

FACULTY OF MEDICINE

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Dean – Prof. Habil. Dr. *Algirdas Utkus*

STAFF

582 teachers (540 holding research degree), 88 research fellows (65 holding research degree), 170 doctoral students.

DEPARTMENTS OF THE FACULTY

Institute of Biomedical Sciences:

Department of Anatomy, Histology and Anthropology

Department of Human and Medical Genetics

Pharmacy Centre

Department of Pathology, Forensic Medicine and Pharmacology

Department of Physiology, Biochemistry, Microbiology and Laboratory Medicine

Department of Radiology, Nuclear Medicine and Physics of Medicine

Institute of Clinical Medicine:

Clinic of Obstetrics and Gynecology

Clinic of Anaesthesiology and Reanimatology

Clinic of Ear, Nose, Throat and Eyes diseases

Clinic of Gastroenterology, Nephrourology and Surgery

Clinic of Infectious Diseases and Dermatovenereology

Clinic of Chest Diseases, Immunology and Allergology

Clinic of Neurology and Neurosurgery

Clinic of Psychiatry

Clinic of Rheumatology, Orthopaedic and Traumatology and Reconstructive Surgery

Clinic of Cardiovascular diseases

Clinic of Children's Diseases

Clinic of Internal Medicine, Family Practice and Oncology

Clinics of Emergency Medicine

Institute of Dentistry

Institute of Health Sciences:

Department of Rehabilitation, Physical and Sports Medicine

Department of Nursing

Department of Public Health

Center for Health Ethics, Law and History

RESEARCH AREAS

Human Genome Diversity, Its Origin and Phenotypic Realization

Human and Public Health, Quality of Life and Environment

Etiopathogenesis, Diagnostics, Treatment of Diseases: Fundamental and Clinical Research,

Innovative Technologies

Development of the new diagnostic and prognostic molecular markers and tools for their quantification in the tissues. Diagnostic value of pathology tests and efficiency of cancer prevention programs.

Development of the predictive, preventive, personalized and prognostic biomarkers of the diseases.

Genesis and gnoseology of violence.

Changes in cardiovascular medicines utilization, morbidity, and mortality from cardiovascular disease in Lithuania

Research and investigation of etiopathogenetic mechanisms of atherosclerosis

Research and investigation of new methods in laboratory diagnostics of diseases

Investigation of nutrition and evaluation of new high quality food products with increased biological value to human health

Development of new antimicrobials for control of the medically important bacterial biofilms

Design of new molecular biology techniques for identification of the pathogenic and commensal microorganisms, genotyping, antimicrobial resistance and epidemiology

DOCTORAL DISSERTATIONS MAINTAINED IN 2019

Beata Aleksūnienė. An Evaluation of Genomic Factors and their Importance in the Etiopathogenesis of Congenital Heart Diseases.

Laura Pranckėnienė. An Evaluation of the Intensity of De Novo Mutations in the Exomes of the General Population of Lithuania and of Individuals with Intellectual Disabilities (to be defended 4th December, 2019).

Vytautas Žėkas. Extracellular Vesicles as a New Biomarker of Early Atherosclerosis in Healthy and Ischemic Heart Disease-Affected Male Populations.

Sigitas Chmieliauskas. Evaluating Homicide in Lithuania in Terms of Forensic, Ethical, Social and Legal Aspects (Supervisor Prof. Dr. Dainius Characiejus, Scientific Consultant Dr. Algimantas Jasulaitis).

Eglė Sakalauskaitė-Juodeikienė. Nervous system diseases in the first half of the 19th century in Vilnius.

Daiva Valadkevičienė. The biopsychosocial aspects of disability assessment in patients with multiple sclerosis.

Solovjova S. The study of influence of altered arterial function and structure on diastolic heart failure in middle-aged high-risk cardiovascular subjects.

Lipnevičius A. A comparison of postoperative outcomes between transapical and conventional mitral valve repair.

Stanevičiūtė E. The comparison of the efficacy of the antiseptic solutions in treatment of Staphylococcus aureus infected woven vascular graft in vitro and vivo.

Jarašūnas J. Analysis of the link between various cardiovascular factors and atrial fibrillation.

Aistė Kadziauskienė. Morphologic changes of lamina cribrosa in glaucomatous eyes after trabeculectomy“

Birutė Zablockienė „Prevention of Influenza Viral Pneumonia Using Zanamivir and Antisense Oligonucleotide Against Inducible Nitric Oxide Synthase“. 2019 kovo 14 diena.

R. Kavalnienė. The influence of social and demographic factors, depression and anxiety on patient satisfaction with primary care.

N. Lachej. Clinical significance of NOTCH signalling pathway in uterine cancer.

Augustė Kačėnienė: Suicide risk among cancer patients in Lithuania.

Laura Steponavičienė. Mamography screening in Lithuania: the program's course and its influence on the epidemiological situation of breast cancer.

MAIN CONFERENCES ORGANIZED IN 2019

International scientific practical conference „Dysmorphology autumn 2019“

Organizing & maximizing rare disease biological sample data in biobanks

The 16 th Baltic Conference on Intellectual Co-operation “Genes: from the Past to the Future”

International conference „7th Nordic-Baltic Biometric conference“

National conference „International Down Syndrome Day 2019“

National conference „International DNA Day in Lithuania“

Huntington Disease conference, Huntington disease patients school „Rare neurological movement disorders”

24th meeting of the International Society for the History of the Neurosciences,

National conference „Conference of Lithuanian Stroke Association”

National conference „17th Lithuanian Summer School of Neurology“

The 6th International Conference on Prehypertension, Hypertension, Metabolic Disorders and Cardiovascular disease

Seminars in Cardiology – 2019

8th Vilnius-Gdansk Universities Meeting on Hypertension, Kidney Disease and Cardiovascular Protection

International conference „4th meeting of Baltic Society of Cardiovascular Magnetic Resonance.“
<http://balticcmr.com/>

Conference „Heart Failure Biomarkers Meeting“

International conference „Actual Questions in Heart and Chest Surgery“

Lithuanian Hypertension Congress

Vilnius Rheumatology seminars/25

National conference „How to avoid traps at the perioperative period?“

Lithuanian otorhinolaryngology society conference “Otorhinolaryngology actualities”

Lithuanian otorhinolaryngology society conference “Otorhinolaryngology seminars”

International forum Ophthalmologicum Balticum

National conference „Topical problems of Pulmonology“

Allergology and clinical immunology: new challenges and treatment options in 2019

Seminar „Bronchial asthma day“

Conference Anaphylaxis and acute allergic diseases: challenges in diagnostics and treatment.

Conference “News in allergology and clinical immunology“

Conference Winter of allergology and clinical immunology 2019

CAMS: Collaborative Assessment and Management of Suicidality
Conference „My own psychotherapy“
National conference „Diabetes and pregnancy“
International conference „Current issues in aesthetic and reconstructive gynecology“
National conference and training course „New treatments for male and female infertility and other topical infertility issues“
International conference „Congress on paediatric and adolescent gynaecology. Oncogynecology. Oncofertility“
International conference “Fetal medicine”
Scientific-practical conference „Urgent situations and their management in the field of infectious diseases and toxicology“
Scientific-practical conference “Communicable diseases of travellers and their prophylaxis”
International scientific-practical conference „Infectology 2019”
International scientific-practical conference 2nd Baltic Young Infectologists Conference
Scientific-practical conference Dermatovenereology Afternoon III
Scientific-practical conference Dermatovenereology Update 2019
Scientific-practical conference Dermatovenereology Afternoon IV
Scientific-practical conference LDVD Vilnius Seminars V
International Scientific Conference „Can emigrants doctors contribute to the Health System progress in Lithuania? 1st Conference.“
International Scientific Conference „News of acute coronary syndromes and emergency medicine“.
International Scientific Conference „Progress of ECMO in Lithuania. 3rd Conference“
„11th European Regional Conference on Thoracic Oncology: Where We Are Now?"
Scientific – practical conferences “Endocrine diseases diagnostics and treatment: an update”
National scientific conference “Diabetes and pregnancy: an update on diagnostics, long-time follow up and treatment”
Mayo Clinic days in Klaipeda 2019
National scientific conference “Addictions and harm reduction strategies”
Organized nine Cycles of the National Conference „Fundamentals of Organ Donation
Organized four Cycles of the National Conference „Ultrasound Guided Regional Anesthesia“
XXIII – XXVI Vilnius International Paediatric Pulmonology and allergology Conference – School
Annual Meeting of the Lithuanian Pediatric Nephrology Society
Current Issues in Pediatric Liver Transplantation
Clotting disorders. Introduction to VWD
Haemophilia A: Needs and Challenged
Hepatomegaly and Splenomegaly: Challenges and Therapeutic Options
News in Pediatric Oncohematology

International annual meeting of Lithuanian Society of Prosthodontics

International conference „Typicality in periodontology“

International conference „ENDO-BALTIC 2019“

National Scientific-Practical Conference “A Sustainable Environment for Children’s Health”

4th International School on Public Mental Health: Research In Public Mental Health And Resilience“

Scientific-practical conference "The Place of Alternative and Complementary Health Care in the Lithuanian Health Care System".

Scientific-practical conference "Correction of Diplopia by Prism"

Summer School for nursing doctoral students „Research in Nursing Care“

Scientific-Practical Conference “Simulative education innovations”

Scientific-Practical Conference "Development of competences of pharmacy and improvement of skills in nursing"

MAIN SCIENTIFIC ACHIEVEMENTS IN 2019

1. Patent application “Automated Tumour-Stroma Interface Zone Detection for Anti-Tumour Response Assessment by Immunogradient Indicators” (No. LT 2019 509)
2. Patent application “Computer-implemented process on an image of a biological sample” (No. PCT/EP2019/067180).
3. Evaluating the effects of obstructive sleep apnea on the cornea (published scientific article in ISI Web of Science (Clarivate analytics) journal).
4. Assessing the risk of pulmonary artery thrombotic embolism in patients with advanced lung cancer using the Khorana Scale (cornea (published scientific article in ISI Web of Science (Clarivate analytics) journal).
5. Participation at international multicenter study on the adverse effects of tuberculosis drugs cornea (published scientific article in ISI Web of Science (Clarivate analytics) journal).
6. Validation of the Lithuanian version of sarcopenia-specific quality of life questionnaire (SarQoL*)
7. The predictive markers in the efficacy of radical combined surgical and conservative treatment in women with stage IA-IV non-small cell lung cancer.
8. Bousquet J, Schünemann HJ, Togias A, Bachert C, Erhola M, (...) Valiulis A, et al. Next-generation Allergic Rhinitis and Its Impact on Asthma (ARIA) guidelines for allergic rhinitis based on Grading of Recommendations Assessment, Development and Evaluation (GRADE) and real-world evidence // Journal of Allergy and Clinical Immunology. New York: Mosby-Elsevier Inc. ISSN 0091-6749. eISSN 1097-6825. 2019, first on line, p. [1-14]. DOI: 10.1016/j.jaci.2019.06.049. [IF: 14,110; AIF: 4,730; Q1 (2018, InCites JCR SCIE)]
9. Bousquet J, Hellings PW, Agache I, Amat F, Annesi-Maesano I et al. Allergic Rhinitis and its Impact on Asthma (ARIA) Phase 4 (2018): Change management in allergic rhinitis and asthma multimorbidity using mobile technology: reviews and feature article // Journal of Allergy and Clinical Immunology. New York : Mosby Inc. ISSN 0091-6749. eISSN 1097-6825. 2019, vol. 143, no. 3, p. 864-879. DOI: 10.1016/j.jaci.2018.08.049. IF: 14,110; AIF: 4,730; Q1 (2018, InCites JCR SCIE)]
10. Azukaitis K, Ju W, Kirchner M, et al. Low levels of urinary epidermal growth factor predict chronic kidney disease progression in children. *Kidney Int.* 2019 Jul;96(1):214-221. (IF 8.306; Q1; AIF 3.292)
11. Dr. Daiva Brogiene. Vice-president of CPME (The Standing Committee of European Doctors)

INSTITUTE OF BIOMEDICAL SCIENCES

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Head – Prof. Dr. *Janina Tutkuvienė*

STAFF

Professors: dr. (HP) R. Jankauskas, dr. (HP) J. Tutkuvienė, dr. R. Šimkūnaitė-Rizgeliienė, dr. V. Žalgevičienė.

Associate professors: dr. A. Barkus, dr. R. Čepulienė, dr. E. M. Jakimavičienė, dr. Ž. Miliauskienė, dr. L. Nedzinskienė, dr. A. Suchomlinov, dr. V. Tutkus (part-time).

Assistants Professor: dr. M. Leonavičiūtė-Klimantavičienė (part-time), R. Mackevičienė, R. Morkūnienė.

Lecturers: dr. V. Bartuškienė (part-time), R. Karneckė (part-time), J. Janavičius (part-time).

Researchers: dr. J. Kozakaitė, dr. D. Piombino-Mascoli

Research Assistant: S. Šilovė

Doctoral students: K. Kuolienė, G. Laurinavičiūtė, V. Lukošaitis, R. Morkūnienė, A. Vaitiekus.

Students' scientific group of Human Biology and Evolutionary Medicine: scientific supervisor – prof. J. Tutkuvienė; coordinator – student S. Ekkert; in total – 25 members of students.

RESEARCH INTERESTS

Phenotypic variety of Lithuanian and other populations in a changing environment

The variety of morphometric (skeletal and dental) health indicators of Lithuanian paleopopulations, paleopathology and its factors (ecological, demographic, social).

The peculiarities and factors of growth programming, prenatal and postnatal development, also health risk factors, using data from experimental animal models (chicken embryos, rats, other) studies.

The diversity of physical status of Lithuanian and other populations, the biotic and abiotic factors of phenotypic expression, and the relationship between markers of physical and general health status from the viewpoint of evolutionary medicine.

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

- 1. Phenotypic variety of Lithuanian inhabitants, its prenatal and postnatal factors in a changing environment.** Supervisors: Prof. J. Tutkuvienė, prof. R. Jankauskas (2019–2023).

Bioarcheological investigations. Data of infection diseases (syphilis, TB) in historical Lithuanian populations were summarised. Samples selected for pathogen analysis in mummified remains collected and submitted for analysis. Collection of samples for pathogen detection in medieval

remains continued, one paper submitted. Papers on stable isotope analysis as indicator of nutrition and data on mummified tissue pathologies published.

Main publications:

Whitmore, K. M., Dupras, T. L., Williams, L. J., Skipitytė, R., Schultz, J. J., Jankauskas, R. 2019. Stable carbon and nitrogen isotope inter- and intra-individual dietary reconstruction from the late 14th to early 18th century site of Alytus, Lithuania. *American Journal of Physical Anthropology*, vol.168(2), no 2, p.279-291, doi: 10.1002/ajpa.23742.

Piombino Mascali, D., Juškys, R., Longo, M., Loynes, R. 2019. The Trepanned Skull From Comiso (Ragusa): Trauma, Surgery, and Care in Modern Age Sicily. *Journal of Forensic Radiology and Imaging*, vol. 19, art. No. 100342, p. 1-4, doi: 10.1016/j.jofri.2019.100342.

Zink, A., Samadelli, M., Gostner, P., & Piombino-Mascali, D. 2019. Possible Evidence for Care and Treatment in the Tyrolean Iceman. *International Journal of Paleopathology*, Vol. 25, P. 110-117, Doi: 10.1016/J.Ijpp.2018.07.006.

2. Experimental (growth programming) investigations.

Further analysis of data from the experimental study on the influence of maternal nutrition prior to pregnancy and during pregnancy was carried out: the histomorphological profile of the rat offspring eyes was determined with an analysis of photoreceptors, retinal microglia and ganglion cells, the results on evaluation of retinal microglia and retinal thickness were presented at international conference. Further analysis of data from the experimental study on the influence of ionized water, boron and fluorine on rat embryos was carried out: the results were presented at international conference and the scientific article was published. The viability of periodontal ligament cells in different media was studied and results were presented at international conference, demineralization and remineralization of periodontal tissues around dental implants was analysed, data published in two scientific articles.

Main publications:

Puišys, A., Auzbikavičiūtė, V., Minkauskaitė, A., Šimkūnaitė-Rizgelienė, R., Razukevičius, D., Linkevičius, R., Linkevičius, T. 2019. Early Crestal Bone Loss: Is It Really Loss? *Clinical Case Reports*, Vol. 7, No. 10, P. 1913-1915, Doi: 10.1002/Ccr3.2376.

Puišys, A., Auzbikavičiūtė, V., Šimkūnaitė-Rizgelienė, R., Razukevičius, D., Linkevičius, R., Linkevičius, T. 2019. Bone Remineralization Around Dental Implants Following Conservative Treatment After Peri-Implantitis. *Case Reports in Dentistry*, Vol. 2019, Art. No. 7210837, P. 1-6, Doi: 10.1155/2019/7210837.

3. Investigations of physical status of contemporary inhabitants.

The data on prevalence of prematurity in Lithuania during the 1995-2015 period in relation to maternal age, antenatal and perinatal pathologies were analysed and presented at the international conference, materials on newborns head circumference were prepared for publication, also further data collecting and analysis of longitudinal study of preterm newborns in Lithuania was continued. Analysis of stillbirths during the 1995-2016 period in Lithuanian newborns was performed, and data were presented at the international conference. Worldwide variations in prevalence of low birth weight, prematurity and stillbirth rate in relation to different factors were studied in 57 counties, and the results were presented at the international conference. Analysis of data from study on premenstrual syndrome was carried out and the results were presented at the international conference. The manuscript on female's breast morphology were prepared for publication. The study on physical status, health, body image, psychological status, consumption of psychoactive substance of different age and sex groups, also incarcerated persons was continued, and materials were prepared for publication. The study on the relationship between the joint's alignment in relation to the lower limb function and physical status of young adults was continued (in total, 176 persons were investigated): the data on X-rays and the results of physical examination were

analysed. The study on anatomical variants of cerebral arteries in relation to cerebral vascular pathologies was started: 75 patients were included into the investigation (25 persons treated with reperfusion and 50 persons treated with basic stroke therapy). The data on variations in facial nerve branches and anatomical landmarks for its trunk identification in cadavers were collected, analysed and published.

Main publication:

Stundžaitė-Baršauskienė G., Tutkuvienė J., Barkus A., Jakimavičienė E. M., Gibavičienė J., Jakutis N., Tutkus V., Venciūtė R., Dadonienė J. Facial Perception, Self-Esteem and Psychosocial Well-Being in Patients After Nasal Surgery Due to Trauma, Cancer and Aesthetic Needs (Cluster Analysis of Multiple Interrelations). *Annals of Human Biology*. 2019 Nov 21: 1-16. Doi: 10.1080/03014460.2019.1690678. [Epub Ahead of Print]

Hermanussen M., Mumm R., Rintisch A., Tutkuvienė J., Suchomlinov A., Joubert K., Scheffler Ch. Height SDS Changes (Delta hSDS) In Healthy Children from Birth to 18 Years, with Correction Factors for Measurement Intervals of Less Than One Year. *Pediatric Endocrinology Reviews*, 2019, Vol. 16(4): 457-467.

DOI: 10.17458/per.vol16.2019.hmr.heightsdschanges.

Stankevičius D., Suchomlinov A. Variations in Facial Nerve Branches and Anatomical Landmarks for Its Trunk Identification: A Pilot Cadaveric Study in Lithuanian Population. *Cureus*, 2019. Doi: 10.7759/Cureus.6100. 1-12

National Research Projects

1. Granted by Research Council of Lithuania. **Osteological material as the source for Lithuanistic research: Knowledge, Systemization and Access.** (No. S-LIP-18-50 / LSS-150000-1175). Assoc. Prof. Ž. Miliauskienė (leading scientist), dr. J. Kozakaitė (researcher), 2018–2020.

Analysis of human osteological collection was continued. More than 2000 skeletal remains were reanalyzed. Digital osteological database was established first data were entered. An archaeological and historical data, including all publications of the analyzed osteological collection was collected. The osteological collection and the project were introduced at national and international conferences, including an international seminar.

2. Granted by National Museum of Lithuania, and the Genocide and Resistance Research Centre of Lithuania: **Anthropological investigation of skeletal remains of the January uprising (1863–1864) at the Gediminas hill in Vilnius.** Prof. R. Jankauskas (leading scientist), dr. J. Kozakaitė (researcher), assoc. Prof. Ž. Miliauskienė (researcher), 2017–2019.

Investigation and identification of skeletal remains of participants of the January uprising (1863–1864) was completed. Results were summarised and published: Jankauskas R., Kozakaitė J., Kisielius G., Miliauskienė Ž. & Jankauskienė J. Gedimino kalne rastų 1863-1864 metų sukilėlių palaikų identifikavimas // 1863-1864 metų sukilėlių kelias į mirtį ir atgimimą / Sud. Tamara Bairašauskaitė. Vilnius: Lietuvos Nacionalinis Muziejus, 2019. P. 168-183.

3. Granted by the Genocide and Resistance Research Centre of Lithuania: **Anthropological investigations of orphans' cemetery of the 19th c. in Vilnius.** Prof. R. Jankauskas (leading scientist), dr. J. Kozakaitė (researcher), assoc. Prof. Ž. Miliauskienė (researcher), 2017–2019.

During historical, archaeological and anthropological investigations of orphan's cemetery of the 19th c. in Vilnius another 15 remains of victims of Soviet repressions (1956–1969) were uncovered. Remains of the participants of the Lithuanian partisans' movement Antanas Kraujalis-Siaubūnas

and Juozapas Streikus-Stumbras were identified by complex anthropological and forensic analysis. Investigation is continued.

4. Granted by the Genocide and Resistance Research Centre of Lithuania: **Anthropological investigations of remains of participants of anti-Soviet resistance in 1944-1953** (Leipalingis, Alytus district). Prof. R. Jankauskas (leading scientist), dr. J. Kozakaitė (researcher), assoc. Prof. Ž. Miliauskienė (researcher), 2019–2020.

During historical, archaeological and anthropological investigations in Leipalingis (Alytus district) 33 remains of participation of anti-Soviet resistance (1944-1953) were uncovered. Investigation were continued.

International Research Projects

1. Horizon-2020 project of EU-13 countries “**Alliance for Life: Closing Research and Innovation Divide in the European Union**” (2017–2019). Prof. J. Tutkuviene (Strategy Board member from Lithuanian partner – Vilnius University, Faculty of Medicine).

Summing up of the materials with respect to organisation and management of research activities, research evaluation criteria and research infrastructure at the 13-EU countries (partners of the project) was finalised. Assessment report (methodology and indicators, benchmarking of A4L member institutions, benchmarking with EU advanced institutions) was issued.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INNOVATION) PARTNERS

Institute of Anthropology, University of Vienna (Austria)

Max-Planck-Institute, Starnberg-Seewiesen (Germany)

Institute of Evolutionary Medicine, University of Zürich (Switzerland)

Institute for Anthropological Research, Zagreb (Croatia)

The Institute for Mummy Studies, Bolzano (Italy)

Institute of Forensic Medicine, Heinrich-Heine University of Düsseldorf (Germany)

Department of Anatomy, University of Göttingen (Germany)

University of Central Florida (Orlando, Florida, USA)

Medical University of Lodz (Poland)

University of Torun (Poland)

Cranfield University (UK)

University of Tartu (Estonia)

McMaster University (Canada)

University of Catania (Italy)

State Forensic Medicine Service (Lithuania)

OTHER SCIENTIFIC ACTIVITIES

Prof. J. Tutkuviene

- member of the Council of the Faculty of Medicine
- chair of the Doctoral Committee for PhD studies in Medicine at Vilnius University
- Council member of the European Anthropological Association
- member of the Commission for Human Ecology of International Union of Anthropological and Ethnological Sciences (IUAES)
- member of the other international scientific societies: International Association of Human Biologists, Society for Studies of Human Biology, International Auxological Society
- member of national scientific societies: Lithuanian Morphological Society, Lithuanian Society of Obstetricians and Gynaecologists (Section of Gynaecology of Children and Adolescents)

- editorial board member of the journals: Anthropologischer Anzeiger; Journal of Human Ecology; Acta Medica Lituanica; Visuomenės Sveikata (Public health)

Prof. R. Jankauskas

- editorial boards member of the journals: Papers on Anthropology (Tartu University, Estonia); Anthropologischer Anzeiger; Lietuvos archeologija; Archaeologia Baltica;
- member of the Board of the European Anthropological Association;
- member of the Scientific Council of the Lithuanian Institute of History;
- member of the Scientific Council of the Nature Research Center;
- member of Lithuanian Academy of Sciences (<http://lma.lt/old/intranetas>);
- member of Paleopathology Association.

Prof. R. Šimkūnaitė-Rizgeliė

- member of the European Anthropological Association;
- board member of the Lithuanian Morphological Society.

Prof. V. Žalgevičienė

- vice-chairperson of the Commission of Appeal at the Faculty of Medicine;
- member of the Lithuanian Morphological Society;
- member of Baltic Laboratory Animal Association (Balt-LASA).

Senior Research Fellow D. Piombino-Mascali

- member of Paleopathology Association;
- honorary membership at American Society of Embalmers.

Assoc. Prof. A. Barkus

- member of the Lithuanian Morphological Society;
- member of the European Anthropological Association;
- member of the Lithuanian Society of Archaeology.

Assoc. Prof. R. Čepulienė

- member of the Lithuanian Morphological Society;
- member of the European Anthropological Association;
- member of the World's Poultry Science Association.

Assoc. Prof. E. M. Jakimavičienė

- member of the Lithuanian Morphological Society;
- member of the European Anthropological Association;
- member of the International Auxological Society.

Assoc. Prof. Ž. Miliauskienė

- member of the Lithuanian Morphological Society;
- member of Paleopathology Association;
- member of the European Anthropological Association;
- member of the Lithuanian Society of Archaeology.

Assoc. Prof. L. Nedzinskienė

- member of the Lithuanian Morphological Society.

Assoc. Prof. A. Suchomlinov

- member of the European Anthropological Association;
- member of the International Auxological Society;

- member of the Lithuanian Morphological Society.

Assoc. Prof. V. Tutkus

- member of European Society of Sports Traumatology, Knee Surgery and Arthroscopy (ESSKA);
- member of International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine (ISAKOS);
- member of Lithuanian Association of Arthroscopic Surgeons;
- member of Lithuanian Society of Orthopaedics and Traumatology;
- member of Lithuanian Society of Plastic and Reconstructive Surgery.

Assist. dr. M. Leonavičiūtė-Klimantavičienė

- member of Lithuanian Society of Children's Pulmonology;
- member of Lithuanian Society of Allergy and Clinical Immunology;
- member of European Respiratory Society.

Junior Assist. R. Mackevičienė

- member of the Lithuanian Morphological Society;
- member of the Lithuanian Ornithological Society.

Junior Assist., PhD student R. Morkūnienė

- member of Lithuanian Pediatric Society;
- member of European Anthropological Association;
- member of the International Auxological Society.

Researcher J. Kozakaitė

- Member of the Lithuanian Society of Archaeology

Lect. dr. V. Bartuškienė

- member of the European Anthropological Association;
- member of the Lithuanian Morphological Society.

Lect. R. Jacevičiūtė

- member of the Lithuanian Morphological Society.

Lect. J. Janavičius

- president of Lithuanian Hand Surgery and Rehabilitation Society Manus Lithuanica;
- member of Lithuanian Foot Surgery Society;
- member of International Federation of Societies for Surgery of the Hand;
- member of European Foot and Ankle Society.

PhD student K. Kuolienė

- member of the European Anthropological Association;
- member of Lithuanian Ophthalmological Society;
- member of the Association for Research in Vision and Ophthalmology.

PhD student G. Laurinavičiūtė

- member of Lithuanian Ophthalmological Society;
- European Society of Cataract and Refractive Surgeons.

PhD student V. Lukošaitis

- member of Lithuanian Association of Neurologists;

- member of Lithuanian Society for Epileptology;
- member of Lithuanian Stroke Association.

PhD student A. Vaitiekus

- member of Lithuanian Society of Orthopaedics and Traumatology;
- member of Lithuanian Foot Surgery Society;
- member of European Foot and Ankle Association (EFAS);
- member of Lithuanian Association of Arthroscopic Surgeons

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

1. Tutkuvienė J. Variation in facial morphology and biopsychosocial factors of facial attractiveness (invited lecture). Riga Stradiņš University International Conference on Medical and Health Care Sciences, April 1st-3rd, 2019, Riga, Latvia.
2. Tutkuvienė J., Silovė S., Jakimavičienė E.M. Negative outcomes of development in uterus: global geographic, climatic and socioeconomic indicators versus individual maternal factors related to low birth weight, prematurity and stillbirth rate. The 27th Aschauer Soiree of Auxological Society, November 15th-17th, 2019, Krobielowice-Wroclaw, Poland.
3. Suchomlinov A., Konstantinov V., Purlys P. "Fat and Sad": associations between depression, height and body mass index in adolescent and adult population of Penza city and oblast, Russia. The 27th Aschauer Soiree of Auxological Society, November 15th-17th, 2019, Krobielowice-Wroclaw, Poland.

MOST IMPORTANT PARTICIPATION CASES OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS AND ORGANISATIONS, AND BUSINESS ENTITIES

Jankauskas R. Working group on identification of remains of leaders of 1863–1864 uprising.

Jankauskas R. Working group on identification of remains of Soviet regime victims inhumed in Antakalnis cemetery.

Jankauskas R. European Commission Research Executive Agency expert.

Jankauskas R. The State Education Development Agency of Latvia expert.

CONSULTATIONS PROVIDED BY THE UNIT TO THE PUBLIC OR ECONOMIC ENTITIES

Tutkuvienė J. Regular consultations provided to public and other institutions with regard to growth and development criteria of Lithuanian children.

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Tutkuvienė J. A public discussion at the Baltic Food and Beverage Exhibition BAF'19 "Eat or not to eat – that is the question!" on the topics of human body changes in relation to nutrition, dieting, physical activity, other factors (on the 9th of November, 2019): <https://www.litexpo.lt/lt/parodos/baf-lt-3#event-inner-modal3044>

Tutkuvienė J. Interview to the magazine "Tavo vaikas (Your Child)" on factors and tendencies related to growth and development of children: "Ar panašūs? Tėtis aukštas, sūnus žemas: Aplinka keičia paveldėjimo dėsnius (Are they similar? Dad is tall, son is short: The environment is changing the laws of inheritance".

<https://www.tavovaikas.lt/lt/idomybes/g-56640-zurnalo-tavo-vaikas-viesnia-neseniai-mama-tapusi-dovile-filmanaviciute>

Piombino-Mascali D. A public speech at the Egyptian museum of Turin, concerning ethics, research and display of the palermo mummies: <https://www.musei.re.it/appuntamenti/anatomia-della-meraviglia-la-splendida-vita-delle-mummie/>

Piombino-Mascali D. A public speech at the city museums of Reggio-Emilia about mummy studies around the world and a summary of mummy investigation:
<https://www.museoegizio.it/esplora/notizie/conference-human-remains-ethics-conservation-display/>

Piombino-Mascali D. A public speech in several Sicilian cities like Palermo, Catania, Messina and Comiso introducing the Sicily mummy project and its scientific advances:
<http://www.edizionikalos.com/rassegna-stampa-del-volume-le-catacombe-dei-cappuccini-guida-storico-scientifica/>

Department of Human and Medical Genetics

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www <http://www.genetika.mf.vu.lt>

Head – Prof. Dr. *Algirdas Utkus*

STAFF

Professors: Dr. L. Cimbalistienė (part-time), Dr. A. Jakaitienė (part-time), Habil. Dr. V. Kučinskas (emeritus), Dr. A. Utkus (part-time).

Associate professors: Dr. L. Ambrozaitytė (part-time), Dr. A. Matulevičienė (part-time), Dr. A. Morkūnienė (part-time), Dr. A. Molytė (part-time).

Assistant professors: Dr. A. Bankauskienė (part-time), Dr. N. Bratčikovienė (part-time), Dr. B. Burnytė (part-time), Dr. B. Tumienė (part-time).

Researchers: Dr. I. Domarkienė (part-time), Dr. V. Mikštienė (part-time), Dr. T. Rančelis (part-time), Dr. B. Aleksiūnienė (part-time), Dr. A. Urnikytė (part-time), Dr. E. Pranckevičienė (part-time), Dr. E. Preikšaitienė (part-time), Dr. Ž. Maldžienė (part-time), Dr. V. Ginevičienė (part-time).

Lecturers: Dr. V. Šliužas (part-time), Dr. J. Songailienė (part-time), K. Baronas, (part-time), N. Krasovskaja (part-time), D. Vansevičiūtė (part-time).

Researchers assistants: J. Arasimavičius (part-time), E. Siavrienė (part-time);

Doctoral students: L. Pranckėnienė, E. Siavrienė, R. Laukienė, E. Dagytė, G. Žukauskaitė, K. Grigalionienė, G. Petraitytė.

Genetic scientific group of students: scientific leader – Dr. E. Preikšaitienė, coordinator – student Eglė Griškevičiūtė; 8 members of students.

RESEARCH INTERESTS

Genetic variation inter- and intra- population of Lithuania

Genomics of intellectual disability and congenital anomalies

Genetic analysis of hereditary phenotypes – genetic characterization of human phenome, genome and regulome

RESEARCH PROJECTS CARRIED OUT IN 2018

Projects Supported by University Budget

- 1. Fundamental Research of Human Genome Architecture: Characterization of Phenome, Genome and Regulome Markers of the Lithuanian Population.** Prof. Dr. A. Utkus. 2019–2023.

The research of the specific genetic loci for neurodevelopmental disorders and intellectual disability, severe dysmorphic phenotypes, and other challenging hereditary phenotypes were performed investigating physical mapping and possible DNA variants function. Genetic variation analysis of the Lithuanian population considering genomic factors within the population groups was carried out and compared to the other European and world populations.

Main publications:

Urnikytė, Alina; Flores-Bello, Andre; Mondal, Mayukh; Molytė, Alma; Comas, David; Calafell, Francesc; Bosch, Elena; Kučinskas, Vaidutis. Patterns of genetic structure and adaptive positive selection in the Lithuanian population from high-density SNP data // Scientific reports. London: Nature publishing group. ISSN 2045-2322. 2019, vol. 9, art. no. 9163, p. 1-11. DOI: 10.1038/s41598-019-45746-3. [DB: MEDLINE; Biological Abstracts; Scopus; Science Citation Index Expanded (Web of Science)] [Indėlis: 0,125] [Citav. rod.: 4.011 (2018, SCIE)] [M.kr.: N 010]

Gasiūnienė, Monika; Zubova, Anastasija; Utkus, Algirdas; Navakauskienė, Rūta. Epigenetic and metabolic alterations in human amniotic fluid stem cells induced to cardiomyogenic differentiation by DNA methyltransferases and p53 inhibitors. Journal of Cellular Biochemistry, May 2019, Vol.120(5), p.8129-8143, DOI: 10.1002/jcb.28092. IF 2.959.

Edgaras Dlungauskas, Robertas Strumila, Aistė Lengvenytė, Laima Ambrozaitytė, Evelina Dagtė, Alma Molytė, Alvydas Navickas & Algirdas Utkus, Analysis of Lithuanian CYP2D6 polymorphism and its relevance to psychiatric care of the local population. Nordic journal of psychiatry. Abingdon : Taylor & Francis Ltd. 2019, vol. 73, iss. 1, p. 31-35. ISSN: 0803-9488 ; eISSN: 1502-4725 ; DOI: 10.1080/08039488.2018.1548648. IF 1.764.

National Research Projects

1. Deciphering the Genetic Architecture of Intellectual Disability and Congenital Anomalies (INGENES). Dr. E. Preikšaitienė. 2017–2020.

Intellectual disability and congenital anomalies (ID/CA) are significant causes of chronic illness and constitute a leading socio-economic problem of health care. The main objective of the study is to detect and validate novel genetic causes of ID/CA through identification of novel DNA sequence and copy number variants and their clinical, molecular and functional characterization. During this project the researchers use most up to date technologies, including next generation sequencing, bioinformatics and gene expression analysis. The knowledge will be expanded in functional genomics approaches, particularly in live cell genome editing. For that purpose, strongest candidate genes will be selected for CRISPR-Cas9 experiments. Discovery of novel genes associated with ID/CA will contribute to deeper understanding of etiology and pathophysiology of congenital disorders. Straightforward benefit of the obtained results will be providing an accurate diagnosis in a significant fraction of individuals with previously idiopathic ID/CA, which is the basis of effective genetic counselling.

Main publications:

Pranckėnienė L, Siavrienė E, Gueneau L, Preikšaitienė E, Mikštienė V, Reymond A, Kučinskas V. De novo splice site variant of ARID1B associated with pathogenesis of Coffin-Siris syndrome. Mol Genet Genomic Med. 2019 Oct 19:e1006. doi: 10.1002/mgg3.1006.

Siavrienė E, Mikštienė V, Radzevičius D, Maldžienė Ž, Rančelis T, Petraitytė G, Tamulytė G, Kavaliauskienė I, Šarkinas L, Utkus A, Kučinskas V, Preikšaitienė E. Novel GLI3 variant causes Greig cephalopolysyndactyly syndrome in three generations of a Lithuanian family. Mol Genet Genomic Med. 2019 Jul 20:e878. doi: 10.1002/mgg3.878.

Siavrienė E, Petraitytė G, Mikštienė V, Rančelis T, Maldžienė Ž, Morkūnienė A, Byčkova J, Utkus A, Kučinskas V, Preikšaitienė E. A novel CHD7 variant disrupting acceptor splice site in a patient with mild features of CHARGE syndrome: a case report. BMC Med Genet. 2019 Jul 17;20(1):127. doi: 10.1186/s12881-019-0859-y.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INOVATION) PARTNERS

Thermo Fisher Scientific Baltics (Lithuania)

Lithuanian Olympic Sports Center (Lithuania)
University of Lausanne (Swiss Confederation)
Department of Medical Research Kaohsiung Chang-Gung Memorial Hospital, Taiwan (China)
Division of Medical Genetics Department of Pediatrics, Keio University School of Medicine,
Tokyo (Japan)

OTHER SCIENTIFIC ACTIVITIES

Prof. Dr. A. Utkus

- member of the Executive Committee of The Association of Medical Schools in Europe (AMSE);
- member of the National Health Council;
- editorial board member of the journal *Laboratorinė medicina (Laboratory Medicine)*;
- member of the Lithuanian Society of Human Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>;
- President of the Lithuanian Society of Human Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>;
- editorial board member of the journal *Sveikatos mokslai (Lietuva)*;
- member of the European Society of Human Genetics, www.eshg.org;
- member of the American Society of Human Genetics, www.ashg.org;
- dean of the Faculty of Medicine, Vilnius University, www.mf.vu.lt;
- member of the Rectorate of Vilnius University;
- coordinator of ERN-RND (European Reference Network on Rare Neurological Diseases).

Prof. Habil. Dr. V. Kučinskas

- council member of the Federation of European Academies of Medicine, <https://www.feam.eu/about-us/governance>;
- chairperson of the division of Biology, Medicine and Geosciences of the Lithuanian Academy of Sciences, <http://www.lma.lt/>;
- member of the Presidium of the Lithuanian Academy of Sciences, <http://www.lma.lt/>;
- member of the Lithuanian Academy of Sciences, <http://lma.lt/intranetas/index.php?m=profile&user=309>;
- editorial board member of the journal *Laboratorinė medicina (Laboratory Medicine)*, <http://www.llmd.ip.lt/lm>;
- editorial board member of the *Journal of Applied Genetics* (Poland), <http://www.jay.au.poznan.pl/JAG/>;
- editorial board member of the journal *Medicina (Medicine)*;
- editorial board member of the *Journal Medical Genetics (Russia)*;
- editorial council member of the *Journal Acta Medica Lituanica*;
- editorial board member of the *Balkan Journal of Medical Genetisc (Makedonija)*;
- consultant on medical genetics, Ministry of Health of the Republic of Lithuania;
- board member of the Lithuanian Society of Human Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>;
- member of the European Society of Human Genetics, www.eshg.org;
- member of the American Society of Human Genetics, www.ashg.org;
- member of Human Genome Organization (HUGO);
- chairman of the committee of Master study programme Medical Genetics at Vilnius University.

Prof. Dr. L. Cimbališienė

- member of the Society for the Study of Inborn Errors of Metabolism (SSIEM), <http://www.ssiem.org>;
- member of the Lithuanian Society of Human Genetics (chairperson of Committee of Financial Supervisory Commission), <http://www.geneticahumana.lt/LZGD/organizacija.htm>;
- member of the Lithuanian Doctors' Union, <http://www.lgs.lt/>.

Prof. Dr. A. Jakaitienė

- member of Lithuanian Mathematical Society, <http://www.mif.vu.lt/lmd/index.html>;
- board member of Lithuanian Statistics Society, <http://www.statistikusajunga.lt/>;
- member of International Biometric Association, <https://www.biometricsociety.org>;
- country representative of International Biometric Association in Nord Baltic Region, <http://ibsnbr.org>;
- member of International Epidemiological Association;
- country representative at European Statistical Advisory Committee, <https://ec.europa.eu/eurostat/web/european-statistical-advisory-committee-esac>;
- chairman of the committee of Master study programme Systems Biology at Vilnius University.

Dr. E. Prankevičienė

- member of Canadian Society of Molecular Biosciences, <https://csmb-scbm.ca>;
- member of American Association of Advancement of Science, <https://www.aaas.org>;
- member of International Neural Network Society, <https://www.inns.org>;
- member of the Lithuanian Society of Human Genetics;
- member of the European Society of Human Genetics, www.eshg.org;

Dr. L. Ambrozaitytė

- member of the Lithuanian Society of Human Genetics (board member), <http://www.geneticahumana.lt/LZGD/organizacija.htm>;
- member of the European Society of Human Genetics, www.eshg.org;
- member of the American Society of Human Genetics, www.ashg.org.

Dr. I. Domarkienė

- member of the Lithuanian Society of Human Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>.

Dr. V. Ginevičienė

- member of the Lithuanian Society of Human Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>;
- member of the European College of Sport Science, <http://www.ecss.mobi/>;
- member of the Baltic Sport Science Society, www.leu.lt/download/6594/bsss_sutartis.pdf;
- member of the Lithuanian Federation of Sports Medicine, <http://www.lsmf.lt/>.

Dr. Ž. Maldžienė

- member of the Lithuanian Society of Human Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>.

Dr. A. Matulevičienė

- member of the European Society of Human Genetics, www.eshg.org;
- member of the Committee for Orphan Medicinal Products (COMP);
- member of the Lithuanian Society of Human Genetics, (board member of the Committee of Financial Supervisory Commission), <http://www.geneticahumana.lt/LZGD/organizacija.htm>;

- member of the Lithuanian Society of Doctors;
- coordinator of ERN-ITHACA (Network of Intellectual Disability and Congenital Malformations).

Dr. A. Morkūnienė

- member of the Lithuanian Society of Human Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>.

Dr. A. Molytė

- member of the Lithuanian Computer Society.

Dr. J. Songailienė

- member of the Lithuanian Society of Human Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>;
- member of the International Society for Neonatal Screening, <https://www.isns-neoscreening.org/>;
- member of the Society for the Study of Inborn Errors of Metabolism (SSIEM), <http://www.ssiem.org/home/welcome.asp>;
- president of the Baltic Metabolic Group; <http://www.ssiem.org/nationalsocieties/membercountries.asp>;
- National representative of Lithuania in ERNDIM/EuroGenTest (ERNDIM- European Research Network for Evaluation and Improvement of Screening, Diagnosis and Treatment of Inherited Disorders of Metabolism; EuroGenTest - EU-funded Network of Excellence), <https://erndim.org/home/start.asp>.

Dr. V. Šliužas

- member of the Lithuanian Society of Human Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>;
- member of the European Society of Human Genetics, www.eshg.org.

Dr. E. Preikšaitienė

- member of the Lithuanian Society of Human Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>.

Dr. A. Bankauskienė

- members of the Lithuanian Mathematical Society.

Dr. V. Mikštienė

- member of the Lithuanian Society of Human; Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>;
- member of the European Society of Human Genetics, www.eshg.org.

Dr. B. Tumienė

- board member of the European Society of Human Genetics, www.eshg.org;
- Lithuanian representative in the European Reference Network Board of Member States, https://ec.europa.eu/health/ern_en;
- member of the Panel of Experts, Rare2030: Foresight in rare disease policies, <https://www.rare2030.eu/>;
- member of the Interregional Committee, Regions4PerMed, <https://www.regions4permed.eu/>;
- member of the Lithuanian Society of Human Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>;
- member of the Society for Studies of Inborn Errors of Metabolism, SSIEM;
- board member of Baltic Metabolic Group;
- member of Lithuanian Child Neurology Association;
- member of Lithuanian Society of Epileptology;
- member of Lithuanian Society of Neurosciences;
- Orphanet Lithuania National Coordinator, Orphanet Operating Committee member, <https://www.orpha.net/consor/cgi-bin/index.php>.

Dr. B. Aleksišienė

- member of the Lithuanian Society of Human Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>;
- member of the European Society of Human Genetics, www.eshg.org.

Dr. B. Burnytė

- member of the Lithuanian Society of Human Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>;
- member of the European Society of Human Genetics, www.eshg.org;
- member of the American Society of Human Genetics, www.ashg.org;
- member of the Society for Studies of Inborn Errors of Metabolism, SSIEM
- Orphanet information scientist.

E. Siavrienė

- member of the Lithuanian Society of Human Genetics, <http://www.geneticahumana.lt/LZGD/organizacija.htm>.

J. Arasimavičius

- member of European Academy of Dermatology and Venereology, <https://eadv.org/>;
- member of Lithuanian Society of Dermatovenereologists, <http://www.ldvd.lt/>;
- member of European Association of Dermato Oncology, <http://www.eado.org/>;
- member of International Dermoscopy Society, <https://dermoscopy-ids.org/>;
- member of European Nail Society, <http://www.euronailsociety.eu/index-en.aspx>.

MOST IMPORTANT NATIONAL AND INTERNATIONAL AWARDS RECEIVED FOR R&D ACTIVITIES

Dr. E. Preikšaitienė – scholarship of Lithuanian Academy of Sciences for young researchers, 2018–2019.

MOST IMPORTANT PARTICIPATION CASES OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS AND ORGANISATIONS, AND BUSINESS ENTITIES

Dr. L. Ambrozaitytė – nominated representative to the Working Group on the White Paper on good genomic practice *Towards access to at least 1 million sequenced genomes in the European Union by 2022*.

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Results of the scientific manuscript “Patterns of genetic structure and adaptive positive selection in the Lithuanian population from high-density SNP data” in the media (in the Lithuanian language):

- <https://www.elta.lt/lt/pranesimai-spaudai/nature-grupes-zurnalo-straipsnyje-vu-genetikai-pirma-karta-pristate-lietuviu-kilmes-tyrimus-186550>
- <https://naujienos.vu.lt/nature-grupes-zurnalo-straipsnyje-vu-genetikai-pirma-karta-pristate-lietuviu-kilmes-tyrimus/>
- <https://lithuaniantribune.com/lithuanian-genetics-new-unique-findings/>
- <https://en.delfi.lt/lifestyle/lithuanian-genome-does-it-differ-from-other-europeans.d?id=81661849>
- <https://www.ve.lt/naujienos/ve-rekomenduojami/skaityk-dabar/tyrimas-kuo-zemaitis-skiriasi-nuo-aukstaicio-1721596/>
- <https://www.ziniuradijas.lt/laidos/mokslo-mygukas/kokia-tikroji-lietuviu-kilme?video=1>
- <https://sodas.ugdome.lt/naujienos/perziura/48650/>
- <https://www.lrt.lt/naujienos/mokslas-ir-it/11/1073682/kas-yra-lietuvis-ir-kuo-zemaitis-skiriasi-nuo-aukstaicio-nustate-kiek-mumyse-skandinavijos-rytu-ir-vakaru>

Dissemination of the results of the project for 2018 „Prevalence of prenatal alcohol exposure in Lithuania and the effect of prenatal alcohol exposure on metabolism of newborns (ALKOMET LT)“ in the media (in the Lithuanian language):

- <https://www.delfi.lt/seima/laukimas/paaiskejo-realus-skaiciai-kiek-nesciuju-lietuvoje-vartoja-alkoholi-kaip-atrodome-pasaulio-kontekste.d?id=81419733>
- <https://www.15min.lt/naujiena/aktualu/lietuva/15min-paaiskina-kodel-naujagimio-kraujyje-esanti-alkoholio-koncentracija-virsija-net-motinos-56-1133388?copied>
<https://www.15min.lt/naujiena/aktualu/lietuva/15min-paaiskina-kodel-naujagimio-kraujyje-esanti-alkoholio-koncentracija-virsija-net-motinos-56-1133388>
- <https://www.lrt.lt/naujienos/mokslas-ir-it/11/247667/saugaus-alkoholio-kiekio-per-nestuma-nera-pasekmes-veliau-galima-skaityti-veiduose>
- http://m.technologijos.lt/cat/121/article/S-74009?utm_source=ms2
- <https://www.delfi.lt/seima/laukimas/paaiskejo-realus-skaiciai-kiek-nesciuju-lietuvoje-vartoja-alkoholi-kaip-atrodome-pasaulio-kontekste.d?id=81419733>
- <https://www.youtube.com/watch?v=iQ60e2TZj4Q>
- <https://www.ziniuradijas.lt/laidos/dienos-klausimas/ka-daryti-kad-vaiku-negimdytu-girtos-mamos?video=1>
- <https://www.lrytas.lt/sveikata/medicinos-zinios/2019/09/09/news/pristate-isgerianciu-nesciuju-statistika-simtai-apsvaigusiu-motinu-11754796/>
- <https://www.lrt.lt/naujienos/lietuvoje/2/1095808/statistika-negailistinga-per-metus-iki-800-nesciuju-pries-gimdydamos-vartojo-alkoholio>
- <https://www.tv3.lt/naujiena/lietuva/1011842/moteru-abejingumas-sokiruoja-suskaiciuota-kiek-nesciuju-vartoja-alkoholi>
- <https://m.klaipeda.diena.lt/zymes/nescioji-2>
- <https://www.tv3.lt/naujiena/lietuva/1012008/istryre-lietuvos-kudikius-medikai-praso-nesciuju-elgtis-kitaip>

- <https://lsveikata.lt/aktualijos/tyrimas-alkoholi-paskutinemis-nestumo-savaitemis-vartojimo-apie-3-proc-gimdyviu-10931>
- <https://infa.lt/36441/paskutinemis-nestumo-savaitemis-alkoholi-vartojimo-3-proc-nesciuju/>
- https://www.lrs.lt/sip/portal.show?p_r=119&p_k=1&p_t=267972

Pharmacy Centre

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Tel. +370 5 239 8771

E-mails: dale.marciulioniene@mf.vu.lt

Head –prof. dr. Jolanta Gulbinovič

STAFF

Professors: dr. Gene Biziulevičienė (part-time)

Associate Professors: dr. Jonas Grincevičius

Teaching Assistants: Indrė Trečkienė

Lecturers: dr. Kristina Ložienė (part-time), dr. Kostas Ivanauskas, dr. Vincas Lapinskas (part-time), dr. Milda Jodinskienė (part-time), Rūta Matulaitienė (part-time), Rima Losinskaja (part-time)

Assistants Professor: dr. Nora Šlekienė

Researcher: Indrė Trečiokienė

RESEARCH INTERESTS

Drug utilization research

Research on drug utilization patterns in Lithuania, adherence and persistence rates in different ATC classes. Various source data on drug utilization is used to link morbidity, outcome of treatment and quality of care with the ultimate goal of assessing whether drug therapy is rational or not. Research goal is to describe the extent, nature and determinants of drug exposure.

Need for and implementation of pharmacy services

Research on need and implementation of value-added services in pharmacy practice, improvement of pharmaceutical services, evaluation and implementation of clinical pharmacist in Lithuania.

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

1. **The role of pharmacist and importance of pharmacy services in treatment management in hypertensive patients**, Supervisors: prof. J. Gulbinovič, 2017-10-01 - 2021-12-31.

Questionnaire for hypertensive patients prepared. In 2020 the questionnaire would be piloted and validated.

Protocol for antihypertensive drugs utilization patterns and persistence in hypertensive patients' research in Lithuania prepared. Data from Sveidra database requested.

Patterns of antihypertensive medicine use trends in Lithuania, Latvia and Estonia studied, manuscript prepared.

International Research Projects

2. **Medication use review**. Supervisors: Assoc.prof. Jonas Grincevičius, 2019-2021.

International research project was initiated by University of Tartu, Estonia and started in Spring 2019. The concept of MUR service is developed based on PCNE classification. In 2019 protocol for research pilot was developed. The aim of the pilot is to evaluate professional competency of community pharmacists about MUR and possible impact of MUR service to patient's knowledge about medication use (administration, medication adherence, etc) as well as validation of instrument. Research protocol was presented at conference Next Chapter in Patient Care 2019 – Medication use review in the era of digital care, Narva, Estonia.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INOVATION) PARTNERS

Groningen University, Netherlands
UAB Eurovaistinė, Lithuania
UAB Gintarinė vaistinė, Lithuania
UAB Universiteto vaistinė, Lithuania

OTHER SCIENTIFIC ACTIVITIES

I. Trečiokienė

- member of International Pharmaceutical Federation (FIP)
- member of International Society for Pharmacoeconomics and Outcomes Research (ISPOR)
- board member of Lithuanian Pharmaceutical Association

K. Ložienė

- board member of “THAISZIA – Journal of Botany“ (P. J. Šafárik University, Košice, Slovakia) (ISSN 2233-0275)
- member of joint of doctoral committee of Nature Research Centre and Vilnius University (domain Biomedical Sciences, direction - Ecology and Environmental Science)

R. Losinskaja

- member of Lithuanian Pharmaceutical Association

R. Matulaitienė

- board member of Lithuanian Pharmaceutical Association

J. Grincevičius

- member of Lithuanian Pharmaceutical Association

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

Second place poster presentation in social pharmacy section. Assessing job satisfaction and work-related stress among pharmacy specialists in Lithuania. Trečiokiene I, Straznickeine L, Ragazinskiene O. FIP Worl Congress, Abu Dhabi, 2019.

MOST IMPORTANT PARTICIPATION CASES OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS, ORGANISATIONS, BUSINESS ENTITIES

I.Trečiokienė:

- Task Force to implement immunization services in pharmacy, initiated by Health Ministry
- Working group to update requirements for pharmacy studies in Lithuania, initiated by Centre for Quality Assessment in Higher Education
- Working group to set requirements on reimbursement of new medicines and HTA use in assessment process, initiated by Health Ministry

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Conference on Drug Utilization Research, March, 2019

Department of Pathology, Forensic Medicine and Pharmacology

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Head – Prof. Dr. *Arvydas Laurinavicius*

STAFF

Professors: Dr. Dainius Characiejus, Dr. Virginija Grabauskienė, Dr. Jolanta Gulbinovič, Dr. Arvydas Laurinavičius, Dr. Aurelija Žvirblienė.

Associate professors: Dr. Aušrinė Barakauskienė, Dr. Edita Kazėnaitė, Dr. Violeta Kvedarienė, Dr. Jurgita Stasiūnienė, Dr. Edvardas Žurauskas.

Teaching Assistants: Tomas Baltrūnas, Dr. Justinas Besusparis, Dr. Sigitas Chmieliauskas, Dmitrij Fomin, Aušra Garnelytė, Elena Jurevičienė, Dr. Allan Rasmusson, Dovilė Stravinskienė, Rokas Šimakauskas, Dovilė Žilėnaitė.

Lecturers: Vilhelmas Bajoras, Artūras Barkus, Justė Baušienė, Augustinas Baušys, Snežana Budrikienė, Ignė Bunevičiūtė, Agnė Čerkauskaitė, Kamilė Čerlinskaitė, Laimis Dambrauskas, Julius Drachneris, Rita Dzetaveckienė, Armantas Gintautas, Rūta Barbora Grinevičiūtė, Dr. Tomas Janušonis, Skirmantė Jokubauskienė, Rimgaudas Katkus, Donata Linkevičiūtė-Ulinskienė, Margarita Lėckienė, Vygantė Maskoliūnaitė, Ugnius Mickys, Donatas Petroška, Dovilė Ramanauskaitė, Dmitrij Šeinin, Ignė Vencevičiūtė, Živilė Žukauskaitė.

Assistants Professor: Dr. Sigitas Laima, Dr. Ingrida Lisauskienė.

Researchers: Dr. Allan Rasmusson.

Doctoral students: Tomas Baltrūnas (Institute of Clinical Medicine), Vaida Baltrūnienė, Agnė Čerkauskaitė, Ieva Drejerienė, Ieva Kažukauskienė, Donata Linkevičiūtė-Ulinskienė, Sandra Mažeikienė, Rokas Šimakauskas, Dovilė Žilėnaitė.

Project group: Chief researcher Dr. Jen Kuang-Yu, Chief researcher Dr. Aida Laurinavičienė, Chief researcher (project leader) Dr. Arvydas Laurinavičius, Chief researcher Dr. Richard Montefiore Levenson, Senior researcher Dr. Benoit Plancoulaine, Senior researcher Dr. Allan Rasmusson, Chief researcher Dr. Michael Shribak.

RESEARCH INTERESTS

Digital pathology, digital image analysis, pathology informatics, artificial intelligence in pathology, multi-dimensional analysis of biomarkers.

Inflammatory cardiomyopathy: prognostic biomarkers of heart failure.

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

1. **Development of the new diagnostic and prognostic molecular markers and tools for their quantification in the tissues. Diagnostic value of pathology tests and efficiency of cancer prevention programs.** prof. dr. A. Laurinavičius, 2019-01-01-2020-12-31.

Main publications:

Joseph J, Roudier MP, Narayanan PL, Augulis R, Ros VR, Pritchard A, Gerrard J, Laurinavicius A, Harrington EA, Barrett JC, Howat WJ: Proliferation Tumour Marker Network (PTM-NET) for the identification of tumour region in Ki67 stained breast cancer whole slide images. *Sci Rep*. 2019 Sep 6;9(1):12845. doi: 10.1038/s41598-019-49139-4.

Abdelsamea MM, Grineviciute RB, Besusparis J, Cham S, Pitiot A, Laurinavicius A, Ilyas M: Tumour Parcellation and Quantification (TuPaQ): a tool for refining biomarker analysis through rapid and automated segmentation of tumour epithelium. *Histopathology*, 2019,doi: 10.1111/his.13838.

Rimm DL, Leung SCY, McShane LM, Bai Y, Bane AL, Bartlett JMS, Bayani J, Chang MC, Dean M, Denkert C, Enwere EK, Galderisi C, Gholap A, Hugh JC, Jadhav A, Kornaga EN, Laurinavicius A, Levenson R, Lima J, Miller K, Pantanowitz L, Piper T, Ruan J, Srinivasan M, Virk S, Wu Y, Yang H, Hayes DF, Nielsen TO, Dowsett M: An international multicenter study to evaluate reproducibility of automated scoring for assessment of Ki67 in breast cancer. *Modern Pathology*, 2019, 32:59-69, doi: 10.1038/s41379-018-0109-4.

Abdelsamea MM, Pitiot A, Grinevičiūtė RB, Besusparis J, Laurinavičius A, Ilyas M: A cascade-learning approach for automated segmentation of tumour epithelium in colorectal cancer //Expert systems with applications. Oxford: Pergamon-Elsevier Science LTD. ISSN 0957-4174. eISSN 1873-6793. 2019, 118:539-552. DOI: 10.1016/j.eswa.2018.10.030.

Meeting abstracts:

Šileikytė A, Jakubkevičius V, Besusparis J, Augulis R, Laurinavičius A: The use of an artificial intelligence based image analysis algorithm for histological renal segmentation //14th Białystok international medical congress for young scientists, May 17-18th 2019: book of abstracts. Medical University of Białystok, 2019. ISBN 9788395207501. p. 75

[<http://bimc.umb.edu.pl/abstract-book/>](http://bimc.umb.edu.pl/abstract-book/)

2. Development of the predictive, preventive, personalized and prognostic biomarkers of the diseases. prof. V. Grabauskienė, prof. D. Characiejus; 2019-01-01- 2019-12-31

The use of the new biomarkers has evolved in a better identification of the aetiology and pathophysiology of the disease and development of novel treatment strategies. We are searching new immunohistochemical and molecular biology biomarkers for diagnosis, prognosis and disease progression of dilated cardiomyopathy and for patient selection for novel aetiology-directed treatment strategies. We investigate the prognostic and predictive biomarkers in cancer patients with special attention on T lymphocytes which are most important players of the control of neoplastic disease.

Main publications:

Kažukauskienė I, Balčiūnaitė G, Baltrūnienė V, Ručinskas K, Maneikienė VV, Grabauskienė V: Left ventricle global longitudinal strain is an independent predictor of poor outcome in patients with non-ischemic dilated cardiomyopathy//European heart journal cardiovascular imaging. Oxford: Oxford University Press. ISSN 2047-2404. eISSN 2047-2412. 2019, vol. 20, suppl. 1, i627. DOI: [10.1093/ehjci/jey267](https://doi.org/10.1093/ehjci/jey267).

Celutkienė J, Burneikaite G, Shkolnik E, Jakutis G, Vajauskas D, Cerlinskaite K, Zuoziene G, Petrauskiene B, Purnaite R, Komiagiene R, Butkuvienė I, Steponėnienė R, Misiūra J, Laucevičius A: The effect of cardiac shock wave therapy on myocardial function and perfusion in the randomized, triple-blind, sham-procedure controlled study. *Cardiovascular Ultrasound*, 2019, 17:13, DOI: 10.1186/s12947-019-0163-1.

Dulskas A, Patasius A, Linkeviciute-Ulinskiene D, Zabuliene L, Urbonas V, Smailyte G: Metformin increases cancer specific survival in colorectal cancer patients-National cohort study.

Cancer Epidemiology, 2019, 62:101587, DOI: 10.1016/j.canep.2019.101587, Published: OCT 2019.

Builyte IU, Baltrunas T, Butkute E, Srinantholgen R, Skrebunas A, Urbonavicius S, Rucinskas K: Peripheral artery disease patients are poorly aware of their disease. Scandinavian Cardiovascular Journal, 2019, 53(6): 373-378, DOI: 10.1080/14017431.2019.1645350.

Meeting abstracts, reviews:

Kažukauskienė I, Baltrūnienė V, Bironaitė D, Čibiras S, Ručinskas K, Grabauskienė V: Prognostic significance of carboxy-terminal telopeptide (ICTP) and Caspase-3 in patients with non-ischemic dilated cardiomyopathy // ESC Congress 2019 365 : Paris, France, 31 August-4 September 2019/European Society of Cardiology. Paris. 2019, abstract no. P5447, p. [1-2]. <<https://esc365.escardio.org/Congress/ESC-CONGRESS-2019/Poster-Session-6-Biomarkers-in-heart-failure/199041-prognostic-significance-of-carboxy-terminal-telopeptide-ictp-and-caspase-3-in-patients-with-non-ischemic-dilated-cardiomyopathy#abstract>>

Kezeviciute M, Abramikas Z, Cesnauskaite A, Montrimas A, Cerlinskaite K, Mebazaa A, Kavoliuniene A, Celutkiene, J: Comparison of clinical profile and outcomes of patients with acute dyspnea due to acute heart failure, pulmonary causes or combination thereof. European Journal of Heart Failure, 2019, 21(1):546-547, Special Issue: SI, Meeting Abstract: P2110, <https://doi.org/10.1002/ejhf.1488>, *Meeting Abstract*.

Tulyte S, Sileikis A, Tarnulyte I, Ranceva A, Characiejus D, Matuzeviciene R, Janiulioniene A, Zvirblis T: Circulating T cell subsets differ in PDAC patients at initial diagnosis and after two months of treatment: a single institution prospective study. Annals of Oncology, 2019, 30(4):37-37, *Meeting Abstract*. DOI:[10.1093/annonc/mdz155](https://doi.org/10.1093/annonc/mdz155)

Verikas D, Cerlinskaite K, Rimkus A, Vaiciulienė D, Mebazaa A, Kavoliuniene A, Celutkiene J: Profiling of Acute Dyspnea Patients According to Body Mass Index and Systolic Blood Pressure Predicts Mortality. Journal of Hypertension, 2019, 37(1):E310-E310, *Meeting Abstract*.

Verikas DD, Kundelis R, Rimkus A, Saule IM, Cerlinskaite K, Vaiciulienė D, Mebazaa A, Kavoliuniene A, Celutkiene J: Acid-base balance disorders are markers of an increased overall mortality risk in patients with acute dyspnea. European Journal of Heart Failure, 2019, 21(1):113-113, *Meeting Abstract*, <https://doi.org/10.1002/ejhf.1488>

3. Genesis and gnoseology of violence. Assoc. prof. Dr. J. Stasiūnienė. 2019-01-01 2019-12-31.

Even though the majority of preventative programs are intended to decrease violent crime rate, in dynamics, the numbers decrease insignificantly and remain high. It is clear that several preventative programs are needed aiming at diminishing alcohol consumption and population groups regarding their social background.

Main publications:

Vasiljevaitė D, Stasiūnienė J, Laima S, Chmieliauskas S, Fomin D, Jasulaitis A: Suicides in Lithuania: rates, methods and distribution by age, gender and settlement, 2012-2016 //CBU international conference proceedings. Prague, ISSN 1805-997X, eISSN 1805-9961. 2019, 7:1-7. DOI: 10.12955/cbup.v7.1464.

Meeting abstracts, reviews:

Chmieliauskas S, Laima S, Fomin D, Jurolaici E, Jasulaitis A, Stasiūnienė J, Characiejus D, Utkus A: Homicide victims and mechanisms in Lithuania from 2004 to 2016. // Journal of forensic and legal medicine. Oxford: Elsevier science. ISSN 1752-928X. eISSN 1532-2009. 2019, 65:27-31. DOI: 10.1016/j.jflm.2019.04.010. (*Clarivate Analytics*).

4. Side effect – reason of hospitalizations and result of hospitalization. Prof. Dr. J. Gulbinovič. 2019-01-01 - 2023-12-31

The objective is to evaluate the hospitalization for medicine side effect and frequency and nature of it.

Short description: Researches for side effect of drug reactions were started.

National Research Projects

- 1. Search for new pathology imaging techniques**, ESF project under the measure No 09.3.3-LMT-K-712 „Development of Competences of Scientists, Other Researchers and Students Through Practical Research Activities“ activity “Supporting students' research practices (for instance, students' researches carried outside study hours)” of Priority Axis 9 “Educating The Society and Strengthening the Potential of Human Resources”). Project leader prof. A. Laurinavicius, A. Vitkūnaitė – student; 2014-2020.

The Aim of the project is to explore novel pathology imaging techniques for cellular and extracellular analysis approaches to improve digital analysis accuracy.

The Objective is to study novel deep UV microscopy and polychromatic polarization microscopy imaging techniques approaches and their combined possibilities for novel digital image analysis methodologies in pathology lab.

International Research Projects

- 1. Deep-Context Tissue Analytics for Integrated Pathology Modeling in Tumors and Kidney Allografts**, ESF project under the measure No 09.3.3-LMT-K-712 „Strengthening the Skills and Capacities of Public Sector Researchers for Engaging in High Level R&D Activities“ activity „Strengthening of General Skills and Competences of Researchers Through Implementation of High Level R&D Projects“. Project leader prof. dr. A. Laurinavičius, other participants: Dr. A. Laurinavičienė, Dr. A. Rasmusson, Dr. B. Plancoulaine, Dr. R. Levenson, Dr. M. Shribak, Dr. KY. Jen; 2014-2020.

The Aim of the study is to develop novel tissue-based analytical assays for integrated modelling of tumor and kidney allograft pathology.

Objective 1. Explore tissue processing/data extraction approaches to discover unique digital signatures of tissue components and integrated pathology indicators.

Objective 2. Design and validate the “deep-context” tissue assays for selected analytical and clinical tasks to enable robust and affordable multidimensional modelling of tissue pathology.

Oral/Poster presentations:

Arvydas Laurinavičius: poster presentation “Automated tumour-stroma interface zone CD8+ Immunogradient indicators predict overall survival of the patients with breast and colorectal carcinoma”, Immuno-Oncology Summit, July, 2019, Boston, USA;

Aušrinė Nestarenkaitė, Allan Rasmusson A, Dovilė Žilėnaitė, Renaldas Augulis, Aida Laurinavičienė, Valerijus Ostapenko, Tomas Poškus, Arvydas Laurinavičius: poster presentation “Prognostic value of CD8 Immunogradient indicators in tumour-stroma interface zone of colorectal cancer”, 31st European Congress of Pathology, September, 2019, Nica, France;

Dovilė Žilėnaitė, Allan Rasmusson, Aušrinė Nestarenkaitė, Renaldas Augulis, Aida Laurinavičienė, Valerijus Ostapenko, Tomas Poškus, Arvydas Laurinavičius: poster presentation “The Immunogradient of CD8+cell density in the tumour-stroma interface zone predicts overall survival of patients with hormone receptor-positive invasive ductal breast carcinoma”, 31st European Congress of Pathology, September, 2019, Nica, France;

Arvydas Laurinavičius: oral presentation “Deep Context Pathology Assays by Novel Imaging and Analytics”, 6th Digital Pathology & AI Congress, December, 2019, London, GB;

Allan Rasmusson, Arvydas Laurinavičius: oral presentation “Mining HALO for Advanced Spatial Analytic”, 6th Digital Pathology & AI Congress, December, 2019, London, GB.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INOVATION) PARTNERS

Université de Caen Basse-Normandie (France)
Cancer Pathology Nottingham University (GB)
Brigham and Women’s Hospital, Harvard Medical School, Boston, MA (USA)
Ruprecht-Karls-universitat Heidelberg, EMBL (Germany)
University Hospital Gießen and Marburg (Germany)
Division of Clinical Pharmacology, Karolinska Institutet, Karolinska University

OTHER SCIENTIFIC ACTIVITIES

Prof. Dr. A. Laurinavičius

- member, Lithuanian Association of Nephrology, Dialysis, and Transplantation
- member, European Society of Pathology
- member, Renal Pathology Society
- member, the board of the Lithuanian Society of Pathology
- editorial board member of the journal *Medicina (Medicine)*
- editorial board member of the journal *Diagnostic Pathology*
- editorial board member of the journal *Pathology Informatics*
- chairman, Management Board, Lithuanian Association of Health Informatics and Bioinformatics

Prof. Dr. V. Grabauskienė

- fellow of the European Society of Cardiology (FESC)
- member of the European Association of Echocardiography (EAE) of the ESC
- member of the Heart Failure Association (HFA) of the ESC
- member of the American Society of Echocardiography;
- UEMS (European Union of Medical Specialist) Diploma of European Cardiologist Nr.52546
- member of the European Association for Predictive, Preventive and Personalized Medicine (EPMA)

Prof. Dr. Jolanta Gulbinovič

- Member of Executive Committee of the European Association of Clinical Pharmacology and Therapeutics (EACPT)
- Member of Council of European Drug Utilisation Group (EuroDurg)
- Board member of Lithuanian Association of Clinical Pharmacology
- Member of Pharmacovigilance Risk Assessment Committee of the European medicines Agency

Prof. Dr. D. Characiejus

- National Representative of the European Association for Predictive, Preventive and Personalized Medicine (EPMA) in Lithuania
- editorial board member of The EPMA Journal
- member of the Council of the Lithuanian Society of Immunology

Assoc. Prof. Dr. E. Žurauskas

- member of the Lithuanian Society of Pathology

Dr. Aida Laurinavičienė

- president of Lithuanian Association of Pathology Technologists

Ugnius Mickys

- board member of the Lithuanian Society of Pathology

D. Petroška

- member of the Lithuanian Society of Pathology

Assoc. Prof. Dr. Jurgita Stasiūnienė

- Member of the Lithuanian Society of Forensic Medical Physicians

Assistant Dr. Sigitas Laima

- Vice–President of the Lithuanian Society of Forensic Medical Physicians

Junior Assistant Rokas Šimakauskas

- Member of the Lithuanian Society of Forensic Medical Physicians

Doctoral student Sigitas Chmieliauskas

- Member of the Lithuanian Society of Forensic Medical Physicians

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Laurinavičius A: oral presentation “Deep Context Pathology Assays for Innovative Cancer Therapies”, Innovation Drift 2019, June, 2019, Vilnius.

Department of Physiology, Biochemistry, Microbiology and Laboratory Medicine

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Head – Assoc. Prof. Dr. *Dovilė Karčiauskaitė*

STAFF

Professors: Dr. Zita Aušrelė Kučinskienė, Dr. Algis Abaravičius, Dr. Arvydas Kaminskas, Dr. Vaiva Hendrixson

Associate Professors: Dr. Dovilė Karčiauskaitė, Dr. Valerija Jablonskienė, Dr. Tomas Kačergius, Dr. Rėda Matuzevičienė, Dr. Loreta Bagdonaitė, Dr. Dalius Vitkus, Dr. Sandra Meidutė - Abaravičienė

Assistant Professors: Dr. Asta Mažeikienė, Dr. Agnė Kirkliauskienė, Dr. Marius Baranauskas, Dr. Valdas Banyš

Teaching Assistants: Mantas Radzevičius, Žilvinas Chomanskis, Vytautas Žėkas, Eglė Mazgelytė, Inga Bikulčienė

Lecturers: Dr. Dalia Paškevičienė, Laima Vasiliauskaitė, Elvyra Ostanevičiūtė

Researchers: Dr. Maxim Bratčikov, Dr. Aušra Linkevičiūtė, Dr. Žydrūnas Daunoravičius

Doctoral students: Mantas Radzevičius, Vytautas Žėkas, Eglė Mazgelytė

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

- 1. Investigation of Environmental and Metabolic Factors in the Pathogenesis of Atherosclerosis.** Prof. Z. A. Kučinskienė. 2019–2020.

The aim was to evaluate the etiopathogenetic relationship between different clinical manifestations of atherosclerosis: coronary heart disease and metabolic syndrome. Different diagnostic biomarkers in healthy individuals and patients with coronary heart disease and metabolic syndrome were investigated, including routine and new parameters.

Main publications:

Bikulčienė, Inga; Golubevaitė, Orianta; Žėkas, Vytautas; Radzevičius, Mantas; Karčiauskaitė, Dovilė; Matuzevičienė, Rėda; Hendrixson, Vaiva; Mažeikienė, Asta; Burokienė, Neringa; Kaminskas, Arvydas; Kučinskienė, Zita Aušrelė. Association of platelet membrane fatty acid composition with markers of oxidative stress in healthy men // *Medical science monitor*. 2019, vol. 25, p. 6405-6416. DOI: 10.12659/MSM.915111.

Žėkas, Vytautas; Matuzevičienė, Rėda; Karčiauskaitė, Dovilė; Mažeikienė, Asta; Burokienė, Neringa; Radzevičius, Mantas; Janiulionienė, Aušra; Linkevičiūtė, Aušra; Kučinskienė, Zita Aušrelė. Chronic and oxidative stress association with total count of endothelial microvesicles in healthy young male plasma // *Advances in clinical and experimental medicine*. 2019, vol. 28, no. 5, p. 683-692. DOI: 10.17219/acem/94144.

Kutkienė, Sandra; Petrulionienė, Žaneta; Karčiauskaitė, Dovilė; Laucevičius, Aleksandras; Matuzevičienė, Gabija; Staigyte, Justina; Šaulytė Mikulskienė, Akvilė; Gargalskaitė, Urtė; Skiauterytė, Eglė; Kovaitė, Milda. Lower than average HDL cholesterol efflux capacity in

Lithuanian population. // *Lipids in health and disease*. 2019, vol. 18, artr. no.186, p. [1-8]. DOI: 10.1186/s12944-019-1124-2.

Mazgelytė, Eglė; Karčiauskaitė, Dovilė; Linkevičiūtė, Aušra; Mažeikienė, Asta; Burokienė, Neringa; Matuzevičienė, Rėda; Radzevičius, Mantas; Janiulionienė, Aušra; Jakaitienė, Audronė; Dindienė, Lina; Kučinskienė, Zita Aušrelė. Association of hair cortisol concentration with prevalence of major cardiovascular risk factors and allostatic load // *Medical science monitor*. 2019, vol. 25, p. 3573-3582. DOI: 10.12659/MSM.913532.

Simundic, Ana-Maria; Filipi, Petra; Vrtaric, Alen; Miler, Marijana; Gabaj, Nora Nikolac; Kocsis, Andrea; Avram, Sanja; Gligorovic Barhanovic, Najdana; Bulo, Anyla; Cadamuro, Janne; van Dongen-Lases, Edmee; Eker, Pinar; Vital-E-Silva, Andre; Homsak, Evgenija; Ibarz, Mercedes; Labudovic, Danica; Nybo, Mads; Pivovarníková, Hedviga; Shmidt, Inna; Siodmiak, Joanna; Sumarac, Zorica; Vitkus, Dalius. Patient's knowledge and awareness about the effect of the over-the-counter (OTC) drugs and dietary supplements on laboratory test results: a survey in 18 European countries // *Clinical chemistry and laboratory medicine*. 2019, vol. 57, no. 2, p. 183-194. DOI: 10.1515/cclm-2018-0579.

Trimigno, Alessia; Khakimov, Bekzod; Savoran, Francesco; Tenori, Leonardo; Hendrixson, Vaiva; Čivilis, Alminas; Glibetic, Marija; Gurinovic, Mirjana; Pentikäinen, Saara; Sallinen, Janne; Diaz, Sara Garduno; Pasqui, Francesca; Khokhar, Santosh; Luchinat, Claudio; Bordoni, Alessandra; Capozzi, Francesco; Engelsen, Søren Balling. Investigation of variations in the human urine metabolome amongst European populations: an exploratory search for biomarkers of people at risk-of-poverty // *Molecular nutrition & food research*. 2019, vol. 63, iss. 1, sp. iss, art. no. 1800216, p. [1-11]. DOI: 10.1002/mnfr.201800216.

Austys, Donatas; Dobrovolskij, Andrej; Jablonskienė, Valerija; Dobrovolskij, Valerij; Valevičienė, Nomedra Rima; Stukas, Rimantas. Epicardial adipose tissue accumulation and essential hypertension in nonobese adults // *Medicina*. 2019, vol. 55, no. 8, art. no. 456, p. [1-11]. DOI: 10.3390/medicina55080456

2. Optimisation of flow cytometry for the diagnostics and minimal residual disease detection of haematological disorders and research of the new methods for leukemic cell phenotyping. Assoc. Prof. R. Matuzevičienė, 2019-2020

The aim is to investigate changes in neoplastic cells and compare them with normal cells at the cytomic-proteomic level. Also to analyse the peculiarities of neoplastic cell signal transmitting pathways, to determine their influence on disease proceeding, prognosis and response to treatment.

Main publications:

Modvig, S.; Madsen, H.O.; Siitonen, S.M.; Rosthøj, S.; Tierens, A.; Juvonen, V.; Osnes, L.T.N.; Vålerhaugen, H.; Hultdin, M.; Thörn, I.; Matuzevičienė, Rėda; Stoškus, M.; Marincevic, M.; Fogelstrand, L.; Lilleorg, A.; Toft, N.; Jónsson, O.G.; Pruunsild, K.; Vaitkevičienė, Goda Elizabeta; Vettenranta, K.; Lund, B.; Abrahamsson, J.; Schmiegelow, K.; Marquart, H.V. Minimal residual disease quantification by flow cytometry provides reliable risk stratification in T-cell acute lymphoblastic leukemia // *Leukemia*. 2019, Vol. 33, p. 1324-1336. DOI: 10.1038/s41375-018-0307-6.

3. Fundamental, Clinical and Epidemiological Studies on Pathogenic and Opportunistic Microorganisms Involved in the Pathogenesis of Human Diseases. Assoc. Prof. Dr. T. Kačergius, Dr. S. Kiverytė. 2019–2020.

Main aim is to investigate novel, plant-based and synthetic bacterial film-forming inhibitors and test their efficacy against oral, cardiovascular and infectious streptococci in vitro. As well to investigate the application of new molecular biology methods and technologies for identification of pathogenic and conditionally pathogenic microorganisms, genotyping, detection of antimicrobial resistance molecular markers and epidemiological studies.

Main publications:

Gabè, Vika; Kačergius, Tomas; Abu-Lafi, Saleh; Kalesinskas, Povilas; Masalha, Mahmud; Falah, Mizied; Abu-Farich, Basheer; Melninkaitis, Andrius; Zeidan, Mouhammad; Rayan, Anwar. Inhibitory effects of ethyl gallate on streptococcus mutans biofilm formation by optical profilometry and gene expression analysis // *Molecules*. Basel : MDPI. ISSN 1420- 3049. 2019, vol. 24, no. 3, art. no. 529, p. [1-14]. DOI: 10.3390/molecules24030529.

Gabè, Vika; Kačergius, Tomas; Abu-Lafi, Saleh; Zeidan, Mouhammad; Abu-Farich, Basheer; Austys, Donatas; Masalha, Mahmud; Rayan, Anwar. Suppressive effects of octyl gallate on *Streptococcus mutans* biofilm formation, acidogenicity, and gene expression // *Molecules*. Basel : MDPI. ISSN 1420-3049. 2019, vol. 24, no. 17, art. no. 3170, p. [1-14]. DOI: 10.3390/molecules24173170.

Mačiulaitis, Justinas; Miškinienė, Milda; Rekštytė, Sima; Bratchikov, Maksim; Darinskas, Adas; Šimbelytė, Agnė; Daunoras, Gintaras; Laurinavičienė, Aida; Laurinavičius, Arvydas; Gudas, Rimtautas; Malinauskas, Mangirdas; Mačiulaitis, Romaldas. Osteochondral repair and electromechanical evaluation of custom 3D scaffold microstructured by direct laser writing lithography // *Cartilage*. 2019, p. 1-11. DOI: 10.1177/1947603519847745.

Mačiulaitis, Justinas; Rekštytė, Sima; Bratčikov, Maksim; Gudas, Rimtautas; Malinauskas, Mangirdas; Pocevičius, Alius; Ūsas, Arvydas; Rimkūnas, Augustinas; Jankauskaitė, Virginija; Grigaliūnas, Valdas; Mačiulaitis, Romaldas. Customization of direct laser lithography-based 3D scaffolds for optimized in vivo outcome // *Applied surface science*. 2019, vol. 487, p. 692-702. DOI: 10.1016/j.apsusc.2019.05.065.

Miškinytė, Monika; Juškaitė, Raminta; Skerniškytė, Jūratė; Voldemariene, Vida; Valuckas, Konstantinas Povilas; Kučinskienė, Zita Aušrelė; Sužiedėlis, Kęstutis; Sužiedėlienė, Edita. High incidence of plasmid-mediated quinolone resistance (PMQR) genes among antibiotic-resistant Gram-negative bacteria from patients of the Lithuanian National Cancer Center // *Infectious Diseases*. 2019, 51, 6, p. 471-474. DOI: 10.1080/23744235.2019.1591637.

Stanevičiūtė, Elvyra; Builytė, Inga Urtė; Ridziauskas, Martynas; Besusparis, Justinas; Kirkliauskienė, Agnė; Zabulis, Vaidotas; Davainis, Linas; Valiūnaitė, Gabrielė; Triponis, Vytautas Jonas; Sirvydis, Vytautas Jonas. Efficacy of antiseptic solutions in treatment of *Staphylococcus aureus* infected surgical wounds with patches of vascular graft: an experimental study in rats // *Medicina*. 2019, vol. 55, no. 4, art. no. 106, p. [1-10]. DOI: 10.3390/medicina55040106.

International Research Projects

- 1. Treatment Protocol for Children (1.0–17.9 years of age) and Young Adults (18–45 years of age) with Acute Lymphoblastic Leukemia NOPHO (Nordic Pediatric Hemato-Oncology) group, <http://www.nopho.org/welcome/frame.htm>.** Flow Cytometry Coordinator of the Project in Lithuania: Assoc. Prof. R. Matuzevičienė.

Vilnius University Children's Hospital, Organizer of the Project – Nordic Society of Paediatric Haematology and Oncology (NOPHO), www.nopho.org. Countries involved in the Project: Denmark, Sweden, Finland, Iceland, Norway, Lithuania, Estonia, Latvia. 2008 - 2019

2. International Joint Project with AL-Qasemi Research Center, Israel: Effect of Rhus Plant Extract and Its Active Fractions on Biofilm Formation in Bacterial Systems.
Assoc. Prof. Dr. T. Kačergius, Prof. Dr. A. Rayan (Israel). 2015-2019

The aim of this study is to investigate whether the methanolic extract of *Rhus coriaria* L. fruits and its active fraction – methyl gallate inhibit *Streptococcus mutans* biofilm formation and acidogenicity. The findings are important for the development of new antibacterial agents.

Main publications:

Gabe V., Kacergius T., Abu-Lafi S., Zeidan M., Austys D., Masalha M., Rayan A. Suppressive effects of octyl gallate on *Streptococcus mutans* biofilm formation, acidogenicity, and gene expression. *Molecules* (ISSN: 1420-3049). 2019, 24(17). pii: E3170. DOI: 10.3390/molecules24173170.

Gabe V., Kacergius T., Abu-Lafi S., Kalesinskas P., Masalha M., Falah M., Abu-Farich B., Melninkaitis A., Zeidan M., Rayan A. Inhibitory effects of ethyl gallate on *Streptococcus mutans* biofilm formation by optical profilometry and gene expression analysis. *Molecules* (ISSN: 1420-3049). 2019, 24(3). pii: E529. DOI: 10.3390/molecules24030529

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INOVATION) PARTNERS

NOPHO (Nordic Pediatric Hemato-Oncology) group (<http://www.nopho.org/welcome/frame.htm>)
Malmö University, Malmö (Sweden)
Clinical Institute of Chemistry, Zagreb (Croatia)
AL-Qasemi Research Center (Israel)
Department of Human and Medical Genetics of Faculty of Medicine of Vilnius University (Lithuania)
Centre of Pediatrics, Faculty of Medicine, Vilnius University (Lithuania)

OTHER SCIENTIFIC ACTIVITIES

Prof. Z. A. Kučinskienė

- member of the Lithuanian Academy of Sciences;
- member of the European Atherosclerosis Society (EAS);
- member of the Board of the Lithuanian Society of Laboratory Medicine;
- member of the Lithuanian Society of Human Genetics;
- editor-in-chief of the journal *Laboratorinė medicina* (Laboratory Medicine);
- editorial board member of the journals: *Acta Medica Lituanica*, *Medicina*, *Medicinos teorija ir praktika*, *Sveikatos mokslai*, *Seminars in Cardiology*.

Prof. A. J. Abaravičius

- member of the National Committee of New Food Products;
- member of the Lithuanian Society of Laboratory Medicine;
- member of Lithuanian Physiological Society.

Prof. A. Kaminskas

- member of the Lithuanian Society of Laboratory Medicine;

Prof. V. Hendrixson

- member of the Lithuanian Society of Laboratory Medicine;
- member of open Medical Institute Lithuanian Association of Neuroscience;
- member of Federation of European Neuroscience Societies (FENS);
- Honorary Professor of the Karaganda State Medical University.

Assoc. Prof. L. Bagdonaitė

- member of the Lithuanian Society of Laboratory Medicine;
- member of the Lithuanian Society of Allergology and Clinical Immunology;

Assoc. Prof. V. Jablonskienė

- editorial board member of the journal *Laboratorinė medicina* (Laboratory Medicine);
- executive editor of the journal *Laboratorinė medicina* (Laboratory Medicine);
- member of the Lithuanian Society of Laboratory Medicine.

Assoc. Prof. T. Kačergius

- member of the Lithuanian Society of Medical Microbiologists.

Assoc. Prof. R. Matuzevičienė

- editorial board member of the journal *Laboratorinė medicina* (Laboratory Medicine),
- member of the Lithuanian Society of Laboratory Medicine;
- member of the Lithuanian Society of Haematology;
- member of the Lithuanian Society of Allergology and Clinical Immunology;
- member of the Lithuanian Medical Association;
- member of the European Society for Clinical Cell Analysis – ESCCA.

Assoc. Prof. D. Vitkus

- president of the Lithuanian Society of Laboratory Medicine;
- National Representative at the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC);
- National Representative at the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM);
- National Representative at the Registration Commission of the European Society of Clinical Chemistry and Laboratory Medicine (EFLM);
- member at large of the Board of Baltic Association of Laboratory Medicine;
- member of the American Association for Clinical Chemistry;
- corresponding Member of the Committee of Nomenclature for Properties and Units of Scientific Division of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC);
- corresponding Member of the Committee of Reference Systems of Enzymes of Scientific Division of the IFCC;
- corresponding Member of the Committee of Traceability in Laboratory Medicine of Scientific Division of the IFCC;
- member of the ISTD;
- corresponding member of the IFCC Task Force on Proficiency Testing;
- corresponding member of the IFCC EMD Clinical Laboratory Management; Committee, Analytical Quality Committee;
- corresponding member of the EFLM Working Group on Congresses and Postgraduate Education;
- editorial board member of the journal *Laboratory Medicine*.

Assoc. Prof. D. Karčiauskaitė

- board member of Baltic Atherosclerosis Society;
- board member of Lithuanian Laboratory Medicine Society;
- member of European Atherosclerosis Society.

Assist. Prof. A. Kirkliauskienė

- member of the Lithuanian Society of Laboratory Medicine;
- member of the Lithuanian Society of Infectious Diseases.

Assist. Prof. S. Kiverytė

- member of the European Society of Clinical Virology;
- member of the Lithuanian Society of Laboratory Medicine.

Assist. Prof. V. Banys

- board member and treasurer of the Lithuanian Society of Laboratory Medicine;
- AACC (American Association for Clinical Chemistry);
- ISTH (International Society on Thrombosis and Haemostasis);
- CLSI (Clinical and Laboratory Standards Institute);
- IFCC (International Federation of Clinical Chemistry and Laboratory Medicine) corresponding member of):
- IFCC EMD Evidence-Based Laboratory Medicine Committee (C-EBLM)
- IFCC EMD Harmonization of Interpretive Comments EQA Working Group (WG-ICQA)
- IFCC EMD Laboratory Errors and Patient Safety Working Group (WG-LEPS)
- IFCC SD Reference Intervals and Decision Limits Committee (C-RIDL)
- IFCC Task Force on Ethics (TF-E)
- IFCC Task Force on Ethics (TF-E)
- IFCC Task Force for Young Scientists (TF-YS).

Assist. Prof. . A. Mažeikienė

- member of European Atherosclerosis Society (EAS);
- member of the Lithuanian Society of Laboratory Medicine.

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

Mazgelytė, Eglė; Karčiauskaitė, Dovilė; Matuzevičienė, Rėda; Burokienė, Neringa; Mažeikienė, Asta; Linkevičiūtė, Aušra; Kučinskienė, Zita Aušrelė. Association of hair cortisol concentration with the prevalence of traditional cardiovascular risk factors // *Atherosclerosis*. 2019, vol. 287, p. e255-e256. DOI: 10.1016/j.atherosclerosis.2019.06.787.

Mazgelytė, Eglė; Karčiauskaitė, Dovilė; Matuzevičienė, Rėda; Burokienė, Neringa; Mažeikienė, Asta; Linkevičiūtė, Aušra; Kučinskienė, Zita Aušrelė. Objectively, but not subjectively, measured stress is associated with the prevalence of metabolic syndrome // *Clinica chimica acta*. 2019, vol. 493, suppl. 1, p. S281. DOI: 10.1016/j.cca.2019.03.580.

Gao, Wei; Mazgelytė, Eglė; Leutner, Liz; Kirschbaum, Clemens. Differential washout effect of five steroid hormones incorporated into hair: Can we compute a retrospective stress hormone calendar? // *Psychoneuroendocrinology*. 2019, vol. 107, suppl. S, p. 42. DOI: 10.1016/j.psyneuen.2019.07.121.

Žėkas, Vytautas; Matuzevičienė, Rėda; Karčiauskaitė, Dovilė; Vitkus, Dalius; Radzevičius, Mantas; Janilionienė, Aušra; Linkevičiūtė, Aušra; Kučinskienė, Zita Aušrelė. Endothelial microvesicles as biomarkers of oxidative stress // *Medicina*: vol. 55, suppl. 1: 77 International Scientific Conference of the University of Latvia, February 22, 2019, Riga, Latvia.

Mazgelytė, Eglė; Kučinskienė, Zita Aušrelė. The comparison of objective and subjective chronic stress assessment techniques // Health for all: Science and innovation week 2019: International doctoral and resident students conference: Science for health: Kaunas, Lithuania, 8-12 April, 2019

Mickūnaitė, Gerda; Bandzevičiūtė, Rimantė; Čėponkus, Justinas; Rudzikaitė, Gabija Julija; Olekaitė, Eglė; Kirkliauskienė, Agnė; Hendrixson, Vaiva; Šablinskas, Valdas. Tulžies pūslės akmenų susiformavimo tyrimas Ramano sklaidos spektroskopiniu metodu = Study of gallstones formation by means of Raman scattering spectroscopy // 43-ioji Lietuvos nacionalinė fizikos konferencija, 2019 m. spalio 3-5 d., Kaunas

Department of Radiology, Nuclear Medicine and Medical Physics

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Tel./fax. 236 5177
E-mail: algirdas.tamosiunas@santa.lt

Head – Prof. Dr. *Algirdas Edvardas Tamošiūnas*

STAFF

Professors: Dr. A. E. Tamošiūnas, Dr. N. R. Valevičienė.

Associate Professors: Dr. J. Dementavičienė, Dr. S. Letautienė.

Asisstants Professor: Dr. A. Samuilis, Dr. A. Brazaitis, Dr. D. Palionis, Dr. J. Ušinskienė, Dr. B. Gricienė, Dr. M. Matačiūnas, Dr. R. Briedienė, D. Valančienė.

Lecturers: R. Baltagalvienė, J. Šilanskienė.

Doctoral students: A. Neverauskienė, R. Komiagienė, G. Lengvenis, A. Domarkienė, D. Jocius.

RESEARCH INTERESTS

Creation of new functional and anatomical imaging techniques and evaluation of effectiveness for diagnostics of cardiovascular and oncological diseases

Estimation of iron overload in liver and heart on 3T MRI

Physical properties in vitro of metabolites using high resolution 9.4T NMR spectrometer

AI and deep learning applications in diagnostic imaging

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

- 1. New Functional and Anatomical Imaging Techniques in Cardiovascular and Oncology New Functional and Anatomical Imaging Techniques in Cardiovascular and Oncology Diagnostics.** Dr. A. E. Tamošiūnas, Dr. N. R. Valevičienė, Dr. J. Dementavičienė, Dr. R. Briedienė, Dr. S. Letautienė, Dr. A. Samuilis, Dr. B. Gricienė, Dr. M. Matačiūnas, Prof. G. Kalinauskas, Dr. J. Valaikeinė, Dr. J. Dementavičienė. 2014–2020.

Developing and evaluating new functional and anatomical imaging techniques in cardiovascular and oncology cancer diagnostics. Evaluation of the role of intracranial arterial stenosis and general atherosclerosis process for the patients undergoing surgery for coronary artery disease has been done. The patients, who are undergoing surgery for coronary artery disease were investigated before and after the surgery.

Main publications:

K. Kristinaityte, T. Zalewski, M. Kempka, S. Sakirzanovas, D. Baziulyte-Paulaviciene, S. Jurga, R. Rotomskis, N. R. Valeviciene. Spin Lattice Relaxation and Diffusion Processes in Aqueous Solutions of Gadolinium-Based Upconverting Nanoparticles at Different Magnetic Fields. *Applied Magnetic Resonance*, Volume: 50 Issue: 4 Special Issue: SI Pages: 553-561 Published: APR 2019

S. Kutkiene, Z. Petrulioniene, A. Laucevicius, R. Cerkauskiene, A. Samuilis, V. Augaitiene, A. Gedminaitė, G. Bieliauskiene, A. Saulyte-Mikulskiene, J. Staigyte, E. Petrulionyte, U. Gargalskaite, E. Skiauteryte, G. Matuzeviciene, M. Kovaite, I. Nedzelskiene. Achilles tendon ultrasonography e A useful screening tool for cardiovascular risk estimation in patients with

severe hypercholesterolemia. *Atherosclerosis Supplements*, Volume: 36 Pages: 6-11 Published: MAR 2019

Valaikiene J., Ryliskyte L., Valaika A., Purnaitė R., Dementaviciene J., Vaitkevicius A., Badariene J., Butkuvienė I., Kalinauskas G., Laucevicius A. A High Prevalence of Intracranial Stenosis in Patients with Coronary Artery Disease and the Diagnostic Value of Transcranial Duplex Sonography. *Journal of Stroke & Cerebrovascular Diseases*, Volume: 28 Issue: 4 Pages: 1015-1021 Published: APR 2019

2019 - Okuchi S, Rona-Garcia A, Ulyte A, Lopez I, Usinskiene J, Lewis M et al. Diagnostic accuracy of Dynamic Contrast-Enhanced Perfusion MRI in stratifying gliomas: a systematic review and meta-analysis. *Cancer Medicine*. Article ID: CAM42369 Article DOI: 10.1002/cam4.2369 Internal Article ID: 16511004

International Research Projects

1. Joint Vilnius University and CERN cooperation project: **Optimization of Ionizing Radiation Exposure in Radiology and Nuclear Medicine**. Prof. A. E. Tamošiūnas. 2016–2020.

Objectives of the project are to create new diagnostic guidelines and optimize CT and Nuclear medicine imaging techniques. In 2017, we collected ionizing radiation exposure data from one CT scanner, analysed exposure profiles, preliminary data were presented in Baltic Congress of Radiology 2016. At the end of 2017–18 collected data should be published.

OTHER SCIENTIFIC ACTIVITIES

Prof. A. E. Tamosiunas –

- board member of Lithuanian Radiologists' Association;
- board member of Lithuanian Ultrasound Association;
- member of European Society of Radiology.

Assoc. Prof. J. Dementavičienė –

- editorial board member of the journal *Theory and Practice in Medicine*;
- vicepresident of Lithuanian Radiologists' Association;
- member of European Society of Radiology;
- member of European Society of Neuroradiology;
- member of International Society of Magnetic Resonance in Medicine;
- member of Radiology Society of North America;
- social Adviser to Health Care Minister of Lithuania;
- lecturer at continuing and advanced education courses at Vilnius University in Neuroradiology, Chest, Abdominal, Musculoskeletal Imaging;
- member of Research Committee at European Society of Radiology.

Assist. Prof. Dr. R. Briedienė –

- managing editor of the journal *Acta Medica Lituanica*.

Assist. Prof. R. Grigienė –

- editorial board member of the journal *World Journal of Surgical Oncology*.

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

Annual International Meeting of Lithuania Senological Society. J.Ušinskienė- Metastatic breast cancer

INSTITUTE OF CLINICAL MEDICINE

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Head – Prof. Dr. *Diana Ramašauskaitė*

STAFF

Professors: Dr. D. Ramašauskaitė, Dr. HP G. S. Drašutienė, Dr. Ž. Bumbulienė, K. Mačiulienė (prof of partnership)

Associate professors: Dr. A. Arlauskienė, Dr. D. Bartkevičienė, Dr. N. Drazdienė, Dr. D. Laužikienė, Dr. M. Šilkūnas, Dr. R. Vansevičiūtė-Petkevičienė (assoc. prof of partnership), Dr. J. Zakarevičienė

Assistant Professor: Dr. A. Amšiejienė, Dr. D. Bužinskienė, Dr. G. Domža, Dr. V. Paliulytė, Dr. V Rudaitis

Teaching assistants: K. Norvilaitė

Lecturers: I. Daunoravičienė,

Doctoral students: Ž. Sabonytė-Balšaitienė, G. Balčiūnienė, K. Norvilaitė, R. Gričius

RESEARCH INTERESTS

Health of mother and fetus: physiology and pathology.

RESEARCH PROJECTS CARRIED OUT IN 2019

Project Supported by University Budget

1. Peculiarities of women's health care. Prof. Dr. D. Ramašauskaitė, 2019-2023

The present report describes a female patient with 46,XY karyotype and normal female external genitalia, and provides a detailed clinical characterization of the patient and a new pathogenic gene leading to androgen insensitivity syndrome. A prospective cohort study to evaluate quality of life (QOL) was performed including 440 pregnant women during the first trimester visit. Our questionnaire consisted of mental (MCS) and physical (PCS) health scores. Several significant variables that influence QOL of women during the first trimester of pregnancy were found; lower MCS and PCS scores during the first trimester were associated with large for gestational age newborns.

Main publications:

Pranckėnienė, Laura; Bumbulienė, Žana; Dasevičius, Darius; Utkus, Algirdas; Kučinskas, Vaidutis; Preikšaitienė, Eglė. Novel Androgen Receptor gene variant containing a premature 2 termination codon in a patient with androgen insensitivity syndrome//Journal of pediatric and adolescent gynecology. New York : Elsevier Science. ISSN 1083-3188. eISSN 1873-4332. 2019, first on line, p. 1-9. DOI: 10.1016/j.jpag.2019.08.001.

Bedei, Ivonne; Bumbulienė, Žana; Sirakov, Milko; Mahmood, Tahir; Wood, Paul. Provision of paediatric and adolescent gynaecology in Europe today: a joint review by The European Association of Paediatric and Adolescent Gynaecology (EURAPAG) and European Board and College of Obstetrics and Gynaecology (EBCOG) // European journal of obstetrics, gynecology, and reproductive biology. Amsterdam : Elsevier Scientific BV. ISSN 0301-2115. eISSN 1872-7654. 2019, vol. 235, p. 116-120. DOI: 10.1016/j.ejogrb.2018.08.023.

Jakubauskienė, Lina; Jakubauskas, Matas; Mainelis, Antanas; Bužinskienė, Diana; Drąsutienė, Gražina Stanislava; Ramašauskaitė, Diana; Poškus, Tomas. Factors influencing quality of life during the first trimester of pregnancy: a prospective cohort study // Medicina. Basel : LSMU, MDPI AG. ISSN 1010-660X. eISSN 1648-9144. 2019, vol. 55, art. no. 666, p. [1-8]. DOI: 10.3390/medicina55100666.

National Research Projects

Research Council of Lithuania project „Noninvasive Immunological Analysis of Amniotic fluid in Preterm Birth“, No P-MIP-19-66, prof. D.Ramašauskaitė. 2019-2021.

The most common complications of preterm premature rupture of membranes is intrauterine infection, which is related to fetal inflammatory response syndrome (FIRS), and is characterized by severe fetal and newborn injury, and can be a cause of death. As diagnosis of intrauterine infection is made, it is recommended to discontinue the pregnancy. However, there is a risk of neonatal respiratory distress syndrome (NRDS). Most of the amniotic fluid analysis are performed invasively, using amniocentesis. In this project evaluation of immunological markers in amniotic fluid collecting them transvaginally is being done seeking to determine the cut-off values of immunological markers for FIRS and NRSD.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INNOVATION) PARTNERS

Zurich University (Switzerland)

University of Gdansk (Poland)

Warsaw Medical University (Poland)

Jagiellonian University Krakow (Poland)

Pomeranian Medical University (PMU) Szczecin (Poland)

Lund University (Sweden)

Riga Stradins University (Latvia)

Niels-Stensen-Kliniken Marienhospital Osnabrück (Germany)

University Hospital Estaimont Of Clermont-Ferrand(France)

OTHER SCIENTIFIC ACTIVITIES

Prof. HP G. S. Drąsutienė –

- editorial board member of the journal *Lietuvos chirurgija (Lithuanian Surgery)*.

Prof. N. Drazdienė –

- editorial board member of the journal *Lietuvos akušerija ir ginekologija (Lithuanian Obstetrics & Gynecology)*;
- board member of Lithuanian Pediatric Society and Vilnius Pediatric Society;
- head of Lithuanian section of German-Baltic Physician Society.

Prof. D. Ramašauskaitė –

- president of Lithuanian Society of Obstetricians Gynecologists, (<http://www.lagd.lt/apiemus/valdybos-nariai/28>);
- editorial board member of the journal *Lietuvos akušerija ir ginekologija (Lithuanian Obstetrics & Gynecology)*;
- elected member of Committee for Safe Motherhood and Newborn Health FIGO (FIGO - The International Federation of Gynecology and Obstetrics) (<https://www.figo.org/committee-safe-motherhood-and-newborn-health>).
- member of EBCOG Council (EBCOG European board & college of obstetrics and gynaecology)
- Moderator of international conference *Women's Health day 2019* (<http://www.lagd.lt/renginiai/womens-health-day-2019-conference/135>)
- organizing committee board member of the national conference and training course „*New treatments for male and female infertility and other topical infertility issues*“ 2019.06.06-07 <https://reg.eventas.lt/ehome/nmvm2019/organizatoriai/>
<https://reg.eventas.lt/ehome/nmvm2019/programa/>
- organizing committee board member of the national conference „*Diabetes and pregnancy: topical issues in diagnostics, care and treatment*“ 2019-03-01 <https://reg.eventas.lt/ehome/dn2019/informacija/>
<https://reg.eventas.lt/ehome/dn2019/programa/>

Prof. Ž. Bumbulienė –

- president-elect of EURAPAG (European Association of Paediatric and Adolescent Gynaecology), <http://www.eurapag.com/association/ec/>;
- board member of FIGIJ (International Federation Of Infant and Juvenile Gynecology), <http://www.figij.org/>
- head of section of Lithuanian Society of Obstetricians Gynecologists;
- board member of Vilnius Medical Society;
- organizing committee board member of the international conference “*Congress on paediatric and adolescent gynaecology. Oncogynecology. Oncofertility*“ <https://reg.eventas.lt/website/661/home/> <http://www.lagd.lt/renginiai/tarptautine-moksline-praktine-konferencija-congress-on-paediatric-and-adolescent-gynaecology.-oncogynecology.-oncofertility/134>
- international editorial board member of the journal *Wiadomości Lekarskie*;
- international advisory board member of the journal *Pediatric and Adolescent Reproductive Health*, <http://rzdpc.geotar.ru/>;
- editorial board member of the journal *Lietuvos akušerija ir ginekologija (Lithuanian Obstetrics & Gynecology)*;
- head of editorial board of the journal *Ginekologijos aktualijos*.
- organizing committee board member of the international conference “*Pan-European Trainees' Congress in Paediatric and Adolescent Gynaecology*”, Frankfurt, Germany, 15-16 February 2019.
- organizing committee board member of the international conference “*4th Baltic Paediatric Congress under the auspices of European Academy of Paediatrics (EAP/UEMS-SP)*”, 16-18 May 2019.

Assoc.prof. A. Arlauskienė –

- board member and treasurer of Lithuanian Society of Obstetricians Gynecologists;
- editorial board member of the journal *Lietuvos akušerija ir ginekologija (Lithuanian Obstetrics & Gynecology)*;
- member of International Society of Ultrasound in Obstetrics and Gynecology, www.isuog.com;

- director of Ian Donald School of Medical Ultrasound branch for Lithuania, www.iandonaldschools.com.

Assoc. Prof. M. Šilkūnas –

- head of Vilnius region Society of Obstetrics and Gynecology;
- board member of Lithuanian Society of Obstetricians Gynecologists;
- organizing committee board member of the international conference “Fetal medicine”, November 14, 2019, <http://www.lagd.lt/renginiai/mokslines-praktines-konferencija-aktualus-vaissiaus-medicinos-klausimai/138>
- organizing committee board member of the international conference “*Current issues in aesthetic and reconstructive gynecology*”, March 08, 2019, <https://www.nmcentras.lt/en/renginiai/current-issues-in-aesthetic-and-reconstructive-gynecology/>;
- organizing committee board member of the 12th General Meeting of Lithuanian Society of Obstetricians and Gynecologists and Scientific Conference “*Challenges of Professionalism*”, April 5-6, 2019, <http://www.lagd.lt/renginiai/lagd-nariu-eilinis-rinkiminis-xii-suvaziavimas-ir-mokslines-konferencija-profesionalumo-issukiai/110?sqid=330eae6df6764cfd45efd13ef5ab29d2670ee75e8>

Assoc. Prof. D. Bartkevičienė –

- president of The Lithuanian Aesthetic Gynecology Association, (<http://www.estetineginekologija.lt/daiva-bartkeviciene/>);
- editorial board member of the journal *Sveikatos mokslai (Health sciences)*;
- organizing committee board member of the international conference “*Current issues in aesthetic and reconstructive gynecology*”, March 08, 2019, <https://www.nmcentras.lt/en/renginiai/current-issues-in-aesthetic-and-reconstructive-gynecology/>;
- board member of Vilnius region Society of Obstetricians Gynecologists;
- member of Lithuanian Society of Obstetricians Gynecologists;
- member of International Society of Ultrasound in Obstetrics and Gynecology (ISUOG), www.isuog.com;
- member of European Society for Gynaecological Endoscopy (ESGE);
- member of The International Ovarian Tumor Analysis (IOTA) group;
- member of The European Society of Aesthetic Gynecology (ESAG).

Assist. V. Paliulytė –

- board member of Vilnius region Society of Obstetricians Gynecologists.
- board member of International Society of Ultrasound in Obstetrics and gynecology; www.isuog.com.
- organizing committee board member of the international conference “*Fetal medicine*”, November 14, 2019, <http://www.lagd.lt/renginiai/mokslines-praktines-konferencija-aktualus-vaissiaus-medicinos-klausimai/138>

Assist. Vilius Rudaitis

- president of Gynecology Oncology association
- board member of EU initiative programme # ENI-LLB-1-029 on reduction of social exclusion in the quality of life cancer patients in Vilnius and Grodno regions
- Consultant for enhancement of minimal invasive total laparoscopic hysterectomy "On-Site Training" during regular scheduled interventions for physicians selected by Medtronic company.

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

Žana Bumbuliene. „*Complete XY gonadal dysgenesis – when should the prophylactic gonadectomy be performed*“. World Congress of Paediatric and Adolescent Gynaecology, Melbourne, Australia, Nov 30- Dec 3 2019.

Žana Bumbuliene. „*Contraception in adolescents: an overview*“. Trainees' Congress in Paediatric and Adolescent Gynaecology, Frankfurt, Germany, 15-16 February 2019.

Margarita Montrimaite, Mindaugas Silkunas, Daiva Bartkeviciene, Vilius Rudaitis. „*Obturator nerve resection*“. ESGE 28th Annual Congress, Thessaloniki, Greece, 6th – 9th October 2019.

Žana Bumbuliene. „*Hyperandrogenism and PCOS in adolescents*“. III scientific-practical conference “*National and international experience in the reproductive health of children and youth*“. Moscow, 16-18 April 2019.

Greta Balčiūnienė; Diana Ramašauskaitė; Gražina Stanislava Drąsutienė; Ingrida Pilypienė; Violeta Gulbinienė; Daiva Bartkevičienė; Auksė Zinkevičienė; Irutė Girkontaitė; Irena Dumalakienė. „*Significance of TNF-α and rantes concentration in vaginally obtained amniotic fluid in predicting fetal inflammatory response syndrom*“. ECIC 2019 : 4th European congress on intrapartum care, 14-16 March 2019

MOST IMPORTANT NATIONAL AND INTERNATIONAL AWARDS RECEIVED FOR R&D ACTIVITIES

V. Rudaitis and **K. Mačiulienė** - Cross of the Knight of the Order of the Lithuanian Grand Duke Gediminas

MOST IMPORTANT PARTICIPATION CASES OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS AND ORGANISATIONS, AND BUSINESS ENTITIES

Prof. D. Ramašauskaitė is a member of Integrated Health Care Management Committee of Perinatology, Ministry of Health, Republic of Lithuania;

Prof. D. Ramašauskaitė is a member of Lithuania Bioethical Committee biomedical research experts group

Assist. V. Rudaitis, Assoc. Prof. of partn. R. Vansevičiūtė-Petkevičienė – members of work group of the Ministry of Health, Republic of Lithuania, on Updating Procedures and Methodology for New Selective Cervical Cancer Program

CONSULTATIONS PROVIDED BY THE UNIT TO THE PUBLIC OR ECONOMIC ENTITIES

Guidelines in obstetrics (38 guidelines updated in 2019. Every guideline has 5 parts, one of them – Information for society - <https://sam.lrv.lt/lt/veiklos-sritys/programos-ir-projektai/sveicarijos-paramos-programa/akuserijos-ir-neonatologijos-diaagnostikos-ir-gydymo-metodikos/akuserijos-diaagnostikos-ir-gydymo-metodikos>

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Ž. Bumbulienė – Abstinence - the Best Contraception - This Approach Brings Pregnant Teenagers and Thousands of Abortions to Lithuania Every Year (Conference in the Parliament of Lithuania)

https://m.delfi.lt/sveikata/sveikatos_naujienos/article.php?id=81303998&fbclid=IwAR0SUqas7qdoikOVOyzBw-YKKnVGF-NofjmF3DeTMZEK1o66yfyR7ysyRF8

Ž. Bumbulienė - menopause - what happens in a woman's body

<https://www.delfi.lt/video/sveikata-tv/mitais-apipinta-menopauze-kas-vyksta-moters-organizme-ir-kaip-tai-palengvinti.d?id=79033789>

K. Mačiulienė – about hormone storms, birthing postures and the best age to give birth

<https://www.15min.lt/gyvenimas/naujiena/seima/viena-labiausiai-patyrusiu-ginekologiu-akuseriu-k-maciuliene-apie-hormonu-audras-gimdymo-pozas-ir-geriausia-amziu-gimdyti-1026-1207054?copied&fbclid=IwAR14TUV6ZfAVD7t3jR5X5BRrOqPWgCylGuOf6J1IBM8b1C4V0tF1bawhxMM>

D. Ramašauskaitė – Why some people get sick less often: You can look for reasons to remember when your mother gave birth

<https://www.delfi.lt/sveikata/moters-sveikata/kodel-kai-kurie-zmones-serga-reciau-priezasciu-ieskoti-galima-prisiminus-kaip-motina-gimde.d?id=81087077>

A. Arlauskienė – interview TV3 „Alcoholic fetal syndrome“, 2019 March.

Clinic of Anaesthesiology and Reanimatology

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Head – Prof. Dr. *Jūratė Šipylaitė*

STAFF

Professors: Dr. J. Šipylaitė

Senior researcher Dr. A. Andrijauskas.

Associate professors: Dr. D. Činčikas, Dr. A. Klimašauskas, Dr. E. Kontrimavičiūtė, Dr. I. Norkienė, Dr. M. Šerpytis, Dr. S. Vosylius.

Assistant professors: Dr. S. Švedienė, Dr. R. Badaras (part-time), Dr. D. Ringaitienė (part-time),

Teaching Assistants: Š. Judickas (part-time), D. Gražulytė (part-time), M. Svetikienė (part-time), A. Vaitkus (part-time).

Lecturers: L. Balčiūnas (part-time), E. Gaižauskas (part-time), V. Kuzminskaitė (part-time), T. Strainys (part-time).

Doctoral students: Š. Judickas, D. Gražulytė, M. Svetikienė, A. Vaitkus.

Students' scientific group of Anaesthesiology and reanimatology: scientific leader – Assoc. Prof. S. Vosylius, coordinator – student I. Kvietinskaitė, 54 members in the group.

RESEARCH INTERESTS

Etiopathogenesis, diagnostics, treatment of diseases: fundamental and clinical research, innovative technologies.

Influence of malnutrition on rate of complications and duration of hospital stay in patients after cardiac surgery.

Optimization of low back pain diagnosis and treatment.

Organ dysfunction in critically ill oncohaemathological patients.

Early changes in cognitive functioning in patients undergoing general anaesthesia.

Optimal cerebral perfusion pressure target treatment for traumatic brain injury patients.

Intra-operative oxygen administration and adequate organ perfusion maintenance during different methods of anaesthesia.

Spinal bupivacaine baricity and dose in day-case surgery.

Development of new methods of opioid detoxification for illicit and prescription opioid dependent patients.

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

- 1. Perioperative Patient Optimization and Management of Critical States.** Prof. Dr. J. Šipylaitė. 2019–2023.

The research study „The relationship between malnutrition, rate of complications and duration of hospital stay in patients after cardiac surgery“ was continued in order to determine the relationship between the pre-operative bioelectric impedance phase angle (malnutrition criteria) and late mortality and blood transfusions after cardiac surgery. The effect of blood transfusions during the perioperative period on late mortality was also studied. was studied.

Data collection according to clinical trial „Value of quantitative sensory testing and lumbar sympathetic block for diagnosis and treatment of low back pain“protocol was finished. Primary analysis of data from the 1st study stage was performed and presented as a poster.

Prospective study “Cerebrovascular autoregulation impairment in severe traumatic brain injury“ was completed including the patients after severe traumatic brain injury. The goal was to find optimal optimal cerebral perfusion pressure for stabilizing cerebrovascular autoregulation in severe traumatic brain injury as well as for improving their outcome.

Main publications:

Bioelectrical Impedance Phase Angle-Predictor of Blood Transfusion in Cardiac Surgery. Ringaitiene D, Puodziukaite L, Vicka V, Gineityte D, Serpytis M, Sipylaite J. J Cardiothorac Vasc Anesth. 2019 Apr;33 (4):969-975. doi: 10.1053/j.jvca.2018.07.007.

Long-term quality of life in patients treated with extracorporeal membrane oxygenation for postcardiotomy cardiogenic shock. Norkiene I, Jovaisa T, Scupakova N, Janusauskas V, Rucinskas K, Serpytis P, Laurusonis K, Samalavicius R. Perfusion. 2019 May;34(4):285-289. doi: 10.1177/0267659118815291. Epub 2018 Dec 19.

Petkus V., Preiksaitis A., Krakauskaite S., Bartusis L., Chomskis R., Hamarat Y., Zubaviciute E., Vosylius S., Rocka S., Ragauskas A. Non-Invasive Cerebrovascular Autoregulation Assessment using the Volumetric Pressure Reactivity Index: Prospective Study. Neurocritical Care 2019; 30: 42-50. DOI: 10.1007/s12028-018-0569-x.

V. Petkus, A. Preiksaitis, E. Chaleckas, R. Chomskis, E. Zubaviciute, S. Vosylius, S. Rocka, D. Rastenyte, M. Aries, A. Ragauskas, J-O. Neumann. Optimal cerebral perfusion pressure-targeted treatment for severe traumatic brain injury. Journal of Neurotrauma 2019 Oct 4. DOI: 10.1089/neu.2019.6551. [Epub ahead of print]

Badaras R, Jovaisa T, Lapinskiene I, Ivaskevicius J. Dose Escalation of Naltrexone to Reduce Stress Responses Associated With Opioid Antagonist Induction: A Double-blind Randomized Trial. J Addict Med. 2019 Oct 11. doi: 10.1097/ADM.0000000000000560. [Epub ahead of print]

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INNOVATION) PARTNERS

Research and Education, Department of Clinical Science and Education, Karolinska Institutet/Södersjukhuset Section of Anaesthesiology and Intensive Care (Sweden)

OTHER SCIENTIFIC ACTIVITIES

Prof. J. Šipylaitė

- council member of Lithuanian Society of of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>);
- member of the European Society of Anaesthesiology (<https://www.esahq.org/>);
- member of the Board of Anaesthesiology of Medical Specialists of the European Union (<http://www.eba-uems.eu/>);
- editorial board member of the journal *Acta medica Lituanica* (<https://www.lmaleidykla.lt/ojs/public/journals/1/Redkolegija.pdf>)
- chairman of Committee of Resideency of Anestijhesiology and Reanimatology Study Programme Vilniaus University Faculty of Medicine

Assoc. Prof. S. Vosylius –

- counsil member of Lithuanian Society of of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>);
- member of the European Society of Intensive Care Medicine (<https://www.esicm.org/>);

- editorial board member of the Journal *Lietuvos chirurgija* (<http://www.zurnalai.vu.lt/lietuvos-chirurgija/pages/view/editorial-board>);
- member of Vilnius Regional Biomedical Ethics Committee (<http://www.mf.vu.lt/lt/content/vrbtek/vrbtek-sudetis-ir-darbo-nuostatai>)

Senior researcher A. Andrijauskas –

- member of the Lithuanian Society of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>);
- member of the European Society of Anaesthesiology (<https://www.esahq.org/>);
- member of Western Anaesthesia Society of Ireland <https://anaesthesiawest.wordpress.com/>.

Assoc. Prof. M. Šerpytis –

- council member of Lithuanian Society of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>)
- treasurer of the Lithuanian Society of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>);

Assoc. Prof. I. Norkienė –

- member of the Lithuanian Society of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>);
- member of the European Society of Anaesthesiology (<https://www.esahq.org/>);
- Representative Council member of European Association of Cardiothoracic Anaesthesiology (<http://www.eacta.org/about-eacta/organs/representative-council/>);
- membership of European Association of Cardiothoracic Anaesthesiology (EACTA). National representative of Lithuania in EACTA. Member of EACTA Representative Council.
<http://www.eacta.org> .

Assoc. Prof. D. Činčikas, Assoc. Prof. E. Kontrimavičiūtė –

- members of the Lithuanian Society of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>).

Assoc. Prof. A. Klimašauskas –

- vicepresident of the Lithuanian Society for Parenteral and Enteral Nutrition (www.lpemd.org);
- council member of the Lithuanian Society of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>).

Assist. Prof. S. Švedienė –

- member of Lithuanian Society of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>);
- ESRA member and Baltic ESRA Council member (<https://esraeurope.org/>)

Assist. Prof. R. Badaras –

- council member of Lithuanian Society of of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>);
- member of the Lithuanian Society for Parenteral and Enteral Nutrition (www.lpemd.org);
- member of the Lithuanian Society of Clinical Toxicology <https://www.apsinuodijimai.lt/>;
- member of European Association of Poisons Centres and Clinical Toxicologists (EAPCCT) <https://www.eapcct.org/>;
- member of European Society for Clinical Nutrition and Metabolism (ESPEN) <https://www.espen.org/>;

- member of the pool of experts on *ad hoc* rapid risk assessment of chemical threats under the Scientific Committee on Health, Environmental and Emerging Risks (SCHEER) at European Commission https://ec.europa.eu/health/scientific_committees/scheer_en.

Assist. Prof. D. Ringaitienė –

- member of Lithuanian Society of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>);
- member of European society of Intensive Care Medicine (<https://www.esicm.org/>);
- member of European society for clinical nutrition and metabolism (<http://www.espen.org/>).

Teaching Assist. Š. Judickas –

- member of the Lithuanian Society of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>);
- member of European Society of Intensive Care Medicine (<https://www.esicm.org/>).

Teaching Assist. A. Vaitkus –

- council member of Lithuanian Society of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>);
- member of Association of Pain Clinics, Lithuania (www.skausmoklinika.lt)

Lect. L. Balčiūnas –

- member of the Lithuanian Society of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>);
- member of European Society of Intensive Care Medicine (<https://www.esicm.org/>).

Lect. E. Gažauskas –

- member of the Difficult Airway Society (<https://das.uk.com/>)
- member of the Lithuanian Society of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>);
- member of European Society of Intensive Care Medicine (<https://www.esicm.org/>).

Lect. V. Kuzminskaitė –

- member of the Lithuanian Society of Anaesthesiology and Intensive Care (<http://anest-rean.lt/>);
- member of the European Society of Anaesthesiology (<https://www.esahq.org/>).

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

Immediate aspiration of the drug infused via central venous catheter through the distally positioned central venous dilalysis catheter catheter: an experimental study. Ringaitiene D, Stanaitis J, Tutkus J, Vaidas V, Sipylaite J. ESICM LIVES 2019 September 28 – October 2.

Choice of inhalational anesthetic does not implicate early postoperative cognitive functions: primary results from randomized double-blinded study. Vilma Kuzminskaitė, Greta Bukelytė, Ieva Slauzgalvytė, Greta Bružytė, Eglė Kontrimavičiūtė. Euroanaesthesia 2019, 2019-06-01, Vienna, Austria.

Comparison of non invasive and invasive blood pressure monitoring. R. Grišiūtė , L. Balčiūnas. 32nd ESICM LIVES conference Berlin September 28 - October 2, 2019.

Influence of hypotension to the brain oxygenation during shoulder arthroscopy in sitting position. S. Švedienė. 38th Annual ESRA Congress. Bilbao, Spain 11 – 14 September, 2019.

Sensory phenotyping of single side painful lumbosacral radiculopathy patients by qualitative sensory testing. Alfredas Vaitkus, Jurate Sipylaite. International conference “The International Conference on Controversies in Neuropathic Pain (Neuropathic-Pain2019)” Munich, Germany, 23-24 October 2019.

Clinic of Ear, Nose, Throat and Eye Diseases

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Head – Prof. Dr. *Eugenijus Lesinskas*

STAFF

Professor: Dr. E. Lesinskas.

Associate professors: Dr. M. Petrulionis, Dr. R. Ašoklis, Dr. A. Cimbalas, Dr. S. Galgauskas.

Assistant Professor: Dr. V. Beleškienė, Dr. D. Rauba, Dr. J. Ivaška, Dr. R. Strupaitė-Šileikienė, A. Kadziauskienė

Lecturers: A. Morozas, A. Matulevičius, K. Malyško, A. Misevičė, D. Pranytė

Students' scientific groups of:

Ophthalmology: scientific leader – assoc. prof. S. Galgauskas, coordinator – student E. Balsienė; 30 members of the group.

Otorhinolaryngology: scientific leader – prof. E. Lesinskas, coordinator – student N. Stukas; 25 members of the group.

RESEARCH INTERESTS

Estimation of the influence of morphology and clinical peculiarities of otorhinolaryngological and ophthalmological diseases to results of application of novel diagnostic methods and treatment

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

Children and adults hearing rehabilitation surgery and cochlear implantation distant results analysis. Prof. Eugenijus Lesinskas. 2014-2023.

Study of the patients with the Meniere's disease was completed. Results of 3T MRI evaluation and testing of peripheral vestibular system were studied for different form of the diseases. Doctoral theses for this study were completed.

National Research Projects

Lithuania Research council project A-MIP-19-116 Children with cochlear implants social integration challenges in Lithuania. Prof. E. Lesinskas. 2017-2019

The aim of this study is to evaluate the macro and micro level factors of social integration of children with cochlear implants in Lithuania.

OTHER SCIENTIFIC ACTIVITIES

Prof. E. Lesinskas –

- senior otorhinolaryngologist of the Ministry of Health of the Republic of Lithuania;
- president of the Lithuanian Society of Otorhinolaryngologists;
- member of the Council of the Faculty of Medicine;
- editorial board member of the journals *Medicinos teorija ir praktika (Theory and Practice in Medicine)*, *Journal of Hearing Science*.

Assoc. Prof. Dr. R. Ašoklis –

- board member of Lithuanian Society of Ophthalmologists;
- board member of Vilnius County Ophthalmologists Association;
- member of European Board of Ophthalmology;
- national delegate in European Union of Medical Specialists.

Assoc. Prof. Dr. A. Cimbalas –

- board member of Lithuanian Society of Ophthalmologists;
- board member of Vilnius County Ophthalmologists Association;
- member of Lithuanian Glaucoma Society;
- international member of American Academy of Ophthalmology.

Assoc. Prof. Dr. S. Galgauskas –

- board member of Vilnius County Ophthalmologists Association;
- member of Lithuanian Society of Ophthalmologists;
- member of Lithuanian Glaucoma Society;
- member of European Association for Vision and Eye Research;
- member of Association for Research in Vision and Ophthalmology.

Assist. Dr. D. Rauba –

- board member of Lithuanian Society of Otorhinolaryngologists.

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

Eugenijus Lesinskas. Musical abilities for children with cochlear implantation. Congress organized by Confederation of European Otorhinolaryngology-Head and Neck Surgery. Brussels, Belgium, 2019.

Arnoldas Morožas. Acoustic neurinoma: an interesting case report. Congress organized by Confederation of European Otorhinolaryngology-Head and Neck Surgery. Brussels, Belgium, 2019.

Eugenijus Lesinskas. Musical abilities for children with cochlear implantation. American Academy Otolaryngology and Head and Neck Surgery Congress. New Orleans, USA, 2019

Eugenijus Lesinskas. Prognostic factors and social integration of children with cochlear implantation. European Symposium of Paediatric Cochlear Implantation. Bucharest, Romania, 2019.

MOST IMPORTANT NATIONAL AND INTERNATIONAL AWARDS RECEIVED FOR R&D ACTIVITIES

Eugenijus Lesinskas. Officer's Cross of the Order of the Grand Duke of Lithuania Gediminas

Rasa Strupaitė-Šileikienė. SOE Teacher Grant (European Society of Ophthalmology)

MOST IMPORTANT PARTICIPATION CASES OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS AND ORGANISATIONS, AND BUSINESS ENTITIES

E. Lesinskas, D. Rauba. A. Morožas A. Paškoniė currently are the members of the work group for Ministry of Health working on improvement of ENT specialist norm.

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

During the year 2019 an ophthalmologist A.Makselis took part in the series of TV shows “Laba diena, Lietuva”, “Klauskite daktaro”, “Klausimėlis” where he spoke about the dry eye disease, contact lenses and eye infections.

Clinic of Gastroenterology, Nephrourology and Surgery

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Head – Prof. Habil. Dr. *Kęstutis Strupas*

STAFF

Professors: Habil. Dr. K. Strupas, Dr. E. Poškus, Dr. T. Poškus, Dr. G. Simutis, Dr. A. Šileikis, (HP) Dr. G. Brimas, (HP) Dr. F. Jankevičius, Dr. M. Miglinas, Habil. Dr. J. Valantinas, Dr. P. Schemmer (prof of partnership), (HP) Dr. Beiša (till 2019-09).

Associate professors: A. Černiauskiene, Dr. G. Denapiene, Dr. A. Gradauskas, Dr. V. Jotautas, Dr. S. Mikalauskas, Dr. V. Sokolovas, Dr. A. Stašinskas, Dr. G. Verkauskas, Dr. A. Želvys, Dr. K. Saniukas (till 2019-11).

Assistant professor: Dr. R. Adomaitis, Dr. G. Bernotavičius, Dr. B. Buckus, A. Čekauskas, Dr. Ž. Juodeikis, D. Kubilius, Dr. M. Petrulionis, Dr. L. Rimševičius, Dr. I. Stundienė, Dr. K. Trainavičius.

Teaching assistants: A. Bakavičius, E. Mačionienė, D. Sukackienė, R. Vaicekauskas.

Lecturers: Dr. E. Gavelienė, P. Gradauskas, Dr. L. Mašalaitė, G. Pošiūnas, Dr. I. Savlan.

Research fellows: prof. Dr. V. Liakina, Dr. A. Beiša, Dr. G. Denapiene, assist. A. Kielaitė-Gulla, senior Dr. G. Simutis.

Doctoral students: E. Mačionienė, M. Barisienė, A. Bakavičius, J. Tumas, D. Danys, A. Aleknaitė, J. Makevičius, G. Tauginienė – Valeikaitė, B. Vincel, A. Kielaitė-Gulla, D. Sukackienė, R. Lukšaitė, B. Kurlinkus, R. Vaicekauskas, P. Bosas, R. Račkauskas, M. Kryžauskas, V. Kazlauskas, M. Snicorius, A. Baušys, U. Žukauskienė, G. Platkevičius, T. Januškevičius.

RESEARCH INTERESTS

Minimally invasive surgery of abdominal organs, development and improvement of new procedures and devices for the performance of minimally invasive procedures, especially of abdominal malignancies;

Research of liver and pancreas transplantation techniques (listing and preparing of patients for liver, pancreas, kidney transplantation);

Research of liver and pancreas transplantation techniques

Study of dietary treatment of enteropathies.

Minimal hepatic encephalopathy

Gut microbiota in health and disease

Extrahepatic complications of liver cirrhosis

Diagnostic/prognostic markers for prediction of HCC

Novel treatment for the GI bleeding

Contemporary diagnostic analysis of ascite liquid

Epidemiology and novel treatment of viral hepatitis

Patients with chronic hepatitis C quality of life study during DAA therapy.

Urological cancer.

Kidney stone disease.

Urinary incontinence Primary glomerular diseases.

Resistant hypertension.

Peritoneal dialysis.

Medical kidney transplant management.

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

1. **Investigation efficiency of traumatic – restorative, minimally invasive surgeries and transplantation methods in visceral surgery.** Prof. K. Strupas, prof. G. Brimas 2019–2023.

The application of minimally invasive surgical techniques in patients with hepatobiliary, pancreatic, gastrointestinal, colorectal and endocrine pathology were evaluated and outcomes reported. Results of the research were presented in national, regional and international meetings, and published in peer-reviewed journals. The successful organ-tissues transplantations-program in Vilnius University *Santaros Hospital* is the best fact to take Vilnius University Hospital as the leader Transplantation Center in the Baltic States.

Main publications:

K. Strupas, A. Želvys, A. Gulla, V. Sokolovas, M. Petrulionis, S. Mikalauskas “Practical Guide to Abdominal Organ Transplantation” 2019, Vilnius.

2. **Chronic liver diseases genomic and proteomic, these diseases pathogenetic relationship with other abdominal disease, optimization of therapeutic and surgical treatment.** Prof. J. Valantinas, ass. prof. G. Denapienė, dr. V. Liakina, dr. L. Mašalaitė, dr. I. Stundienė, dr. I. Savlan, dr. E. Gavėlienė, R. Vaicekauskas, A. Aleknaitė. 2019-2023.

This research is focused on interrelationships of liver diseases and other disorders of digestive tract. On the basis of retrospective case-control study we concluded that additional surgery should be recommended after non-curative endoscopic submucosal dissection whenever treatment-associated risk is acceptable. In prospective single centered follow-up study enrolled 40 patients with mild acute pancreatitis and 16 healthy group subjects we have found that portal blood flow velocities do not change during mild acute pancreatitis in the inflammatory and postinflammatory periods. This observation suggests that mild acute pancreatitis does not increase the risk of portal vein thrombosis.

Main publications:

Bausys R, Bausys A, Stanaitis J, Vysniauskaite I, Maneikis K, Bausys B, Stratilatovas E, Strupas K. Propensity score-matched comparison of short-term and long-term outcomes between endoscopic submucosal dissection and surgery for treatment of early gastric cancer in a Western setting. *Surg Endosc.* 2019 Oct;33(10):3228-3237. doi: 10.1007/s00464-018-06609-6. Epub 2018 Dec 3.

Stundiene I, Sarnelyte J, Norkute A, Aidietiene S, Liakina V, Masalaite L, Valantinas J. Liver cirrhosis and left ventricle diastolic dysfunction: Systematic review. *World J Gastroenterol.* 2019 Aug 28;25(32):4779-4795. doi: 10.3748/wjg.v25.i32.4779.

Mickevičius A, Valantinas J, Stanaitis J, Jucaitis T, Mašalaitė L. Changes in the Velocity of Blood in the Portal Vein in Mild Acute Pancreatitis-A Preliminary Clinical Study. *Medicina (Kaunas).* 2019 May 26;55(5). pii: E211. doi: 10.3390/medicina55050211.

Sands BE, Peyrin-Biroulet L, Loftus EV Jr, Danese S, Colombel JF, Törüner M, Jonaitis L, Abhyankar B, Chen J, Rogers R, Lirio RA, Bornstein JD, Schreiber S; VARSITY Study Group. Vedolizumab versus Adalimumab for Moderate-to-Severe Ulcerative Colitis. *N Engl J Med.* 2019 Sep 26;381(13):1215-1226. doi: 10.1056/NEJMoa1905725.

Mickuniene R, Stundiene I, Jucaitis T, Valanciene D, Valantinas J. A case of ectopic pancreas in the ileum presenting as obscure gastrointestinal bleeding and abdominal pain. *BMC Gastroenterol.* 2019 Apr 17;19(1):57. doi: 10.1186/s12876-019-0971-7.

3. The Influence of Immune System Senescence to Kidney Transplant Survival and Choice of Immunosuppression. E. Macioniene, Prof. M. Miglinas. 2015-2022

The Study started in 2016 and is performed in collaboration with the Life Sciences Center. The study focus on identification of molecular biomarkers of kidney transplant rejection. Additional clinical data has been also collected. 70 patients were included into the Study and patient enrolment is continued. This Study is paused in 2020 due to maternity leave of PhD Student E. Macioniene and will be continued the next year.

4. Dynamics of changing nutritional status and related factors in patients after kidney transplantation. D. Sukackiene, L. Rimsevicius, prof. M. Miglinas. 2017-2021

The project aims to evaluate changes of nutritional status and body composition in patients after kidney transplantation and compare the results with control group. This study is approved by Vilnius Regional Bioethics Committee and State Data Protections Inspectorate. Inclusion process of the patients is ongoing. Final follow-up (after one year) will be completed by December 2020. Early results were presented at the conferences:

1. "Correlation of serum leptin and nutritional parameters in ESRD patients" August 30-september 3d., 2019. Krakaw (Poland).
2. "Revising bioimpedance-derived ECW/TBW cut-off value for all-cause mortality in hemodialysis patients". August 30-September 2d., 2019. Turku (Finland).

Main publications:

"Risk stratification for patients awaiting kidney transplantation: role of bioimpedance derived Edema Index and nutrition status" just has been accepted for publication in *Clinical Nutrition*.

5. Influence of Pancreatic and Periampullary Cancer, Immunomodulation and Surgery on Patient Metabolism and Treatment Outcomes. Prof. A. Šileikis, Prof. K. Strupas, J. Tumas. 2016–2019.

The research focuses on effects of pancreatic cancer and immunonutrition on the metabolism and immune system and the use of metabolomic analyses for stratification of patients for nutritional management with the aim to improve postoperative outcomes. We introduced supplementary radiological methods for lumbar skeletal muscle index measurements, bioelectrical impedance analysis in our patients for better evaluation of nutritional status.

6. Laser Hemorrhoidoplasty, Hemorrhoidopexy and Hemorrhoidectomy. D. Danys, Prof. T. Poškus. 2015–2019.

Randomized prospective trial was finished, and analysis is being performed and publications prepared. The aim of the study is to compare early and one-year outcomes of two new surgical techniques of treatment of haemorrhoids with traditional excisional hemorrhoidectomy. The study is finished including patients, completed 6 weeks follow-up (early results), by including 120 patients. Initial results were presented at the World Congress of Phlebology in Melbourne, Australia, Korean Society of Coloproctology research meeting in Seoul, Korea, European Society of Coloproctology meeting in Nice, France.

7. The Value of Clinical and Molecular Markers in Preoperative Diagnosis of Prostate Cancer. Arnas Bakavičius, prof. Feliksas Jankevičius 2015-2020

The study was initiated in 2015 and is a part of a large-scale PCa biomarker research started in 2008, performed after approval by the Lithuanian Bioethics Committee (2007-11-23 No. 50 and 2011-09-07 No. 6B-11-275). The objective of the present study was to characterise the rates of

prostate cancer upgrading and upstaging after radical prostatectomy, investigate their role on surgical and oncological outcomes, so established epigenetic biomarkers as a noninvasive tool for more accurate PCa categorization.

Main publications:

The impact of prostate cancer upgrading and upstaging on biochemical recurrence and cancer-specific survival. Bakavicius A, Drevinskaite M, Daniunaite K, Barisiene M, Jarmalaite S, Jankevicius F. In press.

Urinary DNA methylation biomarkers for prediction of prostate cancer upgrading and upstaging. Bakavicius A, Daniunaite K, Zukauskaite K, Barisiene M, Jarmalaite S, Jankevicius F. Clin Epigenetics, 2019 Aug 5;11(1):115. doi: 10.1186/s13148-019-0716-z.

Decreased Expression of MT1E is a Potential Biomarker of Prostate Cancer Progression. Damidenko R., Daniunaite K, Bakavicius A, Sabaliauskaite R, Skeberdyte A, Petroska D, Laurinavicius A, Jankevicius F, Lazutka JR, Jarmalaite S. Oncotarget, 2017 Jun 27; 8(37): 61709-61718. doi: 10.18632/oncotarget.18683. eCollection 2017 Sep 22.

Clinical Significance of miRNA Host Gene Promoter Methylation in Prostate Cancer. Daniunaite K, Dubikaityte M, Gibas P, Bakavicius A, Lazutka JR, Ulys A, Jankevicius F, Jarmalaite S. Hum Mol Genet, 2017 Jul 1; 26(13): 2451-2461. doi: 10.1093/hmg/ddx138.

The Utility of Urine-circulating miRNAs for Detection of Prostate Cancer. Stuopelyte K, Daniunaite K, Bakavicius A, Lazutka JR, Jankevicius F, Jarmalaite S. Br J Cancer, 2016 Sep 6; 115(6): 707-715. doi: 10.1038/bjc.2016.233. Epub 2016 Aug 4.

8. Cholecholithiasis management based on individual risk and multidisciplinary approach for patients with cholecystolithiasis and scheduled cholecystectomy. Prof. G. Simutis, A. Aleknaite. 2016-2020

The research started in 2016. A retrospective analysis of risk assessment of cholecholithiasis and its management was performed to evaluate effectiveness of currently used prognostic index of cholecholithiasis and new threshold values for different risk groups were calculated. A randomized prospective trial on the best management strategy (endoscopic ultrasound before ERCP vs. intraoperative cholangiography) for patients with intermediate risk of cholecholithiasis is carried on, enrolling participants, about 75% of required sample size has been enrolled. A literature review article and trial protocol have been written and submitted for publishing.

Main publications:

Aleknaite A, Simutis G, Stanaitis J, Valantinas J, Strupas K. Risk assessment of cholecholithiasis prior to laparoscopic cholecystectomy and its management options. United European Gastroenterology Journal. 2018 Apr;6(3):428–38.

9. Distant Results of the Quality of Life of Patients Operated on for Colorectal Cancer. G.Valeikaite Tauginiene, Prof. T. Poškus. 2016-2019

The Study started in 2016. Distant results of the quality of life of patients, operated on for colorectal cancer is a continuation of the prospective study, which was started in 2012 as part of the National Science Foundation grant *Colorectal cancer in Lithuania: study of mortality, morbidity and quality of life, LIG01/11*. It will try to identify the factors, reducing long-term quality of life in colorectal cancer patients. The study is performed in collaboration with National Cancer Institute and Lithuanian University of Health Sciences. Final publication is planned for 2019.

10. Diagnosis of Acute Appendicitis. Prof. T. Poškus, R. Lukšaitė. 2019-2022

The study started in 2019. It is a randomized trial within prospective cohort of patients with suspected acute appendicitis, randomized for CT or observation in cases when ultrasound examination is inconclusive. 250 patients are set to be included in the trial. Inclusion is planned for two years. Publication of the results is expected in 2022.

National Research Projects

1. LR SAM 2018-10-31 Nr. S-210 project **NATRIJOD (Assessment of the sodium and iodine status of the Lithuanian population and development of public health policy guidelines)**. Project group: U. Žakauskienė, D. Sukackienė, M. Miglinas. 2018-2020

Ongoing study of intake of sodium and iodine by 24 hour urine sample analysis in Lithuanian population. Study started in 2018. Planned sample size is 1000 subjects. Publications, presentations and development of guidelines for public health policy on salt intake reduction and adequate iodine consumption to prevent renal and cardiovascular disease are planned in 2020.

2. **The Value of Clinical and Molecular Markers in Preoperative Diagnosis of Prostate Cancer**. Arnas Bakavičius, prof. dr. (HP) Feliksas Jankevičius. 2015 - 2019

The study was initiated in 2015 and is a part of a large-scale PCa biomarker research started in 2008, performed after approval by the Lithuanian Bioethics Committee (2007-11-23 No. 50 and 2011-09-07 No. 6B-11-275). The objective of the present study was to characterise the rates of prostate cancer upgrading and upstaging after radical prostatectomy, investigate their role on surgical and oncological outcomes, so established epigenetic biomarkers as a noninvasive tool for more accurate PCa categorization.

Main publications:

The impact of prostate cancer upgrading and upstaging on biochemical recurrence and cancer-specific survival. Bakavičius A, Drevinskaite M, Daniunaite K, Barisiene M, Jarmalaite S, Jankevicius F. In press.

Urinary DNA methylation biomarkers for prediction of prostate cancer upgrading and upstaging. Bakavičius A, Daniunaite K, Zukauskaite K, Barisiene M, Jarmalaite S, Jankevicius F. Clin Epigenetics, 2019 Aug 5;11(1):115. doi: 10.1186/s13148-019-0716-z.

3. **Non-Invasive Approach to Early Diagnosis and Prognosis of Acute Severe Pancreatitis**. (01.2.2-LMT-K-718-01-0025). Project leader: J. Razumienė. Project group: Prof. K. Strupas; Prof. A. Šileikis; Assoc. Prof. D.V itkus; Assoc. Prof. M. Šerpytis, Assoc. Prof. A. Klimašauskas, A. Karpavičius; A. Samuilis; A. Kielaitė-Gulla; R. Budvytytė; T. Ragaliauskas; M. Jankunec; T. Penkauskas; I. Šakinytė; M. Dagys; A. Laurynėnas; V. Gurevičienė; D. Ratautas. 2018-2022

In 2019 the project was selected by Lithuanian Research Association to be the top among current SMART specialization performed activities in the country. A special TV health report on the disease's burden for society was created and aired (TV Info October 14, 2019).

The project activities include: applying artificial intelligence to build acute pancreatitis decision models and prediction models; over 100 samples were analyzed for selecting different clinical and laboratory markers while applying different non-invasive methodology. The results were presented in national and international congresses with a positive feedback and high success.

The publication of the most recent results is in progress.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INOVATION) PARTNERS

University of Heidelberg (Germany)

Renal Services at Westmead Hospital, Sydney (Australia)

Academy of Science of Ukraine (Ukraine)

Karolinska Institute (Sweden)
University of Warsaw (Poland)
University of Latvia (Latvia)
University of Tallinn (Estonia)

OTHER SCIENTIFIC ACTIVITIES

Prof. Habil. Dr. K. Strupas

- past President of Lithuanian Surgical Oncology society;
- board member of the European Academy of Surgical Sciences (EAeSS);
- member of International Hepato-Pancreato-Biliary Association;
- member of the Scientific Committee of Vilnius University;
- elected president of the Association of Lithuanian Surgeons;
- member of European Association for Endoscopic Surgery (EAES);
- editorial board member of the international journal *Viszeralmedizin*, <http://content.karger.com/Journal/EditorialBoard/223970>;
- editorial board member of the journal *Medicinos teorija ir praktika (Theory and Practice in Medicine)*, <http://www.mtp.lt/lt/redaktoriu-kolegija-8/>;
- editorial board member of the journal *Lietuvos chirurgija (Lithuanian Surgery)* <http://www.chirurgija.lt>;
- editorial board member of the journal *Medicina (Lithuania, ISI)*, <http://medicina.kmu.lt>.

Prof. Dr. V. Beiša

- chairman of Vilnius Association of Surgeons;
- member of the European Society of Endocrine Surgeons (ESES);
- member of the International Society of Surgery (ISS).

Prof. G. Simutis

- board member of the Lithuanian Minimally Invasive Surgery Society;
- member of Vilnius Association of Surgeons;
- member of Lithuanian Surgical Oncology society;
- member of European Association for Endoscopic Surgery (EAES).

Prof. E. Poškus

- chairman of the Lithuanian Minimally Invasive Surgery Society;
- member of Lithuanian Surgical Oncology society;
- member of the Lithuanian Society of Coloproctologists;
- member of the European Society of Coloproctology;
- member of the International Society of University Colon and Rectal Surgeons;
- member of European Association for Endoscopic Surgery (EAES).

Prof. A. Šileikis

- chairman of Vilnius Association of Surgeons;
- chairman of Lithuanian Surgical Oncology society;
- member of the International HepatoPancreato Biliary Association (IHPB);
- member of the American Society of Clinical Oncology (ASCO);
- member of the Lithuanian Minimally Invasive Surgery Society.

Prof. T. Poškus

- Vice-president of the Lithuanian Society of Coloproctologists;
- member of Lithuanian Surgical Oncology society;

- member of Vilnius Association of Surgeons.

Assoc. Prof. Dr. V. Sokolovas

- president Lithuanian Association of Transplantology;
- member of the Lithuanian Minimally Invasive Surgery Society;
- member of Vilnius Association of Surgeons;
- member of Lithuanian Surgical Oncology Society;
- member of the Lithuanian Enteral and Parenteral Nutrition Society;
- member of the Lithuanian Society of Gastroenterology.

Assoc. Prof. Dr. V. Jotautas

- member of the Lithuanian Minimally Invasive Surgery Society;
- member of Vilnius Association of Surgeons;
- member of the Lithuanian Society of Coloproctologists;
- member of European Association for Endoscopic Surgery (EAES).

Assoc. Prof. S. Mikalauskas

- board member of the Lithuanian Minimally Invasive Surgery Society;
- member of Vilnius Association of Surgeons;
- member of the Lithuanian Society of Coloproctologists;
- member of European Association for Endoscopic Surgery (EAES);
- member of Lithuanian Surgical Oncology Society.

Prof. Habil. Dr. J. Valantinas

- editor of the journal *Internistas* supplement *Gastroenterology*;
- editorial board member of the journal *World Journal of Gastroenterology*;
- editor board member of the journal *Medicinos teorija ir praktika*;
- member of the international *Pancreas-2000* scientists group;
- member of the European Association for the Study of the Liver (EASL);
- member of the World Organization of Gastroenterology (OMGE);
- president of the Lithuanian Society of Gastroenterology.

Assoc. Prof. E. Gavelienė

- member of the Lithuanian Society of Gastroenterology;
- member of the European Association of Enteral and Parenteral Nutrition.

Assoc. Prof. G. Denapienė, Assistant Prof. I. Stundienė, Lect. L. Mašalaitė, Assist. Prof. I. Savlan, Lect. R. Vaicekauskas

- members of the Lithuanian Society of Gastroenterology.

Research Prof. V. Liakina

- member of the European Association for the Study of the Liver (EASL);
- member of the Lithuanian Society of Gastroenterology;
- member of the Lithuanian Society of Immunology.

Prof. Dr. G. Brimas

- deputy editor-in-Chief of the journal *Lietuvos chirurgija*;
- editorial board member of the journal *Videosurgery and miniinvasive techniques*.

Assoc. Prof. A. Stašinskas

- editorial board member of the journal *Lietuvos chirurgija*;
- board member of the Association of Lithuanian Surgeons.

Teach. Assist. B. Buckus

- member of Vilnius Society of Surgeons.

Assoc. Prof. G. Verkauskas

- member of the European Paediatric Surgeons' Association;
- member of the European Society for Paediatric Urology.
- member Lithuanian Society of Pediatric Nephrology

Assist. Prof. K. Trainavičius

- member of the Baltic Association of Pediatric Surgeons (BAOPS);
- member of the Council of Lithuanian Society of Pediatric Surgery;
- editorial board member of the journal *Pediatrics* (*Paediatrics*), www.idejgrupe.lt;
- member of the European Paediatric Surgeons Association.

Assist. Prof. Dr. Giedrius Bernotavičius

- member of the Baltic Association of Pediatric Surgeons (BAOPS);
- member of the Council of Lithuanian Society of Pediatric Surgery;
- member of the European Paediatric Surgeons Association.

Assist. Prof. Dr. Gintas Pošiūnas

- Lithuanian Society of Pediatric Surgeons
- Lithuanian Society of Pediatric Surgeons
- European Association of Pediatric Surgeons
- President of Lithuanian Association of Laser Medicine
- International Academy of Laser Medicine and Surgery

Prof. Dr. F. Jankevičius

- chairman of the Lithuanian Early Prostate Cancer Detection Programme;
- member of the European Association of Urology (EAU);
- corresponding Member of Deutschen Gesellschaft für Urologie;
- member of Lithuanian Urological Association;
- chairman of Lithuanian Society of Oncologists.

Assoc. Prof. A. Želvys

- member of the Lithuanian Urology (LUD) Society;
- member of the European Association of Urology (EAU);
- member of the Lithuanian Nephrology Dialysis Transplantation Association (LNDDTA);
- member of the Lithuanian Society for Sexual Medicine (LSSM).

Assoc. Prof. A. Černiauskiene

- member of the Lithuanian Urology (LUD) Society;
- member of the Lithuanian Society for Sexual Medicine (LSSM).

Assist. Prof. A. Čekauskas

- member of the Lithuanian Urology (LUD) Society;
- member of the Lithuanian Nephrology Dialysis Transplantation Association (LNDDTA);
- member of the European Association of Urology (EAU).

Assist. Prof. R. Adomaitis

- member of the Lithuanian Urology (LUD) Society;
- member of the Lithuanian Society for Sexual Medicine (LSSM);

- member of the European Society for Sexual Medicine (LSSM).

Teach. Assist. A. Bakavičius

- member of the Lithuanian Urology (LUD) Society;
- member of the European Association of Urology (EAU).

Prof. M. Miglinas

- member of the European Dialysis Transplantation Association – European Renal Association (EDTA-ERA);
- member of the European Society of Hypertension (ESH);
- member of the International Society of Nephrology (ISN);
- member of the International Society of Hypertension (ISH);
- president of Lithuanian Kidney Foundation;
- president of the Lithuanian Hypertension Society.

Assist. Prof. L. Rimševičius

- member of the European Dialysis Transplantation Association – European Renal Association (EDTA-ERA);
- member of Lithuanian Nephrology, Dialysis and Transplantation Association (LNDTA);
- member of Lithuanian Kidney Foundation (LKF).

Teach. Assist. E. Mačionienė

- member of the European Dialysis Transplantation Association – European Renal Association (EDTA-ERA);
- member of Lithuanian Nephrology, Dialysis and Transplantation Association (LNDTA);
- member of Lithuanian Kidney Foundation (LKF).

Teach. Assist. Prof. D. Sukackienė

- member of the European Dialysis Transplantation Association – European Renal Association (EDTA-ERA);
- member of Lithuanian Nephrology, Dialysis and Transplantation Association (LNDTA);
- member of Lithuanian Kidney Foundation (LKF).
- member of European Society for Clinical Nutrition and Metabolism

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

Urinary 3-gene methylation test for prostate cancer risk assessment A. Bakavicius, K. Daniunaite, S. Jarmalaite, F. Jankevicius. European Urology Supplements, Vol. 18, Issue 3, e2435, Published in issue: May 2019.

Marta Kantauskaite, Rimsevicius Laurynas, Miglinas Marius. Changes in body composition of stable dialysis patients during 5 year period. Nephrology Dialysis Transplantation, Volume 34, Issue Supplement_1, June 2019.

Aiste Gulla, Rima Budvytyte, Tadas Ragaliauskas, Julija Razumiene, Kestutis Strupas Heat Shock Protein-90 in Acute Severe Pancreatitis: Potential Risk- Defining Marker, European Pancreas Club, June 13-16, Berlin, P2-042. Poster presentation.

Gulla, Aistė; Budvytytė, Rima; Ragaliauskas, Tadas; Razumienė Julija; Strupas Kęstutis; Heat shock protein-90 in acute severe pancreatitis: Potential risk- defining marker, Pancreatology, Experimental Pancreatitis, Vol. 18,(4), Supplement, 2018, P. S26. <https://doi.org/10.1016/j.pan.2018.05.069>. poster presentation.

Aiste Gulla, Rima Budvytyte, Julija Razumiene, Kestutis Strupas “ Utilizing tethered bilayers phospholipid membrane with heat shock protein-90 for early diagnosis in acute severe pancreatitis” A-614. 51 st Meeting of the European Pancreas Club, Bergen June 26-29,2019 Norway Published Pancreatology, Volume 19, Number S1, 2019.

THE LIST OF THE MOST IMPORTANT RECEIVED NATIONAL AND INTERNATIONAL AWARDS FOR R&D ACTIVITIES

Prof. F.Jankevičius awarded by Lithuanian Science Prize.

Prof. F.Jankevičius awarded by SAPIENT SAT medal.

Prof. Tomas Poškus - successful grant co-applicant with UK, Denmark, Spain researchers - Bowel disease research foundation (UK) - Patient reported outcomes in peristomal hernia treatment study (PROPER).

Prof. Tomas Poškus - Best paper of the American Society of Colon and Rectal Surgeons Annual Meeting 2019, Cleveland, USA

THE LIST OF THE MOST IMPORTANT CASES OF PARTICIPATION OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS AND ORGANISATIONS, AND BUSINESS ENTITIES

Lithuanian health ministry working groups on prostate hyperplasia; urine incontinence; organ donation in transplantation.

Participation in Residency Training programmes certification by European Board of Urology (EBU). Assoc. prof. A.Želvys became EBU board member, National Representative of Lithuania. Participation in COST Action CA18124 “European Sexual Medicine Network”. R. Adomaitis became a Member of managing committee, National representative of Lithuania nominated by Academy of Sciences of Lithuania. Participation in COST Action

National dialysis guidelines „Network for Research in Vascular Ageing” 2020-2023 m. (I. Rimsevicius)

Endorsement from Lithuanian Ministry of Health obtained for full membership application in “Rare Adult Cancers Network - ERN EURACAN”; final application planned in November 2019 (<http://euracan.ern-net.eu/lt/pagrindinis>). E. Poškus, M. Petrulionis, K. Strupas

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Seminars on Urology”- conference for wide medical professionals.

Creation of methodological recommendations for teachers. Project of Ministry of Education and Science of Republic of Lithuania "Sexuality education and preparation for family life in adolescents: advices for teacher".

Patent application continued (investigators: Prof. K. Strupas, PhD candidate A. Gulla) "Non-invasive approach to early diagnosis and prognosis of acute severe pancreatitis based on heat shock proteins mechanism of action".

Project funded by Lithuanian Research Council „ Liver Tissue engineering through 3D hepatocyte organoids and smart biomaterials“.

Established „Center of Visceral Medicine Translational Research“

Clinic of Infectious Diseases and Dermatovenereology

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Head – Prof. Dr. *Ligita Jančorienė*

Centre of Dermatovenereology

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Tel. +370 5 272 0385, fax +370 5 272 0256
E-mail: jurate.grigaitiene@santa.lt

Head – Dr. *Jūratė Grigaitienė*

STAFF

Professors: Dr. L. Jančorienė (part-time), Dr. R. Matulionytė, Habil. Dr. A. Ambrozaitis (part-time), Dr. M. Bylaitė-Bučinskienė (part-time).

Associate professors: Dr. R. Gancevičienė (part-time).

Assistant Professor: Dr. J. Grigaitienė (part-time), Dr. D. Radžišauskienė (part-time), B. Zablockienė (part-time).

Lecturers: A. Marcinkutė (part-time), E. Matulytė (part-time), K. Žvirblytė Skrebutėnienė (part-time), T. Karmazienė (part-time), I. Kisielienė (part-time), T. Raudonis (part-time).

Research fellows: A. Stiklerytė.

Doctoral students: R. Jurčiukonytė, B. Zablockienė, E. Matulytė, I. Kisielienė.

Students' scientific groups of:

Infectious diseases: scientific leader – prof. L. Jančorienė, coordinator – student R. Vaikutytė; 38 members of the group.

Dermatovenereology: scientific leader – Assoc. Prof. R. Gancevičienė, coordinator – student A. Timinskaitė; 58 members of the group.

RESEARCH INTERESTS

Pathogenesis, diagnostics, treatment and prevention of infectious diseases: assessment of the current diagnostics, treatment and prevention methods; search of a new diagnostics, treatment and prevention methods; study of the mechanisms of infectious diseases pathogenesis; study of a safety and efficacy of a new vaccines and drugs for the treatment and prevention of infectious diseases.

Effectiveness, feasibility and impact of latent tuberculosis treatment for the prevention of active tuberculosis among HIV-positive individuals

Incidence, etiology and pathogenesis of inflammatory chronic dermatosis (acne, rosacea, psoriasis, dermatitis, eczema, vitiligo): basic and clinical research, implementation of innovative technologies.

Dermatooncology in Lithuania: epidemiology, pathogenesis, diagnostics, treatment and prevention of epithelial skin cancers and melanoma.

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

1. Prevalence of Viral Hepatitis A, B and C Serological Markers in Donor's Population in Lithuania. 2012–2020

During this cross-sectional study the prevalence viral hepatitis serologic and virologic markers (such as anti-HAV, HBsAg, HBV-DNR, anti-HBc, anti-HBs, anti-HCV, HCV-RNA), residual risk and main risk factors of viral hepatitis transmission among the blood donors in Lithuania has been estimated. The study is in progress.

2. Prevention of Influenza Viral Pneumonia Using Zanamivir and Antisense Oligonucleotide against Inducible Nitric Oxide Synthase. 2013–2019

The aim of the study was to evaluate how zanamivir and iNOS antisense suppress the pulmonary inflammation during influenza infection using mouse model. The weight variations and means of lung histologic scores were compared between the mouse groups. The levels of iNOS RNR, IFN- γ , TNF- α and influenza virus were determined using reverse transcriptase - polymerase chain reaction. The doctoral dissertation was defended in 2019.

3. Effectiveness, feasibility and impact of latent tuberculosis treatment for the prevention of active tuberculosis among people living with Human Immunodeficiency Virus. 2018-2023

The objective of this study is to evaluate the effectiveness, feasibility and impact of latent tuberculosis infection (LTBI) treatment for the prevention of active tuberculosis among people living with Human Immunodeficiency Virus (HIV). The prevalence of LTBI among PLHIV and its comparison with the prevalence in the general population, and with international data has been performed with next step to define the characteristics of diagnostic tests (the interferon gamma release assays and the tuberculin skin test) among PLHIV and to optimize the diagnostic strategy for LTBI.

4. Long-term Outcome of Patients Presenting With Acute Infectious Encephalitis of Various Causes (ENCEIF-LT). European network for collaboration on encephalitis investigation and follow-up - ENCEIF. 2019-2022.

The study is in progress.

International Research Projects

1. I-MOVE+: Hospital-based test negative case control studies to measure seasonal influenza vaccine effectiveness against influenza laboratory confirmed SARI hospitalisation among the elderly across the European Union and European Economic Area Member States. Prof. L. Jančorienė, Dr. B. Zablockienė. 2015-2019.

The objective was to measure seasonal influenza vaccine effectiveness (SIVE) against influenza illness in patients admitted to hospital during the 2015–2018 influenza seasons. A test-negative case-control study was being performed in two university hospitals of Lithuania. Influenza and other respiratory pathogens were confirmed by multiplex RT-PCR. In collaboration with the

European hospital influenza vaccine effectiveness network a multicentre test negative case control study was initiated in the hospitals of 8 European countries to measure influenza vaccine effectiveness against laboratory confirmed hospitalised influenza among people aged ≥ 65 years.

2. Clinical and Virological Outcome of European Patients Infected With HIV (EuroSIDA). R. Matulionytė. 2015 - ongoing

The EuroSIDA study is a prospective observational cohort study of more than 23000 patients followed in 100 hospitals in 35 European countries plus Israel and Argentina. The main objective of the study is to follow the long-term clinical prognosis for the general population of HIV-infected patients living in Europe and to assess the impact of antiretroviral drugs on the long-term prognosis for these patients.

Main publications:

Laut K, Kirk O, Rockstroh J, Phillips A, Ledergerber B, Gatell J, Gazzard B, Horban A, Karpov I, Losso M, d'Arminio Monfort A, Pedersen C, Ristola M, Reiss P, Scherrer AU, de Wit S, Aho I, Rasmussen LD, Svedhem V, Wandeler G, Pradier C, Chkhartishvili N, Matulionyte R, Oprea C, Kowalska JD, Begovac J, Miró JM, Guaraldi G, Paredes R, Raben D, Podlekareva D, Peters L, Lundgren JD, Mocroft A. The EuroSIDA study: 25 years of scientific achievements. *HIV Med.* 2019 Oct 24. doi: 10.1111/hiv.12810. [Epub ahead of print].

Neesgaard B, Pelchen-Matthews A, Ryom L, Florence E, Peters L(1), Roen A, Svedhem V, Clarke A, Benfield T, Mitsura V, Moreno S, Beniowski M, Begovac J, Matulionyte R, Trofimova T, Elbirt D, Kundro M, Vullo V, Behrens G, Staub T, Ragone L, Vannappagari V, Lundgren J, Mocroft A; EuroSIDA study. Uptake and effectiveness of two-drug compared with three-drug antiretroviral regimens among HIV-positive individuals in Europe. *AIDS.* 2019 Nov 1;33(13):2013-2024.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INNOVATION) PARTNERS

Warren Alpert Medical School at Brown University, Providence, RI (USA)

Ludwig – Maximilians University, Munich (Germany)

Brandenburg Medical School Theodor Fontane, Brandenburg (Germany)

Skåne university hospital, Lund University, Department of occupational and environmental dermatology (Sweden)

Malmö University (Sweden)

OTHER SCIENTIFIC ACTIVITIES

Prof. L. Jančorienė

- member of the European Association of the Study of the Liver, www.easl.ch;
- member of the International Society of Travel Medicine, www.istm.org;
- member of the Central European Vaccination Awareness Group;
- member of the European Society of Clinical Microbiology and Infectious Diseases, www.escmid.org;
- board member of the Lithuanian Society of Infectious Diseases, www.lid.lt;
- member of the Lithuanian Society of Gastroenterology, www.gastroenterologija.lt;
- member of the working group for preparation of Action plan for Viral Hepatitis Prevention and Control 2019–2022, Lithuania.
- member of the Coordination group for the control of national HIV/AIDS and sexually transmitted infections action plan under Lithuanian Ministry of Health;

- member of Independent Experts (advisors, consultants) group for the National Immunoprophylaxis programme for 2019–2023.

Prof. A. Ambrozaitis

- board member of the Lithuanian Society of Infectious Diseases, www.lid.lt;
- country representative and member of the European Society of Clinical Microbiology and Infectious Diseases (ESCMID), www.escmid.org;
- national representative and board member of the Infectious Diseases Section of European Union of Medical Specialists (UEMS), www.uems.net;
- editorial board member of the journals *HIV&AIDS Review: International Journal of HIV-related Problems*, www.journals.elsevier.com/hiv-and-aids-review; *Sveikatos mokslai (Health Sciences)*, www.sam.lt/lt/sam/moksliniai/straipsniai/; *Internistas (Internist)*, www.medpraktika.lt; *Acta medica Lituanica*, www.lmaleidykla.lt;
- member of Independent Experts (advisors, consultants) group for the National Immunoprophylaxis programme for 2019–2023.

Prof. R. Matulionytė

- chair of the Vilnius Society of Infectious Diseases, www.lid.lt;
- board member of the Lithuanian Society of Infectious Diseases, www.lid.lt;
- member of the European Society of Clinical Microbiology and Infectious Diseases (ESCMID), www.escmid.org;
- ESCMID Study Group for Antimicrobial Stewardship (ESGAP). A European consensus: ESCMID generic competencies in antimicrobial prescribing and stewardship. Panel member, country coordinator; www.esgap.escmid.org
- member of the European AIDS Clinical Society, www.eacs.ws;
- member of the HIV Euroguidelines in Central and Eastern Europe (ECEE) Network Group;
- steering committee member for 2017–2022 of the multi-centre prospective observational cohort study group EuroSIDA;
- coordinator in the partnership of Vilnius University Hospital Santaros Klinikos in the EU project 761319 – Joint Action on integrating prevention, testing and link to care strategies across HIV, viral hepatitis, TB and STIs in Europe (INTEGRATE);
- member of the Action plan for HIV/AIDS and STI Prevention and Control 2018–2020, Lithuania;
- member of Independent Experts (advisors, consultants) group for the National Immunoprophylaxis programme for 2019–2023.

Prof. M. Bylaitė-Bučinskienė

- president of the Lithuanian Society of Dermatovenereology, www.ldvd.lt;
- board member of the European Association of Dermato Oncology, www.eado.org;
- board member of the Baltic association of Dermatovenereologists, www.badv.org;
- member of the European Academy of Dermatology and Venereology (EADV), www.eadv.org;
- member of the European Dermatology Forum, www.euroderm.org;
- member of the European Society for Pediatric Dermatology (ESPD), www.espd.info;
- member of the International Society of Dermatology, www.intsocderm.org;
- editorial board of the *Journal of Health Sciences*;
- editorial board of the *Journal of Lithuanian's Obstetrics and Gynecology*;
- editorial board member of the journal *Sveikatos mokslai (Health Sciences)*, www.sam.lt/lt/sam/moksliniai/straipsniai/.

Assoc. Prof. R. Gancevičienė

- board member of the Lithuanian Society of Dermatovenereology, www.ldvd.lt;
- member of the European Academy of Dermatology and Venereology, www.eadv.org;
- member and board member of the local Euromelanoma Committee
- editorial board member of the Journal of Dermato-Endocrinology, Landes Biosciences
Member of the Scientific Technical Committee *Cosmetics* of Lithuanian Department for Standardization.

Assoc. Prof. Dr. J. Grigaitienė

- member of the Lithuanian Society of Dermatovenereology, www.ldvd.lt;
- member of the European Academy of Dermatology and Venereology, www.eadv.org;
- member of Lithuanian society of Allergology and clinical immunology, www.alergologudraugija.lt;
- member of the Lithuanian Society of Lasers:
- national representative and board member of the Dermato-Venerology Section of European Union of Medical Specialists (UEMS), www.uems.net.

Assist. Prof. B. Zablockienė

- board member of the Lithuanian Society of Infectious Diseases, www.lid.lt;
- member of the European Society of Clinical Microbiology and Infectious Diseases, www.escmid.org;
- member of Lithuanian Society of Pulmonologists, <http://www.chest.lt/>
- member of Lithuanian Ultrasound Association, <http://www.ultragarsas.lt>

Teaching assistant I. Kisieliene

- member of the Lithuanian Society of Dermatovenereology, www.ldvd.lt.

Teaching assistant T. Raudonis

- member of the Lithuanian Society of Dermatovenereology, www.ldvd.lt;
- member of the European Academy of Dermatology and Venereology, www.eadv.org.

Teaching Assist. E. Matulytė

- member of the Lithuanian Society of Infectious Diseases, www.lid.lt;
- member of the European Society of Clinical Microbiology and Infectious Diseases, www.escmid.org;
- member of the European AIDS Clinical Society, www.eacs.org;
- specialist in the EU project 761319 (partner – Vilnius University Hospital Santaros Klinikos) – Joint Action on integrating prevention, testing and link to care strategies across HIV, viral hepatitis, TB and STIs in Europe (INTEGRATE);
- national representative Trainee Association the European Society of Clinical Microbiology and Infectious Diseases.

Lect. T. Karmazienė

- member of the Lithuanian Society of Dermatovenereology, www.ldvd.lt;
- member of the European Academy of Dermatology and Venereology, www.eadv.org.

Lect. A. Marcinkutė

- member of the Lithuanian Society of Infectious Diseases, www.lid.lt;
- member of the European Society of Clinical Microbiology and Infectious Diseases, www.escmid.org.

Lect. M. Paulauskas

- member of the Lithuanian Society of Infectious Diseases, www.lid.lt;
- member of the European Society of Clinical Microbiology and Infectious Diseases, www.escmid.org.

Lect. K. Žvirblytė - Skrebutėnienė

- member of the Lithuanian Society of Infectious Diseases, www.lid.lt.

Investigator I. Kubiliūtė

- member of the Lithuanian Society of Infectious Diseases, www.lid.lt;
- member of the European Society of Clinical Microbiology and Infectious Diseases, www.escmid.org;
- member of the European AIDS Clinical Society, www.eacs.org.

Research Assist. S. Grubytė

- member of the Lithuanian Society of Infectious Diseases, www.lid.lt;

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

Ligita Jančorienė State of Art Lecture “**Vaccination as a tool of prevention and control of chronic noncommunicable diseases**”. 2nd Baltic Young Infectologists Conference, Riga, Latvia, 2019 03 23

Ligita Jančorienė “**HIV/HCV coinfection: influence on risk for cancer and cardiovascular events, and impact of successful HCV cure**”, 5th CEE Meeting on Viral Hepatitis and HIV, Vilnius, Lithuania 2019 09 19-20

Ligita Jančorienė “**A modern approach to the diagnosis and treatment of viral hepatitis and HIV infection. Elimination of HCV infection – is it possible?**” scientific-practical conference “Modern blood component transfusion – from donor to recipient”, Vilnius, Lithuania 2019 10 23

THE LIST OF THE MOST IMPORTANT CASES OF PARTICIPATION OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS AND ORGANISATIONS, AND BUSINESS ENTITIES

Arvydas Ambrozaitis, Ligita Jančorienė, Raimonda Matulionytė, from 2015 till now, National Immunoprophylaxis programme 2014–2018 and Programme for 2019–2023, Members of Independent Experts (advisors, consultants) group.

Raimonda Matulionytė during periods 2015–2017 and 2018–2020. Member of Coordinating Board for National Action Plan (AP) on HIV/AIDS and STI Prevention and Control, (SAM įsakymas / Order of Ministry of Health of the Republic of Lithuania Nr./No V-1191, 2015-10-26; Nr. V-451, 2017-04-19).

Raimonda Matulionyte, member of the national Monitoring Network for Drugs and Drug Addiction (NTAKD) under the Lithuanian Drug, Tobacco and Alcohol Control Department, since 2018

Raimonda Matulionytė, member of Experts group under Lithuanian Ministry of Health Expert group on addressing the issues related with the emergence and spread of antimicrobial resistant micro-organisms.

Ligita Jančorienė, Raimonda Matulionytė, members of Expert group under Lithuanian Ministry of Health for the preparation of National guidelines for the rational use of antimicrobials and for the preparation of draft version of guidelines for the selection of the recommended first-line and reserve antimicrobials.

Ligita Jančorienė, Raimonda Matulionytė, members of the working group under Lithuanian Ministry of Health for the revision and update of Lithuanian Medical Norm for Infectious Diseases Specialist

Raimonda Matulionytė, Elžbieta Matulytė, Tadas Raudonis, scientific members of EU project 761319 (partner – Vilnius University Hospital Santaros Klinikos) – Joint Action on integrating prevention, testing and link to care strategies across HIV, viral hepatitis, TB and STIs in Europe (INTEGRATE).

Ligita Jančorienė, Raimonda Matulionytė the members of the Coordination group of the national HIV/AIDS and sexually transmitted infections action plan under Lithuanian Ministry of Health.

Ligita Jančorienė members of the working group under Lithuanian Ministry of Health for the preparation of the national action plan for the prevention and control of viral hepatitis.

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Odos akademija / Skin academy

Egzemos mokykla / School of Eczema

Raimonda Matulionytė, participation in the educative project of public institution “Nacionalinis mokymų centras“: „What Healthcare Workers Should Know about Testing for Human Immunodeficiency Virus?“

Ligita Jančorienė participation in educative project of the Coalition of non-governmental organizations and experts “Integration into HIV treatment - case management in municipalities”.

Ligita Jančorienė participation in educative project of Association Demetra on HIV prevention, diagnosis and treatment for primary care physicians, nurses and laboratory medicine specialists.

Ligita Jančorienė participation in preparation of e-learning course for MD postgraduate education “Vaccination of immunosuppressed patients” internet platform “Evisit”.

Ieva Kubiliūtė interaction with the media and participation in collaboration with the online platform VakcinABC in preparing material on vaccination issues.

Mindaugas Paulauskas, participation in educative project for pharmacy specialists related to antimicrobial stewardship: “Antibiotic related diarrhea. Clostridioides difficile”.

Clinic of Chest Diseases, Immunology and Allergology

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Head – Prof. Dr. (HP) *Edvardas Danila*

STAFF

Professors: Dr. E. Danila (part-time), Dr. L. Malinauskienė (part-time).

Associate professors: Habil.Dr. R.Janilionis (part-time), Dr. A. Blažienė (part-time), Dr. R. Zablockis (part-time), Dr. V. Gruslys (part-time), Dr. A.Chomičienė (part-time).

Assistant professors: Dr. V. Šileikienė (part-time), Dr. Ž. Jagelavičius (part-time).

Lecturers: G. Cincelevičiūtė (part-time), R. Gauronskaitė (part-time), I. Pocienė (part-time), K. Kėvelaitienė (part-time).

Research fellows: Habil. Dr. R. Dubakienė (part-time), Dr. V. Kvedarienė (part-time), Dr. L. Malinauskienė (part-time), J.Račkauskienė (part-time).

Doctoral students: R. Aleksonienė, E. Jurevičienė, R. Stankevičiūtė, K. Linauskienė.

Students' scientific groups:

Pulmonology: scientific leader – prof. E. Danila, coordinator – student V. Sudmantaitė; 18 members of the group.

Allergy and clinic immunology: scientific leader – Dr. V. Kvedarienė, coordinator – student G. Rudzikaitė; 15 members of the group.

Thoracic surgery: scientific leader – assist. prof. Ž. Jagelavičius, coordinator – student R. Vitkauskas; 12 members of the group.

RESEARCH INTERESTS

Evaluation of the efficacy of the diagnostic and treatment methods in obstructive, interstitial, neoplastic and allergic lung diseases: diagnosis and management of interstitial lung diseases

Diagnosis and management of COPD and bronchial asthma; sensitivity to various kinds of disinfectants among the medical staff

Development of new technologies, methods of early cancer detection and treatment interventions

Improvement of the quality of life of cancer patients

Pleural disease, diagnostic procedures, pleural biopsy; diagnosis, epidemiological and clinical research of drug hypersensitivity

Allergen immunotherapy: selection of patients, efficacy of different methods and long term treatment results

Drug hypersensitivity diagnostic peculiarities

Study of interactions between allergic rhinitis and bronchial asthma, application of new technologies in allergic and respiratory diseases

Strategy and approaches of the surgical management of patients with different thoracic pathology

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

1. Diagnosis and treatment of interstitial lung diseases. Prof. E.Danila. 2014-2019

The aim of the study was to evaluate the significance of bronchoalveolar lavage fluid examination in sarcoid patients and patients with rare interstitial disorders (eosinophilic pneumonia, hypersensitivity pneumonitis). Clinical symptoms, cell differentials and distribution of lymphocyte subgroups in BALF, chest X-ray, spirometric indices, blood gases were evaluated.

Main publications:

Akkerman O, Aleksa A, Alffenaar J-W, Danila E, et al. Surveillance of adverse events in the treatment of drug-resistant tuberculosis: A global feasibility study. *Int J Infect Dis* 2019; 83: 72–76.

2. Assessment of pulmonary function of patients with lung diseases. Prof. E.Danila. 2014-2019

Comparison of different methods for evaluation of bronchial obstruction. Evaluation of lung ventilation reserve with different methods of lung ventilation reserve evaluation.

Main publication:

Ragaišienė G, Kibarskytė R, Gauronskaitė R, Giedraitytė M, Dapšauskaitė A, Kasiulevičius V, Danila E. Diagnosing COPD in primary care: what has real life practice got to do with guidelines? *Multidiscip Respir Med* 2019; 14: 28 (1-7).

Valiulis A, Bousquet J, Veryga A, Danila E, Kvedarienė V, et al. Vilnius Declaration on chronic respiratory diseases: multisectoral care pathways embedding guided self-management, mHealth and air pollution in chronic respiratory diseases. *Clin Transl Allergy* 2019; 9: 7 (1–10).

Šileikienė V, Laurinavičienė A, Leščiūtė-Krilavičienė D, Jurgauskienė L, Malickaitė R, Laurinavičius A. Levels of CD4+CD25+ T regulatory cells in bronchial mucosa and peripheral blood of chronic obstructive pulmonary disease indicate involvement of autoimmunity mechanisms. *Adv Respir Med* 2019; 87: 159–166.

3. D-dimer levels in pleural fluid. E.Danila. 2014-2019

Significance of pleural fluid D-dimer concentration is evaluated in patients with pleural effusion. Pleural D-dimer levels are measured and compared with D-dimer concentrations in plasma. Pleural fluid LDH, protein, pH, and glucose levels are assessed as well. The study is in process.

4. Evaluation of pulmonary embolism risk in lung cancer patients. Prof. E.Danila. 2014-2019

The aim of the study was to assess the prevalence and risk factors of pulmonary embolism in advanced lung cancer patients and to evaluate association between the Khorana score and risk of PE development among advanced stage lung cancer inpatients treated with chemotherapy. A retrospective cohort study included 2008-2017 year data of 217 lung cancer inpatients with IIIB and IV clinical stages receiving chemotherapy. The Khorana score was evaluated and patients were divided in two groups: a group of patients with 1 point and a group of patients with 2 or more points of the Khorana score. The study is in process.

Main publications:

Dapkevičiūtė A, Daškevičiūtė A, Zablockis R, Kuzaitė A, Jonušienė G, Diktanas S, Danila E. Association between the Khorana score and pulmonary embolism risk in patients with advanced stage lung cancer. *Clin Respir J* 2019; doi: 10.1111/crj.13092. [Epub ahead of print].

Gedvilaitė V, Danila E, Cicėnas S, Smailytė G. Lung cancer survival in Lithuania: changes by histology, age, and sex from 2003-2007 to 2008-2012. *Cancer Control* 2019; 26: 1–7.

5. Evaluation of hypersensitivity reactions to cytostatic drugs in patients with lung cancer. Prof. E.Danila. 2014-2019

The aim of the study was to evaluate type of adverse reactions to different type of cytostatic drugs in patients with lung cancer.

Main publications:

Vėbrienė R, Malinauskienė L, Blažienė A, Chomičienė A. Premedication for cold induced urticaria in patient undergoing cold cardioplegia. *Allergol Int* 2019; 68: 544–545.

6. Differences between self-reported drug hypersensitivity reactions in Lithuanian adults and children. Prof. E.Danila. 2014-2019

The aim of study was to assess the prevalence of self-reported DHRs in adults and in children and to analyze the risk factors in both groups. Cross-sectional survey of a population was made.

Main publication:

Kvedarienė V, Šitkauskienė B, Tamašauskienė L, Rudzevičienė O, Kasiulevičius V, Nekrošytė G, Gomes ER, Demoly P. Prevalence of self-reported drug hypersensitivity reactions among Lithuanian children and adults. *Allergol Immunopathol (Madr)* 2019; 47: 32–37.

7. Allergen immunotherapy: patients' selection, efficacy of different methods and treatment results. Prof. E.Danila. 2014-2019

The aim of the study was to evaluate the clinical efficacy and adverse reactions in adults with allergic rhinoconjunctivitis with or without asthma. We conclude that treatment with ASIT (allergen-specific immunotherapy) is effective and safe.

8. Metal contact allergy. Prof. E.Danila. 2014-2019

The aim of the study was to detect the most common contact allergens in the metal workers, to detect the depth of the penetration of the metals' (nickel, cobalt and chrome) ions in the skin using pig skin as a human skin model and to evaluate pathophysiological reactions occurring during acute contact reaction to these metals by investigating various inflammatory cytokines. Data was obtained and analyzed from questionnaires of 185 metal workers. Results were presented as a poster in the annual Congress of the European society of Contact dermatitis in Manchester, UK.

Main publication:

Malinauskienė L, Linauskienė K, Černiauskas K, Chomičienė A. Bakuchiol - a new allergen in cosmetics. *Contact Dermatitis* 2019; 80: 398–399.

9. Strategy and tactics of the surgical management of patients with different thoracic pathology. Prof. E.Danila. 2014-2019

New surgical methods using ultrasound intraoperatively and VATS were elaborated for the surgical management of the patients with pleuropulmonary suppurations. The value of videomediastinoscopy and videoassisted thoracoscopic surgery in diagnostics and management of the patients was assessed.

Main publication:

Žulpaitė R, Jagelavičius Ž, Mickys U, Janilionis R. [primary pulmonary meningioma with rhabdoid features](#). *Int J Surg Pathol* 2019; 27: 457–463.

National Research Projects

1. Improvement of tuberculosis prevention, diagnostics, treatment and improvement of practical skills (J02-CPVA-V-04-0002). Prof. E. Danila, Assoc. Prof. R. Zablockis, Assoc. Prof. V. Gruslys. 2018–2021.

The goal of the project is to increase the qualifications of healthcare professionals in improving the epidemiological surveillance, prevention and control of tuberculosis, to improve knowledge of tuberculosis diagnostics, treatment management and to improve practical skills.

International Research Projects

1. **Patch Testing with Propolis of Different Origin in Different Countries** in collaboration with Gothenburg University, Sahlgrenska University Hospital, Department of Dermatology, Gothenburg, Sweden. Assoc. Prof. Dr. Laura Malinauskienė. 2017 -2020

The aim is to compare the frequencies of contact allergy to propolis in the participating countries, and to investigate if there is a difference in frequencies of contact allergy to propolis of different origins. The study is in process.

2. **Presence of Unlabeled Formaldehyde in Cosmetic and Medications** in collaboration with Lund University, Skåne university hospital, Department of occupational and environmental dermatology (Sweden), Assoc. prof. Dr. Laura Malinauskienė. 2016 - 2022

The aim of the study to analyse various topical medicines and cosmetic products for the presence of free formaldehyde especially if it is not labelled. We already analysed around 30 products using chomotropic acid and HPLC. The study is in process.

Main publications:

Linauskienė K, Zimerson E, Malinauskienė L, Isaksson M. Low amount of formaldehyde in topical medication and cosmetics: Is it clinically relevant? *Contact Dermatitis* 2019; 81: 60–61.

3. **Textile Dye Allergy and Allergic Contact Dermatitis** in collaboration with Lund University, Skåne university hospital, Department of occupational and environmental dermatology (Sweden). Assoc. prof. Dr. Laura Malinauskienė. 2012 – 2026

The aim of the study is to detect which dyes used today for textile dyeing can be inducers of the contact allergy and contact allergic dermatitis. Extracts from over 100 textile items are made to test patients already shown to be allergic to the textile dye mix allergen. Another aim is to detect which method of extraction from the textile items is the best retrieving the highest concentration of the dye. Three methods (extraction in ultrasonic bath, in acetone, in ethanol and artificial sweat) has been compared and the samples with HPLC analysed. The study is in process.

4. **Allergic Rhinitis and its Impact on Asthma (ARIA)** in collaboration with the leading French scientists: Prof. Pascal Demoly (Montpellier University, France) and Prof. Jean Bousquet (INSERM 1168, France) and cooperation with 70 science centers worldwide. Dr. Violeta Kvedariene. 2002 – 2025

The aim to provide an active and healthy life to rhinitis sufferers and to those with asthma multimorbidity across the life cycle, whatever their gender or socio-economic status, in order to reduce health and social inequities incurred by the disease and to improve the digital transformation of health and care. The ultimate goal is to change the management strategy in chronic diseases. The study is in process.

Main publications:

Bousquet J, Hellings PW, Agache I, ... Kvedariene V, Zuberbier T; Mobile Airways Sentinel Network (MASK) Study Group. Allergic Rhinitis and its Impact on Asthma (ARIA) Phase 4 (2018): Change management in allergic rhinitis and asthma multimorbidity using mobile technology. *J Allergy Clin Immunol*. 2019; 864–879.

Bousquet J, Pfaar O, Togias A, Kvedariene V, ... Zuberbier T; ARIA Working Group. 2019 ARIA Care pathways for allergen immunotherapy. *Allergy* 2019; doi: 10.1111/all.13805

Bousquet J, Ansotegui IJ, Anto ...Kvedariene V, . A, Zuberbier T. Mobile Technology in Allergic Rhinitis: Evolution in Management or Revolution in Health and Care? *J Allergy Clin Immunol Pract* 2019; 7: 2511–2523.

Bousquet J, Pfaar O, Togias A, ...Kvedariene V, ... A, Zuberbier T; ARIA Working Group. 2019 ARIA Care pathways for allergen immunotherapy. *Allergy* 2019; 74: 2087–2102.

5. Integrated care pathways for airway diseases (AIRWAYS-ICPs). Dr. Violeta Kvedariene. 2014 - 2025

AIRWAYS ICPs was initiated 2014. In collaboration with the leading French scientists: Prof. Pascal Demoly (Montpellier University, France) and Prof. Jean Bousquet (INSERM 1168, France) and 23 collaborating centers.

The objective was to launch a collaboration to develop multi-sectoral care pathways (ICPs) for chronic respiratory diseases in European countries and beyond as a Global Alliance Against Respiratory Diseases (GARD) demonstration project. The study is in process.

Main publications:

Bosnic-Anticevich S, Costa E, Menditto E, ... Kvedariene V, ... Bousquet J. ARIA pharmacy 2018 "Allergic rhinitis care pathways for community pharmacy": AIRWAYS ICPs initiative (European Innovation Partnership on Active and Healthy Ageing, DG CONNECT and DG Santé) POLLAR (Impact of Air POLLution on Asthma and Rhinitis) GARD Demonstration project. *Allergy* 2019: 1219–1236.

6. European Innovation Partnership on Active and Healthy Ageing (EIP on AHA) in collaboration with the leading French scientists: Prof. Pascal Demoly (Montpellier University, France) and Prof. Jean Bousquet (INSERM 1168, France) and 74 collaborating centers. Dr. Violeta Kvedariene. 2014 – 2025

The overarching goals of the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA) are to enable European citizens to lead healthy, active and independent lives whilst ageing. The EIP on AHA includes 74 Reference Sites. The aim of this study was to transfer innovation from an app developed by the MACVIA-France EIP on AHA reference site (Allergy Diary) to other reference sites. The phenotypic characteristics of rhinitis and asthma multimorbidity in adults and the elderly will be compared using validated information and communication technology (ICT) tools (i.e. the Allergy Diary and CARAT: Control of Allergic Rhinitis and Asthma Test) in 22 Reference Sites or regions across Europe. This will improve the understanding, assessment of burden, diagnosis and management of rhinitis in the elderly by comparison with an adult population. The study is in process.

7. Study of interactions between allergic rhinitis and bronchial asthma, application of new technologies in the program (MASK-air/MASK: MACVIA-ARIA Sentinel Network) in collaboration with the leading French scientists: Prof. Pascal Demoly (Montpellier University, France) and Prof. Jean Bousquet (INSERM 1168, France) and cooperation – 23 science centers worldwide. Dr. Violeta Kvedariene. 2014 – 2025

The aim of the projects is to improve the diagnosis of allergic diseases, to increase life expectancy in the case of quality healthy aging. An e-medical application (MACVIA-LR) adapted for societal use was developed in order to help patients and enable medical information collection, to improve the quality of life and develop new treatment algorithms. The study is in process.

Main publications:

Menditto E, Costa E, Midão L. Kvedariene V, Bousquet J; MASK group. Adherence to treatment in allergic rhinitis using mobile technology. The MASK Study. *Clin Exp Allergy* 2019: 442–460.

Bédard A, Basagaña X, Anto JM, Kvedariene V, Bousquet J; MASK study group. Mobile technology offers novel insights into the control and treatment of allergic rhinitis: The MASK study. *J Allergy Clin Immunol* 2019: 135–143.

- 8. TWINNING (Transfer of Innovation) research project.** Since 2014 in collaboration with the leading French Prof. Jean Bousquet (INSERM 1168, France) and cooperation – 23 science centers worldwide. Dr. Violeta Kvedarienė. 2014- 2025

The aim of this study was to transfer innovation from an app developed by the MACVIA-France EIP on AHA reference site (Allergy Diary) to other reference sites. Specific objectives will be: (i) to assess the percentage of adults and elderly who are able to use the Allergy Diary, (ii) to study the phenotypic characteristics and treatment over a 1-year period of rhinitis and asthma multimorbidity at baseline (cross-sectional study) and (iii) to follow-up using visual analogue scale (VAS). This part of the study may provide some insight into the differences between the elderly and adults in terms of response to treatment and practice. Finally (iv) work productivity will be examined in adults. The study is in process.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INNOVATION) PARTNERS

Skåne university hospital, Sweden

Lund University, Department of occupational and environmental dermatology, Sweden Gothenburg University Sahlgrenska University Hospital, Department of Dermatology, Gothenburg, Sweden

Prof. Pascal Demoly (Montpellier University, France) and Prof. Jean Bousquet (INSERM 1168, France), prof. Annick barbaud ([Hopital universitaire Est Parisien site Tenon](#), Paris, France).

OTHER SCIENTIFIC ACTIVITIES

Prof. E. Danila

- member of European Respiratory Society (ERS); <http://www.ersnet.org/>;
- member of Lithuanian Society of Pulmonologists; <http://www.chest.lt/>;
- editorial board member of the journal *Vaikų pulmonologija ir alergologija (Children's Pulmonology and Allergology)*.

Prof. R. Dubakienė

- member of the Lithuanian Academy of Sciences;
- chairman of Allergology Commission of Lithuanian Academy of Sciences;
- expert of the Research Council of Lithuania;
- expert of MITA;
- editor-in-chief of the journal *Alergologija ir klinikinė imunologija (Allergology and Clinical Immunology)*;
- editor-in-chief of the on-line journal *Alergologija ir klinikinė imunologija (Allergology and Clinical Immunology)*;
- editorial board member of the journals: *Acta Medica Lithuania*, <http://www.lmaleidykla.lt/ojs/index.php/actamedicalituanica>; *Revue of Allergology and Clinical Immunology*; *Medicinos teorija ir praktika (Theory and Practice in Medicine)*;
- member of the Lithuanian Immunology Society;
- member of the European Academy of Allergy and Clinical Immunology;
- head of online websites: www.alergo.lt, www.rutadubakiene.com.

Prof. L. Malinauskienė

- member of the European Academy of Allergy and Clinical Immunology;
- member of the Lithuanian society of Allergology and clinical immunology;
- president of the Vilnius Regional Society of Allergologists and Clinical immunologists;
- national representative of the International Hereditary Angioedema organization;

- editorial board member of the journal *Alergija, astma, imunologija (Allergy Asthma Immunology)*.

Assoc. Prof. A. Blažienė

- editorial board member of the journal *Medicinos teorija ir praktika (Theory and Practice in Medicine)*, <http://www.mtp.lt/>;
- editor-in-chief of the journal *Alergija, astma, imunologija (Allergy Asthma Immunology)*;
- member of the European Respiratory Society (ERS), <http://www.ersnet.org/>;
- member of the European Academy of Allergy and Clinical Immunology, <http://www.eaaci.org/>;
- member of the American Academy of Allergy, Asthma and Immunology, <http://www.aaaai.org/home.aspx>;
- member of American College of Allergy, Asthma and Immunology, <http://www.acaai.org/Pages/default.aspx>;
- member of European Society of Immunodeficiency, <http://www.esid.org/>;
- member of Lithuanian Society of Immunology, www.imcentras.lt/lid/;
- member of Lithuanian Society of Pulmonologists, <http://www.chest.lt/>.

Assoc. Prof. R. Zablockis

- chairman of Lithuanian Society of Pulmonologists, <http://www.chest.lt/>;
- member of European Respiratory Society (ERS), <http://www.ersnet.org/>;
- editor-in-chief of the journal *Pulmonology News*, <http://www.chest.lt/>;
- editorial board member of the journal *Pulmonology and Allergology*, <http://www.pulmoalerg.lt/>.

Assoc. Prof. Habil. Dr. R. Janilionis

- board member of the Lithuanian Society of Cardiothoracic Surgery, www.lkscd.lt/;
- board member of Vilnius Surgical Society;
- member of European Respiratory Society (ERS), www.ersnet.org;
- member of the European Association for Cardio-Thoracic Surgery, www.eacts.org;
- editorial board member of the journal *Medicina*, www.medicina.kmu.lt;
- editorial board member of the journal *Lithuanian Surgery*, <http://www.chirurgija.lt0>.

Assoc. Prof. V. Gruslys

- member of Lithuanian Society of Thoracic and Cardiac Surgeons, www.lkscd.lt;
- member of European Respiratory Society (ERS), www.ersnet.org;
- board member of Lithuanian Society of Minimal Invasive Surgery, http://www.mic.lt;
- member of Lithuanian Respiratory Society, http://www.chest.lt.

Assoc. Prof. A. Chomičienė

- member of the European Academy of Allergy and Clinical Immunology, <http://www.eaaci.org/>;
- member of Lithuanian society of Allergology and clinical immunology, <http://www.aai.mf.vu.lt/alerimun/draugija.htm>;
- editorial board member of the journal *Alergija, astma, imunologija (Allergy Asthma Immunology)*;
- member of Vilnius Regional Society of Allergists and Clinical Immunologists <http://vaki.lt>.

Senior researcher V. Kvedarienė

- editorial board member of the journal *Pulmonologija, imunologija ir alergologija (Pulmonology, Immunology and Allergology)*;

- vice-chairman of reviewer board of the journal *Vaikų pulmonologija ir alergologija (Children's Pulmonology and Allergology)*;
- chairman of Lithuanian allergy and asthma association
- member of Allergology Commission of Lithuanian Academy of Sciences;
- member of the European Academy of Allergy and Clinical Immunology;
- member of UCB Institute of Allergy, <http://www.theucbinstituteofallergy.com/Home>;
- member of Lithuanian Society of Allergology and Clinical Immunology;
- member of Allergic Rhinitis and its Impact on Asthma (ARIA);
- member of European Network on Drug Allergy (ENDA);
- member of Integrated Care Pathways for Airways Diseases (AIRWAYS-ICPs);
- medical advisor of Lithuania Asthma Patient Association.

Assist. Prof. V. Šileikienė, Lect. Teaching Assist. J. Račkauskienė, Lect. I. Pocienė, Lect. G. Cincilevičiūtė, Lect. R. Aleksonienė, Lect. E. Jurevičienė

- members of European Respiratory Society (ERS), <http://www.ersnet.org/>;
- members of Lithuanian Society of Pulmonologists, <http://www.chest.lt/>.

Assist. Prof. Ž. Jagelavičius

- member of Lithuanian Society of Thoracic and Cardiac Surgeons, www.lkscd.lt;
- member of European Society of Thoracic Surgeons (ESTS), www.ests.org;
- member of European Respiratory Society (ERS), www.ersnet.org.

Lect. K. Kėvelaitienė

- member of European Respiratory Society (ERS);
- member of Lithuanian Society of Pulmonologists.

Lect. R. Gauronskaitė

- member of European Respiratory Society (ERS), <http://www.ersnet.org/>;
- member of Lithuanian Society of Pulmonologists, <http://www.chest.lt/>;
- member of World Sleep Society, <http://worldsleepsociety.org/>.

Lect. K. Linauskienė

- member of Lithuanian society of Allergology and Clinical Immunology (LAKID);
- member of the European Academy of Allergy and Clinical Immunology (EAACI);
- member of European Society for Immunodeficiencies (ESID);
- ESID junior country representative.

Doctoral stud. R. Stankevičiūtė

- member of the European Academy of Allergy and Clinical Immunology;
- member of Lithuanian Society of Allergology and Clinical Immunology.

MOST IMPORTANT CASES OF PARTICIPATION OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS AND ORGANISATIONS, AND BUSINESS ENTITIES

Rūta Dubakienė – prepared *Lithuanian names of food allergens* for the Bank of Terms of the Lithuanian State Commission.

Edvardas Danila – participation in the Lithuanian State Ministry of Health Tuberculosis Task Force.

Laura Malinauskienė – participation in the working group for revising allergology and clinical immunology speciality medical standart.

CONSULTATIONS PROVIDED BY THE UNIT TO THE PUBLIC OR ECONOMIC ENTITIES

Edvardas Danila – regular consultations for Lithuanian State Ministry of Health.

Edvardas Danila – advisory board for several pharmaceutical companies.

Rolandas Zablockis - regular consultations for Lithuanian State Ministry of Health.

Rolandas Zablockis – advisory board for several pharmaceutical companies.

Laura Malinauskienė – advisory board for several pharmaceutical companies.

Virginija Šileikienė - advisory board for several pharmaceutical companies.

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Edvardas Danila – seminar for students of Vilnius gymnasiums about lung diseases in Vilnius University.

Anželika Chomičienė conducted a seminar for 3rd Age Polish University in Vilnius about allergic diseases.

Violeta Kvedarienė as chairman of Lithuanian allergy and asthma association (LAAA) – twice a year conducted seminars for allergic patients, she is also Head of „Allergy school“ for asthma and COPD patients.

Organizer of Educational Activities Created by LAAA: World Allergy Day events take place on the 8th of July each year.

V.Kvedarienė participated in radio and TV interviews with journalists and published articles in the allergy-related periodicals.

Kvedarienė Violeta was Chairman of the Organizing Committee of Scientific-Practical Conferences organized by the Lithuanian Allergy and Asthma Association (LAAA) and the Lithuanian Academy of International Scientific-Practical Conference Allergies or Adverse Reactions: Peculiarities of Diagnosis and Treatment, 2019.10.24-25, Vilnius.

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Head – Prof. Dr. *Dalius Jatuzis*

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Head – Prof. Dr. *Gintaras Kaubrys*

Centre of Neurosurgery

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Head – Prof. Dr. *Saulius Ročka*

STAFF

Professors: Dr. G. Kaubrys, Dr. R. Mameniškienė, Dr. S. Ročka.

Associate professors: Dr. R. Kizlaitienė, Dr. J. Valaikienė, Dr. K. Ryliškienė, Dr. A. Vilionskis

Assistant Professor: E. Audronytė, Dr. N. Giedraitienė, A. Jasionis, Dr. R. Kaladytė Lokominienė, Dr. A. Klimašauskienė, R. Masiliūnas, Dr. A. Vaitkevičius, Dr. R. Kvaščevičius, A. Ekkert

Lecturers: Dr. G. Terbetas, Dr. K. Laurikėnas.

Research Assistants: Ž. Chomanskis, A. Preikšaitis.

Doctoral students: E. Audronytė, A. Jasionis, M. Kurminas, J. Kuzmickienė, R. Masiliūnas, E. Sakalauskaitė-Juodeikienė, D. Valadkevičienė, A. Ekkert, Ž. Chomanskis, V. Sutnikienė

Students' scientific groups of:

Neurology: scientific leader – Dr. K. Ryliškienė, coordinator – student M. Jokubaitis; 40 members of the group.

Neurosurgery: scientific leader – Dr. G. Terbetas, coordinator – L. Šalaševičius; 32 members of the group.

RESEARCH INTERESTS

Cognitive disorders in neurodegenerative, cerebrovascular, demyelinating diseases and epilepsy
Diagnostic evaluation and treatment of cerebrovascular disorders, headache, dizziness, traumatic brain injuries degenerative spinal diseases and cerebral neoplasms
Historical research: nervous system diseases in the first half of the nineteenth-century Vilnius

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

1. Nervous System Diseases in the First Half of the Nineteenth-century Vilnius. Prof. D. Jatužis and E. Sakalauskaitė-Juodeikienė. 2015–2019.

The aim of this study was to reveal the origins of neurology in the first half of the 19th century in Vilnius: to show how the basic medical systems influenced the perception of nervous system diseases and treatment options, to evaluate the perception of aetiology, pathogenesis, symptoms, prophylaxis and treatment methods of nervous system diseases, to discover the origins of neurosurgery, to reveal the principles of the human cognition research.

Main publication:

Sakalauskaitė-Juodeikienė E, Eling P, Finger S. Ludwig Heinrich Bojanus (1776-1827) on Gall's craniognomic system, zoology, and comparative anatomy. *J Hist Neurosci* 2019; 11: 1-19. doi: 10.1080/0964704X.2019.

2. Diagnostic evaluation and treatment of cerebrovascular disorders, headache, dizziness, traumatic brain injuries degenerative spinal diseases and cerebral neoplasms. Prof. D.Jatužis. 2014-2019

Clinical research focussed on epidemiological findings, clinical characteristics, diagnostics, treatment and prognostic factors of different neurological and neurosurgical disorders (stroke, migraine, dizziness and vertigo, multiple sclerosis, Parkinson's disease, epilepsy, traumatic brain injury, cerebral neoplasms) has been continued. New methods of endovascular treatment of cerebrovascular disorders, innovative monitoring devices for traumatic brain injury, new modalities in minimally invasive degenerative spinal diseases management were investigated. Invasive neurostimulatory therapies methods for certain neurological diseases has been started.

Main publications:

Valadkeviciene D, Kavaliunas A, Kizlaitiene R, Jocys M, Jatužis D. Incidence rate and sex ratio in multiple sclerosis in Lithuania. *Brain Behav* 2019; 9(1): e01150. doi:10.1002/brb3.1150.

Ulytė A, Valančius D, Masiliūnas R, Paškoniene A, Lesinskas E, Kaski D, Jatužis D, Ryliškiene K. Diagnosis and treatment choices of suspected benign paroxysmal positional vertigo: current approach of general practitioners, neurologists, and ENT physicians. *Eur Arch Otorhinolaryngol* 2019; 276(4): 985-991. doi: 10.1007/s00405-019-05313-y.

Puteikis K, Medžiaušaitė I, Mameniškienė R. Valproate utilisation trends among girls and women from 2013 to 2018. *Seizure* 2019; 70: 77-81. doi: 10.1016/j.seizure.2019.07.001.

3. Cognitive disorders in neurodegenerative, cerebrovascular, demyelinating diseases and epilepsy. Prof. G.Kaubrys. 2014-2019

Research in the field of Alzheimer's disease has been continued to evaluate the potential of computerized cognitive tests to predict early response to treatment, the search for new markers of very early Alzheimer's disease was continued in the study of cognitive, olfactory and visuo-perceptive functions. In the field of multiple sclerosis, the cognitive features of relapse and their dynamics were investigated, neurofilament light chain and optical coherence tomography have been studied as differential markers for various clinical forms of multiple sclerosis. Investigation of cognitive, clinical and ultrasound features in carotid and vertebrobasilar circulation stroke has been started.

Main publications:

Giedraitienė N, Kaubrys G. Distinctive pattern of cognitive disorders during multiple sclerosis relapse and recovery based on computerized CANTAB tests. *Front Neurol* 2019; 10: 572. doi: 10.3389/fneur.2019.00572.

National Research Projects

- 1. Research on Synthesis Regulation of Proteins, Associated with the Development of Alzheimer's Disease** in cooperation with the Vilnius University Institute of Biotechnology. National Science Program *Healthy Ageing*. Project No: SEN-05/2015. Principal Investigator at Vilnius University IBT (VU Life Sciences Center) - Prof. K. Sasnauskas, Principal Investigator at VUH SK - Prof. G. Kaubrys. 2016-2019.

In 2019, research and data analysis were continued. The goal of the project is to create an immunochemical ELISA-based method, which could allow testing of all potential polypeptides, encoded by the small open reading frames of the genes related to Alzheimer's disease. These new methods may help to determine the role of synthesized small polypeptides in the fundamental changes of the protein synthesis in ageing and Alzheimer's disease. The results of the project may provide new knowledge about the AD-related regulation of protein synthesis and new opportunities for the prevention and early diagnosis of Alzheimer's disease.

- 2. Clinical research Impact of Modified Lindy-Hop Dance Therapy on Motor Condition and Quality of Life in Early Parkinson's Disease** in collaboration with Vilnius Gediminas Technical University. Assist. R. Kaladytė Lokominienė. 2015–2019.

In 2019, further analysis of data was performed. Quantitative assessment of dance therapy influence on upper limb biomechanics and gait for patients with Parkinson's disease was continued.

- 3. Clinical research Ataxia and Gait Impairment in Multiple Sclerosis Patients** in collaboration with Vilnius Gediminas Technical University. Assoc. prof. R. Kizlaitienė. 2015-2019.

In 2019, data was collected and analysed. Objective quantitative parameters for more accurate evaluation of coordination in patients with multiple sclerosis were searched by instrumented biomechanical analysis of upper extremity movements.

Presentations at the international conferences:

Ovčínikova, Agnė; Kizlaitienė, Rasa; Kaubrys, Gintaras Ferdinandas; Pakulaitė-Kazlienė, Gytė; Žižienė, Jurgita; Griškevičius, Julius; Daunoravičienė, Kristina. Ataxia: from subjective to objective evaluation // *Acta medica Lituanica*. Vilnius : Lietuvos mokslų akademijos leidykla. ISSN 1392-0138. eISSN 2029-4174. 2018, vol. 25, suppl. 1, p. 38.

Daunoravičienė, Kristina; Žižienė, Jurgita; Griškevičius, Julius; Pauk, Jolanta; Ovčínikova, Agnė; Kizlaitienė, Rasa; Kaubrys, Gintaras Ferdinandas. Quantitative assessment of upper extremities motor function in multiple sclerosis // *Technology and health care*. Amsterdam : IOS Press. ISSN 0928-7329. eISSN 1878-7401. 2018, vol. 26, iss. S2, p. 647-653. DOI: [10.3233/THC-182511](https://doi.org/10.3233/THC-182511).

International Research Projects

- 1. Collaborative European NeuroTrauma Effectiveness research in TBI: a prospective longitudinal observational study (CENTER-TBI)**, funded by 7BP; www.center-tbi.eu. Participants: Prof. S. Ročka, A. Preikšaitis. 2015-2019

The aim of the project is to collect high quality clinical, epidemiological, radiological and genetic database of traumatic brain injured patients. CENTER-TBI aims to advance the care for apatients with traumatic brain injury by better characterization trauma as a disease and indentifying the most effective clinical interventions for managing TBI.

Main publication:

Steyerberg EW, Wiegers E, Sewalt C, Buki A, Citerio G, De Keyser V, Ercole A, Kunzmann K, Lanyon L, Lecky F, Lingsma H, Manley G, Nelson D, Peul W, Stocchetti N, von Steinbüchel N, Vande Vyvere T, Verheyden J, Wilson L, Maas AIR, Menon DK; CENTER-TBI Participants and Investigators [S.Rocka]. Case-mix, care pathways, and outcomes in patients with traumatic brain

injury in CENTER-TBI: a European prospective, multicentre, longitudinal, cohort study. *Lancet Neurol* 2019; 18(10): 923-934. DOI: 10.1016/S1474-4422(19)30232-7.

- 2. Safe Implementation of Treatment of Stroke (SITS) - EAST Project.** Participants: Assoc. Prof. A. Vilionskis, Prof. D. Jatužis, R. Masiliūnas. 2009-ongoing

Collaborative project with other stroke centers from Eastern and Central Europe: prospective international database of all acute stroke patients treated with reperfusion treatment.

The aim of project to collect demographic, clinical, radiological, treatment details of all acute ischemic stroke patients, treated with reperfusion treatment as 3 months follow up as well.

Presentation at the international conference:

Keselman B, Gdovinova Z, Jatužis D, Pinho T, Melo E, Vilionskis A, et al. Safety and outcomes of iv thrombolysis in posterior versus anterior circulation acute ischemic stroke. Results from the SITS international stroke thrombolysis register (SITS-ISTR) and meta-analysis // *European stroke journal* 2019; 44(1), suppl.: ESOC Abstracts, abstract no. AS05-018, p. 110. DOI: [10.1177/2396987319845578](https://doi.org/10.1177/2396987319845578).

- 3. Current Status of Epilepsy Health Care for Adult Patients from Central and Eastern European Union Countries.** Prof. R. Mameniskiene. 2015-2019.

The aim of this survey was to review and compare the current approaches to epilepsy management in central and eastern EU countries. Experts from Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia participated in the project, focused on the epilepsy treatment of adults. We concluded that the lack of unified procedures pertaining to the evaluation and therapy of epilepsy is reflected by marked differences in access to treatment modalities for patients from CEEU countries.

- 4. Implementation Research Network in Stroke Care Quality – IRENE COST ACTION.** Participants: Assoc. prof. A. Vilionskis, R. Masiliūnas, Prof. D. Jatužis. 2018 – 2023.

Collaborative project with other stroke centers from Eastern, North and Central Europe: prospective international database of all acute stroke patients. The aim of project to improve stroke care across Europe, including acute stroke treatment and stroke prevention; to establish the quality registry that will provide a cohesive picture of the implementation of stroke treatments; to disseminate of results to the main stakeholders.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INNOVATION) PARTNERS

Kaunas University of Technology (Lithuania)

National Cancer Institute (Lithuania)

Vilnius Gediminas Technical University (Lithuania)

OTHER SCIENTIFIC ACTIVITIES

Prof. D. Jatužis

- president of Lithuanian Stroke Association and Lithuanian Neurological Association;
- executive editor of the journal *Neurologijos seminarai (Seminars in Neurology)*;
- fellow member of European Stroke Organization (FESO);
- national representative and member of Subspecialty Scientific Panel *Stroke* of the European Academy of Neurology (EAN);
- National educational co-ordinator and member of the World Federation of Neurology;

- leading investigator in TWIST acute stroke trial.

Prof. S. Ročka –

- president of Lithuanian Neurosurgical Society;
- member of Lithuanian Society for Epileptology;
- member of European Association of Neurosurgical Societies;
- member of World Federation of Neurosurgical Societies;
- member of Lithuanian Neuroscience Association.

Prof. G. Kaubrys

- member of the Council of the Lithuanian Neurological Association.
- member of Subspecialty Scientific Panel *Dementia and Cognitive Disorders* of the European Academy of Neurology (EAN);
- voting member of the Association for the Scientific Study of Consciousness (ASSC);
- editorial board member of the journal *Neurologijos seminarai* (Seminars in neurology);
- member of the World Federation of Neurology.

Prof. R. Mameniškienė

- president of Lithuanian Society for Epileptology;
- member of Subspecialty Scientific Panels *Epilepsy* and *Neurooncology* of the European Academy of Neurology (EAN);
- member of the Council of the Lithuanian Neurological Association;
- cover art editor of the journal *Seizure - European Journal of Epilepsy*;
- editor-in-chief of the journals *Neurologijos seminarai* (Seminars in neurology) and *Nervų ir psichikos ligos*;
- national coordinator in European Register of Antiepileptic Drugs and Pregnancy (EURAP) and in the international registry of the treatment of refractory status epilepticus;
- member of the Lithuanian Stroke Association;
- member of the World Federation of Neurology.

Assoc. Prof. J. Valaikienė

- editorial board member of the journal *Neurologijos seminarai* (Seminars in neurology);
- member of the Council of the Lithuanian Society of Clinical Neurophysiology and Neurosonology;
- member of Subspecialty Scientific Panels *Neurosonology* and *Infectious Diseases* of the European Academy of Neurology (EAN);
- member of the Lithuanian Neurological Association and Lithuanian Stroke Association;
- member of the World Federation of Neurology.

Assoc. Prof. R. Kizlaitienė

- member of the Council of the Lithuanian Neurological Association;
- member of Subspecialty Scientific Panel *Multiple Sclerosis and Demyelinated Diseases* of the European Academy of Neurology (EAN);
- member of the Lithuanian Stroke Association;
- head of the Medical Advisory Board of Lithuanian Multiple Sclerosis Association.

Assoc. Prof. K. Ryliškienė

- member of Subspecialty Scientific Panels *Headache* and *Neuro-ophthalmology and Neuro-otology* of the European Academy of Neurology (EAN);
- member of European Board of Neurology in European Union of Medical Specialists;

- Head of Neurology Panel of Students' Research Network of Vilnius University Faculty of Medicine.

Assoc. Prof. A. Vilionskis –

- member of Council of Lithuanian Stroke Association;
- fellow member of European Stroke Organization;
- member of management committee IRENE COST ACTION;
- member of Lithuanian Neurological Association;
- member of World Stroke Organization;
- member of World Federation of Neurology.

Assist. R. Kvaščevičius –

- member of Lithuanian Neurosurgical Society;
- member of Baltic Neurosurgical Association;
- member of European Association of Neurosurgical Societies;
- member of World Federation of Neurosurgical Societies;
- member of Lithuanian Society of Vertebrology.

Lect. K. Laurikėnas –editorial board member of the journal *Chirurgija (Surgery)*;

- member of the Lithuanian Society of Vascular Surgery.

Lect. G. Terbetas –member of Lithuanian Neurosurgical Society;

- member of Lithuanian Society of Vertebrology;
- AOSpine member.

Assist. R. Kaladytė-Lokominienė

- member of the Council of Lithuanian Neurological Association;
- member of Subspecialty Scientific Panel *Movement Disorders* of the European Academy of Neurology (EAN);
- member of International Parkinson's Disease and Movement Disorders Society;
- member of Cochrane Collaboration Neurological Network;
- coordinator of Huntington's Disease Coordination Centre.

Assist. R. Masiliūnas

- executive board member of the Nordic Stroke Society;
- member of Subspecialty Scientific Panel *Stroke* of the European Academy of Neurology (EAN).

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

D.Valadkevičienė, R. Kizlaitienė, D. Jatužis. Relationship between the working capacity level and the results of the brief ICF core set for multiple sclerosis. XXIV World Congress of Neurology, 27-31 October 2019, Dubai, United Arab Emirates.

D. Jatužis. Treatment of asymptomatic carotid artery disease. 20th Nordic Stroke Congress, August 21-23, 2019, Tromsø, Norway.

D. Jatužis. Acute and prophylactic treatment of migraine: practical approaches. V International Conference on Multidisciplinary pain management: new approaches. September 28-29, 2019, Tbilisi, Georgia.

A. Vilionskis. Reperfusion therapy in acute stroke patients with posterior circulation stroke. Scientific practical conference "Comprehensive stroke center. Reality in clinical practice of acute ischaemic stroke care". 23th March, 2019, Odessa, Ukraine.

D. Jatužis. Professor Valmantas Budrys (1958 – 2015) and promotion of the history of neuroscience in Lithuania. 24th meeting of the International Society for the History of the Neurosciences, 8-11 July, 2019, Vilnius, Lithuania.

MOST IMPORTANT PARTICIPATION CASES OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS AND ORGANISATIONS, AND BUSINESS ENTITIES

Participation in working groups and committees set by Lithuanian Health Ministry:

- Stroke Integrated Healthcare Management Committee (prof. Dalius Jatužis; dr. Aleksandras Vilionskis)
- Working Group on Neurology Medicine Norm Update (prof. Dalius Jatužis; prof. Rūta Mameniškienė, dr. Aušra Klimašauskienė)
- Working Group on Epilepsy treatment (prof. Rūta Mameniškienė)
- Working Group on Multiple sclerosis treatment (assoc. prof. Rasa Kizlaitienė)

CONSULTATIONS PROVIDED BY THE UNIT TO THE PUBLIC OR ECONOMIC ENTITIES

Dalius Jatužis:

- expert of projects in Lithuanian Business Support Agency;
- expertise for State Health Care Accreditation Agency under the Ministry of Health;

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Scientific popularization of TV, radio and Internet broadcasts (prof. Dalius Jatužis; prof. Rūta Mameniškienė, assoc. prof. Kristina Ryliškienė, assoc. prof. Aleksandras Vilionskis, asist. Rytis Masiliūnas).

Epilepsy, Parkinson's disease, Multiple Sclerosis, Stroke, Migraine, Alzheimer's Day Informative Events for the Public.

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Head – Prof. Dr. *Sigita Lesinskiene*

STAFF

Professors: Dr. S. Lesinskiene, Dr. D. Pūras, Dr. A. Germanavičius (part-time).

Associate professors: Dr. A. Šiurkutė, Dr. A. Navickas, Dr. R. Viliūnienė, Dr. B. Diomšina (part-time).

Assistants Professor: Dr. G. Bulotienė, Dr. A. Deksnytė, Dr. E. Dlugauskas (part-time).

Lecturers (part-time): Dr. A. Dervinytė-Bongarzoni, Dr. E. Laurinaitis, V. Rutkauskas, R. Balčiūnas, V. Andrejauskienė, M. Misevičė, L. Bukelskis, I. Treigienė, A. Šapranauskienė, R. Samušytė, M. Karnickas, D. Natkevičienė, J. Ulevičienė, S. Ašvydienė, E. Paužienė, E. Petkutė, J. Stanikūnė, V. Mickutė, B. Flemming, L. Andrikienė, R. Židonienė, L. Andrikienė, A. Nemanienė, Z. Sadūnaitė, S. Triškuvienė, R. Milašiūnas, I. Udrienė, A. Kurienė, T. Grigonis, I. Markūnė, K. Markūnienė, D. Verseckienė.

Doctoral students: M. Misevičė, V. Andrejauskienė.

Students' scientific groups of:

Child and adolescent psychiatry: scientific leader – Prof. S. Lesinskiene, coordinator – student G. Stonkutė; 9 members of the group.

Psychiatry: scientific leader – Assoc. Prof. A. Navickas, coordinator – student A. Valentukevičiūtė; 79 members of the group.

Psychotherapy: scientific leader – Assoc. Prof. R. Viliūnienė, coordinator – student J. Songailaitė; 70 members of the group.

RESEARCH INTERESTS

Evaluation of functioning and quality of life of patients with psychiatric disorders

Analysis of outcome variables of the treatment of developmental, neurotic, affective and psychotic in children and adults. Transition processes in young people, medical students.

Different approaches on psychosocial rehabilitation and assertive outreach for comprehensive integrated community care for people with mental disorders in the community settings

Evaluation of services for people with mental illness and their families.

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

- 1. Mental, behavioural, developmental and dependency disorders: clinical features, possibilities of prevention and treatment during the life span.** Asist. dr. E. Dlugauskas. 2019-2023

The importance of patient pharmacogenetics in the choice of individualized treatment has been investigated and scientific articles published. The influence of mental illness on cognitive functions and the association of somatic diseases with mental disorders were investigated.

Main publications:

Dlugauskas E., Strumila R., Lengvenytė A., Ambrozaitytė L., Dagtė E., Molytė A., Navickas A., Utkus A. Analysis of Lithuanian CYP2D6 polymorphism and relevance to psychiatric care of the local population//Nordic journal of psychiatry. Abingdon : Taylor&Francis Ltd. IssN 0803-9488. eISSN 1502-4725. 2019, vol.73, iss.1, p. 31-35.

Pūras D., Gooding P. Mental health and human rights in the 21st century//World psychiatry. Hoboken: Wiley. ISSN 1723-8617.eISSN 2051-5545. 2019, vol.18, iss. 1, p. 42-43.

Sashidharan S.P.; Mezzina R.; Pūras D. Reducing coercion in mental healthcare// Epidemiology and psychiatric sciences. Cambridge: Cambridge University Press. ISSN 2045-7960. eISSN 2045-7979. 2019, vol. 28, iss. 6, p. 605-612.

2. Analysis of self harmful and suicidal behavior and of effective current treatments..

Assoc. Prof. A. Navickas. 2019-2023

The project focused on research on: cardiology and suicidal behavior; oncological diseases and suicidal behavior; clarifying the causes of homeless death; schizophrenia clinic analysis; research on addictions and suicidal and violent behavior; for analysis of dermatological diseases and emotional disorders.

Main publications:

Fountoulakis KN, Dragioti E, Theofilidis AT, Wiklund T, Atmatzidis X, Nimatoudis I, Thys E, Wampers M, Hranov L, Hristova T., Navickas A., Bukelskis L., Hilbig J. et al. Staging of Schizophrenia with the use of PANSS: An international multi-center study. International Journal of Neuropsychopharmacology. 2019, 22(11): 681-697. doi: 10.1093/ijnp/pyz053. (IF: 4,207)

Pociūtė K, Bulotiene G. "Interventions for reducing suicide risk in cancer patients: A literature review" Europe's Journal of Psychology (EJOP) [Vol 15 No 3 \(2019\)](#), p 637-649. <https://doi.org/10.5964/ejop.v15i3.1741> (WoS publikacija)

Benošis A., Navickas A., Palaidotų savivaldybių biudžeto lėšomis mirusių asmenų Lietuvoje kai kurie apžvalgos duomenys mirties priežasčių ir socialinių požiūrių= The review of data on the state/municipal funded burials of the deceased in Lithuania from the causes of death and social perspective//Sveikatos mokslai. Vilnius: Sveikatos mokslai. ISSN 1392-6373. eISSN 2335-867X. 2019, t. 29, nr.1, p.72-85

Navickas p., Lukavičiūtė L., Šerpytis P., Benošis A., Šerpytis R., Daškevičius K., Navickas A. Išeminės širdies ligos ir savižudybių paplitimo sąsaja Europos Sąjungoje= The link between ischemic heart disease and the prevalence of suicide in European Union// Sveikatos mokslai. Vilnius: Sveikatos mokslai. ISSN 1392-6373. eISSN 2335-867X. 2019, t. 29, nr. 1, p. 42-49.

3. Survey of burning out syndrome and mental health of medical specialists. Project leader: Prof. S. Lesinskienė. 2019-2023

Active involvement of lecturers and medical students in the research and actuality of the topic. Preparations of the survey: first year medical students undergoing of the transitions are planned to be investigated. Specialised digital material covering topic of the Transitions is planned to be prepared as supplementary help for students in cooperation with Turku university, Finland.

Main publications:

Kiziela A., Viliūnienė R., Friberg O., Navickas A., Distress and resilience associated with work of medical students// Journal of mental health. Philadelphia : Taylor& Francis. Issn 0963-8237. eISSN 1360-0567. 2019, vol.28, iss. 3, p. 319-323.

Šarskutė A., Gužas J., Andrejauskienė V., Lesinskienė S. Paauglių naudojimosi socialiniu tinkle Instagram ir kūno išvaizdos sąsajos=Using of social network Instagram and body image relations

among adolescents//Pediatrija. Vilnius:UAB “Baltijos idėjų grupė” ir partneriai. ISSN 1648-4630. 2019, Nr.2(86), p. 70-73.

4. Attachment, emotional and behavioral disorders in children: investigation of the impact of the therapeutical interventions. Prof. S. Lesinskienė. 2019-2023,

Background and methodology have been elaborated. Research survey has been organised and in the process of implementation together with doctoral research program of lecturer Monika Misevičė

Main publications:

Skokauskas N.; Fung D.; Flaherty L.T.; Von Klitzing K.; Pūras D.; Servili Ch.; Dua T.; Falissard B.; Vostanis P.; Moyano M.B.; Feldman I.; Clark C.; Boričecič V.; Patton G.; Lventhal B.; Guerrero A. Shaping the future of child and adolescent psychiatry// Child and adolescent psychiatry and mental health. London : BioMed Central Ltd. eISSN 1753-2000. 2019, vol.13, art.no.19, p. 1-7.

International Research Project

1. The Observation of Children in Lithuanian Care Homes in Preparation for their Trip and Stay in Italian Carers’ Families, Cultural Mediation and Psychological Support for Children and Carers. A. Dervinytė-Bongarzoni. 2018-2020.

The project of the visits is delivered by the not-for-profit organization “Nuovo Cielo” (president Sara Bianci), and is carried out in collaboration with Paolo Sesti (University of Calabria, Italy). The project is ongoing.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INNOVATION) PARTNERS

Institute of Psychiatry Kings College, London (UK)

Viena S. Freud Private University (Austria)

Department of Child and Adolescent Psychiatry of Heidelberg University (Germany)

Vilnius University, Faculty of Philosophy (Lithuania)

Lithuanian Academy of Music and Theatre, Faculty of Music (Lithuania)

Turku University, Finland

OTHER SCIENTIFIC ACTIVITIES

Prof. S. Lesinskienė

- board member of NBO: Nornic Baltic Organisation;
- editorial board member of the journal *Pediatrija (Paediatrics)*, www.medpraktika.lt/leidiniai/leidinys/2/Pediatrija.

Prof. D. Pūras

- UN Special rapporteur on the right to physical and mental health; <https://www.ohchr.org/en/issues/health/pages/srrihealthindex.aspx>;
- Chair of the Coordination committee of the Special procedures of the United Nations;
- University of Essex (UK) visiting professor;
- Georgetown University (USA) distinguished visitor;
- editorial board member of the national journal *Visuomenės sveikata (Public Health)*, http://www.hi.lt/content/D2_redkolegija.html;
- editorial board member of the national journal *Medicina*;

- member of International Advisory Board of the Archives of Psychiatry and Psychotherapy, <http://www.archivespp.pl/International-Advisory-Board.html>.

Prof. A. Germanavičius

- editorial board member of the journals: *Nordic Journal of Psychiatry, Medicina (Medicine), Visuomenės sveikata (Public Health), Biologinė psichiatrija ir psichofarmakologija (Biological Psychiatry and Psychopharmacology)*;
- scientific board member of the Neuroscience Institute at Lithuanian University of Health sciences (Kaunas);
- Executive Board member of ENMESH (European Network for Mental Health Service Evaluation: www.enmesh.eu);
- Member of European network on Training, Evaluation and Research (ENTER: www.entermentalhealth.net);
- Representative for Lithuanian Association of Psychiatrists for Nordic Board of World Psychiatric Association (WPA).

Assoc. Prof. A. Navickas

- WPA Honorary Membership for excellence in service to the World Psychiatric Association
- President of the Lithuanian Association of Suicidology
- Past president of the Lithuanian Psychiatric Association
- Member of International Association of Suicide Prevention
- Editorial board member of the journal *Biologinė psichiatrija ir psichofarmakologija (Biological Psychiatry and Psychopharmacology)*, <http://www.pri.kmu.lt/biological-psychiatry.ht>;
- Editorial board member of the journal *Sveikatos mokslai (Health Science)*, <https://sm-hs.eu/lt/>

Assoc. Prof. A. Šiurkutė

- member of Lithuanian Psychiatric Association.

Assoc. Prof. R. Viliūnienė

- president of Lithuanian Society of Psychoanalysis (LPaD), <http://psichoterapija.org>;
- member of Lithuanian Psychiatric Association (LPA).

Assist. Dr. G. Bulotienė

- Member of Lithuanian Psychiatric Association (LPA)
- Member of the International Psycho-Oncology Society (IPOS) Federation Task Force
- Board member of Lithuanian Society of Oncologists (LOD)
- Individual member of the International Association for Analytical Psychology (IAAP)
- Member of Lithuanian Society of Psychoanalysis (LPaD)

Assist. Dr. E. Džugauskas

- member of the Lithuanian Psychiatric Association (LPA)
- member of Lithuanian Society of Psychoanalysis (LPaD)

Lectr. Dr. A. Dervinyte-Bongarzoni

- member of Lithuanian Psychiatry Association;
- member of Children and Adolescents Psychiatry Association.

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

Giedrė Bulotienė Other within us: Analysis of patient with life threatening disease. A clinical case presentation 21st International IAAP Congress, “Encountering the Other: Within Us, Between Us, and in the World” Vienna, Austria, 25-30 August, 2019

Austėja Staniunaitė, Giedrė Bulotienė, Vilmantė Aleksienė Possibilities of Music Therapist’s Action in Providing Palliative Care “11th European Music Therapy Conference Aalborg, Denmark, 26-30 June, 2019

Dlugauskas, Edgaras; Strumila, Robertas; Lengvenytė, Aistė; Ambrozaitė, Laima; Dagytė, Evelina; Molytė, Alma; Navickas, Alvydas; Utkus, Algirdas. Analysis of Lithuanian CYP2D6 polymorphism and its relevance to psychiatric care of the local population // Nordic journal of psychiatry. Abingdon : Taylor & Francis Ltd. ISSN 0803-9488. eISSN 1502-4725. 2019, vol. 73, iss. 1, p. 31-35. DOI: [10.1080/08039488.2018.1548648](https://doi.org/10.1080/08039488.2018.1548648). [DB: PsycInfo, MEDLINE, Scopus, Social Sciences Citation Index (Web of Science), Science Citation Index Expanded (Web of Science)] [M. kr.: M 001]

MOST IMPORTANT PARTICIPATION CASES OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS AND ORGANISATIONS, AND BUSINESS ENTITIES

S. Lesinskienė – Participation in the working groups elaborating National suicide prevention strategy and Improvement of child and adolescent mental health set by Ministry of Health in Lithuania.

CONSULTATIONS PROVIDED BY THE UNIT TO THE PUBLIC OR ECONOMIC ENTITIES

Clinic staff often participates in debates or opinion formation regarding mental health and psychiatry initiated by broad variety public media sources

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Kučinskaitė J., Dlugauskas E., Lesinskienė S. Klinikinis atvejis: karbamazepino sukeltas antikvulsantų hiperjautrumo sindromas ir agranulocitozė//Sveikatos mokslai: Sveikatos mokslai. ISSN 1392-6373.

Zuoza R., Lesinskienė S. Neformalusis vaikų švietimas ir sveikata=Non formal education and health of children// Pediatrija, Vilnius:UAB “Baltijos įdėjų grupė” ir partneriai.ISSN 16-4630.2019, Nr.2(86), p.70-73.

Clinic of Rheumatology, Orthopedic Trauma and Reconstructive Surgery

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Head - Prof. Dr. *Irena Butrimienė*

STAFF

Professors: Prof. Dr. I. Butrimienė, Prof. Habil. Dr. N. Porvaneckas, Prof. Habil. Dr. K. Vitkus, Prof. V. Uvarovas.

Associate Professors: Dr. I. Šatkauskas, Dr. R. Rugienė, Dr. S. Stropuvienė, Dr. L. Zabulienė.
Dr. S. Ryliškis

Assistant Professors: Dr. D. Miltinienė, Dr. I. Arštikytė, Dr. G. Kvederas

Lecturer: Dr. N. Jakutis.

Research fellows: Dr. R. Rugienė, Dr. D. Miltinienė, G. Stundžaitė–Baršauskienė, I. Sakalauskaitė, G. Šeškutė

Doctoral students: R. Šakalytė, E. Pucevičienė, E. Tertelienė, A. Makulavičius, G. Stundžaitė–Baršauskienė, A. Petrulionienė, G. Petryla, G. Šeškutė

Students' scientific groups of:

Rheumatology: scientific leader – Dr. D. Povilėnaitė, coordinator – student J. Mironova, 6 members of the group.

Orthopaedics and traumatology: scientific leader – Dr. S. Prof. N. Porvaneckas, coordinator – student R. Bradūnaitė; 57 members of the group.

RESEARCH INTERESTS

Peculiarities of applying biological therapy to rheumatic patients in Lithuania

Immunogenicity in rheumatic patients with anti-TNF treatment

Outcomes of early undifferentiated arthritis

Associations between genetic, epigenetic factors, rheumatoid arthritis etiopathogenesis and clinical course

Outcomes of systemic sclerosis

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

- 1. Associations Between Genetic, Epigenetic Factors and Rheumatoid Arthritis Etiopathogenesis and Clinical Course.** Prof. I. Butrimienė, PhD Student E. Pucevičienė. 2015-2020

Aim of study is to investigate the association between genetic, epigenetic factors in pathogenesis of rheumatoid arthritis, disease activity and clinical course. Special attention will be kept on vitamin D concentration and oral health as external risk factors in higher susceptibility for rheumatic diseases and influence in etiopathogenesis by causing changes in gene function. Accordingly, research of laboratory data of epigenetics (DNA methylation, ect.) and genetics (vitamin D receptor gene polymorphism) that potentially mediates genetic risk for rheumatoid arthritis will be done. This study is approved by Lithuanian Bioethics Committee.

2. The Long Term Prognosis of Rheumatoid Arthritis Patients after Knee Arthroplasty in Lithuania. Prof. A. Venalis, PhD student E. Tertelienė. 2015-2020

Aim of study is to identify factors that influence the patients functional outcome and quality of life after total knee arthroplasty in Lithuania.

The main tasks were to evaluate the results of total knee replacement in rheumatic patients 2 years after surgery; to identify factors that influence implant survival, complications rate and risk factors for revision surgery. This study is approved by Lithuanian Bioethics Committee.

3. Lyme's Disease clinical syndrome's Epidemiological and Clinical Interface with a Transmitter of the Disease and Biological Characteristics of the Pathogen. Prof. A. Venalis, PhD student A. Petrulionienė. 2016-2020

The main aim of this study is to elucidate Lyme's disease clinical syndromes and their frequency in Lithuania, to find out the correlations between clinical disease appearance and biological characteristics of the pathogen in infected ticks. This study is approved by Vilnius Regional Bioethics Committee, and by State Data Protections Inspectorate.

4. EMerging Eular NETwork (EMEUNET). Coordinator – PhD student Goda Šeškutė, since 2013 by 2021

Goda Šeškutė is a working group member and country liaison of EMEUNET (a working group of young clinicians and researchers in rheumatology). The objectives of the organization are to promote education, perform research, widen collaborations and integrate with EULAR activities. Goda Šeškutė as country liaison is responsible for disseminating and promoting information amongst young clinicians and scientists within the country. G. Šeškutė collected data from Lithuania rheumatology trainees.

5. Access to Social Security Benefits in Case of Work Disability Due to RA. Coordinator: Polina Putrik. Prof. I. Butrimienė. The Research team at Maastricht University initiated the project since 2016-2020

The aim of this study is to compare the differences in access to social security benefits in case of sick leave and work disability and to compare the level on income substitution and lower economic status for patients with rheumatoid arthritis in different countries across Europe. 43 countries take part in the project.

6. A Prospective Randomized Study of Minimally Invasive Treatment of Acute Achilles Tendon Rupture. January 2015–December 2019.

The protocol was approved by the Regional Ethical Committee. A prospective study of functional outcomes after pelvic ring and acetabulum fracture treatment is ongoing.

National Research Projects

1. Research Council of Lithuania. Analysis of Immunological, Genetic and Epigenetic Factors in Pathogenesis of Autoimmune Arthritis. (No. S-MIP-17-12). Prof. I. Butrimiene, assoc. prof. S. Stropuviene, PhD student R. Sakalyte, PhD student E. Punceviciene 2017–2020.

The aim of this study was to determine correlation of immunologic, genetic, and epigenetic factors (expression of Toll-like receptors, vitamin D response metabolism genes DNA sequence methylation changes, vitamin D receptors genes polymorphisms) on etiopathogenesis of autoimmune arthritis.

220 patients with autoimmune arthritis and approximately 180 healthy controls were analysed, and epigenetic vitamin D metabolism genes analysis was carried out for 100 subjects (50 patients/50 control group). Later we will examine synovial tissues and vitamin D levels in blood sera in 30 patients.

International Research Projects

1. The EULAR Scleroderma Trials and Research group (EUSTAR) initiated multicentral online study **Minimum Essential Data Set**. Since 2011 – ongoing. Prof. I. Butrimienė, assoc. prof. dr. R. Rugienė.

Minimal essential data set (MEDS) Online is an international registry established by the European League against Rheumatism scleroderma trial and research (EUSTAR), which collects data from over 8000 patients from 92 centres worldwide, including 21 European centres and 9 centres outside Europe. Center contribution: clinical patient data input online, updated on an annual basis.

2. **Genetic Analysis of Early Undifferentiated Arthritis Patients (single nucleotide polymorphism profile) Association with Disease Outcome and Early Radiological and Ultrasound Damage**. PhD student R. Sakalyte, prof. A. Venalis, assoc.prof. S. Stropuviene. 2016–2019.

The aim of this study is to evaluate if any single nucleotide polymorphism (SNP) alone or in combination can help to predict the outcomes of early undifferentiated arthritis. Moreover, we want to see if any of SNP we analyse are related with early joints damage (erosions) that can be detected on ultrasound. All this could help to determine which early undifferentiated arthritis patients should be treated more aggressively to prevent debilitating outcomes of arthritis.

3. **Research on Early Arthritis and its Outcomes**. PhD student R. Sakalyte. Assoc. prof. S. Stropuviene, prof. A. Venalis. 2019 – 2021.

The aim of this study is to analyse certain gene expression dynamics in pathogenesis of chronic inflammatory arthritis. Patients who developed chronic inflammatory arthritis will be compared with patients whose arthritis resolved.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INNOVATION) PARTNERS

Department of Clinical Science and Education, Karolinska Institutet Södersjukhuset Section of Anaesthesiology and Intensive Care, Stockholm (Sweden)

Department of Quantum Electronics of the Faculty of Physics of Vilnius University (Lithuania)

State Research Institute Centre for Innovative Medicine (Lithuania)

The EULAR Scleroderma Trials and Research group (Italy)

The European League against Rheumatism (Switzerland)

Children's Hospital Oakland Research Institute, San Francisco (USA)

OTHER SCIENTIFIC ACTIVITIES

Prof. I. Butrimienė

- board member of Opinion Leaders for Biological Therapy, Europe;
- member of executive committee for clinical trials in European League against Rheumatism;
- president of Lithuanian Arthritis Foundation;
- member of the Lithuanian Rheumatology Association;
- editorial board member of the journals *Reumatologijos seminarai (Seminars in Rheumatology)* and *Skausmo medicina (Pain Medicine)*;
- co-president of the organizing committee of annual conference Vilnius Rheumatology Seminars.

Prof. N. Porvaneckas

- editorial board member of the journal *Medicina*;

- editorial board member of the journal *Medicinos teorija ir praktika (Theory and Practice in Medicine)*;
- board member of the Lithuanian Orthopaedic and Trauma Society;
- member of EFFORT, European Hip Society and AO.

Assoc. Prof. S. Stropuvienė –

- board member of the Lithuanian Rheumatology Association.
 - acting secretary of the Lithuanian Rheumatology Association.
 - organizing committee member of the annual conference *Vilnius Rheumatology Seminars*;
- editorial board member of the journal *Reumatologijos seminarai (Seminars in Rheumatology)*.

Assoc. Prof. R. Rugienė –

- editorial board member of the journals *Reumatologijos seminarai (Seminars in Rheumatology)*;
- organizing committee member of the annual conference *Vilnius Rheumatology Seminars*;
- member of The EULAR Scleroderma Trials and Research Group (EUSTAR);
- member of the Lithuanian Rheumatology Association.

Assoc. Prof. M. Kocius –

- editorial board member of the journal *Medicinos teorija ir praktika (Theory and Practice in Medicine)*;
- member of EFFORT.

Assistant professor I. Arštikytė –

- member of Emerging Euler Network (EMEUNET) - The European League Against Rheumatism (EULAR) working group of young clinicians and researchers in rheumatology;
- organizing committee member of the annual conference *Vilnius Rheumatology Seminars*;
- member of the Lithuanian Rheumatology Association.

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Participation in patient's organisation "Lietuvos Artrito Asociacija" (Lithuanian Arthritis Association), "LUPUS", and "Judesys" activities.

Articles presented to journals "*Internistas*", "*Medicinos teorija ir praktika*", patients' journal "*Artritas*", participation in TV and radio programs.

Clinic of Cardiovascular Diseases

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Tel. 8 5 236 5307, E-mail cardio@santa.lt

Head

Prof. Habil. Dr., Full Member of the Lithuanian Academy of Sciences *Aleksandras Laucevičius*

STAFF

Professors: Dr. (HP) A.Aidietis, Dr. S. Aidietienė, Dr. J.Čelutkienė, Dr. G.Davidavičius, Dr. A.Kibarskis, Dr. (HP) G. Marinskis, Dr. (HP) Ž.Petrulionienė, Dr. (HP) K.Ručinskas, Dr. P.Šerpytis, Dr. V.Tarutis, Dr. D. Zakarkaitė (part-time).

Associate professors: Dr. J.Barysienė, Dr. J.Badarienė. Dr. S.Glaveckaitė, Dr. G.Kalinauskas, Dr. R.Karalius, Dr. B.Petrauskienė, Dr. A.Rudys,

Lecturers: Dr. J.Misiūra, Dr. R.Vaitkevičius (part-time), R. Sipavičius (part-time), D.Sudavičienė (part-time), G.Vaitėnas (part-time), Dr. G.L.Vilkevičius, Dr. R.Kūgienė (part-time), Dr. B.Vaišnytė.

Assistants Professor: Dr. R.Steponėnienė, Dr., Dr. N.Misonis Dr. V.Janušauskas,

Research fellows: J. Balsytė-Zupkauskienė (part-time), Dr. A. Baranauskas (part-time), Dr. A. Berūkštis (part-time), Dr. L.Bezuška, M.Budra (part-time), Dr. G.Burneikaitė (part-time), Dr. I.Butkuvienė, Dr. A.Čypienė, Dr. R.Čypienė, Dr. V.Grabauskienė, E. Gaižauskas (part-time), Dr. L.Gumbienė, Dr. V.Janušauskas, Dr. L.Jurgauskienė, dr.A. Laučytė-Cibulskienė (part-time), Dr. V.Lebetkevičius, Dr. D.Liekienė, Dr. A. Lipnevičius (part-time), E. Lycholip (part-time), Dr. R.Malickaitė, Dr. V.V.Maneikienė (part-time), Dr. R.Navickas (part-time), E. Palevičiūtė (part-time), R. Purnaitė (part-time), A. Podkopajev (part-time) Dr. G. Račkauskas(part-time), Dr. E.Rinkūnienė (part-time), Dr. L.Ryliškytė, V. Rudienė (part-time), Dr. P.Semėnienė, Dr. R. Sudikienė, (part-time), Dr. E.Uždavinytė-Gatlienė (part-time), Dr. A.Valaika, A.Zorinas (part-time), Dr. G.Zuozienė (part-time).

Doctoral students: G.Balčiūnaitė, T.Baltrūnas, G.Bieliauskienė, M.Budra, P. Budrys, S. Čėsna, U. Gargalskaitė, E.Čiburienė, A.Drašutienė, D.Fomin, E.Gaižauskas, J.Jarašūnas, K.Jonas, V.Juknevičius, V.Rudienė, R.Ruseckaitė, A.Skrebūnas, E.Stanevičiūtė, R.Šerpytis, V.Šileikienė, J. Balsytė-Zupkauskienė, E. Palevičiūtė, A. Podkopajev, G. Radauskaitė.

Scientific groups of students:

Cardiology: scientific leader – prof. P. Šerpytis, coordinator – student P.Zikaitė, 67 members of students.

Vascular surgery: scientific leader – A.Skrebūnas, coordinator –K. Jauniškis; 34 members of students.

RESEARCH INTERESTS

Investigation of arterial wall functional and structural disorders in atherosclerosis and metabolic syndrome.

Primary and secondary prevention of cardiovascular diseases. Development of high risk strategy in prevention of cardiovascular diseases.

Fundamental and clinical research in cardiac arrhythmias. Improvement of methods of complex treatment of atrial and ventricular tachyarrhythmia.

Complex multi imaging assessment of left and right ventricular function in coronary artery disease, hypertension and heart failure.

Myocardial regeneration therapy by cardiac pulse wave therapy in coronary heart disease.

Congenital heart disease cardiac surgery in infants.

New possibilities of hybrid (interventional and surgical) and minimally invasive technologies in cardiovascular medicine.

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

- 1. Prevention of atherosclerosis, diagnosis and treatment of induced diseases.** Prof. A.Laucevičius. 2019-2023.

During the 2019, screening and investigation of patients with familial hypercholesterolemia (FH) was continued. A national screening programme for FH patients in Lithuania was established. A paper evaluating high-density lipoprotein cholesterol (HDL-C) efflux capacity in Lithuanian population has been published. One more publication evaluating whether coronary artery calcium scoring can be applied in the algorithm for clinical examination of patients with severe hypercholesterolemia has been published too. Moreover, usefulness of Achilles tendon ultrasonography in identifying people at greater cardiovascular diseases risk among subjects with severe hypercholesterolemia in a high-risk population has been investigated.

Also during the 2019, investigation of patients with resistant hypertension who can't achieve normal blood pressure values after medical treatment correction for renal artery denervation has been continued and follow-up after procedure and investigated predictive biomarkers for the long-term effect and quality of the procedure was performed.

Main publications:

Kutkienė S., Petrulionienė Ž., Laucevičius A., Čerkauskienė R., Samuilis A., Augaitienė V., Gedminaitė A., Juozalėnaitė G., Šaulytė A., Staigytė J., Petrulionytė E., Gargalskaitė U., Skiauterytė E., Matuzevičienė G., Kovaitė M., Nedzelskienė I. Achilles tendon ultrasonography – a useful screening tool for cardiovascular risk estimation in patients with severe hypercholesterolemia. *Atherosclerosis Supplements* 2019;36:6-11.

Kutkienė S., Petrulionienė Ž., Laucevičius A., Čerkauskienė R., Kasiulevičius V., Samuilis A., Augaitienė V., Gedminaitė A., Bieliauskienė G., Šaulytė-Mikulskienė A., Staigytė J., Petrulionytė E., Gargalskaitė U., Skiauterytė E., Matuzevičienė G., Kovaitė M., Nedzelskienė I. Is the coronary artery calcium score the first-line tool for investigating patients with severe hypercholesterolemia? *Lipids in Health and Disease* 2019;18(1):149. [p.1-9]

Kutkienė S., Petrulionienė Ž., Karčiauskaitė D., Laucevičius A., Matuzevičienė G., Staigytė J., Šaulytė Mikulskienė A., Gargalskaitė U., Skiauterytė E., Kovaitė M. Lower than average HDL cholesterol efflux capacity in Lithuanian population. *Lipids in Health and Disease* 2019;18(1):186 [p.1-8].

- 2. New technologies for management of structural heart diseases.** Leaders: prof. dr. (HP) A.Aidietis, prof. dr. (HP) K.Ručinskas, 2014-2019.

From December 2011 to November 2019, 111 patients underwent mitral valve repair with the DS1000 system (NeoChord, Inc., Eden Prairie, MN) to treat severe degenerative mitral regurgitation at Vilnius University Hospital Santaros Klinikos. During this minimally invasive transapical procedure, artificial chordae (neochords) are implanted into a prolapsing MV leaflet segment on a beating heart conditions through left anterolateral minithoracotomy.

In 2019, there were 13 patients who underwent this procedure. On the basis of the collected data dr.A.Lipnevicius defended doctoral dissertation and one dissertation is being prepared.

Total 50 patients were treated for mitral valve paravalvular leak with this novel catheter based procedure. On the basis of the collected data doctoral dissertation (dr.A.Zorinas) was defended.

Main publications:

Comparison of early postoperative results between conventional and transapical mitral valve repair
A.Zorinas, A. Lipnevicius, V.Bleizgytė, V. Janušauskas, D. Liekienė, M. Budra, R. Samalavičius, A. Drąsutienė, D.Zakarkaitė, A.Aidietis, K.Ručinskas Adv Interv Cardiol 2019;

Mid-term Procedural and Clinical Outcomes of Percutaneous Paravalvular Leak Closure With the Occlutech Paravalvular Leak Device. Onorato EM, Muratori M, Smolka G, Zorinas A, Zakarkaitė D, Mussayev A, Christos CP, Bauer F, Gandet T, Martinelli GL, Costante AM, Bartorelli AL. EuroIntervention. 2019 Aug 20. pii: EIJ-D-19-00517. doi: 10.4244/EIJ-D-19-00517. [Epub ahead of print];

Gaidulis G., Selmi M., Zakarkaitė D., Aidietis A., Kačianauskas R. Modelling and simulation of mitral valve for transapical repair applications. Nonlinear Analysis: Modelling and Control 2019;24(4):485–502.

3. Improvement and evaluation of congenital heart disease surgery. Prof. dr. V. Tarutis. 2014-2019.

A review of the heart transplantation in children in Lithuania has been presented in a „30 years for Heart Transplantation in Lithuania” congress of the Lithuanian Society of Thoracic and Heart surgery. Presentation „39 years of experience of treating transposition of the great arteries in a single low-volume center“ was made at the 7th World Congress of Pediatric Cardiology and Cardiac Surgery in Barcelona. An article “30-year experience of Fontan surgery: single-centre’s data” has been published in Journal of Cardiothoracic Surgery. Our experience in a surgical treatment of pulmonary artery valve endocarditis has been summarized and article prepared.

Poster „Treatment difficulties in young adults with residual arterial hypertension after early aortic coarctation repair“ was presented in EUROGUICH 2019 meeting.

Main publications:

Rudienė V., Hjortshøj C.M.S., Glaveckaitė S., Zakarkaitė D., Petrulionienė Ž., Gumbienė L., Aidietis A., Søndergaard L. Cor triatriatum sinistrum diagnosed in the adulthood: a systematic review. Heart 2019;105(15):1197-1202.

4. Optimization of diagnosis and the creation of treatment strategy for type 2 myocardial infarction. Prof. P. Šerpytis. 2018-2019

The aim of this study is to improve the diagnosis of type 2 MI, to evaluate the benefits of new laboratory and instrumental investigations and to evaluate different patient treatment strategies. The patients with type 2 MI are being screened and randomized into the study.

Main publications:

Alpert, J., Serpytis, R., Serpytis, P., Chen, Q. (2018). Myocardial Infarction with Nonobstructive Coronary Arteries (MINOCA) The American Journal of Medicine 132(Int J Cardiol 261 2018), 267 268. <https://dx.doi.org/10.1016/j.amjmed.2018.12.005>

National Research Projects

1. Assessment of myocardial structural changes and their prognostic significance in patients with severe degenerative aortic stenosis. EU Structural Funds, No 09.3.3-LMT-K-712. Assoc. prof. S. Glaveckaite; 2018 -2021.

The ongoing scientific project is a prospective, open, case-driven, multicentre study (Lithuania, Denmark). The main goal of the project is to improve qualification of researchers by mastering new imaging technologies for assessing myocardial structural changes. The objective of the project is to identify reliable parameters and biomarkers of non-invasive imaging modalities to assess structural myocardial changes and to evaluate the prognostic significance of myocardial structural changes in patients with severe degenerative AS.

Main publications:

Balciunaite G, Rimkus A, Zurauskas E, Zaremba T, Palionis D, Valeviciene N, Aidietis A, Serpytis P, Rucinskas K, Sogaard P, Glaveckaite S. Transthyretin cardiac amyloidosis in aortic stenosis: prevalence, diagnostic challenges and clinical implications. *Hellenic J Cardiol*. 2019 Nov 15. pii: S1109-9666(19)30278-7. doi: 10.1016/j.hjc.2019.10.004.

Balciunaite G, Skorniakov V, Rimkus A, Zaremba T, Palionis D, Valeviciene N, Aidietis A, Serpytis P, Rucinskas K, Sogaard P, Glaveckaite S. Prevalence and prognostic value of late gadolinium enhancement on CMR in aortic stenosis: meta-analysis. *Eur Radiol*. 2019 Aug 12. doi: 10.1007/s00330-019-06386-3. [Epub ahead of print] Review.

2. The development and application of a toolset for monitoring the effectiveness of personalized physical activity . Prof. A. Laucevičius. 2017-2019

The leading cause of morbidity and mortality is cardiovascular disease, for which the major risk factor is a lack of physical activity. Therefore, the search for methods to increase motivation for long-term physical activity is one of the most important tasks, especially in patients, who already are at high cardiometabolic risk. The main objectives were to identify arterial markers that best reflect cardiovascular risk and its dynamics during personalized exercise interventions in high cardiometabolic risk subjects, to develop an arterial marker-based tool to assess cardiometabolic risk and physical activity levels, and to create a personalized model for monitoring physical activity. Using the data collected, the tools needed to create that personalized model were invented, which improved the motivation for physical activity in high cardiometabolic risk patients by almost 20%.

Main publications:

Laucevičius A, Rinkūnienė E, Ryliškytė L, Kasiulevičius V, Jatužis D, Petrulionienė Ž, Badariene J, Navickas R, Jucevičienė A, Kutkienė S, Solovjova S, Andrejevaitė V, Lisauskienė I, Zupkauskienė J, Purnaitė R, Gurevičius R, Mikolaitytė J. Primary prevention strategy for cardiovascular disease in Lithuania. *Seminars in Cardiovascular Medicine*. 2019; 25:14-39.

Ryliškytė L, Navickas R, Šerpytis P, Purnaitė R, Zupkauskienė J, Jucevičienė A, Badariene J, Rimkienė M, Ryliškienė K, Skiauterytė E, Laucevičius A. Association of aortic stiffness, carotid intima-media thickness and endothelial function with cardiovascular events in metabolic syndrome subjects. *Blood Press*. 2019 Jan 30:1-8.

Slušnienė A., Laucevičius A., Navickas P., Ryliškytė L., Stankus V., Stankus A., Navickas R., Laucevičienė I., Kasiulevičius V. Daily Heart Rate Variability Indices in Subjects with and Without Metabolic Syndrome Before and After the Elimination of the Influence of Day-Time Physical Activity. *Medicina-Lithuania* 2019;55(10):700 [p.1-14].

International Research Project

1. User driven innovation: Symptom monitoring after hospitalization in Methods for long-term unobtrusive monitoring of atrial arrhythmias in post-stroke patients. Project No: P-MIP-17-234. Prof. (HP) Audrius Aidietis. 2017-2019.

Emerging e-health technologies for atrial fibrillation detection suggest in-hospital recognition of atrial fibrillation (AF) to be just the tip of the iceberg. A wearable dedicated to provide both long-term heart rhythm monitoring and a 6-lead ECG was created. Authors measured its ability to differentiate between AF and sinus rhythm (SR). The wrist-worn device works as an integrated

diagnostic system of two components: a photoplethysmography-based (PPG) AF detection algorithm and a wireless modified ECG of 6 limb leads. In a single-center prospective study subjects with AF and control groups of SR with/ without frequent premature atrial/ ventricular complexes (PACs/ PVCs) were recruited. In addition, a validated external ECG device recorded a nearly simultaneous 3-lead continuous ECG to monitor the heart rhythm. Once the PPG algorithm detected AF it triggered a vibration alarm. Two independent diagnosis-blinded cardiologists assessed the ECG tracings as “AF”, “SR” or “Cannot be concluded”.

2. Multivessel versus culprit lesion only percutaneous revascularization in patients with acute myocardial infarction complicated by cardiogenic shock. CULPRIT-SHOCK Clinical Trials. gov number NCT01927549, funded by the European Union 7th Framework Program and others. Prof. P.Šerpytis. 2014-2019.

Prospective, randomized, international, multicenter, open-label study to compare immediatemultivessel revascularization by PCI to culprit lesion only PCI with staged non-culprit lesionrevascularization in patients with cardiogenic shock complicating acute myocardial infarctionpresenting with multivessel disease.

During this trial it has been examined if culprit vessel only PCI withpotentially subsequent stagedrevascularization in comparison to immediate multivessel revascularization by PCI in patients with cardiogenic shock complicating acute myocardial infarction reduces the incidence of 30-day mortality and/or severe renal failure requiringrenal replacement therapy.

Main publications:

Wijntjens G.W., Fengler K., Fuernau G., Jung C., den Uil C., Akin S., van de Hoef T.P., Šerpytis R., Diletti R., Henriques J.P., Šerpytis P., Thiele H., Piek J.J. Prognostic implications of microcirculatory perfusion versus macrocirculatory perfusion in cardiogenic shock: a CULPRIT-SHOCK substudy. *European heart journal. Acute cardiovascular care* 2019 Sep 13:2048872619870035. doi: 10.1177/2048872619870035. IF 3.734 Q2.

Alpert J.S., Šerpytis R., Šerpytis P., Chen Q.M. Myocardial Infarction with Nonobstructive Coronary Arteries (MINOCA). (Commentary). *The American Journal of Medicine* 2019;132(3):267-268.

(In press) Maria Rubini Gimenez; Elliot Miller; Carlos Alviar; Sean van Diepen; Christopher Granger; Giles Montalescot; Stephan Windecker; Lars Maier; Pranas Serpytis; Rokas Serpytis; Keith G. Oldroyd; Marco Noc; Georg Furnau; Kurt Huber; Marcus Sandri; Suzanne de Waha-Thiele; Taoufik Ouarrak; Steffen Schneider; Uwe Zeymer; Steffen Desch; Holger Thiele. Outcomes Associated with Respiratory Failure for Patients with Cardiogenic Shock and Acute Myocardial Infarction: A Substudy of the CULPRIT-SHOCK Trial. *Critical care journal. CRIC-D-19-01755*, 2019/2020.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INNOVATION) PARTNERS

Ghent University Hospital, Ghent, Belgium

Cardiovascular Research Institute Maastricht (CARIM), Maastricht University Medical Centre, Maastricht, the Netherlands

Southampton University Hospital, Wessex Cardiothoracic Centre, England

The Department of Cardiothoracic Surgery, University of Pittsburgh Physicians, Pittsburgh

OTHER SCIENTIFIC ACTIVITIES

Prof. habil. dr. A. Laucevičius

- member of American College of Cardiology (FACC)
- fellow of the European Society of Cardiology (FESC)

- member and fellow of North American Society of Pacing and Electrophysiology (NASPE)
- member of the Lithuanian Academy of Sciences (full member)
- member of the Council of the Faculty of Medicine of Vilnius University
- member of the Lithuanian Society of Cardiology
- editorial board member of the journal *Medicina (Lithuania)*
- managing editor of the journal *Seminars in Cardiovascular Medicine*
- editorial board member of the journal *Internistas (Internist)*
- editorial board member of the journal *Mediterranean Journal of Pacing and Electrophysiology (MESPE)*
- editorial board member of the journal *Journal of Human Hypertension*
- international editorial board member of the journal *Europace (ESC)*
- editorial board member of the journal *Blood pressure*
- editorial board member of the journal *Cardiology Management*, editorial board member of the journal *Cardiology Journal (Folia Cardiologica)*
- chair of the Doctoral Committee of the Faculty of Medicine

Prof. dr (HP) A. Aidietis

- board member of Lithuanian Heart Association;
- chairman of Heart Rhythm workgroup at Lithuanian Society of Cardiology
- member of Lithuanian Society of Thoracic and Cardiac Surgeons
- member of Scandinavian Association for Thoracic Surgery
- editorial board member of the journal *Seminars in Cardiovascular Medicine*

Prof. dr. J. Čelutkienė

- member of Lithuanian Society of Cardiology
- Elect President of Lithuanian Society of Cardiology
- member of Lithuanian Heart Association
- member of European Society of Cardiology
- member of Heart Failure Association of the ESC
- member of European Association of Echocardiography
- Head of Heart Failure working group of Lithuanian Society of Cardiology
- Fellow of the European Society of Cardiology
- Board member of the Heart Failure Association of the ESC
- member of American College of Cardiology (FACC)

Prof. dr. G. Davidavičius

- member of Lithuanian association for interventional cardiology
- European Society of Cardiology TransCatheter Valve treatment (TCVT) Registry Steering Committee member

Prof. dr. V. Grabauskienė –

- National coordinator of Euro Heart Survey Programme (ESC)
- fellow of the European Society of Cardiology (FESC)
- member of the European Association of Echocardiography (EAE) of the ESC
- member of the Heart Failure Association (HFA) of the ESC
- member of the American Society of Echocardiography
- UEMS (European Union of Medical Specialist) Diploma of European Cardiologist Nr.52546
- member of the European Association for Predictive, Preventive and Personalized Medicine (EPMA)

- member of Lithuanian Society of Thoracic and Cardiac Surgeons

Prof. dr. A. Kibarskis –

- vice-president of Baltic Association of Interventional Cardiology
- editorial board member of the journal *Gydymo menas (Art of Treatment)*
- editorial board member of the journal *Medicinos teorija ir praktika (Theory and Practice in Medicine)*

Prof. dr. (HP) G. Marinskis –

- editor-in-Chief of the journal *Seminars in Cardiovascular Medicine*
- member of the Credentials committee
- European Society of Cardiology - Member of Fellowship Committee
- European Heart Rhythm Association - Member of Nomination Committee
- board member of Lithuanian Heart Association
- Chairman of Heart Rhythm workgroup at Lithuanian Society of Cardiology

Prof. dr. (HP) Ž. Petrulionienė

- editorial board member of the journal *Seminars in Cardiovascular Medicine*
- editor of chapter *Cardiologic Seminars* of the journal *Internistas (Internist)*
- member of the European Society of Cardiology
- Chairman of Prevention and Rehabilitation workgroup at Lithuanian Society of Cardiology

Prof. dr. (HP) K. Ručinskas

- member of European Association for Cardio-Thoracic Surgery
- member of Scandinavian Association for Thoracic Surgery
- board member of Lithuanian Society of Thoracic and Cardiac Surgeons
- editorial board member of the journal *Lietuvos chirurgija (Lithuanian Surgery)*

Prof. dr. P. Šerpytis

- fellow of the European Society of Cardiology
- chairman of Intensive Cardiac Care workgroup at Lithuanian Society of Cardiology
- member of Lithuanian Heart Association
- member of Lithuanian Society of Cardiology
- expert of Lithuanian Research Council
- editorial board member of the journal “Sveikatos mokslai”
- scientific board member of the journal “Emergency Medicine Service”
- editorial board member of the journal “International Heart and Vascular Disease Journal”

Prof. dr. V. Tarutis

- member of Scandinavian Association for Thoracic Surgery
- board member of Lithuanian Society of Thoracic and Cardiac Surgeons
- editorial board member of the journal *Lietuvos chirurgija (Lithuanian Surgery)*

Prof. dr. A. Aidietienė

- member of the European Society of Cardiology
- board member of Lithuanian Heart Association
- member of Lithuanian Society of Cardiology

Assoc. Prof. dr. S. Glaveckaitė

- Member of European Society of Cardiology for Valvular Heart Diseases and Cardiovascular Magnetic Resonance working groups

- Chairman of imaging workgroup at Lithuanian Society of Cardiology
- members of Lithuanian Heart Association

Assoc. Prof. dr. G.Kalinauskas

- member of European Association for Cardio-Thoracic Surgery
- member of Scandinavian Association for Thoracic Surgery
- President of Lithuanian Society of Thoracic and Cardiac Surgeons
- Chairman of Cardiac Surgery workgroup at Lithuanian Society of Cardiology

Assoc. Prof. dr. R. Karalius

- member of the European Society for Cardiovascular Surgery
- member of Scandinavian Association for Thoracic Surgery
- member of Lithuanian Society of Thoracic and Cardiac Surgeons
- member of the Society of Lithuanian Surgeons
- member of the Society of Cardiology of Lithuania.

Researcher dr. L. Jurgauskienė

- member of European Respiratory Society
- member of European Federation for Immunogenetics
- member of Baltic Sea Society for Immunology
- member of Lithuanian Society for Immunology
- member of Lithuanian Society of Laboratory Medicine
- member of Lithuanian Respiratory Society
- member of Lithuanian Rheumatology Association

Investigator dr. D. Liekienė

- member of the Lithuanian Society of Paediatric Cardiology

Senior Researcher dr. R. Malickaitė

- member of European Federation for Immunogenetics
- member of International Society for Heart and Lung Transplantation
- board member of Lithuanian Society for Immunology
- board member of Lithuanian Society for Alergology and Clinical Immunology
- members of Lithuanian Society of Thoracic and Cardiac Surgeons
- member of the Lithuanian Society of Laboratory Medicine
- member of Lithuanian Association of Transplantology

Lect. dr. J. Misiūra

- member of Lithuanian Society of Thoracic and Cardiac Surgeons
- member of the ESC Working Group of Heart Failure

Lect. dr. B. Vaišnytė

- members of Lithuanian Society of Vascular Surgery
- members of Society of Vilnius surgeons
- members of Lithuanian Society of Surgeons

Researcher dr. A.Valaika

- board member of Lithuanian Society of Thoracic and Cardiac Surgeons

Lect. dr. G. Vilkevičius

- editorial board member of the journal “Flebologija“

- member of European Federation of Societies for Ultrasound in Medicine and Biology;
- member of Lithuanian society for vascular surgery
- vice-president of Lithuanian society for phlebology
- member of Lithuanian Association of Ultrasound Diagnostics.

Research Assist. dr. G. Račkauskas

- member of American College of Cardiology (FACC)
- fellow of the European Society of Cardiology (FESC)
- members of Lithuanian Heart Association
- members of Lithuanian Society of Cardiology

Prof. Dr. (HP) A. Aidietis, Prof. Dr. V. Grabauskienė, Prof. Dr. A. Kibarskis, Prof. Dr (HP) G. Marinskis, Prof. Dr. G. Davidavičius, Assoc. Prof. Dr. B. Petrauskienė, Assoc. Prof. Dr. A. Rudys, Assoc. Prof. dr. J. Badarienė, Ass. Prof. Dr. J. Barysienė, Researcher dr. G. Burneikaitė, Researcher dr. I. Butkuvienė, Senior Researcher dr. A. Čypienė, Researcher dr. R. Čypienė, Lect. dr. R. Kūgienė, Investigator dr. D. Liekienė, Researcher dr. V. Maneikienė, Lect. dr. J. Misiūra, Senior Researcher dr. L. Ryliškytė, Senior Researcher dr. E. Rinkūnienė, Researcher dr. P. Semėnienė, Assist. Prof. dr. R. Steponėnienė, Researcher dr. R. Navickas

- members of European Society of Cardiology
- members of Lithuanian Heart Association
- members of Lithuanian Society of Cardiology

Researcher dr. R. Čypienė, Research Assist. M. Budra, Researcher dr. I. Butkuvienė, Investigator E. Gaižauskas, Researcher dr. L. Gumbienė, Research Assist. dr. Ž. Katliorienė, Researcher dr. V. Lebetkevičius, Research Assist. A. Lipnevičius, Investigator dr. D. Liekienė, Researcher dr. V. Maneikienė, Researcher dr. G. Norkūnas, Researcher dr. P. Semėnienė, Assist. Prof. dr. R. Sipavičius, Research Assist. A. Zorinas

- members of Lithuanian Society of Thoracic and Cardiac Surgeons

THE LIST OF THE MOST IMPORTANT CASES OF PARTICIPATION OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS AND ORGANISATIONS, AND BUSINESS ENTITIES

Dr. Prof. J. Čelutkienė

- The Heart Failure Association of the ESC (HFA of the ESC)] Board member
- ESC Congress Program Committee member
- ESC Membership Committee member

Dr. Prof. P. Šerpytis

- Working groups of the Lithuanian Ministry of Health:
- Lithuanian Health Ministry working group of law number V-208 (dated April 8th, 2004) “For ratification of the emergency medicine care and emergency medicine service provision order and extent”;
- Working group of Emergency medicine service for traumas and other external conditioned injuries (Trauma cluster).
- Working group of “Formation health supervision administrative comity for integrated pathologies in health supervision control council for cardiology, oncology, stroke and perinatology” (Cardiology cluster).
- Working group for use of ECMO system in emergency medicine service.
- The member of the Municipality of Vilnius. The member of the Health Council, since the year- 2019 .

- The member of the Research Council of Lithuania, since the year- 2015.

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Heart Failure Awareness Days –10-12, May 2019

Go Red for Woman (awareness campaign) – 08 June 2019, Vilnius

The World Heart Day (World Heart Federation) – September 29, 2019; Vilnius, Kaunas, Šiauliai, Panevezys, Klaipeda.

Clinic of Children's Diseases

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Head – Prof. Dr. *Augustina Jankauskienė*

STAFF

Professors: Dr. R. Čerkauskienė, Dr. R. Ėmužytė, Dr. A. Jankauskienė, Dr. O. Rudzevičienė, Dr. V. Urbonas, habil. Dr. V. Usonis, habil. Dr. A. Valiulis.

Associate Professors: Dr. S. Burokienė, Dr. N. Drazdienė, Dr. J. Grikinienė, Dr. A. Liubšys, Dr. G. Kleintienė, Dr. V. Panavienė, Dr. S. Petraičienė, Dr. J. Rascon, Dr. V. Žilinskaitė

Assistant Professor: Dr. S. Dumčius, Dr. I. Ivaškevičienė, Dr. O. Kinčinienė, Dr. I. Pilypienė, Dr. R. Praninskienė, Dr. S. Rusonienė, Dr. R. Samaitienė, Dr. I. Stacevičienė, Dr. S. Šaulytė Trakymienė, Dr. G. Vaitkevičienė, Dr. R. Vankevičienė.

Teaching assistants: D. Kalibatienė, I. Paulavičienė, S. Sendžikaitė, D. Ruzgienė

Research Assistants: K. Ažukaitis

Lecturers: Dr. R. Kemežys, L. Kilaitė, V. Radžiūnienė, D. Vaičiūnienė

Doctoral students: K. Ažukaitis, J. Navikienė, I. Paulavičienė, A. Pliauckienė, I. Polianskytė, R. Selvestravičius, S. Sendžikaitė, N. Stirbienė, D. Kalibatienė, I. Juškienė, E. Poluziorovienė, E. Viršilas, A. Janulionis, P. Kalibatas.

Students' scientific groups of: Pediatrics: scientific leader – Dr. S. Burokienė, coordinator – student J. Jankauskaitė, 47 members of the group.

RESEARCH INTERESTS

Health care of mother and child: physiological and social aspects and research of natural development of the child

Studies of functional development of organs and systems of newborns and children

Studies of neonatal pathology and perinatal mortality in Lithuania

Studies of chronic inflammation in paediatric pulmonology (asthma, cystic fibrosis, COPD) and elaboration of markers of early diagnostics of chronic diseases in children

Development of the methods of diagnostics, treatment and prophylaxis of acute and chronic infectious, immune, allergic, metabolic

Progression and outcomes of pediatric renal disorders

Studies of immunoprophylaxis and vaccination

Diagnostics and treatment of inherited metabolic diseases

Diagnostics, treatment and prophylaxis of children's abuse and trauma

Gut microbiota and gut brain axis

Studies on childhood cancer etiology and predisposition, identification of new therapeutical targets and criteria for treatment risk group stratification to further improve treatment individualization and reduce the treatment burden and long-term side effects.

Studies on antimicrobial stewardship in paediatrics

Studies for improving the quality of care for children and young adolescents in health facilities

Etiology and long-term outcomes of pediatric inherited and acquired pediatric kidney diseases (cystic kidney diseases, glomerulopathies, chronic kidney disease, vesicoureteral reflux)

Air pollution and child health

Allergic rhinitis and its impact on bronchial asthma in children

mHealth, shared decision making and other modern technologies for the management of chronic noncommunicable disease (CNDs)

Healthy ageing through the early diagnostics and prevention of CNDs

Human Ecology

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

- 1. Acute Kidney Injury During the First 100 Days after Allogeneic Hematopoietic Stem Cell Transplantation in Children.** Prof. Augustina Jankauskiene, assoc. prof. Jelena Rascon, dr. Goda Vaitkeviciene, Karolis Azukaitis (PhD Student). 2018-2019

A retrospective analysis of the whole study was completed; interim results were presented in the congresses of European Society for Pediatric Nephrology and International Society of Nephrology; publication with main findings was drafted.

- 2. Central hemodynamics and arterial stiffness in children with CKD.** Prof. Augustina Jankauskiene, Karolis Azukaitis (PhD Student). 2017-2020

Data collection within the 4C Study (Heidelberg University) has been completed and primary analysis of longitudinal changes started.

- 3. Peculiarities of Drug Hypersensitivity in Children.** Prof. Odilija Rudzeviciene, Neringa Stirbiene (2015-2025)

Results of allergy work-up in children when drug allergy is suspected and peculiarities of drug hypersensitivity reactions in children were analyzed. Knowledge, attitudes and practices related to drug hypersensitivity in children among primary care doctors in Lithuania were assessed.

- 4. Factors Affecting Human Milk Composition among Lithuanian Women.** Prof. Vytautas Usonis, assoc. prof. Arunas Liubsys, Ieva Paulaviciene (PhD Student). 2017-2020

Metabolomic analysis of human milk samples was performed in collaboration with Italian research partners. Preliminary results of the study were presented at international congresses. Two scientific publications with main findings are under preparation.

- 5. Non-Invasive Measurement Of Neonatal Central And Peripheral Hemodynamics.** Prof. Vytautas Usonis, assoc. prof. Arunas Liubsys, Ausrine Pliauckiene (PhD Student). 2017-2020

The study already enrolled 126 both preterm and full-term newborns of any gestational age. Statistic data analysis was made. Three scientific publications with main findings are under preparation. Four presentations at the international and national conferences.

- 6. The role of lung ultrasound in diagnosing infectious lung diseases in children.** Prof. Vytautas Usonis, Paulius Kalbatas (PhD Student). 2019-2023

Early phase of the project. Literature review, implementation of the study methodology. Testing the efficacy of rehabilitation procedures has been impeded by ongoing COVID-19 pandemic, will be resumed when quarantine will be lifted. Project is ongoing.

- 7. Severe brain injury in children: epidemiology, management and outcomes at the Tertiary Pediatric Trauma Center.** Assoc. prof. Burokiene S. 2018-2019

The results presented at an international conference. The manuscript is prepared for publication.

8. **A questionnaire based study to assess knowledge and attitude to meningococcal disease and prevention among parents of children up to 2 years in Lithuania.** Assoc. prof. S. Burokiene, prof. V. Usonis. 2019.

The results presented at an international conference. The manuscript submitted for publication, pending decision.

9. **Early Cardiovascular Aging in Children after Aortic Coarctation Repair.** Prof. A. Jankauskiene (PI), Skaiste Sendzikaite (PhD Student). Partners: Children Memorial Health Institute (Warsaw, Poland), Riga Children's Hospital (Latvia). 2017-2021

Data collection was finalized and the analysis of the findings was started. Interim results were presented in international congresses. A publication on arterial hypertension profiles and left ventricular geometry in the population is under preparation.

10. **Retrospective analysis of invasive meningococcal infection.** dr. V. Zilinskaite, B. Paskevici. 2019-2021

157 patients have been included so far and the interim analysis is being performed.

11. **Peculiarities of pediatric flu.** Assoc. prof. S. Petraitienė, prof. O. Rudzevičienė, dr. I. Ivaškevičienė, D. Vaičiūnienė, A. Eidukaitė. 2017-2019

Inclusion of patients was completed with 655 patients enrolled in total. Data analysis was started.

12. **Timely Diagnosis of Food Allergies and Optimal Monitoring of Allergic Child Nutrition Status.** prof. Dr. Odilija Rudzevičienė, I. Adomaite (PhD Student). 2017-2028

Patient enrollment, analysis of medical data, questionnaires, and food diaries is ongoing.

13. **Evaluation of the brain and kidney regional blood flow using Near Infrared Spectroscopy (NIRS) method in very low birth weight (<1500 g) infants with PDA.** Prof. A. Jankauskienė, assoc. prof. A. Liubsys, J. Navikiene (PhD Student). 2017-2021

Patient enrollment, analysis of medical data, questionnaires, and food diaries is ongoing.

Main publications:

Navikiene J, Liubsys A, Jankauskiene A. Lietuvos akušerija ir ginekologija. Kaunas : Vitae litera. ISSN 1392-5091. 2019, t. 22, Nr. 1, p. 52-59.

14. **Analysis and Associations of Clinical, Laboratory, Neurophysiological, Imaging and Neuropsychologic Data in Children With Neurologic Diseases.** Assoc. prof. J. Grikinienė, dr. R. Samaitienė, dr. R. Praninskiene. 2015-2025

Machine learning and automated algorithms for EEG data extraction and diagnosis classification were studied in benign childhood epilepsy and structural focal epilepsy. Interim findings were presented in International congresses, summarized in article. Ongoing research data of EpExMo cooperation, an open international research initiative for the study of epilepsies with external modulation (EpExMo) of ictogenesis were summarized in 33rd International Epilepsy Congress.

Main publications:

Misiukas Misiunas AV, Meskauskas T, Samaitiene R. Conference Proceedings 2164, 080005 (2019); <https://doi.org/10.1063/1.5130828>

Misiukas Misiunas AV, Meskauskas T, Samaitiene R. Biomedical Signal Processing and Control 48:118-127; <https://doi.org/10.1016/j.bspc.2018.10.006>

Tilindyte E, Muliuolis I, Samaitiene R. Neurologijos Seminarai . 2019, Vol. 23 Issue 2, p86-91. DOI: 10.29014/ns.2019.13

National Research Projects

1. **School AQR Seasonal peculiarities of in-door air pollution and its impact on respiratory morbidity and allergy of primary school children.** Prof. A.Valiulis, Assoc. Prof. V.Kvedarienė, I.Juškienė. Financial source: Lithuanian Council of Science. 2019-2022

Main publications:

Hahtela T, (...) Valiulis A, et al. (2019). Clin Transl Allergy, 9: 57, <https://doi.org/10.1186/s13601-019-0295-2>

Prokopciuk N, (...) Valiulis A, et al. (2019). Environ Sci Pollut Res; <https://doi.org/10.1007/s11356-020-08093-9>

2. **Effect of the initial antileukemic treatment and supportive care to early complications and early mortality rates for the patients with acute lymphoblastic leukemia (ALL) and hyperleukocytosis (> 100 x 10⁹/L).** G. Vaitkeviciene with student investigators. Partially funded by the Lithuanian Council of Science. 2013-2019.

The aim of the study was to monitor the hyperleukocytosis caused early deaths or development of tumor lysis syndrome after introduction of antileukemic therapy for the ALL patients with very high WBC (>100 < 109/L). Clinical and laboratory data as well as data on initial management of the patients were collected from the NOPHO ALL register and through a Questionnaire which was sent out to the relevant Nordic pediatric and adult centers where the patients with ALL and WBC ≥100 x 10⁹/L were treated. Results were accepted as an abstract for NOPHO 2020 Conference.

3. **Virus reactivation and virus infections caused complications during the early post-transplant period in children undergoing allogeneic hematopoietic stem cell transplantation (HSCT).** G. Vaitkeviciene with student investigators. Partially funded by the Lithuanian Council of Science. 2013-2019

The aim of the study was to collect and analyze the incidence, risk factors and outcomes of viral (Epstein Barr, Cytomegalovirus, adenovirus) reactivation and related complications within 100 days after HSCT in children treated at the Center for Pediatric Oncology and Hematology in Vilnius University Hospital Santaros Klinikos. Data were collected from patients treated during the period from 2012 to 2018. Fifty three patients with at least one virus reactivation were identified. Clinical and lab data as well as risk factors for virus reactivation were analyzed. Algorithm for the virus load monitoring, treatment and prophylaxis was developed.

International Research Projects

1. **Alfa-1-Qual Introducing standards of the best medical practice for the patients with inherited alpha-1 antitrypsin deficiency in Central Eastern Europe.** Prof. A.Valiulis, T.Alasevičius E.Poluziorovienė. Financial source: Leonardo da Vinci project & Lithuanian Council of Science. 2011-2013 ext 2019-2024.

Main publications:

Valiulis A, et al. (2019). Clin Transl Allergy, 9: 7; DOI:10.1186/s13601-019-0242-2

DeLuca DS, (...) Valiulis A (2019). Ped Pulmon, 54 (9): 1474-78; DOI:10.1002/ppul.24422

2. **e-QoL Asthma Health Related Paediatric Asthma Quality of Life in Eastern Europe.** Prof. A.Valiulis, V.Taminskienė. Financial source: Lithuanian Council of Science & IPOKRATES Lithuania Fund. 2013-2017 ext 2019-2022.

Main publications:

Taminskiene V, (...) Valiulis A. (2019). Eur J Pediatr, 178 (3): 369-76; <https://doi.org/10.1007/s00431-018-3306-8>

Hadjipanayis A, (...) Valiulis A, et al. (2019). Eur J Pediatr, 178 (10): 1605-12; <https://doi.org/10.1007/s00431-019-03458-w>

- 3. ARIA Allergic Rhinitis and its Impact on Asthma.** Prof. A.Valiulis, Assoc. Prof. V.Kvedarienė, Prof. R.Dubakienė, Prof. R.Ėmužytė. Financial sources: EU Grants and private sponsorship, 2015-ongoing.

Main publications:

Bousquet J, (...) Valiulis A, et al. (2019). Allergy, 74 (11): 2087-102; DOI: 10.1111/all.13805

Hellings P, (...) Valiulis A, et al. (2019). Rhinology, 57 (5): 392-99; DOI:10.4193/Rhin19.011

Bousquet J, (...) Valiulis A, et al. (2019). J Thorac Dis, 11 (8): 3633-42; DOI: 10.21037/jtd.2019.08.64

Bousquet J, (...) Valiulis A, et al. (2019). Clin Transl Allergy, 9: 44; DOI: 10.1186/s13601-019-0279-2

Bousquet J, (...) Valiulis A, et al. (2019). J Thorac Dis, 11 (9): 4072-84; DOI: 10.21037/jtd.2019.09.38

Bousquet J, (...) Valiulis A, et al. (2019). J Allergy Clin Immunol, 143 (3): 864-79, DOI:10.1016/j.jaci.2018.08.049

- 4. MASK-air MACVIA ARIA Sentinel Network for airway diseases.** Prof. A.Valiulis, Assoc. Prof. V.Kvedarienė, Prof. R.Dubakienė Prof. R.Ėmužytė. Financial sources: EU Action Plan B3 / DG Sante & DG Connect. 2015-ongoing.

Main publications:

Bosnic-Anticevich S, (...) Valiulis A, et al. (2019). Allergy, 74 (7): 1219-36; DOI:10.1111/all.13701

Bousquet J, (...) Valiulis A, et al. (2019). Clin Transl Allergy, 9: 16; <https://doi.org/10.1186/s13601-019-0252-0>

Bousquet J, (...) Valiulis A, et al. (2019) J Allergy Clin Immunol Pract, 7 (8): 2511-23, DOI: 10.1016/j.jaip.2019.07.044

Menditto E, (...) Valiulis A, et al. (2019). Allergy, 49 (4): 442-60; DOI:10.1111/cea.13333

Bedard A, (...) Valiulis A, et al. (2019). J Allergy Clin Immunol, 144 (1): 135-43; DOI: 10.1016/j.jaci.2019.01.053

- 5. 4C Study Cardiovascular Comorbidity in Children with Chronic Kidney Disease.** Prof. A. Jankauskiene, Prof. R. Cerkauskiene, Karolis Azukaitis. Financial Sources: E. RA-EDTA, German Federal Ministry of Education and Research. 2014-ongoing

The study is continuing into long-term patient-reported online follow-up of main clinical, quality of life and cardiovascular measures as an extended 4C-TRACK study with junior researcher K. Azukaitis taking over the coordination of the study extension.

Main publications:

Düzova A, (...) Azukaitis K, (...) Jankauskiene A, (...) et al. Hypertens. 2019 Nov;37(11):2247-2255. DOI: 10.1097/HJH.0000000000002160.

Azukaitis K, (...) Schaefer F; 4C Study; ESCAPE Trial Group. Kidney Int. 2019 Jul;96(1):214-221. DOI: 10.1016/j.kint.2019.01.035

Doyon A, (...) Azukaitis K, (...) Schaefer F. Sci Rep. 2019 Aug 7;9(1):11462. DOI: 10.1038/s41598-019-46653-3.

Holle J, (...) Azukaitis K, Schaefer F. Pediatr Nephrol. 2019 Dec;34(12):2571-2582. DOI: 10.1007/s00467-019-04331-6.

6. ALLTogether - A Treatment Study Srotocol of the ALLTogether Consortium for Children with Newly Diagnosed Acute Lymphoblastic Leukaemia (ALL). Assoc. prof. Jelena Rascon, G.Vaitkeviciene, G.Kleinotiene, S.Saulyte-Trakymiene. 2019-2032

During the 2019 Pilot study initiated to test the diagnostics and logistic as well as registration systems of the main Study. The Pilot Project is performed as an observational study. The main study starts in the Q1 of 2020 with the full scope of PK/PD studies and interventions, including three randomisations

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INNOVATION) PARTNERS

University of Heidelberg (Germany)

University of Cologne (Germany)

University of Bologna (Italy)

Bambino Gesù Hospital, Rome (Italy)

Karolinska Institutet and Karolinska University Hospital (Swedish)

Universitätsklinikum Hamburg-Eppendorf (UKE) (Hamburg, Germany)

Instytut "Pomnik - Centrum Zdrowia Dziecka" (Warsaw, Poland)

PENTA Foundation (Italy)

Harvard University, USA (Harvard Medical School) and Boston Children's Hospital (Pediatric Leadership, Pediatric Neurology, Neurophysiological Research).

Riga Children's Hospital and Riga Stradins University (Latvia)

Children's Hospital of Philadelphia (USA)

Poltava University (Ukraine)

Kyiv Medical University (Ukraine)

Montpellier University (France)

Aberdeen University (UK)

London Imperial College (UK)

Great Ormond Street Hospital (UK)

Leuven University (Belgium)

Columbia University (USA)

OTHER SCIENTIFIC ACTIVITIES

Prof. A. Jankauskienė

- member of European Pediatric Nephrology society council
- leader of Vilnius reference center for European rare kidney disease
- Member of ESCAPE Pediatric Nephrology Research Consortium
- president of Lithuanian Society for Paediatric Nephrology;
- member of Lithuanian Nephrology, Dialysis and Transplantation Association;
- member of International Paediatric Nephrology Association;
- member of Dialysis working group of the European Society for Paediatric Nephrology;
- member of International Paediatric Hypertension Association;
- member of Lithuanian Paediatric Society;
- member of regional bioethical committee.
- Project expert , expert for "Medicina", Dovepress journals
- editorial board member of the journal *Pediatrics*

Prof. Habil. Dr. V. Usonis

- member of Central European Vaccination Advisory Group (CEVAG);
- expert on vaccine-related issues at the European Disease Control Centre (ECDC);
- expert of Lithuania Science Council;
- member of the European Society of Paediatric Infectious Diseases (ESPID);
- board member of the Lithuanian Paediatric Society;
- chairman of Lithuanian Committee for Poliomyelitis Eradication Certification;
- editorial board member of the *Paediatric Infectious Disease Journal*;
- editorial board member of the journal *Vaikų pulmonologija ir alergologija (Paediatric Pulmonology and Allergology)*;
- editorial board member of the journal *Pediatrics (Paediatrics)*;

Prof. R. Čerkauskienė

- vice-president of Lithuanian Society for Paediatric Nephrology;
- member of Lithuanian Nephrology, Dialysis and Transplantation Association;
- member of International Paediatric Nephrology Association;
- member of Vilnius Paediatric Society;
- member of International Pediatric PD Biobank;
- Work group member of Workgroup Metabolic Nephropathies & Stone Disorders, (ERKNet, The European Rare Kidney Disease Reference Network), <https://www.erknet.org>).

Prof. N. Drazdienė

- editor-in-chief of the journal *Lietuvos akušerija ir ginekologija (Lithuanian Obstetrics and Gynaecology)*;
- editorial board member of the journal *Pediatrics (Paediatrics)*;
- board member of Lithuanian Paediatric Society and Vilnius Pediatric Society;
- representative person of Lithuania on the project EUscreen 2020 (www.euscreen.eu),
- vicepresident of Lithuanian section of German-Baltic Physicians Society (Deutsch-Baltische Arztegesellschaft).

Prof. R. Ėmužytė

- editorial board member of the journals: *Vaikų pulmonologija ir alergologija (Paediatric Pulmonology and Allergology)*; *Alergologija ir klinikinė imunologija (Allergology and Clinical Immunology)*; *Medinfo*; *Pediatrics (Paediatrics)*;
- international editorial board member of the journal *Alergia astma immunologia (Allergy Asthma Immunology)* (Poland);
- Lithuanian representative in European Training Committee of Paediatric Allergology;
- national representative of European ARIA (Allergic Rhinitis and its Impact on Asthma) Committee;
- member of the Lithuanian Society of Allergology and Clinical Immunology.

Prof. O. Rudzevičienė

- board member of the Lithuanian Paediatric Society;
- Lithuanian representative in European Training Committee of Paediatric Allergology;
- member of the European Academy of Allergology and Clinical Immunology;
- member of Lithuanian Society of Paediatric Allergology;
- member of the Lithuanian Society of Allergology and Clinical Immunology;
- editorial board member of the journal *Vaikų pulmonologija ir alergologija (Paediatric Pulmonology and Allergology)*;
- editorial board member of the journal *Pediatrics (Paediatrics)*.

Prof. Habil. Dr. A. Valiulis –

- Executive Committee member and Treasurer of European Academy of Paediatrics (EAP/UEMS-SP);
- Chairman of the Commission of Mother and Child of the Lithuanian Academy of Sciences;
- Chairman of Commission of Experts of National Programme of Immunoprophylaxis of Lithuanian Ministry of Health;
- President of the Lithuanian Paediatric Respiratory Society;
- Vicepresident of the Lithuanian Paediatric Society;
- Chairman of Vilnius International Paediatric Pulmonology and Allergology Conference-School (26 annual postgraduate courses since 1996);
- Editor-in-chief of the *journal Vaikų pulmonologija ir alergologija (Paediatric Pulmonology and Allergology)*;
- National Coordinator and Planning Committee member of WHO project Global Alliance Against Chronic Respiratory Diseases (WHO-GARD Lithuania);
- National Coordinator and Representative of Lithuania in International Guidelines of Allergic Rhinitis and its Impact on Asthma (ARIA Lithuania);
- Site Coordinator in international research projects MACVIA MASK, MASK-air, AIRWAYS ICPs, QoHproLT, e-QoL ASTHMA, Alfa-1-QoL, RareBestPractice.

Prof. V. Urbonas

- president of the Lithuanian Paediatric Society;
- president of the Lithuanian Society for Paediatric Gastroenterology and Nutrition;
- board member of Lithuanian Society for Parenteral and Enteral Nutrition;
- member of the European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN);
- member of the European Society for Parenteral and Enteral Nutrition (ESPEN);
- editorial board member of the journal *Gastroenterologija ir hepatologija*;
- editorial board member of the journal *Pediatrics*;
- chairman of the 4 Baltic Paediatric Congress

Assoc. Prof. S. Burokienė

- member of Scientific Paediatric Committee (PDCO) at European Medicines Agency.
- member of the Lithuanian Paediatric Society
- vice president of Vilnius Paediatric Society
- member of the European Society of Paediatric Infectious Diseases (ESPID)
- member of the European Academy of Paediatrics (EAP)
- member of the the Harvard Alumni Association.

Assoc. Prof. J. Grikinienė

- member of Lithuanian Association of Neurology;
- member of Lithuanian Paediatric Neurology Society;
- member of Lithuanian Society of Epileptology;
- member of Lithuanian Paediatric Society.

Assoc. Prof. V. Panavienė

- member of Paediatric Rheumatology European Society (PRES);
- national representative in the PRES Training and Education Committee;
- member of Paediatric Rheumatology International Trial Organisation (PRINTO);
- member of the Council of Lithuanian Rheumatology Association;
- editorial board member of the journal *Pediatrics (Paediatrics)*;

- editorial board member of the journal *Reumatologija (Rheumatology)*.

Assoc. Prof. S. Petraitiėnė

- member of Scientific Committee of Vilnius International Course 2017 (VICO-2017) Update on Paediatric Infectious Diseases, <https://www.vilniuscourse.com>;
- editorial board member of the journal *Paediatric Pulmonology and Allergology*, <http://www.pediatrija.org>.
- board member of Lithuanian Children Pulmonologist society

Assoc. Prof. V. Źilinskaitė

- board member of the Lithuanian Paediatric Intensive Care Society;
- member of the European Society of Intensive Care Medicine;
- editorial board member of the journal *Pediatrija (Paediatrics)*.

Assoc. Prof. J. Rascon

- member of the Mission Assembly for Cancer of the Horizon Europe programme 2021-2027
- board member of the European Reference of Paediatric Oncology (ENR-PaedCan)
- board member of the Lithuanian Society of Haematology (LHD)
- member of the Lithuanian Society of Pediatric Oncology and Hematology (LVOHD)
- member of the National Cancer Prevention and Control Programme 2015-2025 of the Lithuanian Ministry of Health;
- member of the Nordic Society of Pediatric Oncology and Hematology (NOPHO);
- member of the European Society for Blood and Marrow Transplantation (EBMT);
- member of the European Society of Pediatric Oncology (SIOPE)
- member of the European Society for Immune Deficiency (ESID)

Lect. R. KemeŹys –

- editorial board member of the journal *Baltic Endocrinology*;
- member of Lithuanian Paediatric Endocrinology Association;
- member of the International Growth Hormone Research Society (GRS);
- member of the European Society of Endocrinology (ESE);
- member of International Society for Paediatric and Adolescent Diabetes (ISPAD).

Assist. Prof. S. Dumėius –

- member of the European Respiratory Society;
- member of the European Cystic Fibrosis Association;
- editorial board member of the journal *Pediatrija (Paediatrics)*.

Assist. Prof. I. IvaŹkeviėienė –

- member of the Lithuanian Paediatric Society;
- member of the European Society of Paediatric Infectious Diseases (ESPID);
- member of the Young ESPID (European Society of Paediatric Infectious Diseases) Society;
- member of Central European Vaccination Advisory Group (CEVAG)
- member of Lithuanian Committee for Poliomyelitis Eradication Certification
- member of Commission of Experts of National Programme of Immunoprophylaxis of Lithuanian Ministry of Health

Assist. Prof. O. Kinėinienė –

- president of the Lithuanian Paediatric Cardiology Society;
- deputy editor of the journal *Pediatrija (Paediatrics)*.
- member of the Council of Lithuanian Paediatric Society;

- member of the Council of Vilnius Paediatric Society.

Assist. Prof. I. Pilypienė

- member of Vilnius Paediatric Society
- member of the Lithuanian Neonatology Association
- expert neonatologist in the State Forensic Medicine, Lithuanian Ministry of Justice

Assist. Prof. R. Samaitienė

- member of Baltic Child Neurology Association;
- member of Lithuanian Paediatric Neurology Society;
- board member of Lithuanian Society of Epileptology;

Assist. Prof. R. Vankevičienė

- president of Vilnius Paediatric Society;
- member of the Council of Lithuanian Paediatric Society;
- member of Lithuanian Paediatric Cardiology Society;

Assist. Prof. G. Vaitkevičienė

- Board member of the Nordic Society of Pediatric Oncology and Hematology (NOPHO);
- Chair of the NOPHO Pharmacology group
- Member of the European Society for Blood and Marrow Transplantation (EBMT);
- Member of the European Society of Pediatric Oncology (SIOPE).

Assist. Prof. S. Šaulytė Trakymienė

- Chair of the Lithuanian Society of Pediatric Hematology and Oncology (LVOHD)
- Board member of the NOPHO Scientific Committee
- Member of the Lithuanian Society of Hematology (LHD)
- Member of the Nordic Society of Pediatric Oncology and Hematology (NOPHO);
- Member of the European Society of Pediatric Oncology (SIOPE).

Teaching Assit. K. Ažukaitis

- Member of the Lithuanian Pediatric Nephrology Society
- Member of the European Society for Pediatric Nephrology
- Member of the International Pediatric Nephrology Association
- Member of the ESCAPE Pediatric Nephrology Research Consortium

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

Rudzevičienė O. How to investigate a child with a possible allergy to vaccine? Congress of European Academy of Allergology and Clinical Immunology, Lisbon, Portugal. June 1-5, 2019.

V.Urbonas. et al. Current treatment of Helicobacter pylori infected children and adolescents in Europe: interim results of the new EuroPedHp registry. ESPGHAN Glasgow, Scotland. June 5-8, 2019. (verbal)

Urbonas. et al. Characterization of Eosinophilic Esophagitis in a multicenter patient population from the European Pediatric Eosinophilic Esophagitis Registry (pEEr) of ESPGHAN. ESPGHAN Glasgow, Scotland. June 5-8, 2019. (verbal)

V.Urbonas. et al. Systematic review and meta-analysis of histological gastritis according to the updated Sydney classification in Helicobacter pylori positive and negative children. ESPGHAN Glasgow, Scotland. June 5-8, 2019.

V.Urbonas. et al. Differences in implementation of guidelines on diagnosis and treatment of eosinophilic esophagitis (EOE). An overview of current pediatric and adult GI practice in Europe. UEGW Barcelona, Spain. October 19-23, 2019.

V.Urbonas. Pediatric constipations. International Children's Health Day 2019 & International Scientific Pediatric Students Conference. Riga, Latvia. November 1, 2019

K. Ažukaitis. How to set up a research framework? Congress of International Pediatric Nephrology Association. Venice, Italy. October 13-16, 2019.

A. Jankauskienė. Urinary tract infection prophylaxis in high grade vesicourethral reflux: Benefits and risks. 4 th BALTIC PAEDIATRIC CONGRESS. Vilnius, Lithuania. May 16-18, 2019.

A.Jankauskiene. Urinary tract infection prophylaxis in high grade reflux: data from PREDICT trial. Polish Pediatric Nephrology society meeting. Crakow, Poland. May 24-26, 2019.

Nijolė Drazdienė. Incidence and management of RSV infection in the Baltic States./ 4th BALTIC PAEDIATRIC CONGRESS under the auspices of European Academy of Paediatrics (EAP/UEMS-SP). Vilnius, Lithuania. May 16-18, 2019.

Nijolė Drazdienė. Respiratory Syncytial Virus Infection Management in the Baltic States./ Growing up healthy after going home from NICU/ 5th Global Summit for Premies. Vilnius, Lithuania, December 5-6, 2019

MOST IMPORTANT NATIONAL AND INTERNATIONAL AWARDS RECEIVED FOR R&D ACTIVITIES

K. Ažukaitis. Vilnius University Rector's Scientific Award 2019

MOST IMPORTANT PARTICIPATION CASES OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS AND ORGANISATIONS, AND BUSINESS ENTITIES

V. Urbonas. Participation in Lithuanian Health Ministry working groups:

- On pediatrician practice regulations
- Liver transplantation services
- Viral hepatitis prevention and control
- National immunoprophylaxis program

J. Rascon:

- Member of the National Cancer Prevention and Control Programme 2015-2025 of the Lithuanian Ministry of Health (continued);
- Member of the Working Group of the Ministry of Health for Hematopoietic Stem cell Transplantation (accomplished)

S. Burokienė. Participation in working groups of the Ministry of Health:

- on optimizing child health care services
- on optimizing services of emergency departments.

R. Čerkauskienė:

- Commission on Reimbursement of Treatment for Very Rare Diseases of Lithuanian Ministry of Health, WG Member
- National activities related to rare diseases Plan of Lithuanian Ministry of Health, WG Member

CONSULTATIONS PROVIDED BY THE UNIT TO THE PUBLIC OR ECONOMIC ENTITIES

1. European Union Investment Project "Improving the Efficiency and Capacity of Public Health Institutions through Evidence Based Management", leader of expert group (Prof. R. Čerkauskienė)
2. European Union Investment Project and Funds from the State Budget of the Republic of Lithuania - Medical Management Projects 2017-2020: Investment Project to Improve Quality and Availability of Diagnostic, Treatment and Monitoring Services for Rare Pediatric Diseases at Santariškės Clinics, Vilnius University Hospital, project leader (Prof. R. Čerkauskienė)

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

V. Urbonas. Participation in TV and radio shows, press interviews.

N. Drazdienė. TV interviews on fetal alcohol syndrome

R. Čerkauskienė. Participation in TV and radio shows, press interviews. Participation in patients organization meetings and conferences.

Clinic of Internal Medicine, Family Practice and Oncology

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Head – Prof. Dr. *Virginijus Šapoka*

STAFF

Professors: Dr. V. Šapoka, Dr. V. Kasiulevičius, Dr. V. Alekna, Dr. L. Griškevičius, Dr. N. Samalavičius, Habil. Dr. D. Kalibatienė, Habil. Dr. V. Gaigalaitė, Dr. V. Ostapenko (part-time)

Associate Professors: Dr. V. Urbanavičius, Dr. (HP) E. Mišeikytė Kaubrienė, Dr. V. Dženkevičiūtė, Dr. Ž. Visockienė, Dr. V. Ožeraitienė, Dr. L. Vencevičienė (part-time)

Research Professor: Dr. S. Cicėnas

Assistants professor: Dr. A. Abraitienė, Dr. V. Pečeliūnas, Dr. A. Marcijonienė (part-time), Dr. K. Simanauskas (part-time), N. Burokienė (part-time), V. Andrejevaitė (part-time), Dr. S. Varvuolytė, Dr. R. Staigis (part-time), Dr. V. Karpavičienė (part-time), Dr. O. Nečajauskaitė (part-time).

Teaching assistant: R. Laukienė (part-time), K. Švaikevičienė (part-time).

Lecturers: A. Slobinas (part-time), S. Tulytė (part-time), L. Vaitkevičiūtė (part-time), D. Diglys (part-time), A. Galkinė (part-time), E. Vitkauskaitė (part-time), G. Jonuškienė (part-time), A. Degulys (part-time), I. Fomčenko (part-time), D. Jakučionis (part-time), M. Buitkus (part-time), E. Gruodytė (part-time), E. Bagurskienė (part-time), dr. A. Mastavičiūtė (part-time), T. Maselienė (part-time).

Doctoral students: A. Krasauskas, R. Pileckytė, V. Dirsė, J. Mozūraitienė, I. Fomčenko, J. Bublevič, A. Bliūdžius, S. Tulytė, K. Švaikevičienė.

Scientific groups of students:

Oncohematology: scientific leader – dr. Ž. Gudlevičienė, coordinator – student V. Vaitekėnaitė; 28 members of students.

Endocrinology: scientific leader – dr. A. Abraitienė, coordinator – student G. Labul; 26 members of students.

Family medicine: scientific leader – dr. V. Andrejevaitė, coordinator – student M. Burneikaitė; 38 members of students.

RESEARCH INTERESTS

Etiopathogenesis, Diagnostics, Treatment of Diseases: Fundamental and Clinical Research, Innovative Technologies

Early Diagnostics and Prevention of Non-infection Diseases in Family Practice and in Gerontology

Biomarker Research in Hematology and Oncology

Investigation of Etiopathogenetic Risk Factors and Quality Of Patients' Life With Internal Diseases

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

- 1. Validation of the Lithuanian version of sarcopenia-specific quality of life questionnaire SarQoL**, prof. V. Alekna, Prof. M. Tamulaitienė, 2019-2023.

The research evaluating the dependence of the quality of life of elderly persons on the manifestation of sarcopenia has been started and Lithuanian version of sarcopenia-specific quality of life questionnaire has been validated.

- 2. Detection of Optimal Diagnostic and Treatment Methods. Early Diagnostics and Prevention of Non-Infection Diseases**. Prof. V. Šapoka, Prof. V. Kasiulevičius. 2019-2023.

The research aiming to determine the long-term effects of gastric bypass surgery on metabolism and cardiovascular changes has been started.

National Research Projects

- 1. The importance of functional imaging in conservatively treated patients with lung cancer**. Saulius Cicenás. 2018-2022.

The latest literature was collected and analyzed. Data is being collected. First report of study was delivered at the International Conference „Medical Physics in the Baltic States“.

Main publications:

Lung cancer survival in Lithuania: changes by histology, age, and sex from 2003-2007 to 2008-2012. V. Gedvilaite, S. Cicenás, E. Danila, G. Smailyte. Cancer control. Sage Publications Inc. 2019, vol. 26, p. 1-7. ISSN: 1073-2748 ; DOI: 10.1177/1073274819836085

- 2. Non-small cell lung cancer (NSCLC) immune microenvironment and exosome analysis in connection with patient survival and treatment outcomes**. Saulius Cicenás 2017-2022.

The aim of the study is to evaluate tumour associated macrophages (TAM) and tumour infiltrated lymphocytes (TIL) and PD-L1 interaction in patients with non-small lung cancer (NSCLC), who underwent surgery and correlation these indicators with patients overall survival and treatment results.

During this work the research aiming to determine how TAM micro localisation in tumour can influence NSCLC patients survival and results of treatment has been started.

Main publications:

Immune Markers in Non-Small Cell Lung Cancer: What Else Beyond Pd-L1 and Tumour Mutational Burden is there? J.Bublevic, S. Cicenás, V. Pasukoniene.. Biomed J Sci & Tech Res 12(5)-2019. BJSTR. MS.ID.002325. DOI: 10.26717/BJSTR.2019.12.002325

International Research Projects

- 1. Implementation of good practices for chronic diseases. CHRODIS-PLUS**. L. Vencevičienė. 2017-2020

Currently, there is a lack of evidence-based guidelines for comprehensive care for patients with multiple illnesses. For this reason it is necessary to develop a specific healthcare model for these patients and thus improve their medical care. The aim of this project is to optimize the treatment and care of patients with multiple illnesses. The study is performed by LSMU Family Medicine Center and VUL SK Family Medical Center. The team of investigators from VUL SK Family Medicine Center, led by L. Vencevičienė, already enrolled 200 patients with multiple illnesses.

2. **European platform for outcomes research into perioperative interventions during surgery for cancer.** COST International scientific project. Saulius Cicėnas. 2018 – 2019

Analyzing the use of intravenous versus inhaled anesthetic agents in patients undergoing breast cancer resection. The team found that when breast cancer cell lines were incubated with sevoflurane there was a significant increase in proliferation, migration, and invasion in some breast cancer cell lines. In another study the team \ found that xenon inhibited migration in both adenocarcinoma cells and decreased release of a pro-angiogenic factor RANTES from one of the breast cancer cell lines. Based on the current evidence, this combination of anesthetic and analgesic agents has the best chance of improving cancer-related outcomes and postoperative recovery.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INNOVATION) PARTNERS

Dramemen Hospital, Norway

Oslo University Hospital, Norway

Norwegian University of Science and Technology, Department of Cancer Research and Molecular Medicine, Norway

The Oncoplastic Breast Consortium , Switzerland Academic Clinical Study Scientific Group (SAKK), Senologic International Society /International School of Senology

OTHER SCIENTIFIC ACTIVITIES

Prof.V. Šapoka

- board member of International and European Society of Internal Medicine and prezident of Lithuanian Society of Internal Medicine;
- editor-in-chief of journal *Internistas (Internist)*;
- president of Lithuanian Evidence-Based Medicine Society;
- board member of journals *Medicinos teorija ir praktika (Theory and Practice in Medicine)*, *Geriatrija (Geriatrics)* and *Lietuvos bendrosios praktikos gydytojas (General Practitioner of Lithuania)*;
- Head of department of Internal Diseases of Vilnius University Hospital Santaros Clinics

Assoc. prof. V. Urbanavičius

- member of Eurodiabetes index 2015 committee;
- editorial board member of journals *Lietuvos endokrinologija (Endocrinology of Lithuania)*, *Medicinos teorija ir praktika (Theory and Practice in Medicine)*, *Diabetes Review* and *Internistas (Internist)*;
- member of the organizing committees of endocrinological conferences;
- member of European Association of the Study of Diabete.

Prof. V. Alekna

- president of Lithuanian Osteoporosis Foundation;
- editor-in-Chief of journal *Gerontologija (Lithuania)*;
- president Lithuanian Association of Gerontology and Geriatrics;
- board member of European Geriatric medicine Society;
- board member of European union of medical specialists Geriatric medicine section.

Assoc. prof. Dr. Zydrune Visockiene

- President of Vilnius Society of Endocrinology;
- member of Lithuanian Society of Endocrinology;
- board member of Lithuanian Bioethics Committee;

- member of European Association for the Study of Diabetes;
- editorial board member of the journal *Lietuvos endokrinologija*.

Prof. D. Kalibatiėnė

- head of the Department of Internal Diseases at Vilnius Clinical Hospital;
- member of the Council of the Faculty of Medicine of Vilnius University;
- editorial board member of the journal *Slauga. Mokslas ir praktika*, <http://www.sdtsc.lt/index.php?id=285>;
- member of the Lithuanian Society of Gastroenterology, <http://www.gastroenterologija.lt/>;
- member of the Lithuanian Society of Internists;
- member of the Lithuanian Society of Palliative Medicine, <http://www.paliatyvipagalba.lt/>;
- board member of the Society of Lithuanian Nurses with university education, <http://www.lusd.lt/>;
- head of the self-assessment work group of Nursing Studies programmes;
- head of the Nursing Bachelor's degree final thesis Defending Committee.

Prof. V. Gaigalaitė

- member of Lithuanian Society of Neurology;
- member of Lithuanian Society of Stroke;
- editorial board member of the journal *Slauga. Mokslas ir praktika*, <http://www.sdtsc.lt/index.php?id=285>.

Prof. S. Cicėnas

- member of the ESTS (European Society of Thoracic Surgeons)
- member of the IASLC (International Association for study of lung cancer)
- member of the Lung Cancer Study Group EORTC (European organization for research and treatment of cancer)
- board member of the Lithuanian Society of Cardiothoracic Surgeons.
- editorial board member and of the journal (Lithuanian Surgery)
- editorial board member of the journal BSM (Biological Science Monitor) expert of malignant pleural mesothelioma issues
- member of Lithuanian Society of Pulmonology and Allergy
- board member of Lithuanian Society of Oncology

Prof. Narimantas Evaldas Samalavicius

- President of the Lithuanian Society of Coloiproctologists;
- President-elect of International Society of University Colon and Rectal Surgeons;
- Editor-in-chief of the journal *Lithuanian Surgery*;
- editorial boards member of the *World Journal of Coloproctology*, *Annal of Coloproctology*;
- scientific program director of 29th biennial meeting of the International Society of Univesity Colon and Rectal Surgeons. London, UK, August 29–September 1, 2018.
- co-chairman at the Health Ministry of Lithuania of the steering committe of the National Colorectal cancer Screening Pogram.

Assoc. prof. Dr. V. Ožeraitienė

- member of the world Society of Gastroenterology;
- member of the Lithuanian Society of Gastroenterology, <http://www.gastroenterologija.lt/>;
- member of the Lithuanian Society of General Practitioners, <http://gydytojas.blogspot.com/>;
- member of Nursing Bachelor's degree final thesis Defending Committee;

- editorial board member of the journal *Slauga. Mokslas ir praktika*, <http://www.sdtsc.lt/index.php?id=285>.

Assist. Prof. Dr. S. Varvuolytė

- president of Lithuanian Society of General Practitioners;
- country delegate of UEMO (European Union of General Practitioners/Family Physicians);
- board member and country delegate of EURACT (European Academy of Teachers in GP/FM);
- member of BARN (Baltic Antibiotic Resistance Collaborative Network);
- independent expert consultant of The National Immunoprophylaxis Programme 2014-2018;
- expert consultant family physician of the Ministry of Health of the Republic of Lithuania;
- expert consultant of Experts Group for Prevention of Microorganisms Resistance for Antimicrobial Treatment Development and Prevalence;
- expert of Vilnius region's Antimicrobial Resistance Inter Institutional Management Group;
- expert consultant family physician of European Medical Agency;
- member of Medications Reimbursement Commission.

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

1. Conference „Current and future perspectives of multiple myeloma and other hematological malignancies“ Warsaw, 8-9 Mar 2019. Presentation „How I treat multiple myeloma using IMiDs“.
2. „T4 Surgery for Lung Cancer“ was delivered on 25-th of October 2019 at International Conference on Thoracic Oncopathology in Republican Scientific and Practical Center of Oncology and Medical Radiology in Minsk, Republic of Belarus.
3. -“Combination of novel pathogenic variants in sarcomeric proteins genes and GLA gene in relatives with hypertrophic cardiomyopathy”, 2019.05.25 ESC Heart Failure 2019 (Europe Society of Cardiology). Athens, Greece.
4. Treatment methods and outcomes of hip fracture in Lithuanian hospitals. World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases, Paris France 4-7 April 2019, Paris.
5. Lithuanian experience in colorectal surgery with robotic system. Spring Colorectal Meeting. Braga, Portugal, 2019 06 13-15.

MOST IMPORTANT PARTICIPATION CASES OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS AND ORGANISATIONS, AND BUSINESS ENTITIES

Participation in Lithuanian Health Ministry Committee on criteria for assessment of health technologies. Dr. V. Pečeliūnas, prof. V. Kasiulevičius

Participation in Lithuanian Health Ministry working group for Health technology reimbursement strategy. Dr. V. Pečeliūnas, prof. L. Griškevičius

Meeting of Lithuanian Government and Ministry of Health authorities „On requirements to the breast cancer surgeons“. Vice-minister prof. L. Jaruševičienė, prof. R. Rimdeika, prof. A. Boguševičius, prof. V. Ostapenko, dr. N. Jakutis, dr. Š. Mažeika, A. Česas

CONSULTATIONS PROVIDED BY THE UNIT TO THE PUBLIC OR ECONOMIC ENTITIES

EMA- Ad Hoc Expert Group meeting in Amsterdam on 3rd of September 2019

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Regular (5-6 times in a year) lectures and reports delivered on Lung Cancer item at Lithuanian television, radio stations and local newspapers

Participation in TV, radio broadcasts, popularizing the achievements of medical science

Regular (8 times in a year) participation and organization of National and International conferences in Lithuania

Research dissemination project NCI with the National Breast Cancer Association (patients) “And life goes on”

First Lithuanian meeting of breast cancer professional and patients: the Joint Lithuanian

Senological (Breast Diseases) Society and Lithuanian National Breast Cancer (patients)

Association 6. Alternative smoking – what do we know? Republican Scientific and Practical Conference. 2019. Vilnius.

Clinics of Emergency Medicine (from 2018-03-01)

2 Santariškių, LT-08661 Vilnius

Tel. +370 5 2365 204

E-mail: rasel.seraite@mf.vu.lt; pranas.serpytis@santa.lt

Head – Dr. Prof. Pranas Šerpytis

STAFF

Professor: Dr. P. Šerpytis.

Associate professors: Dr. I. Norkienė, Dr. S. Vosylius, Dr. R. Samalavičius

Teaching Assistants: Dr. R. Badaras, Dr. V. Žilinskaitė, P. Uksas.

Senior Researcher: Dr. R. Samalavičius.

Lecturers: K. Laurušonis, P. Uksas, A. Ignotas, B. Markevič, A. Zubrickas, A. Tamošiūnienė, A. Vilimas, M. Gedminas.

Doctoral students: P. Uksas, A. Briedis.

RESEARCH INTERESTS

Emergency Medicine

Acute Cardiac Care

Resuscitation

Politraum

Triage

Acute coronary syndromes

Sudden death

Acute heart failure

RESEARCH PROJECTS CARRIED OUT IN 2019

National Research Projects

- 1. Myocardial Infarction in the Elderly.** Project. No: 09.3.3.-LMT-K-712-15-0003. Prof. Pranas Šerpytis, Margarita Broslavskytė. 2018-2019

Acute myocardial infarction (AMI) is one of the most common diseases among the elderly. Patients older than 75 years are often underrepresented in clinical trials and often do not receive treatment according to current guidelines.

Results: The highest incidence was of NSTEMI (51,50%) among all patients and invasive treatment was used in 1487 (74,35%) cases. A total of 267 (13,35%) patients have died. In survivors group, invasive treatment methods (1319 (76,1%) vs. 168 (62,9%), $p < 0,05$) were used more common. Among the patients that died, there was a more common STEMI (162 (60,7%) vs. 808 (46,6%), $p < 0,05$), cardiogenic shock (194 (78,2%) vs. 132 (9,2%), $p < 0,05$) and bleeding in hospital (59 (22,1%) vs. 130 (7,5%), $p < 0,05$). General health, physical functioning and emotional well-being scores were lowest (54, 55,85 and 56 points respectively). Physical functioning was better assessed in the invasive treatment group (60,95 (27%) vs. 40,80 (20,5%), $p = 0,003$).

Main publications:

In press „Changes in quality of life in elderly patients with acute myocardial infarction“ *Sveikatos mokslai* 2019/2020.

Prognostic significance of biomarkers in predicting in-hospital all-cause mortality in elderly patients with acute myocardial infarction”. *Biomedical journal of scientific and technical research* 2019, vol. 20, no. 3, p. 15095-15099; DOI: 10.26717/BJSTR.2019.20.003462; Impact Factor: 0.548.

OTHER SCIENTIFIC ACTIVITIES

Prof. P. Šerpytis

- Member of the Research Council Committee of Natural and Technical Sciences, <https://www.lmt.lt/lt/apie-taryba/gamtos-ir-technikos-mokslu-komitetas/prof.-pranas-serpytis/2813>;
- Editorial board member of the journal *Sveikatos mokslai*;
- Editorial board member of the journal *Santara*;
- Scientific board member of the journal *Emergency Medicine Service*;
- Editorial board member of the journal *International Heart and Vascular Disease Journal*;
- Editorial board member of the journal *Annals of Medical Case Reports*;
- Editorial board member of the journal *Emergency Medicine and Critical care Journal*;
- Co- Chairman of International Scientific Conference ”Progress of ECMO in Lithuania”. 3rd Conference” September 20, 2019. Vilnius.

MOST IMPORTANT PARTICIPATION CASES OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS AND ORGANISATIONS, AND BUSINESS ENTITIES

Working groups of the Lithuanian Ministry of Health (P. Šerpytis):

- Lithuanian Health Ministry working group of law number V-208 (dated April 8th, 2004) “For ratification of the emergency medicine care and emergency medicine service provision order and extent”;
- Working group of Emergency medicine service for traumas and other external conditioned injuries (Trauma cluster).
- Working group for use of ECMO system in emergency medicine service.
- The member of the Health Council, since the year- 2019 .
- The member of the Research Council of Lithuania, since the year- 2015.

CONSULTATIONS PROVIDED BY THE UNIT TO THE PUBLIC OR ECONOMIC ENTITIES

Lecture provided in municipality of Neringa. Topic: “*How to prevent acute heart stroke?*” P. Šerpytis, July 29, Nida;

Lecture provided in municipality of Šilalė. Topic: “*How to recognise acute miocard infarction?*” P. Šerpytis, August 5, 2019, Šilalė;

Open lecture provided in Medical Faculty. Topic: “*How to recognise acute miocard infarction?*” P. Šerpytis, April 18, 2019, Vilnius.

Open lecture provided in Medical Faculty. Topic: “*Resuscitation and automated external Defibrillator*” P. Uksas. April 18, 2019, Vilnius.

Open lecture-“*Resuscitation and automated external Defibrillator*“, provided in project“Student for one day”, P. Šerpytis, October 22, 2019, Vilnius.

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Presentation at Lithuanian Government Ministry Council “Inovation in Cardiology”, P. Šerpytis, December 2, 2019, Vilnius.

Interviews for Lithuanian National Radio and TV shows. Topics: Emergency Medicine, Cardiology, Preventive Medicine. P. Šerpytis, 2019.

INSTITUTE OF DENTISTRY

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Head – Prof. Dr. *Vytautė Pečiulienė*

STAFF

Professors: Dr. V. Pečiulienė, Dr. A. Pūrienė, Dr. T. Linkevicius, Dr. V. Rutkūnas

Associate professors: Dr. R. Manelienė, Dr. L. Zaleckas, Dr. S. Drukteinis, Dr. V. Brukienė, Dr. L. Linkevičienė, Dr. R. Bendinskaitė.

Assistants Prof.: Dr. V. Berlin (part-time), E. Nedzinskienė (part-time), A. Rimkevičius (part-time), Dr. R. Žaliūnienė (part-time), E. Vindašiūtė-Narbutė (part-time)

Teaching Assists.: A. Gedrimienė (part-time), R. Trumpaitė-Vanagienė (part-time), V. Zaleckienė (part-time), S.K. Žukauskas (part-time).

Lecturers: Dr. E. Miliūnienė (part-time), Dr. D. Ivanauskaitė (part-time), Dr. R. Almonaitienė (part-time), V. Almonaitis (part-time), R. Pletkus (part-time), D. Janavičiene (part-time), G. Krukonis (part-time), D. Matkevicius (part-time), J. Žekonienė (part-time), G. Naujokaitytė (part-time), P. Andrijauskas (part-time), G. Janarauskaitė (part-time), P. Mikalauskienė (part-time), J. Pletkus (part-time), J. Vaščiūnaitė-Tylienė (part-time).

Doctoral students: L. Džiaugytė-Eyberdiyev, I. Gendvilienė, S.K. Žukauskas, A. Gedrimienė, R. Borusevičius, A. Rovas, P. Tušas, I. Stankevičienė.

Students' scientific group of Odontology: scientific leader – Assoc. Prof. Dr. V. Brukienė, Coordinator – Student G. Vitosytė; 61 Members of the group.

RESEARCH INTERESTS

Etiopathogenesis, diagnostics, treatment, rehabilitation and prevention of stomatognathic system disease: fundamental and clinical research.

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

- 1. Evaluation of Prevalence, Treatment Methods Modalities, Rehabilitation and Prevention of Patients with Congenital and Acquired Diseases of Stomatognathic System.** Prof. V. Pečiulienė, Prof. A. Puriene, Prof. T. Linkevicius, Prof. V. Rutkunas, Assoc. Prof. V. Brukiene, Assoc. Prof. L. Linkeviciene, Assoc. Prof. S. Drukteinis, Assoc. Prof. L. Zaleckas 2014–2019.

The holistic aim of the project is to evaluate the prevalence of congenital and acquired stomatognathic system diseases in order to select the most effective methods of treatment and prevention with novelty approach.

Regeneration therapy could open new perspectives in dentistry. Bone regeneration enhancement and development of synthesis methods to produce composite materials (CM) with applications for bone regeneration. Creation of new technology for pulp-dentin complex regeneration using tissue engineering principles by implementing newly created 3D scaffolds and bioactive flowable endodontic cements.

Research of the emerging importance of epigenetic regulation in the etiopathology of aims to assess micro-RNA role in inflammation related to chronic periodontitis for patients diagnosed with CP and RA. To understand xerostomia, autoimmune and non-autoimmune sicca syndrome epidemiology, epigenetics and neuroimmune axis relation with oral health is started.

- 2. The Association of Epigenetic Factors with the Etiopathogenesis and Clinical Status of Periodontal Diseases and Rheumatoid Arthritis.** Prof. A. Puriene, PhD St. A. Rovas. 2017-2021.

Rheumatoid arthritis (RA) and chronic periodontitis (CP) are similar in terms of pathogenesis as both diseases involve chronic inflammation fuelled by pro-inflammatory cytokines, connective tissue breakdown and bone erosion. Researches aimed at revealing associations between the diseases, including clinical, epidemiological and other aspects have been initiated. The emerging importance of epigenetic regulation in the etiopathology of various diseases was the rationale for current research which aims to assess micro-RNA role in inflammation related to chronic periodontitis for patients diagnosed with CP and RA.

Main publications:

Adomas Rovas, Benita Buragaitė-Staponkienė, Kristina Stuopelytė, Eglė Puncevičienė, Irena Butrimienė, Sonata Jarmalaitė, Alina Pūrienė. Circulating MiRNAs as Biomarkers for Non-invasive Diagnostics of Chronic Periodontitis The Continental European Division (CED-IADR), Scandinavian Division (NOF) - The International Association for Dental Research Oral Health Research“, Madrid, Spain; 2019, October.

- 3. New tissue regeneering technologies for reconstruction of periodontal tissues using periodontal ligament –derived mesenchymal stem cells.** Prof. Alina Puriene. 2019-2023.

The aim of this project is to develop new periodontitis therapies. To our knowledge, such research has been carried out for the first time. Our data collected during the research demonstrates that PDLSCs produce biologically active extracellular vesicles (EVs), that have been shown to display anti-inflammatory properties.

- 4. Xerostomia, autoimmune and non-autoimmune sicca syndrome epidemiology, epigenetics and neuroimmune axis relation with oral health.** Prof. A. Puriene, dokt. Indre Stankeviciene. 2019-2023

This project aim is to understand xerostomia, autoimmune and non-autoimmune sicca syndrome epidemiology, epigenetics and neuroimmune axis relation with oral health.

- 5. Theory-Based Interventions for Improving Oral Self-Care in 15-16 Years Old Schoolchildren.** Prof. V. Pečiulienė, Assoc. Prof. V. Brukienė, PhD St. L. Džiaugytė-Eyberdiyev. 2016-2020.

Medical interventions guided by psychological theories have been effective in reducing risk behaviours and disease levels in different settings and population groups. Targeting adolescent cohorts for health promotion is important due to the fact that adults who maintained their oral health lifestyle from adolescence through adulthood presented with better oral health than the ones who had a poorer health-related lifestyle in their adolescence. Main hypothesis of research done so far is the theory guided interventions are superior to a one-time conventional dental instruction for improving and sustaining oral self-care in adolescents.

- 6. Salivary Factors and Caries in Family Members. Preparation of Patients with Childhood Autism for Dental Procedures: Assessment of Possibilities. Oral Health**

and Dental Treatment Needs of Children with Cerebral Palsy in Vilnius City. Assoc. Prof. V. Brukiene. 2018-2022.

Evaluation of the possibilities to prepare patients diagnosed with childhood autism for dental procedures is important. The research has been made to reveal and to assess the prognostic criteria for possibilities of the child with autism to cooperate during dental procedures according to clinics of autism, evaluating patient developmental abilities and skills and the effectiveness of behavioural management methods based on accomplishment of repeated tasks.

Main publications:

Oral health status of children with Cerebral Palsy in Vilnius (Lithuania). J.Vasciunaite-Tyliene, V. Brukiene. 11th Interim Seminar & Guidelines Workshop of the European Academy of Pediatric Dentistry in Chania, Crete, Greece. 2019.05.03-2019.05.04. https://www.eapd.eu/uploads/files/EAPD_Abstract_Book.pdf

- 7. Epidemiological Oral Health Survey in Lithuania.** Assoc. Prof. R. Bendinskaitė, Prof. A. Pūrienė. 2015-2020.

Epidemiological oral health survey aims to collect data regarding the distribution of different oral conditions and their determinants in key age groups in different regions of Lithuania and to compare present findings with the results of the adult Lithuanian survey done in 1997/1998. National oral health survey is a cross-sectional study, which take place in 15 geographic locations. Now we have data from 1300 children and adolescence and 1400 adults.

- 8. Exploring the Effectiveness of Oral Health Problem Solving with Interactive Training.** Assoc. Prof. R. Bendinskaitė, Prof. A. Pūrienė. 2017-2021.

The study is aiming to explore the effectiveness of interactive training in addressing dietary and oral care oral health problems among different dental risk groups, to find out the level of dental anxiety experienced by Lithuanian residents and the effectiveness of interactive training in solving the problems caused by this anxiety, to explore the effectiveness of interactive training in solving oral health problems among high-risk dental populations.

- 9. Prevalence of physical and psychological disorders among dentistry undergraduate students – a pilot study in seven European countries.** Prof. A. Pūrienė, V. Berlin. 2017-2021.

Numerous studies reported a high prevalence of physical and psychological health problems among dental students all over the world. The mapping of physical and psychological problems among undergraduate dental students with a focus on different time points in clinical work in seven Eastern European and Scandinavian countries has been done. This will help to evaluate students' knowledge of ergonomics and its use in daily work. The study will show whether there is a need to investigate dysfunctions in clinical learning environments qualitatively country-wise in order to design tailor-made supportive strategies.

Main publications:

Berlin V, Puriene A, Hysi D, Katrova L, Nikolovska J, Oancea R, Stangvaltaite-Mouhat L, Chalas R. Multi-country analysis of self-reported physical condition declared by dental students. Annual Meeting Association for Dental Education in Europe 2019, 21st-23rd August, Berlin, Germany.

- 10. New technology for dental pulp-dentin complex regeneration. Characterization and Sealing Ability of the Flowable Bioceramic Materials. Shaping Ability, Cyclic Fatigue Resistance and Fractographic Analysis of Hybrid and Reciprocating Nickel Titanium Endodontic Instruments.** Prof. dr. Vytaute Peciuliene, Assoc. Prof. S. Drukteinis, pHd student Paulius Tusas. 2019-2023.

The research aimed at creating new technology for pulp-dentin complex regeneration using tissue engineering principles by implementing newly created 3D scaffolds and bioactive flowable

endodontic cements has been initiated. The aims of the studies performed are to develop flowable bioceramic material mta flow, using scanning electron microscopy (sem), energy dispersive spectroscopy (eds) and x-ray diffractometry; to evaluate and compare the root canal sealing quality by mta flow and bioroot rcs/single-cone technique in artificially perforated roots of mandibular molars, using micro computed tomography (μ ct) and to evaluate and compare the effect of ultrasound agitation on the porosity of the flowable bioceramic materials, using micro computed tomography (μ ct).

Main publications:

Porosity Distribution in Apically Perforated Curved Root Canals Filled with Two Different Calcium Silicate Based Materials and Techniques: A Micro-Computed Tomography Study. By: Drukteinis, S (Drukteinis, Saulius)[1] ; Peciuliene, V (Peciuliene, Vytaute)[1] ; Shemesh, H (Shemesh, Hagay)[2] ; Tusas, P (Tusas, Paulius)[1] ; Bendinskaite, R (Bendinskaite, Ruta)[1]. View Web of Science ResearcherID and ORCID. MATERIALS. Volume: 12. Issue: 11. Article Number: 1729. DOI: 10.3390/ma12111729. Published: JUN 1 2019

Shaping ability of BioRace, ProTaper NEXT and Genius nickel-titanium instruments in curved canals of mandibular molars: a MicroCT study. By: Drukteinis, S.; Peciuliene, V.; Dummer, P. M. H.; et al. INTERNATIONAL ENDODONTIC JOURNAL Volume: 52 Issue: 1 Pages: 86-93 Published: JAN 2019

- 11. Evaluation of procedural errors frequency during endodontic treatment and their influence on tooth prognosis.** Prof. dr. Vytaute Peciuliene, Assoc. Prof. S. Drukteinis, Lect. G. Naujokaitytė. 2017-2023.

Successful root canal treatment is determined by many factors. Inappropriate root canal treatment procedures result in endodontic treatment errors. It is precisely they that become the main thrills that can determine not only the course of the treatment, but also the further prediction of the treatment. The aim of this study is to evaluate the incidence of endodontic treatment errors, the impact of endodontic treatment outcomes, the prognosis and the possibility of correcting these procedural errors.

- 12. Dental Trauma Experience, Attitudes and Trauma Prevention in 11 to 13 Year-Old Lithuanian Schoolchildren.** J. Assist. V. Zaleckienė, Prof. V. Pečiulienė. 2014-2020.

The aim of this study was to identify the prevalence and determinants of dental trauma in permanent anterior teeth among 11- to 13-year-old schoolchildren, to compare self-reported dental trauma rates with clinical examination trauma rates, and to examine mouth guard use among children engaged in contact sports. A probability sampling scheme was used to recruit schools, with all sixth grade children in the selected schools invited to participate.

- 13. Mechanical Wear and Bioavailability of Prosthetic Cement Materials.** J. Assist. R. Trumpaite-Vanagiene, Prof. A. Puriene. 2014-2020.

The work objective is to study in vitro model the wear and tear of cementitious substances used in dentistry practice and their bioavailability with periodontium. We have investigated the resistance of wearing teeth cementing materials to the wear and the effect of the edge precision of the protrusion on wear intensity and carried out a quantitative analysis of the cytotoxicity of dental cementation agents in human gum fibroblasts. A qualitative analysis of the cytotoxicity of dental cementation in human gum fibroblasts has been done aimed to determine the primary mechanism of cement cell death.

15. *In Vivo and in Vitro Accuracy Evaluation of Digitally Made Impressions and Restorations on Dental Implants.* Assoc. Prof. V. Rutkūnas, PhD St. A. Gečiauskaitė. 2016-2020.

Evaluation of factors influencing accuracy of digital implant impressions and restorations has been done. Digital technologies have revolutionised clinical prosthodontics, extending diagnostic, treatment and follow – up possibilities. Digital workflow is still susceptible to errors, therefore we aimed to improve the accuracy of digital workflow and to achieve aesthetic and functional restorations with minimal effort. Due to constant changes in intraoral scanners hardware and software, reliable methodology and clinical guidelines will be provided.

Main publications:

Rutkūnas V, Dirsė J, Bilius V. Accuracy of an intraoral digital scanner in tooth color determination. *J Prosthet Dent.* 2019 Jun 18. pii: S0022-3913(19)30074-5. doi: 10.1016/j.prosdent.2018.12.020. [Epub ahead of print] PMID: 31227232

16. *Comprehensive Evaluation of Factors Influencing the Accuracy of Digital Workflow.* Assoc. Prof. V. Rutkūnas. 2019-2024.

The aim is to evaluate implant-supported restoration misfits occurring during the digital workflow and to investigate methods aimed at detection of the misfit. The separate steps of the digital workflow have been analysed trying to identify the steps most susceptible to the errors. This will help to identify better the clinical indications of fully digital and combined digital/analogue workflows. Based on the findings, the solutions helping to increase potential of digital technologies in prosthodontics will be offered.

Main publications:

Chapter "Digital technologies in restorative dentistry" in "Practical Advanced Periodontal Surgery" 2nd edition. S. Dibart. 2019. Wiley Publishing Inc., New Jersey. Publication date: Apr 2020

17. *Influence of implant placement depth and soft tissue thickness on crestal bone stability around implants with and without platform switching. A comparative clinical trial.* Prof. dr. Tomas Linkevicius, PhD student Saulius Zukauskas. 2016-2020.

The aim of our study was to investigate if implant placement depth in relation with soft tissue thickness has influence on crestal bone stability around dental implants. The research hypothesis was that bone level implants with platform switching, placed subcrestally when surrounding gingiva is thin would have similar bone resorption with bone level implants without platform switching, placed in thick soft tissue supracrestally.

Main publication:

Puisys A, Zukauskas S, Kubilius R, Barbeck M, Razukeyvičius D, Linkevičiene L, Linkevičius T. Clinical and Histologic Evaluations of Porcine-Derived Collagen Matrix Membrane Used for Vertical Soft Tissue Augmentation: A Case Series. *Int J Periodontics Restorative Dent.* 2019 May/Jun;39(3):341-347. doi: 10.11607/prd.4097.

Puisys A, Schlee M, Linkevicius T, Petrakakis P, Tjaden A. Photo-activated implants: a triple-blinded, split-mouth, randomized controlled clinical trial on the resistance to removal torque at various healing intervals. *Clin Oral Investig.* 2019 Sep 11, Epub.

18. *Enamel Changes after Removal of Metal and Ceramic Braces.* Assoc. Prof. L. Linkevičiene. 2016-2020

The aim of the study was to evaluate and compare emcs characteristics (severity, direction, location, length, and width) before and after removal metal and ceramic brackets from the teeth of the

younger and older age groups. Extracted human maxillary premolars were included in the study. The teeth were extracted for orthodontic reasons or periodontal pathology from two groups of patients: younger age group (age range, 18-34 years), and older age group (age range, 35–54 years).

Main publications:

Retention of zirconia copings over smooth and airborne-particle-abraded titanium bases with different resin cements. Linkevicius T, Caplikas A, Dumbryte I, Linkeviciene L, Svediene O. Journal Prosthetic Dentistry 2019 Jun;121(6):949-954.

- 19. Prospective randomised long term three centre study of the Baltic Cleft Network (Rostock, Germany; Ryga, Latvia and Vilnius, Lithuania): Appearance of lip and nose in patients with unilateral clefts of lip, alveolus, and palate.** Assoc. Prof. L. Zaleckas. 2016-2021.

The aim of this study was to compare long term results of three different cleft treatment protocols treating patients with unilateral complete clefts of lip, alveolus and palate. The standardized clinical photographs of patients had been taken according to one and the same protocol in that centre where the patient had been treated. The treatment protocols varied among these centres regarding techniques and timing. Photographies were taken before surgery and at the age of 5 and 10 years. The evaluation of function and aesthetics of the lip as well as of symmetry and harmony of the nose in 5-year-old and 10 -years old consecutive patients was done. Evaluation was done two times according to the protocol by experienced maxillofacial surgeons on two consecutive days. The results of this evaluation will analysed statistically for significant differences.

National Research Projects

- 1. Construction of Composite Bone Scaffold Material and in Vivo Evaluation of Biocompatibility and Osteopromotion. Project No NKPDOKT-15078. Funding source: Lithuanian Research Council.** Prof. V. Rutkūnas, PhD St. I. Gendviliene. 2015-2020.

The aim was to evaluate effectiveness of innovative 3D printed composite scaffolds in in vitro and in vivo studies on bone regeneration. Bone regeneration is a complex, well-orchestrated physiological process of bone formation, which can be seen during normal fracture healing, and is involved in continuous remodelling throughout adult life. However, there are complex clinical conditions in which bone regeneration is required in large quantity, such as for skeletal reconstruction of large bone defects created by trauma, infection, tumour resection and skeletal abnormalities, or cases in which the regenerative process is compromised, including avascular necrosis, atrophic non-unions and osteoporosis. Biology, material science and regenerative medicine, searching for a new bone graft material to change the autogenous bone.

Main publications:

Alksne M, Simoliunas E, Kalvaityte M, Skliutas E, Rinkunaite I, Gendviliene I, Baltriukiene D, Rutkunas V, Bukelskiene V. The effect of larger than cell diameter polylactic acid surface patterns on osteogenic differentiation of rat dental pulp stem cells. J Biomed Mater Res A. 2019 Jan;107(1):174-186. doi: 10.1002/jbm.a.36547. Epub 2018 Oct 19. PMID: 30338633

- 2. Accuracy of Digitally Planned Implant Placement and Cad/Cam Immediate Prosthesis. Project No KD-16137.** Assoc. Prof. V. Rutkūnas, PhD St. R. Borusevičius. 2017-2021.

The aim was to evaluate accuracy of guided implant placement and possibilities to produce digital immediate restorations. Digital treatment planing and 3D technologies are becoming routine in dental practice. Cone beam computed tomography (cbct), intraoral scanners, computer-aided design and manufacturing (cad/cam), 3D printing has changed dental practice/dentistry. Prosthetic and

implant dentistry employs these innovations to improve treatment accuracy, outcomes and patient satisfaction. Novel dental implantation standards require evaluation of various aspects, such as hard and soft tissue condition, prosthesis position. All these aspects have to be taken into account when planning the position of dental implants. The aim of this doctoral thesis is to evaluate the accuracy as well as biological, technical and clinical aspects of digitally planned dental implantation and immediate prosthodontics rehabilitation.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INNOVATION) PARTNERS

University of Birmingham, England

Center for Physical Sciences and Technology, Lithuania

University of British Columbia, Vancouver, Canada

Institute of Biotechnology, Vilnius University, Lithuania

Institute of Biochemistry, Vilnius University, Lithuania

Laser Research Center, Vilnius University, Lithuania

UiT The Arctic University of Norway, Norway

University College London and University of Kent, United Kingdom

SPOH ARTS – International Oral Health Psychology, Amsterdam, The Netherlands

Medical University of Lublin, Poland

University of Medicine, Albania

Medical University, Bulgaria

University of Medicine and Pharmacy, Romania

Malmo University, Sweden

Zurich University, Switzerland

University of Medicine, Albania

Medical University, Bulgaria

University Ss. Cyril and Methodius, Faculty of Dental Medicine, University of Sts Cyril and Methodius, Macedonia

Faculty of Dentistry, State University of Medicine and Pharmacy “Nicolae Testemițanu”, Republic of Moldova

Dental Faculty, Belarussian State Medical University, Belarus

Center for Innovative Medicine, Lithuania

OTHER SCIENTIFIC ACTIVITIES

Prof. V. Pečiulienė

- board member of the International Association of Dental Research, NOF section;
- member of the Council of the Faculty of Medicine;
- member of the Scientific Committee of the Faculty of Medicine;
- chair of the Doctoral Committee of Odontology the Faculty of Medicine;
- member of Study Committee in the Institute of Odontology, Faculty of Medicine, Vilnius University;
- member of study committee of European Society of Endodontists;
- member of postgraduates Study Committee in the Institute of Odontology, Faculty of Medicine, Vilnius University;
- editorial board member of the journal *Stomatologija (Dentistry)*;
- editorial board member of the *European Journal of General Dentistry*;

- editorial board member of the journal *Acta Medica Lituanica*;
- editorial board member of the journal *Health Sciences*;
- expert of the Lithuanian Business Support Agency (LVPA).
- reviewer in: Journal of Dental Traumatology, International endodontic journal, Biomaterials, Stomatologija. Baltic Dental and Maxillofacial Journal

Prof. A. Pūrienė

- editorial board member of the journal Stomatologija (Dentistry);
- editorial board member of the journal Dental and Medical Problems, Poland;
- editorial board member of the journal Health Sciences;
- member board member of the Stomatology Edu Journal
- president of Lithuanian society of Ergonomics;
- member of Lithuanian society of Periodontology;
- expert of the Lithuanian Business Support Agency (LVPA), 2015-2017
- member of ESDE European Society of Dental Ergonomics;
- member of EADPH European association of dental public health;
- member of Academy of Osseointegration;
- member of the Doctoral Committee of Odontology of the Faculty of Medicine;

Prof. V. Rutkūnas

- president of Lithuanian Society of Prosthodontics;
- international relation committee member of European Prosthodontic Association;
- council member of European Prosthodontic Association;
- digital Dentistry Society, Ambassador to Lithuania;
- editorial board member of the European Journal of Prosthodontics and Restorative Dentistry;
- editorial board member of Stomatologija, Baltic Maxillofacial and Dental Journal;
- expert of the Agency for Science, Innovation and Technology (MITA);
- member of Study Committee in the Institute of Odontology, Faculty of Medicine, Vilnius University;
- member of postgraduates Study Committee in the Institute of Odontology, Faculty of Medicine, Vilnius University;
- reviewer in: Clinical Implant Dentistry and Related Research; Journal of Prosthodontics
- Journal of Oral Rehabilitation; Journal of Dental Materials; Journal of Biomaterials Applications; Journal of Advanced Prosthodontics; European Journal of Prosthodontics and Restorative Dentistry; Stomatologija. Baltic Dental and Maxillofacial Journal; BMC Oral Health
- participation of the organizing committees of international meetings: The annual meeting of Lithuanian Society of Prosthodontics 2019; International students and residents conference REST 2019.

Prof. T. Linkevičius

- editorial board member of the journal Stomatologija (Dentistry)
- Visiting Professor in Ghent University, Belgium
- Reviewer in peer-reviewed international journals *Clinical Oral Implants Research*, *Clinical Implant Dentistry and Related Research*, *Journal of Prosthetic Dentistry*, *International Journal of Prosthodontics*, *International Journal of Oral and Maxillofacial Implants* and *International Journal of Restorative Dentistry and Periodontics*.

Assoc. Prof. Rūta Bendinskaitė

- Member of Study Committee in the Institute of Dentistry Faculty of Medicine Vilnius University
- Member of Vilnius Regional Bioethics Committee
- Lithuanian Health Ministry, expert in working groups

Assoc. Prof. V. Brukienė

- board member of the International Association of Dental Research, NOF section;
- member of the Association of Dental Education in Europe;
- editorial board member of the journal *Stomatologija (Dentistry)*, *Baltic Dental and Maxillofacial Journal*, <http://www.sbdmj.com/editors.html>;
- editorial board member of the journal *Slauga. Mokslas ir praktika (Nursing. Science and Practice)*;
- Lithuanian Dental Chamber, Vice-president;
- chair of the Study Committee in the Institute of Odontology, Faculty of Medicine, Vilnius University;

Assoc. Prof. L. Zaleckas

- member of Association of Oral and Maxillofacial surgeons of Lithuania, member of council;
- member of Baltic Association of Maxillofacial and Plastic Surgeons;
- member of European Association for Cranio-Maxillo-Facial Surgery;
- editorial board member of the journal *Baltic Dental and Maxillofacial Journal*;
- member of Study Committee in the Institute of Odontology, Faculty of Medicine, Vilnius University;
- member of postgraduates Study Committee in the Institute of Odontology, Faculty of Medicine, Vilnius University.

Assoc. Prof. S. Drukteinis

- member of the Research Committee of the European Society of Endodontology;
- president of the Lithuanian Endodontic Society;
- member of Study Committee in the Institute of Odontology, Faculty of Medicine, Vilnius University;
- chair of postgraduates Study Committee in the Institute of Odontology, Faculty of Medicine, Vilnius University;
- agency for Science, Innovation and Technology (MITA);
- expert of research projects in dentistry;
- European Commission. The Research Executive Agency (REA). Expert of research projects in dentistry and medicine.

Assoc. Prof. L. Linkevičienė

- editorial board member of the journal *Stomatologija (Dentistry)*, *Baltic Dental and Maxillofacial Journal*, <http://www.sbdmj.com/editors.html>;
- member Lithuanian Dental Chamber
- member of Study Committee in the Institute of Odontology, Faculty of Medicine, Vilnius University;
- member of postgraduates Study Committee in the Institute of Odontology, Faculty of Medicine, Vilnius University.
- member of Lithuanian Orthodontics Association, member of council;
- member of European Cleft organization.

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Prof. dr. Vygandas Rutkūnas:

Presentation of 3D printed bone scaffold research results in TV3 news channel. April 28, 2019.

<https://www.tv3.lt/naujiena/lietuva/998297/lietuvos-mokslininkai-nesnaudzia-kuria-pasauline-medicinos-inovacija>

Short interview about 3D printed bone scaffold research in PowerHit Radio. October, 2019

Presentation of 3D printed bone scaffold research results in TV3 news channel. November 26, 2019.

<https://www.tv3.lt/naujiena/verslas/1020616/auganti-gyvybes-mokslu-industrija-imli-inovacijoms?fbclid=IwAR2tF4VqmhxfJY8cxMPxLkRaDikGHWPMZjvgvLzk4HrjUwV68IP8ZOtrYIY#.Xfioieq-mLg.messenger>

prof. dr. (HP) Alina Pūrienė:

Lrytas.lt website published an article „The most visible cancers are usually detected at an advanced stage: do not ignore the symptoms". December 19, 2019.

panorama.lt website published the article „A service designed to take care of the disabled - a dentist to take home". September 21, 2019.

panorama.lt website published an article „Dentists are worried about the condition of their teeth: some of them have no healthy teeth". August 12, 2019.

panorama.lt website published an article „Persons with severe disabilities will receive dental services at home". May 21, 2019.

Asist. Prof. dr. Rūta Žaliūnienė

Interview for TV3 evening news regarding children's teeth traumas. July, 2019.

Interview for TV3 evening news regarding children's teeth treatment under general anesthesia. August, 2019

Article in magazine "Lietaus vaikai" on how to help children with autism spectrum disorders to adjust to dental procedures. "Visit to the dentist". December, 2019.

Article in magazine "Mamos žurnalas" about children's eating habits and its impact on oral health. "Sweets' fault?" November, 2019.

INSTITUTE OF HEALTH SCIENCES

Department of Rehabilitation, Physical and Sports Medicine

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E-mail: juozas.raistenskis@vuvl.lt

Head – Prof. Dr. *Juozas Raistenskis*

Professors: Dr. J. Raistenskis, Dr. V. Alekna, Dr. R. Dadelienė, Dr. M. Tamulaitienė, Dr. J. Griškevičius

Associate professors: Dr. A. Adomavičienė, Dr. L. Samsonienė, Dr. A. Šidlauskienė, Dr. R. Žilinskienė, Dr. J. Armonienė

Assistants Professors: Dr. J. Indriūnienė, Dr. I. E. Jamontaitė, Dr. A. Mastavičiūtė, Dr. I. Muntianaitė,

Research Assistants: A. Grigonytė, J. Blaževičius, R. Sinkevičius, A. Černovas, V. Radzevič

Lecturers: L. Aučynienė, T. Balčius, D. Barzinskas, A. Budėjienė, L. Budrienė, A. Cirtautas, J. Kesienė, R. Kulikauskaitė, L. Mikulėnaitė, T. Palšytė, M. Grybauskaitė, A. Juodytė, V. Strukčinskaitė, J. Kupčiūnas, O. Rašimaitė, T. Gritėnienė, S. Buklienė, D. Šatkutė, A. R. Venskaitis, G. Mikulėnaitė, L. Uščinas, T. Jenikova, A. Jakubauskienė, Dr. J. Petrulytė

Doctoral students: T. Aukštikalnis, A. Grigonytė, G. Narmontaitė, I. Streikė, R. Sinkevičius.

Students' scientific group of Rehabilitation, physical and sports medicine: scientific leader – Lect. T. Palšytė, coordinators – Student R. Gerdaitytė, Student M. Gaušytė; 19 members of the group.

RESEARCH INTERESTS

Biopsychosocial model

Effectiveness of rehabilitation, physical and sport medicine

Components of physical capacity

Prevention of disease and injury

RESEARCH PROJECTS CARRIED OUT IN 2018

Projects Supported by University Budget

1. **Prognostication of Comprehensive Rehabilitation Effectiveness in Patients with Movement Dysfunction.** Prof. J. Raistenskis. 2014–2018.

The aim of this research is to search comprehensive rehabilitation effectiveness prognostication parameters; to prepare methodology of comprehensive rehabilitation prognosis in patients with movement disturbances; to perform comparable examination of comprehensive rehabilitation prognostication, using functional status evaluation. The staff of the Department continued performance of comparable examination and methodology development of comprehensive rehabilitation effectiveness prognostication. On the base of these data, six articles were published in *Clarivate Analytics database*, one doctor theses were defending, and research workers took part

at international and in Lithuanian scientific meetings, total 66 presentations. Students participated at international students' conferences.

Main publications:

Krylovas, Aleksandras; Dadelienė, Rūta; Kosareva, Natalja; Dadelo, Stanislavas. Comparative evaluation and ranking of the European countries based on the interdependence between human development and internal security indicators // *Mathematics*. Basel: MDPI AG. eISSN 2227-7390. 2019, vol. 7, iss. 3, art. no. 293, p. 1-18. DOI: [10.3390/math7030293](https://doi.org/10.3390/math7030293). [DB: DOAJ, Zentralblatt MATH (zbMATH), Scopus, Science Citation Index Expanded (Web of Science)] [M. kr.: N 001]

Quality of life of the family of children with asthma is not related to asthma severity. Taminskienė, Vaida; Alasevičius, Tomas; Valiulis, Algirdas; Vaitkaitienė, Eglė; Stukas, Rimantas; Hadjipanayis, Adamos; Turner, Steve; Valiulis, Arūnas; *European journal of pediatrics*. 2019 Mar: 178 (3):369-376.

Vilnius Declaration on chronic respiratory diseases: multisectoral care pathways embedding guided self-management, mHealth and air pollution in chronic respiratory diseases. Valiulis, Arūnas; Bousquet, J.; Veryga, Aurelijus; Suprun, U.; Sergeenko, D.; Cebotari, S.; Borelli, D.; Pietikainen, S.; Banys, Jūras; Agache, I.; Billo, N.E.; Bush, A.; Chkhaidze, I.; Dubey, L.; Fokkens, W.J.; Grigg, J.; Haahtela, T.; Julge, K.; Katilov, O.; Khaltayev, N.; Odemyr, M.; Palkonen, S.; Savli, R.; Utkus, Algirdas; Vilc, V.; Alasevičius, Tomas; Beddbrook, A.; Bewick, M.; Chorostowska-Wynimko, J.; Danila, Edvardas; Hadjipanayis, A.; Karseladze, R.; Kvedarienė, Violeta; Lesinskas, Eugenijus; Münter, L.; Samolinski, B.; Sargsyan, S.; Šitkauskienė, Brigita [Šitkauskienė, B.]; Somekh, D.; Vaidelienė, Laimutė [Vaidelienė, L.]; Valiulis, Algirdas; Hellings, P.W.; *Clinical and translational allergy*. London: BMC. 2019, vol. 9, art. no. 7, p. [1-10].

SERPINA1 gene polymorphisms in a population-based ALSPAC cohort. DeLuca, David S.; Poluziorovienė, Edita; Taminskienė, Vaida; Wrenger, Sabine; Utkus, Algirdas; Valiulis, Algirdas; Alasevičius, Tomas; Henderson, John; Bush, Andrew; Welte, Tobias; Janciauskiene, Sabina; Valiulis, Arūnas; *Pediatric pulmonology*. Hoboken: John Wiley & Sons, Inc. 2019, vol. 54, no. 9, p. 1474-1478.

Aušra Adomavičienė, Kristina Daunoravičienė, Raimondas Kubilius, Lina Varžaitytė, Juozas Raistenskis. Influence of New Technologies on Post-Stroke Rehabilitation: A Comparison of Armeo Spring to the Kinect System. *Medicina (Kaunas)*. 2019;55(4):98.

Aurelija Šidlauskienė, Birutė Strukčinskienė, Juozas Raistenskis, Rimantas Stukas, Vaiva Strukčinskaitė, Raimondas Buckus. The association between the level of physical activity with spinal posture and physical fitness parameters in early adolescence. // *Vojnosanitetski pregled*. Belgrade: Military Medical Academy. ISSN 0042-8450. eISSN 2406-0720. 2019, first on line, p. 1-22.

Geerinck, Anton; Alekna, Vidmantas; Beaudart, Charlotte; Bautmans, Ivan; Cooper, Cyrus; De Souza Orlandi, Fabiana; Konstantynowicz, Jerzy; Montero-Erasquin, Beatriz; Topinkova, Eva; Tsekoura, Maria; Reginster, Jean-Yves; Bruyere, Olivier. Standard error of measurement and smallest detectable change of the Sarcopenia Quality of Life (SarQoL) questionnaire: an analysis of subjects from 9 validation studies // *PlosOne*. San Francisco: Public Library of Science. ISSN 1932-6203. 2019, vol. 14, no. 4, art. no. e0216065, p. [1-13]

Kazlauskas, Tomas; Alekna, Vidmantas; Mastavičiūtė, Asta; Tamulaitienė, Marija. Relationships between depression, malnutrition, physical activity and daily living activities in elderly people // *European geriatric medicine*: vol. 10, suppl. 1: abstracts of the 15th international congress of the European geriatric medicine Society, 25-27 September 2019, Krakow: Springer. ISSN 1878-7649. eISSN 1878-7657. 2019, vol. 10, suppl., art. no. P-814, p. 298.

Maknickas, Algirdas; Alekna, Vidmantas; Ardatov, Oleg; Chabarova, Olga; Zabulionis, Darius; Tamulaitienė, Marija; Kačianauskas, Rimantas. FEM-Based compression fracture risk assessment in osteoporotic lumbar vertebra L1 // *Applied sciences*. Basel: MDPI. eISSN 2076-3417. 2019, vol. 9, iss. 15, art. no. 3013, p. 1-22.

Alekna, Vidmantas; Kilaitė, Justina; Tamulaitienė, Marija; Geerinck, Anton; Mastavičiūtė, Asta; Bruyère, Olivier; Reginster, Jean Yves; Beaudart, Charlotte. Validation of the Lithuanian version of sarcopenia specific quality of life questionnaire (SarQoL®) // European geriatric medicine. New York: Springer. ISSN 1878-7649. eISSN 1878-7657. 2019, vol. 10, iss. 5, p. 761-767

Marozik, Pavel; Alekna, Vidmantas; Rudenko, Ema; Tamulaitienė, Marija; Rudenka, Alena; Mastavičiūtė, Asta; Samokhovec, Volha; Černovas, Andrejus; Kobets, Katsiaryna; Mosse, Irma. Bone metabolism genes variation and response to bisphosphonate treatment in women with postmenopausal osteoporosis // Plos One. San Francisco: Public Library of Science. eISSN 1932-6203. 2019, vol. 14, iss. 8, art. no. e0221511, p. 1-14

Šileikis, Denis; Būbnelis, Tomas; Guzovijūtė, Šarlota; Kriščiokaitytė, Joana; Aukštikalnis, Tomas; Gritėnienė, Teresė. Job satisfaction of residents of the surgical specialities: analysis of the common work day // Health for all: Science and innovation week 2019: International doctoral and resident students conference: Science for health: abstract book: Kaunas, Lithuania, 8-12 April, 2019 / Edited by Elvinas Monstavičius, Alvita Vilkevičiūtė. Kaunas: Council of LSMU Doctoral Students. ISSN 2669-0314. 2019, p. 90-91.

Būbnelis, Tomas; Kriščiokaitytė, Joana; Gritėnienė, Teresė; Aukštikalnis, Tomas; Šileikis, Denis. Possibilities of applying complex art therapy in psychiatric hospital // Health for all: Science and innovation week 2019: International doctoral and resident students conference: Science for health: abstract book: Kaunas, Lithuania, 8-12 April, 2019 / Edited by Elvinas Monstavičius, Alvita Vilkevičiūtė. Kaunas: Council of LSMU Doctoral Students. ISSN 2669-0314. 2019, p. 88-89.

MAIN RESEARCH, DEVELOPMENT AND INNOVATION PARTNERS

Rīga Stradiņš University, Faculty of Rehabilitation, Latvia

Haapsalu Neurological Rehabilitation Centre, Estonia

Karolinska Institute, Sweden

Notwill Rehabilitation Centre, Switzerland

Hannover medical school, Germany

OTHER SCIENTIFIC ACTIVITIES

Prof. J. Raistenskis

- head of the Rehabilitation studies programme committee at the Faculty of Medicine of Vilnius University;
- editorial board member of the journals *Gerontologija (Gerontology)*, *Polish Annals of Medicine*;
- board member of Association of Physical Medicine and Rehabilitation Physicians;
- member of the Association of Acupuncture, Manual and Traditional Medicine Physicians;
- board member of scientific and organizing committee of the 21st European Congress of Physical & Rehabilitation Medicine, May 1–6, 2018, Vilnius, Lithuania.

Prof. V. Alekna

- editor-in-chief of the journal *Gerontologija (Gerontology)*
- president of Lithuanian Association of Gerontology and Geriatrics
- president of Lithuanian Osteoporosis Foundation
- board member of UEMS Geriatric Section
- board member of European Geriatric Medicine Society (EUGMS)

Prof. M. Tamulaitienė

- editorial board member of the journal *Gerontologija (Gerontology)*

Prof. R. Dadelienė

- editorial boards member of the journals: *Biology of Exercises; Journal of Physical Education and Human Movement; Sporto mokslas (Sport Science)*
- member of study comity, coordinator of the Rehabilitation study program
- member of European Sport Science College
- member of Lithuanian Olympic Academy
- member of LNOC group (scientist, consultant) for preparation sportsmen for 2020

Prof. J. Griškevičius

- editorial board member of the journal *Technology & Health Care*, the Netherlands
- member of study committee, coordinator of the Biomechanics and Biomedical Engineering study programs at VGTU
- scientific council member of the Faculty of Mechanics, VGTU
- member of European Society of Biomechanics
- president of Lithuanian Society of Biomechanics
- general secretary of non-profit association Educating Students in Engineering and Medicine (www.esem.eu)
- chairman of organizing committee of International conference BIOMDLORE (<http://biomdlore.vgtu.lt>)

Assoc. Prof. A. Adomavičienė

- chairman of the Occupational Therapy Undergraduate studies programme committee;
- member of ENOTHE
- member of Lithuanian Occupational Therapy Association

Assoc. Prof. A. Šidlauskienė

- the invited reviewer of the international journal *Polish Annals of Medicine*;
- board member of Lithuanian Physiotherapy Association.

Assoc. Prof. R. Žilinskienė

- co-opted member of Executive Committee of European Network of Academic Sport (www.enas-sport.net)
- member of the Executive Committee of Lithuanian Student Sport Association

Assoc. Prof. L. Samsonienė

- member of the Team Publons: Public Health and Health services;
- member of International Council for Physical Activity and Fitness Research (ICPA);
- member of Lithuanian Association for Adapted Physical Activity.

Assoc. Prof. J. Armonienė

- member of Lithuanian Athletic Federation
- member of Lithuanian Physical Education Teachers' Association

Assist. I. E. Jamontaitė

- chairman of the Physiotherapy Undergraduate studies programme committee
- board member of Lithuanian Physiotherapy Association

Assist. A. Mastavičiūtė

- member of the board of Lithuanian Gerontologists and Geriatrics association
- member of European Academy for Medicine of Ageing
- editorial board member and managing editor of the journal *Gerontologija*, <http://www.gerontologija.lt>

Assist. J. Petrulytė

- chairman of Society of Social Pediatrics of Lithuania

Assist. I. Muntianaitė, Assist. J. Indriūnienė

- members of study programs committee

Department of Public Health

21/27 M. K. Čiurlionio str., LT-03101 Vilnius, Lithuania

Tel. 239 8732, 239 8738, fax 239 8738

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Head – Prof. Dr. *Rimantas Stukas*

STAFF

Professors: Dr. R. Stukas, Dr. J. Dadonienė.

Associate professors: Dr. M. Jakubauskienė, Dr. L. Murauskienė, Dr. R. Buckus (part-time), Dr. Oresta Katakiniene (part-time).

Assistant Professor: Dr. M. Butikis, Dr. S. Vainauskas, Dr. J. Kairys (part-time), Dr. L. Ašoklienė (part-time), Dr. R. Bartkevičiūtė (part-time), A. Barzda (part-time), Dr. A. Beržanskytė, Dr. N. Kuprevičienė (part-time), Dr. R. Sketerskienė (part-time), Dr. A. Juodaitė – Račkauskienė (part-time), Dr. R. Jankauskas (part-time), Dr. G. Smailytė (part-time), Dr. V. Taminskienė, Dr. V. Dobrovolskij (part-time), Dr. D. Austys, Rūta Maceinaitė (part-time), Justina Račaitė (part-time),

Research fellows: Dr. A. Valiulis, Dr. Rolandas Zuoza, Dr. A. Emeljianovas.

Lecturers: Dr. A. Astrauskienė (part-time), Dr. D. Brogienė (part-time), Dr. J. Stanislavovienė, R. Baranauskienė, V. Jaeck (part-time), Dr. R. Vaitkienė Vaitkienė (part-time), Rimonda Kungytė (part-time), Mindaugas Pauliukas (part-time)

Doctoral students: Viktorija Andreikėnaitė, Inga Tamulaitytė - Morozovienė, Ineta Pačiauskaitė, Andrėjus Černovas, Olga Ubartienė, Daiva Dudutienė, Aušra Bilotienė - Motiejūnienė, Samanta Grubytė, Rūta Maceinaitė, Justina Račaitė, Žymantas Žandaras, Jūratė Lekstutienė, Auišvydas Patašius, Ginreta Valinčiūtė, Justinas Blaževičius, Rožė Perminienė, Veslava Radzevič.

Public health scientific group of students: scientific leader – Dr. Valerij Dobrovolskij, coordinator – student Erikas Jansonas; 31 members of the group.

RESEARCH INTERESTS

Environmental and social factors and public health

History of medicine

Epidemiology of non-infectious and infectious diseases

Scientific basis of health care management

Assessment of health care activities and biostatistics

Health and quality of life

Medical ethics

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

1. **Assessment of Health Risk Factors and Sense of Coherence of Elderly People.** Prof. R. Stukas. 2014–2020.

The collected data was analysed according to the dissertation theme and scientific publications from the obtained research data were prepared (two research articles were submitted and accepted).

Main publications:

Marozik P, Alekna V, Rudenko E, Tamulaitiene M, Rudenka A, Mastaviciute A, et al. Bone metabolism genes variation and response to bisphosphonate treatment in women with postmenopausal osteoporosis. PLoS One. 2019;14(8): e0221511.

Černovas A, Alekna V, Tamulaitienė M, Stukas R. Reliability and validity of the Lithuanian version of CASP-19: a quality of life questionnaire for the elderly. Medicina. 2018;54(6):103.

Černovas A, Alekna V, Tamulaitienė M, Kataviciūtė G, Stukas R. physical activity, quality of life and subjective well-being peculiarities and associations in elderly women. Health Sciences in Eastern Europe. 2018;28(4):18-24.

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INNOVATION) PARTNERS

Lancaster University, United Kingdom

Universidad de Deusto, Spain

University of Verona, Italy

Corvinus University of Budapest, Hungary

Ministry of Health of The Republic of Lithuania, Lithuania

OTHER SCIENTIFIC ACTIVITIES

Prof. R. Stukas

- editorial college member of the journal *Visuomenės sveikata (Public Health)*
- editorial board member of the journal *Sveikatos mokslai (Health Sciences)*
- member of the Board of the Faculty of Medicine
- head of study programmes Committee for Bachelor and Master degree and PhD in Public Health
- board member of the Lithuanian Society of Hygienists and Epidemiologists

Prof. J. Dadonienė

- President of Lithuanian Rheumatologist Association
- board member of Lithuanian Arthritis Association (patient organization)
- member of European Network for Vasculitis Research (EUVAS)
- member of organizing committee for the annual conference *Vilnius Seminars in Rheumatology*

Assoc. Prof. Dr. M. Jakubauskienė

- vice president of the Public Mental Health Section of the European Public Health Association (EUPHA)
- member of the International Scientific Committee of the European Public Health Association (EUPHA)
- member of the review board of the International Society for Traumatic Stress Studies (USA)
- member of the Lithuanian Association for Trauma Psychology
- member of the Lithuanian Bioethics Society
- member of the Board of Federation Global Initiative on Psychiatry;
- co-leader of the International Research in Public Mental Health course

Prof. A. Valiulis

- president of Lithuanian Paediatric Respiratory Society
- vicepresident of Lithuanian Paediatric Society
- chairman of Lithuanian Alliance Against Chronic Lung Diseases (WHO-GARD Lithuania)
- vicechairman of Mother and Child Health Commission of Lithuanian Academy of Sciences
- national coordinator in Strategic Pediatric Alliance for the Child Health in Europe
- national delegate at Global Asthma Initiative (GINA) and Global Allergic Rhinitis Initiative (ARIA)
- chairman of Advisory Board of Lithuanian Council of Asthma Clubs
- chief executive of IPOKRATES Lithuania Fund
- editor-in-Chief of the journal *Paediatric Pulmonology and Allergology* (Index Copernicus)
- editor-in-Chief of the journal *Lithuanian Paediatric Chronicle*
- editorial board member of the journals *Paediatric Respiratory Reviews*, *Pneumonologia i Alergologia Polska*, *Pediatrics Polska*, *Russian Paediatric Journal*
- chairman of Vilnius International Paediatric Pulmonology Conference – School (20th annual international conferences of Paediatric Asthma, Pneumonia, CF, TB and Orphan Lung Diseases; more than 8000 trained doctors)
- chairman of 4 Lithuanian National Asthma Congresses
- chairman of 3 Lithuanian Congresses on Paediatric Pulmonology
- chairman of 2 international conferences on Human Ecology
- honorary fellow of British Royal College of Paediatrics and Child Health
- member of Commissions of Rare Diseases, TB, Immunoprophylaxis, Mother & Child, Suckling, Human Resources, Accessibility of Health Service of Lithuanian Ministry of Health
- chief Vilnius Paediatrician of the Ministry of Health of the Republic of Lithuania

Assoc. prof. J. Kairys

- editorial board member of the journal *Sveikatos mokslai (Health Sciences)*

Assoc. Prof. L. Murauskienė

- associate editor for *BMC Health Services Research*
- member of the *Health Systems and Policies Monitoring Network*, European Observatory on Health Systems and Policies

Assist. R. Vaitkienė

- deputy member of the Administrative Commission for the Coordination of Social Security Systems, European Commission, since 2009, Brussels, Belgium
- member of the intersectoral working party on implementation of United Nations 2030 Agenda for Sustainable Development in Lithuania

Assist. R. Jankauskas

- editorial board chair of the journal *Visuomenės sveikata (Public Health)*

Assist. R. Bartkevičiūtė

- member of Lithuanian Breastfeeding Committee.
- alternate representative of European Food Safety Authority Food Consumption Data Network

Assist. R. Barzda

- representative of Republic of Lithuania in Codex Alimentarius Commission
- representative of European Food Safety Authority Food Consumption Data Network

Assist. D. Brogienė

- executive director of the Foundation for Patient Safety, Innovations and Quality
- member of Lithuanian Society of Obstetricians and Gynaecologists. Chair of Legal, Ethics and Competence Evaluation Commission
- member of the Board of Lithuanian Doctors Association. Chair of the Legal Commission
- Board member of Lithuanian Bioethics Committee under the Ministry of Health
- Vice-president of CPME (The Standing Committee of European Doctors)

Assist. Audrone Juodaitė-Račkauskienė

- Member of „European palliative care association “Toekomststraat 36, 1800 Vilvoorde, Belgium
- Presentation: „Challenges Affecting Family Caregivers in Lithuania “, Brussels, Belgium, 25th October 2018; Conference: „Public Health Research in Palliative Care: Shifting the Paradigm
- "Improving patient waiting time- innovative approach to reduce the wait in homecare" Cascais, Portugal, 27th September 2018, Portuguese Journal of Public Health Vol. 36, Suppl. 1, 2018 „27th European Association of Hospital Managers (EAHM) Congress
- Shortening Waiting Times for Palliative Care Patients: Methods and Challenges “, Palliative Medicine Journal, Volume 32 Issue 1_suppl, May 2018, Bern, Switzerland

R. Baranauskienė

- member of European Health management association

THE LIST OF THE MOST IMPORTANT RECEIVED NATIONAL AND INTERNATIONAL AWARDS FOR R&D ACTIVITIES

- Prof.Arūnas Valiulis. Professor Honoris Causa of Poltava Medical and Stomatological University, Ukraine (October 31, 2019)

THE LIST OF THE MOST IMPORTANT CASES OF PARTICIPATION OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS AND ORGANISATIONS, AND BUSINESS ENTITIES

L. Murauskienė. Leading a Working Group for Setting Priorities for Health-related Activities Financing for 2021-2028. Commissioned by Consulting Company ESTEP and the Ministry of Finance.

Rima Vaitkienė. The member of the Compulsory Health Insurance Board (Resolution No 710 of the Government of the Republic of Lithuania, 2017) and chair person of Compulsory Health Insurance Board since 15 th of September 2017 till 11 of October 2018;

Rima Vaitkienė. Chair person of the group for the management improvement at the Ministry of Health of the Republic of Lithuania (Order of the Minister of Health of the Republic of Lithuania No V-880, 26 of July 2017) (till 11 of October 2018);

Rima Vaitkienė. The member of the working group for the amendments for Lithuanian Health Strategy for 2014-2025 approved by the Resolution of the Parliament of the Republic of Lithuania No XII-964, 2014 (Order of the Minister of Health of the Republic of Lithuania No V-111, 14 of January 2018);

Jolanta Dadoniene. Research council expert since 2014 with focus on doctoral studies activities; research group projects evaluation; research nad experimental activities of state research institutions;

Jolanta Dadoniene. Board member of national programme on *Healthy ageing* 2017-2021.

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Prof. Rimantas Stukas. Delfi Portal Interview on Healthy Eating (12 issues).

Prof. Rimantas Stukas. LRT, Consumer Control Interview about Healthy Eating (4 issues).

Prof. Rimantas Stukas. TV 3 News Interview about Healthy Eating (5 issues).

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

1. 2019 02 12-14 - Reduced risk of prostate cancer in a cohort of Lithuanian diabetes mellitus patients., Patasius A., Kincius M., Linkeviciute-Ulinskiene D., Zabuliene L., Smailyte G, ASCO GU Symposium, San Francisco, USA (Journal of Clinical Oncology 2019 37:7_suppl, 130-130)
2. 2019 05 24-25 Patasius A., Innos K., Leja M., Misins J., Yaumenenka A, Smailyte G. Prostate cancer incidence and mortality trends in the Baltic States and Belarus. 6th Baltic Meeting in conjunction with the EAU, Tallinn, Estonia. 3rd prize winner in Berlin Chemie award
3. 2019 06 03-05 - Patasius A. Ulys A., Adomaitis R. Smailyte G., “Changing incidence and stage distribution of prostate cancer in a Lithuanian population – evidence from national screening programme” International Cancer Screening Conference 2019” Rotterdam, Netherlands
4. 2019 birželio 18-21 dienomis. Antroji visuomenės psichikos sveikatos konferencija (angl. International Public Mental Health Conference). Pranešimas „Suicidinės mintys ir ketinimai tarp Lietuvos dirbančiųjų“ (angl. *Suicidal Thoughts and Intentions Among the Employees in Lithuania*). Jelena Stanislavovienė. Bendraautorės Baliulytė V., Utkuvienė J., Skarolskytė K.
5. 2019 birželio 5-7 dienomis. III ioji Tarptautinė neužkrečiamų ligų konferencija (angl. 3rd International Conference in Non-Communicable Diseases: Health Risk Factors and Prevention on Injuries and Disasters (Kišiniovas, Moldova)). Pranešimas „Kodėl turėtume vertinti psichosocialinę darbo aplinką: Vilniaus ikimokyklinių ugdymo įstaigų tyrimas“ (angl. Psychosocial environment at work, or why we should evaluate it: Vilnius (Lithuania) kindergarten study). Jelena Stanislavovienė. Bendraautorė Jankovskaja D.
6. Dr. Liubovė Murauskienė. Presentation at Third Forum of the Scientific Panel for Health “Enabling health equality in Europe – the role of health research” Brussels, Belgija (2019/06/05)
7. Dr. Liubovė Murauskienė. Konferencija 9-11 birželio 2 pranešimai dalyvaujant debatuose Debate "Challenges of health policy" and scientific conference in Olsztyn, Poland (10-11 June 2019):
8. 4th Baltic Paediatric Congress & Annual Conference of European Academy of Paediatrics EAP/UEMS-SP (Vilnius, Lithuania, May 16-18, 2019), invited lectures „Vilnius declaration on chronic respiratory diseases control: from mHealth to guided self management“, „Rational antibioticotherapy in paediatrics: model of community acquired pneumonia“ (Prof. habil. dr. Arūnas Valiulis).
9. 9th EUROPAEDIATRICALS Congress (Dublin, Ireland, June 13-15, 2019), invited lecture „Allergic rhinitis and the role of mobile technologies“ (Prof. habil. dr. Arūnas Valiulis).

10. 35th Annual Congress of Polish Paediatric Society (Rzeszow, Poland, September 5-7, 2019), invited lecture „Vilnius Declaration on prevention and management of chronic respiratory diseases“ (Prof. habil. dr. Arūnas Valiulis).
11. 13th General Assembly of WHO Global Alliance against Chronic Respiratory Diseases (Beijing, China, October 24-26, 2019), invited lecture „Vilnius declaration: Political action for clean air“ (Prof. habil. dr. Arūnas Valiulis).
12. 6th International Conference on Lung Health (Dhaka, Bangladesh, November 5-8, 2019), invited lecture „European Respiratory Society Guidelines of preschool wheezing and beyond: phenotypic approach for daily practice“ (Prof. habil. dr. Arūnas Valiulis).
13. 24th Vilnius International Paediatric Pulmonology and Allergology Conference-School (Odessa, Ukraine, November 12, 2019), invited lecture „ Wheezing and early diagnosis of asthma in children“, „Diagnostic and treatment of community acquired pneumonia in children“ (Prof. habil. dr. Arūnas Valiulis).
14. 2019 05 24-25 Drevinskaite M., Patasius A., Ulys A., Smailyte G., Oral abstract -Changes in testicular cancer incidence, mortality and survival in Lithuania, 1998-2013, 6th Baltic Meeting in conjunction with the EAU, Tallinn, Estonia. Afiliacija: 1. Laboratory of cancer epidemiology, National Cancer Institute, Vilnius Lithuania; 2. Institute of Health Sciences, Faculty of Medicine, Vilnius University, Vilnius, Lithuania

Department of Nursing

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E-mail: Natalja.fatkulina@mf.vu.lt

Head – Prof. Dr. Natalja Fatkulina

STAFF

Professor: Dr. N. Fatkulina.

Associate professor: Dr. A. Gradauskas.

Assistants Professor: Dr. A. Mikaliūkštienė, Dr. R. Stundžienė (part-time), Dr. Z. Gierasimovič (part-time), Dr. A. Kurienė (part-time), Dr. J. Kutkauskienė (part-time), Dr. R. Šturienė (part-time).

Teaching Assistants: V. Kielė, L. Gedrimė (part-time), J. Stirblienė (part-time), I. Čergelytė-Podgrušienė (part-time).

Lecturers: J. Gimžauskienė (part-time), M. Čiurlionis (part-time), I. Dailidkienė (part-time), E. Davydenko (part-time), A. Gaupšienė (part-time), S. Greičienė (part-time), O Misiūnienė (part-time), M. Skvarčevskaja (part-time), J. Šuminienė (part-time), R. Urbavaničė (part-time).

Doctoral students: V. Kielė, L. Gedrimė, J. Stirblienė, I. Čergelytė-Podgrušienė.

RESEARCH INTERESTS

Innovation in nursing science, research and studies;

Nursing policy;

Quality of nursing care

Nurse professional competence;

Nursing and patient education;

Research of nurses' working environment;

Needs and features of perioperative nursing care;

Patient safety and the role of nurse;

Physical activity and nursing care

Advanced nursing practice

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

- 1. Health and disease research: nurses' competence and education, patients teaching, nursing requirement and quality.** Prof. N.Fatkulina. 2019-2021.

Analyze innovation and applicability of nursing research, with emphasis on nurse educational capabilities and competencies, patient education, nursing need and quality aspects.

Main publications:

Stundžienė R. Nurses' role in using non-pharmacological methods of postoperative pain management in children. *Actualities of Nursing Science and Practice* 2019. Klaipėda, Lithuania, 2019, 7th of June

Gedrimė, Lina; Istomina-Fatkulina, Natalja; Brasaite, Indre; Salanterä, Sanna. Information needs of digestive tract surgery patients before and after surgery: an exploratory study of western Lithuania // *Medical science pulse*. Opole: Państwowa Medyczna Wyższa Szkoła Zawodowa w Opolu. ISSN 2544-1558. eISSN 2544-1620. 2019, vol. 13, no. 1, p. 14-16. DOI: 10.5604/01.3001.0013.1538. [DB: CEEOL – Central and Eastern European Online Library, IndexCopernicus]

Čiurlionis, Marius. Last Aid Course. An Education for All Citizens and an Ingredient of Compassionate Communities. *Healthcare* (Basel). 28th of January 2019. PMID: 30696095 DOI: 10.3390/healthcare70100192. **Complex assessment of nurses' professional competence**. 2019-2021. To investigate the professional competence of nurses and to identify clinical, educational and social controlled and uncontrollable factors influencing the competence of nurses.

Main publications:

Žavoronok, Olga; Kielaitė, Viktorija; Razbadauskas, Artūras; Fatkulina, Natalja. Slaugos naujovės slaugant sunkiai nudegusius pacientus = Nursing innovations of seriously burned patients // *Sveikatos mokslai*. Vilnius. ISSN 1392-6373. eISSN 2335-867X. 2019, t. 29, Nr. 3, p. 110-116. DOI: [10.5200/sm-hs.2019.046](https://doi.org/10.5200/sm-hs.2019.046). [DB: IndexCopernicus] [M. kr.: M 005]

Skarbalienė, Aelita; Skarbalius, Egidijus; Gedrimė, Lina. Effective communication in the healthcare settings: are the graduates ready for it? = Učinkovita komunikacija u zdravstvenoj djelatnosti: jesu li diplomirani studenti pripravnici? // *Management: journal of contemporary management issues*. Split: University of Split. ISSN 1331-0194. eISSN 1331-0194. 2019, vol. 24, no. SI, p. 137-147. DOI: 10.30924/mjcmi.24.si.9. [DB: Business Source Complete, DOAJ, IndexCopernicus, Emerging Sources Citation Index (Web of Science)]

Skarbalienė, Aelita; Skarbalius, Egidijus; Gedrimė, Lina; Rapolienė, Lolita. Self-assessment of communication skills of healthcare professionals: a quantitative study // *Sabiedrība. Integrācija. Izglītība: starptautiskās zinātniskās konferences materiāli: 2019.gada 24.-25. maijs maijs = Society. Integration. Education: proceedings of the international scientific conference: May 24th - 25th, 2019: Sports un veselība. Māksla un dizains = Sports and health. Art and design. Rēzekne: Rēzeknes Tehnoloģiju akadēmija*. ISSN 1691-5887. eISSN 2256-0629. 2019, d. 4, p. 277-286. DOI: 10.17770/sie2019vol4.3867.

2. Assessing health needs, quality of life, improving health care and education. Prof. N.Fatkulina. 2019-2021.

The investigation of the quality of life and nursing needs of patients with chronic somatic (therapeutic, surgical, pediatric, neurological) diseases has been initiated. One of the aims – to prepare basic guidelines for improving long-term care and nursing by examining the psychosocial risk factors of nurses in the work environment and the social reflections of teamwork and to evaluate future perspectives and organization of practical training process in health care institutions.

Main publications:

Rapolienė, Lolita; Gedrimė, Lina; Mockevičienė, Daiva; Razbadauskas, Artūras. Relation of health status with distress and job-related risk factors // *Family medicine & primary care review*. Poznan: Termedia Publishing House. ISSN 1734-3402. eISSN 2449-8580. 2019, vol. 21, iss. 2, p. 130-137. DOI: [10.5114/fmPCR.2019.84549](https://doi.org/10.5114/fmPCR.2019.84549). [DB: Emerging Sources Citation Index (Web of Science), Scopus, Academic Search Complete, IndexCopernicus]

Rapolienė, Lolita; Gedrimė, Lina; Razbadauskas, Artūras; Skarbalienė, Aelita. Geothermal water for health state improvement: randomised controlled study // *Balneo research journal*. Bucharest: Romanian Association of Balneology. ISSN 2069-7597. eISSN 2069-7619. 2019, vol. 10, no. 2, p.

153-166. DOI: 10.12680/balneo.2019.255. [DB: Emerging Sources Citation Index (Web of Science), Academic S

project aiming to produce and evaluate instruments for assessment of competence and factors connected, both self-assessment and objective tests and to establish a cohort for follow-up studies in future, responding to the need for longitudinal studies.

Nursing Leaders earch Complete, DOAJČergelytė-Podgrušenė, I. Gudžinskienė, V. (2019) Emotional situation and experience of parents to deal with diabetes melitus disease of their child. Socialinis darbas, (17), 70 – 83. <file:///C:/Users/user1/Downloads/5021-11317-2-PB.pdf>

International Research Projects

1. **Professional Competence in Nursing (PROCOMPnurse)**. Prof. N. Fatkulina. 2017–2021.
2. **Research hip Educational Program for Doctoral and Postdoctoral Nurses (NURSE-LEAD). Erasmus + strategic partnership, project:** Prof. N. Fatkulina. 2017–2019.

The project aims to direct doctoral nursing students and postdoctoral nurses into an academic career in nursing by providing them with opportunities to expand their educational, research and leadership competencies. Thus the project will attune nursing education into emerging labor market's needs.

3. **CHRODIS PLUS: Implementing good practice for chronic diseases**. Prof. N.Fatkulina. 2017-2020.

CHRODIS PLUS aims to contribute to the reduction of this burden by promoting the implementation of policies and practices that have been demonstrated to be successful. The development and sharing of these tested policies and projects across EU countries is the core idea behind this action.

4. **European Sexual Medicine Network (COST project)**. Prof. N.Fatkulina. 2018-2022.

The Action aims to exchange research results produced by different disciplines in order to find commonalities in concepts and approaches to sexual medicine. This serves as the foundation for identifying shared concepts and definitions, and the start of joint interdisciplinary research, with a particular focus on including young researchers.

5. **Erasmus+ „Supporting teachers to maximise enjoyable MVPA minutes in children and youth: Project Enjoyable MVPA”**. Prof. dr. Arunas Emeljanovas. 2019– 2022.

Contractual Research

Contract with The Department for the Affairs of Disabled under the Ministry of Social Security and Labor. 2019

MAIN R&D&I (RESEARCH, DEVELOPMENT AND INOVATION) PARTNERS

Klaipėda University, Lithuania

University of Turku, Department of Nursing Science, Turku, Finland

Health Science Research Centre, University College Lillebaelt and Southern Denmark University, Denmark

Karolinska Institutet, Department of Neurobiology, Care Sciences and Society, Stockholm, Sweden

University of Utrecht, Utrecht, Netherlands

University of Island, Reykjavik, Island

Stavropol State Medical University, Russia
Karaganda State Medical University, Kazakhstan
Astana Medical University, Kazakhstan
International University of Catalonia, Spain
University Hospital of Barcelona, Spain

OTHER SCIENTIFIC ACTIVITIES

Prof. N. Fatkulina

- elected member of Board of European Academy of Nursing Science, <https://european-academy-of-nursing-science.com/>
- board member of the European Academy of Nursing science
- member of Anesthesia and Intensive Care Nurses' Society
- chair of Medicine program final thesis Defending Committee
- member of Association Institute of Bute
- member of the Nursing Bachelor's Degree Program;
- member of the Nursing Master's Degree Program;
- editorial board member of the journal *Slauga: mokslas ir praktika (Nursing. Science and Practice)*

Publications:

- Emeljanovas, Arūnas; Gruodytė-Račienė, Rita; Šukys, Saulius; Miežienė, Brigita; Rutkauskaitė, Renata; Trinkūnienė, Laima; **Fatkulina, Natalja**; Gerulskienė, Inga; Balsytė, Vita; Zabolotnaja, Tatjana; Daukantas, Tomas. The Lithuanian physical activity report card for children and youth 2018. Kaunas : LSU, 2019. 46 p. ISBN 9786098200218. <http://dspace.lsu.lt/handle/123456789/56>. [M. kr.: S 007]
- Gedrimė, Lina; Istomina-**Fatkulina, Natalja**; Salanterä, Sanna; Brasaitė, Indrė. Patients' information needs before and after digestive tract surgery // Healthy and Transparent Being on the Way of Vydūnas: Vydūnas International Scientific Conference to Celebrate the 20th Anniversary of the Faculty of Health Sciences: Conference Proceedings. Klaipėda, 2019. eISBN 9786094810299. p. 35. [M. kr.: M 005]

Assoc. Prof. A. Gradauskas

- head of the Clinic of Surgery at Vilnius city Clinical Hospital
- vice-president of Vilnius Association of Surgeons
- board member of the Lithuanian Association of Minimally Invasive Surgery, <http://www.mich.lt/>

Assist. A. Mikaliūkštienė

- chair of the Lithuanian University Education Nursing Society Board, <http://www.lusd.lt/>
- member of the Lithuanian Society of Palliative Medicine, <http://www.paliatyvipagalba.lt/>
- member of the Nursing Bachelor's Degree Program
- member of the Nursing Master's Degree Program
- member of Medicine program degree final thesis Defending Committee
- editorial board member of the journal *Sveikatos mokslai (Health Sciences)*
- editorial board member of the journal *Slauga: mokslas ir praktika (Nursing. Science and Practice)*

Presentations at conferences:

- Gierasimovič Z, **Mikaliūkštienė A.** The Significance of Hand Hygiene Training of Medical Staff in the Formation of Proper Hand Hygiene Skills. International Scientific conference on Medicine, February 22, 2019. University of Latvia, Faculty of Medicine.

- Jerdiakova N, **Mikaliūkštienė A.** Evaluating of the Common Preanalytical Blood Sampling Mistakes Made by Nursing Staff in Clinical Laboratory. International Scientific conference on Medicine, February 22, 2019. University of Latvia, Faculty of Medicine.
- Gierasimovič Z, **Mikaliūkštienė A.** Importance of training in correct hand hygiene skills. International Conference "Current Issues in Nursing Science and Practice 2019" June 6, 2019, Klaipėdos university.
- Gierasimovič Z, **Mikaliūkštienė A.** Relationships of nurses' knowledge of nosocomial infections with applications in nursing practice. International Conference "Current Issues in Nursing Science and Practice 2019". June 7, 2019, Klaipėdos university.
- Baltokaitė L, **Mikaliūkštienė A,** Jerdiakova N. Attitudes of patients in cardiology center towards the quality of care provided. International Conference "Current Issues in Nursing Science and Practice 2019" June 7, 2019, Klaipėdos university.
- Jerdiakova N, **Mikaliūkštienė A,** Gimžauskaitė S. Teamwork and safety climate from the operational point of view of the operational team members. International Conference "Current Issues in Nursing Science and Practice 2019" June 7, 2019, Klaipėdos university.
- **Mikaliūkštienė A,** Jerdiakova N. Impact of haemolysis samples on venous blood test results. International Conference "Current Issues in Nursing Science and Practice 2019" June 7, 2019, Klaipėdos university.

Publications:

- Jerdiakova N, **Mikaliūkštienė A,** Julija Rabkovskaja J. Dažniausi pirminės asmens sveikatos priežiūros paslaugų kokybę lemiantys veiksniai. Pacientų požiūris. The Most Common Factors That Determine the Quality of Primary Health Care. Patients Attitude
- Gierasimovič Z, **Mikaliūkštienė A,** Kuzborska Z, Skučikienė D. Padidintos rizikos skyrių slaugos personalo žinių apie hospitalines infekcijas įvertinimas. On Assessing Nursing Staff Exposure to High Risk Infections

Assist. R. Stundžienė

- member of the Lithuanian Society of Palliative Medicine, <http://www.paliatyvipagalba.lt/>
- member of the Nursing Bachelor's Degree Program
- member of the Lithuanian University Education Nursing Society Board, <http://www.lusd.lt/>
- member of Lithuanian Nursing Specialists Organization, <http://www.lssso.lt/>

Assist. Z. Gierasimovič

- member of the Lithuanian Society of Palliative Medicine, <http://www.paliatyvipagalba.lt/>
- member of the Nursing Bachelor's Degree Program
- member of the Lithuanian University Education Nursing Society Board, <http://www.lusd.lt/>
- editorial board member of the journal *Slauga: mokslas ir praktika (Nursing. Science and Practice)*
- member of Nursing Bachelors' degree final thesis Defending Committee

Publications:

- Rymšo K., **Gierasimovič Z.** Expectations and motivation of nursing staff. Nursing. Science and practice. 2019 Nr.1 (265): 4-8.
- Stankevič J., **Gierasimovič Z.** Influence of risk factors on beautician health. Nursing. Science and practice. 2019 Nr.4 (268): 4-7.
- Gurinskaitė L., Jurgelevičiūtė K., Grušnytė K., Jakelytė L., Joskaudaitė G, **Gierasimovič Z.** Nursing and care of preterm newborns. Nursing. Science and practice. 2019
- **Gierasimovič Z.,** Kuzborska Z. Influence of risk factors on the damage to tissue integrity. Annals of Agricultural and Environmental Medicine. 2019.

Presentations at conferences:

- **Gierasimovič Z.**, Mikaliūkštienė A. Importance of training in correct hand hygiene skills. International Conference "Nursing Science and Practice Topics 2019", Klaipėda.
- **Gierasimovič Z.**, Mikaliūkštienė A. Relationships of nurses' knowledge of nosocomial infections with applications in nursing practice. International Conference "Nursing Science and Practice Topics 2019", Klaipėda.
- **Gierasimovič Z.** Prietaisų higiena. Causes of infection, prevention. News of acute coronary syndromes and emergency medicine. Conference. 2019, Alytus.
- Skunčikienė D., **Gierasimovič Z.** Peculiarities of nursing in the perioperative period. Case study. Professional challenges for operating nurses. 4th International Scientific Practical Conference. Trakai.
- **Gierasimovič Z.**, Karpovič A. Peculiarities of postoperative wound care in the outpatient setting. Professional challenges for operating nurses. 4th International Scientific Practical Conference. Trakai.
- Surgunt N., **Gierasimovič Z.** Importance of positioning of patients undergoing surgery and its applicability during surgery. Professional challenges for operating nurses. 4th International Scientific Practical Conference. Trakai.
- **Gierasimovic Z.**, Butkevič V. Influence of risk factors on changes in vital activities following neurosurgical interventions. 2019/ Lithuanian Surgery. 2019; 18 (3): 193-194. ISSN1392-0995.
- **Gierasimovic Z.**, Olševska I Stem hematopoietic transplantation. Case study / Lithuanian Surgery. 2019; 18 (3): 192-193. ISSN1392-0995.
- **Gierasimovic Z.**, Butkevič V. Pain management after hip replacement surgery. Case study. Lithuanian Surgery. 2019; 18 (3): 190-191. ISSN1392-0995.
- Beperšaitė E., **Gierasimovič Z.** Safe procedures for beauty services. The Roots of Science 2019, 2019, Panevezys.
- Stankevič J., **Gierasimovič Z.** Interacting with a client to provide beauty services. The Roots of Science 2019, 2019, Panevezys.
- Poplavskaja E., **Gierasimovič Z.** Work safety in cosmetologist's office. The Roots of Science 2019, 2019, Panevezys.
- Gierasimovič Z., Mikaliūkštienė A. The significance of hand hygiene training of medical staff in the formation of proper hand hygiene skills. International Scientific Conference on Medicine at the University of Latvia, 2019, Riga.
- Gierasimovič Z. Butkevič V. Assessment of vital functions after neurosurgical interventions. International Scientific Conference on Medicine at the University of Latvia, 2019, Riga.

Teaching Assist. J. Stirbliėnė

Publications:

- Sinkevičius, Vytautas; Birmontienė, Toma; Miliuvienė, Jolita; Vilkelis, Gintautas; Novikovas, Andrejus; Bilevičiūtė, Eglė; Juškevičius, Jonas; Stirbliėnė, Jurgita; Kaminskienė, Natalija; Tvaronavičienė, Agnė; Kavalnė, Salvija; Pakutinskas, Paulius; Čekanaivičius, Ažuolas; Girdenis, Tomas; Marcinauskaitė, Renata; Jurka, Raimundas; Ažubalytė, Rima; Žilinskas, Justinas; Jočienė, Danutė; Katuoka, Saulius; Liauksminas, Arnas; Šaltinytė, Loreta. Lithuanian Law, 2018: Substantial Changes. Vilnius: Mykolas Romeris University, 2019. 74 p. ISBN 9789955199397. eISBN 9789955199380. <<https://repository.mruni.eu/handle/007/15678>>.

Teaching Assist. L Gedrimė –

Publications:

- Zavackienė, Andželika; Gedrimė, Lina; Didvalė, Daiva; Skarbalienė, Aelita. Survey of the Prestige Opinion of the Nursing Profession in Lithuania // Towards a Healthy Life and Transparent Being on the Vydūnas Road: Vydūnas International Scientific Conference to

Celebrate the 20th Anniversary of the Faculty of Health Sciences: March 22, Klaipėda]: conference proceedings / Klaipėda University. Faculty of Health Sciences; [compiled by: Dalia Marija Stančienė, etc.]. Klaipėda: Klaipėda University 2019. ISBN 9786094810299. p. 124. https://www.ku.lt/svmf/wp-content/uploads/sites/7/2019/03/Vyduno-konferencija_leidinys_2019.pdf

- Rapolienė, Lolita; Skarbalienė, Aelita; Gedrimė, Lina; Mockevičienė, Daiva; Razbadauskas, Artūras. The influence of psychosocial factors on distress expression // Family medicine & primary care review. Poznan: Termedia Publishing House. ISSN 1734-3402. eISSN 2449-8580. 2019, vol. 21, iss. 1, p. 41-46. DOI: 10.5114/fmpr.2019.82978. [DB: Emerging Sources Citation Index (Web of Science), Scopus, Academic Search Complete, IndexCopernicus]
- Gedrimė, Lina; Istomina-Fatkulina, Natalja; Salanterä, Sanna; Brasaitė, Indrė. Patients' information needs before and after digestive tract surgery // Vydūnas Roads to a Healthy and Transparent Being: Vydūnas International Scientific Conference to Celebrate the 20th Anniversary of the Faculty of Health Sciences: Conference Proceedings. Klaipėda: Klaipėda University, 2019. eISBN 9786094810299. p. 35.
- Rapolienė, Lolita; Razbadauskas, Artūras; Gedrimė, Lina; Mockevičienė, Daiva; Skarbalienė, Aelita. Influence of geothermal water procedures on psycho-emotional state // Marine and Shore Research 2019: 12th National Conference on Marine Science and Technology: Conference Material: 9-10 May 2019, Klaipėda. Klaipėda: Klaipėda University. ISSN 2538-7243. 2019, p. 160-163.
- Skarbalienė, Aelita; Gedrimė, Lina. HELP - an opportunity for every healthcare professional to learn professional English in an innovative, fun, boring and completely free way // Nursing. Science and practice. Vilnius: Nursing Training and Specialization Center. ISSN 1648-0570. 2019, Nr. 1(265), p. 13-14. <http://www.sskc.lt/uploads/Leidiniai/Spaudai%20201901.pdf>.
- Šakytė, Kristina; Čižauskaitė, Agnė; Šimčikas, Dainius; Gedrimė, Lina; Skarbalienė, Aelita. Women's Awareness of Lymphedema of the Hand // Towards a Healthy Life and Transparent Being on the Way of Vydūnas: Vydūnas International Scientific Conference to Celebrate the 20th Anniversary of the Faculty of Health Sciences: Conference Proceedings. Klaipėda: Klaipėda University, 2019. eISBN 9786094810299. p. 114. https://www.ku.lt/svmf/wp-content/uploads/sites/7/2019/03/Vyduno-konferencija_leidinys_2019.pdf.
- Zavackiene, Andzelika; Gedrimė, Lina; Skarbaliene, Aelita; Didvale, Daiva. Occupational prestige of nursing in Lithuania // Tarptautinė konferencija "Slaugos mokslo ir praktikos aktualijos 2019 m.": 2019 m. birželio 7 d., Klaipėda = 2019 International conference of nursing science and practice: [June 7, 2019, Klaipėda, Lithuania] / Respublikinė Klaipėdos ligoninė. Klaipėdos universitetas. Klaipėda: Respublikinė Klaipėdos ligoninė ; Klaipėdos universitetas. 2019, p. 9-10

Teaching Assist. V. Kielė

- member of the Lithuanian University Education Nursing Society Board, <http://www.lusd.lt/>.

Teaching Assist. I. Čergelytė-Podgrušienė

- Phd student of educology, main thesis – Children with diabetes education.

Lect. M. Čiurlionis

- board member of the Lithuanian Society of Palliative Medicine, <http://www.paliatyvipagalba.lt/>
- chair of the Baltic Palliative Care association <https://balticpca.com/>
- steering committee board member of the Last Aid International. <https://www.letztehilfe.info/>

- member of Nursing Bachelors' degree final thesis Defending Committee;
- mentor European Palliative Care Academy Mentoring Program <https://www.eupca.eu/>

Publications:

- presentation: „Restricted palliative care“, Ghent, Belgium, 8th of March 2019, ICEL3 Third International Conference on End of Life Law, Ethics, Policy, and Practice.
- poster: „Challenges Affecting Family Caregivers in Lithuania“, Brussels, Belgium, 25th October 2018, Conference „Public Health Research in Palliative Care: Shifting the Paradigm“.
- abstract: Cascais, Portugal, 27th September 2018, Portuguese Journal of Public Health Vol. 36, Suppl. 1, 2018 „27th European Association of Hospital Managers (EAHM) Congress“.
- abstract: „Shortening Waiting Times for Palliative Care Patients: Methods and Challenges“, Palliative Medicine Journal, Volume 32 Issue 1_suppl, May 2018, Bern, Switzerland.
- presentation: „Evaluating the Impact of Health Information Technology on Efficiency and Costs of Home Care“. Oxford, UK 30th June 2017, „International Health Conference“.
- poster: „Innovative Model and Solutions for Delivering Home-based Palliative Care and Nursing“, Madrid, Spain 18th May 2017, „15th World Congress of the European Association for Palliative Care“.

Lect. R. Urbanavičė

Publications:

- R. Urbanavičė, R. Rozenbergaitė, J. Kairys, A. Kurienė, J. Kutkauskienė, N. Fatkulina. Formation and implementation of nursing policy in Lithuania. Health Sciences, 2020 No. 1
- J. Grudzinskienė, R. Rozenbergaitė, R. Urbanavičė, J. Kairys. Influence of socio-demographic characteristics and lifestyle of nurses and patients on health education. Health Sciences.
- T. Aukštikalnis, V. Radzevič, E. Godliauskienė, J. Kairys, R. Urbanavičė, J. Raistenskis. Effects of dosing exercise on the musculoskeletal system of adolescents. Health Sciences.
- A. Gylytė, R. Pikūnienė, R. Liaudinskas, R. Urbanavičė, J. Raistenskis. Effects of aerobic exercise on cognitive function, balance and coordination in children with mixed developmental disabilities. Health Sciences.

Presentations at conferences:

- “Development of Lithuanian Nursing Policy: Importance of Nursing Engagement”. Republican Practical Conference "Leadership in Nursing Practice". October 24, 2019 Faculty of Health Care, Vilnius College, Vilnius.
- “Development of Nursing Policy in Lithuania”. Scientific-Practical Conference "Strengthening Nursing Leadership Through Awareness Raising". December 6, 2019, Children's Hospital, Vilnius University Hospital Santara Clinic Branch, Vilnius.

Lect. J. Gimžauskienė

- member of the Nursing Bachelor's Degree Program;
- member of the Lithuanian University Education Nursing Society Board, <http://www.lusd.lt/>;
- member of the Anaesthesia and Intensive Care Nurses Association;
- member of Lithuanian Nursing Specialists Organization, <http://www.lssso.lt/>.

MOST IMPORTANT PARTICIPATION CASES OF RESEARCHERS IN WORKING GROUPS OR COMMISSIONS SET UP BY STATE AUTHORITIES, STATE AND MUNICIPAL INSTITUTIONS, ORGANISATIONS, BUSINESS ENTITIES

Natalja Fatkulina is board member of the European Academy of Nursing Science (EANS) and member of Strategic development group of EANS

Marius Čiurlionis is board and of the Lithuanian Society of Palliative Medicine, (<http://www.paliatyvipagalba.lt/>) and chair of the Baltic Palliative Care association <https://balticpca.com/>

CONSULTATIONS PROVIDED BY THE UNIT TO THE PUBLIC OR ECONOMIC ENTITIES

Prof. N.Fatkulina. Political discussions with Ministry of Health of the Republic of Lithuania

Prof. N.Fatkulina. Consultations provided for the Department for the Affairs of Disabled under the Ministry of Social Security and Labor

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Department of Nursing is collaborating partner of CHRODIS+ project.

Center for Health Ethics, Law and History

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Head – *Prof. dr. Eugenijus Gefenas*

STAFF

Professors: dr. Eugenijus Gefenas

Assistant Professor: dr. Aistė Bartkienė (part-time), dr. Eglė Sakalauskaitė-Juodeikienė, dr. Aistis Žalnora

Lecturers: dr. Almantas Bagdonavičius (part-time), dr. Asta Čekanauskaitė (part-time), dr. Margarita Poškutė (part-time), Vygintas Aliukonis (part-time), Romalda Baranauskienė, Irma Kušeliauskaitė (part-time), Vilma Lukaševičienė (part-time), Monika Ramonaitė (part-time).

RESEARCH INTERESTS

History of medicine

Medical ethics

RESEARCH PROJECTS CARRIED OUT IN 2019

Projects Supported by University Budget

1. **Legal and Institutional Aspects of Biomedical Research with Humans.** Prof. E. Gefenas. 2019 –2021.

Researches of Centre for Health Ethics, Law and History collected and analysed data on IR and RE training programmes and their efficiency. The team of the Centre have analyzed ethical and legal issues emerging in research on human biological material, biobanks and Big Data. Prof. Eugenijus Gefenas and Jūratė Lekstutienė presented the data of the analysis at 33rd European Conference on Philosophy of Medicine and Health care „Philosophy and Ethics at the Edge of Medicine“, 7-10 August, 2019, in Oslo (Norway).

2. **Studies and students at the Faculty of Medicine of the Vilnius Stephen Batory University.** Asist. dr. A. Žalnora. 2019 – 2021.

In 2019 archival materials were collected and systemized. Data on hygiene education at the Stephen Batory University was analysed in this stage. Dr. Aistis Žalnora presented he collected data at the international conference „XVII Biannual Conference of the German-Polish Society for the History of Medicine Circulation of Medical Knowledge and Skills, from Early Modern Times to Nowadays“, the 31st May, 2019, in Szczecin (Poland).

International Research Projects

1. **ENERI – European Network of Research Ethics and Research Integrity.** Prof. E. Gefenas. 2015 – 2019.

The aim of the project is to strengthen activities of education and training in research ethics and research integrity, promote a culture of integrity, and foster the development of and compliance with joint rules and norms. In 2019 researchers of Vilnius University has been prepared on-line training resource on RI and RE.

2. INTEGRITY: empowering students through evidence-based, scaffolded learning of Responsible Conduct in Research (RCR). Prof. E. Gefenas. 2019-2021

The aim of the project is to empower students in responsible research. The main strategy of INTEGRITY's team is to build knowledge and set up tools aimed at supporting high school teachers and university professors, very often required to impart professional ethics and integrity training. In 2019 reasearches of Vilnius University translated a pilot questionnaire on RI and distributed it in Lithuania. The VU team has been prepared for the annual project meeting.

3. EU-STANDS4PM: A European standardization framework for data integration and data-driven in silico models for personalized medicine. Prof. E. Gefenas. 2019-2021.

Recently in combination with patient/personal derived data such as electronic health records, patient registries and - databases, as well as life style information this Big Data holds an immense potential for clinical applications, especially for in silico personalized medicine approaches. A Pan-European Expert forum has the overarching aim to bundle transnational standardization guidelines for in silico methodologies in transnational and clinical research to unfold the potential of PM. In 2019 the researches of Vilnius University conducted an analysis of legal documents and ethical guidelines related to in silico model for personalized medicine.

OTHER SCIENTIFIC ACTIVITIES

Prof. E. Gefenas

- member of European Group on Ethics in Science and New Technologies (EGE)
- member of the bureau of the European Society for Philosophy of Medicine and Health Care (ESPMH)
- member of the advisory editorial board of the journals *Medicine, Health Care and Philosophy: A European Journal*, (Springer)

Dr. A. Čekanauskaitė

- member of the Council of Europe Steering Committee on Bioethics (CDBI)
- member of the Lithuanian Bioethics Society
- member of the Board of the Foundation for Patient Safety, Innovations and Quality

Dr. Eglė Sakalauskaitė-Juodeikienė –

- Organization of the International Society for the History of the Neurosciences (ISHN) conference in Vilnius, Lithuania, in July 8-11, 2019.

Dr. A. Žalnora

- member of Lithuanian Morphological Society
- member of Lithuanian Association of the History and Philosophy of Science
- editorial board member of the “Acta medico-historica Rigensia”.

R. Baranauskienė

- member of European Health management association.

BEST REPORTS DELIVERED AT CONFERENCES ABROAD

Bartkienė Aistė. „Bioethics in medical education: searching for the best mode“, Annual Workshop of Nordic-Baltic Network of Philosophy of Medicine „Issues in Bioethics and Philosophy of Medicine“, 11-12 June, 2019, Tartu (Estonia).

Gefenas Eugenijus, Lekstutienė Jūratė. “DTC Genetic Testing Vs Incidental Findings: Pros and Cons“, 33rd European Conference on Philosophy of Medicine and Health care „Philosophy and Ethics at the Edge of Medicine“, 7-10 August, 2019, Oslo (Norway).

Žalnora Aistis. “Medical (hygiene) education in Vilnius Stephen Bathory University”, international scientific Conference “XVII Biannual Conference of the German-Polish Society for the History of Medicine Circulation of Medical Knowledge and Skills, from Early Modern Times to Nowadays”, 30 May-2 June, 2019, Szczecin (Poland)

Gefenas, Eugenijus. Moderator of the discussion “The Ethics of Gene Editing”, International Dialogue on Bioethics and Ethics in Science and Technologies, The European Group on Ethics in Science and New Technologies, 17 October, 2019.

Gefenas, Eugenijus. Rapporteur of the discussion “Ethical/Societal Considerations Related to Agricultural Applications of NBTs”, “Genome Editing in Agriculture. Implications for Society”, European Parliament, the 2nd April, 2019.

Žalnora Aistis. „The Disputes on Mental Hygiene and Eugenics in Vilnius and Lithuania in 1919–1939“, the 24th Meeting of the International Society for the History of Neurosciences, 8-11 July, 2019, Vilnius, Lithuania.

Ramonaitė Monika. “The Beginnings of Medical Education at the University of Vilnius: Vision and Challenges of the Commission of National Education”, The 29th Baltic Conference on the History of Science, Vilnius, 19–21 September 2019 Vilnius, Lithuania

Sakalaukaitė-Juodeikienė, Eglė. „Solidism Doctrine and the Perception of Nervous System Diseases in the First Half of the 19th Century at Vilnius University“, The 29th Baltic Conference on the History of Science, Vilnius, 19–21 September 2019 Vilnius, Lithuania

Žalnora Aistis. „Physical Health and Pronatalism in Jędrzej Śniadecki’s book “On the Physical Education of Children“, The 29th Baltic Conference on the History of Science, Vilnius, 19–21 September 2019 Vilnius, Lithuania.

Žalnora Aistis. „The Occupational poisoning issues in the works of Vilnius Stephen Bathory University doctors and hygienists“, the 10th International Pharmaceutical Conference „Science and Practice 2019“, 15 November, 2019, Kaunas, Lithuania.

MOST IMPORTANT RESEARCH DISSEMINATION ACTIVITIES

Žalnora Aistis. A lesson for higher school students on medical history, Riešė Gymnasium, Vilnius district, 4 October, 2019.

Žalnora Aistis. TV interview on unusual treatment methods, TV show „History Detectives“ (LRT), 13 October, 2019.

Žalnora Aistis, Poškutė Margarita. Participation in the project „Student for one day“ (lectures „The Old Medical Paradigm: from Ancient Greece to the Islamic World“ and „The Ethical Issues Related to the Beginning of Human Life“), 23, 25 October, 2019.

Poškutė Margarita. Open lecture „Ethical Issues related to Genome Editing“, University of the Third Age, Alytus, 29 November, 2019.

Ramonaitė Monika. An interview in the newspaper: Miškinytė Rūta. „Raupai ir kitos bėdos: kuo sirgo ir kaip gydėsi Lietuvos Didžiosios Kunigaikštystės gyventojai?“ 15min.lt, published 9

December, 2019 <https://www.15min.lt/ar-zinai/naujiena/idomi-lietuva/raupai-ir-kitos-bedos-kuo-sirgo-ir-kaip-gydesi-liuuvos-didziosios-kunigaikstystes-gyventojai-1162-1244126>