan Z., Zunec R., Grubic Z. The possible role of the tumour necrosis factor polymorphisms and human leucocyte antigens in the development of prostate cancer. Int J Immunogenet 2016, 43(3), 143-50.

3. Grubic Z., Maskalan M., Svilicic D., Stingl Jankovic K., Zunec R. Determination of HLA-A, -B, and -DRB1 Allele and Haplotype Frequencies in the Croatian Population Based on a Family Study. Arch Immunol Ther Exp (Warsz) 2016, 64(1), 83-88.

4. Maskalan M., Grubic Z., Jankovic K.S., Cepulic B.G., Zunec R. Identification of the novel HLA-A*01:200 allele by sequence-based typing in a Croatian individual. HLA 2016, 87(5), 381-382.

5. Grubic Z., Stingl Jankovic K., Maskalan M., Serventi-Seiwerth R., Mikulic M., Nemet D., Burek Kamenaric M., Labar B., Zunec R. The effect of HLA allele and haplotype polymorphisms on donor matching in hematopoietic stem cell transplantation - Croatian experience. Hum Immunol 2016, 77(12), 1120-1127.

6. Grubic Z., Maskalan M., Stingl Jankovic K., Zvecic S., Dumic Kubat K., Krnic N., Zunec R., Ille J., Kusec V., Dumic M. Association of HLA alleles and haplotypes with CYP21A2 gene p. V282L mutation in the Croatian population. HLA, 2016, 88(5), 239-244.

7. Burek Kamenaric M., Stingl Jankovic K., Grubic Z., Serventi Seiwerth R., Maskalan M., Nemet D., Mikulic M., Zunec R. The impact of KIR2DS4 gene on clinical outcome after hematopoietic stem cell transplantation. Hum Immunol. 2016, 78(2), 95-102.

8. Dumic K.K., Grubic Z., Yuen T., Wilson R.C., Kusec V., Barisic I., Stingl K., Sansovic I., Skrabic V., Dumic M., New M.I. Molecular genetic analysis in 93 patients and 193 family members with classical congenital adrenal hyperplasia due to 21-hydroxylase deficiency in Croatia. J Steroid Biochem Mol Biol 2017, 165, 51-56.

9. Burek Kamenaric M, Maskalan M, Grubic Z, Mikulic M, Serventi Seiwerth R, Durakovic N, Vrhovac R, Stingl Jankovic K, Zunec R. HLA-DPB1 matching in unrelated hematopoietic stem cell transplantation program contributes to a higher incidence of disease relapse. Hum Immunol. 2017, 78(11-12):665-671.

10. Ramosaj-Morina A, Keka-Sylaj A, Hasbahta V, Baloku-Zejnullahu A, Azemi M, Zunec R. Carpal spasm in a girl as initial presentation of celiac disease: a case report. J Med Case Rep. 2017 Sep 4;11(1):252. doi: 10.1186/s13256-017-1376-2.

11. Stingl Jankovic K, Grubic Z, Jakupic J, Burek Kamenaric M, Maskalan M, Zunec R. The distribution of HLA-DRB3 alleles among HLA-DRB1*03:01-positive haplotypes. HLA. 2018, 92(3):160-163.

12. Grubic Z, Rojnic Putarek N, Maskalan M, Zunec R, Stingl Jankovic K, Burek Kamenaric M, Knezevic-Cuca J, Spehar Uroic A, Dumic M. Human Leukocyte Antigen class II polymorphisms among Croatian

patients with type 1 diabetes and autoimmune polyglandular syndrome type 3 variant. *Gene*. 2018, 674:93-97.

13. Grubic Z, Maskalan M, Radmanic L, Stingl Jankovic K, Burek Kamenaric M, Zunec R. The distribution of the DRB4*01:03:01:02N null allele in HLA-DRB1~DQB1 haplotypes in the Croatian population. *HLA*. 2018, 91(1):23-28.

14. Raos M, Zunec R, Mocibob M, Gojceta K, Lukic M, Golubic Cepulic B. Susceptible and protective HLA-DR and HLA-DQ alleles for Fya alloimmunization in the Croatian population. *Transfusion*. 2018 Dec 12. doi: 10.1111/trf.15087. [Epub ahead of print]

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

“Immunomolecular studies of the histocompatibility complex HLA” (No: 0108123)

“Studies of microsatellites within the Major Histocompatibility Complex region “ (No: 214-0000000-3354)

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

Frequency, pathogenic characteristics and clinical significance of donor-specific HLA and non-HLA antibodies in kidney transplant recipients IP-2018-01-4737

NUMBER OF SUCCESSFUL MENTORSHIPS THAT RESULTED IN DISSERTATION DEFENCE 3

ORDINAL NUMBER:

FIRST NAME, LAST NAME, AND TITLE OF THE TEACHER: Tomislav Župić, MD, PhD, assistant professor

NAME OF INSTITUTION OF EMPLOYMENT OF THE TEACHER: Department for Gynecology and Obstetrics
Medical School University of Zagreb

NAME OF COURSE/MODULE THAT HE/SHE TEACHES AT THIS DOCTORAL STUDY: Diagnostics and treatment of female urinary incontinence

BIOGRAPHY

Date and place of birth September 16, 1959 Split

Education:

School of Medicine University of Zagreb 1978 – 1984

1989-1993 Clinical hospital centre Zagreb / Department of Obstetrics and Gynaecology - specialization in gynaecology and obstetrics

1995- present Gyn Obstet specialist in Department for Gynecology and Obstetrics Medical School University of Zagreb

Postgraduate study Perinatology and neonatology, Medical School University of Zagreb 1990 – 1992

Master degree: 2000

PhD degree 2011

Subspecialist of urogynecology 2012

Assistant professor Medical School University of Zagreb 2017

2011 – present – Head of Unit for transvaginal surgery Department for Gynecology and Obstetrics Medical School University of Zagreb

2014- present Head of Department for gynaecological surgery and urology Clinical Hospital Centre Zagreb
Professional education:

VIII international course of gynaecological endoscopic surgery, Ljubljana/Villach 2001.

SPARC Sling System Workshop, Universitätsklinik für Urologie, Graz, Austria 2001.

The role of colposcopy in early detection and prevention of cervical intraepithelial lesions, Zagreb 2001

Deep infiltrating endometriosis, Bled, Slovenia 2002.

Gynecare TVT Obturator Workshop, Ljubljana 2004.

HPV Infection and Cervical Cancer Prevention, Ljubljana 2005.

APOGEE and PERIGEE Workshop, Conegliano Clinic, Italy 2005.

Painless vaginal hysterectomy using the ERBE BiClamp, Universitäts – Frauenklinik Tübingen, Deutschland 2006.

Membership in professional association:

Croatian Medical Chamber

Croatian Society for Gynecology and Obstetrics

Croatian Society for Urogynecology

Croatian Society for Gynecological Endoscopic Surgery

Croatian Society for perinatal medicine

Croatian Society for colposcopy and cervical diseases- vice president

DATE OF LAST APPOINTMENT TO A RESEARCH-AND-TEACHING OR ART-AND-TEACHING RANK: 2017

LIST OF PUBLISHED WORK WHICH QUALIFY HIM/HER FOR IMPLEMENTATION OF THE PROGRAMME, THAT IS, WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

1. Persec J, Persec Z, Buković D, Merc V, Pavelić J, Župić T. Preoperative clonidine or levobupivacaine--effect on systemic inflammatory stress response. Coll Antropol. 2009 Jun;33(2):573-7.
2. Vulić M, Strinić T, Buković D, Tomić S, Župić T, Pavić M, Turčić P, Mihaljević S. Expression of matrix metalloproteinase-1 in uterosacral ligaments tissue of women with genital prolapse. Coll Antropol. 2010 Dec;34(4):1411-4.
3. Grgić O, Oresković S, Gršić HL, Kalafatic D, Župić T, Maurac I. Outcome and efficacy of a transobturator polypropylene mesh kit in the treatment of anterior pelvic organ prolapse. Int J Gynaecol Obstet. 2012 Jan;116(1):72-5.

4. Persec Z, Buković D, Peršec J, Rako D, Ljubanović D, Starčević V, Zupić T, Pavić M. Clear cell variant of urothelial carcinoma in urinary bladder; a clinicopathological and immunohistochemical study--a case report. *Coll Antropol.* 2012 Sep;36(3):1045-7.

5. Marijić V, Buković D, Mihaljević S, Oresković S, Persec J, Zupić T, Juras J, Milinović D. Intermittent epidural TOP-UPS vs. patient control epidural analgesia during labor. *Coll Antropol.* 2013 Dec;37(4):1339-41.

1. Orešković S, Kalafatić D, Lovrić H, Župić T, Gojević A, Banović M. Cystocele repair by synthetic mesh secured through the obturator foramen (PERIGEE system). *Gynaecol Perinatol* 2008;17(1):29–32.

2. Herman M, Delmis J, Ivanisević M, Zupić T. Pregnancies and deliveries in patients with Charcot-Marie-Tooth disease. *Acta Med Croatica.* 2010 Jul;64(3):215-20.

3. Strelec M, Župić T, Sirovec A. Antibiotic prophylaxis for hysteroscopy, D&C, endometrial biopsy and hysterosalpingography. *Gynaecol Perinatol* 2010;19(1):32–6.

4. Lešin J, Babić D, Forko-Ilić J, Skerlev M, Zekan J, Lugonja M, Župić T. Mixed HPV infection is a poor prognostic factor for surveillance of patient with invasive cervical cancer. *Gynaecol Perinatol* 2010;19(3):141–147.

5. Blajić J, Dijaković A, Ivanišević M, Juras J, Đelmiš J, Župić T. Placental growth factor in mothers's and umbilical cord blood in pregnant women suffering from type-1 diabetes mellitus. *Gynaecol Perinatol* 2010;19(1):10–15.

6. Kosi-Santić K, Rudan D, Buković D, Segregur J, Wagner J, Oresković S, Zupić T, Radan M. Asymmetric neonatal crying: microdeletion, infection or birth injury? - a case report. *Coll Antropol.* 2014 Mar;38(1):331-5.

7. Hodžić D, Zupić T, Mandić V, Valetić J, Gojević A, Oresković S. Efficacy of sling procedures for treatment of female stress urinary incontinence. *Coll Antropol.* 2014 Sep;38(3):1063-9.

LIST OF PUBLISHED WORK IN THE LAST FIVE YEARS

1. Kosi-Santić K, Rudan D, Buković D, Segregur J, Wagner J, Oresković S, Zupić T, Radan M. Asymmetric neonatal crying: microdeletion, infection or birth injury? - a case report. *Coll Antropol.* 2014 Mar;38(1):331-5.

2. Hodžić D, Zupić T, Mandić V, Valetić J, Gojević A, Oresković S. Efficacy of sling procedures for treatment of female stress urinary incontinence. *Coll Antropol.* 2014 Sep;38(3):1063-9.

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED AND WHICH ARE RELEVANT FOR THE FIELD OF THE DOCTORAL PROGRAMME

LIST OF SCIENTIFIC AND ARTISTIC PROJECTS IN WHICH HE OR SHE PARTICIPATED IN THE LAST FIVE YEARS

„Multicentre Randomised Survival Study of Monoclonal Antibody Radioimmuno-Therapy: A multinational study in patients with ovarian carcinoma using the HMFG1 antibody labelled with 90Yttrium“
SMART international multicenter project implemented in 11 European countries for the Republic of Croatia at the Institute for Gynecologic Oncology, Clinic for Female Diseases and Births of the Clinical Hospital Center Zagreb 2001-2002. Professor Ante Ćorušić.

A.6.2. LIST OF SCIENTIFIC, ARTISTIC AND DEVELOPMENTAL PROJECTS ON WHICH THE PROGRAMME OF THE DOCTORAL STUDY IS BASED

ORDINAL NUMBER: 1.

TITLE OF THE PROJECT: Novel Bone Regeneration Drug Osteogrow: Therapeutic Solution for Lumbar Back Pain (OSTEOproSPINE)

PROJECT CODE: 779340; H2020-SC1-201-2017/H2020-SC1-Single-Stage-RTD

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/01/2018 - 31/12/2022

SOURCE OF FUNDING: H2020

ORDINAL NUMBER: 2.

TITLE OF THE PROJECT: Molekularna, epidemiološka i klinička obilježja zaraze HIV-om u Hrvatskoj (MEKHH/MECHC) / Molecular, epidemiological and clinical features of HIV infection in Croatia

PROJECT CODE: IP-4461

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/10/2015 – 30/09/2019/

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 3.

TITLE OF THE PROJECT: Genotip-fenotip korelacija u Alportovom sindromu i nefropatiji tankih glomerularnih bazalnim membrane (GpofASandTBMN) / Genotype-phenotype correlation in Alport's syndrome and nephropathy of thin glomerular basal membranes

PROJECT CODE: IP-2151

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/09/2015 – 31/08/2019

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 4.

TITLE OF THE PROJECT: Kronične upalne bolesti crijeva u djece: incidencija, tijek bolesti te uloga prehrane i crijevnne mikroflore u etiopatogenezi / Chronic inflammatory bowel disease in children: incidence, course of disease and the role of diet and intestinal microflora in etiopathogenesis

PROJECT CODE: IP-3788

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/03/2016 – 28/02/2020

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 5.

TITLE OF THE PROJECT: Subplate zona ljudskog mozga: neriješeni problem (HUMANSUBPLATE) / Subplate zone of the human brain: the unresolved problem

PROJECT CODE: IP-4517

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/01/2016 – 31/12/2019

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 6.

TITLE OF THE PROJECT: Molekularni posrednici koštane resorpcije uvjetovane receptorom Fas u artritisu (MEFRA) / Molecular bone resorption mediators mediated by Fas receptor in arthritis

PROJECT CODE: IP-7406

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 02/11/2015 – 31/10/2019

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 7.

TITLE OF THE PROJECT: Istraživanje unosa joda u trudnoći i djetinjstvu u svjetlu nacionalne strategije prevencije poremećaja uzrokovanih nedostatkom joda (IPACSTOPIDD) / Study of iodine intake in pregnancy and childhood in light of the national strategy for the prevention of iodine deficiency disorders

PROJECT CODE: IP-6499

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 22/09/2015 – 21/09/2019

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 8.

TITLE OF THE PROJECT: Ispitivanje reaktivnosti trombocita u različitim srčanožilnim bolestima (SPARELIFE-CVD) / Investigation of platelet reactivity in various cardiovascular diseases

PROJECT CODE: IP-8403

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/12/2015 – 30/11/2019

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 9.

TITLE OF THE PROJECT: Reprogramiranje citoprotektivnih puteva u mezoteliomu (ReprogrammingMM) / Reprogramming cytoprotective pathways in mesothelioma

PROJECT CODE: IP-4173

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/12/2015 – 30/11/2019

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 10.

TITLE OF THE PROJECT: Hiperfosforilacija, agregacija i transsinaptički prijenos tau proteina u Alzheimerovoj bolesti: analiza likvora i ispitivanje potencijalnih neuroprotektivnih spojeva (ALZTAUPROTECT) / Hyperphosphorylation, aggregation and trans-synaptic transmission of Alzheimer's disease: liquid analysis and potential neuroprotective tests

PROJECT CODE: IP-9730

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 12/10/2015 – 11/10/2019

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 11.

TITLE OF THE PROJECT: Novootkrivene cirkulirajuće izoforme BMP1 proteina kao biomarkeri i terapijski ciljevi za humane bolesti (BMP1-IsoFor) / Newly discovered circulating isoforms of BMP1 proteins as biomarkers and therapeutic goals for human diseases

PROJECT CODE: IP-3509

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/01/2016 – 31/12/2018

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 12.

TITLE OF THE PROJECT: Adipocitokinima modulirana disfunkcija endotela u podlozi mikrovaskularnih komplikacija šećerne bolesti tipa 1 i tipa 2 (ADIEDM) / Adipocytokine modulated endothelial dysfunction underlying microvascular complications of type 1 and type 2 diabetes mellitus

PROJECT CODE: IP-7459

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 16/12/2015 – 15/12/2019

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 13.

TITLE OF THE PROJECT: Vrijednosti i odluke na kraju života (VAL-DE-END) / Values and decisions at the end of life

PROJECT CODE: IP-2721

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/09/2017 – 31/08/2020

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 14.

TITLE OF THE PROJECT: Sonoelastografija i magnetska rezonancija u dijagnostici i liječenju karcinoma dojke (EL-MRI-BREAST) / Sonoelastography and magnetic resonance imaging in diagnosis and treatment of breast cancer

PROJECT CODE: IP-2997

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 20/03/2017 – 19/03/2021

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 15.

TITLE OF THE PROJECT: Multimodalni prikaz molekularnih zbivanja tijekom oporavka mišjeg mozga nakon ishemijskog oštećenja (RepairStroke) / Multimodal representation of molecular events during recovery of mouse brain after ischemic damage

PROJECT CODE: IP-1892

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/12/2017 – 30/11/2021

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 16.

TITLE OF THE PROJECT: Epigenetički biomarkeri u krvi i ejakulatu bolesnika sa seminomom testisa (epiSem) / Epigenetic biomarkers in the blood and ejaculate of the testicular semen

PROJECT CODE: IP-3692

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/08/2017 – 31/07/2021

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 17.

TITLE OF THE PROJECT: Evolucija upalnog artritisa u djece: uloga osnaženoga muskuloskeletnoga ultrazvukate epigenetskih, proteinskih i disbiotičkih biomarkera u razvoju juvenilnog idiopatskog artritisa (childARTHRITISevolve) / Evolution of inflammatory arthritis in children: the role of enhanced musculoskeletal ultrasound of epigenetic, protein and dysbiotic biomarkers in the development of juvenile idiopathic arthritis

PROJECT CODE: IP-4771

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/04/2017 – 31/03/2021

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 18.

TITLE OF THE PROJECT: Epidemiologija hipertenzije i unos kuhinjske soli u Hrvatskoj (EH-UH 2) / Epidemiology of hypertension and salt intake in Croatia

PROJECT CODE: IP-9033

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/09/2017 – 31/08/2020

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 19.

TITLE OF THE PROJECT: Molekularni biljezi vulnerabilnosti, adaptacije i plastičnosti neurona u akutnoj i kroničnoj ozljedi mozga (NeuroReact) / Molecular signs of neuron vulnerability, adaptation and plasticity in acute and chronic brain injury

PROJECT CODE: IP-8636

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/06/2017 – 31/05/2021

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 20.

TITLE OF THE PROJECT: Matične stanice usne šupljine čovjeka za liječenje ishemijske bolesti mozga (ORASTEM) / Stem cells of the human oral cavity for the treatment of cerebral ischemia

PROJECT CODE: IP-9451

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/10/2017 – 30/09/2021

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 21.

TITLE OF THE PROJECT: Novi biomarkeri kronične bolesti presatka protiv primatelja (Bio-cGVHD) / Novel biomarkers of chronic Graft-versus-Host disease

PROJECT CODE: IP-8046

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 20/03/2017 – 19/03/2021

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 22.

TITLE OF THE PROJECT: Signalni mehanizmi i metaboličke promjene u diferencijaciji stanica akutne mijeloidne leukemije (SignalmetabAML) / Signal mechanisms and metabolic changes in the differentiation of acute myelogenous leukemia cells

PROJECT CODE: IP-4581

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 15/04/2017 – 14/04/2021

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 23.

TITLE OF THE PROJECT: Razvoj novih antitijela (biološki lijek) koja selektivno inhibiraju izražaj hepcidina u jetri za terapiju anemije kronične bolesti (BMP6Fe3) / Development of new antibodies (biological drug) that selectively inhibit the expression of hepcidin in the liver for chronic disease anemia

PROJECT CODE: IP-2169

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/07/2017 – 30/06/2021

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 24.

TITLE OF THE PROJECT: Uloga bradikininu u ishemiji mozga i mrežnice u mišjim modelima dijabetesa (BRADISCHEMIA) / The role of bradykinin in ischemia of the brain and retina in mouse models of diabetes

PROJECT CODE: UIP-8082

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/09/2018 – 31/08/2023

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 25.

TITLE OF THE PROJECT: Epigenetički biomarkeri raka prostate (epiPro) / Epigenetic biomarkers of prostate cancer

PROJECT CODE: UIP-8138

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/04/2018 – 31/03/2023

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 26.

TITLE OF THE PROJECT: Uloga Notch signalnog puta u patogenezi jetrene fibroze (NOFIBRO) / The role of the Notch signaling pathway in pathogenesis of liver fibrosis

PROJECT CODE: UIP-1965

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 16/07/2018 – 15/07/2023

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 27.

TITLE OF THE PROJECT: Misterij subthalamusa - anatomska podjela subtalamičke jezgre (3STAN) / Mystery of the subthalamus - anatomical division of the subthalamic nucleus

PROJECT CODE: UIP-7578

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 01/06/2018 – 31/05/2023

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 28.

TITLE OF THE PROJECT: Opasnosti i prednosti društvenih mreža - e-profesionalizam zdravstvenih djelatnika (SMePROF) / Dangers and benefits of social networks - e-professionalism of health professionals

PROJECT CODE: UIP-2140

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 09/05/2018 – 08/05/2023

SOURCE OF FUNDING: Hrvatska zaklada za znanost / Croatian Science Foundation

ORDINAL NUMBER: 29.

TITLE OF THE PROJECT: Znanstveni centar izvrsnosti za reproduktivnu i regenerativnu medicinu (CERRM) / Centre of Research Excellence for Reproductive and Regenerative Medicine

PROJECT CODE:

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 2014 - 2019



SOURCE OF FUNDING: Ministarstvo znanosti i obrazovanja iz Europskih strukturnih i investicijskih fondova /
Ministry of Science and Education from European Structural and Investment Funds

ORDINAL NUMBER: 30.

TITLE OF THE PROJECT: Znanstveni centar izvrsnosti za temeljnu, kliničku i translacijsku neuroznanost (ZCI –
Neuro) / Centre of Research Excellence for Basic, Clinical and Translational Neuroscience

PROJECT CODE:

DURATION OF THE PROJECT (START AND END DATE OF THE PROJECT): 2015 - 2020

SOURCE OF FUNDING: Ministarstvo znanosti i obrazovanja iz Europskih strukturnih i investicijskih fondova /
Ministry of Science and Education from European Structural and Investment Funds