



STUDENTS & PROJECTS

LEARNING BY DOING

2021
2022

SALUTATORY

A FEW WORDS FROM THE LEADERSHIP

On 1 June 2021, the Centre for Translational Medicine commenced its work at Semmelweis University (SU). This is part of a new dynamic process at our University, which aims to reinforce the University's capabilities at multiple levels, including teaching, research and patient care.

Science has become inescapable in our daily lives in the 21st century. The last 20 years have seen seismic changes in all areas, including the automotive industry, sport, communications, transport and patient care. Nowadays, scientific experimentation, data collection, analysis and decision-making based on scientific results have become essential to high-quality patient care. It is no coincidence that a new concept in the field of medicine, Translational Medicine, has emerged with the main objective of accelerating and streamlining the use of scientific results, including the prevention, treatment and monitoring of diseases.

It is well-known that patient care requires continuous adaptive changes to improve the health status of the population. According to data from the European Commission's Statistical Office, 126 900 deaths occurred in Hungary in 2016, of which approximately 30 000 could have been avoided through better prevention, 16 000 through more effective patient care and a further 14 000 through patient education. For the under-75s, the situation is even more dramatic: four out of five deaths are preventable. It is therefore clear that our healthcare today should be improved through the effective use of the knowledge base created and made available through scientific activity. Apart from the COVID crisis, these statistics are slowly getting better, but there is still a strong need to accelerate this process.

As part of the Research, Development and Innovation (RDI) support system at SU, the Centre for Translational Medicine has a clear purpose to harmonize and improve teaching, research and medical services and reinforce the complexity of these three duties in a challenging environment. The Translational Medicine Programme, will bring together patient care, scientific activity and education in a common model and boost Hungary's competitiveness in all three areas, as well as attracting and providing a suitable career model for outstanding doctors and professionals, thereby improving the quality of education, patient care and scientific performance.

The new Translational Medicine (TM) Programme is open to all students from different departments and aspires to maintain close collaboration in the education of doctors, healthcare professionals and researchers.



BÉLA MERKELY
Rector of the
Semmelweis University



PÉTER FERDINANDY
Vice-Rector for
Science and Innovations



PÉTER HEGYI
Strategic director of the
Centre for Translational Medicine

THE HISTORY OF TRANSLATIONAL MEDICINE IN HUNGARY

The first TM centre in Hungary was established at the University of Pécs in January 2016 under the leadership of Péter Hegyi. One of the key partners to the Centre for Translational Medicine at Pécs has been the Translational Medicine Foundation (TMF).

The University of Pécs has established excellent conditions for patient care and, with its motivated teachers, students and physicians, has provided the human resources for patient care, education and research. The TMF has promoted the practical application of scientific results and innovations in health care, as well as stimulating and unifying the exchange of information and data flow between universities, hospitals and research centres. In an effort to support patient care, education, scientific activity and communication, we set up an interdisciplinary unit at the outset involving a number of different disciplines, including patient coordination, biostatistics, IT, data management, artificial intelligence, legal support and communication.

Within a short period of time, two hospitals (the Szent György University Teaching Hospital of Fejér County (in Székesfehérvár) and the Heim Pál National Pediatric Institute (in Budapest) and three universities (the University of Pécs (in Pécs), the University of Szeged (in Szeged) and Semmelweis University (in Budapest) joined the TM programme, expanding translational medicine in Hungary to a national level.

In the first five years, almost 50 PhD students and residents have participated in our programmes, and more than 300 high-quality papers have been published based on scientific research and translational patient care. The results have made it possible to develop and supplement a number of treatment guidelines and to immediately apply scientific results in patient care.

A summary of this period was published in the highly distinguished journal, Nature Medicine. In June 2021, Semmelweis University established one of the largest TM centres in Europe, where 91 PhD students commenced their research activities in September 2021. The programme, which is unique in the world, will certainly attract considerable international attention and see significant growth in the future.



PÉTER HEGYI

Strategic director of the
Centre for Translational Medicine

INTRODUCTION TO OUR PH.D PROGRAM

I. THE TRANSLATIONAL MEDICINE EDUCATIONAL PROGRAMME AT SEMMELWEIS UNIVERSITY

1. THE COURSE DESIGN

The Hybrid Ph.D. / Resident Programme at the Centre for Translational Medicine provides students with the opportunity to engage in patient care and academic activity simultaneously. Within the framework of the training, they should acquire clinical research methodologies using the “learning by doing” method through independent scientific projects. They can join workgroups, participate in meta-analyses and studies related to different registers, and participate in clinical work.

The programme helps students to become critical consumers of medical research papers, to gather primary data on health issues through questioning and observation, and to conduct biomedical research. Students will gain an understanding of the planning of clinical research, including meta-analyses, patient registries and clinical trials, by designing an extended project in study groups, which are led by experienced members of the Translational Medicine Centre.

We believe that continuous monitoring is very important. Participants in the programme present their results and the current status of the projects every three months. They receive valuable, immediate feedback from their mentors, fellow students and academic staff at the Centre on the feasibility of the project and the communication skills of the speaker, including their ability to debate.

Students will also be involved in other students’ projects during the programme, so, at the end of the programme, they will have 1–2 first author and several co-author publications. These publications can serve as the basis for their Ph.D. thesis.

2. INTERDISCIPLINARY RESEARCH SUPPORT

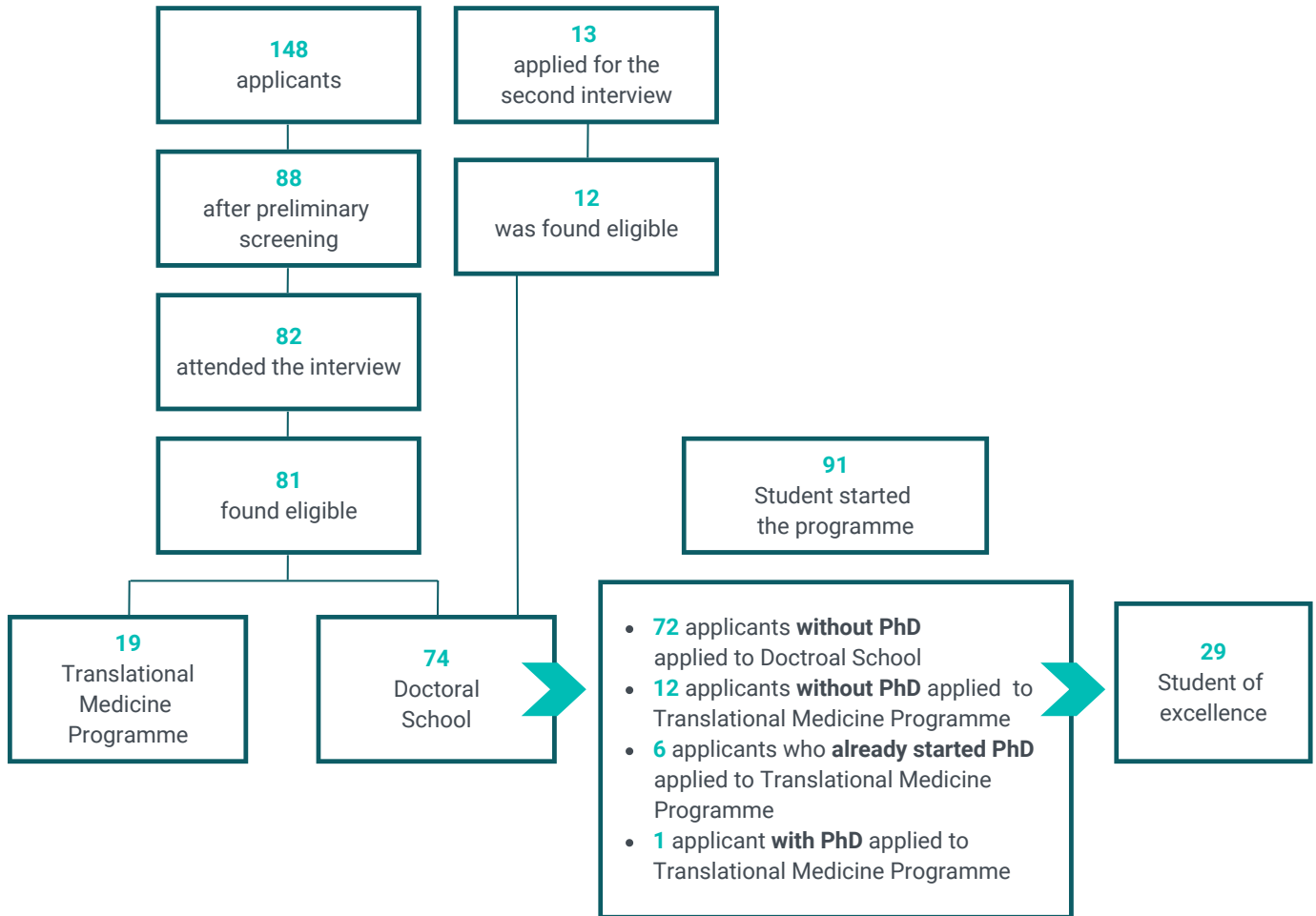
Our centre has begun building an interdisciplinary research support team to support the work of researchers and Ph.D. students in a number of areas. The scientific methodology team provides a basic professional background in the development of courses, and in the design and implementation of patient registries, meta-analyses and clinical trials. The IT group offers support in the development of multicentre registries and clinical trials, and the biostatistics group aids in the planning of data collection and the analysis of incoming data. Clinical research is also supported by the central administrative service, e.g. through the preparation and submission of documents for ethical permissions. The communication team supports the design, preparation and dissemination of education and information materials.

References

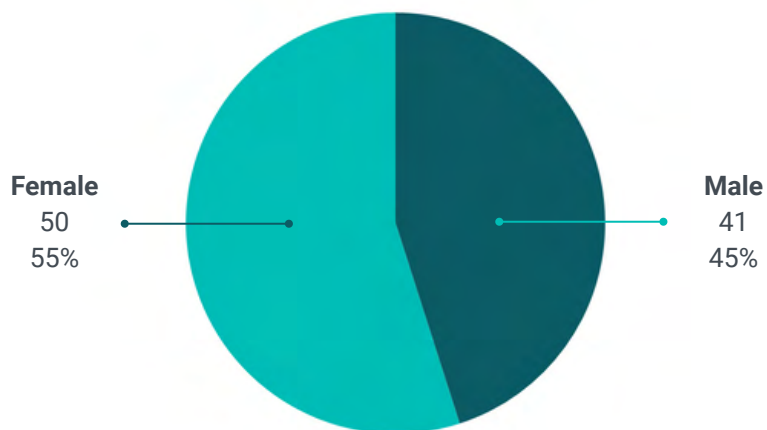
1. Hegyi, P., et al., Academia Europaea Position Paper on Translational Medicine: The Cycle Model for Translating Scientific Results into Community Benefits. *J Clin Med*, 2020. 9(5).
2. Hegyi, P., et al., Accelerating the translational medicine cycle: the Academia Europaea pilot. *Nat Med*, 2021. 27(8): p. 1317-1319.

II. ADMISSION STATISTICS 2021–2022

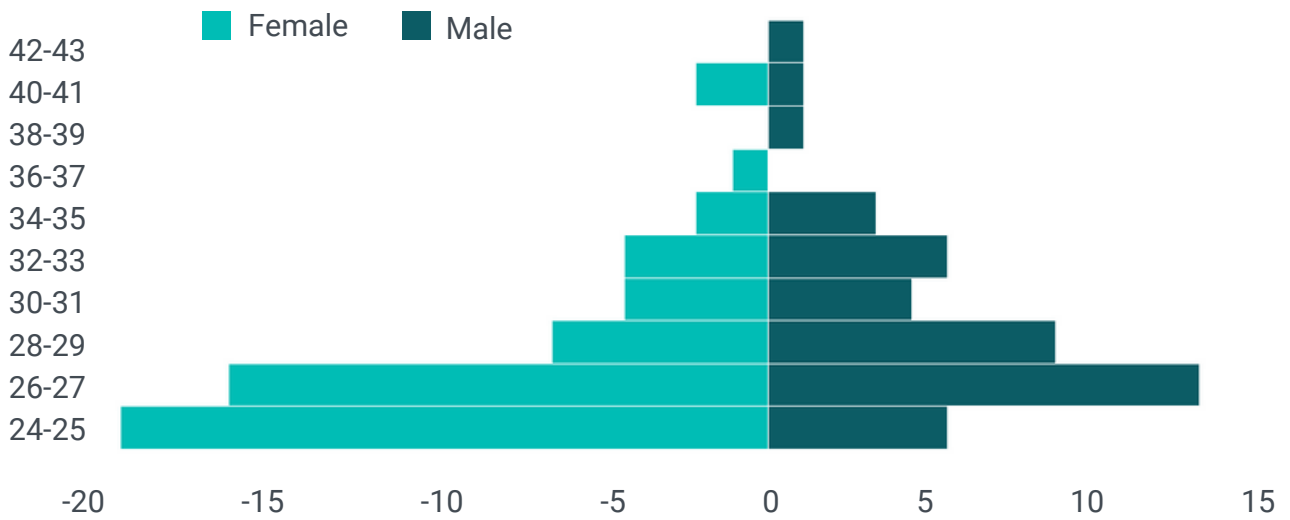
1. NUMBER OF APPLICANTS



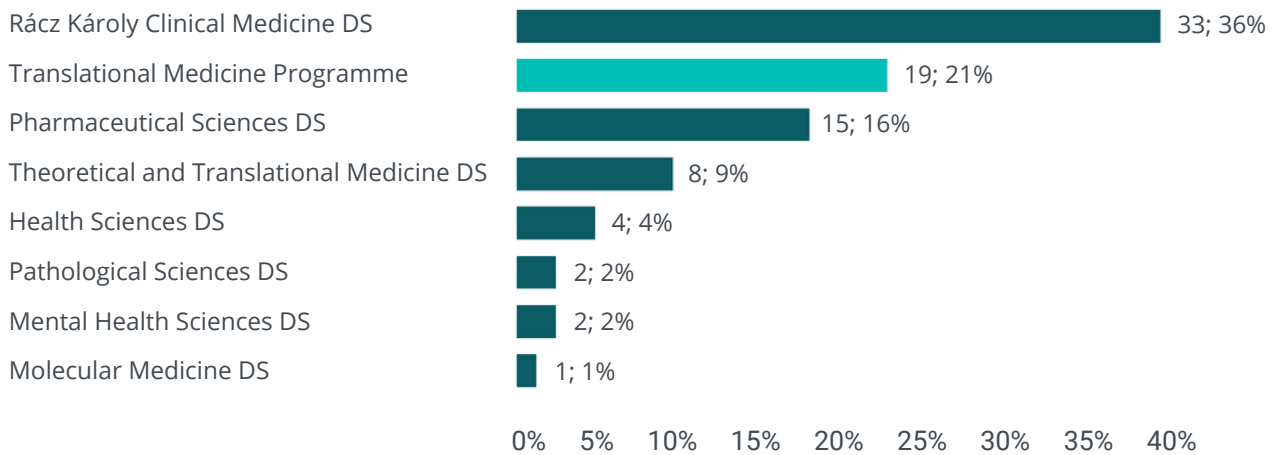
2. GENDER DISTRIBUTION



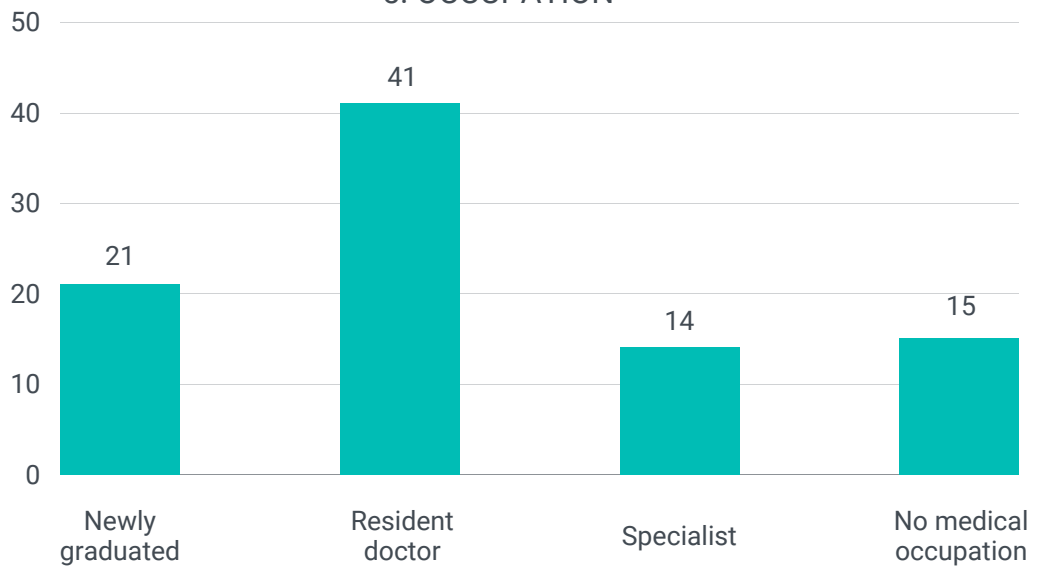
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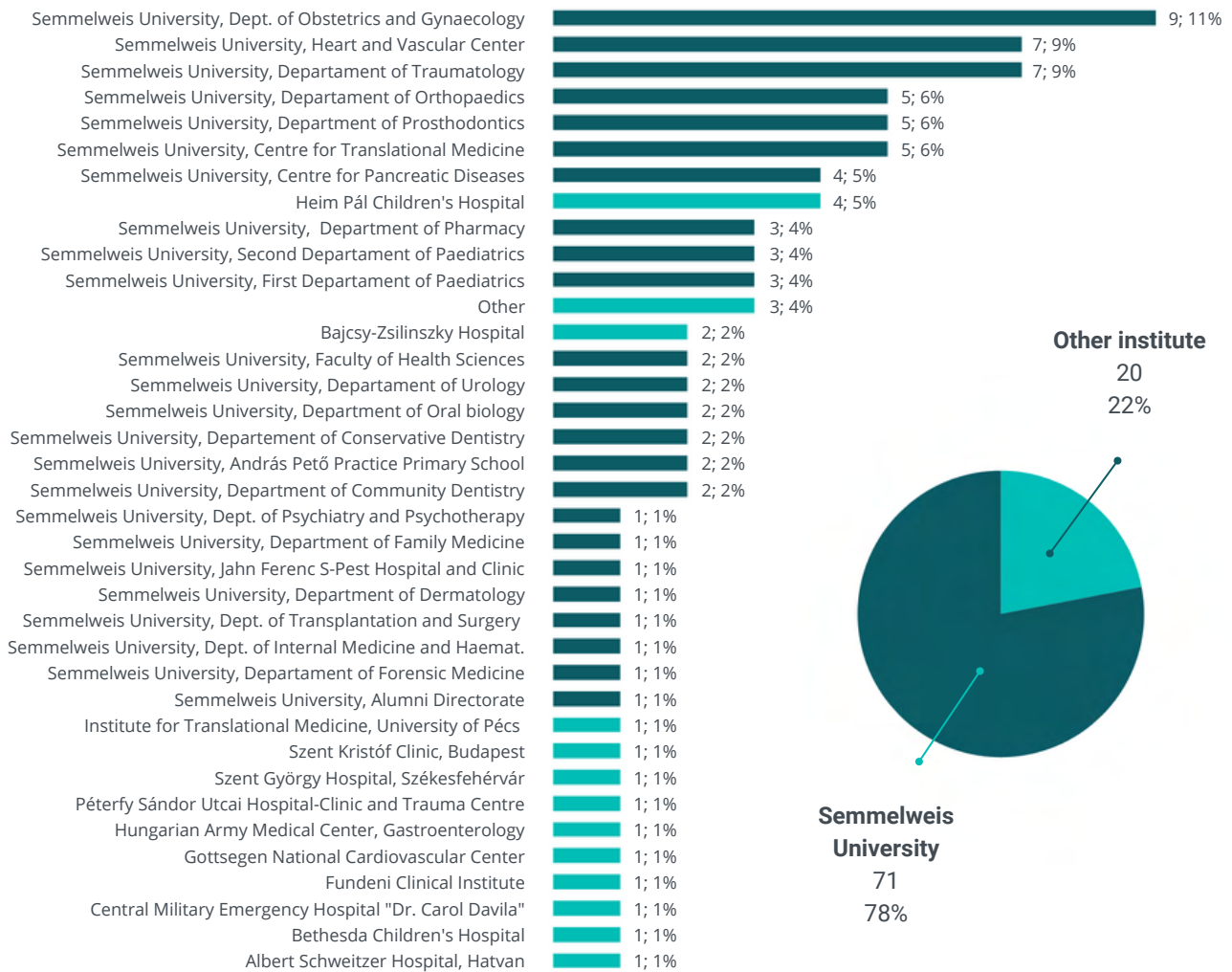
4. CHOSEN PROGRAMME



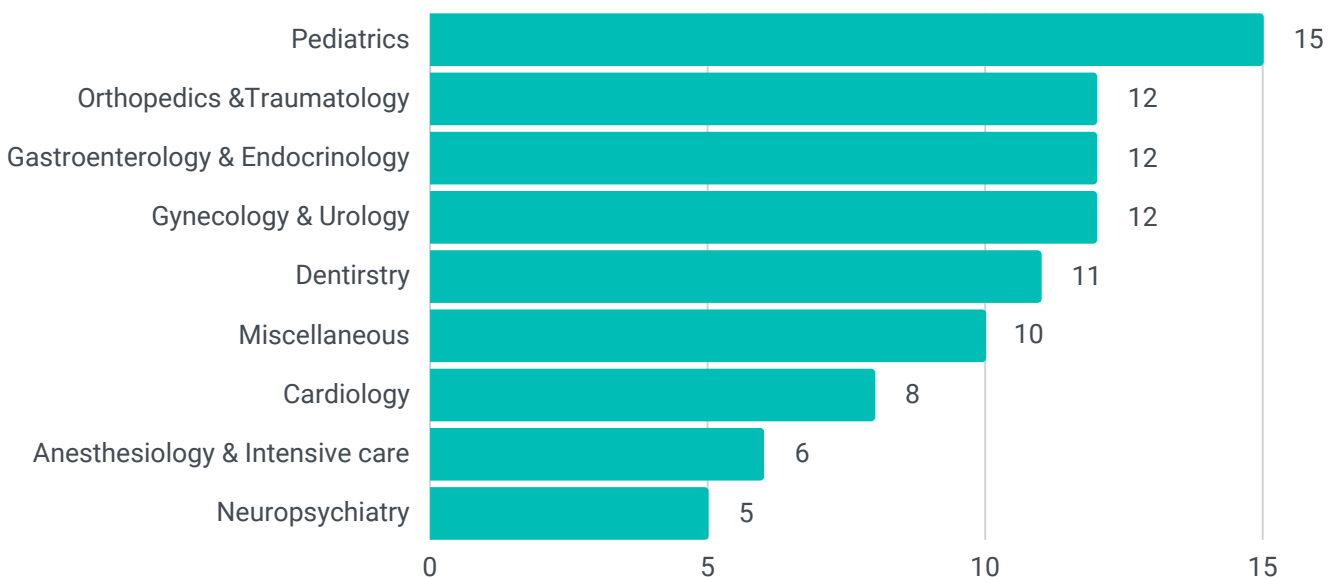
5. OCCUPATION



6. CURRENT WORKPLACE



7. FIELD OF RESEARCH



III. SUPPORT AND SUPERVISION

In September 2021, **91 research fellows started their scientific career** at the Semmelweis University, Centre for Translational Medicine in clinical and basic research PhD programs. This brochure aims to describe the research projects in which the fellows are working.

Our research fellows receive scientific and methodological education which is very intensive in the first year in the frame of **weekly courses**. In addition, the fellows are grouped according their scientific fields. This year **eight scientific groups** were formed: DENTISTRY; GYNECOLOGY & UROLOGY; CARDIOLOGY, INTENSIVE CARE, ANESTHESIOLOGY & NEUROPSYCHIATRY; ORTHOPEDICS & TRAUMATOLOGY; PEDIATRICS; GASTROENTEROLOGY & ENDOCRINOLOGY; and MISCELLANEOUS.

Each group has a meeting each week. In these meetings each fellow presents his/her progress during the previous week and the group jointly discusses the presentations. The **individual projects** are also weekly managed by small study groups which consist of at least the junior fellow and a senior fellow, the tutor, the biostatistician and, if necessary for the project, an expert specialist. The projects are essentially meta-analyses, patient registries, clinical trials, and basic research projects in which **the research fellow is the principal investigator** (i.e. first author).

The following experienced scientists will provide support for the students:

1) An expert discussant is appointed for each group. She/He is a highly experienced physician-scientist who provides help from the design of the study until the publication. She/He helps the students (1) to polish their projects, (2) to find the big picture and (3) challenges them week after week.

2) The group leaders are experienced physician-scientists who are well known representatives of the given field and have a record of high level research productivity.

3) The scientific supervisors of each fellow is are senior clinicians (expert) who raises relevant clinical questions, determines the direction of the research and bridges the gap between the theoretical and clinical work in the clinical PhD program. Thisese tutor continuously leads the research work of the fellows during the whole program.

4) Scientific methodology supervisors are a methodologist who has experience in designing and carrying out translational research projects and provides methodological support in various aspects of science including meta-analyses, patient registries, and clinical trials.

5) Educational supervisors are expert in the various fields taught through courses to the fellows. Such courses include meta-analysis, patient registry, clinical trial, biostatistics, data handling and clinical pharmacology.

Statisticians are appointed to each group to provide valuable help for the statistical work of the project.

6) Statisticians are appointed to each group to provide valuable help for the statistical work of the project.

Below you can see the meaning of the colours, which are shown by each student's profile to indicate the number of meta-analyses, registries and clinical trials they participate in.



number of meta analyses



number of registries



number of clinical trials

HEADS OF THE PROGRAM



PÉTER HEGYI

*Strategic
Director*



GÁBOR VARGA

*Operative
Director*



ANDREA SZENTESI

*Operative
Director*



BÁLINT ERŐSS

*Medical Group
Leader*



SZILÁRD VÁNCSA

*Ph.D Program
Coordinator*



GROUP 1
MISCELLANEOUS





GROUP 1

MISCELLANEOUS

GROUP MEETINGS
MONDAY, 2 PM - 4:30 PM

INTRODUCTION TO THE GROUP

The miscellaneous group is characterized by a wide range of approached research topics. The group members come from various fields – including – pharmacology, rheumatology, dermatology, otolaryngology, and pathophysiology. In smaller teams, they have already started working on a total of 17 meta-analyses, 2 clinical trial protocols, one registry analysis, one registry initiation, and the development of an analytical method for therapeutic drug monitoring. The group leader is Dezsó Csupor. He has a Ph.D. in pharmaceuticals and vast experience in research. He is now a pharmacology professor at the University of Pécs and his research area is phytochemistry, analytics of plant-based products, phytotherapy. The group scientific method supervisors are Fanni Dembrovsky and Stefania Bunduc. Fanni is one of the meta-analysis group coordinators of the Center for Translational Medicine and a 3rd-year Ph.D. student at the University of Pécs. Her main area of interest is infectious diseases and her Ph.D. topic is fecal microbiota transplantation in clostridoides infections. Stefania is a specialist doctor in Gastroenterology and a 4th-year Ph.D. student at Carol Davila University of Medicine and Pharmacy from Bucharest, Romania. Her main area of interest is pancreatology and her Ph.D. topic is the mutational profile of pancreatic adenocarcinoma.

MEMBERS OF THE GROUP



DEZSŐ CSUPOR
Group Leader



FANNI DEMBROVSKY
*Scientific Methodology
Supervisor*



STEFANIA BUNDUC
*Scientific Methodology
Supervisor*



GÁBOR MÉSZÁROS
Statistician

STUDENTS: Eszter Bakó, Garmaa Gantsetseg, Eszter Gulyás, Emese Eszter Gunther, István László Horváth, Kata Illés, Dénes Kleiner, Fanni Adél Meznerics

SUPERVISORS: András Bánvölgyi, Andrea Böszörményi, Dezsó Csupor, Tamás Horváth, Gellért Balázs Karvaly, Gábor Kökény, György Nagy,

ESZTER BAKÓ

SEMMELWEIS UNIVERSITY, DEPARTMENT OF PHARMACOGNOSY AND TOXICOLOGY



PROJECT DESCRIPTION

Eszter is a Phd student at the **Department of Pharmacognosy** of Semmelweis University. Eszter joined the Translational Medicine Program in 2021. She is working on her **first project which is a meta-analysis** examining the efficacy of topically applied essential oils in musculoskeletal disorders. Her second project in the Translational Medicine PhD Program is to write a **clinical trial protocol**. The clinical trial aims to investigate the vasodilatory and hyperemic effects of certain essential oils of gymnosperm species applied topically on the skin of healthy volunteers. The **main goal of her research** work is to examine essential oils, balsams, and resins of gymnosperm species that have potential effects on human microcirculation. Establishing essential oil profiles of the selected species is ongoing and skin blood flow measurements are going to be carried out to provide important information on the potential effects of the volatile compounds of the investigated plants on human microcirculation.

AGE
37 years

SUPERVISOR(S)
Andrea Böszörményi

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GARMAA GANTSETSEG

SEMMELWEIS UNIVERSITY, INSTITUTE FOR TRANSLATIONAL MEDICINE



PROJECT DESCRIPTION

Gantsetseg Garmaa is an **internal medicine specialist**, an **ambassador from Mongolia** in the Association of Hungarian Ph.D. and DLA Candidates, and a **Ph.D. student** at the Department of Basic and Translational Medicine, Semmelweis University. During her doctoral journey, she aims to **investigate the miRNAs** as potential anti-fibrotic agents in renal fibrosis. Now she is working on human renal cell culture. Her projects within the 12-month research fellowship program of the Center for Translational medicine will consist of **two meta-analyses**. The **first study** will be the determination of the most dysregulated miRNAs in human and animal chronic kidney disease. The **second meta-analysis** will be on the diagnostic accuracy of miRNAs in CKD.

AGE
32 years

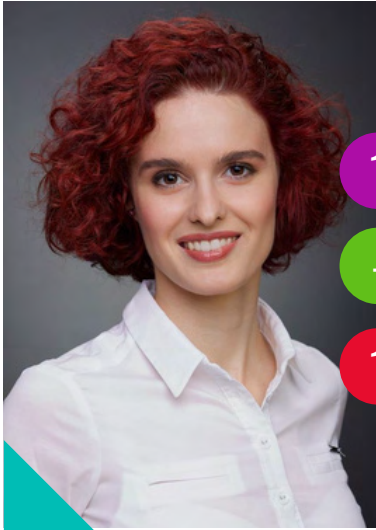
SUPERVISOR(S)
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ESZTER GULYÁS

SEMMELWEIS UNIVERSITY, UNIVERSITY PHARMACY DEPARTMENT OF PHARMACY ADMINISTRATION



1

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PROJECT DESCRIPTION

Eszter Gulyás is a **clinical hospital pharmacist** at the University Pharmacy Department of Pharmacy Administration of Semmelweis University. Her **main topic** is therapeutic drug monitoring (TDM) of antibiotics in critically ill patients. Her first project will be a **meta-analysis** about the therapeutic drug monitoring of beta-lactam antibiotics and its relation to PK/PD target attainment and to clinical outcomes. Eszter's second project will be to **develop an analytical method** for the TDM of colistin and to conduct its pharmacokinetic examination and clinical validation.

AGE

29 years

SUPERVISOR(S)

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ISTVÁN LÁSZLÓ HORVÁTH

SEMMELWEIS UNIVERSITY, UNIVERSITY PHARMACY DEPARTMENT OF PHARMACY ADMINISTRATION



1

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PROJECT DESCRIPTION

István László Horváth works as a **clinical hospital pharmacist** at Semmelweis University, University Pharmacy Department of Pharmacy Administration. His main topic is acute pancreatitis. His first project will be a **meta-analysis** on the efficacy of Ulinastatin+Somatostatin by comparison with Somatostatin alone in the treatment of acute pancreatitis. As a second project, he will perform a **registry analysis aiming** to identify the chronic treatments associated with an increased risk of acute pancreatitis. He is working on an additional project investigating the clinical pharmacist's impact on patient care. For this, he **developed a questionnaire** quantifying the work of a pharmacist which he already tested which he plans to further develop into a nationwide registry for all Hungarian clinical hospital pharmacists.

AGE

30 years

SUPERVISOR(S)

Dezső Csupor

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KATA ILLÉS

BAJCSY-ZSILINSZKY HOSPITAL, DEPARTMENT OF OTO- RHINO- LARYNGOLOGY AND HEAD- AND NECK SURGERY



2

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PROJECT DESCRIPTION

Kata is a **PhD student** at the Centre for Translational Medicine and **part-time clinical doctor** at the Department of Oto- Rhino- Laryngology and Head- and Neck Surgery in Bajcsy-Zsilinszky Hospital. **Her main interest** is otology and middle ear surgery, treating both forms of chronic otitis media, cholesteatoma and mesotympanic type with perforation on the tympanic membrane. From the scientific point of view, she focuses on the improvement of middle ear surgery outcomes in chronic otitis media by comparing different surgical techniques and by analyzing the predictive factors of the surgery. Kata is currently working on an **interventional meta-analysis**, comparing the effectiveness of mastoid obliteration versus the conventional canal wall up technique in cholesteatoma surgery. She works on **another meta-analysis** about the predictive factors of type I tympanoplasty, which is the intervention for closing a perforation on the tympanic membrane.

AGE

26 years

SUPERVISOR(S)

Tamás Horváth

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DÉNES KLEINER

SEMMELWEIS UNIVERSITY, UNIVERSITY PHARMACY DEPARTMENT OF PHARMACY ADMINISTRATION



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PROJECT DESCRIPTION

Dénes Kleiner is a **clinical hospital pharmacist** and an assistant lecturer at the University Pharmacy Department of Pharmacy Administration within Semmelweis University. He has a **great interest** in recent emerging plant-derived agents but also in health education. Therefore, his first project will be a **meta-analysis** on the efficacy of nabiximols as an additional treatment for the alleviation of spasticity, associated with multiple sclerosis. As a second project, he is planning an **interventional study** on the type of web-based tools that are best for educating breastfeeding women about the safety of over-the-counter drugs.

AGE

33 years

SUPERVISOR(S)

Dezső Csupor

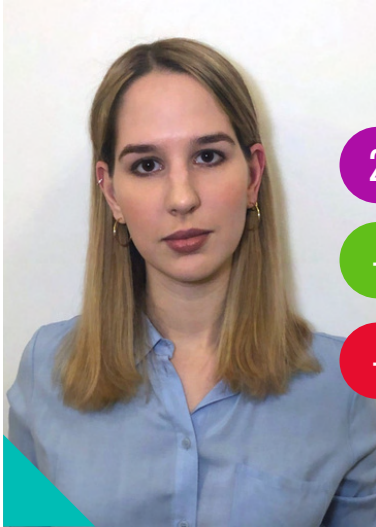
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FANNI ADÉL MEZNERICS

SEMMEIWEIS UNIVERSITY, DEPARTMENT OF DERMATOLOGY



PROJECT DESCRIPTION

Fanni is a **Phd student** at the Department of Dermatology, Venerology, and Dermatocology of Semmelweis University, participating in the Translational Medicine **PhD Program**. Her main focus of interest is the application of platelet-rich plasma (PRP) treatment in the **field of dermatology**. Fanni is currently working on an **interventional meta-analysis** with regards to the treatment of alopecia areata with PRP, and planning to conduct **another meta-analysis** about the role of PRP in chronic wound management. Platelet-rich plasma (PRP) is a relatively new, constantly **evolving treatment modality** that holds an increasingly important role in the field of dermatology. It is already widely used in other medical fields, such as orthopedics, facial plastic surgery, and oral surgery.

AGE

25 years

SUPERVISOR(S)

András Bánvölgyi

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GROUP 2
DENTISTRY





GROUP 2 DENTISTRY

GROUP MEETINGS
MONDAY, 5 PM - 7:30 PM

INTRODUCTION TO THE GROUP

The Dentistry group consists of 11 students and their respective mentors, from various specialties and Departments such as: Department of Anatomy (1), Department of Community Dentistry(2), Department of Conservative Dentistry (1), Department of Oral Biology(1), Department of Prosthodontics (5), Department of Periodontology (1). With the variety of departments involved, the main interests of the group includes Alveolar Ridge Preservation, Dental Enamel, Dental Implant Prosthetics, Digital Dentistry, Halitosis, Maxillofacial Prosthodontics, Maxillofacial Surgery, Periodontal diseases, Temporomandibular Disorders and Teledentistry. Currently, regarding the projects, a total of 22 meta-analyses (MA) are being developed, with 10 interventional , 4 prognostic and 8 diagnostic MAs, besides 1 clinical trial on initiation. The group also counts with 5 project students - undergraduate students that are having their first contact with high-level research and plan to join the program as PhD students in the future. As the group leader we have Varga Gábor, a highly experienced professor and researcher, who is also the Operative Director of TMC and part of the Department of Oral Biology. We understand the importance of participation and commitment in the program not only aiming the success at an individual level but as Faculty of Dentistry, where both young researchers and supervisors are active part of this learning process. Understanding the vision of translational medicine is key for a significant scientific output that truly changes our clinical dental practice.

MEMBERS OF THE GROUP



GÁBOR VARGA
Group Leader



GÁBOR GERBER
Group Leader



MÁRK CZUMBEL
*Scientific Methodology
Supervisor*



BENCE SZABÓ
Statistician

STUDENTS: Alexander Schulze Wenning, Bianca Golzio Navarro Cavalcante, Zsuzsanna Domokos, Kata Kelemen, János König, Anna Németh, Eleonóra Sólyom, Eszter Ágnes Szalai, Péter Tajti, Eszter Uhrin, Viktória Vitai

SUPERVISORS: Judit Borbély, Réka Fazekas, Gábor Gerber, Péter Hermann, Beáta Kerémi, Krisztina Mikulás, Bálint Molnár, Orsolya Németh, Gábor Varga,

ALEXANDER SCHULZE WENNING

SEMMELWEIS UNIVERSITY, DEPARTMENT OF ORAL BIOLOGY



2

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PROJECT DESCRIPTION

Alexander is a **medical doctor** and dentistry student, as well as a PhD student at the Doctoral School of Clinical Medicine. Alex joined the Translational Medicine Program in 2021. His **main interest** is maxillofacial surgery. The first project is a **meta-analysis** that compares maxillofacial growth in cleft lip and palate patients undergoing either one-stage or two-stage palatoplasty, aiming to provide evidence-based recommendations to guide this clinical decision and improve surgical outcome and life quality of those patients. The second project is **another meta-analysis** that investigates the clinical applicability of salivary miRNA as a non-invasive, early tumor diagnostic marker, increasing the opportunity for an efficient treatment, and implementing an easier, cheaper and safer diagnostic tool.

AGE

28 years

SUPERVISOR(S)

Gábor Varga, Gábor Gerber

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BIANCA GOLZIO NAVARRO CAVALCANTE

SEMMELWEIS UNIVERSITY, DEPARTMENT OF ORAL BIOLOGY



2

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PROJECT DESCRIPTION

Bianca is a 2nd year **PhD student** at Doctoral School of Clinical Medicine participating in the Translational Medicine Program. Her **main focus** of interest is dental enamel and its developmental defects. Her first project is a **meta-analysis** about the efficacy of CPP-ACP as a remineralizing agent on early stages of caries lesions, aiming to provide minimally invasive and cost-effective approaches with no discomfort to the patient. Her second topic is **another meta-analysis** that targets the role of CPP-ACP on management of hypersensitivity and remineralization of teeth affected by Molar Hypomineralization (MH), aiming to improve aesthetics and sensitivity discomfort, arresting caries progression and preventing further complications such as pulp involvement, tooth loss, dental fear and anxiety from the patient. Through these projects she focus on cost-effective and non-invasive clinical solutions for the therapeutic restoration of tooth enamel. She is also working in a **basic science research**, where she aims to understand the molecular and functional mechanisms affecting ameloblasts and enamel formation in rodent incisors.

AGE

27 years

SUPERVISOR(S)

Gábor Varga

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ZSUZSANNA DOMOKOS

SEMMEIWEIS UNIVERSITY, DEPARTMENT OF COMMUNITY DENTISTRY



2

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PROJECT DESCRIPTION

Zsuzsa is a **PhD student** and **clinical doctor at the Department of Community Dentistry**. She is participating in the clinical PhD fellowship programme. Her **main interest** is periodontal diseases. The aim of her **first meta-analysis** is to investigate the association between two multifactorial diseases: periodontal disease and inflammatory bowel diseases, further developing the knowledge about their connection and improving their treatment through a multidisciplinary job, involving dentists and medical doctors. Her **second meta-analysis** aims to compare different surgical techniques used in the surgical treatment of gingival recessions, meeting the esthetic demands of patients but also the integrity of gingival tissue, helping clinicians in decision-making.

AGE

24 years

SUPERVISOR(S)

Orsolya Németh

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KATA KELEMEN

SEMMEIWEIS UNIVERSITY, DEPARTMENT OF PROSTHODONTICS



2

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PROJECT DESCRIPTION

Kata is a third year **resident at the Department of Prosthodontics**, Semmelweis University. She is participating in the 24 month PhD fellowship programme and is interested in temporomandibular disorders. Her first project is a **meta-analysis** investigating the efficacy of additional splint therapy to physiotherapy in patient with myogenic temporomandibular disorders. Her second topic is also a **meta-analysis** that will compare the efficacy of PRP and hyaluronic acid in temporomandibular osteoarthritis. These studies **aim** to understand the clinical effectiveness and optimize the treatment for those patients with more efficient, less painful and cheaper approaches.

AGE

27 years

SUPERVISOR(S)

Péter Hermann

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JÁNOS KÖNIG

SEMMELEWEIS UNIVERSITY, DEPARTMENT OF PROSTHODONTICS



PROJECT DESCRIPTION

János is a **clinical specialist at the Department Of Prosthodontics**, Semmelweis University. He is participating in the 24-month clinical PhD fellowship programme. His **main field** of interest is maxillofacial prosthodontics and 3D imaging. Currently he is working on a **meta-analysis** evaluating the differences between 3D surface scanning technologies' performance on human faces in regard of extraoral prosthetic (epithetic) rehabilitation, aiming to give better and more comfortable impression-taking for patients. His second project is **another meta-analysis** about the comparative evaluation of surgical reconstruction and obturator prostheses in patients with maxillary defects, aiming to prove that prosthetic solutions can be just as effective as surgical interventions (non-inferiority) and in that way prosthetic treatment can be widely popularized, with lower cost but similar results. His **additional goal** is the create proof-of-concept studies in the field of digital maxillofacial prosthodontics. János is also taking part in the education of dental students on the field of Prosthodontics in Hungarian, English and German language.

AGE

28 years

SUPERVISOR(S)

Péter Hermann

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ANNA NÉMETH

SEMMELEWEIS UNIVERSITY, DEPARTMENT OF PROSTHODONTICS



PROJECT DESCRIPTION

Anna is a second year **resident at the Department of Prosthodontics**, Semmelweis University and taking part in the 24 month PhD fellowship programme. She is mainly interested in digital dentistry and 3D printing. Her first project is a **meta-analysis** investigating the accuracy of 3D printed dental models compared to digital reference model. Her **second meta-analysis** investigates the accuracy of additive manufacturing of fixed dental restorations compared to subtractive manufacturing. Her goal is to evaluate the possibilities of using 3D printing in prosthodontics, and showing the more efficient workflow and more accurate results that benefits dentists and patients. Anna is also taking part in the education of dental students on the field of Prosthodontics.

AGE

25 years

SUPERVISOR(S)

Judit Borbély

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ELEONÓRA SÓLYOM

SEMMELWEIS UNIVERSITY, DEPARTEMENT OF CONSERVATIVE DENTISTRY



PROJECT DESCRIPTION

Eleonóra is a **clinical doctor** and **PhD student** at **Department of Periodontology**, Semmelweis University, also participating in the 24-month clinical PhD fellowship programme. She is currently working in a **meta-analysis** about the safety and efficacy of autogenous tooth bone graft, a graft with great osteoinductive and osteoconductive properties and easy and rapid workflow, giving the patient cost and time-efficiency. Her second project is also a **meta-analysis** about the comparison of non-particulated and particulated graft materials for alveolar ridge preservation. She is also planning to establish a **prospective randomized clinical trial** comparing 3 different alveolar ridge preservation techniques. These studies aim to further investigate novel graft materials that can achieve better healing results. Eleonóra is also taking part in the education of dental students on the Department of Periodontology in Hungarian, English and German language.

AGE

27 years

SUPERVISOR(S)

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ESZTER ÁGNES SZALAI

SEMMELWEIS UNIVERSITY, DEPARTEMENT OF CONSERVATIVE DENTISTRY



PROJECT DESCRIPTION

Eszter is a **clinical specialist in Conservative dentistry and Prosthodontics**, and also a **Ph.D. student** at the Department of Conservative Dentistry, Semmelweis University, participating in a 12-month clinical fellowship program at the Institute for Translational Medicine. She is working in a **meta-analysis** of randomized controlled trials, examining the efficacy of chlorine dioxide containing mouthwashes in halitosis aiming to show that chlorine dioxide-containing mouthwashes could be the new gold standard, without side-effects. Eszter second topic is also a **meta-analysis** about the optimal measurement of halitosis. With these projects she **aims** to increase public concern about bad breath, leading to the use of mouth rinses to prevent and manage halitosis, improving patient's well-being. Eszter also teaches for the Conservative Dentistry Department in the Hungarian and English language program.

AGE

36 years

SUPERVISOR(S)

Beáta Kerémi

E-MAIL

szalai.eszter85@gmail.com

PÉTER TAJTI

SEMMELWEIS UNIVERSITY, DEPARTMENT OF PROSTHODONTICS



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PROJECT DESCRIPTION

Peter is a second year **resident at the Department of Prosthodontics**, Semmelweis University, participating in the 24-month clinical PhD fellowship program. Currently he is working on a **meta-analysis** on monolithic zirconia single implant restorations compared with metal-ceramic ones. His second project is **another meta-analysis** about the comparison of platform-switching and platform-matching concepts. His results can help in adding evidence-based knowledge and facilitating clinical-decision making for clinicians aiming function, aesthetics and high patient satisfaction. His additional goal is the create proof-of-concept studies in the field of digital implant prosthodontics. Peter is also taking part in the education of dental students on the field of Prosthodontics in Hungarian and English language.

AGE

26 years

SUPERVISOR(S)

Krisztina Mikulás

E-MAIL

tajti.peter@dent.semmelweis-univ.hu

ESZTER UHRIN

SEMMELWEIS UNIVERSITY, DEPARTMENT OF COMMUNITY DENTISTRY



2

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PROJECT DESCRIPTION

Eszter is a **PhD student** at Doctoral School of Clinical Medicine and a **clinical dentist at the Department of Community Dentistry**. Her first project is a meta-analysis about the use of teledentistry in the differential diagnosis of oral lesions. Her second topic is **another meta-analysis** about the effectiveness of oral hygiene programs for post-stroke inpatients. In the future, she would like to develop a teledentistry-driven diagnostic application that can help in the prevention of oral cancer. Teledentistry is beneficial by increasing access to care, cost and time-effectiveness. More patients can have a specialists' opinion on oral lesions, as well as referral opinion that is crucial to the diagnosis.

AGE

26 years

SUPERVISOR(S)

Orsolya Németh

E-MAIL

eszter1221uhrin@gmail.com

VIKTÓRIA VITAI

SEMMELWEIS UNIVERSITY, DEPARTMENT OF PROSTHODONTICS



PROJECT DESCRIPTION

Viki is a **clinical specialist at the Department Of Prosthodontics**, Semmelweis University. She is participating in the 24-month clinical **PhD** fellowship programme. Currently she is working on a **meta-analysis** on accuracy of intraoral scans compared to reference scans in full-arch. Her second project is **another meta-analysis** about the comparison of Tooth Shade selection with Intraoral Scanners to Spectrophotometers. These studies can bring more evidence-based knowledge about the accuracy, precision and trueness of these devices, consequently aiming cost and time-effectiveness, reducing errors and improving patient's comfort. Her **additional goal** is provide proof-of-concept studies in the field of digital prosthodontics. Viki is also taking part in the education of dental students on the field of Prosthodontics in Hungarian and English language.

AGE

28 years

SUPERVISOR(S)

Judit Borbély

E-MAIL

vitai.viktoria@dent.semmelweis-univ.hu

GROUP 3
**GYNECOLOGY &
UROLOGY**





GROUP 3

GYNECOLOGY & UROLOGY

GROUP MEETINGS
TUESDAY, 2 PM - 4:30 PM

INTRODUCTION TO THE GROUP

Twelve students with fourteen supervisors started their PhD projects in the Gynecology and Urology group in September of 2021, under the leadership of professors Nándor Ács and Péter Nyirády. The majority of the participants are gynecologists, but there is also a dietetician, a radiologist and three urologists in the group. The diversity of the group results in a great variety of research topics, such as investigations of premature delivery, female and male infertility, and precision oncology and radiology. The group is particularly active; meetings provide a creative, interdisciplinary, academic atmosphere that has already generated an exceptional number of high-quality projects. Sixteen interventional-, four observational- and two network meta-analyses are being conducted. Moreover, two registries, four clinical trials, and four retrospective cohort studies are being undertaken by the students as well. As a result of the high productivity of the participants, the group was awarded the "Group of the Month" prize in October 2021, and Professor Ács was named "Supervisor of the month" in September. Over the course of their first three months, both students and supervisors have shown great commitment to, and enthusiasm for, the program, and are progressing with a clear vision towards a scientific career.

MEMBERS OF THE GROUP



NÁNDOR ÁCS
Group Leader



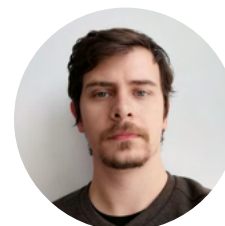
PÉTER NYIRÁDY
Group Leader



SZILÁRD VÁNCSA
*Scientific Methodology
Supervisor*



BRIGITTA TEUTSCH
*Scientific Methodology
Supervisor*



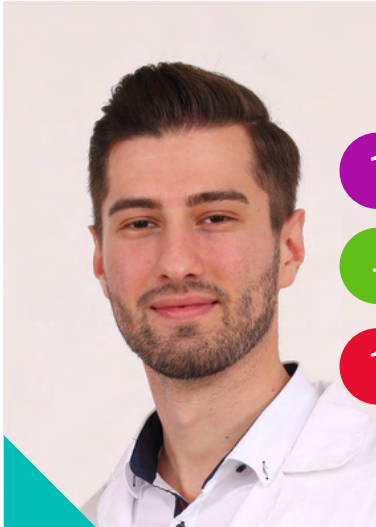
ALEX VÁRADI
Statistician

STUDENTS: István Baradács, Tamás Fazekas, Teodóra Filipov, Dorina Greff, Balázs Hamar, Eszter Hoffmann, Anna Evelin Juhász, Balázs Komoróczy, Ákos Mátrai, Boglárka Pethő, Anett Szabó, Ádám Dániel Széles

SUPERVISORS: Nándor Ács, Zsófia Benkő, Pál Ákos Deák, Csaba Demendi, Réka Hermanné Juhász, Eszter Mária Horváth, Zsolt Kopa, Balázs Lintner, Zsolt Melczer, Tibor Szarvas, Szabolcs Várbíró

ISTVÁN BARADÁCS

SEMMELWEIS UNIVERSITY, DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY



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PROJECT DESCRIPTION

István Baradács is a **resident gynecologist** at the Department of Obstetrics and Gynecology of Semmelweis University. He is currently working on a **meta-analysis** examining the efficacy and safety of targeted therapy in gynecological malignancies. The **clinical implication** of this study may be the improved overall survival of patients with cancer. He also aims to participate in a **clinical trial** that aims to develop a unified testing and scoring system for the diagnosis of HER2-positive endometrial carcinoma.

AGE

27 years

SUPERVISOR(S)

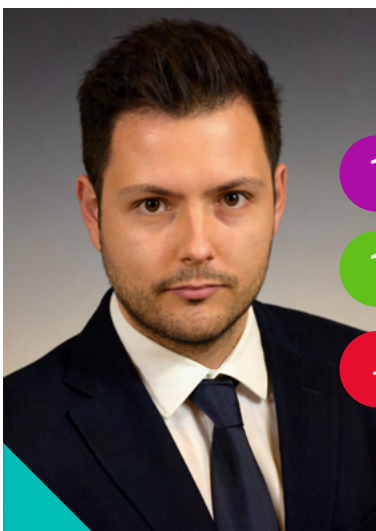
Balázs Lintner

E-MAIL

baradacsist@gmail.com

TAMÁS FAZEKAS

SEMMELWEIS UNIVERSITY, DEPARTMENT OF UROLOGY



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PROJECT DESCRIPTION

Tamás Fazekas is a **resident in urology**. His PhD and main research areas are molecular markers of **prostate and urothelial cancers**. His first and second **meta-analysis** compares the different treatment options in BRCA positive metastatic castration-resistant prostate cancer. These studies aim to optimize the **therapeutic decision-making** in BRCA positive patients. In his third project, he will perform a **multicentric retrospective analysis** of immune checkpoint inhibitor therapy of bladder tumors. In line with this, Tamás will establish a **prospective registry** of prostate and bladder cancer.

AGE

29 years

SUPERVISOR(S)

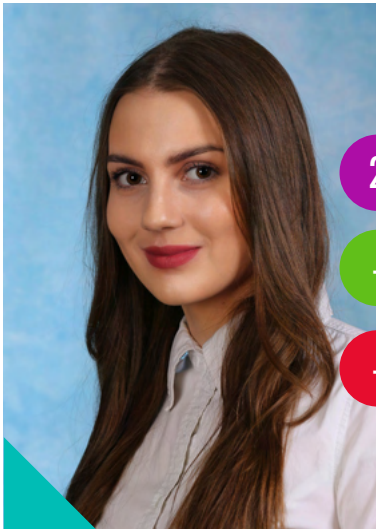
Tibor Szarvas

E-MAIL

fazekastamas192@gmail.com

TEODÓRA FILIPOV

SEMMELWEIS UNIVERSITY, DEPARTMENT OF TRANSPLANTATION AND SURGERY



2

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PROJECT DESCRIPTION

Teodóra Filipov, aspiring to become a **radiology specialist**, later on, is researching different topics in the field. She is currently working on a **meta-analysis**, assessing the accuracy of ultrasound-based elastography in the detection of renal allograft dysfunction. Her other main focus is to conduct a **registry analysis** combined with a meta-analysis on the topic of cryoablation for fibroadenomas. In addition, she is responsible for planning a **single center clinical trial** to assess the efficacy of treating early-stage malignant breast tumors minimally invasively with cryoablation.

AGE

26 years

SUPERVISOR(S)

Pál Ákos Deák

E-MAIL

filipovdora@gmail.com

DORINA GREFF

SEMMELWEIS UNIVERSITY, DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY



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PROJECT DESCRIPTION

Dorina is a resident doctor in **obstetrics and gynecology** and taking part in a PhD fellowship programme. She is currently working on a **meta-analysis**, comparing the efficacy and safety of metformin and inositols in polycystic ovary syndrome. She also works on a **second meta-analysis**, investigating the efficacy and safety of inositol in the prevention of gestational diabetes mellitus in pregnant women. Her additional goal is to establish a **patient registry** considering gestational diabetes mellitus.

AGE

25 years

SUPERVISOR(S)

Szabolcs Várbíró, Eszter Mária Horváth

E-MAIL

greffdorina@gmail.com



BALÁZS HAMAR

SEMMELWEIS UNIVERSITY, DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY



PROJECT DESCRIPTION

Balázs Hamar is a **resident doctor in obstetrics and gynecology**. His main field of interest is **HPV infection**. Currently, he is working on a **meta-analysis** examining the effect of trichomonas infection on cervical carcinogenesis. He is also a **co-investigator** in a meta-analysis that evaluates preterm birth and possible screening methods. Balázs's second project is **another meta-analysis** that investigates the efficacy of topical imiquimod on the reduction of cervical intraepithelial neoplasia. Cervical cancer has a **significant burden** on society, therefore Balázs aims to prevent cervical neoplasia.

AGE

26 years

SUPERVISOR(S)

Zsolt Melczer

E-MAIL

balazs.hamar@gmail.com

ESZTER HOFFMANN

SEMMELWEIS UNIVERSITY, DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY



PROJECT DESCRIPTION

Eszter is a PhD student at the **Department of Obstetrics and Gynecology** at Semmelweis University, Budapest, Hungary. She is currently working on two meta-analyses on the **role of vaginal infection** in preterm birth and premature rupture of membranes. The **first meta-analysis** aims to investigate the efficacy of the regular screening of the vaginal flora during pregnancy to reduce the rate of preterm birth. She recently started the **second meta-analysis**, examining the efficacy of the treatment of the abnormal vaginal flora during pregnancy to reduce the rate of preterm birth.

AGE

28 years

SUPERVISOR(S)

Csaba Demendi, Nándor Ács

E-MAIL

h.eszter@icloud.com

ANNA EVELIN JUHÁSZ

ALBERT SCHWEITZER HOSPITAL, HATVAN



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PROJECT DESCRIPTION

Anna Evelin Juhász works as a **dietician** and her primary goal is to summarize the evidence regarding the **dietary management of polycystic ovary syndrome (PCOS)** that can be applied from a nutritional point of view, with special regard to the role of certain dietary fibers. She is currently working on a **network meta-analysis**, investigating the effects of dietary fiber supplementation on glycemic control and lipid profile in patients with type 2 diabetes. In this project, different types of dietary fibers will be compared to find out which is most effective for normalising glucose levels and lipid abnormalities. She is also responsible for planning a **protocol of a clinical trial** that aims to investigate the effects of B-glucan supplementation on metabolic and hormonal parameters of women with PCOS.

AGE

25 years

SUPERVISOR(S)

Réka Hermanné Juhász

E-MAIL

juhaszannaevelin@gmail.com

BALÁZS KOMORÓCZY

SEMMELWEIS UNIVERSITY, DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY



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PROJECT DESCRIPTION

Balázs is a resident doctor in **obstetrics and gynecology** and he is taking part in the PhD fellowship programme. He is working on a **systematic review and meta-analysis** examining the optimal dose and initiation time of low-dose aspirin for pregnant women to prevent preeclampsia, preterm birth, and intrauterine growth restriction. His second project is a **prospective observational study** at Semmelweis University Department of Obstetrics and Gynaecology, which aims to predict preterm birth in singleton pregnancies by measuring the cervical length on the second trimester ultrasound screening and obtaining detailed maternal history in the Hungarian population.

AGE

31 years

SUPERVISOR(S)

Zsófia Benkő

E-MAIL

komoroczy.balazs@gmail.com

ÁKOS MÁTRAI

SEMMELWEIS UNIVERSITY, DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY



PROJECT DESCRIPTION

Ákos Mátrai works as a **specialist** at the Department of Obstetrics and Gynecology of Semmelweis University. He is working on a **meta-analysis** examining the effects of maternal influenza during pregnancy on birth defects. His second project is **publishing his results** from the database of the Hungarian Case-Control Surveillance of Congenital Abnormalities. In his analysis, he investigates the role of maternal influenza on the incidence of non-chromosomal birth defects, in more than **89000 pregnant women**.

AGE

32 years

SUPERVISOR(S)

Nándor Ács

E-MAIL

matraiakos@gmail.com

BOGLÁRKA PETHŐ

SEMMELWEIS UNIVERSITY, DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY



PROJECT DESCRIPTION

Boglárka is a **specialist doctor** in obstetrics and gynecology at Semmelweis University and is also participating in a clinical PhD fellowship programme. She is currently working on a **meta-analysis**, assessing the effects of maternal age on congenital anomalies. Her second project is a **population-based analysis**, examining the effects of maternal social background and maternal diseases on pregnancy outcomes. **Based on her observations** not only advanced age is a risk factor for congenital anomalies. Her **main area of interest** is perinatology, and she is planning to take part in establishing a **registry of pregnant patients** with additional risk factors.

AGE

32 years

SUPERVISOR(S)

Nándor Ács

E-MAIL

dr.pethoboglarka@gmail.com

ANETT SZABÓ

SEMMELWEIS UNIVERSITY, DEPARTMENT OF UROLOGY



PROJECT DESCRIPTION

Anett is a first-year PhD student, who is interested mainly in **andrology**. She is currently working on **two meta-analyses**. One of them aims to summarize the risk factors associated with increased sperm DNA fragmentation, thus decreased fertility. The other **meta-analysis** investigates interventions that could decrease sperm DNA fragmentation. She plans on doing a third **meta-analysis** on drugs that alter sperm DNA fragmentation in any way. She is conducting a **posthoc analysis** on non-palpable testicular tumors' testes-sparing surgeries. Lastly, she will also take part in the improvement of surgical treatments of infertile men via **artificial intelligence software**.

AGE

26 years

SUPERVISOR(S)

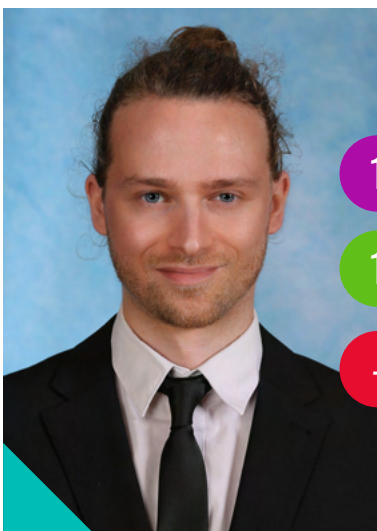
Zsolt Kopa

E-MAIL

a.szabo1995@gmail.com

ÁDÁM DÁNIEL SZÉLES

SEMMELWEIS UNIVERSITY, DEPARTMENT OF UROLOGY



PROJECT DESCRIPTION

Ádám is a **resident doctor in urology** and he is also participating in a the Translational Medicine PhD program. He is currently working on his **first meta-analysis** where he is assessing the prognostic significance of serum PD-L1 and serum PD-1 in human malignancies treated with immune checkpoint inhibitors. Since immune checkpoint inhibitor usage is emerging in urology in his **second meta-analysis**, he is going to investigate the prognostic and predictive values of different laboratory markers in urothelial cancer patients treated with immune checkpoint inhibitors. Ádám also plans to create a **retrospective cohort analysis** assessing the prognostic significance of serum PD-L1 in Upper Tract Urothelial Cancer patients.

AGE

26 years

SUPERVISOR(S)

Tibor Szarvas

E-MAIL

szelesadam95@gmail.com

GROUP 4
CARDIOLOGY





GROUP 4 CARDIOLOGY

GROUP MEETINGS
TUESDAY, 5:30 PM - 8 PM

INTRODUCTION TO THE GROUP

The cardiology group consists of 7 students, interested in a wide range of topics. The majority of students are also residents at the Heart and Vascular Centre at Varosmajor, with the exception of one full-time PhD student and one specialist candidate at the Gottsegen national cardiovascular institute. Topics dealt with are cardiac resynchronization therapy, cryptogenic strokes, electrophysiology, resuscitation, drug-eluting stents, anticoagulation and leadless pacemakers. There are 7 meta-analyses ongoing, further projects that are planned are four randomized controlled trials, 2 meta-analyses, an international survey and an observational study. The group scientific methodology supervisors are Rita Nagy and Marie Engh. Rita is a pediatric resident in Heim Pal National Pediatric Institute and 2nd year phd student in the CTM. Marie is an international PhD student at the CTM whose interest is mainly in pancreatitis and pancreatic cancer. The group leader, Professor Bela Merkely, is an interventional cardiologist, the director of the heart and vascular centre and the rector of Semmelweis University.

MEMBERS OF THE GROUP



BÉLA MERKELY

Group Leader



RITA NAGY

Scientific Methodology Supervisor



MARIE ANNE ENGH

Scientific Methodology Supervisor



MÁRK FÉLIX JUHÁSZ

*Scientific Methodology Supervisor
(until November 2021)*



PÉTER FEHÉRVÁRI

Statistician

STUDENTS: Boldizsár Kiss, Péter Márton Kulyassa, Henriette Mészáros, Enikő Pomozi, Sara Gharehdaghi Khajeh Ghiasi, Péter Vámosi, Boglárka Veres

SUPERVISORS: Pál Ábrahám, Gábor Duray, István Ferenc Édes, Annamária Kosztin, Béla Merkely, Klaudia Vivien Nagy, Sándor Nardai, Zoltán Szeberin, Endre Zima

BOLDIZSÁR KISS

SEMMELWEIS UNIVERSITY, HEART AND VASCULAR CENTER



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PROJECT DESCRIPTION

Boldizsar is a **cardiology resident doctor** in the Heart and Vascular Centre at Semmelweis University. His first project is a **meta-analysis**, which aims to investigate the accuracy and reliability of different neurological prediction score systems in cases with out-of-hospital cardiac arrest (OHCA) after successful resuscitation. Using such prognostic score systems in the intensive care unit can prevent the healthcare system to apply costly and intensive resources in cases of futility. His **second project is a meta-analysis** about the benefit of preventive short-term antibiotic therapy after successful resuscitation. As his third project, a **randomized clinical trial** is planned to be settled on prophylactic antibiotic treatment after successful resuscitation.

AGE

25 years

SUPERVISOR(S)

Endre Zima

E-MAIL

b.kiss96@gmail.com

PÉTER MÁRTON KULYASSA

SEMMELWEIS UNIVERSITY, HEART AND VASCULAR CENTER



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PROJECT DESCRIPTION

Péter is a **cardiology resident doctor** in the Heart and Vascular Centre at Semmelweis University. His first project is an **interventional meta-analysis** investigating whether early or late in-stent restenosis of drug-eluting stents is a predictor of the outcome of intervention with a drug-coated balloon. His second project is to **publish the protocol of a randomized controlled trial** comparing different patent hemostasis devices using biological and chemical compounds to the „gold standard” mechanical compression device. As a third project, there is a **randomized controlled trial** comparing different devices for the treatment of in-stent restenosis.

AGE

29 years

SUPERVISOR(S)

István Ferenc Édes

E-MAIL

peter.kulyassa@gmail.com

HENRIETTE MÉSZÁROS

SEMMELWEIS UNIVERSITY, HEART AND VASCULAR CENTER



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PROJECT DESCRIPTION

Henriette works at the Heart and Vascular Centre as a **first-year cardiology resident**. In her **meta-analysis**, she investigates whether the decreased left atrial strain is associated with the occurrence of atrial fibrillation. She is part of the persistent foramen ovale (PFO) closure **working group** in the clinic, therefore as a second project, she intends to conduct a **randomized clinical trial** on this topic. She aims to compare the effect of the high and low mesh density closure devices on the atrial strain and incidence of atrial fibrillation.

AGE

26 years

SUPERVISOR(S)

Béla Merkely, Sándor Nardai, Pál Ábrahám

E-MAIL

meszaros.henriette0923@gmail.com

ENIKŐ POMOZI

SEMMELWEIS UNIVERSITY, HEART AND VASCULAR CENTER



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PROJECT DESCRIPTION

Enikő is a **vascular surgeon resident** at the Heart and Vascular Centre and focuses on patients with peripheral artery disease. She works on a **meta-analysis** about the comparison of the effect of novel oral versus vitamin-K antagonist anticoagulant therapy on the progression of atherosclerosis in patients with peripheral artery disease. Her second project is to present a **case report and conduct a systematic review** on vascular complications in patients with congenital ichthyosis. As the **third project**, she aims to study the role of anticoagulation therapy to the extent of arterial calcification by measuring Ca-score values on patients' CT-angiograms before revascularisation procedures and during their follow-ups.

AGE

28 years

SUPERVISOR(S)

Zoltán Szeberin

E-MAIL

pomen093@gmail.com

SARA GHAREHDAGHI KHAJEH GHIASI

GOTTSEGEN NATIONAL CARDIOVASCULAR CENTER, BUDAPEST

PROJECT DESCRIPTION



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Sara is a **cardiology specialist candidate** at Gottsegen National Cardiovascular Centre, and is interested in leadless pacemakers. Her first project is a **meta-analysis** on the safety and efficacy of leadless pacemakers when compared to conventional pacemakers. She hypothesizes that these kinds of pacemakers are superior to the conventional ones in the terms of mortality and complications. Her second project will be an **international survey** investigating the real-life selection of patients for leadless pacemaker implantation and aiming to discover the potential barriers to their use in eligible patients. She intends to send a pre-defined questionnaire to the **network of Arrhythmia societies**.

AGE

41 years

SUPERVISOR(S)

Gábor Duray

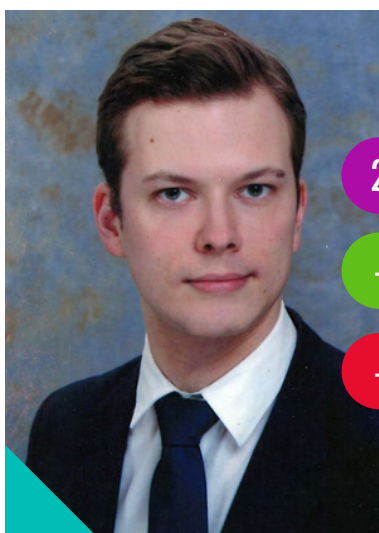
E-MAIL

saraghrh@gmail.com

PÉTER VÁMOSI

SEMMELWEIS UNIVERSITY, HEART AND VASCULAR CENTER

PROJECT DESCRIPTION



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Peter Vámosi is a **cardiology resident** at the Heart and Vascular Centre and is interested in the technical aspects of cardiac electrophysiological studies. His first project is a **meta-analysis** on the potential benefits of ultrasound guidance during femoral venous puncture for electrophysiological interventions. As a second project, he aims to perform a **randomized controlled trial** on ultrasound guidance for femoral venous puncture and its complications. Both studies aim to decrease the major vascular **complication rates**. He also plans to perform a **second meta-analysis** on the effect of atrioventricular node ablation in heart failure patients with atrial fibrillation undergoing cardiac resynchronization therapy.

AGE

32 years

SUPERVISOR(S)

Klaudia Vivien Nagy

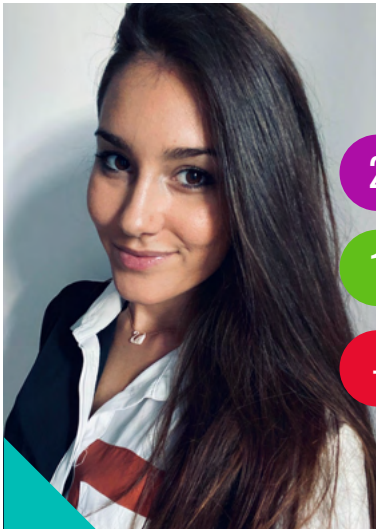
E-MAIL

peter.vamosi.s@gmail.com



BOGLÁRKA VERES

SEMMELWEIS UNIVERSITY, HEART AND VASCULAR CENTER



PROJECT DESCRIPTION

Boglárka is a full-time, **second-year PhD student** interested in **cardiac devices** and remote monitoring. Her first project is a **meta-analysis** comparing mortality outcomes for cardiac resynchronization therapy with and without a defibrillator. Her study would help in the **adequate choice of therapy** in heart failure patients. Her second project will be a **meta-analysis** as well, which aims to investigate whether remote home monitoring may improve patient outcomes in heart failure patients when compared to standard of care. Remote monitoring could help in the **early identification** of heart failure progression and decrease mortality in this patient group.

AGE

25 years

SUPERVISOR(S)

Béla Merkely, Annamária Kosztin

E-MAIL

boglarka.sara.veres@gmail.com

GROUP 5
**INTENSIVE CARE,
ANESTHESIOLOGY &
NEUROPSYCHIATRY**





GROUP 5

INTENSIVE CARE, ANESTHESIOLOGY & NEUROPSYCHIATRY

GROUP MEETINGS

WEDNESDAY, 11:30 AM - 2 PM

INTRODUCTION TO THE GROUP

The anesthesiology and neuropsychiatry group consists of 11 students. The group is made up of a neurology specialist, resident doctors of neurology, psychiatry, pediatrics, orthopedics, anesthesiology and emergency medicine, and 4 PhD students. The range of topics dealt with in the group are as varied as the fields of the students. Topics dealt with are management of cerebral palsy, Alzheimers, multiple sclerosis, myasthenia gravis, management of emergency patients, sedation management and circadian disruption in pediatric ICU patients, ventilation settings during anesthesia, goal-directed fluid therapy, preoperative carbohydrate loading and use of hemadsorption in liver failure. Currently there are 11 meta-analyses ongoing. Further studies that are planned are 3 observational trials, a randomized controlled trial, 2 registries, 3 meta-analyses and 2 systematic reviews.

MEMBERS OF THE GROUP



ZSOLT MOLNÁR
Group Leader



GÁBOR CSUKLY
Group Leader



KLEMENTINA OCSKAY
*Scientific Methodology
Supervisor*



MARIE ANNE ENGH
*Scientific Methodology
Supervisor*



BERNADETTE NAGY
*Scientific Methodology
Supervisor (until November 2021)*



LÁSZLÓ SZABÓ
Statistician

STUDENTS: Orsolya Gresits, Zsolt Huszár, Emőke Henrietta Kovács, Katalin Lugosi, Márk Pavlekovics, Anna Réka Sebestyén, Gergő Vilmos Szabó, Ambrus Szemere, Csenge Erzsébet Szigetváry, Caner Turan, Mátyás Vezér

SUPERVISOR: Gábor Csukly, Klaudia Horváth, Klára Horváth, Zsolt Illés, Gábor Lovas, Zsolt Mezei, Zsolt Molnár, Máté Rottler, Zoltán Ruzskai, Krisztián Tánczos, Tamás Terebessy, Marcell Virág



ORSOLYA GRESITS

SEMMELWEIS UNIVERSITY, DEPARTMENT OF ORTHOPAEDICS



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PROJECT DESCRIPTION

Orsolya is a **full-time PhD student** interested in spasticity management of cerebral palsy patients. **Cerebral palsy** is a group of permanent movement disorders that appear in early childhood. Her first project is a **systematic review and meta-analysis** on the functional benefits of upper limb botulinum toxin A injections. She will investigate if upper limb botox has better **functional outcomes** compared to less-invasive methods like different physiotherapies. Her second project will be a **meta-analysis**, also on a topic related to botulinum toxin injections in cerebral palsy patients. Botulinum toxin may improve **quality of life** in this group of patients.

AGE

32 years

SUPERVISOR(S)

Tamás Terebessy

E-MAIL

gresits.orsolya@gmail.com

ZSOLT HUSZÁR

SEMMELWEIS UNIVERSITY, DEPARTMENT OF PSYCHIATRY AND PSYCHOTHERAPY



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PROJECT DESCRIPTION

Zsolt is focusing on Alzheimer's disease while he is a **resident doctor** at the Department of Psychiatry and Psychotherapy, Semmelweis University. His first project is a **meta-analysis** investigating if the elevated amyloid level in the cerebrospinal fluid (CSF) or on computed tomography scan is a prognostic factor of cognitive decline in cognitively unimpaired patients, with or without the presence of hyperphosphorylated Tau protein. He also plans to set up a **registry analysis** to identify region-specific risk factors for the development of dementia in Hungarian patients. He also aims to clarify the role of cardiovascular disease, diabetes, and late-onset depression by follow-up visits at their „**memory ambulance**”.

AGE

32 years

SUPERVISOR(S)

Gábor Csukly

E-MAIL

huszarzss@gmail.com



EMŐKE HENRIETTA KOVÁCS

FUNDENI CLINICAL INSTITUTE, DEPARTMENT OF ANESTHESIOLOGY, BUCHAREST



2

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1

PROJECT DESCRIPTION

Kovács Emőke is a **resident doctor** at Fundeni Clinical Institute, Department of Anesthesiology, Bucharest. As her first project, she will perform a **systematic review and meta-analysis** about the safety and efficacy of different anticoagulant doses applied for thrombosis prophylaxis on clinical outcomes in COVID-19. She aims to investigate whether **higher anticoagulant doses** than those used in routine prophylaxis have beneficial effects on clinical outcomes without jeopardizing safety in COVID-19 patients. As her second project, she will perform a **prospective meta-analysis** about the effects and safety of fibrinolytic therapy in critically ill Covid-19 patients with acute respiratory distress syndrome. Lastly, Emőke plans to initiate a **multicentric prospective observational study** on the effects of immunomodulation with Tocilizumab on the coagulation system in critically-ill Covid-19 patients.

AGE

27 years

SUPERVISOR(S)

Zsolt Molnár, Krisztián Tánczos

E-MAIL

emsikee@gmail.com

KATALIN LUGOSI

BAJCSY-ZSILINSZKY HOSPITAL, DEPARTMENT OF NEUROLOGY



2

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PROJECT DESCRIPTION

Katalin is a **neurology specialist doctor**, and she plans to investigate the cognitive impairment in patients with multiple sclerosis. She will perform a **systematic review and meta-analysis** on the prevalence of cognitive impairment in the different clinical subtypes of multiple sclerosis. She also plans to start a **multicentric longitudinal observational study** investigating potential prognostic markers for the progression of cognitive impairment in patients with multiple sclerosis. The results of these studies will help in the **early neurocognitive rehabilitation** in subtypes with higher cognitive impairment prevalence.

AGE

34 years

SUPERVISOR(S)

Zsolt Mezei, Klaudia Horváth

E-MAIL

lugosikacci@gmail.com



MÁRK PAVLEKOVICS

SEMMELWEIS UNIVERSITY, JAHN FERENC SOUTH-PEST HOSPITAL AND CLINIC



1

1

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PROJECT DESCRIPTION

Márk is a **resident doctor of neurology** at Jahn Ferenc Dél-Pesti Hospital. His interest is in **myasthenia gravis** and its epidemiological and therapeutic landscape. As a first project, he will compare the efficacy and safety of intravenous immunoglobulin and plasma exchange therapy in moderate to severe myasthenia gravis through a **systematic review and meta-analysis**. As a **clinical implication** of this study, if the two interventions are similar in efficacy then they can substitute each other. As a second project, he plans to establish a **national registry** for myasthenia gravis. The main goal of the Myasthenia Gravis registry is to explore the incidence, the prevalence of the disease, and the mean age of onset. As his third project, he plans to **update and continue** an existing Neuromyelitis Optica Spectrum Disease registry.

AGE

31 years

SUPERVISOR(S)

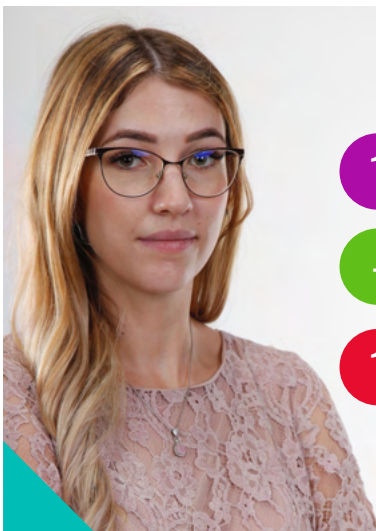
Gábor Lovas, Zsolt Illés

E-MAIL

mrkpavlekovics@gmail.com

ANNA RÉKA SEBESTYÉN

HEIM PÁL CHILDREN'S HOSPITAL



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PROJECT DESCRIPTION

Anna's **interest is in pediatrics** and she works at Heim Pál Children's Hospital. She is currently working on a systematic review and meta-analysis, and a two-arm randomized controlled trial protocol. In her **meta-analysis**, she investigates the effect of preoperative carbohydrate loading on postoperative outcomes in patients undergoing elective major non-cardiac surgery. She would like to test whether **preoperative carbohydrate loading** reduces the postoperative stress response, postoperative insulin resistance, and preoperative fasting time, leading to a shorter length of hospital stay. As her second project, she **plans a protocol** to compare multimodal individualised, contextualised management of intraoperative cardiovascular dynamics to conventional management in patients undergoing major pancreatic surgery.

AGE

24 years

SUPERVISOR(S)

Zsolt Molnár, Marcell Virág

E-MAIL

annareka97@gmail.com



GERGŐ VILMOS SZABÓ

SZENT GYÖRGY HOSPITAL, SZÉKESFEHÉRVÁR



2

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PROJECT DESCRIPTION

Gergő is an **oxylogist and emergency physician specialist** at Szent György Hospital, Székesfehérvár. His first project in the PhD Program is a **systematic review and meta-analysis** about the added value of Point of Care Ultrasound (PoCUS) use in the management of patients admitted with acute dyspnoea in the A&E. His main objective is to examine whether PoCUS usage added to conventional modalities **improves clinical outcomes** in patients with acute onset dyspnoea. His second project is **another meta-analysis** about comparing the efficacy of 0.9 % NaCl versus balanced electrolyte solutions (BES) in resolving diabetic ketoacidosis (DKA) in adults admitted to the A&E. **Evidence is still controversial** on this topic, therefore he aims to perform a meta-analysis of all published studies in the field and provide further evidence regarding the best type of fluid for resuscitation in DKA.

AGE

33 years

SUPERVISOR(S)

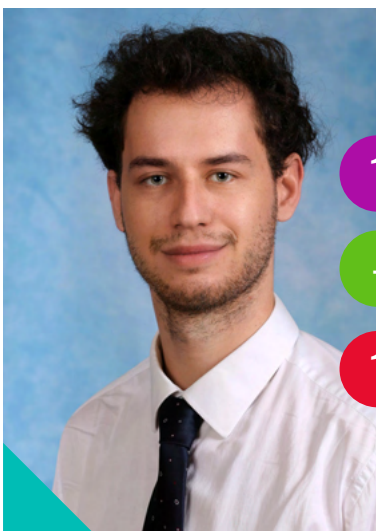
Zsolt Molnár, Máté Rottler

E-MAIL

szabogvilmos@gmail.com

AMBRUS SZEMERE

SEMMELWEIS UNIVERSITY, SECOND DEPARTMENT OF PAEDIATRICS



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1

PROJECT DESCRIPTION

Ambrus's **interest is in pediatrics** and he works at Semmelweis University, Second Department of Paediatrics. His first project is a **systematic review and meta-analysis** about the effectiveness and safety of protocolized sedation in the pediatric intensive care unit. **Sedation practice** has not been updated in the past 8 years, and 50% of patients who are admitted to the intensive care unit are ineffectively sedated. Inadequate sedation increases the risk of adverse events. As for the second project, he aims to plan an **observational study** about sleep and circadian rhythm in the pediatric intensive care unit. The objective of their observational study is to **describe the circadian rhythms** and measure the quality and quantity of sleep in the pediatric intensive care unit using actigraphy. He also aims to investigate their impact on short- and long-term psychological outcomes.

AGE

25 years

SUPERVISOR(S)

Klára Horváth, Zsolt Molnár

E-MAIL

ambrus.szemere@gmail.com



CSENGE ERZSÉBET SZIGETVÁRY

SEMMELWEIS UNIVERSITY, DEPARTMENT OF ANAESTHESIOLOGY AND INTENSIVE THERAPY



1

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PROJECT DESCRIPTION

Csenge is a **newly-graduated** medical student from the University of Szeged and her main area of interest is in **anesthesiology**. As her first project, she initiated a **systematic review and meta-analysis** on the effects of individualized vs. conventional positive end expiratory pressure (PEEP) settings on perioperative outcomes in patients undergoing abdominal surgery. The **clinical implication** of her study is to improve perioperative oxygenation and reduce postoperative pulmonary complications. In addition, she is now preparing the establishment of a **national and international patient registry** on acute hypoxaemic respiratory failure. She aims to prospectively collect **high-quality data** on standards of care, procedures, and outcomes regarding the treatment of patients in Hungarian and international intensive care units. Lastly, she plans a **second meta-analysis** about adjuvant hemoadsorption therapy in Acute Respiratory Distress Syndrome (ARDS).

AGE

26 years

SUPERVISOR(S)

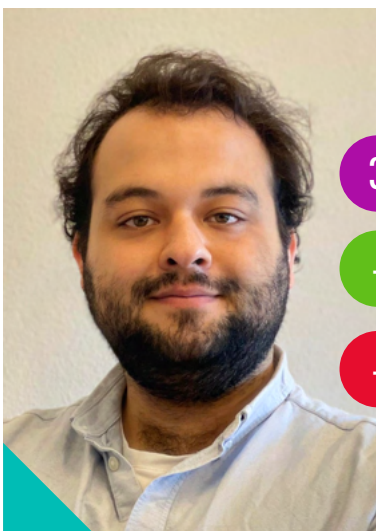
Zsolt Molnár, Zoltán Ruzskai

E-MAIL

szigetvary.csenge@gmail.com

CANER TURAN

SEMMELWEIS UNIVERSITY, ALUMNI DIRECTORATE



3

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PROJECT DESCRIPTION

Caner's main area of interest is **intensive care medicine**. He is working on a **systematic review and meta-analysis** on the effects of preoperative steroid administration on intra- and postoperative outcomes in liver surgery patients who undergo liver surgery suffer from high rates of postoperative complications in which dysregulation immune response of the host plays a major role. In a **systematic review**, he aims to summarize the evidence on the use of hemadsorption therapy for patients with acute liver dysfunction. **Randomized trials are lacking**, hence in this systematic review, he aims to collect, analyze and report on all aspects of the current knowledge on hemadsorption therapy in this context. Lastly, **in a meta-analysis**, he aims to compare the effects of goal-directed fluid therapy (GDFT) versus conventional management on postoperative complications after major liver surgery.

AGE

27 years

SUPERVISOR(S)

Zsolt Molnár

E-MAIL

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MÁTYÁS VEZÉR

SEMMELWEIS UNIVERSITY, DEPARTMENT OF ORTHOPAEDICS



PROJECT DESCRIPTION

Mátyás is an **orthopedic resident** at the Department of Orthopedics, Semmelweis University, and is interested in the rehabilitation of cerebral palsy patients. His first project is a **systematic review and meta-analysis** on robot-assisted gait training for children with cerebral palsy, and its effect on gross motor function. The results of his study could assist in **better treatment decisions** to improve gait function in this group of patients. His second project will be a **meta-analysis** on video-game-based therapy and its effects on upper limb function in children with hemiplegic cerebral palsy. This study could have the same **clinical implication** as to the first one on upper extremity function.

AGE

27 years

SUPERVISOR(S)

Tamás Terebessy

E-MAIL

drvezermatyas@gmail.com

GROUP 6

ORTHOPEDICS & TRAUMATOLOGY





GROUP 6

ORTHOPEDICS & TRAUMATOLOGY

GROUP MEETINGS

WEDNESDAY, 4 PM - 6:30 PM

INTRODUCTION TO THE GROUP

The Orthopaedics and Traumatology group is composed of 11 students, 6 doctors from the field of orthopaedics and 5 doctors specialized in traumatology. Among the students there are experienced surgeons as well as young doctors in the beginning of their carriers. The members have various interests, such as child orthopaedics, hip and knee arthroplasty, shoulder, hand and foot surgery. Topics incorporate short- and long-term follow up of patients to determine the best operative techniques, diagnostic accuracy studies, methods to reduce perioperative infections and comparison of different non-operative techniques for knee or shoulder conditions. Although the areas of research differ greatly, cooperation and interest in each other's projects characterizes the team. The group plans to complete 17 meta-analysis, 3 registry analysis, 2 prospective cohort analysis, 1 network meta-analysis and 1 clinical trial. In the following years they also plan to launch an international registry for total knee arthroplasty. As the members of the group, 9 project students help the researchers and also learn the basis of quality research through the program of Translational Medicine Centre. The leaders of the group are Professor László Hangody and Professor György Szőke, internationally renowned experts of their fields. Professor Hangody's main interest is cartilage lesions and repair and ligamentous lesions of the knee. Professor Szőke's field of interest is child orthopedics, with special focus on congenital hip dysplasia, ICP and limb length difference.

MEMBERS OF THE GROUP



GYÖRGY SZŐKE

Group Leader



LÁSZLÓ HANGODY

Group Leader



SZILÁRD VÁNCSA

*Scientific Methodology
Supervisor*



NORBERT KOVÁCS

*Scientific Methodology
Supervisor*



GERGŐ AGÓCS

Statistician

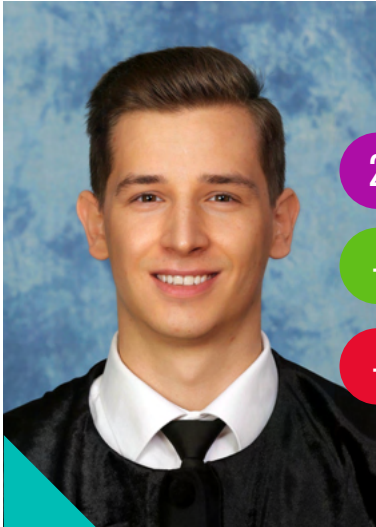
STUDENTS: Robert de Jonge , Gyula Domos, Luca Hergár, Miklós Keszég, Koppány Péter Kocsis, Krisztián Balázs Kovács, Miklós Máté, Bence Stubnya, Gyula Ferenc Szőcs, Csaba Varga, Viktor Weninger

SUPERVISORS: Zoltán Bejek, György Márk Hangody, László Hangody, Judit Réka Hetthéssy, Gegely Holnapy, György Kocsis, Károly Pap, Gergely Pánics, Gábor Skaliczki, Imre Szerb, György Szőke



ROBERT DE JONGE

SEMMELWEIS UNIVERSITY, DEPARTMENT OF TRAUMATOLOGY



PROJECT DESCRIPTION

Robert de Jonge is an **orthopedic-traumatologist resident** at the Uzsoki Street Hospital, Semmelweis University. He is working on a **systematic review and meta-analysis** regarding anterior cruciate ligament (ACL) injuries and investigates the osteoarthritic evolutions after ACL injury and reconstruction. His aim is to find the **best practice** to prevent osteoarthritis in patients with isolated ACL rupture. His second project will be a **prospective observational follow-up** study, where he would analyse injured and contralateral healthy knees on the aspect of developing early-onset post-traumatic osteoarthritis. He intends to **compare ACL reconstruction** with lateral extra-articular tenodesis with reconstruction alone. He also takes part in **traumatology education** as a member of the Semmelweis University, Department of Traumatology.

AGE

27 years

SUPERVISOR(S)

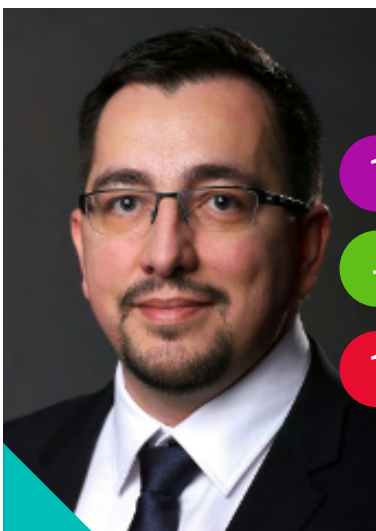
Gergely Pánics, László Hangody

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GYULA DOMOS

SEMMELWEIS UNIVERSITY, DEPARTMENT OF ORTHOPAEDICS



PROJECT DESCRIPTION

Gyula Domos is a **pediatric orthopedic surgeon** and participating in a PhD fellowship programme. His research topic is **congenital hip dislocation** and he is currently working on a **meta-analysis**, evaluating the **risk factors** of failure in the treatment of developmental dysplasia of the hip. He is evaluating **all treatment options** and his results could help to decrease the rate of unnecessary interventions and complications. His second project is a **retrospective analysis** of the primary complex surgical treatment of hip dislocation after failed conservative treatment and in late presented cases performed at his Department. He would like to summarize the **unique surgical technique** used at their Department in the last 12 years.

AGE

43 years

SUPERVISOR(S)

György Szőke

E-MAIL

domosgy@gmail.com



LUCA HERGÁR

SEMMELWEIS UNIVERSITY, DEPARTMENT OF ORTHOPAEDICS



PROJECT DESCRIPTION

Luca is a **resident doctor** in orthopedics and traumatology and is participating in the Translational Medicine PhD program. Her main interest is **hand surgery**. Connected to this topic, she is currently working on two systematic reviews and meta-analyses, and an observational study. In one of the **meta-analyses**, she intends to investigate the diagnostic performance of magnetic resonance imaging in the case of wrist cartilaginous and ligamentous lesions. The diagnostic accuracy of MRI in these lesions ranges on a large scale, therefore she aims to **clarify the differences** between the studies. Her second **meta-analysis** is about the correct clinical evaluation of two-point discrimination results of the hand. She also plans to start an **international study**, examining the role of two-point discrimination in the diagnosis of upper limb tunnel syndromes.

AGE

26 years

SUPERVISOR(S)

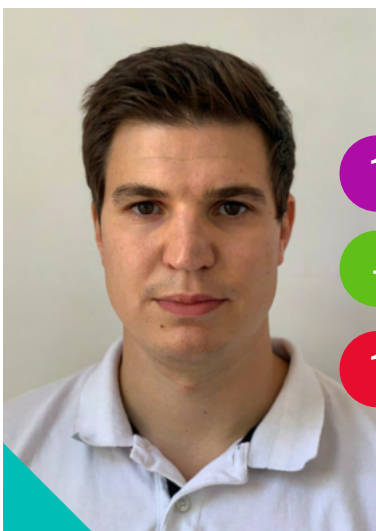
Judit Réka Hetthéssy

E-MAIL

luca.hergar@gmail.com

MIKLÓS KESZÉG

SEMMELWEIS UNIVERSITY, DEPARTMENT OF TRAUMATOLOGY



PROJECT DESCRIPTION

Miklós Keszég is a **resident orthopedic-traumatologist** at Uzsoki Hospital, Orthopaedic and Trauma Department. He is working on a **systematic review and meta-analysis** regarding the long-term result of mosaic osteochondral autologous transplantation versus microfracture for the treatment of medium size osteochondral defects of the knee. His results could help in achieving a better **long-term functional status** after osteochondral defects. His second project will be a **retrospective cohort study** investigating the risk factors of patients who need revision arthroplasty. He intends to **collect retrospective data** on all patients undergoing knee or hip total arthroplasty, and compare demographic parameters, lifestyle factors, comorbidities, etc., between patients with and without the need for revision arthroplasty.

AGE

27 years

SUPERVISOR(S)

László Hangody, Imre Szerb

E-MAIL

keszegmiki1@gmail.com



KOPPÁNY PÉTER KOCSIS

SEMMELWEIS UNIVERSITY, DEPARTMENT OF TRAUMATOLOGY



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PROJECT DESCRIPTION

Koppány Kocsis is a specialist in orthopedic-traumatology at Uzsoki Hospital, Orthopaedic and Trauma Department. He is currently working on a systematic review and meta-analysis regarding the diagnostic accuracy of ultrasonography in the soft tissue injury of the ankle. His hypothesis is that ultrasound scan is non-inferior to magnetic resonance imaging for soft tissue injuries of the ankle. His second project will be a diagnostic accuracy network meta-analysis about the medial collateral ligament injury of the knee. Based on his results, ultrasound scans could be used as a cheap, easily accessible alternative. Since there is a lack of direct comparisons between ultrasound and MRI for diagnosis of knee injuries, as his third project, he aims to initiate a clinical trial to compare these two imaging methods. Lastly, he takes part in the education of orthopedics and traumatology for medical students.

AGE

36 years

SUPERVISOR(S)

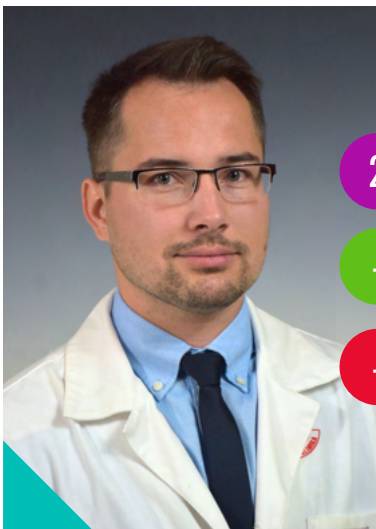
Károly Pap

E-MAIL

koppany.kocsis@gmail.com

KRISZTIÁN BALÁZS KOVÁCS

SEMMELWEIS UNIVERSITY, DEPARTMENT OF ORTHOPAEDICS



2

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PROJECT DESCRIPTION

Krisztian's interest is in orthopedics and traumatology and he is working as a resident doctor at the Department of Orthopedics, Semmelweis University. He is currently working on a systematic review and meta-analysis investigating the impact of different factors influencing the accuracy of in vitro Young's moduli results. His study could help in the prosthesis design in orthopedics. His second project is to summarize in a descriptive study the results of LockDown Surgical Technique in Hungary and make a second meta-analysis comparing the efficacy of LockDown technique to other surgical approaches used in acromioclavicular instabilities. He intends to contact orthopedic surgeons in Hungary who already performed operations with the LockDown technique, for this he will apply for a retrospective national ethical approval.

AGE

32 years

SUPERVISOR(S)

György Kocsis

E-MAIL

dr.kovacs.ortop@gmail.com



MIKLÓS MÁTÉ

SEMMELWEIS UNIVERSITY, DEPARTMENT OF TRAUMATOLOGY



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PROJECT DESCRIPTION

Miklos Máté is an orthopedic-traumatologist resident at the Uzsoki Street Hospital Semmelweis University. He is working on a systematic review and meta-analysis on anterior cruciate ligament injuries. He is comparing surgical and conservative treatments and investigates the short-term osteoarthritic evolutions after an ACL injury. His second project will be a prospective observational study on the early signs of posttraumatic osteoarthritis after isolated anterior cruciate ligament tear. He plans to do a follow-up study of patients undergoing isolated ACL injury and he intends to follow the patients after surgery with magnetic resonance imaging. He would compare the injured and contralateral healthy knee on the aspect of developing early-onset osteoarthritis. He also takes part in traumatology education as a member of the Semmelweis University, Department of Traumatology.

AGE

28 years

SUPERVISOR(S)

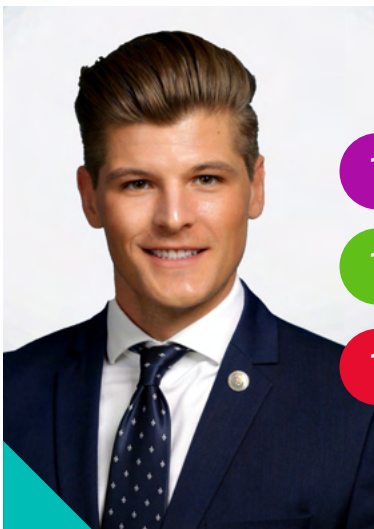
Gergely Pánics, László Hangody

E-MAIL

drmatemiklos@gmail.com

BENCE STUBNYA

SEMMELWEIS UNIVERSITY, DEPARTMENT OF ORTHOPAEDICS



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PROJECT DESCRIPTION

Bence is not only an orthopedic and traumatology **resident doctor** at Semmelweis University, but is also a PhD researcher in total knee replacement therapy. He is doing a **systematic review and network meta-analysis** about comparing different surgical approaches in total knee arthroplasty. His study could help in the effectiveness of rehabilitation after total knee arthroplasty. He is also **running a clinical trial** on the comparison of the subvastus and other approaches in total knee arthroplasty focusing on clinical outcomes. Lastly, he plans to start a total knee arthroplasty **patient registry** in the future. He is taking an **active part** in the university's brightly developing future, he has not only won the 2021 Semmelweis Innovation Award but in addition, is currently the **president** of the Doctoral Student's Union.

AGE

26 years

SUPERVISOR(S)

Zoltán Bajek

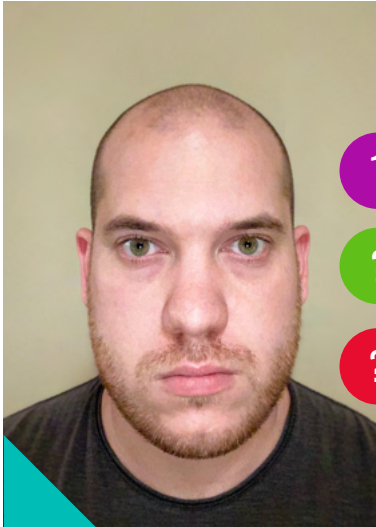
E-MAIL

bence@stubnya.hu



GYULA FERENC SZŐCS

SEMMELWEIS UNIVERSITY, DEPARTMENT OF TRAUMATOLOGY



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PROJECT DESCRIPTION

Gyula Szőcs is a **resident orthopedic-traumatologist** at Uzsoki Hospital, Orthopaedic and Trauma Department. He is going to write a **meta-analysis** regarding the treatment of concomitant anterior cruciate ligament and meniscal injury, investigating whether meniscectomy or meniscal repair leads to better outcomes during primary anterior cruciate ligament reconstruction. The results could help to increase the stability of the knee after ACL reconstruction. His second project will also be a **systematic review and meta-analysis** about intraarticular injections in the treatment of knee osteoarthritis. In his second project, he aims to investigate the efficacy and safety of different intra-articular injection therapies, like hyaluronic acid, platelet-rich plasma, corticosteroids, etc. Lastly, he takes part in the **education** of orthopedics and traumatology for medical students.

AGE

30 years

SUPERVISOR(S)

György Márk Hangody

E-MAIL

szocs.gyulaferenc@gmail.com

CSABA VARGA

SEMMELWEIS UNIVERSITY, DEPARTMENT OF ORTHOPAEDICS



2

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PROJECT DESCRIPTION

Csaba is a specialist doctor in orthopedics. He is currently working on a **meta-analysis** assessing the operative techniques for the treatment of adult flatfoot. Specialists use plenty of **types of surgical methods** in each stages of adult flatfoot, this study helps to clarify the differences between the effects of the operation types. The annual prevalence of **ankle prosthesis** increases worldwide but the role of risk factors is still unclear. Therefore, his second project is a **meta-analysis** about the efficacy and safety of total ankle replacement in relationship with body mass index.

AGE

34 years

SUPERVISOR(S)

Gergely Holnapy

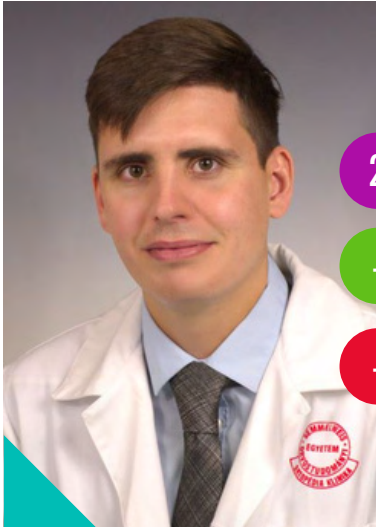
E-MAIL

dr.vargacsaba001@gmail.com



VIKTOR WENINGER

SEMMELWEIS UNIVERSITY, DEPARTMENT OF ORTHOPAEDICS



PROJECT DESCRIPTION

Viktor Weninger's main interest is in **shoulder surgery** and he is also a **resident** at the Orthopaedic and Traumatology Department, Semmelweis University. He is currently working on a **systematic review and network meta-analysis** on the comparison of the safety and efficacy of different injection therapies for partial rotator cuff tears. His study will help clinicians in the choice of the most efficacious and safe therapy. The second project is **another systematic review** on the investigation of the efficacy of peroxide skin preparation for the reduction of Cutibacterium acnes on the skin around the shoulder joint. He also takes part in **orthopedics education** as a member of the Department of Orthopedics.

AGE

28 years

SUPERVISOR(S)

Gábor Skaliczki

E-MAIL

weningerviktor@yahoo.com

GROUP 7
PEDIATRICS





GROUP 7 PEDIATRICS

GROUP MEETINGS
THURSDAY, 1 PM - 4:30 PM

INTRODUCTION TO THE GROUP

The pediatric group consists of 14 students with a wide range of research area. Most of the Ph.D. students are coming from the Heim Pál National Pediatric Institute, 1st and 2nd Department of Paediatrics in Semmelweis University. Three of the students started their residency and Ph.D. this September, however, the majority already has a few years of clinical experience. The main research topics are cystic fibrosis, neonatology, COVID-19, oncology and IBD. Beside pediatric departments, students are also coming from the Faculty of Health Science, Petho András Faculty and Department of Forensic Medicine. First, meta-analyses have been conducted and as further studies, mainly registry or meta-analyses are planned to be performed beside randomized controlled trials and basic research studies.

MEMBERS OF THE GROUP



ANDREA PÁRNICZKY
Group Leader



MIKLÓS GARAMI
Group Leader



GÁBOR KOVÁCS
Group Leader



RITA NAGY
Scientific Methodology
Supervisor



MARCELL IMREI
Scientific Methodology
Supervisor



MÁRK FÉLIX JUHÁSZ
Scientific Methodology Supervisor
(until November 2021)



ZOLTÁN SIPOS
Statistician

STUDENTS: Dorina Rita Bajzát, Judit Farkasné Varga, Adrienn Krisztina Ferencsikné Kéri, Réka Garai, Márk Viktor Hernádfői, Zita Hornok, Ágoston Jánosi, Dóra Kornélia Koch, Kinga Kovács, Adrienn Anna Lukács, Vanda Máté, Péter Misnyovszki, Márk Pulay, Nóra Zimonyi

SUPERVISORS: Tamás Cserni, Viktor Dombrádi, Éva Feketené Szabó, Andrea Ferencz, Péter Gaál, Miklós Garami, Ákos Gasparics, Mónika Horváth, Gábor Kovács, Péter Krivácsy, Boglárka Marcs, Katalin Müller, Andrea Párniczky, Attila Szabó, Miklós Szabó, Klára Törő, Ibolya Túri



DORINA RITA BAJZÁT

HEIM PÁL CHILDREN'S HOSPITAL



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PROJECT DESCRIPTION

Dorina is a **newly graduated medical doctor** and her interest is in the pediatric field. Her first project is a **systematic review and meta-analysis** on the effect of preoperative anti-TNF-alpha therapy on postoperative complications in pediatric irritable bowel disease. Concern was raised that by modulating the immune response, anti-TNF-alpha may increase surgical site **infections and morbidity**. The **result of the meta-analysis** will help the physician in operation schedules. Her second project is a **registry analysis** about intestinal resections in pediatric Crohn's disease. It is a **nationwide survey** based on the Hungarian Pediatric IBD Registry. **The aim of this multicenter, retrospective cohort study** is to analyze the surgical interventions among Hungarian children with IBD based on HUPIR. They **would like to assess** the rate of surgical interventions after diagnosis, identify predictor factors for the first surgery, and prognostic factors that increase the rate of postoperative complications and recurrences.

AGE

25 years

SUPERVISOR(S)

Katalin Müller

E-MAIL

bajzat.dorka96@gmail.com

JUDIT FARKASNÉ VARGA

SEMMELWEIS UNIVERSITY, DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY



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PROJECT DESCRIPTION

Judit works at the 2nd Department of Obstetrics and Gynecology as a **neonatologist specialist**. Her field of interest is the investigation and measurement of **sleep patterns in preterm babies**. She is conducting a **systematic review and meta-analysis** regarding the diagnostic accuracy of actigraphy compared to the gold standard, polysomnography. This technique could be used as an alternative in individual monitoring of circadian rhythm. As a second project, she conducts an **observational study** on monitoring and measuring sleep patterns of neonates. Later, she will participate in a project that aims to develop a non-contact video-based **measuring method** of the circadian rhythm of neonates.

AGE

40 years

SUPERVISOR(S)

Miklós Szabó

E-MAIL

vrgjudit@gmail.com



ADRIENN KRISZTINA FERENCSEKNÉ KÉRI

HEIM PÁL CHILDREN'S HOSPITAL



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PROJECT DESCRIPTION

Adrienn is a **third-year pediatric resident** in Heim Pál National Pediatric Institute. Her main focus is on the endocrine **pancreatic insufficiency in cystic fibrosis (CF)**. In her **meta-analysis**, the aim is to assess the prevalence of abnormal glucose tolerance (AGT) in different age groups in CF. Based on her results, the **guidelines on CF** could be reconsidered and early treatment of abnormal glucose tolerance could be initiated. In her second project, she is planning to perform a **registry analysis** investigating the prevalence of AGT in children with CF analyzing the dataset of the ongoing **longitudinal, prospective** Cystic Fibrosis-related Pancreatic Disorders Registry (CFRPDR). In the registry, there is a **yearly follow** of CF patients, while they are assessing the patient's carbohydrate homeostasis, clinical status, and collecting biomedical samples. Her analysis aims to earn knowledge about the **dynamics of the progression** in glucose tolerance status.

AGE

28 years

SUPERVISOR(S)

Andrea Párniczky

E-MAIL

adrikeri@gmail.com

RÉKA GARAI

SEMMELWEIS UNIVERSITY, FIRST DEPARTMENT OF PAEDIATRICS



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2

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PROJECT DESCRIPTION

Réka is a **resident doctor** at the 1st Department of Paediatrics, Semmelweis University. Her research interests include **vaccine technologies**, long-term effects following SARS-CoV-2 infection, and related to this, the **long COVID syndrome**. She is working on a **meta-analysis and systematic review** evaluating the effectiveness and safety of nasal influenza vaccines compared to injectable forms in children. Nasal administration might be favorable due to being less painful, time-saving, maybe even in subpopulations where it is contraindicated at the moment. The results could **increase vaccination rates**. Her second project is a **registry analysis** investigating the characteristics of the pediatric long COVID syndrome with the help of the multicentric pediatric Long COVID Registry. In her study, she aims to understand the **clinical characteristics** of a newly emerged condition.

AGE

29 years

SUPERVISOR(S)

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MÁRK VIKTOR HERNÁDFŐI

SEMMELWEIS UNIVERSITY, SECOND DEPARTMENT OF PAEDIATRICS



2

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PROJECT DESCRIPTION

Márk is a newly-graduated medical student and his main interest is in **pediatric oncology and hematology**. He is currently working on a **systematic review and meta-analysis** regarding the comparison of social and economical outcomes between former childhood cancer patients and the general population. With the developments of the last decades, 8 out of 10 pediatric oncology patients can be cured. Therefore, in recent times, the greater focus turns on the real success of therapy, which is successful **reintegration into society**. His second project will be a **network meta-analysis** about the comparison of the effectiveness of different therapeutical approaches in the treatment of neuroblastoma. Neuroblastoma is the most common cancer in infants and extracranial solid tumor in children. There are several therapeutical approaches to improve survival (especially in high-risk groups), but there is lacking information about **which therapy is superior** compared to the others.

AGE

27 years

SUPERVISOR(S)

Miklós Garami

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ÁGOSTON JÁNOSI

HEIM PÁL CHILDREN'S HOSPITAL



2

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PROJECT DESCRIPTION

Ágoston is a newly-graduated medical student and his main research field is **pediatric COVID-19**. He is working on a **systematic review and meta-analysis** investigating the prevalence of asymptomatic COVID-19 in different pediatric age groups. Children are likely to have a higher proportion of asymptomatic infection than adults, therefore he aims to create proposals and **recommendations for protective measures** in children regarding COVID-19. His **second study** is about the effectiveness and safety of TNF-alpha inhibitors in COVID-19 therapy. His **meta-analysis** may improve COVID-19 survival. His last project is a **registry analysis** about the characterization of COVID-19 in Hungarian children. He intends to analyze 507 **prospectively collected** COVID-19 patients' data. The registry ensures the opportunity to research the epidemiology, diagnosis, treatment, complication, and genetic background of SARS-CoV-2 disease.

AGE

27 years

SUPERVISOR(S)

Andrea Párniczky

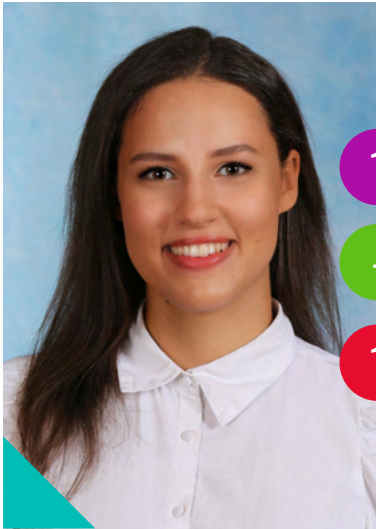
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DÓRA KORNÉLIA KOCH

SEMMELWEIS UNIVERSITY, SECOND DEPARTMENT OF PAEDIATRICS



1

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1

PROJECT DESCRIPTION

Dóra is a newly-graduated medical doctor and her research area is **pediatric hematology and oncology**. She is working on a **systematic review and meta-analysis**, comparing the toxicity levels between bolus injection and long-term vincristine infusion in patients with malignancies. Previously it has been shown that different chemotherapeutic agents have the same effectiveness when administered in long-term infusions but may have fewer side effects. The results of her study could help in the **reduction of vincristine toxicity**. Her second project is a **clinical trial** with the same question as in her meta-analysis. There is a **lack of data** regarding the comparison of bolus injection and long-term vincristine infusion. She aims to evaluate the **severity of adverse events** in two different routes (bolus injection vs. 180 min infusion) of vincristine-sulfate administration in children with hematologic malignancies.

AGE

25 years

SUPERVISOR(S)

Gábor Kovács

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KINGA KOVÁCS

SEMMELWEIS UNIVERSITY, DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY



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PROJECT DESCRIPTION

Kinga is a **pediatric resident** at the 1st Department of Obstetrics and Gynecology and her main area of interest is in neonatology. As her first project, she conducts a **systematic review and meta-analysis** to assess the role of the histopathologic fetal inflammatory response in developing adverse outcomes in premature neonates. Thus, evaluating its role as a **prognostic factor** in neonatal intensive care. As a second project, she intends to conduct a **systematic review and meta-analysis** on the dose of caffeine citrate loading before extubation. Later, she intends to conduct a **randomized clinical trial** on the same topic and write a pre-study protocol. The results of these studies could lead to the reduction of extubation failure within the 48 hours.

AGE

26 years

SUPERVISOR(S)

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ADRIENN ANNA LUKÁCS

SEMMEIWEIS UNIVERSITY, FACULTY OF HEALTH SCIENCES



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1

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PROJECT DESCRIPTION

Lukács Adrienn is a certified **physiotherapist** and her main research area is the **multisystem Inflammatory Syndrome in Children (MIS-C)**. She is currently working on a **meta-analysis** investigating the prevalence and characteristics of cardiovascular abnormalities in COVID-19 associated multisystem inflammatory syndrome in children. Children with MIS-C have an **elevated risk** for cardiac involvement (laboratory and ECG changes etc.) and need intensive care unit admission. Therefore the results of her study could lead to decreased hospitalization in this group of patients. She is also working on a **survey research** investigating the Hungarian inpatient and outpatient physiotherapeutic care in COVID-19 associated Multisystem Inflammatory Syndrome in Children. This **cross-sectional survey** aims to assess the Hungarian physiotherapeutic care of MIS-C and to identify its similarities and discrepancies among Hungarian hospitals.

AGE

24 years

SUPERVISOR(S)

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VANDA MÁTÉ

SEMMEIWEIS UNIVERSITY, FIRST DEPARTMENT OF PAEDIATRICS



2

2

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PROJECT DESCRIPTION

Vanda is a pediatric **resident doctor** at Heim Pál National Pediatric Institute. Her main focus is **pediatric oncology and hematology**. She works on a **systematic review and meta-analysis** on the effectiveness of conventional and targeted therapies in pediatric oncology. She aims to estimate the therapeutic effect of additional **targeted therapy** compared to conventional treatment alone and establish new therapeutical protocols if the therapies in question improve the outcome of the disease. Her second project is also a **systematic review** comparing the effectiveness of current diffuse intrinsic pontine glioma treatments. **Different therapies** that have been most promising are epigenetic modifiers, transcriptional regulators, immunotherapy, and microenvironmental targets. Therefore, she aims to estimate the therapeutic effect of different therapies in a **network meta-analysis**. Her last study is a **registry analysis** comparing patients receiving and not receiving targeted therapy in clinically high-risk groups.

AGE

28 years

SUPERVISOR(S)

Miklós Garami

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PÉTER MISNYOVSKI

SEMMELWEIS UNIVERSITY, DEPARTMENT OF FORENSIC MEDICINE



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PROJECT DESCRIPTION

Péter works at the Department of **Forensic Medicine** at Semmelweis University. His main area of interest is **forensic radiology**. He performs a **systematic review and meta-analysis** on the diagnostic accuracy of post mortem imaging techniques, like post mortem magnetic resonance imaging or computed tomography scan compared to the gold standard autopsy. Imaging methods could represent a **less time-consuming method**. As a second project, he is planning to conduct a **registry analysis**, investigating the association between suicidal death cases and environmental factors, like changes in humidity or air pressure. **Péter's hypothesis** is that the change in a meteorological factor like temperature, air pressure, etc., shows association with the incidence of suicidal death cases. Based on his results **targeted ads** and **suicide hotline** availability could be improved.

AGE

29 years

SUPERVISOR(S)

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MÁRK PULAY

SEMMELWEIS UNIVERSITY, ANDRÁS PETŐ PRACTICE PRIMARY SCHOOL



1

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PROJECT DESCRIPTION

Márk works at the András Pető Faculty as a **conductor-teacher** and his special field is the rehabilitation of patients with **cerebral palsy** (CP). He is working on a **systematic review and meta-analysis** about the effect of additional whole-body vibration therapy in CP patients. Based on his results whole-body vibration therapy could be considered for inclusion in conventional **rehabilitation programs**. He also participates in a pilot of a **randomized clinical trial** in collaboration with the Faculty of Health Sciences in which he investigates the beneficial effect of electromagnetic therapy in the same patient population. He intends to write the **pre-study protocol** of a randomized clinical trial. His results could update the possibilities of **rehabilitation programs** for CP patients.

AGE

34

SUPERVISOR(S)

Éva Feketené Szabó, Viktor Dombrádi

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NÓRA ZIMONYI

SEMMEIWEIS UNIVERSITY, ANDRÁS PETŐ PRACTICE PRIMARY SCHOOL



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PROJECT DESCRIPTION

Nóra is a conductor-teacher working at the András Pető Faculty at Semmelweis University. She is working on a meta-analysis investigating the executive functions and evaluating the different executive function test results among the cerebral palsy population, thus identifying the most affected aspects. Her second project is a clinical trial comparing executive function test scores between children with cerebral palsy and typically developing children, and examining the extent of their disadvantage and how much the different components of executive function skills are affected. The results will be important in designing a more targeted development programme.

AGE

35

SUPERVISOR(S)

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GROUP 8
**GASTROENTEROLOGY
& ENDOCRINOLOGY**





GROUP 8

GASTROENTEROLOGY & ENDOCRINOLOGY

GROUP MEETINGS

TURSDAY, 5 PM - 7:30 PM

INTRODUCTION TO THE GROUP

The Gastroenterology & Endocrinology group consists of 12 PhD students. There are seven medical doctors at the beginning of their careers, and one student is already a specialist in gastroenterology. There are also two dietitians and two psychologists in the group. Six of the students work in clinical practice as well. There are three international students, and one student is taking part in the ERASMUS program. Since the group represents interdisciplinary areas, the research topics are diverse as well. The topics include several investigations in pancreatic diseases, gastrointestinal bleeding, diabetes, microscopic colitis, probiotics and the role of psychological care in clinical practice. All students perform a meta-analysis as their first project, and since most of the students plan to carry out a second one, the number of planned meta-analyses is 19. Among the second projects, there is a registry analysis, registry establishment, writing a randomized-controlled study protocol, creating an international survey. Within the group, there are also nine project students facilitating the progress of the PhD student's projects. The group leaders are Bálint Erőss and Nóra Hosszúfalusi, two highly qualified physicians. One of the SMSs is Brigitta Teutsch, who is a second-year PhD student at the University of Pécs. Stefania Bunduc, the second SMS of the group, is a specialist in gastroenterology and a fourth-year PhD student. Both of them have interest in gastroenterology.

MEMBERS OF THE GROUP



BÁLINT ERŐSS
Group Leader



NÓRA HOSSZÚFALUSI
Group Leader



STEFANIA BUNDUC
*Scientific Methodology
Supervisor*



BRIGITTA TEUTSCH
*Scientific Methodology
Supervisor*



DÁNIEL VERES
Statistician

STUDENTS: Sára Bognár, Anna Júlia Éliás, Marie Anne Engh, Beatrix Fogarasi, Endre-Botond Gagy, Adrienn Nikolett Kovács, Mahmoud Obeidat, Anna Noémi Németh, Dániel Pálincás, Cristina Patoni, Anett Rancz, Olga Julia Zahariev

SUPERVISORS: László Földvári-Nagy, Bálint Erőss, Nóra Hosszúfalusi, Péter Hegyi, Péter Jenő Hegyi, Márk Félix Juhász, Katalin Márta, Emese Mihály, Klementina Ocskay



SÁRA BOGNÁR

SEMMELWEIS UNIVERSITY, CENTRE FOR PANCREATIC DISEASES



2

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PROJECT DESCRIPTION

Bognar Sára is a **certified psychologist** currently working at the Department for Pancreatic Diseases within the Semmelweis University Transplant Clinic. Her main area of research is the **psychological burden** in patients with **cancer**. Her first project will be a **systematic review and meta-analysis** investigating the effect of psychological interventions on quality of life and survival in patients with cancer. The results of her study could help to achieve an **improved quality of life** in patients with cancer, but also to achieve prolonged survival in some of the cancer cases. Her second project is a **prevalence meta-analysis** evaluating the psychological burden of patients with pancreatic cancer. She aims to identify the **degree of psychological burden** in patients with PC.

AGE

31

SUPERVISOR(S)

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ANNA JÚLIA ÉLIÁS

SEMMELWEIS UNIVERSITY, FACULTY OF HEALTH SCIENCES



2

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PROJECT DESCRIPTION

Anna Júlia Éliás is a **dietitian** and obtained her Bachelor's degree in Nutrition at Semmelweis University Faculty of Health Sciences, Budapest, Hungary. Her main area of research is the **human gut microbiome**. Her projects will consist of two **systematic reviews and meta-analyses**. One of them investigates the role of probiotics in antibiotics-associated dysbiosis. Her results could help in the **evidence-based recommendations** on the administration of probiotics for the post-antibiotic recovery of the microbiome. Her **second meta-analysis** focuses on the effect of probiotic supplementation in a generally healthy population. Besides, she is planning a **randomized controlled trial** to further investigate the possible methods for safely influencing the composition of the gut microbial community.

AGE

26

SUPERVISOR(S)

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MARIE ANNE ENGH

SEMMELOWEIS UNIVERSITY, CENTRE FOR TRANSLATIONAL MEDICINE



2

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PROJECT DESCRIPTION

Engh Marie Anne is a newly-graduated medical doctor and her main interest is in **gastroenterology**. She has performed a **systematic review and meta-analysis** regarding the prevalence of gastrointestinal bleeding in pancreatitis. She started this project before the Translational Medicine PhD program as a **project student** and she has already finished her manuscript. Her second project is a **network meta-analysis** regarding the efficacy of different needles used for endoscopic ultrasound-guided tissue acquisition of pancreatic masses. Her last project will be a **third meta-analysis** examining the use of contrast-enhanced endoscopic ultrasound during tissue acquisition of pancreatic masses. **Both studies aim to improve** the diagnostic process during tissue acquisition in the pancreas, aiding clinicians in choosing equipment, decreasing the risk of re-intervention, and the need for costly processes.

AGE
27

SUPERVISOR(S)
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BEATRIX FOGARASI

SEMMELOWEIS UNIVERSITY, CENTRE FOR PANCREATIC DISEASES



2

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PROJECT DESCRIPTION

Beatrix Fogarasi is a **certified psychologist** taking part in vocational training in health psychology. Her PhD thesis and main research areas are the **psychological interventions** during hospital care, focusing primarily on patients with acute pancreatitis, chronic pancreatitis, and pancreatic cancer. She is working on a **meta-analysis** evaluating the efficacy and safety of various psychological interventions in patients with inflammatory digestive system diseases. Her results could aid the improvement of the quality of patient care. Her **second project** is on the topic of cessation programs for smoking and alcohol consumption. Beatrix will also be a **co-investigator** and will provide the brief interventions in the REAPPEAR trial (Recurrent Acute Pancreatitis Prevention by the Elimination of Alcohol and Cigarette Smoking), which is a multicentric, international, parallel randomized controlled trial, designed by the Centre for Translational Medicine.

AGE
25

SUPERVISOR(S)
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ENDRE-BOTOND GAGYI

SEMMELWEIS UNIVERSITY, CENTRE FOR TRANSLATIONAL MEDICINE



PROJECT DESCRIPTION

Endre Gagyí is a newly-graduated medical doctor and he is participating in a 12-month research fellowship programme. His main area of interest is in **gastroenterology** and in **surgical fields**. He is currently working on a **systematic review and meta-analysis**, assessing the incidence of recurrent acute pancreatitis and chronic pancreatitis after an acute pancreatitis episode. His results could help in the **early recognition** of chronic pancreatitis, which can lead to the slow destruction of pancreatic tissue and cause pancreatic insufficiency. His additional goal is to conduct a **registry analysis** from the Gastrointestinal Bleeding Registry, in which he actively assures the data quality.

AGE

25

SUPERVISOR(S)

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ADRIENN ANNA KOVÁCS

SEMMELWEIS UNIVERSITY, DEPARTMENT OF INTERNAL MEDICINE AND HAEMATOLOGY



PROJECT DESCRIPTION

Kovács Adrienn Anna is an **internal medicine resident** participating in a clinical Ph.D. fellowship program. Her main focus of interest is **ketosis-prone type 2 diabetes mellitus**. Adrienn is currently working on a **systematic review and meta-analysis** that aims to assess the prevalence and to describe the clinical characteristics of ketosis-prone type 2 diabetes mellitus among patients with diabetic ketoacidosis/ketosis. Her second project is a **long-term follow-up study** of Hungarian patients with new-onset diabetes mellitus presenting with ketosis. Her aim is to assess the **prevalence** of ketosis-prone type 2 diabetes among newly diagnosed Caucasian patients. Her second aim is to compare the **clinical characteristics** between type 1, non-ketotic type 2, and ketosis-prone diabetes.

AGE

28

SUPERVISOR(S)

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MAHMOUD OBEIDAT

UNIVERSITY OF PÉCS, INSTITUTE FOR TRANSLATIONAL MEDICINE



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PROJECT DESCRIPTION

Mahmoud Obeidat's main interest is **Gastroenterology**, especially gastrointestinal bleeding. His first project will be a **systematic review and meta-analysis** about the incidence of hemodynamic instability in patients with gastrointestinal bleeding regardless of the source of bleeding. His study could help to know the characteristics and assess the **exact incidence** of hemodynamically unstable patients in GIB. He is also planning to establish an **international survey** to understand the stepwise management targeting hemodynamically unstable patients with non-variceal upper gastrointestinal bleeding. For this project, he will create a **questionnaire in different languages** and send it out to as many hospitals and doctors as possible to have a better insight into the assessment of that particular population.

AGE

25

SUPERVISOR(S)

Bálint Erőss

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ANNA NOÉMI NÉMETH

SEMMELWEIS UNIVERSITY, CENTRE FOR PANCREATIC DISEASES



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1

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PROJECT DESCRIPTION

Anna Noémi Németh is a first year resident doctor in **Gastroenterology**. Her main area of research is **pancreatic cancer**. Her first project is a **meta-analysis** investigating the impact of lag-time between the start of diagnostic procedure and treatment on the prognosis in patients with pancreatic cancer. **Earlier diagnosis** of pancreatic cancer could lead to a significantly improved survival rate. Her second project will be to **establish a registry** for pancreatic solid lesions. Data collected in a **structured solid tumor registry** could provide information regarding early diagnosis, screening, assessment of risk factors, etc. Also, as a third project, she will perform a **registry analysis** to assess the effects of the 4/7 strategy (4 days until diagnosis, 7 days until treatment initiation) on the prognosis of patients with pancreatic cancer and health care costs.

AGE

28

SUPERVISOR(S)

Péter Hegyi

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DÁNIEL PÁLINKÁS

HUNGARIAN ARMY MEDICAL CENTER, DEPARTMENT OF GASTROENTEROLOGY



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PROJECT DESCRIPTION

Dániel Pálkás is currently working on a **meta-analysis**, assessing the risk and benefit of direct oral anticoagulants (DOACs) resumption after a gastrointestinal bleeding episode. His results **will help in the prevention** of re-bleeding in patients with gastrointestinal bleeding, but also in the prevention of embolic events because of the lack of antithrombotic agents. His goal is to write a **randomized clinical trial** protocol on this topic. This trial could **aid clinicians** to determine the **ideal timing of DOACs resumption** by patients following a gastrointestinal bleeding event. In the meantime, he is leading the **Gastrointestinal Bleeding Registry** in the Department of Gastroenterology, Military Hospital Hungarian Defence Forces, where he is working as a **gastroenterologist**.

AGE

34

SUPERVISOR(S)

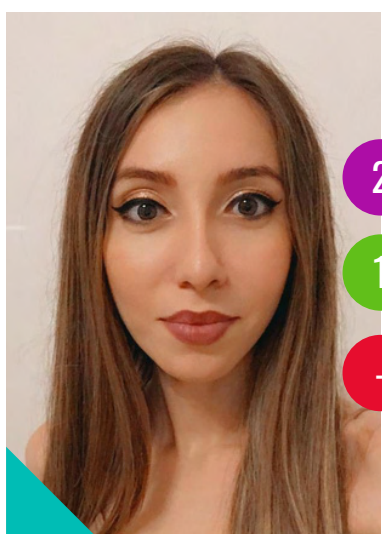
Bálint Erőss

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CRISTINA PATONI

CENTRAL MILITARY EMERGENCY HOSPITAL "DR. CAROL DAVILA", BUCHAREST, ROMANIA



2

1

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PROJECT DESCRIPTION

Cristina Patoni is a **gastroenterologist resident** in her third year of training at the Central Military Emergency University Hospital and she is also a PhD student in the Ph.D. program of the University of Medicine and Pharmacy "Carol Davila" from Bucharest. Her Ph.D. topic is "**Recurrent acute pancreatitis**: etiology, diagnosis, management". She is participating in a 12 month Ph.D. fellowship program and her focus is **acute pancreatitis**. She started a **systematic review and meta-analysis** about the efficacy and safety of prophylactic anticoagulant treatment in acute pancreatitis. Her project could help in the prevention of severe acute pancreatitis thus decrease the mortality rate. Her second project will be also a **meta-analysis** on the safety of early versus late endoscopic/percutaneous interventions in necrotizing pancreatitis.

AGE

29

SUPERVISOR(S)

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ANETT RANCZ

SEMMELWEIS UNIVERSITY, CENTRE FOR TRANSLATIONAL MEDICINE



PROJECT DESCRIPTION

Anett Rancz is a newly graduated medical doctor and her main field of interest is **microscopic colitis** (MC). In her first project, she will assess the prevalence of low bone density and osteoporosis in patients with MC through a **systematic review and meta-analysis**. The results of this study could help to decide if screening is necessary. Her second project is also a **systematic review and meta-analysis**, focusing on the risk factors of microscopic colitis. Anett plans to collect all the data regarding lifestyle factors (e.g. smoking, alcohol consumption) and medications (e.g., nonsteroidal anti-inflammatory drugs, proton pump inhibitors, and selective serotonin reuptake inhibitors), which may contribute to the development of this disease.

AGE
26

SUPERVISOR(S)
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OLGA JULIA ZAHARIEV

SEMMELWEIS UNIVERSITY, CENTRE FOR PANCREATIC DISEASES



PROJECT DESCRIPTION

Olga is a clinical dietitian on the Pancreatic Disease Ward at Semmelweis University. Her field of research is new onset diabetes following acute pancreatitis. Her first project is a prognostic meta-analysis to identify patients who are at risk of developing diabetes mellitus after acute pancreatitis. The second project – a network met-analysis, will look at the effectiveness of lifestyle interventions on preventing or delaying diabetes in the general population. Furthermore she is planning a clinical trial on the effectiveness of lifestyle interventions on diabetes prevention in patients who had acute pancreatitis. Also she is a co-investigator and head dietary coordinator of the EFFORT clinical trial which evaluates effect of dietary fat restriction after acute pancreatitis on pancreatitis recurrence rate.

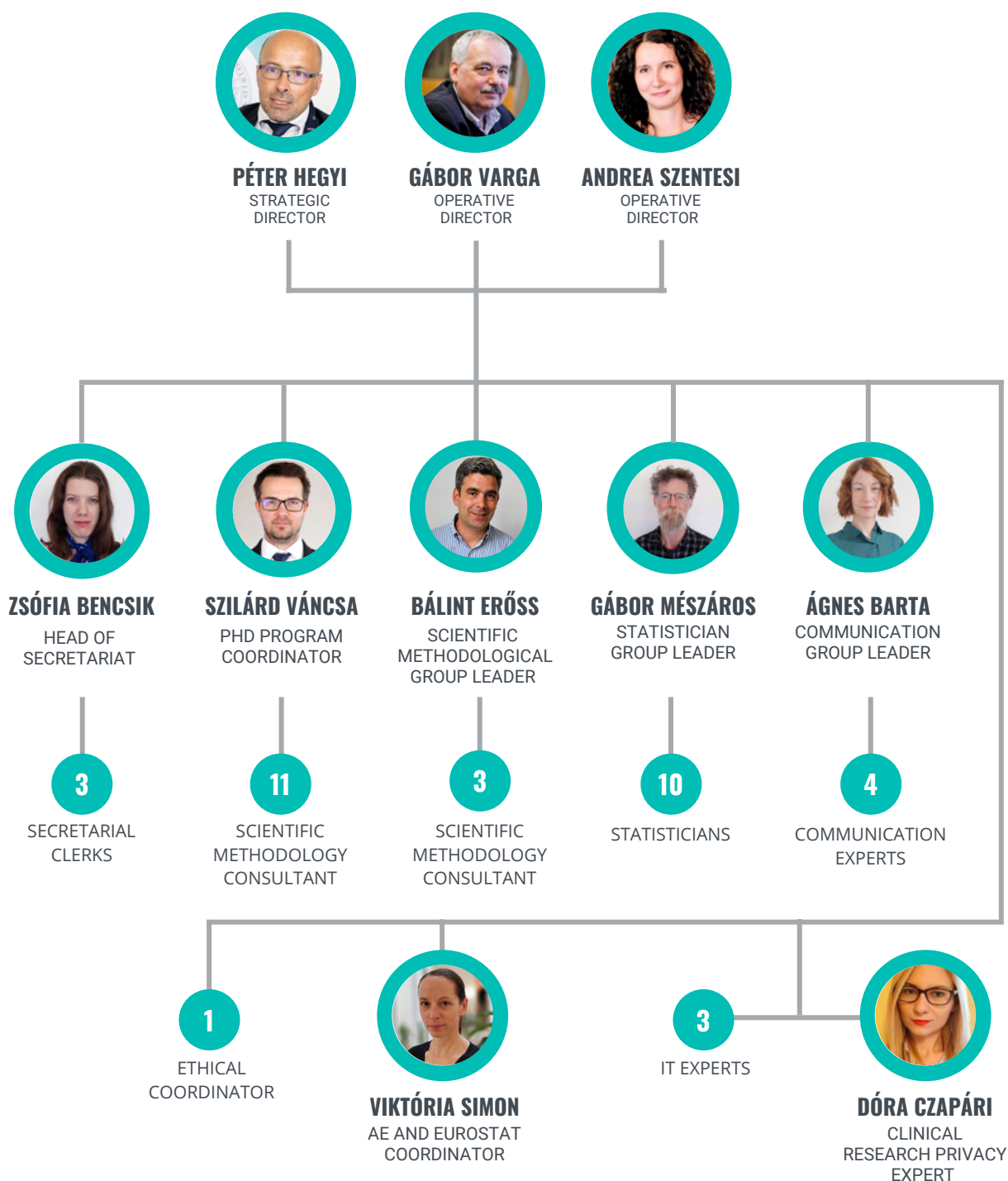
AGE
27

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CENTRE FOR TRANSLATIONAL MEDICINE

ORGANOGRAM



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