



# STUDENTS & PROJECTS

LEARNING BY DOING

2025  
2026



# IMPRINT

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# SALUTATORY

## A FEW WORDS FROM OUR LEADERSHIP

Nowadays, with science rapidly evolving, experimentation, data collection, analysis, and decision-making based on scientific results have become essential to high-quality patient care. As a result, a new concept called Translational Medicine (TM) has emerged, with the primary objective of accelerating and streamlining the application of scientific findings, including the prevention, treatment, and monitoring of diseases.

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 better patient education. For patients under the age of 75, the situation is even more dramatic: four out of five deaths are found to be preventable. Apart from the COVID crisis, the statistics are slowly getting better, although, with the effective use of knowledge to enhance our healthcare, these statistics could be further improved.

As part of the Research, Development, and Innovation (RDI) support system at Semmelweis University, the Centre for Translational Medicine has a clear purpose to develop harmony between teaching, research, and medical services, as well as to reinforce the complexity of these three duties in a challenging environment. To achieve its goal of enhancing Hungary's competitiveness in all fields of medicine, the Translational Medicine PhD Program integrates education and scientific research, ultimately translating these efforts into improved patient care. Furthermore, this model aims to provide a suitable career path for outstanding doctors and professionals, thereby enhancing the quality of education, patient care, and scientific output.

The new TM PhD Program 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**

*Director of the Centre for  
Translational Medicine*

# INTRODUCTION TO TRANSLATIONAL MEDICINE





# THE HISTORY OF TRANSLATIONAL MEDICINE IN HUNGARY

The first CTM in Hungary was established at the University of Pécs (UP) in January 2016 under the leadership of Péter Hegyi. The main partner for UP was the Translational Medicine Foundation (TMF), which provided educational materials, IT support, network connections, and an internationally accessible, highly visible platform from the very beginning.

The University of Pécs has established excellent conditions for medical care, and its motivated professors, students, and physicians have provided great resources for patient care, education, and research. The TMF has promoted the practical application of scientific results and innovations in healthcare, as well as stimulating and unifying the exchange of information and data flow between universities, hospitals, and research centres. By supporting patient care, education, scientific activity, and communication, we set up a multifaceted 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 (Szent György University Teaching Hospital of Fejér County in Székesfehérvár and Heim Pál National Pediatric Institute in Budapest) and three universities (University of Pécs in Pécs, University of Szeged in Szeged and Semmelweis University in Budapest) joined the TM program, expanding translational medicine in Hungary to a national level.

Within the first five years, over 400 PhD students and residents have participated in our programs, and more than 350 high-quality research papers and articles have been published based on scientific research and translational patient care. The results have enabled the development and supplementation of several treatment guidelines, allowing for the immediate application of scientific findings in patient care. A summary of this period was published in the highly distinguished journal *Nature Medicine*.

In June 2021, Semmelweis University established the Centre for Translational Medicine (CTM), one of the largest TM centres in Europe, where in 2021 **91**, in 2022 **84**, in 2023 **89**, in 2024 **90**, whereas in 2025 **80** PhD students began their research.

In 2024, we proudly launched our 1-year MSc programme with an inaugural cohort of 14 students. Due to the remarkable international interest and visibility of this globally unique educational model, the number of participants has already increased, with 22 MSc students beginning their studies in 2025. This growing momentum clearly indicates the programme's strong international recognition and its significant future expansion potential.



**PÉTER HEGYI**

*Director  
Centre for Translational Medicine*



# THE IMPORTANCE OF TRANSLATIONAL MEDICINE

The primary goal of TM is to translate scientific findings into community benefits. Why is this necessary? The answer is quite simple: we are currently using scientific findings in everyday medicine with very poor efficiency. The European Statistical Office of the European Commission has recently reported that 1.7 million people under the age of 75 died in Europe in 2016, with around 1.2 million of those deaths could have been avoided through effective primary prevention and public health intervention. Therefore, Academia Europaea, one of the five Pan-European networks that form SAPEA (Science Advice for Policy by European Academies), a key element of the European Commission's Scientific Advice Mechanism (SAM), has launched a project in 2018 to develop a model to facilitate and accelerate the utilization of scientific knowledge for public and community benefit.

During the process, leaders in the field, including prominent basic and clinical researchers, editors-in-chief of high-impact journals publishing translational research articles, TM centre leaders, media representatives, academics, and university leaders, developed the TM cycle, a new model that we believe could significantly improve the development of TM. This model focuses equally on the acquisition of new scientific results in healthcare, understandable and digestible summation of results, and their communication to all participants. The authors, including senior officers of Academia Europaea, conducted an important paper to serve as a basis for revising the thinking of TM with the end result of enabling more efficient and cost-effective healthcare.





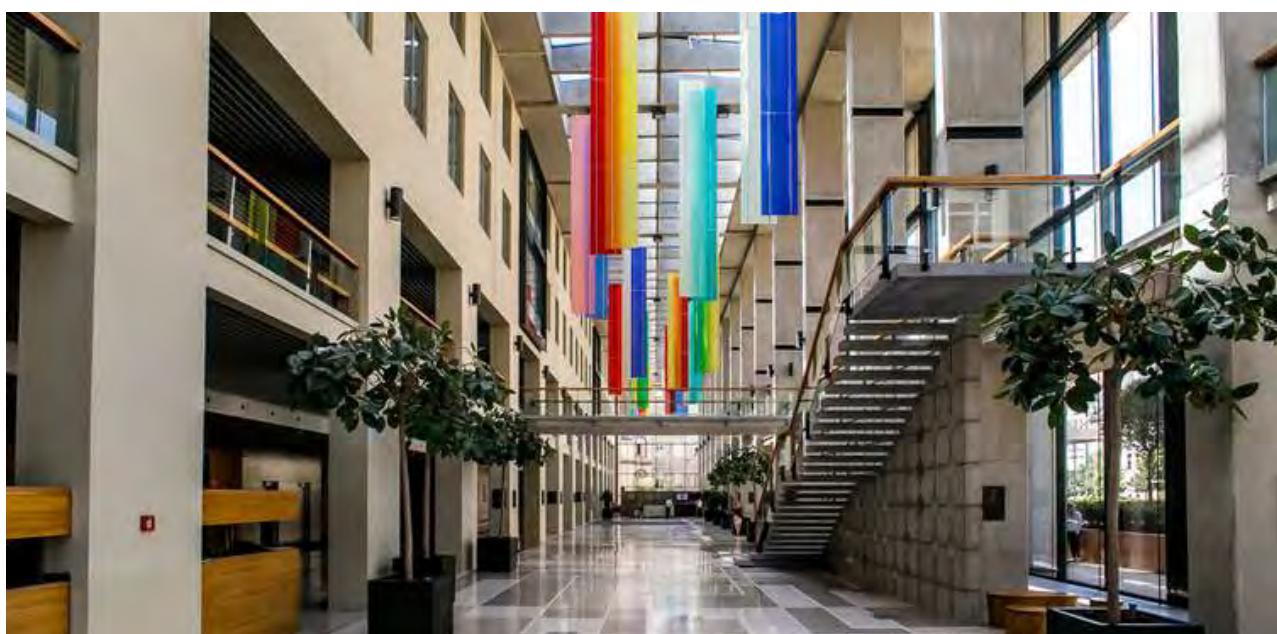
# SEMELWEIS UNIVERSITY

## INTRODUCTION



Semmelweis University's history dates back more than 250 years, to 1769. Today, SU is one of the leading institutions of higher education in Hungary and the Central European Region in the field of medicine and health sciences. At SU, our core commitment is based on the integrity of education, research, and medicine, which makes the University an internationally recognized center.

Semmelweis University aims to rank among the world's best universities and recognizes the importance and high potential of translational medicine. Therefore, this programme was invited to function on a much bigger scale than before, now under the umbrella of SU. As a result, the training at SU started with more than 90 students in 2021. Since then, the programme has expanded to more than 400 students, underscoring its rapid growth and outstanding quality.





# TRANSLATIONAL MEDICINE FOUNDATION



Translational Medicine is, by default, the translation of basic and clinical research findings and, more broadly, the transitioning of all types of research - basic research, meta-analysis, cohort analysis, and clinical trials - back into patient care as quickly as possible. This is a breakthrough in medicine for the 21st century, improving health prevention and the quality of patient care, speeding up the diagnostic process of diseases, and making healthcare more cost-effective.

The Translational Medicine Foundation (TMF) aims to contribute to the development and nature of translational research in Hungary with the results of raising the health quality of Hungarian citizens. These activities are fully non-profit for the benefit of the public as well as it is carried out in a transparent and accessible way to disseminate science-based medicine throughout Hungary. Within this framework, the TMF's mission is to implement the results of scientific research into patient care as soon as possible.

These four values are cardinal for the operation of the foundation:

1. Innovation.
2. Excellence: to conduct high-quality scientific work and to encourage others to do the same.
3. Commitment: committed to supporting and advocating the recognition of the importance of science based medicine.
4. Ethical conduct: accountability and commitment to ethical professional practice.

In pursuing these values, the foundation will work towards the following objectives:

- a) promoting the **practical application** of scientific results and innovations in healthcare. stimulating and standardizing the **exchange of information** and data between
- b) universities, hospitals, and research centers, and facilitating their quality control, which can significantly improve the quality of multicenter research and reduce the resources needed for research.
- helping all members of the population** (including healthy individuals, patients, doctors, etc.) to understand and implement evidence-based knowledge in their daily lives through different platforms (web, printed materials, videos, etc.).
- d) **participating in the organization** of conferences and training courses and the funding of research-related procurement, services, and human resource searches and selection.

To achieve the above objectives, the TMF Board of Trustees Chair has made the Electronic Clinical Data Management System (ECDMS), a data management and quality control system, available to the foundation free of charge under a user agreement. The TMF is entitled to grant the right of use to universities, hospitals, and research institutions, following the above values and objectives. The TMF has also created blended education video materials that are available for free to Hungarian universities for the education of students on public scholarships. These materials are also accessible to students in fee-paying courses if their university donates a certain percentage of their fees to support the foundation's objectives.



# NATIONAL ACADEMY OF SCIENTIST EDUCATION



## THE TRANSFORMATION OF THE SZEGED SCIENTISTS ACADEMY INTO THE NATIONAL ACADEMY OF SCIENTIST EDUCATION

In 2013, the Foundation for the Future of Biomedical Sciences in Szeged established the Szeged Scientists Academy. Based on the results listed over the years, it came to the point in 2021 where - with the support of the Hungarian government – the name of the Foundation was changed to National Biomedical Foundation and the program expanded to National Academy of Scientist Education (NASE) program, to include all cities with institutes of higher education in human life sciences (Budapest, Debrecen, Pécs, Szeged).

The short-term goal of the program remained to embrace talented young people interested in biomedical research, to support their scientific work, to make the career model of scientists more attractive, as well as to keep young researchers in Hungary in the long-term.

## GENERAL INTRODUCTION OF THE NATIONAL ACADEMY OF SCIENTIST EDUCATION

One of the essential innovations of the educational processes of the Szeged Scientists Academy, and then of the National Academy of Scientist Education is that it guides students who are talented in research through the steps of becoming a scientist from their secondary school years. The principal education of the secondary school pupils takes place in seven National Education Centres (in Debrecen, Gödöllő, Hódmezővásárhely, Pécs, Szeged and Szombathely) and 25 Regional Education Centres. The Regional Education Centres are led by the Szent-Györgyi Senior Teachers whose primary task is to find and mentor the pupils within their region who are particularly interested in natural sciences and are later planning to choose a research career. The professional background to the regular theoretical and practical training organized by the Senior Teachers is constantly provided by the Academy.

The university students are trained in four cities (Budapest, Debrecen, Pécs, Szeged), in six Scientific Laboratories, at the best-equipped laboratories in the country, under the professional supervision of the best mentors (the socalled Szent-Györgyi Mentors). In each laboratory, a group of mentors awaits the students, who will also start research work along with their university studies. On the educational side, some university students are helped with an individual curriculum, so students can independently plan being in the laboratory when necessary for their research work. Of course, high-quality research activity cannot come at the expense of educational obligations.





# BLENDDED EDUCATION

## SPECIFICATIONS OF OUR PROGRAM

Our Hybrid PhD/ MSc and Medical/Healthcare Training Program at the CTM provides students with the opportunity to engage in patient care and academic activity simultaneously. Within the framework of the training, they acquire clinical research methodologies using the "learning by doing" method through independent scientific projects. They are provided the opportunity to join workgroups and participate in meta-analyses, studies related to different registers, and clinical trials.

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

### TEACHING METHODS

#### E-LEARNING

To provide the most support and convenience for students, we created an e-learning program to decrease the number of courses that require attendance. These online lectures are available in more than 20 topics, but our online course database is constantly expanding. The courses are held by internationally distinguished scientists and contain tests at the beginning and end of each video so students can better follow their learning process. These are carried out based on individual timetables, but they must be completed before the given personal course. Completion means finishing the opening and closing tests. A minimum of 75% of the points must be achieved on the final test.

#### GROUP MEETING

It gives a great opportunity to run inter- and multidisciplinary discussions. Weekly meetings help with monitoring the learning process and encourage a better quality of work. Discussions take place in person. Participants of the group discussion: all students in the group, supervisor, group leader, CTM staff, and TDK students. Attendance at the group meetings is mandatory for everyone. The time of the group meeting remains constant throughout the year and is expected to last 2-2.5 hours.

#### WORKSHOP

The incorporation of in-person workshops following e-learning modules is a commendable approach, enhancing the overall educational experience by bridging theoretical knowledge with practical application. The groups are divided into classes, and class meetings are held on a class-by-class basis. Each course is held on separate days. Attendance is mandatory for all PhD and MSc students. Otherwise, we cannot credit the course. TDK students and supervisors are also recommended to join. The courses are in-person and last 6 hours with breaks.

#### PROJECT MEETING

The student, supervisor, TDK student, and SMS/statistician have to participate in the project meetings weekly. The meetings are mainly held online (e.g., Zoom), if necessary, in person.

#### SEMINARS

Every year, CTM organizes several seminars for our students. We invite outstanding researchers who can provide a career path model. The seminars are open to anyone, but students are required to attend.

## PROGRESS REPORT

Progress Reports (PRs) are scheduled every 3 or 6 months, aligning with the academic year. Attendance is compulsory for all participants, and rescheduling on an alternate day is not feasible. Each PR session entails an 8/10-minute presentation, succeeded by a 4-minute discussion, during which the audience is free to ask questions about the projects. The purpose of PR is to monitor the progress of students and their projects, to help everyone develop presentation techniques, and to build relationships with members of other students. The PR VI is equal to the complex exam, which has to be completed by the end of the 2nd year. Starting from the 3rd year, students in an advanced phase can start to prepare their thesis. Therefore, we organize PR VII as the house defense, while PR VIII represents the thesis defense. By the time of the thesis defense, the students had already presented their project almost 100 times.

## IT SUPPORT

We use Moodle to manage the tasks that arise during the training. It provides support for storing personal data, e-learning for training, project tracking, attendance sheet management, peer-to-peer communication, forums, and calendar management.

## EXPERT SUPPORT

The following experienced scientists will provide support for the students:

- 1) The **group leaders** are experienced physician-scientists who are well-known representatives of their field and have a record of high-level research productivity.
- 2) An **expert discussant** is appointed for each group. They are highly experienced physician-scientists who provide help from the design of the study until the publication. They help the students (1) polish their projects, (2) find the big picture, and (3) challenge them on a weekly basis.
- 3) The **scientific supervisors** of each fellow are senior clinicians (experts) who raise relevant clinical questions, determine the direction of the research, and bridge the gap between the theoretical and clinical work within the clinical PhD program. This supervisor 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-analysis, patient registries, and clinical trials.
- 5) **Educational supervisors** are experts in the various fields that are being taught through courses to the fellows. Such courses include meta-analysis, patient registry, clinical trial, biostatistics, data handling, and clinical pharmacology.
- 6) **Statisticians** are appointed to each group to provide valuable help for the statistical work of the project.

## INTERDISCIPLINARY RESEARCH SUPPORT

Our centre has begun building an interdisciplinary research support team to support the work of researchers and PhD/ MSc students in numerous 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-analysis, and clinical trials. The **IT group** offers support in the development of multi-centre registries and clinical trials, and the **biostatistics group** aids in the planning of data collection as well as 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 **legal team** helps researchers comply with ethics and GDPR rules. The communication team supports the design, preparation, and dissemination of education and information materials.

We use **Moodle** to manage the tasks that arise during the training. It provides support for storing personal data, e-learning for training, project tracking, attendance sheet management, peer-to-peer communication, forums, and calendar management.

## LIFETIME CAREER MODEL

**Besides “learning by doing”, “retraining by teaching” is our other main motto.**

The Centre for Translational Medicine (CTM) has developed a well-structured and transparent training system that gradually guides students into research and teaching activities. The goal of the program is not only to provide theoretical knowledge, but also to teach students how to apply scientific methodology in practice — and later to pass on this knowledge to the next generation.

At CTM, the professional development pathway consists of **five main levels: Project Student, PhD Student, PhD-SMS, PhD-Faculty, and Supervisor**.

The first stage of this development system is the **Project Student** position, which can be compared to the Hungarian TDK (Scientific Students' Association) activity. Students regularly attend group and project meetings, with a participation rate of at least 75%, and take an active part in ongoing research projects. This phase provides a unique opportunity to experience translational research in practice, working side by side with clinicians, researchers, and PhD students. The Project Student position offers not only valuable professional experience but also direct recruitment opportunities to the PhD program, co-authorship in scientific publications, and the option to continue within the MD-PhD program.

The next stage is the **PhD Student** level, where students work on their own research topics under the professional support of CTM. During this period, doctoral students receive comprehensive scientific and technical assistance, including statistical, data management, and IT support, as well as access to CTM's expanding international research network. The main goal of PhD students is to conduct independent research in a structured and supportive academic environment, laying the foundation for their scientific careers and future publications.

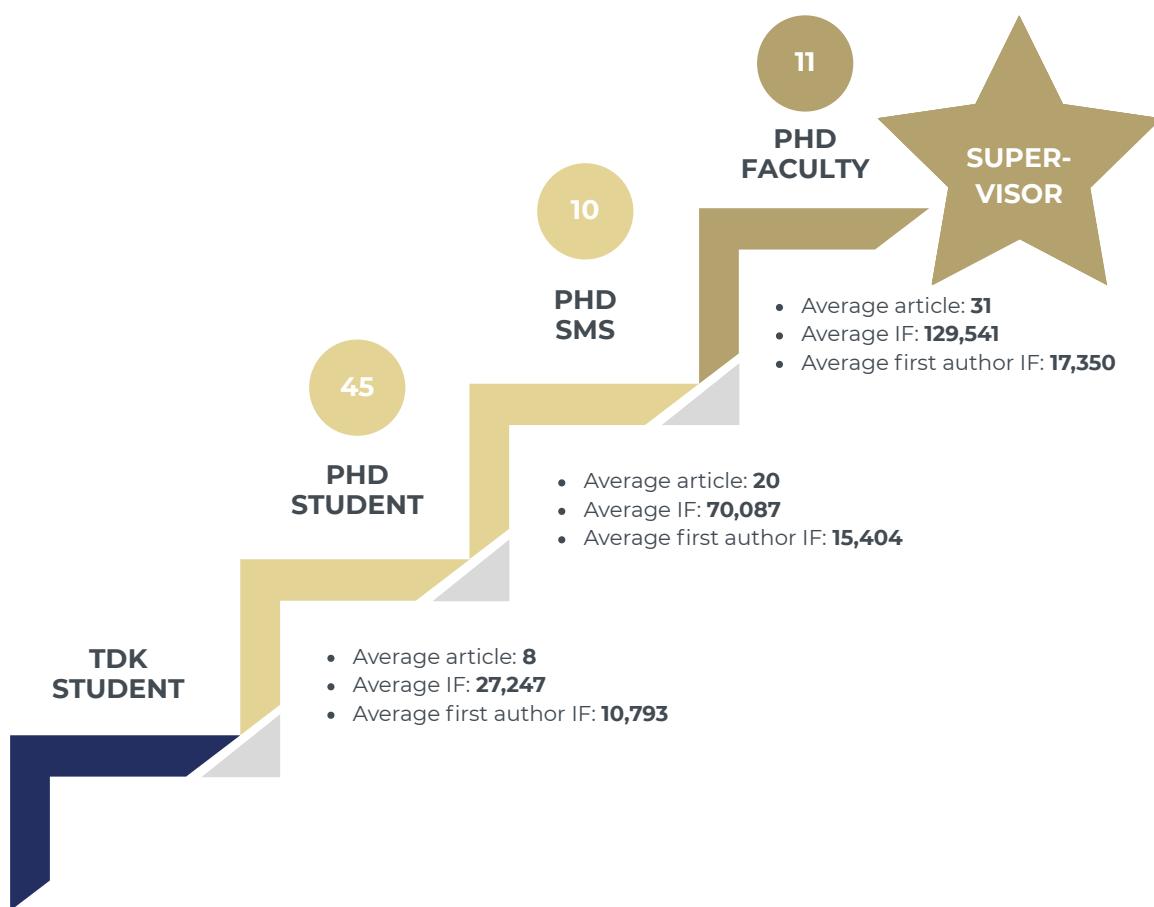
In the second year of the PhD program, students may advance to the **PhD-SMS (Science Methodology Supervisor)** level, which represents the essence of the “learning by teaching” philosophy. PhD-SMS actively mentor new PhD candidates and Project Students, thus contributing to the renewal and growth of the CTM academic community. This level requires a leadership mindset and a high level of motivation, as students take on both research and teaching responsibilities. In return, CTM offers employment opportunities, supports co-authorships, and involves them in international collaborations and leadership training programs. The PhD-SMS position is therefore both a mark of professional recognition and an important developmental opportunity.

The highest level in the CTM doctoral training system is the **PhD-Faculty** category, which prepares the most dedicated candidates for academic and leadership roles. This level is reserved for students who have successfully passed the complex exam, have at least one first-author publication related to their PhD research, and actively contribute to CTM's educational activities by giving lectures and mentoring Project Students and junior PhD candidates. PhD-Faculty participate in international collaborations, gain access to the EUROSTAT database and the Academia Europaea network, and may receive scholarships for training abroad. The most outstanding students can be nominated to the Youth Chapter of the Hungarian Academy of Sciences or to the Young Academy of Europe, and may later advance to positions such as assistant lecturer or assistant professor.

After PhD defence the **Supervisor** level represents the senior stage of academic development, where experienced researchers contribute to the strategic and scientific direction of CTM.

This **five-level progression system** ensures that every CTM student can advance at their own pace while becoming increasingly involved in the life of the scientific community. The path from Project Student to PhD-Faculty — and ultimately to Supervisor — offers not only scientific preparation but also community building, mentoring experience, and leadership development, all of which reflect the core spirit of translational medicine.

Every month, **CTM awards the best-performing student and supervisor** in each year level. In addition, the best group, the best staff member (selected from SMS, statisticians, or office staff), and project student in the first year is also awarded. All awards are based on availability, effort, and creativity. In addition, for SMSs, coordination skills and methodological knowledge are also taken into account. For students, the level of presentation skills is a separate criterion, and the activity and contributions of group leaders in meetings are assessed separately.



A person is using a smartphone to look at a document. A magnifying glass icon is overlaid on the screen, focusing on a bar chart. The background is a dark blue.

# EDUCATION **STATISTICS**



In the following section, we would like to present the first five years of our PhD program. During this academic year, our less than 50 staff members are training more than 500 participants from different groups, such as PhD and Msc students, TDK students, supervisors, and students who are only taking a single course at the CTM.

From September, we were able to increase the percentage of PhD students enrolled in our program among all PhD students at Semmelweis University from 32% to 36%. Meanwhile, both the national and international visibility and respect of our program have increased with the welcome of students from 40 hospitals and 21 different countries.

We are currently monitoring a total of **917** projects, and **498** papers have already been published. Students are required to publish a minimum of two first-author papers. However, numerous students run three, four, or even five projects.

## GENDER DISTRIBUTION

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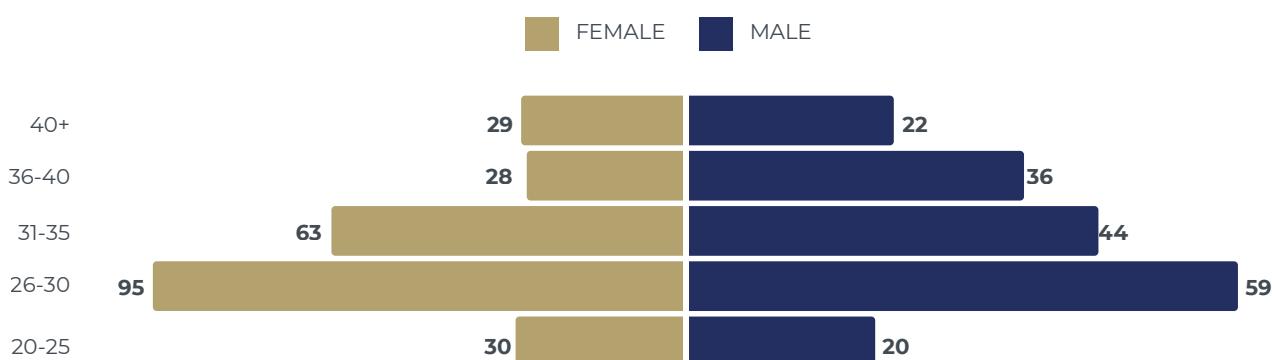
Our program strongly stands by the idea of **gender equality**, with the supporting evidence of the greater number of female students enrolled in the program. Having a higher number of female students than male students enrolled in the program this year, shows that we are providing an equal opportunity for everyone regardless of their gender.



## AGE DISTRIBUTION

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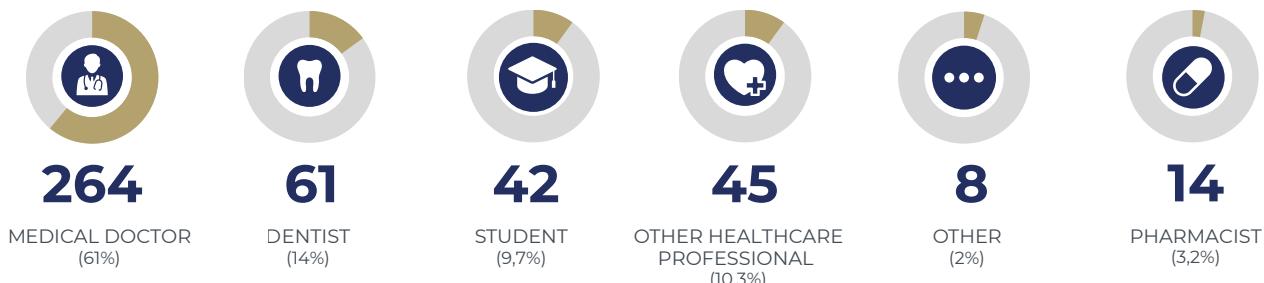
With our motto being that science should play a prominent role throughout the career of healthcare professionals, this program **doesn't have an age limitation**. From recent graduates to experienced specialists, we are providing an opportunity for every age group to further develop their scientific skills, eagerness to learn, and love for science.



## OCCUPATION

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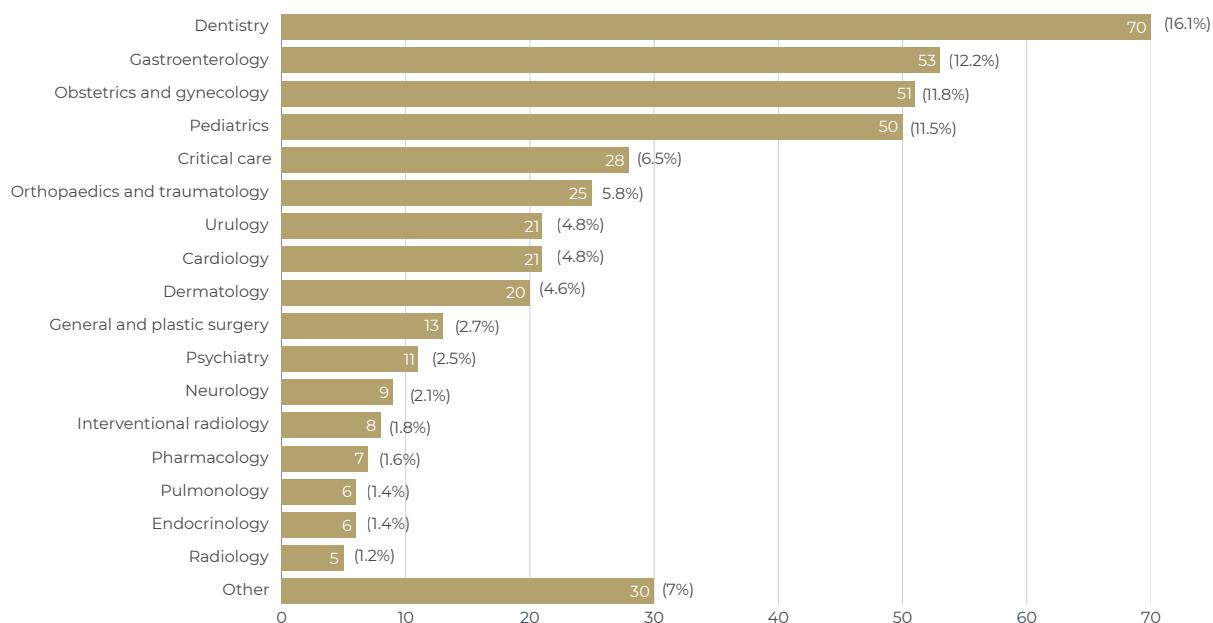
Despite the large number of PhD students who are medical residents, participation is not limited to those with a medical degree. The program has an increased number of students **from all health sciences** such as dietetics, pharmacy, dentistry, psychology, and other marginal specialties.



## FIELD OF RESEARCH

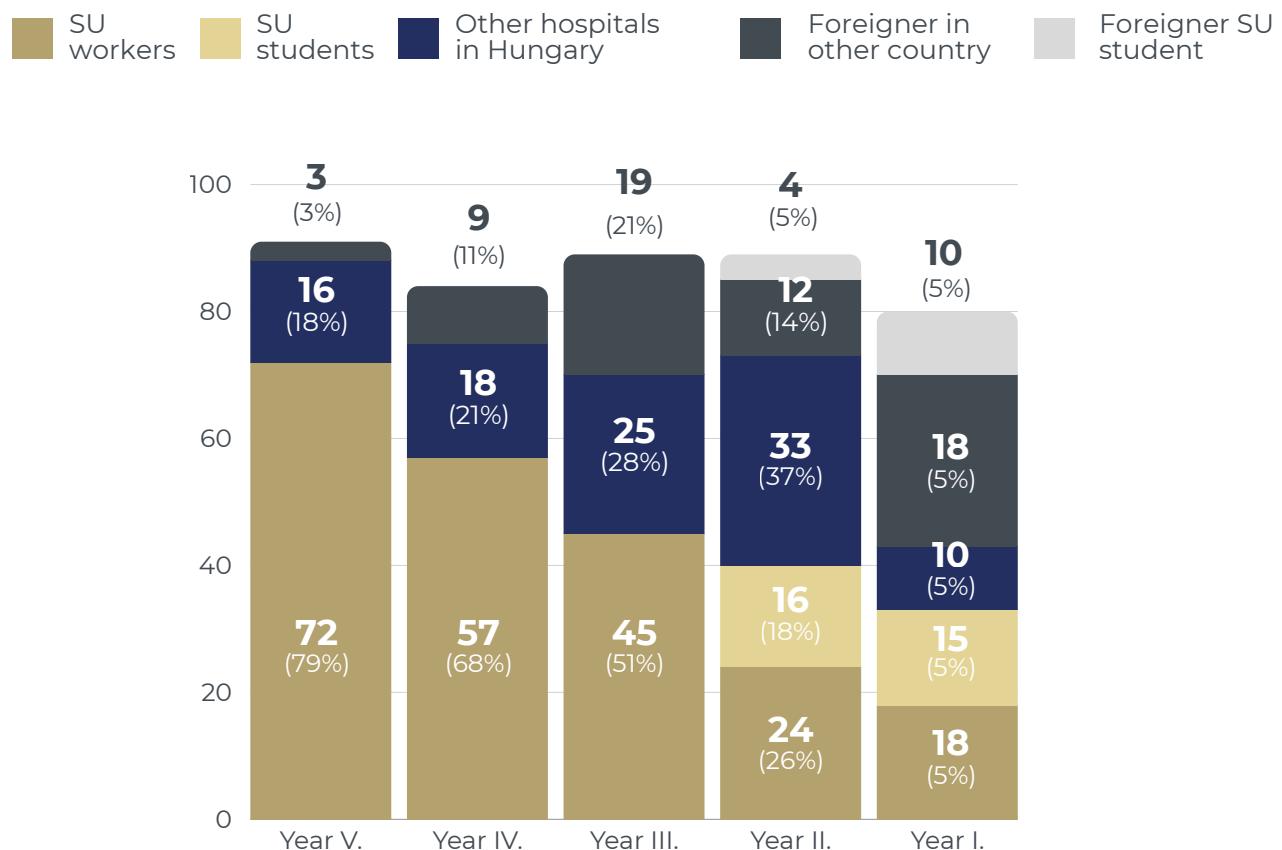
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During the program, students work in groups according to their specialization. The most popular research fields among the attendees were dentistry, gastroenterology, pediatrics, obstetrics, critical care and orthopedics. However, the interest of students stands over the whole healthcare specialty spectrum.



## WORKPLACE

The number of students is constant year by year. However, their origins are changing. In Year V, most of the students joined from Semmelweis University, and the number of foreign students was low. Since then, the **number of foreign students has increased significantly**.



The number of PhD students is growing each year. However, the **highest number of students is from Semmelweis University (SU)**, where The Department of Obstetrics and Gynecology and Institute of Pancreatic Diseases contribute the highest number of students, each providing more than 20 participants. On the other hand, Heim Pál National Pediatric Institute, Bajcsy-Zsilinszky Hospital, Saint George University Teaching Hospital of Székesfehérvár provide the highest number of students outside of SU in Hungary. The number of international students is also continuously growing, led by the University of Medicine, Pharmacy, Science and Technology of Tîrgu Mureş, Medical University of Vienna.

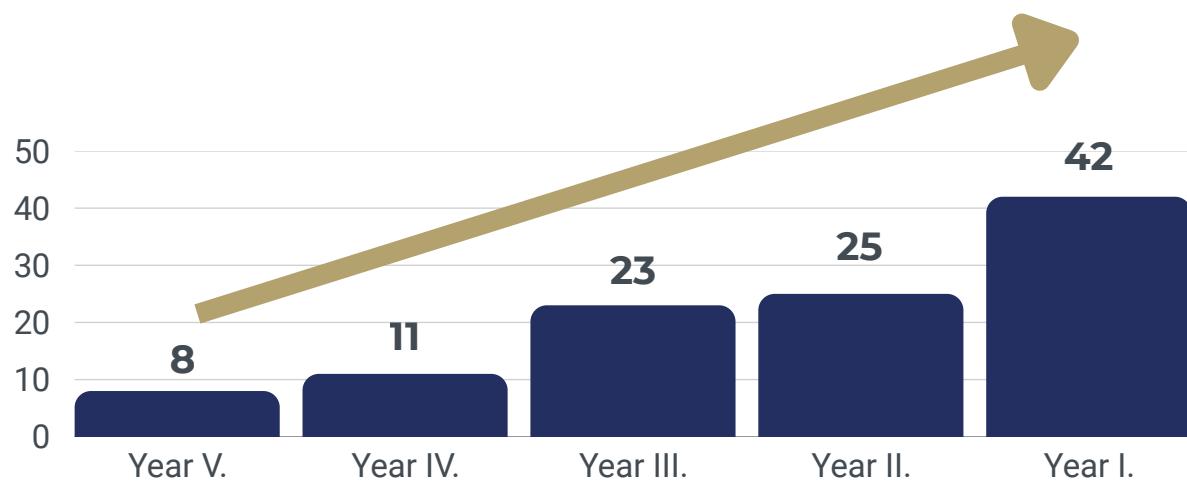
## FORM OF SUPPORT

The financial support in our training is constantly changing. Among Year V students, the majority are **supported by the Hungarian Government** and there are only three Stipendium Hungaricum supported students. Compared to this, among Year I students, the number of self-financed and Stipendium Hungaricum-supported students increased while we started to have more and more MD-PhD and MSc students.

Form of support / Years	Year V.	Year IV.	Year III.	Year II.	Year I.	TOTAL
PhD-general	86	74	70	53	29	312
PhD-general-MOL	2		2	6	4	14
MDPhD-general		1		16	11	28
MDPhD-foreign				4	8	12
MOL		2				2
PhD-EU bilateral		3	4	6	5	18
PhD-nonEU		3	6	3	2	14
PhD-StipHung	3	1	7	1	2	14
MSc				1	19	20
Grand total	<b>91</b>	<b>84</b>	<b>89</b>	<b>90</b>	<b>80</b>	<b>434</b>

## INTERNATIONAL SUPPORT

Our center places special focus on building an international translational medicine network. Therefore, our aim is to **increase the number of international students**. International students attend not only from Europe but from any continent worldwide. The overall number of international students reached **109** this year.



## THE CENTRE IN NUMBERS

The following figure summarizes the most important numbers at the start of the 2025/2026 academic year, representing the scientific activity of the Centre for Translational Medicine and the PhD students participating in the training.





# OUR CENTRE'S **ORGANOGRAM**



# DIRECTORATE

The Directorate serves as the core leadership team of the Centre for Translational Medicine, steering the institution toward achieving excellence in education, research, and patient care. Comprised of experienced leaders, they ensure strategic planning, operational efficiency, and the seamless integration of scientific discovery into practical healthcare applications. Their collective vision supports the development of innovative approaches to translational medicine while fostering collaboration among diverse teams. By aligning academic, clinical, and research priorities, the Directorate plays a critical role in shaping the future of healthcare and science at the CTM.

Notably, its Director, Professor Péter Hegyi MAE, has been awarded the Robert F. Pitts Lecture Award at the IUPS World Congress—one of the most prestigious distinctions in global physiology.



**PÉTER HEGYI**  
Director



**ZSOLT SZÉPVÖLGYI**  
Operative Director



**GÁBOR VARGA**  
General Vice Director  
Graduation & Implementation



**ANDREA HARNOS**  
Vice Director  
Biostatistics



**SZILÁRD VÁNCSA**  
Vice Director  
Education & Recruitment



**MARIE ANNE ENGH**  
Vice Director  
Science & Methodology



**DÓRA CZAPÁRI**  
Vice Director  
Network & Communication



**RITA NAGY**  
Vice Director  
Integrity & Retention

# COORDINATORS

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The Coordinator team is pivotal to the smooth functioning of the CTM, overseeing various aspects of the program, from managing year-level activities to supervising specific research methodologies. Their leadership fosters collaboration, innovation, and progress across student groups and research projects. They serve as the primary link between students, supervisors, and the administrative team, ensuring clear communication and goal alignment. Through their dedication, the coordinators help create an environment where students thrive academically and professionally.

## STUDENT COORDINATORS

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**JIMIN LEE**  
Year I Coordinator



**ANETT RANCZ**  
Year II Coordinator



**MAHMOUD OBEIDAT**  
Year III Coordinator



**ALEXANDER S. WENNING**  
Year IV-V Coordinator



**CANER TURAN**  
Undergraduate (TDK)  
Coordinator

## METHODOLOGY COORDINATORS

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**MARIE ANNE ENGH**  
Meta-analysis  
Coordinator



**AMIR MAKOLLI**  
Deputy Meta-analysis  
Coordinator



**BRIGITTA TEUTSCH**  
Registry and Clinical trial  
Coordinator



**VERONIKA LILLIK**  
Deputy Registry and  
Clinical trial Coordinator

# OFFICE PERSONNEL

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The Office Personnel form the backbone of the CTM, providing essential administrative support, managing communication, and ensuring seamless coordination of daily operations. Their expertise in areas like HR, international relations, student affairs, and event organization plays a vital role in maintaining the center's efficiency. By handling logistical and organizational challenges, they enable researchers, students, and leaders to focus on their core activities. Their commitment to excellence ensures that the CTM operates smoothly, even in a dynamic, fast-paced environment.



**HENRIETT VÁCZ**  
Head of Secretariat  
HR & Personnel



**ANNA IGNÁCZNÉ FODOR**  
Secretarial Expert  
Back Office



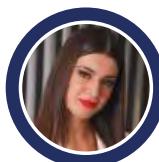
**RÉKA KALTENECKER**  
Secretarial Expert  
Student Affairs



**NÓRA SIMA**  
Secretarial Expert  
International Relations



**NOÉMI STECKEL**  
Senior Event Manager  
Events



**KORINA SCHNEIDER**  
Junior Event Manager  
Events



**DÓRA CZAPÁRI**  
Vice Director  
Network & Communication



**ATTILA MÁRTA**  
Coordinator  
Online Communication



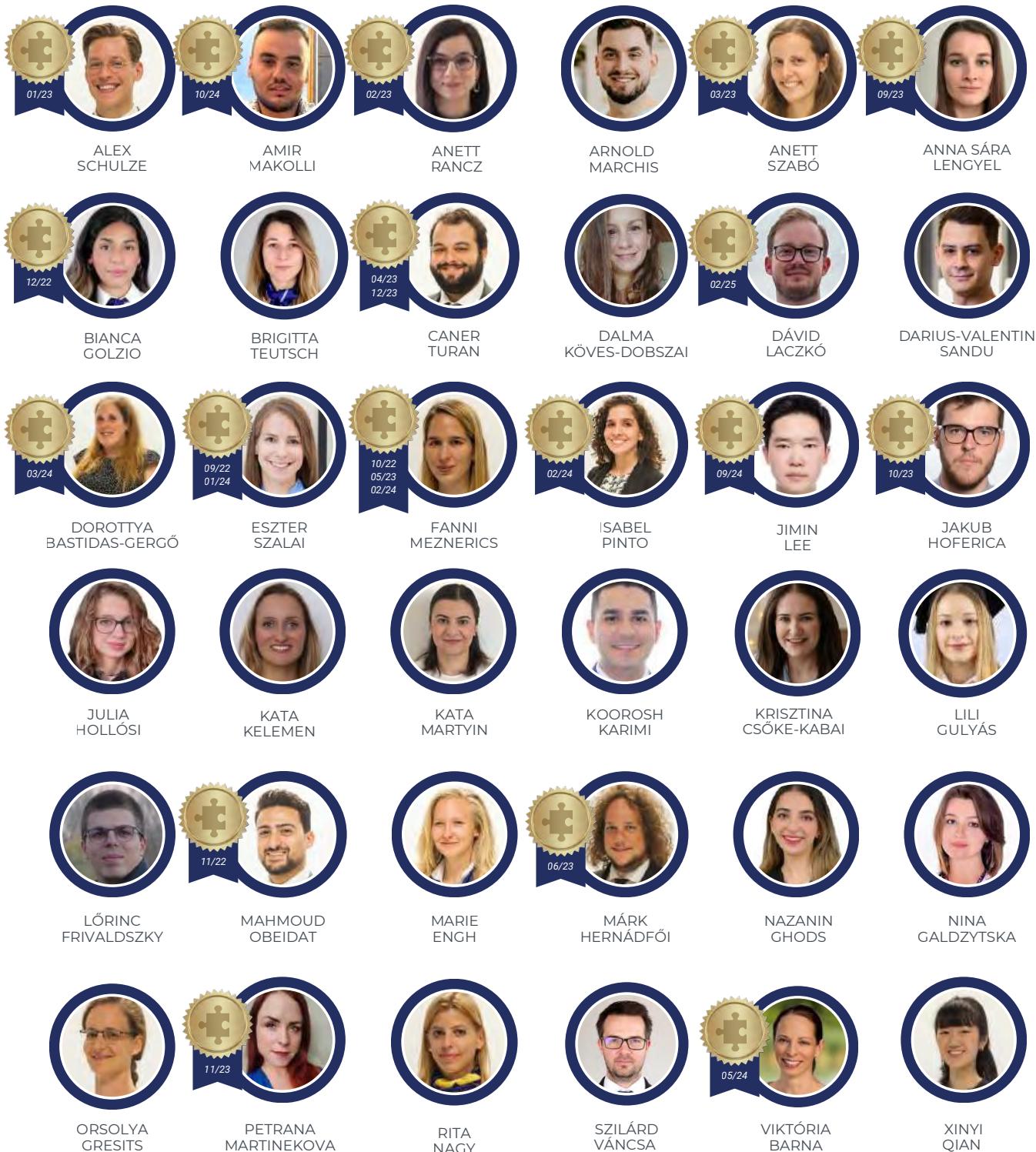
**ZSANETT SÓFALVI**  
Coordinator  
Offline Communication



**VIKTÓRIA KOCSIS**  
Coordinator  
Graphics Design

# SMS TEAM

The Scientific Methodology Support (SMS) team comprises highly skilled individuals dedicated to guiding students and researchers in their scientific endeavors. From refining methodologies to providing hands-on support during project development, the SMS team ensures the academic and professional growth of all participants. Their expertise is instrumental in maintaining the high standards of scientific rigor expected within the CTM. By fostering a supportive environment, the SMS team empowers students to tackle complex research challenges with confidence.



# EDUCATION DEVELOPMENT & STATISTICIAN TEAM

The Education Development and Statistician Team drives the academic innovation at CTM, designing and implementing effective educational frameworks while offering expert statistical support. This team is integral to ensuring that students and researchers have the tools to produce high-quality, data-driven research. They work closely with faculty and students to design courses and methodologies that address evolving scientific needs. Their collaborative approach enhances the educational experience and strengthens the research impact of the Centre.



**ANDREA HARNOS**  
Vice Director  
Biostatistics

## EDUCATION DEVELOPERS



**ZSÓFIA MAGYAR**  
Educational developer



**DALMA BECK**  
Educational developer



**KINGA KINCSŐ HORVÁTH**  
Educational developer



**JUDIT BENCZE**  
Personal assistant

## STATISTICIANS



ANNA  
WALTER



ALEX  
VÁRADI



ÁDÁM  
ZOLCSÁK



BENCE  
SZABÓ



BOGLÁRKA  
SZENTES



DÁNIEL SÁNDOR  
VERES



GERGELY  
AGÓCS



KAREN  
FAZEKAS



MÁRTON  
KISS



MÁTYÁS  
PACZKÓ



MIKLÓT  
BAKONY



NELLI  
FARKAS



NOÉMI  
GÉDE



PÉTER  
HARSFALVI



RÉKA  
TÓTH



SZILVIA  
KISS-DALA



TAMÁS  
KÓI



ZOLTÁN  
SIPOS



ZSOLT  
ABONYI-TÓTH



ZSOLT  
BÍRÓ

# MOST ACTIVE SUPERVISORS

The Most Active Supervisors are the mentors who go above and beyond in guiding students through their academic and research journeys. Their dedication and expertise not only inspire students but also significantly contribute to the center's outstanding scientific output and collaborative culture. By fostering a mentor-student relationship built on trust and mutual respect, they nurture the next generation of medical scientists. Their leadership ensures that students are equipped to tackle complex challenges in translational medicine with confidence and skill.



**PÉTER HEGYI**  
36 students



**ZSOLT MOLNÁR**  
28 students



**NÁNDOR ÁCS**  
18 students



**MIKLÓS GARAMI**  
17 students



**BÁLINT ERŐSS**  
13 students



**GÁBOR VARGA**  
13 students



**ANDRÁS BÁNVÖLGYI** **SZabolcs Várbíró**  
11 students



10 students



**NORBERT KISS**  
9 students



**GÁBOR DURAY**  
6 students

# COLLABORATIONS

WITH INSTITUTES & HOSPITALS



## MOL PROGRAM

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The MOL program aims to promote the dissemination of knowledge in modern clinical science and foster scientific activity in Romania while establishing a collaborative network between Romania and Hungary. In 2024, the program was expanded to include Slovakia and the Czech Republic, further strengthening its regional impact. Additionally, the grant covers tuition fees for participants enrolled in bilateral university or MSc programs.

Eligible applicants must be under the age of 35, hold a degree in health sciences, demonstrate proficiency in medical English at a minimum B2 level, and possess a strong interest in biomedical research.

The selection process is based on a points system that evaluates English language skills, prior scientific contributions, and clinical knowledge, among other criteria. For participants enrolled in bilateral university programs, the training fee is fully covered. Alternatively, those completing the program solely at Semmelweis University may qualify for an additional stipend, supplementing regular government-provided support.

The program has a duration of 12 months, with the possibility of a six-month extension if required. This extension is granted in cases where the participant's research project has not yet been published, during which time the Center for Translational Medicine (CTM) provides methodological and statistical support. Participants are also required to join the Translational Medicine PhD or MSc program at Semmelweis University.

To successfully complete the program, participants must engage actively in group meetings throughout its duration, fulfill all coursework requirements, submit at least one publication to a peer-reviewed journal, and present their research findings at a scientific conference.

### **AWARDED STUDENTS**

**2020/2021:** Stefania Bunduc, Brigitta Teutsch

**2021/2022:** Anett Rancz, Cristina Patoni, Emőke Henrietta Kovács

**2022/2023:** Mihaela Topola, Előd-János Zsigmond

**2023/2024:** Kincső Lórincz, Adolf Lichtfusz

**2024/2025:** Andreea Mădălina Beldie, Eszter Borbényi, Tudor-Cristian Cozma, Anca Cristina Dolhascu, Bernadett Miriam László-Dobai, Arnold Marchis, Sándor Orbán, Hanna Potra, Darius-Valentin Sandu, Kálmán János Zsigmond

**2025/2026:** Alexandra Elena Chichirau, Ildikó Szomorú, Roxana Grigorovici, Theodor Penișoară, Florina Anamaria Marchis, László Kovács, Júlia Albert, Natasa Balázs, Agata Suleja, Marcin Miszczyk



## STIPENDIUM HUNGARICUM

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The Stipendium Hungaricum, the most prestigious higher education scholarship programme of the Hungarian government, was established in 2013. International students with excellent academic records can apply and choose from a wide range of courses. The aim of the scholarship is to support the internationalisation and continuous development of Hungarian higher education, to strengthen the international relations of the academic and research community, and to promote the reputation and competitiveness of Hungarian higher education worldwide.

The programme is based on bilateral education agreements between Hungary and the governments of the sending countries and is already available on five continents in nearly 90 countries and territories, attracting more than 5,000 international students annually. Applicants are offered more than 600 complete training programmes covering all fields of higher education and all levels of training, including part-time and doctoral programmes.

The Stipendium Hungaricum scholarship programme was established by the Hungarian government to promote the internationalisation of Hungarian higher education and to attract excellent foreign students from all over the world who can develop personal and professional ties with Hungary while receiving a high-quality education in the heart of Europe.

### AWARDED STUDENTS

**2021/2022:** Mahmoud Obeidat, Bianca Golzio Navarro Calvancante, Garmaa Gantsetseg

**2022/2023:** Isabel Amorim Pinto das Virgens

**2023/2024:** Amir Makolli, Azamat Bissenov, Bruna Guimaraes, Esra Zhubi, Gökçe Can, Seba Aljomaa, Yasir Nabeel Al-Mohammad

**2025/2026:** Motahareh Pourshahroundi, Vo Doan Minh Nhat

## BILATERAL ACADEMIC PROGRAMS

### INTERNATIONAL COLLABORATIONS IN EDUCATION

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To strengthen international academic collaborations and promote the global dissemination of the translational approach, the Centre for Translational Medicine (CTM) has opened its training framework to international partner universities. This initiative enables foreign universities to delegate their own students or staff members to the Translational Medicine PhD Program or the Master's Program in Clinical Translational Medicine, thereby fostering deeper scientific collaboration, harmonization of research methodologies, and the integration of translational thinking into the educational and clinical practices of partner institutions.

Partner institutions actively participate in the selection of students and the financing of the training. The selected students become members of the Semmelweis University CTM while maintaining their institutional affiliation. Throughout their studies and research activities, they are required to meet the doctoral and master's level academic standards of CTM, and they work according to the unified methodological expectations of the program.

This model not only facilitates knowledge transfer but also empowers participants to become active agents of change, bringing the culture of translational thinking back to their home universities and healthcare institutions. In this way, CTM does not merely provide education but actively contributes to shaping the future international healthcare innovation ecosystem.

In the current academic year, CTM maintains bilateral collaborations with nine partner universities, involving a total of 49 PhD students participating in this unique form of joint training.

## BILATERAL PHD EDUCATIONAL PROGRAM

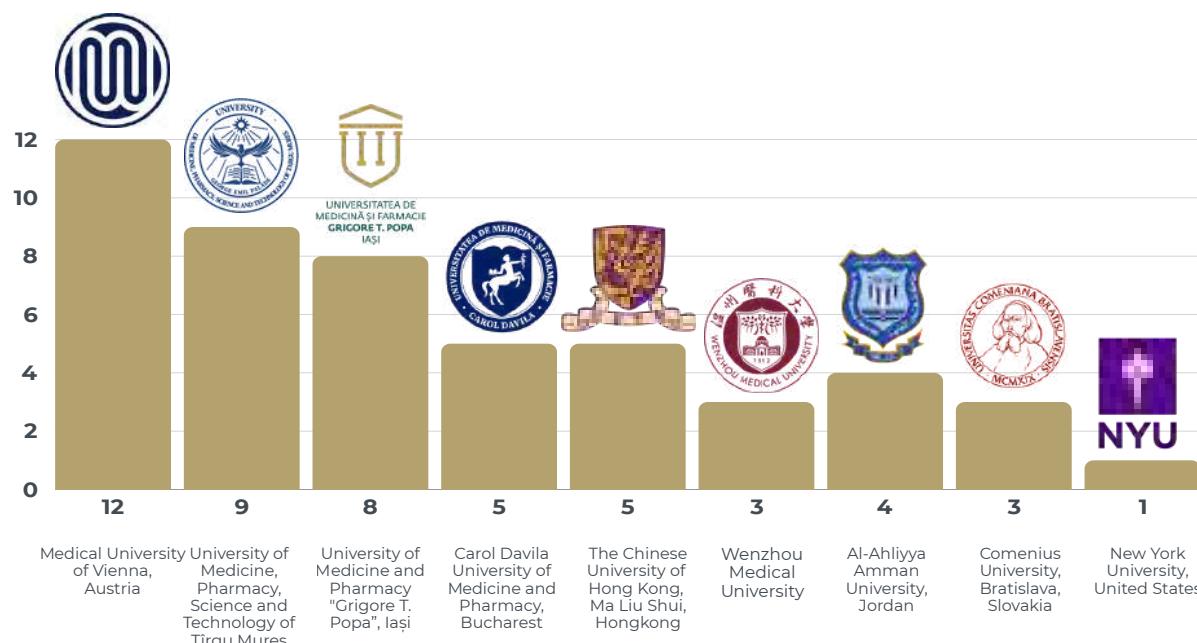
The Bilateral PhD Program forms an integral part of the CTM's Bilateral Academic Programs initiative. Launched in the academic year 2022/2023 within the framework of the Translational Medicine PhD Program, this doctoral training represents a joint program between Semmelweis University and a partner institution, in which the doctoral degree is jointly recognized by both universities.

Applicants are enrolled in the Translational Medicine PhD Program of Semmelweis University and simultaneously admitted to the partner university's doctoral school, allowing them to work under the supervision of two advisors, one from each institution. In terms of research and publication, joint authorship rules apply, ensuring transparent and collaborative scientific work.

PhD students must spend their first academic year at Semmelweis University, while the remaining two to four years may be completed via distance learning. Throughout the program, weekly professional discussions are held with the participation of supervisors from both institutions.

### CONTRIBUTING INSTITUTES

- Comenius University Bratislava, Slovakia
- Grigore T Popa University of Medicine and Pharmacy of Iasi, Romania
- Carol Davila University of Medicine and Pharmacy, Bucharest, Romania
- George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureş
- The Chinese University of Hong Kong
- Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
- Medical University of Vienna, Germany
- New Your University, United States
- Al-Ahliyya Amman University, Jordan



# HOSPITALS & COUNTRIES

The CTM's training programs attract not only the lecturers and students of the four Hungarian medical universities – Semmelweis University, the University of Pécs, the University of Szeged, and the University of Debrecen – but also physicians and healthcare professionals from hospitals across Budapest and the entire country. At present, CTM collaborates with 58 partner healthcare institutions in Hungary.

These partnerships enable clinicians and healthcare professionals to actively engage in translational research and education, ensuring that the experiences gained in everyday clinical practice directly contribute to scientific work, while research results can be rapidly and effectively translated back into patient care.



On an international level, the network continues to expand: CTM has established close professional relations with several leading universities and research institutions, including Wenzhou Medical University (Quzhou, China), Martin University (Slovakia), Carol Davila University of Medicine and Pharmacy (Bucharest, Romania), the Medical University of Vienna (Austria), and New York University (United States).

While the majority of our students come from Hungarian institutions, the number of international participants is increasing year by year. To date, the largest groups of students have joined from Romania, China, Brazil, and Slovakia, and altogether, participants have represented **34** different countries.

Through these international collaborations, CTM's programs have become part of a global knowledge network, building bridges between education, research, and clinical practice, and contributing to the worldwide dissemination of the translational medicine approach.



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# SCIENTIFIC ACHIEVEMENTS

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# SCIENTIFIC SUMMARY

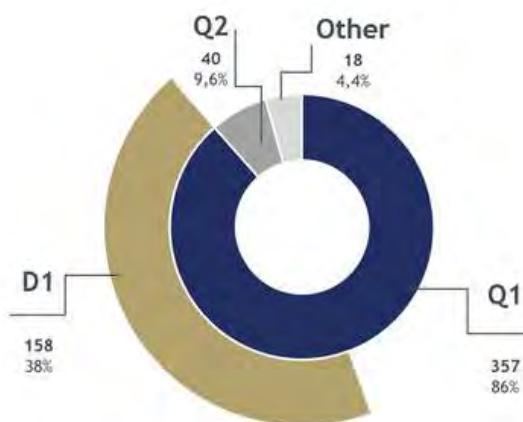


Since the launch of the structured Translational Medicine training model at Semmelweis University, the scientific output has shown a dynamic and continuous growth both in quantity and quality. Between 2021 and 2025, a total of 415 publications were produced within the framework of the programme, reaching a cumulative impact factor of 1993.677, with an average impact factor of 4.804 per paper.

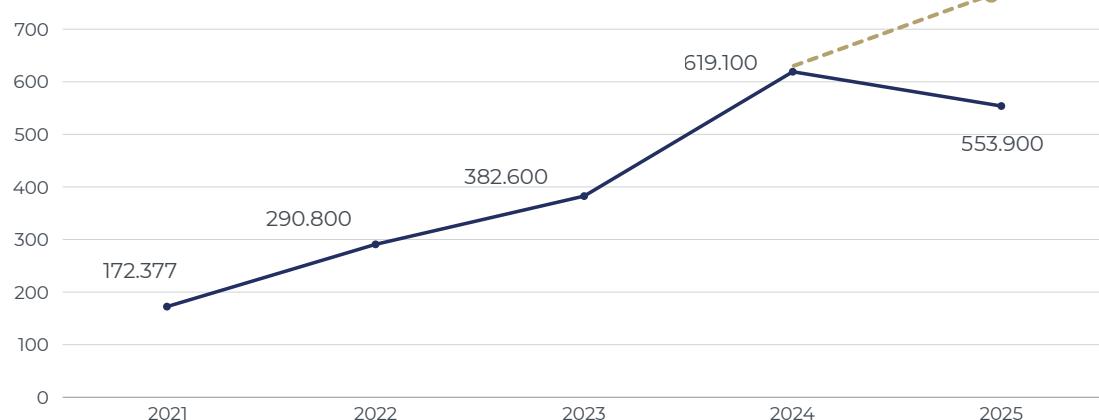
The annual overall impact factor increased significantly, rising from 172.377 in 2021 to a projected 830 by 2025, demonstrating the accelerating scientific productivity of the programme. The number of publications also grew steadily: from 20 papers in 2021 to 117 papers in 2025, indicating a strong expansion in active research capacity.

In terms of quality, the data show an outstanding performance: 86% of the publications were published in Q1-ranked journals, and 38% of all outputs reached D1 classification, reflecting high international visibility and top-tier scientific recognition. An additional 9.6% appeared in Q2 journals, while only 4.4% fell into other categories, confirming that the vast majority of research outcomes meet the highest international standards.

This trend clearly indicates that the Translational Medicine ecosystem at Semmelweis University not only increases the volume of research output but also shifts scientific activity towards excellence, building a high-impact publication culture aligned with global academic expectations.



**Predicted IF  
09.2025**  
830.000

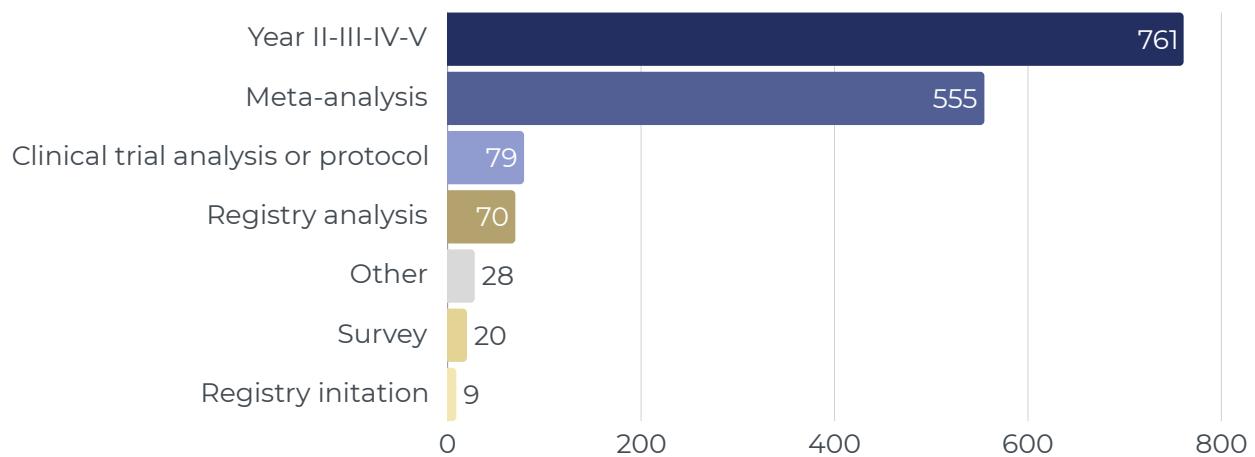


AVERAGE IF	8.618	4.340	4.298	5.033	4.734
PUBLICATIONS	20	67	89	123	117



# STATISTICS OF STUDENT PUBLICATIONS

## YEAR II-III-IV-V PROJECTS



The number of projects is continuously increasing. At the start of the 2025/2026 academic year, there were **761** projects. The highest number of projects were meta-analyses. However, the number of registry analyses and randomized controlled trial protocols are also increasing.

The results of the TM PhD training is also visible in the fact that all the publications by the PhD students were published in journals with at least Q1 ranking. However, almost 40% were published in D1 journals.



# SCIENTIFIC OUTPUT

## TOP PUBLICATIONS OF THE CENTRE

As a result of our high level scientific work and research, we would like to represent our five article with the highest impact factor from each year, from 2016 until now. To see the TOP5 articles each year on PubMed, click on their title.

### 2025

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Academia Europaea's guidelines for the visualization of clinical outcomes  
*Nature Medicine*, IF: **50,0**

Hemodynamic Status as a Determinant Factor of Optimal Endoscopy Timing in Upper Gastrointestinal Bleeding: Results From an International Survey of 533 Clinicians  
*Gastroenterology*, IF: **25,1**

Occurrence and Time of Onset of Intraventricular Hemorrhage in Preterm Neonates: A Systematic Review and Meta-Analysis of Individual Patient Data  
*JAMA Pediatrics*, IF: **18,0**

Comparative effectiveness of different therapies for *Clostridioides difficile* infection in adults: a systematic review and network meta-analysis of randomized controlled trials  
*Lancet Regional Health*, IF: **13,0**

Effect of proton pump inhibitors on occlusion of lumen-apposing metal stents and rate of endoscopic necrosectomies  
*Endoscopy*, IF: **12,8**

### 2024

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Systems education can train the next generation of scientists and clinicians  
*Nature Medicine*, IF: **50,0**

Magnetic Resonance Imaging in Prostate Cancer Screening: A Systematic Review and Meta-Analysis  
*JAMA Oncology*, IF: **20,1**

Burden of Childhood Cancer and the Social and Economic Challenges in Adulthood  
*JAMA Pediatric*, IF: **18,0**

Less marginal bone loss around bone-level implants restored with long abutments: A systematic review and meta-analysis  
*Periodontology 2000*, IF: **15,7**

Obesity paradox in older sarcopenic adults - a delay in aging: A systematic review and meta-analysis  
*Ageing Research Reviews*, IF: **12,4**

## 2023

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Detailed characteristics of post-discharge mortality in acute pancreatitis  
*Gastroenterology*, IF: **29,4**

Extended infusion of  $\beta$ -lactams significantly reduces mortality and enhances microbiological eradication in paediatric patients: a systematic review and meta-analysis  
*eClinicalMedicine*, IF: **9,6**

Procalcitonin-guided antibiotic therapy may shorten length of treatment and may improve survival—a systematic review and meta-analysis  
*Critical Care*, IF: **8,8**

Extracorporeal hemoabsorption in critically ill COVID-19 patients on VV ECMO: the CytoSorb therapy in COVID-19 (CTC) registry  
*Critical Care*, IF: **8,8**

Time-trend treatment effect of Cardiac Resynchronization Therapy with or without Defibrillator on Mortality -A Systematic Review And Meta-Analysis  
*Europace*, IF: **7,9**

## 2022

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Alcohol consumption and smoking dose-dependently and synergistically worsen local pancreas damage  
*Gut*, IF: **24,5**

Association of Body Mass Index With Clinical Outcomes in Patients With Cystic Fibrosis: A Systematic Review and Meta-analysis  
*Jama Network Open*, IF: **13,8**

MIF is a Common Genetic Determinant of COVID-19 Symptomatic Infection and Severity  
*QJM-An International Journal Of Medicine*, IF: **13,3**

Dietary supplementation of transient receptor potential vanilloid-1 channel agonists reduces serum total cholesterol level: a meta-analysis of controlled human trials  
*Critical Reviews In Food Science And Nutrition*, IF: **10,2**

Clinical Frailty Scale (CFS) indicated frailty is associated with increased in-hospital and 30-day mortality in COVID-19 patients: a systematic review and meta-analysis  
*Annals Of Intensive Care*, IF: **8,1**

## 2021

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Accelerating the translational medicine cycle: the Academia Europaea pilot  
*Nature Medicine*, IF: **87,241**

Critical thresholds: key to unlocking the door to the prevention and specific treatments for acute pancreatitis  
*Gut*, IF: **31,793**

Design and validation of a patient-reported outcome measure scale in acute pancreatitis: the PAN-PROMISE study  
*Gut*, IF: **31,793**

Metabolic signature might be an option to identify patients with early CP  
*Gut*, IF: **31,793**

Uncertainty in the impact of liver support systems in acute-on-chronic liver failure: a systematic review and network meta-analysis  
*Annals Of Intensive Care*, IF: **10,318**

## 2020

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Alcohol-dependent effect of PRSS1-PRSS2 haplotype in chronic pancreatitis  
*Gut*, IF: **23,059**

Novel p.K374E variant of CPA1 causes misfolding-induced hereditary pancreatitis with autosomal dominant inheritance  
*Gut*, IF: **23,059**

Lipotoxicity and Cytokine Storm in Severe Acute Pancreatitis and COVID-19  
*Gastroenterology*, IF: **22,682**

Analysis of 1060 Cases of Drug-Induced Acute Pancreatitis  
*Gastroenterology*, IF: **22,682**

The negative impact of comorbidities on the disease course of COVID-19  
*Intensive Care Medicine*, IF: **17,44**

## 2019

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Resection of pancreatic cancer in Europe and USA: an international large-scale study highlighting large variations

*Gut*, IF: **19,819**

Genetic determinants of telomere length and risk of pancreatic cancer: A PANDoRA study

*International Journal Of Cancer*, IF: **5,145**

Germline BRCA2 K3326X and CHEK2 I157T mutations increase risk for sporadic pancreatic ductal adenocarcinoma

*International Journal Of Cancer*, IF: **5,145**

Genetic variability of the ABCC2 gene and clinical outcomes in pancreatic cancer patients

*Carcinogenesis*, IF: **4,603**

Spilanthol Inhibits Inflammatory Transcription Factors and iNOS Expression in Macrophages and Exerts Anti-inflammatory Effects in Dermatitis and Pancreatitis

*International Journal Of Molecular Sciences*, IF: **4,556**

## 2018

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Guts and Gall: Bile Acids in Regulation of Intestinal Epithelial Function in Health and Disease

*Physiological Reviews*, IF: **24,25**

Mitochondrial Dysfunction, Through Impaired Autophagy, Leads to Endoplasmic Reticulum Stress, Deregulated Lipid Metabolism, and Pancreatitis in Animal Models

*Gastroenterology*, IF: **19,809**

Genome-wide association study identifies inversion in the CTRB1-CTRB2 locus to modify risk for alcoholic and non-alcoholic chronic pancreatitis

*Gut*, IF: **17,943**

Genome-wide meta-analysis identifies five new susceptibility loci for pancreatic cancer

*Nature Communications*, IF: **11,878**

Steroid but not Biological Therapy Elevates the risk of Venous Thromboembolic Events in Inflammatory Bowel Disease: A Meta-Analysis

*Journal Of Crohns & Colitis*, IF: **7,827**

## 2017

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Smoking and Drinking Synergize in Pancreatitis: Multiple Hits on Multiple Targets  
*Gastroenterology*, IF: **20,773**

Misfolding cationic trypsinogen variant p.L104P causes hereditary pancreatitis  
*Gut*, IF: **17,016**

Novel PRSS1 Mutation p.P17T Validates Pathogenic Relevance of CTRC-Mediated Processing of the Trypsinogen Activation Peptide in Chronic Pancreatitis  
*American Journal Of Gastroenterology*, IF: **10,231**

Transpancreatic sphincterotomy has a higher cannulation success rate than needle-knife precut papillotomy - a meta-analysis  
*Endoscopy*, IF: **6,629**

The formin DAAM is required for coordination of the actin and microtubule cytoskeleton in axonal growth cones  
*Journal Of Cell Science* 0021-9533 1477-9137, IF: **4,401**

## 2016

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Ca2+ toxicity and mitochondrial damage in acute pancreatitis: translational overview  
*Philosophical Transactions of the Royal Society B - Biological Sciences*, IF: **5,846**

CFTR: A New Horizon in the Pathomechanism and Treatment of Pancreatitis  
*Reviews Of Physiology Biochemistry and Pharmacology*, IF: **4,769**

Bile as a key aetiological factor of acute but not chronic pancreatitis: a possible theory revealed  
*Journal Of Physiology-London*, IF: **4,739**

Pathogenic cellular role of the p.L104P human cationic trypsinogen variant in chronic pancreatitis  
*American Journal Of Physiology: Gastrointestinal and Liver Physiology*, IF: **3,468**

A novel, protective role of ursodeoxycholate in bile-induced pancreatic ductal injury  
*American Journal of Physiology: Gastrointestinal and Liver Physiology*, IF: **3,468**

A group of diverse students, both boys and girls, are sitting on bleachers in a school setting. They are all smiling and have their hands raised in the air, suggesting excitement or participation in a group activity. The background is slightly blurred, focusing on the students in the foreground.

# INTRODUCING OUR **STUDENTS**





# INFORMATION GUIDE

## AWARDS

To reward our best performing students and colleagues, we created monthly awards, which means, that based on the given month, the most dedicated and hardworking members are chosen and given a certificate and an engraved glass statue. Throughout the book you will see little badges beside the picture of a student or a colleague, which means that the person has already received that award. Here you can see what kind of awards we have. The numbers on the ribbons referring to the year and month when the award was received.



**STUDENT**  
of the month



**SUPERVISOR**  
of the month



**STAFF**  
of the month

## ONLINE STUDENT PROFILES



By scanning the QR codes, (or clicking on them in the online version) you can access the profile of the students on our website. Students who already participated on Progress Reports and presented their research progress, videos of the presentation are available there. As we progress through the year, you'll find the videos of our newer students as well.

## PUBLICATIONS

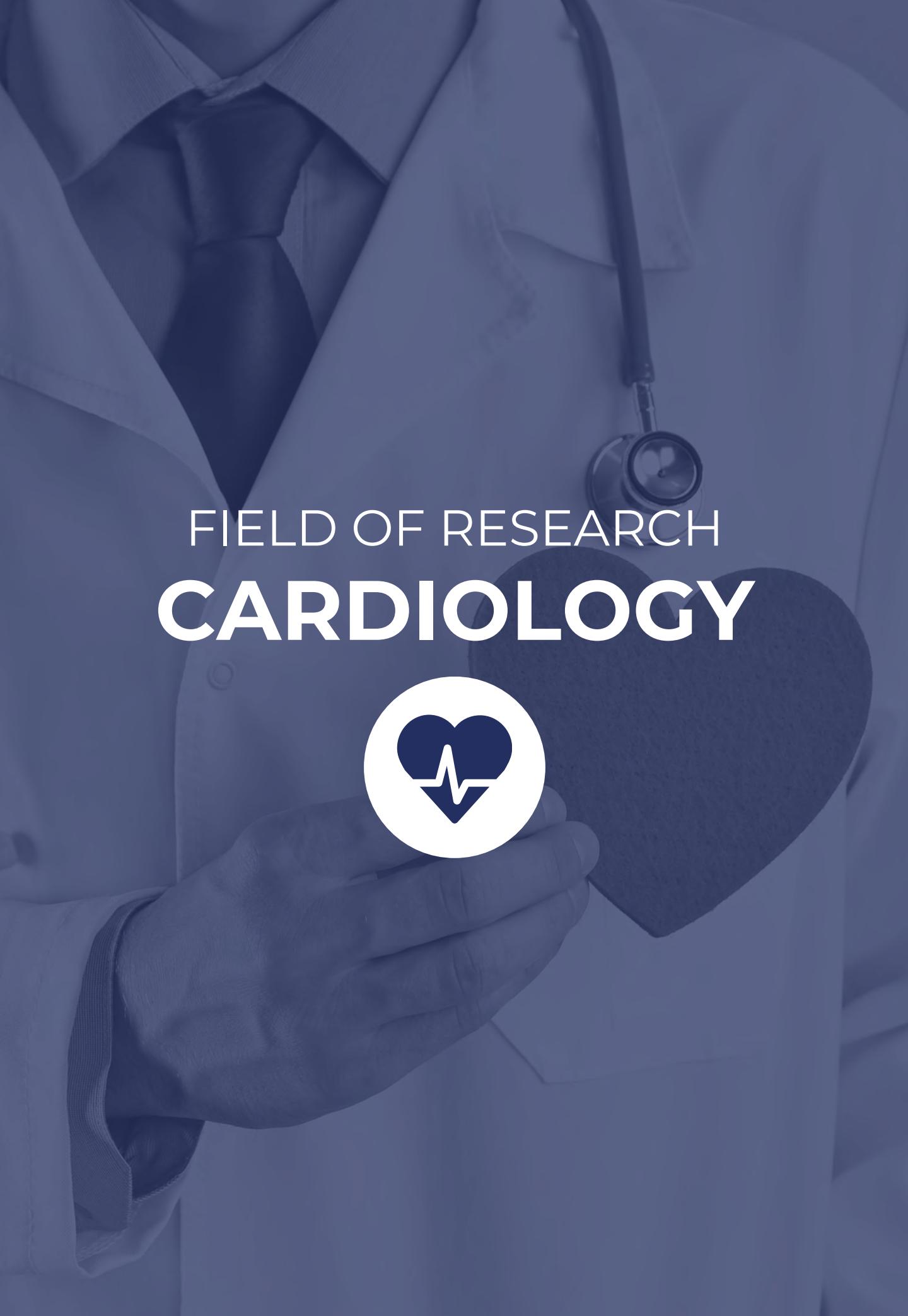


For those students who already have publications, the articles are shown on their profiles with the name of the journal they're published, the quality and the impact factor as well. In the online version if you click on the title of the publication, you'll be directed to the abstract of the given article.



# CAMPUS **BUDAPEST**





FIELD OF RESEARCH  
**CARDIOLOGY**





# RESEARCH FIELD CARDIOLOGY

The Cardiology Research Group brings together doctoral candidates engaged in cutting-edge research across cardiovascular medicine, surgery, and pharmacology. Reflecting the rapid advancement of this field, the group's work integrates clinical innovation, biomedical technology, and translational science to improve cardiovascular care and patient outcomes. Research topics include ischemic heart disease, heart failure, arrhythmology, echocardiography, valve repair, and cardiac resynchronization therapy. Further studies explore coronary interventions, cardiovascular surgery, radiation exposure in cardiac imaging, and the use of biomarkers and drug-eluting stents for diagnosis and therapy optimization. Through clinical trials, imaging research, and pharmacological studies, the group aims to refine diagnostic tools, enhance treatment strategies, and contribute to the prevention and management of cardiovascular diseases — one of the most rapidly developing areas in modern medicine.

## SUPERVISORS

12

★ TOP SUPERVISORS ★



**GÁBOR DURAY**

4 student

Anikó Görbe (*Supervisor of the month: 2025 March*), Annamária Kosztin, Attila Kovács, Béla Merkely, Dan Dobrenau, Endre Zima (*Supervisor of the month: 2022 April*), István Ferenc Édes, Judit Papp, Péter Ferdinandy (*Supervisor of the month: 2024 April*), Renáta Papp (*Supervisor of the month: 2024 December*), Zsuzsanna Mihály

## STUDENTS

14

**YEAR I** Chenxu (Lily) Zhao, Olaf Ziolkiewicz, Tom Brand

**YEAR II** Bernadett Miriam László-Dobai, Judit Sára Liebermann, Sevda Aliyeva, Tudor-Cristian Cozma

**YEAR III** Adolf Lichtfusz, Brúnó Bánk Balázs, Nina Galdzytska

**YEAR IV** Réka Ehrenberger, Richárd Masszi

**YEAR V** Boglárka Veres, Boldizsár Kiss



## CHENXU (LILY) ZHAO

THE CHINESE UNIVERSITY OF HONG KONG

### TOPIC

AI Enhanced Echocardiography

### VISION

Advancing cardiology with the power of artificial intelligence.



### PROJECT 1

Diagnostic Accuracy of AI-enabled Echocardiogram Interpretation for Valvular Heart Disease: A Systematic Review and Meta-analysis

### EDUCATION

medical doctor

### SUPERVISOR(S)

Attila Kovács

### YEAR I

### MSC

AGE 28

### MISSION

To revolutionize the cardiovascular diseases by integrating artificial intelligence into echocardiography.



## OLAF ZIOLKIEWICZ

SEMELWEIS UNIVERSITY

### TOPIC

New Insights into Intraoperative Monitoring

### VISION

Eliminate cerebral hypoperfusion during high-risk surgery with NIRS.



### PROJECT 1

Investigating the Effect of NIRS-guided Intraoperative Intervention on Neurological Outcomes in Cardiovascular Surgeries: A Systematic Review and Meta-analysis

### EDUCATION

medical student

### PROJECT 2

Investigating the Diagnostic Accuracy of Different Imaging Modalities on Completeness of Circle of Willis: A Systematic Review and Meta-analysis

### SUPERVISOR(S)

Zsuzsanna Mihály

### YEAR I

### MD-PHD

AGE 29

### MISSION

To identify the context in which NIRS provides the greatest benefit, and translate these findings into guidelines.



## BERNADETT MIRIAM LÁSZLÓ-DOBAI

TÂRGU MURES EMERGENCY CLINICAL COUNTY HOSPITAL

### TOPIC

Management of cardiac arrhythmias and conductive disorders.

### VISION

World with less Heart Failure.



### PROJECT 1

Comparing the safety and effectiveness of pacing modalities in patients with bradycardia: systematic review and meta-analysis.

### EDUCATION

medical doctor

### PROJECT 2

Investigating the incidence and pattern of atrial fibrillation after flutter ablation: systematic review and meta-analysis.

### SUPERVISOR(S)

Gábor Duray, Dan Dobrenau, Péter Bógyi

### YEAR II

### PHD

AGE 28

### MISSION

Reducing Heart Failure incidence through adequate pacing.



## JUDIT SÁRA LIEBERMANN

FULL TIME PHD STUDENT

### TOPIC

Strategies in coronary artery bypass grafting in patients with acute myocardial infarction.

### VISION

Highest standard of care for patients with Acute Coronary Syndrome.



### PROJECT 1

Investigating the optimal timing of coronary artery bypass grafting in patients with acute myocardial infarction: systematic review and meta-analysis.

### EDUCATION

medical doctor

### PROJECT 2

Investigating the Effect of Body Mass Index on Postoperative Complications in Patients Undergoing Open Heart Surgery: A Systematic Review and Meta-analysis.

### SUPERVISOR(S)

Gábor Duray

### YEAR II

### PHD

AGE 31

### MISSION

Comparing outcomes across different timing strategies.

### E-MAIL

liebermannjudit@gmail.com



## SEVDA ALIYEVA

MD/PHD STUDENT

### TOPIC

New insights into the Cardiometabolic Health and Safety of selected Drug classes.

### VISION

Enhanced Cardioprotective strategies.



### PROJECT 1

Investigating the effect of MAO-A and MAO-B Inhibition on Cardiovascular outcomes in Animal models: systematic review and meta-analysis.

### PROJECT 2

Investigating the Effect of MAO-A and MAO-B Inhibition on Metabolic Outcomes in Animal Models: A Systematic Review and Meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Péter Ferdinand, Anikó Görbe

### YEAR II

### PHD

AGE 24

### MISSION

Investigating how existing treatments can be further optimized to improve cardiometabolic health.



## TUDOR-CRISTIAN COZMA

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY



### TOPIC

Pharmacotherapy considerations in inflammaging.

### VISION

Prolonged, healthy and independent lives for the elderly.

### PROJECT 1

Investigating The Effect Of Statins On Development Of Sarcopenia. A Systematic Review And Meta-analysis.

### PROJECT 2

Assessment of the Efficacy and Safety of New Anti-Diabetic Drugs on Improvement of Inflammatory Profile. A Systematic Review and Meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Péter Ferdinand, Renáta Papp

### YEAR II

### PHD

AGE 26

### MISSION

Conducting research unveiling the role of common medications in reducing the burden of inflammaging.

### PROJECT 3

The Evaluation Of Inflammation And Hematological-derived Prognostic Risk Indexes In Predicting Out-of-hospital Mortality In Covid-19 Patients: A Retrospective Study.

### E-MAIL

cozmatudor19@gmail.com



## ADOLF LICHTFUSZ

HUNGARIAN DEFENSE FORCES MEDICAL CENTRE



### TOPIC

Management strategies for patients with heart failure.

### VISION

Heart failure patients with an individualised treatment strategy.

### PROJECT 1

Assessing the effectiveness of transcatheter mitral valve repair on left ventricular reverse remodeling in heart failure: a systematic review and meta-analysis.

### PROJECT 2

Epicardial Ultrasound in Cardiac Surgery: Reducing Perioperative Stroke Risk Through Improved Aortic Assessment

### EDUCATION

medical doctor

### SUPERVISOR(S)

Gábor Duray, Judit Papp

### YEAR III

### PHD

AGE 27

### MISSION

Clarify the best treatment plan for each subgroup of patients.

### E-MAIL

adolf.lichtfusz@gmail.com



## BRÚNÓ BÁNK BALÁZS

HEART AND VASCULAR CENTER, SEMMELWEIS UNIVERSITY



### TOPIC

Novel methods to optimize cardiac catheterization.

### VISION

Enhance the safety of the cardiac catheterization laboratory team by reducing occupational hazards.

### PROJECT 1

Investigating the risk of radiation exposure for different personnel during fluoroscopy-guided cardiovascular procedures: a systematic review and meta-analysis. *Phys Med, Q1, IF: 2.700*

### PUBLISHED

### PROJECT 2

Head Exposure Assessment during simulated use of protective gear in interventional catheterization laboratory (HEADS-UP): a cross-sectional dosimetry study

### EDUCATION

medical doctor

### SUPERVISOR(S)

Édes István Ferenc

### YEAR III

### PHD

AGE 26

### MISSION

Provide forward-looking and novel scientific results in occupational radiation safety.

### E-MAIL

balazsbrunob@gmail.com



## NINA GALDZYTSKA

MD/PHD STUDENT

### TOPIC

The role of chronic systemic inflammation in cardiovascular pathology.

### PROJECT 1

Improve the treatment, diagnosis and risk assessment of patients with chronic inflammation: a systematic review and meta-analysis.



### VISION

Improve approaches to the diagnosis and treatment of patients with chronic systemic inflammation.

### PROJECT 2

Investigating the role of inflammatory biomarkers in the development of instant restenosis in patients who underwent percutaneous coronary intervention: a systematic review and meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Gábor Duray

### YEAR III

### PHD

AGE 35

### MISSION

Study inflammatory cytokines and their role in patients with chronic inflammation

### E-MAIL

n.galdzytska@gmail.com



## RÉKA EHRENBERGER

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

Cardiology - Coronary heart disease

### VISION

To improve patient care in Hungary and worldwide through evidence-based innovative healthcare solutions

### PROJECT 1

Investigating the effectiveness of treatment modalities for calcified coronary lesions: a systematic review and meta-analysis. *J Clin Med*, Q1, IF: 3.900

### PUBLISHED

### PROJECT 2

Comparison of compression and non-compression based hemostasis devices in case of brachial arterial puncture: protocol of a multicentre randomized trial



### EDUCATION

medical doctor

### SUPERVISOR(S)

István Ferenc Édes

### YEAR IV

### PHD

AGE 27

### MISSION

To provide forward-looking and novel scientific results in coronary artery and vascular treatment

### PROJECT 3

Comparing the safety and efficacy of left ventricular unloading strategies for veno-arterial ECMO in patients with cardiogenic shock: systematic review and meta-analysis

### E-MAIL

reka.ehrenberger@gmail.com



## RICHÁRD MASSZI

HEART AND VASCULAR CENTRE, SEMMELWEIS UNIVERSITY

### TOPIC

Cardiology - Health failure

### VISION

To discover every single detail that can influence the outcome of a disease.

### PROJECT 1

Predictive value of scar burden assessed by MRI on sudden cardiac death in cardiac resynchronization therapy patients: a systematic review and meta-analysis. *Clin Res Cardiol*, D1, IF: 5.000

### PUBLISHED

### PROJECT 2

Effectiveness of non-furosemide drugs with diuretic effect in the management of acute heart failure: a systematic review and meta-analysis



### EDUCATION

medical doctor

### SUPERVISOR(S)

Annamária Kosztin

### YEAR IV

### PHD

AGE 30

### MISSION

Finding more personalised treatment for heart failure patients.

### E-MAIL

masszi.richard@gmail.com



## BOGLÁRKA VERES

HEART AND VASCULAR CENTRE, SEMMELWEIS UNIVERSITY

### TOPIC

Interventional cardiology - Cardiac resynchronization

### VISION

To help heart failure patients receive the most effective, evidence-based therapy.

### PROJECT 1

The benefits of adding a defibrillator to cardiac resynchronization therapy: a systematic review and meta-analysis. *Europace*, Q1, IF: 6.100

### PUBLISHED

### PROJECT 2

Continuous invasive remote monitoring in patients with heart failure compared to regular in-clinic follow-up: a systematic review and meta-analysis. *J Clin Med*, Q1, 2.900



### EDUCATION

medical doctor

### SUPERVISOR(S)

Béla Merkely, Annamária Kosztin

### YEAR V

### PHD

AGE 29

### MISSION

To conclude from observations, which we can include in everyday clinical practice.

### E-MAIL

boglarka.sara.veres@gmail.com



## BOLDIZSÁR KISS

HEART AND VASCULAR CENTRE, SEMMELWEIS UNIVERSITY

### TOPIC

Cardiology - Resuscitation



### PROJECT 1

Investigation of prediction scores in out-of-hospital cardiac arrest: a systematic review and meta-analysis  
*PLoS One, Q1, IF: 3.700*

### EDUCATION

medical doctor

### PUBLISHED

### PROJECT 2

### VISION

The best medical knowledge and practice needs a constant update by scientific research.

### SUPERVISOR(S)

Endre Zima

YEAR V

PHD

AGE 29

### MISSION

Develop and refine intensive care strategies for resuscitated patients.

### PROJECT 3

Prophylactic versus proven infection driven antibiotics after successful resuscitation: a pilot randomized controlled trial

### E-MAIL

b.kiss96@gmail.com



FIELD OF RESEARCH  
**CRITICAL CARE**





# RESEARCH FIELD CRITICAL CARE

The Critical Care Research Group brings together a large and active community of doctoral candidates dedicated to improving outcomes in some of the most complex and time-sensitive areas of medicine. Their research encompasses the full spectrum of anesthesiology, intensive care, and emergency medicine, addressing both the physiological and technological aspects of critical illness management. Key research areas include mechanical ventilation, sepsis, shock, organ dysfunction, anesthesia, fluid resuscitation, acid-base and hemodynamic management, and perioperative care. The group also investigates antimicrobial and anticoagulant therapy, microbiome alterations in critical illness, and the unique challenges posed by COVID-19 and other infectious diseases. Through clinical studies, translational research, and data-driven analyses, the group seeks to enhance diagnostic accuracy, optimize therapeutic interventions, and improve survival and recovery among critically ill patients. Their collective work contributes to advancing evidence-based practice in anesthesiology and intensive care medicine.

## SUPERVISORS

14

★ TOP SUPERVISORS ★



**ZSOLT MOLNÁR**  
22 student



**LÁSZLÓ ZUBEK**  
10 student

András Lörk, András Lovas, Ákos Csomós, Bánk Fenyves (*Supervisor of the month: 2024 December*), Caner Turan, Domonkos Trásy, Emőke Henrietta Kovács, Endre Zima (*Supervisor of the month: 2022 April*), Krisztina Madách, Krisztián Tánczos, Márton Papp, Zoltán Ruszkai

## STUDENTS

24

**YEAR I** Balázs Füle, Emese Lilla Major-Eisler, Ildikó Pálma Szomorú, Mohammed Emad Elshafie, Patricia Natalie Schneidereit, Tamás Tóth, Yusif Ismayilov

**YEAR II** Gábor Nagy, Julia Hollósi, Krisztina Csöke-Kabai, Liliána Nagy, Péter Bakos, Petra Réka Tóth, Tünde Szalay-Frank, Zsuzsanna Weber

**YEAR III** Eszter Szőke, Ildikó Szántó, Levente Prácsér, Tímea Mátyási-Dombi

**YEAR IV** Dilan Márk Karim, Gabriella Anna Rapszky, Márton Papp, Nikolett Kiss

**YEAR V** Emőke Henrietta Kovács



## BALÁZS FÜLE

SEMMELWEIS UNIVERSITY, DEPT. OF ANESTHESIOLOGY AND INTENSIVE CARE

**TOPIC**

Investigating the Effectiveness and Safety of Intraoperative Diuretics in Renal Surgery

**VISION**

Optimizing patient outcomes throughout perioperative care.

**YEAR I****PHD**

AGE 50

**MISSION**

To evaluate intraoperative diuretic efficacy in renal surgeries.

**PROJECT 1**

Investigating the Effectiveness and Safety of Intraoperative Diuretics in Kidney Transplantation: A Systematic Review and Meta-analysis

**PROJECT 2**

Investigating the Effectiveness and Safety of Intraoperative Diuretics in Nephron Sparing Surgery: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Zsolt Molnár, László Zubek

**E-MAIL**

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## EMEZE LILLA MAJOR-EISLER

SEMMELWEIS UNIVERSITY, DEPT. OF ANESTHESIOLOGY AND INTENSIVE CARE

**TOPIC**

Optimizing Neuroprotection during Neurosurgical Interventions

**VISION**

Improve postoperative outcomes in neurosurgical patients.

**YEAR I****PHD**

AGE 24

**MISSION**

Explore the optimal anesthetic technique of cranial surgery.

**PROJECT 1**

Neurocognitive Outcomes after Neurosurgery: Propofol-based versus Inhalational Anesthesia: A Systematic Review and Meta-analysis

**PROJECT 2**

Propofol Post Conditioning Effects on Ischemic Reperfusion Injury in Carotid Endarterectomy: Protocol of a Randomized Controlled Trial

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Zsolt Molnár, Krisztián Tánczos

**E-MAIL**

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## ILDIKÓ PÁLMA SZOMORÚ

INSTITUTUL DE URGENTA DE BOLI CARDIOVASCULARE SI TRANSPLANT, TÂRGU MUREŞ, ROMANIA

**TOPIC**

Inflammatory Biomarker-Guided Management of Infections in Critically Ill Patients

**VISION**

No unnecessary antibiotic treatment in critically ill patients.

**YEAR I****PHD**

AGE 38

**MISSION**

Identifying early diagnostic markers for infection.

**PROJECT 1**

Investigating the Diagnostic Accuracy of Inflammatory Biomarkers in Postoperative Infections after Pediatric Congenital Heart Surgery: A Systematic Review and Meta-analysis

**PROJECT 2**

Multimodal, Individualized Approach in Multiple Organ Dysfunction Caused by Acute Pancreatitis to Reduce Unnecessary Antibiotic Treatment: Protocol of a Randomised Controlled Clinical Trial

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Zsolt Molnár, László Zubek

**E-MAIL**

szomoruip@gmail.com



## MOHAMMED EMAD ELSHAFAI

SEMMELWEIS UNIVERSITY

**TOPIC**

Optimizing Airway and Acid-Base Management Strategies in Critical Illness

**VISION**

Personalized critical care will transform survival into recovery.

**YEAR I****MD-PHD**

AGE 24

**MISSION**

Develop precise physiological strategies for critically ill patients.

**PROJECT 1**

Investigating the Efficacy and Safety of Sodium Bicarbonate Supplementation in Severe Metabolic Acidosis in Critically Ill Patients: A Systematic Review and Meta-analysis

**PROJECT 2**

Investigating the Efficacy and Safety of Early versus Late Tracheostomy on Clinical Outcomes in Critically Ill Patients: A Systematic Review and Meta-analysis

**EDUCATION**

student

**SUPERVISOR(S)**

Zsolt Molnár, Caner Turan

**E-MAIL**

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## PATRICIA NATHALIE SCHNEIDEREIT

PHD STUDENT

**TOPIC**

The Effects of Neuromuscular Modulation on Mechanically Ventilated Patients in Critical Care

**PROJECT 1**

Investigating the Effectiveness of Neuromuscular Modulation in Mechanically Ventilated Patients in Critical Care: A Systematic Review and Meta-analysis

**EDUCATION**

student

**VISION**

Critical care will treat people, not illnesses.

**PROJECT 2**

Assessing the Safety and Efficacy of Diaphragm Thickening Fraction - Guided Extubation: A Randomized Controlled Trial Protocol

**SUPERVISOR(S)**

Zsolt Molnár, Caner Turan

**YEAR I****PHD**

AGE 35

**MISSION**

Provide patient-centered interventions for patient-specific outcomes.



## TAMÁS TÓTH

BAJCSY-ZSILINSZKY HOSPITAL AND CLINIC, BUDAPEST, HUNGARY

**TOPIC**

The Effects of Modulating Dysregulated Immune Response in Critically Ill Patients

**VISION**

To deliver the most precise therapy for every critically ill patient.

**PROJECT 1**

Investigating the Effectiveness and Safety of Microcirculation-guided Resuscitation in Shock: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Zsolt Molnár

**YEAR I****PHD**

AGE 34

**MISSION**

To integrate microcirculation-guided therapy into everyday critical care practice.



## YUSIF ISMAYILOV

SEMMELWEIS UNIVERSITY

**TOPIC**

Risk Stratification Strategies in Critical Care for Hemodynamically Unstable and Frail Patients

**VISION**

To transform critical care worldwide by making evidence-based tools part of everyday practice.

**PROJECT 1**

Investigating the Predictive Value of Vasoactive-Inotropic Score for Mortality and Organ Support in Adults with Shock: A Systematic review and Meta-analysis

**EDUCATION**

student

**SUPERVISOR(S)**

Zsolt Molnár, Caner Turan

**YEAR I****MD-PHD**

AGE 24

**MISSION**

Challenging outdated practices and introducing evidence-based approaches.



## GÁBOR NAGY

DEPARTMENT OF EMERGENCY MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Using personalized treatment to improve early resuscitation in septic patients.

**VISION**

Each patient receives the care that is best for them.

**PROJECT 1**

Comparing the safety and effectiveness of personalized versus fixed-volume resuscitation in septic patients: systematic review and meta-analysis.

**EDUCATION**

advanced practitioner nurse

Investigating the effectiveness and safety of immediate vasopressor initiation in patients admitted to the Emergency Department with shock: Protocol for a Randomized Controlled Trial.

**SUPERVISOR(S)**

Zsolt Molnár, László Zubek

**YEAR II****PHD**

AGE 41

**MISSION**

Eliminating non-evidence-based data to improve survival in sepsis and septic shock.





## JULIA HOLLÓSI

MD/PHD STUDENT

### TOPIC

Role of Immunomodulatory Strategies to Improve Outcomes in Sepsis.

### VISION

Standardized treatments for specific medical situations.

**YEAR II**

**PHD**

AGE 24

### MISSION

Delineating best treatments and incorporate new technologies into care plans.

### PROJECT 1

Investigating the safety and effectiveness of intravenous immunoglobulin treatment versus blood purification in septic patient: Systematic Review and Meta-analysis.

### PROJECT 2

Investigating the safety and effectiveness of immunomodulatory therapies against standard therapy in septic patients: A Systematic Review and Meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Zsolt Molnár, László Zubek

### E-MAIL

julia@hollosi.com



## KRISZTINA CSÓKE-KABAI

ALBERT SZENT-GYÖRGYI MEDICAL CENTRE, SZEGED

### TOPIC

Targeted neuroprotection for post-cardiac arrest patients.

### VISION

All resuscitated patients thrive, not just survive.

**YEAR II**

**PHD**

AGE 33

### MISSION

Driving therapeutic innovations for better quality of life following resuscitation.

### PROJECT 1

Investigating the efficacy and safety of prehospital targeted temperature management on neurological outcome in out-of-hospital cardiac arrest patients: Systematic Review and Meta-analysis

### PROJECT 2

Investigating the efficacy and safety of seizure prevention on neurological outcome in cardiac arrest patients: Protocol of a Randomised Controlled Trial.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Zsolt Molnár, László Zubek

### E-MAIL

krisztikabai@gmail.com



## LILIÁNA NAGY

MD/PHD STUDENT

### TOPIC

The role of advanced hemodynamic monitoring in critically ill patients.

### VISION

Critically ill patients in highest safety.

**YEAR II**

**PHD**

AGE 25

### MISSION

Using accurate devices for accurate condition assessment.

### PROJECT 1

Investigating the efficacy and safety of advanced versus conventional hemodynamic monitoring in patients with shock: systematic review and meta-analysis.

### PROJECT 2

Investigating the efficacy and safety of cardiac output and derived parameters guided therapy in high-risk surgical patients: systematic review and meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Zsolt Molnár, László Zubek

### E-MAIL

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## PÉTER BAKOS

CSONLONKY FERENC HOSPITAL, VESZPRÉM & CARDIOLOGY, BALATONFÜRED

### TOPIC

Role of Artificial Intelligence in Decision-making for Extubation of Mechanically Ventilated Patients.

### VISION

Healthcare professionals at the bedside relying on data instead of customs and traditions.

**YEAR II**

**PHD**

AGE 35

### MISSION

Providing evidence on data-driven decision-making in critical care.

### PROJECT 1

Investigating the accuracy of machine learning models in predicting extubation success in mechanically ventilated patients: systematic review and meta-analysis.

### PROJECT 2

Developing and validating a machine learning model to predict extubation success in mechanically ventilated patients: A Registry Analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Zsolt Molnár, András Lovas

### E-MAIL

ifjbakospeti@gmail.com





## PETRA RÉKA TÓTH

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

Insights into mechanical ventilation.

### VISION

Access to advanced medical technology no matter who you are.



### PROJECT 1

Comparing the effectiveness and safety of adaptive versus conventional modes in invasively ventilated patients: systematic review and meta-analysis.

### PROJECT 2

Model based optimization of mechanical ventilation: A Retrospective Observational Study.

### EDUCATION

medical doctor

### SUPERVISOR(S)

András Lörx, Zsolt Molnár

### YEAR II

### PHD

AGE 27

### MISSION

Improving the effectiveness of current technology.

### E-MAIL

toth.petra.sh@gmail.com



## TÜNDE SZALAY-FRANK

HUNGARIAN DEFENSE FORCES MEDICAL CENTRE

### TOPIC

The role of regional anesthetic techniques in enhancing recovery after cardiac surgery.

### VISION

Regional anesthetic techniques become part of enhanced recovery guideline in cardiac surgery.



### PROJECT 1

Investigating the safety and efficacy of additional thoracic fascial plane blocks in patients undergoing cardiac surgery: systematic review and meta-analysis.

### PROJECT 2

Investigating the effect of additional thoracic fascial plane blocks on the lung function parameters in patients undergoing cardiac surgery: protocol of a randomized controlled trial.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Zsolt Molnár, Ákos Csomós

### YEAR II

### PHD

AGE 44

### MISSION

Taking an active part as a researcher and clinician.

### E-MAIL

szalay.frank.tunde@gmail.com



## ZSUZSANNA WEBER

DEP. OF ANESTHESIOLOGY AND INTENSIVE THERAPY, SEMMELWEIS UNIVERSITY

### TOPIC

Hemodynamic management in the perioperative period of non-cardiac surgeries.

### VISION

Standardized yet personalized patient care worldwide.



### PROJECT 1

Investigating the safety of continuing renin-angiotensin-aldosterone inhibitors for non-cardiac surgery: systematic review and meta-analysis.

### PROJECT 2

Investigating the efficacy and safety of multimodal individual haemodynamic management in patients undergoing major abdominal surgery: protocol of a randomized controlled trial.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Endre Zima, László Zubek

### YEAR II

### PHD

AGE 29

### MISSION

Contributing to the development of high quality, evidence-based strategies while being effective in patient care.

### E-MAIL

weberzsuu@gmail.com



## ESZTER SZŐKE

SEMMELWEIS HOSPITAL, KISKUNHALAS

### TOPIC

Diagnosing and preventing dysphagia associated complications in tracheostomized critically ill patients.

### VISION

Speech therapists and physicians working side-by-side for our patients.



### PROJECT 1

Comparing the Modified Evan's Blue Dye Test (MEBDT) to Fiberoptic Endoscopic Evaluation of Swallowing (FEES) in diagnosing aspiration in tracheostomized critically ill patients: a systematic review and meta-analysis.

### PROJECT 2

The practice of the modified Evan's blue dye test to assess dysphagia in intensive care units around the world: an international survey

### EDUCATION

speech and language therapist

### SUPERVISOR(S)

Zsolt Molnár, András Lovas

### YEAR III

### PHD

AGE 34

### MISSION

Improve tracheostomized patients' lives by reducing aspiration-related complications.

### E-MAIL

szokeeszter05@gmail.com



## ILDIKÓ SZÁNTÓ

JÓSA ANDRÁS HOSPITAL, NYÍREGYHÁZA

**TOPIC**

The association between fluid therapy and organ dysfunction in critically ill patients.

**PROJECT 1**

Investigating the Effects of balanced crystalloids vs. normal saline on organ dysfunction in patients undergoing major abdominal surgery: a systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Improve postoperative outcomes in high-risk surgical patients.

**PROJECT 2**

Investigating the effects of balanced crystalloids versus isotonic saline on organ dysfunction in septic shock: a systematic review and meta-analysis

**SUPERVISOR(S)**

Zsolt Molnár, Zoltán Ruszkai

**YEAR III****PHD**

AGE 44

**MISSION**

To identify the best possible therapy strategy that causes the least harm in critically ill patients.

**E-MAIL**

szantoildiko09@gmail.com



## LEVENTE PRÁCSER

SZENT JÁNOS HOSPITAL, BUDAPEST

**TOPIC**

Investigating the consequences of inappropriate antibiotic use in the Intensive Care Unit.

**PROJECT 1**

Investigating the effects of inappropriate antibiotic use on complication rate in the Intensive Care Unit: a systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

I want to live in a world where every physician can access the most up-to-date resources.

**PROJECT 2**

Procalcitonin kinetics-guided antibiotic management in patients with septic shock: protocol of a randomized controlled trial

**SUPERVISOR(S)**

Zsolt Molnár, Márton Papp, László Zubek

**YEAR III****PHD**

AGE 28

**MISSION**

Provide the best clinical evidence possible to help healthcare professionals make the best possible decisions.

**E-MAIL**

pracserelevente@gmail.com



## TÍMEA MÁTYÁSI-DOMBI

DR. MANNINGER JENÓ TRAUMA CENTRE, BUDAPEST

**TOPIC**

Diagnostic and therapeutic options in sepsis associated coagulopathy

**VISION**

Improve the individualized hemostasis management in critically ill patients in Hungary

**PROJECT 1**

Comparing the effectiveness and safety profiles of different anticoagulant therapies in sepsis-associated coagulopathy: a systematic review and meta-analysis.

**EDUCATION**

medical doctor

**PROJECT 2**

Investigating the efficacy and safety of early fibrinogen supplementation in patients with severe trauma: a systematic review and meta-analysis

**SUPERVISOR(S)**

Zsolt Molnár, Krisztián Tánczos, Emőke Henrietta Kovács

**YEAR III****PHD**

AGE 41

**MISSION**

Generate high-quality data to develop evidence-based hemostasis protocols for better patient care

**E-MAIL**

dombitimi@gmail.com



## DILAN MÁRK KARIM

ANESTHESIOLOGY AND INTENSIVE CARE CLINIC, SEMMELWEIS UNIVERSITY

**TOPIC**

Intensive care - Microbiom

**VISION**

Science may overcome quackery.

**PROJECT 1**

Investigating the extent of dysbiosis in the critically ill: a systematic review and meta-analysis  
*BMJ Open Respir Res*, Q1, 3.400

**PUBLISHED****PROJECT 2**

Exploring the depths: Comparing sample-obtaining methods for lower respiratory microbiome testing: a systematic review and meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Krisztina Madách, Zsolt Molnár

**YEAR IV****PHD**

AGE 35

**MISSION**

I want to understand better and disseminate the beauty and pitfalls of evidence creation.

**PROJECT 3**

Ethanol substitution for the prevention of alcohol withdrawal syndrome in critical illness: a randomized controlled trial

**E-MAIL**

dilan.karim@gmail.com



## GABRIELLA ANNA RAPSZKY

SEMMELWEIS UNIVERSITY

### TOPIC

Emergency medicine - Antibiotics

### VISION

Improve the management of patients presenting at the emergency department.



### PROJECT 1

Investigating the efficacy of rapid molecular assays in the diagnosis of bloodstream infections: a systematic review and meta-analysis

*EClinicalMedicine*, D1, IF: 9.600

### PUBLISHED

### PROJECT 2

Investigating the association of ClotPro®-guided therapy with blood product use and mortality in patients with gastrointestinal bleeding: a retrospective study

### EDUCATION

medical doctor

### SUPERVISOR(S)

Bánk Fenyves

### YEAR IV

### PHD

AGE 28

### MISSION

Contribute to the development of current guidelines.

### E-MAIL

rapszkygabi@gmail.com



## MÁRTON PAPP

NEW SZENT JÁNOS HOSPITAL AND CLINIC, BUDAPEST

### TOPIC

Intensive care - Sepsis

### VISION

Unnecessary and inappropriate antibiotic therapy will be a bad practice from the past.



### PROJECT 1

Investigating the effects of procalcitonin-guided antibiotic therapy versus standard treatment in ICU patients: a systematic review and meta-analysis of randomized controlled trials.

*Crit Care*, D1, IF: 15.100

### PUBLISHED

### PROJECT 2

### PUBLISHED

Using PCT kinetics to guide antibiotic therapy of ICU patients with suspected new-onset infection: protocol of a multicentre randomized trial.

*J Clin Med*, Q1, IF: 3.000

### EDUCATION

medical doctor

### SUPERVISOR(S)

Zsolt Molnár, Domonkos Trásy

### YEAR IV

### PHD

AGE 38

### MISSION

Protocolize and individualize procalcitonin use in the ICU.

### E-MAIL

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## NIKOLETT KISS

HEART AND VASCULAR CENTRE, SEMMELWEIS UNIVERSITY

### TOPIC

Intensive care - Cardiac surgery

### VISION

For science to prevail over routine.



### PROJECT 1

Investigating the predictive value of urinary biomarkers in cardiac surgery related acute kidney injury: systematic review and meta-analysis

*Ann Intensive Care*, D1, IF: 5.700

### PUBLISHED

### PROJECT 2

Perioperative liraglutide for optimal glucose control in open aortic aneurysm repair: Protocol of a randomised clinical trial

### EDUCATION

medical doctor

### SUPERVISOR(S)

Zsolt Molnár, László Zubek

### YEAR IV

### PHD

AGE 43

### MISSION

To implement standardised perioperative protocols in cardiovascular anaesthesia to minimize postoperative complications.

### E-MAIL

kiss.nikolett@med.semmelweis-univ.hu



## EMŐKE HENRIETTA KOVÁCS

DEPARTMENT OF ANESTHESIOLOGY, FUNDENI CLINICAL INSTITUTE, BUCHAREST

### TOPIC

Intensive care - COVID-19

### VISION

To implement new modalities to modify the thromboinflammatory process by further elucidating the underlying mechanisms.



### PROJECT 1

Higher dose anticoagulation cannot prevent disease progression in COVID-19 patients: A systematic review and meta-analysis.

*BMJ Open*, Q1, IF: 2.900

### PUBLISHED

### PROJECT 2

Effectiveness and safety of fibrinolytic therapy in critically ill COVID-19 patients with ARDS: systematic review and a prospective meta-analysis

*BMJ Open*, Q1, IF: 2.900

### EDUCATION

medical doctor

### SUPERVISOR(S)

Zsolt Molnár, Krisztián Tánczos

### YEAR V

### PHD

AGE 31

### MISSION

To unveil the details of the crosstalk between the inflammatory response and hemostasis in critically ill patients.

### E-MAIL

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# FIELD OF RESEARCH **DENTISTRY**





# RESEARCH FIELD DENTISTRY

The Dentistry Research Group is the largest within the program, encompassing a wide network of doctoral candidates and graduates from diverse professional backgrounds, including MD-PhD students, dentists, and resident doctors. Together, they represent the full spectrum of dental and oral sciences, engaging in both clinical and experimental research that bridges dentistry with broader medical disciplines. Research topics span oral and maxillofacial surgery, implantology, prosthodontics, orthodontics, periodontology, restorative and pediatric dentistry, endodontics, and community dentistry. The group also investigates head and neck cancers, oral pathology, salivary biomarkers, digital and teledentistry, and the development and testing of novel dental materials such as ceramics, zirconia, and titanium-based restoratives. Interdisciplinary studies explore links between oral and systemic health, including vascular biology, diabetes, cardiovascular disease, and public health aspects of oral care. Through laboratory research, clinical trials, and digital innovation, the group aims to advance dental science, improve patient care, and promote evidence-based, technologically enhanced practices in oral and craniofacial medicine.

## SUPERVISORS

40

★ TOP SUPERVISORS ★



**GÁBOR VARGA**  
9 student



**GÁBOR GERBER**  
7 student



**NOÉMI KATINKA RÓZSA**  
5 student

Andrea Bródy, Anita Beck, Árpád Joob-Fancsaly, Ákos Zsembery, Barbara Kispélyi (*Supervisor of the month: 2024 April*), Bence Tamás Szabó, Beáta Kerémi (*Supervisor of the month: 2023 January*), Bálint Molnár, Dorottya Bánya, Dániel Végh, Dóra Haluszka, Emese Ábrám, Enikő Vasziné Szabó (*Supervisor of the month: 2024 November*), Eszter Molnár, Eszter Szalai, Gellért Joós-Kovács, Ivett Róth, János Vág (*Supervisor of the month: 2025 June*), Kinga Kórmöczy, Krisztina Mártha, Krisztina Márton (*Supervisor of the month: 2025 February*), Krisztina Ágnes Mikulás (*Supervisor of the month: 2023 June, 2023 September*), Lili Ács, László Köves, Mercédesz Orsós, Mihály Vasziuk, Márton Kivovics (*Supervisor of the month: 2023 December*), Noémi Katinka Rózsa, Nándor Ács (*Supervisor of the month: 2021 September, 2024 May*), Orsolya Németh (*Supervisor of the month: 2023 March*), Réka Fazekas, Tamás Husszár, Tibor Zelles, Veronika Gresz, Victor Costan, Zoltán Géczi, Zsolt Lohinai, Zsolt Németh, Zsuzsanna Helyes

## STUDENTS

58

**YEAR I** Ákos Vodnyánszky, Júlia Albert, Kitti Urbán, Man Qu, Márta Losonczi, Michalis Theocharous, Mónika Balázs, Nadin Abu Al-Samen, Raneem Al Jaloudi, Regina Margit Kméczik

**YEAR II** Ábel Major, Adél Pintér, Adrienn Széll, Ágnes Heizer, Darius-Valentin Sandu, Eszter Borbény, György Árpád Keskeny, Katinka Lékó-Kesjár, Laura Zsófia Tasi, Lili Rozgonyi, Mirjam Kisgergely, Mojtaba Dahmardeh, Nazanin Ghods, Sára Borbála Szabó

**YEAR III** Ádám Fekete, Adél Eszter Mózes, Adrienn Pál, Bálint Zsombor Sárai, Bruna Guimaraes, Caroline Kelly, Dániel Horváth, Elias-Leon Nolden, Ellay Guttmacher, Éva Mlinkó, Flóra Helga Olasz, Kata Sára Haba, Lilien Nagy, Melinda Antal, Patrik Kreuter, Péter Márton, Petra Papócsi, Yasir Nabeel Abdulrazzaq, Zsófia Éva Vincze

**YEAR IV** Anna Takács, Boldizsár Vánkos, Bulcsú Bencze, Dalma Tábi, Eszter Hardi, Madalina Banarescu, Márton Ács, Orsolya Vámos, Péter Gergely Komora, Virág Róna, Xinyi Qian

**YEAR V** Alexander Schulze Wenning, Eleonóra Sólyom



## ÁKOS VODNYÁNSZKI

PHD STUDENT

**TOPIC**

Novel Methods in Oral Diagnostics

**PROJECT 1**

Assessing the Diagnostic Accuracy of Machine Learning in Detecting Oral Malignancies from Pathological Samples of Oral Lesions: A Systematic Review and Meta-analysis

**EDUCATION**

dentist

**VISION**

All patients are to be diagnosed accurately and promptly.

**PROJECT 2**

Predicting Early Implant Failure through Fractal Analysis: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Márton Kivovics

**YEAR I****PHD**

AGE 26

**MISSION**

I want to enhance the efficacy of oral diagnostics.

**E-MAIL**

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## JÚLIA ALBERT

PHD STUDENT

**TOPIC**

The Impact of Orthognathic Surgery on Temporomandibular Joint Structure and Function

**VISION**

Improve TMJ health after orthognathic surgery.

**PROJECT 1**

Investigating the Efficacy of Low-level Laser Therapy on Neurosensory Recovery after Oral and Maxillofacial Surgical Interventions: A Systematic Review and Meta-analysis

**EDUCATION**

dentist

**SUPERVISOR(S)**

Gábor Varga, Krisztina Mártha

**YEAR I****PHD**

AGE 30

**MISSION**

Use MRI to study TMJ changes and guide better care.

**E-MAIL**

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## KITTI URBÁN

SEMMELWEIS UNIVERSITY, DEPARTMENT OF PUBLIC DENTAL HEALTH

**TOPIC**

Exploring Sport-Specific Interactions Between Oral Health and Elite Sport

**VISION**

Developing individualized oral health care strategies for elite athletes

**PROJECT 1**

Investigating the Effects of High-Intensity Training on Salivary Composition in Elite Athletes

**EDUCATION**

dentist

**SUPERVISOR(S)**

Mercédesz Orsós

**YEAR I****PHD**

AGE 27

**MISSION**

To investigate how high-intensity training alters salivary composition

**E-MAIL**

urbankitti98@gmail.com



## MAN QU

SEMMELWEIS UNIVERSITY

**TOPIC**

Patient-Centered Outcomes in Orthodontic Treatments

**VISION**

To advance orthodontic care that harmonizes dental alignment and joint function.

**PROJECT 1**

Investigating the Risk Factors for Temporomandibular Disorders in Orthodontic Patients: A Systematic Review and Meta-analysis

**PROJECT 2**

Investigating Patient's Quality of Life and Aesthetic Satisfaction after Orthognathic Surgery: A Systematic Review and Meta-analysis

**EDUCATION**

dental student

**SUPERVISOR(S)**

Tibor Zelles

**YEAR I****MD-PHD**

AGE 24

**MISSION**

To identify and translate key risk factors for TMD into clinical strategies for safer orthodontic care.

**E-MAIL**

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## MÁRTA LOSONCZI

SEMMELWEIS UNIVERSITY

**TOPIC**

Tobacco products and their impact on health

**PROJECT 1**

Investigating the effect of E-cigarette in oral microbiome changes in healthy adults: A Systematic Review and Meta-analysis

**EDUCATION**

dental student

**VISION**

Reduce the popularity of smoking

**PROJECT 2**

Comparing acute changes in cardiovascular parameters in electronic, non-combustible and combustible tobacco users A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Barbara Kispélyi

**YEAR I****DMD-PHD**

AGE 23

**MISSION**

Raising awareness to the harmful effects of alternative tobacco products

**E-MAIL**

marta.losonczi@gmail.com



## MICHALIS THEOCHAROUS

SEMMELWEIS UNIVERSITY

**TOPIC**

Aesthetic Materials in Restorative Dentistry

**PROJECT 1**

Investigating the Efficacy of Deep Margin Elevation in Indirect Restorations: A Systematic Review and Meta-analysis

**EDUCATION**

dental student

**VISION**

Ultimate success of indirect restorations.

**PROJECT 2**

Investigating the Effect of Different Post-curing Times on the Physical and Optical Properties of 3D-printed Resins: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Enikő Mária Vasziné Szabó, Beáta Kerémi

**YEAR I****DMD-PHD**

AGE 22

**MISSION**

Enhance the quality of techniques used in restorative dentistry.

**E-MAIL**

theomichael31.8@gmail.com



## MÓNICA BALÁZS

SEMMELWEIS UNIVERSITY, DEPARTMENT OF RESTORATIVE DENTISTRY

**TOPIC**

The Role of the Cement Spacing in the Success of CAD/CAM Restorations

**PROJECT 1**

Investigating the Effect of Cement Spacing on the Fit of Milled CAD/CAM Restorations: A Systematic Review and Meta-analysis

**EDUCATION**

dentist

**VISION**

Patient-centered outcomes in orthodontic treatment.

**PROJECT 2**

Comparing the Fit of Fixed Dental Restorations Fabricated by Additive and Subtractive Manufacturing: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

János Vág, Eszter Szalai

**YEAR I****PHD**

AGE 35

**MISSION**

Find the best cement spacing parameters for CAD/CAM restorations.

**E-MAIL**

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## NADIN ABU AL-SAMEN

AL-AHLIYYA AMMAN UNIVERSITY, JORDAN

**TOPIC**

Systemic and Histopathological Factors in Common Oral Mucosal Conditions

**PROJECT 1**

Investigating the Association between Atrophic Glossitis and the Prevalence Rate of Hematinic Deficiencies in Adults: A Systematic Review and Meta-analysis

**EDUCATION**

dentist

**VISION**

Enhancing diagnosis and therapy of oral diseases.

**PROJECT 2**

Investigating the Histopathological Differences between Oral Lichen Planus and Oral Lichenoid Reaction in Adults: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Gábor Gerber

**YEAR I****MSC**

AGE 25

**MISSION**

Detection of hidden changes in glossitis and lichen planus.

**E-MAIL**

nadeennadeen705@gmail.com



## RANEEM AL JALOUDI

AL-AHLIYYA AMMAN UNIVERSITY, JORDAN

**TOPIC**

From Hive to Healing: The Role of Bee Products in Oral Medicine and Oncology

**PROJECT 1**

Investigating the Efficacy of Bee Products in Therapy-induced Oral Mucositis in Cancer Patients: A Systematic Review and Meta-analysis

**EDUCATION**

dentist

**VISION**

Care beyond cancer.

**PROJECT 2**

Investigating the Cellular Effects of Propolis-based Mouthwashes on Human Oral Model Cells: In Vitro-Experimental Study

**SUPERVISOR(S)**

Bence Tamás Szabó

**YEAR I****MSC**

AGE 25

**MISSION**

To explore bee products as supportive care in oncology.

**E-MAIL**

raneemaljalodi0@gmail.com



## REGINA MARGIT KMÉCZIK

PHD STUDENT

**TOPIC**

Understanding Extracellular Vesicle Functions in the Oral and Maxillofacial Field

**PROJECT 1**

Investigating Exosomal Biomarkers as risk factors for Head and Neck Cancer Detection: A Systematic Review and Meta-analysis

**EDUCATION**

dentist

**VISION**

To decrease the high mortality rate of head and neck cancer.

**PROJECT 2**

Investigating the Diagnostic Accuracy of Exosomal MiRNA for Head and Neck Cancer Detection: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Gábor Varga

**YEAR I****PHD**

AGE 26

**MISSION**

Testing exosomal biomarkers for prognosis.

**E-MAIL**

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## ÁBEL MAJOR

MD/PHD STUDENT

**TOPIC**

Control of fear memories and management of dental anxiety.

**PROJECT 1**

Investigating the efficacy and safety of pharmacological interventions on anxiety in patients undergoing dental treatment: A Systematic Review and Meta-analysis.

**EDUCATION**

dental student

**VISION**

Less anxious patients in the dental office.

**PROJECT 2**

Investigating the oral health status in patients with congenital heart defects: Systematic Review and Meta-analysis.

**SUPERVISOR(S)**

Gábor Gerber, Árpád Joób Fancsaly

**YEAR II****PHD**

AGE 27

**MISSION**

Providing data for policy makers to create guidelines.

**PROJECT 3**

Investigating the prevalence and severity of pain in adults with anxiety/chronic depression: non-prescribed medication and alcohol use: Eurostat project.

**E-MAIL**

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## ADÉL PINTÉR

MD/PHD STUDENT

**TOPIC**

Advances in orthodontic acceleration & retention.

**PROJECT 1**

Investigating the effectiveness and safety of micro-osteoperforations in accelerated orthodontics: systematic review and meta-analysis.

**EDUCATION**

dental student

**VISION**

Seamless orthodontic treatment with life-long results.

**PROJECT 2**

Investigating the stability and survival of fixed retainers of different manufacturing methods: systematic review and meta-analysis.

**SUPERVISOR(S)**

Gábor Gerber, Gábor Varga

**YEAR II****PHD**

AGE 24

**MISSION**

Identifying the safest and most effective techniques for acceleration of tooth movement and retention.

**E-MAIL**

adel.pinter@stud.semmelweis.hu



## ADRIENN SZÉLL

DEPARTMENT OF PROSTHODONTICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Oral health of patients with eating disorders.

**VISION**

Improved recovery rates for patients with eating disorders.

**PROJECT 1**

Investigating the prevalence of oral conditions in patients with and without eating disorders: a systematic review and meta-analysis.

**PROJECT 2**

Comparing the oral health status of patients with and without eating disorders in Hungary: a prospective observational study.

**EDUCATION**

dentist

**SUPERVISOR(S)**

Zoltán Géczi

**YEAR II****PHD**

AGE 28

**MISSION**

Assessing oral cavity differences between patients with and without eating disorders.

**E-MAIL**

szell.adrienn@semmelweis.hu



## ÁGNESS HEIZER

DEPT. OF GENERAL DENTAL PRECLINICAL PRACTICE, SEMMELWEIS UNIVERSITY

**TOPIC**

Exploring the Spectrum of Oral Disorders in Different Autoimmune Diseases.

**VISION**

To give a better overview on the course of autoimmune diseases.

**PROJECT 1**

Investigating the Risk of Oral Disorders in Sjögren's Syndrome: A Systematic Review and Meta-analysis.

**PROJECT 2**

Investigating the Prevalence of Oral Disorders in Systemic Lupus Erythematosus: Systematic Review and Meta-analysis.

**EDUCATION**

dentist

**SUPERVISOR(S)**

Krisztina Márton

**YEAR II****PHD**

AGE 27

**MISSION**

To reduce the severity of symptoms in autoimmune diseases.

**E-MAIL**

heizagi@gmail.com



## DARIUS-VALENTIN SANDU

CENTRE FOR TRANSLATIONAL MEDICINE

**TOPIC**

The value of digital technologies in orthognathic surgery.

**VISION**

Best orthognathic surgery outcome by virtual planning.

**PROJECT 1**

Investigating the effectiveness of Patient-Specific Implants over Splints in Orthognathic Surgery: systematic review and meta-analysis.

**PROJECT 2**

Investigating the Effectiveness of Fully Digital Occlusion Planning over Physical Dental Model Approach in Orthognathic Surgery: Systematic Review and Meta-analysis.

**EDUCATION**

dentist

**SUPERVISOR(S)**

Gábor Gerber, Victor Costan

**YEAR II****PHD**

AGE 26

**MISSION**

Finding the best surgical planning approach/strategy/protocol.

**E-MAIL**

darius\_valentin2@yahoo.com



## ESZTER BORBÉLY

FULL TIME PHD STUDENT

**TOPIC**

Dentofacial Anomalies and Intervention Strategies.

**VISION**

Setting the standard in dental anomaly management.

**PROJECT 1**

Investigating the Safety and Efficacy of Open versus Closed Surgical Exposure of Impacted Maxillary Canines: Systematic Review and Meta-analysis.

**PROJECT 2**

Evaluating the Efficacy of Tooth-Borne versus Bone-Borne Maxillary Protraction in Maxillary Hypoplasia: A Systematic Review and Meta-analysis.

**EDUCATION**

dentist

**SUPERVISOR(S)**

Gábor Varga, Lili Ács, János Vág

**YEAR II****PHD**

AGE 26

**MISSION**

Implementing evidence-based practices to address and correct dentofacial irregularities.

**E-MAIL**

eszter13borbely@gmail.com



## GYÖRGY ÁRPÁD KESKENY

DEPARTMENT OF PROSTHODONTICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Innovative Technologies in Dentistry: Exploring Digital Solutions for Enhanced Patient Care and Clinical Precision.

**PROJECT 1**

Comparing Efficiency of Intraoral Scanning Technologies for Implant Impressions: Systematic Review and Meta-analysis.

**EDUCATION**

dentist

**VISION**

To shape the future of dental care by making dental check-ups more accurate and available for everyone.

**PROJECT 2**

Comparing the Accuracy of Teledentistry and In-Person Dental Examination for Caries Detection: A Systematic Review and Meta-analysis.

**SUPERVISOR(S)**

Ivett Róth, Gellért Joós-Kovács

**YEAR II****PHD**

AGE 26

**MISSION**

To explore the role of digital technologies in advancing dental care and precision.



## KATINKA LÉKÓ-KESJÁR

DEPT. OF RESTORATIVE DENTISTRY & ENDODONTICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Investigating alternative methods in caries prevention.

**PROJECT 1**

Investigating the effectiveness and safety of probiotics in preventing caries: a systematic review and meta-analysis.

**EDUCATION**

dentist

**VISION**

Better oral health using alternative methods.

**PROJECT 2**

Investigating the effectiveness and safety of herbal oral care products in caries development: a systematic review and meta-analysis.

**SUPERVISOR(S)**

János Vág, Eszter Molnár

**YEAR II****PHD**

AGE 33

**MISSION**

Exploring new strategies in caries prevention.



## LAURA ZSÓFIA TASI

MD/PHD STUDENT

**TOPIC**

Prosthodontic perspective of mandibular reconstruction methodologies

**PROJECT 1**

Investigating the success rate and safety of primary and secondary implantation in patients undergoing mandibular reconstruction: systematic review and meta-analysis.

**EDUCATION**

dental student

**VISION**

Patients undergoing mandibular reconstruction receive the best possible dental prosthetics.

**PROJECT 2**

Investigating the safety and effectiveness of hydrophilic and hydrophobic implant surfaces in irradiated jaws: systematic review and meta-analysis.

**SUPERVISOR(S)**

Tamás Huszár, Kinga Körömczy, Tamás Würshing

**YEAR II****PHD**

AGE 24

**MISSION**

Providing evidence-based guidelines that optimize mandibular reconstruction.



## LILI ROZGONYI

DEPT. OF PEDIATRIC DENTISTRY AND ORTHODONTICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Dental Management of Children with Special Needs.

**PROJECT 1**

Investigating the Effect of Alternative Audiovisual Techniques and Dental Environment for Children with Neurodevelopmental Disorders: A Systematic Review and Meta-analysis

**EDUCATION**

dentist

**VISION**

All children in special care are smiling.

**PROJECT 2**

Investigating the Effectiveness of Visual Oral Health Education Techniques for Children with Hearing Impairment: A Systematic Review and Meta-analysis.

**SUPERVISOR(S)**

Noémi Rózsa, Anita Beck

**YEAR II****PHD**

AGE 29

**MISSION**

Evaluating the effectiveness of alternative dental management in case of children with special needs.

**PROJECT 3**

Investigating the Access to Dental Care Services for People with Disabilities in Europe: Eurostat Analysis.

**E-MAIL**

lilirozgonyi@gmail.com





## MIRJAM KISGERGELY

DEPARTMENT OF PROSTHODONTICS, SEMMELWEIS UNIVERSITY

**TOPIC**

New insights into the accuracy of fixed dentures.

**PROJECT 1**

Comparing the accuracy of dental milling machines in fabricating fixed dentures: a systematic review and meta-analysis.

**EDUCATION**

dentist

**VISION**

Longer lasting dental restorations to patients.

**PROJECT 2**

Comparing the accuracy of dental milling machines in fabricating crowns: an in vitro study.

**SUPERVISOR(S)**

Gellért Joós-Kovács

**YEAR II****PHD**

AGE 28

**MISSION**

Exploring the ways to produce more accurate fixed dental prostheses.

**E-MAIL**

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## MOJTABA DAHMARDEH

MD/PHD STUDENT

**TOPIC**

Lasers in Endodontics.

**VISION**

Zero failure rate in root canal treatment.

**PROJECT 1**

Investigating the efficacy and safety of lasers in endodontic treatment: systematic review and meta-analysis.

**EDUCATION**

dental student

**PROJECT 2**

Investigating the effect of endodontic treatment on inflammatory biomarkers: a systematic review and meta-analysis.

**SUPERVISOR(S)**

Zsolt Lohinai, Enikő Mária Vasziné Szabó

**YEAR II****PHD**

AGE 31

**MISSION**

Finding the optimal method for root canal disinfection.

**E-MAIL**

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## NAZANIN GHODS

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Evidence-based solutions for orthodontic acceleration.

**VISION**

Transforming orthodontics with effective, non-surgical solutions.

**PROJECT 1**

Investigating the effectiveness and safety Of Non-invasive Accelerated Orthodontic Techniques: Systematic Review and Meta-analysis.

**PROJECT 2**

Investigating the Antimicrobial Effect and Treatment Efficacy of Nano-Coated Orthodontic Appliances in Fixed Orthodontic Treatment: A Systematic Review and Meta-analysis

**EDUCATION**

dentist

**SUPERVISOR(S)**

Gábor Varga, Tibor Zelles

**YEAR II****PHD**

AGE 30

**MISSION**

Delivering evidence-based solutions for orthodontic acceleration.

**E-MAIL**

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## SÁRA BORBÁLA SZABÓ

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Risk factors and therapeutic approach of medication-related osteonecrosis of the jaw.

**VISION**

Prolonged survival and improved quality of life in bone cancer patients.

**PROJECT 1**

Investigating the efficacy and safety of combined anti-angiogenic and anti-resorptive treatments in bone cancer patients: systematic review and meta-analysis.

**PROJECT 2**

Investigating the resolution of medication related osteonecrosis of the jaw: prospective observational study.

**EDUCATION**

dentist

**SUPERVISOR(S)**

Réka Fazekas, Zsuzsanna Helyes

**YEAR II****PHD**

AGE 25

**MISSION**

Estimating the risk and rate of MRONJ in patients receiving BMAs therapy.

**E-MAIL**

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## ÁDÁM FEKETE

DEPT. OF RESTORATIVE DENTISTRY & ENDODONTICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Imbalance in vascular reactivity between healthy women and men.

**VISION**

Improving the quality-adjusted life-year (QALY) of female patients with cardiovascular and periodontal diseases.

**PROJECT 1**

Comparing vascular reactivity between healthy women and men on macrovascular and microvascular level: a systematic review and meta-analysis.

**PROJECT 2**

Examination of heat-induced gingival hyperaemia in men and women

**EDUCATION**

dentist

**SUPERVISOR(S)**

János Vág, Beáta Kerémi

**YEAR III****PHD**

AGE 29

**MISSION**

Provide evidence based data for personalized care.



## ADÉL ESZTER MÓZES

DEPT. OF PEDIATRIC DENTISTRY AND ORTHODONTICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Exploring HPV-associated diseases in different anatomical areas and their preventive measures.

**VISION**

Decrease the prevalence of HPV caused diseases.

**PROJECT 1**

The prevalence of oral HPV infection in cervical HPV-positive women: a systematic review and meta-analysis. *J Dent Res, 91, IF: 5.900*

**PUBLISHED****PROJECT 2**

Analyzing the concordance and risk factors between oral and genital HPV: single-centre cohort analysis

**EDUCATION**

dentist

**SUPERVISOR(S)**

Noémi Katinka Rózsa, Nándor Ács

**YEAR III****PHD**

AGE 28

**MISSION**

Find the best options for HPV prevention and detection.

**PROJECT 3**

Analyzing of the dynamics and trends of HPV infection among couples: an observational study

**E-MAIL**

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## ADRIENN PÁL

DEPARTMENT OF PROSTHODONTICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Evaluation of tooth preparation designs for ceramic crowns.

**VISION**

Offer patients the highest level of precision and accuracy in dental restorations, ensuring optimal oral health and satisfaction.

**PROJECT 1**

Investigating the efficacy of different finish line on ceramic restorations: a systematic review and meta-analysis. *BMC Oral Health, 21, IF: 3.100*

**PUBLISHED****PROJECT 2**

Investigating the effect of wax pattern manufacturing techniques on the marginal fit of lithium disilicate crowns: a systematic review and meta-analysis.

**EDUCATION**

dentist

**SUPERVISOR(S)**

Ivett Róth

**YEAR III****PHD**

AGE 28

**MISSION**

Deliver evidence-based recommendations to dental professionals, guiding their selection of the most appropriate finish line design for ceramic crowns.

**E-MAIL**

paladrienn0413@gmail.com



## BÁLINT ZSOMBOR SÁRAI

DENTAL AND ORAL SURGERY TEACHING INSTITUTE, SEMMELWEIS UNIVERSITY

**TOPIC**

Daily aspect of oral medicine.

**VISION**

Achieve affordable and good oral health for everyone.

**PROJECT 1**

Investigating the efficacy of steroid and calcineurin inhibitor treatment in Oral Lichen Planus: a systematic review and meta-analysis.

**PROJECT 2**

Investigating the efficacy of different methods in detection of oral potentially malignant disorders: a systematic review and meta-analysis.

**EDUCATION**

dentist

**SUPERVISOR(S)**

Orsolya Németh

**YEAR III****PHD**

AGE 28

**MISSION**

Make a positive difference in all patients life.

**E-MAIL**

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## BRUNA GUIMARAES

DEPARTMENT OF COMMUNITY DENTISTRY, SEMMELWEIS UNIVERSITY

### TOPIC

Investigating the accuracy of artificial intelligence used for caries diagnosis.

### VISION

Making high end dental solutions accessible to the public.



### PROJECT 1

Investigating the accuracy of artificial intelligence used for approximal caries diagnosis: A Systematic Review and Meta-Analysis. *J Dent, Q1, IF: 4.400*

### PUBLISHED

### PROJECT 2

Investigating the accuracy of intraoral scanner at diagnosing caries: a systematic review and meta-analysis.

### EDUCATION

dentist

### SUPERVISOR(S)

Márton Kivovics

### YEAR III

### PHD

AGE 37

### MISSION

Applying artificial intelligence not only for implant dentistry, but community dentistry as well.

### E-MAIL

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## CAROLINE KELLY

DEPT. OF RESTORATIVE DENTISTRY & ENDODONTICS, SEMMELWEIS UNIVERSITY

### TOPIC

Investigating the correlation between oral health and comorbidities.

### VISION

Reduce the number of comorbidities associated with oral lesions.



### PROJECT 1

Investigating the prevalence of bacteria in periodontal pockets and atherosclerotic plaques in patients with atherosclerosis: a systematic review and meta-analysis.

### EDUCATION

dentist

### PROJECT 2

Effects of nonsurgical endodontic treatment on risk-biomarkers for cardiovascular disease: a systematic review and meta-analysis.

### SUPERVISOR(S)

Zsolt Lohinai, Beáta Kerémi

### YEAR III

### PHD

AGE 27

### MISSION

Educate the population on the importance of oral health and its impact on our general health.

### E-MAIL

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## DÁNIEL HORVÁTH

DEPARTMENT OF ORAL DIAGNOSTICS, SEMMELWEIS UNIVERSITY

### TOPIC

Artificial intelligence in oral medicine.

### VISION

An artificial intelligence based guide for clinicians, that helps to diagnose and treat oral medicine patients.



### PROJECT 1

Investigating the diagnostic accuracy of artificial intelligence in oral potentially malignant disorders: a systematic review and meta-analysis.

### EDUCATION

dentist

### PROJECT 2

Prognostic evaluation of diagnostic criteria in oral lichen planus on histological images by artificial intelligence: Registry analysis

### SUPERVISOR(S)

Andrea Bródy

### YEAR III

### PHD

AGE 31

### MISSION

Verify artificial intelligence as a reliable support for clinicians, find the possibilities and limitations of the technology.

### E-MAIL

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## ELIAS-LEON NOLDEN

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

Implication of personalised medicine in maxillofacial surgery.

### VISION

Customization driven Optimization for better Patient results.



### PROJECT 1

Comparing Patient-Specific Implants and Stock System in Patients with TMJ-Reconstruction: A systematic review and meta-analysis. *Int J Oral Maxillofac Surg, Q1, 2.700*

### PUBLISHED

### PROJECT 2

Comparing Patient-Specific Implants and Stock System in Patients undergoing cranioplasty: a systematic review and meta-analysis.

### EDUCATION

medical student

### SUPERVISOR(S)

Mihály Vaszilkó, László Kóles

### YEAR III

### PHD

AGE 25

### MISSION

Provide better clinical decisions based on research.

### E-MAIL

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## ELLAY GUTMACHER

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

Novel insights into the oral - systemic health axis.

### PROJECT 1

Investigating the salivary levels of *Fusobacterium nucleatum* in patients with colorectal carcinoma: a systematic review and meta-analysis.

### PUBLISHED

*Sci Rep, Q1, IF: 3.900*

### VISION

Empowering global healthcare through a comprehensive understanding of the oral - systemic health axis.

### PROJECT 2

Investigating the diagnostic accuracy of salivary procalcitonin in bacterial-induced systemic inflammation: a systematic review and meta-analysis.



### EDUCATION

dentistry student

### SUPERVISOR(S)

Ákos Zsembery, Andrea Bródy

### YEAR III

### PHD

AGE 27

### MISSION

Exploring the bidirectional relationship of the oral-systemic health axis.



## ÉVA MLINKÓ

DEPT. OF PAEDIATRIC DENTISTRY & ORTHODONTICS, SEMMELWEIS UNIVERSITY

### TOPIC

Developmental Defects of Enamel: etiological aspects and clinical management

### VISION

Improve the life quality of children with Developmental Defects of Enamel with better clinical assessment



### PROJECT 1

Investigating different types of antibiotics at early childhood as risk factors in Molar Incisor Hypomineralization (MIH) : a systematic review and meta-analysis

### PUBLISHED

*J Dent, D1, IF: 5.500*

### PROJECT 2

Investigating the association of respiratory diseases at early childhood on Developmental Defects of Enamel: a systematic review and meta-analysis

### EDUCATION

dentist

### SUPERVISOR(S)

Noémi Katinka Rózsa, Gábor Varga

### YEAR III

### PHD

AGE 38

### MISSION

Discover causes of Developmental Defects of Enamel and finding new intervention protocols that are improving paediatric dentistry.



## FLÓRA HELGA OLASZ

DEPT. OF PAEDIATRIC DENTISTRY & ORTHODONTICS, SEMMELWEIS UNIVERSITY

### TOPIC

Investigating the effectiveness and safety of presurgical therapy possibilities for unilateral cleft lip and palate in infants

### VISION

Gold standard for presurgical nasoalveolar molding treatment.

### PROJECT 1

Investigating the effectiveness and safety of presurgical therapy possibilities for unilateral cleft lip and palate in infants: a systematic review and meta-analysis

### PROJECT 2

Seasonality in birth months of patients born with orofacial cleft in Hungary - registry analysis

### EDUCATION

dentist

### SUPERVISOR(S)

Noémi Katinka Rózsa

### YEAR III

### PHD

AGE 28

### MISSION

Research existing techniques and compare them.



## KATA SÁRA HABA

DEPARTMENT OF PROSTHODONTICS, SEMMELWEIS UNIVERSITY

### TOPIC

Oral complications of type II diabetes mellitus.

### VISION

Improve the life quality of patients with diabetes.

### PROJECT 1

Investigating the Correlation between salivary glucose level and blood glucose level: a systematic review and meta-analysis.

### PROJECT 2

Evaluating oral hygiene and periodontal complications in patients with hyperglycemia: a systematic review and meta-analysis

### EDUCATION

dentist

### SUPERVISOR(S)

Dániel Végh, Dóra Haluszka

### YEAR III

### PHD

AGE 27

### MISSION

Assess the potential oral complications of diabetes and target them.





## LILIEN NAGY

DEPARTMENT OF PROSTHODONTICS, SEMMELWEIS UNIVERSITY

### TOPIC

Evaluating the mechanical and antipathogenic characteristics of dental polymers.

### VISION

Decrease the incidence of denture fracture and stomatitis.



### PROJECT 1

Evaluation of flexural strength and antimicrobial characteristic of polymethyl metacrylate incorporated with silver nanoparticles: a systematic review and meta-analysis.

### PROJECT 2

Evaluation of mechanical and antimicrobial characteristics of polymethyl metacrylate incorporated with titanium dioxide nanoparticles: a systematic review and meta-analysis

### EDUCATION

dentist

### SUPERVISOR(S)

Zoltán Géczi

### YEAR III

### PHD

AGE 30

### MISSION

Development of a denture material with both antipathogenic and good mechanical characteristics.

### E-MAIL

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## MELINDA ANTAL

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

Optical and mechanical characteristics of dental ceramics.

### VISION

Provide patients the best all-ceramic restoration.



### PROJECT 1

Comparing the mechanical characteristics of additively vs subtractively manufactured dental ceramics: a systematic review and meta-analysis.

### PROJECT 2

Investigating the effect of aging on the color stability of dental ceramics: a systematic review and meta-analysis.

### EDUCATION

dentistry student

### SUPERVISOR(S)

Emese Ábrám

### YEAR III

### PHD

AGE 25

### MISSION

Supply dentists a guidance about the appliance of different dental ceramics.

### E-MAIL

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## PATRIK KREUTER

DEPT. OF PAEDIATRIC DENTISTRY & ORTHODONTICS, SEMMELWEIS UNIVERSITY

### TOPIC

The latest advancements in digital orthodontics.

### VISION

Help more people smile confidently.



### PROJECT 1

Investigating the differences in root resorption between fixed appliances and aligners in permanent dentition: a systematic review and meta-analysis.  
*BMC Oral Health, Q1, 3.100*

### PUBLISHED PROJECT 2

Analyzing the failure rate and adverse effects with indirectly versus manually bonded orthodontic brackets: randomized clinical trial.

### EDUCATION

dentist

### SUPERVISOR(S)

Noémi Katinka Rózsa, Dorottya Bányai

### YEAR III

### PHD

AGE 26

### MISSION

Create more accessible orthodontic treatments.

### E-MAIL

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## PÉTER MÁRTON

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

Mechanical and optical properties of enamel and dentin.

### VISION

Help to define dental esthetics with the academic language of science.



### PROJECT 1

Investigating the effect of tooth whitening on enamel structure: a systematic review and meta-analysis.

### PROJECT 2

Evaluation of the color change and patient-oriented outcomes after teeth whitening in *in vivo* studies: a systematic review and meta-analysis.

### EDUCATION

dentistry student

### SUPERVISOR(S)

Emese Ábrám

### YEAR III

### PHD

AGE 25

### MISSION

Specify what natural-looking means scientifically.

### E-MAIL

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## PETRA PAPÓCSI

DEPT. OF ORO-MAXILLOFACIAL SURGERY & STOMATOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Fixation techniques used in the therapy of jaw fractures.

**VISION**

Learning and utilizing the latest techniques in the case of patients with jaw fractures.

**PROJECT 1**

Investigating the efficacy and safety of the currently used methods in treatment of jaw fractures: a systematic review and meta-analysis.

*Int J Oral Maxillofac Surg, Q1, IF: 2.700*

**PUBLISHED PROJECT 2**

Investigating the prevalence of different maxillofacial injuries in adults related to electric scooter or electric bike using: a systematic review and meta-analysis.

**EDUCATION**

dentist

**SUPERVISOR(S)**

Zsolt Németh

**YEAR III****PHD**

AGE 29

**MISSION**

Using a faster and more comfortable splinting technique during the night duty.



## YASIR NABEEL ABDULRAZZAQ

DEPARTMENT OF PROSTHODONTICS, UNIVERSITY OF BASRAH

**TOPIC**

New insights in the management of partially or completely edentulous patients.

**VISION**

Providing the patient with a durable, long term and comfortable prosthesis.

**PROJECT 1**

Comparing the long-term success of zirconia versus titanium implant abutments: a systematic review and meta-analysis.

**EDUCATION**

dentist

**PROJECT 2**

Investigating the efficacy and safety of added soft liners on removable denture: a systematic review and meta-analysis.

**SUPERVISOR(S)**

Gábor Varga

**YEAR III****PHD**

AGE 34

**MISSION**

Investigating the clinical evidence concerning implants and abutments in fixed prosthodontics.



## ZSÓFIA ÉVA VINCZE

DEPARTMENT OF PROSTHODONTICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Examination of CAD/CAM produced complete dentures.

**VISION**

Resocialise edentulous patients by the help of an aesthetic and well functioning complete denture.

**PROJECT 1**

Investigating the mechanical properties of denture base resins: a systematic review and meta-analysis.

*Dent Mater, D1, IF: 4.600*

**EDUCATION**

dentist

**PROJECT 2**

Evaluation of microbial adhesion of traditional PMMA resins and CAD/CAM based dentures: a systematic review and meta-analysis.

**SUPERVISOR(S)**

Krisztina Márton

**YEAR III****PHD**

AGE 28

**MISSION**

Provide a durable and feasible complete denture for edentulous patients.



## ANNA TAKÁCS

DEPARTMENT OF COMMUNITY DENTISTRY, SEMMELWEIS UNIVERSITY

**TOPIC**

Dentistry - Community dentistry

**VISION**

The application of Augmented Reality based dynamic Computer Assisted Implant Surgery (CAIS) in the everyday clinical practice.

**PROJECT 1**

Investigating the accuracy of different implant placement techniques: a systematic review and meta-analysis.

*J Dent, D1, IF: 4.400*

**EDUCATION**

dentist

**PROJECT 2**

MSc students' learning curve of AR based and conventional dynamic navigation implant placement: protocol of an in vitro study.

**SUPERVISOR(S)**

Márton Kivovics

**YEAR IV****PHD**

AGE 27

**MISSION**

Improving patient satisfaction with implants.

**E-MAIL**

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## BOLDIZSÁR VÁNKOS

DEPARTMENT OF PROSTHODONTICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Dentistry - Implantology

**VISION**

Modern, simple, accurate and patient-friendly workflow in implant prosthodontics.

**PROJECT 1**

Comparing the accuracy of additive versus conventional cast-fabrication in implant prosthodontics: A systematic review and meta-analysis.  
*J Prosthodont Res, D1, IF: 3.200*

**PUBLISHED****PROJECT 2**

Comparing the accuracy of conventional versus different digital implant impression techniques: A systematic review and meta-analysis.

**EDUCATION**

dentist

**SUPERVISOR(S)**

Barbara Kispélyi

**YEAR IV****PHD**

AGE 28

**MISSION**

To investigate the accuracy and efficacy of novel technologies in implant prosthodontics.

**E-MAIL**

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## BULCSÚ BENCZE

DEPARTMENT OF PROSTHODONTICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Dentistry - Implantology

**VISION**

My vision is to provide adequate dental treatment for medically compromised patients focusing particularly on prevention and prosthetic rehabilitation.

**PROJECT 1**

Investigating the effects of different HbA1c levels on the severity of dental implant complications: a systematic review and meta-analysis.  
*J Dent, D1, IF: 4.400*

**PUBLISHED****PROJECT 2**

Investigating the effect of Diabetes Mellitus on the prevalence, risk and mortality of Oral Squamous Cell Carcinoma: a systematic review and meta-analysis

**EDUCATION**

dentist

**SUPERVISOR(S)**

Dániel Végh

**YEAR IV****PHD**

AGE 29

**MISSION**

My mission is to find and provide scientific evidence on possible correlations between Diabetes Mellitus and oral complications.

**E-MAIL**

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## DALMA TÁBI

DEPARTMENT OF COMMUNITY DENTISTRY, SEMMELWEIS UNIVERSITY

**TOPIC**

Dentistry - Orthodontics

**VISION**

Most of the children with disabilities can attend to a specialized preventive educational program, their oral-hygiene indices are the same as their healthy peers and they can receive high-quality treatment if needed.

**PROJECT 1**

Assessing the effectiveness of dental prevention programs among children -systematic review and meta-analysis

**EDUCATION**

dentist

**PROJECT 2**

School-based prevention program for special needs children -Pilot study for an RCT

**SUPERVISOR(S)**

Orsolya Németh

**YEAR IV****PHD**

AGE 29

**MISSION**

To provide a health care program to patients with special needs -especially children with disability and to develop a method where the children's cooperation and oral literacy can be improved.

**E-MAIL**

tabidalma@gmail.com



## ESZTER HARDI

SEMMELWEIS UNIVERSITY

**TOPIC**

Dentistry - Oral surgery

**VISION**

To improve the life quality of patients undergoing oral surgeries.

**PROJECT 1**

Suspendisse blandit rhoncus lectus, a venenatis leo ornare molestie. *Journal of Evidence-Based Dental Practice, D1, IF: 4.100*

**EDUCATION**

dentist

**PUBLISHED****PROJECT 2**

Effect of kinesio tape as adjunct therapy in reducing postoperative complications in third molar removal Randomized controlled trial

**SUPERVISOR(S)**

Árpád Joob-Fancsaly

**YEAR IV****PHD**

AGE 27

**MISSION**

To find the best solution that alleviates patients' complaints after third molar removal

**PROJECT 3**

Investigating the effect of different flap designs on patient morbidity after lower wisdom tooth removal: A systematic review and network meta-analysis

**E-MAIL**

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## MADALINA BANARESCU

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

Dentistry - Cranio maxillofacial surgery

### VISION

To improve the life quality of patients with oro-maxillofacial defects.



### PROJECT 1

Investigating the effectiveness of Intraoperative surgical navigation over conventional surgery in the management of zygomaticomaxillary complex fractures: a systematic review and meta-analysis

### PROJECT 2

Investigating the effectiveness of Intraoperative surgical navigation over conventional surgery in the management of orbital reconstruction: a systematic review and meta-analysis

### EDUCATION

dentist

### SUPERVISOR(S)

Gábor Gerber

### YEAR IV

### PHD

AGE 29

### MISSION

To improve the esthetic and functional outcomes in reconstruction techniques by applying up to date scientific results.



## MÁRTON ÁCS

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

Dentistry - Facial malformation

### VISION

To decrease the incidence of orofacial clefts and improve the patients quality of life.



### PROJECT 1

Investigating the effects of deleterious habits and maternal health disorders on the risk of orofacial cleft development: systematic review and meta-analysis  
*Sci Rep, D1, IF: 4.600*

### PUBLISHED PROJECT 2

Investigating the effects of pharmaceutical therapies during pregnancy on the risk of orofacial cleft development: systematic review and meta-analysis

### EDUCATION

dentist

### SUPERVISOR(S)

Gábor Varga, Gábor Gerber

### YEAR IV

### PHD

AGE 28

### MISSION

To indicate which maternal risk factors play a role in orofacial clefts incidence through newest scientific data.



## ORSOLYA VÁMOS

DEPARTMENT OF PROSTHODONTICS, SEMMELWEIS UNIVERSITY

### TOPIC

Dentistry - Prosthodontics

### VISION

To spread awareness of the harmful effect of tobacco products, promote prevention and cessation.



### PROJECT 1

Investigating the effect of tobacco products on peri-implant tissues: a systematic review and meta-analysis.  
*Nicotine Tob Res, D1, IF: 4.700*

### PUBLISHED PROJECT 2

Impact of smoking status and electronic cigarette use on non-surgical periodontal therapy: a systematic review and meta-analysis.

### EDUCATION

dentist

### SUPERVISOR(S)

Barbara Kispélyi

### YEAR IV

### PHD

AGE 31

### MISSION

To make comparison on the effects of traditional and alternative tobacco products.



## PÉTER GERGELY KOMORA

DEPT. OF RESTORATIVE DENTISTRY & ENDODONTICS, SEMMELWEIS UNIVERSITY

### TOPIC

Dentistry - Conservative dentistry

### VISION

Minimal invasive endodontics.



### PROJECT 1

Comparing the efficacy of bioactive materials in vital pulp therapy: a systematic-review and network meta-analysis. *Sci Rep, D1, IF: 4.600*

### PUBLISHED PROJECT 2

Comparing the root canal filling quality of calcium silicate-based sealers: a systematic-review and meta-analysis of in-vitro studies.

### EDUCATION

dentist

### SUPERVISOR(S)

János Vág, Beáta Kerémi

### YEAR IV

### PHD

AGE 44

### MISSION

Reduce the invasiveness in endodontics through evidence-based science.

### E-MAIL

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## VIRÁG RÓNA

DEPARTMENT OF PROSTHODONTICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Dentistry - Prosthodontics

**VISION**

Researching the usage of polymers in dentistry mainly focusing on chitosan.

**PROJECT 1**

Effect of chitosan on the number of *Streptococcus mutans* in saliva: meta-analysis and systematic review  
*Int J Mol Sci, D1, IF: 5.600*

**PUBLISHED PROJECT 2**

Effect of chitosan on the number of *Enterococcus faecalis* in root canal: meta-analysis and systematic review

**EDUCATION**

dentist

**SUPERVISOR(S)**

Zoltán Géczi

**YEAR IV****PHD**

AGE 31

**MISSION**

Finding some new alternatives that can be used in clinical dentistry.

**E-MAIL**

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## XINYI (CINDY) QIAN

DEPARTMENT OF PROSTHODONTICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Dentistry - Implantology

**VISION**

To provide the highest-quality implant-restorations with the most time- and cost-effective workflow, while minimizing patient discomfort based on scientific and clinical evidence.

**YEAR IV****PHD**

AGE 27

**MISSION**

To implement the best implant-prosthetic treatment for the anterior region into everyday practice.

**PROJECT 1**

Hard and soft tissue outcomes of different placement and loading protocols on single maxillary implants in the esthetic zone: a systematic review and network meta-analysis.  
*J Prosthet Dent, D1, IF: 4.600*

**PUBLISHED PROJECT 2**

Peri-implant hard and soft tissue outcomes with anatomic vs non-anatomic healing abutment: a systematic review and meta-analysis

**PROJECT 3**

The accuracy of digital impression methods for capturing the peri-implant emergence profile: a systematic review and meta-analysis

**EDUCATION**

dentist

**SUPERVISOR(S)**

Krisztina Ágnes Mikulás

**E-MAIL**

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## ALEXANDER SCHULZE WENNING

DEPARTMENT OF ORAL BIOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Dentistry - Maxillofacial surgery

**VISION**

No cleft baby left untreated.

**YEAR V****PHD**

AGE 32

**MISSION**

To reduce invasiveness through research based clinical decision making. Spreading awareness.

**PROJECT 3**

Determining the optimal operation technique for palatoplasty, analyzing maxillofacial growth in patients with uni- and bilateral cleft lip and palate: Systematic review and meta-analysis

**E-MAIL**

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## ELEONÓRA SÓLYOM

DEPARTMENT OF CONSERVATIVE DENTISTRY, SEMMELWEIS UNIVERSITY

**TOPIC**

Dentistry - Periodontology

**VISION**

To change the mindset of tooth extraction.

**YEAR V****PHD**

AGE 31

**MISSION**

None of the extraction sockets should be left unpreserved.

**PROJECT 3**

Effectiveness of autogenous tooth bone grafts in the regenerative treatment of intrabony periodontal defects: a retrospective case series study

**E-MAIL**

eleonorasolyom@gmail.com



Safety and Efficacy of Autogenous Tooth Bone graft for Alveolar Ridge Preservation: a systematic review and meta-analysis.  
*BMC Oral Health, Q1, IF: 2.900*

**EDUCATION**

dentist

**PUBLISHED PROJECT 2**

Clinical, radiographical, histological evaluation and blood flow analysis of hard- and soft- tissue changes following alveolar ridge preservation : protocol of a randomized clinical trial.

**SUPERVISOR(S)**

Réka Fazekas, Bálint Molnár



## ESZTER UHRIN

DEPARTMENT OF COMMUNITY DENTISTRY, SEMMELWEIS UNIVERSITY

### TOPIC

Dentistry - Teledentistry

### VISION

A teledentistry application.



### PROJECT 1

Teledentistry: A Future Solution In The Diagnosis Of Oral Lesions: A Diagnostic Meta-analysis And Systematic Review.  
*Telemedicine and e-Health, Q1, IF: 4.700*

### PUBLISHED

### PROJECT 2

The Effect Of Oral Healthcare Prevention Program For Post-stroke Inpatients' Oral Hygiene: A Systematic Review And Meta-analysis.  
*J Dent, D1, IF: 4.800*

### PUBLISHED

### EDUCATION

dentist

### SUPERVISOR(S)

Orsolya Németh

### YEAR V

### PHD

AGE 30

### MISSION

Using teledentistry in the diagnosis of oral lesions in primary dental care.

### E-MAIL

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FIELD OF RESEARCH  
**DERMATOLOGY**





# RESEARCH FIELD DERMATOLOGY

The Dermatology Research Group is one of the most active and successful groups within the program, uniting doctoral candidates engaged in a broad spectrum of dermatological research. Their work spans clinical, immunological, oncological, and psychosocial aspects of skin health, reflecting the diverse and multidisciplinary nature of modern dermatology. Key research areas include inflammatory and immune-mediated skin diseases, such as psoriasis, cutaneous lupus, prurigo nodularis, and urticaria, as well as oncologic topics including melanoma, basal and squamous cell carcinoma, and treatment-related toxicity. Further areas of interest include sexually transmitted infections, surgical and aesthetic dermatology, vitiligo, teledermatology, and the psychological dimensions of skin disorders. Through clinical studies, translational research, and innovative diagnostic approaches, the group aims to improve understanding of skin pathophysiology, enhance therapeutic outcomes, and promote holistic, patient-centered dermatologic care.

## SUPERVISORS

10

★ TOP SUPERVISORS ★



**ANDRÁS BÁNVÖLGYI**  
8 student



**NORBERT KISS**  
8 student

Bernadett Hidvégi, Fanni Adél Meznerics, Katalin Buday, Kende Kálmán Lőrincz, Lajos Vincze Kermény,  
Norbert Wikonkál, Péter Holló, Zsuzsanna Kurgyis

## STUDENTS

16

**YEAR I** Natasa Balázs, Veronika Sára Upor

**YEAR II** Bella Anna Kelemen, Gabriella Zita Mohos, Genevieve Arany-Lao-Kan, Hanna Potra, Koorosh Karimi,  
Mária Veronika Kolonics, Máté Krebs

**YEAR III** Alzahra Ahmed Mohammed, Andrea Lancz, Katalin Martyin, Laura Anna Bokor, Lili Gulyás,  
Renáta Árok

**YEAR IV** Anna Sára Lengyel



## NATASA BALÁZS

SEMMELWEIS UNIVERSITY

**TOPIC**

Targeted Gut Microbiome Modulation in the Management of Skin Disorders

**PROJECT 1**

Investigating the Efficacy and Safety of Targeted Gut Microbiome Modulation in Psoriasis: A Systematic Review and Meta-analysis

**EDUCATION**

medical student

**VISION**

To provide better care for patients with dermatological diseases.

**PROJECT 2**

Investigating the Efficacy and Safety of Targeted Gut Microbiome Modulation in Burn Injuries: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Norbert Kiss

**YEAR I****MD-PHD**

AGE 25

**MISSION**

Investigate the effect of Gut microbiome modulation in dermatological disorders.



## VERONIKA SÁRA UPOR

DEPARTMENT OF FAMILY MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

The effect of Novel Therapies in Treating Psoriasis

**PROJECT 1**

Investigating the Efficacy of Incretin Based Therapies in Psoriasis : A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**VISION**

Improve the quality of life of patients with psoriasis.

**PROJECT 2**

Investigating the Efficacy of Janus Kinase and Tyrosine Kinase 2 Inhibitors in Psoriasis : A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Lajos Vince Kemény, Katalin Buday

**YEAR I****PHD**

AGE 28

**MISSION**

Investigate the usage of novel therapies in psoriasis.



## BELLA ANNA KELEMEN

DEPT. OF DERMATOLOGY, VENEREOLOGY & DERMATOONCOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Advancements in the diagnostics of skin cancer.

**PROJECT 1**

Investigating the accuracy of novel, optical diagnostic imaging techniques for basal cell carcinoma: systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Early diagnosis and treatment of basal cell carcinoma.

**PROJECT 2**

Investigating the diagnostic accuracy of dermoscopic scoring systems in the detection of melanoma: systematic review and meta-analysis.

**SUPERVISOR(S)**

Norbert Kiss, Norbert Wikonkál

**YEAR II****PHD**

AGE 26

**MISSION**

To improve skin cancer detection through imaging methods.



## GABRIELLA ZITA MOHOS

DEPT. OF DERMATOLOGY, VENEREOLOGY & DERMATOONCOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Microbiome modulation in chronic inflammatory skin diseases.

**PROJECT 1**

Investigating the effect and safety of microbiome modulation in atopic dermatitis patients: systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Better care for patients with chronic inflammatory skin diseases.

**PROJECT 2**

Investigating the efficacy and safety of topical calcineurin inhibitors in immune-mediated skin diseases: international survey.

**SUPERVISOR(S)**

Norbert Kiss, Fanni Meznerics

**YEAR II****PHD**

AGE 28

**MISSION**

Implementing microbiome modulation in chronic inflammatory skin diseases.





## GENEVIEVE ARANY-LAO-KAN

MD/PHD STUDENT

**TOPIC**

Psychodermatological interventions in chronic skin diseases.

**PROJECT 1**

Investigating the efficacy of psychotherapy in the treatment of patients with atopic dermatitis: systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Decreased psychological burden in patients diagnosed with atopic dermatitis.

**PROJECT 2**

Investigating the characteristics of psychological interventions in atopic dermatitis: international survey.

**SUPERVISOR(S)**

Norbert Kiss, András Bánvölgyi

**YEAR II****PHD**

AGE 28

**MISSION**

Implementing of psychotherapy in the treatment of atopic dermatitis.



## HANNA POTRA

FULL TIME PHD STUDENT

**TOPIC**

Comprehensive therapies of acne: from conventional therapies to microbiome modulation.

**PROJECT 1**

Investigating the efficacy and safety of microbiome modulation in the treatment of acne: systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Improved care of acne patients.

**PROJECT 2**

Investigating the efficacy and safety of different doses of isotretinoin treatment in acne: international survey.

**SUPERVISOR(S)**

Norbert Kiss, Fanni Meznerics

**YEAR II****PHD**

AGE 26

**MISSION**

Implementation of novel therapies of acne.



## KOOROSH KARIMI

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Novel approaches in the management of hidradenitis suppurativa.

**PROJECT 1**

Investigating the safety and efficacy of surgical techniques in hidradenitis suppurativa: A Systematic Review and Meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Improve the quality of life of hidradenitis suppurativa patients.

**PROJECT 2**

Evaluating the safety and efficacy of peri-operative use of biologics in hidradenitis suppurativa: International survey.

**SUPERVISOR(S)**

András Bánvölgyi, Kende Kálmán Lőrincz

**YEAR II****PHD**

AGE 28

**MISSION**

Identifying the best surgical techniques for Hidradenitis Suppurativa.



## MÁRIA VERONIKA KOLONICS

DEPT. OF DERMATOLOGY, VENEREOLOGY & DERMATOONCOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Effects of biologics on the comorbidities and microbiome in psoriasis.

**PROJECT 1**

Investigating the effects of biologics on the cardiovascular risk of psoriatic patients: systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Decreased cardiopulmonary burden in psoriatic patients.

**PROJECT 2**

Investigating the effect of the microbiome on the therapeutic success in scalp psoriasis: observational clinical study.

**SUPERVISOR(S)**

Péter Holló, András Bánvölgyi

**YEAR II****PHD**

AGE 28

**MISSION**

To find the best therapy for psoriasis.





## MÁTÉ KREBS

MD/PHD STUDENT

### TOPIC

Therapeutic approaches in immune-mediated inflammatory skin diseases.

### PROJECT 1

Investigating the infection risk of JAK/STAT inhibitors in immune-mediated inflammatory skin diseases: systematic review and meta-analysis.

### EDUCATION

medical doctor

### VISION

Improved quality of life of people with immune-mediated inflammatory skin diseases.

### PROJECT 2

Investigating the risk of inflammatory bowel disease in patients treated with IL-17 inhibitors: systematic review and meta-analysis.

### SUPERVISOR(S)

Lajos Vince Kemény, Péter Holló

### YEAR II

### PHD

AGE 26

### MISSION

Assessing and addressing the risks associated with targeted immune therapies in immune-mediated inflammatory skin diseases.



## ALZAHRA AHMED MOHAMMED

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

The management of vitiligo.

### VISION

Improve the quality of life of vitiligo patients.

### PROJECT 1

Investigating the efficacy and safety of the use of JAK inhibitors in the treatment of vitiligo: a systematic review and meta-analysis.

*Dermatol Ther (Heidelb)*, **D1**, IF: 3.500

### PUBLISHED

### PROJECT 2

### PUBLISHED

Investigating the prevalence of cancers in vitiligo patients: a systematic review and meta-analysis.

*Dermatol Ther (Heidelb)*, **D1**, IF: 4.200

### EDUCATION

medical student

### SUPERVISOR(S)

Lajos Kemény, Zsuzsanna Kurygis

### YEAR III

### PHD

AGE 25

### MISSION

Enhancing vitiligo treatment by bridging basic science with clinical care.



## ANDREA LANCZ

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

Management of itching: new insights in the treatment of urticaria and prurigo nodularis

### VISION

Patients with prurigo nodularis could have a better quality of life.

### PROJECT 1

Comparing the safety and efficacy of biologics in prurigo nodularis: a systematic review and meta-analysis.

### PROJECT 2

Investigating the safety and efficacy of biologics in chronic urticaria: a systematic review and meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

András Bánvölgyi, Norbert Kiss, Fanni Adél Meznerics

### YEAR III

### PHD

AGE 37

### MISSION

Optimizing the treatment of prurigo nodularis.



## KATALIN MARTYIN

DEPT. OF DERMATOLOGY, VENEREOLOGY & DERMATOONCOLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

New insights into the application of teledermatology

### VISION

The latest technological improvements should be implemented in patient care as soon as possible.

### PROJECT 1

Comparing the diagnostic accuracy of teledermatology systems to face-to-face examination in the diagnosis of skin diseases: A systematic review and meta-analysis.

### PROJECT 2

Investigating the diagnostic accuracy of artificial intelligence systems in diagnosis of skin diseases: a systematic review and meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

András Bánvölgyi, Norbert Kiss

### YEAR III

### PHD

AGE 26

### MISSION

Providing reliable data to facilitate the widespread use of teledermatology.





## LAURA ANNA BOKOR

DEPT. OF DERMATOLOGY, VENEREOLOGY & DERMATOONCOLOGY,  
SEMMELWEIS UNIVERSITY

**TOPIC**

Clinicopathological evaluation of cutaneous lupus

**PROJECT 1**

Investigating the efficacy and safety of different therapeutical options in cutaneous lupus: a systematic review and meta-analysis.

*Autoimmun Rev, D1, IF: 9.200*

**EDUCATION**

medical doctor

**VISION**

Improve the quality of life of patients suffering from cutaneous lupus.

**PUBLISHED****PROJECT 2**

Investigating the epidemiological background of cutaneous lupus: a systematic review and meta-analysis.

**YEAR III****PHD**

AGE 27

**MISSION**

Find more efficient therapeutic options for cutaneous lupus.



## LILI GULYÁS

DEPT. OF DERMATOLOGY, VENEREOLOGY & DERMATOONCOLOGY,  
SEMMELWEIS UNIVERSITY

**TOPIC**

Biomarkers in the Diagnosis and Prognosis of Cutaneous Melanoma

**PROJECT 1**

Investigating the predictive value of different biomarkers for post-diagnostic events in malignant melanoma: a systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Improve the monitoring of skin diseases to increase patient survival and therapeutic efficacy.

**PROJECT 2**

Investigating safety and efficacy of Systemic Therapies in Locally Advanced and Metastatic Basal Cell Carcinoma: a systematic review and meta-analysis.

**SUPERVISOR(S)**

Kende Kálmán Lórincz, András Bánvölgyi

**YEAR III****PHD**

AGE 27

**MISSION**

Identify the most effective serum biomarkers for disease monitoring.



## RENÁTA ÁROK

BAJCSY-ZSILINSZKY HOSPITAL AND CLINIC

**TOPIC**

New approaches in the management of dermatological side effects caused by targeted oncological therapies.

**PROJECT 1**

Investigating the efficacy of preventive and therapeutic options for kinase inhibitory therapy-induced skin toxicity: a systematic review and meta-analysis.

**EDUCATION**

pharmacist

**VISION**

Patients treated with targeted oncology therapy could have a better quality of life.

**PROJECT 2**

Comparing the efficacy and safety treatment of cutaneous squamous cell carcinoma: a systematic review and meta-analysis.

**SUPERVISOR(S)**

Norbert Kiss, András Bánvölgyi, Fanni Adél Meznérics

**YEAR III****PHD**

AGE 36

**MISSION**

Finding new approaches to manage skin toxicity adverse events and providing to patients appropriate advices for skin care.



## ANNA SÁRA LENGYEL

DEPT. OF DERMATOLOGY, VENEREOLOGY & DERMATOONCOLOGY,  
SEMMELWEIS UNIVERSITY

**TOPIC**

Dermatology - Oncology

**VISION**

To improve and extend the life of melanoma patients.

**PROJECT 1**

Investigating the efficacy and safety of immune-based and targeted therapies and their combinations in the management of advanced/ metastatic melanoma: a systematic review and network meta-analysis.

*J Mol Sci, D1, IF: 4.900*

**EDUCATION**

medical doctor

**PUBLISHED****PROJECT 2**

Investigating the efficacy and safety of adjuvant therapies in the management of melanoma: a systematic review and network meta-analysis.

**SUPERVISOR(S)**

Lajos Kemény

**YEAR IV****PHD**

AGE 28

**MISSION**

To translate basic research to clinical medicine to optimize treatment strategies.

**E-MAIL**

annasara.lengyel@gmail.com



FIELD OF RESEARCH  
**ENDOCRINOLOGY**





# RESEARCH FIELD ENDOCRINOLOGY

The Endocrinology Research Group brings together doctoral candidates exploring the complex interactions between metabolism, endocrine function, and systemic disease. Their work focuses on improving understanding and management of metabolic disorders, endocrine-related cancers, and the interconnections between endocrine and digestive health. Research topics include metabolic health, diabetes prevention, glucose monitoring technologies, triglyceride metabolism, and the relationship between diabetes and acute pancreatitis. Through clinical studies, translational research, and data-driven analysis, the group aims to identify new pathways for disease prevention and optimize personalized therapeutic strategies in endocrinology and metabolic medicine.

## SUPERVISORS

5



ANDREA SZENTESI



EMEZE SIPTER



GÁBOR KOVÁCS



PÉTER HEGYI



STEFANIA BUNDUC

## STUDENTS

5

**YEAR II** Gabriella Rákóczi, Judit Nagy, Máté Orgoványi, Miaoxin (Macy) Huang

**YEAR III** Luca Havelda, Maria Bucur



## GABRIELLA RÁKÓCZI

SELF-EMPLOYED, UPLEVEL

### TOPIC

Continuous Glucose Monitoring and Diabetes.

### PROJECT 1

Investigating the Diagnostic Accuracy of CGM on Dysglycemia: A Systematic Review and Meta-analysis.

### EDUCATION

dietitian

### VISION

Decreased incidence of diabetes mellitus.

### PROJECT 2

Investigating the Diagnostic Accuracy of Continuous Glucose Monitoring, HbA1c, and Fasting Plasma Glucose on Prediabetes Detection: A Clinical Registry Analysis.

### SUPERVISOR(S)

Péter Hegyi, Emese Sipter

### YEAR II

### PHD

AGE 51

### MISSION

Identify and correct dysglycemia before it develops into diabetes.

### PROJECT 3

Investigating the Effect of Non-Pharmacological Interventions on the Reversal of Type 2 Diabetes: A Systematic Review and Meta-analysis.

### E-MAIL

rakoczigabi277@gmail.com



## JUDIT NAGY

NOVO NORDISK

### TOPIC

Risk factors of atherosclerosis in obese patients.

### VISION

Better detection of subclinical atherosclerosis of obese individuals.



### PROJECT 1

Assessing BMI's Predictive Value for Subclinical Atherosclerosis Measured by the Coronary Artery Calcium Score: A Systematic Review and Meta-analysis.

### EDUCATION

pharmacist

### PROJECT 2

Investigating the inflammation profile of obesity phenotypes in atherosclerosis prediction: systematic review and meta-analysis.

### SUPERVISOR(S)

Péter Hegyi, Emese Sipter

### YEAR II

### PHD

AGE 50

### MISSION

Improved clinical practice, guide preventive strategies, influence policy for better management of cardiovascular risk in obesity.

### PROJECT 3

Eurostat project: Investigating the effect of overweight and obesity on the productivity loss of workers across Europe: A Registry Project

### E-MAIL

judit1386@gmail.com



## MÁTÉ ORGOVÁNYI

UZSOKI TEACHING HOSPITAL

### TOPIC

Management of differentiated thyroid cancer.

### VISION

Better management of differentiated thyroid cancer.



### PROJECT 1

Investigating the predictive accuracy of different risk factors of papillary thyroid microcarcinoma: systematic review and meta-analysis.

### PROJECT 2

Investigating the radioactive iodine treatment as a risk factor for second primary malignancies in differentiated thyroid cancer patients: systematic review and meta-analysis.

### SUPERVISOR(S)

Gábor Kovács

### YEAR II

### PHD

AGE 28

### MISSION

Providing evidence-based knowledge for the unanswered questions.

### E-MAIL

org.mate21@gmail.com



## MIAOXIN (MACY) HUANG

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

The Role Of Inflammation In Progression Of Abnormal Glucose Tolerance.

### VISION

Global access to education and resources to prevent prediabetes from progressing to type 2 diabetes.



### PROJECT 1

Investigating the Effect of Inflammatory Mediators on the Development of Diabetes in Adults with Prediabetes: Systematic Review and Meta-analysis.

### PROJECT 2

Investigating the Effect of Inflammatory Mediator Levels on Disease Progression and Comorbidities in Patients with Metabolic-Associated Steatotic Liver Disease (MASLD): Systematic Review and Meta-Analysis.

### SUPERVISOR(S)

Péter Hegyi, Emese Sipter

### YEAR II

### PHD

AGE 30

### MISSION

Determining which factors affect the progression of prediabetes into diabetes.

### E-MAIL

tianhao0411@gmail.com



## LUCA HAVELDA

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

### TOPIC

The impact of triglyceride level on the risk and outcome of different diseases

### VISION

Contribute to the prevention of all preventable diabetes.

### PROJECT 1

Investigating the effects of different triglyceride levels on the development of diabetes mellitus: Systematic Review and Meta-analysis.

### PROJECT 2

Investigating the effects of different triglyceride levels on the outcome of COVID-19: Registry analysis.

### EDUCATION

dietetian

### SUPERVISOR(S)

Péter Hegyi, Andrea Szentesi

YEAR III

PHD

AGE 31

### MISSION

Provide evidence-based and valuable data to help prevent diabetes.



## MARIA BUCUR

NATIONAL INSTITUTE OF DIABETES, NUTRITION AND METABOLIC DISEASES "N.C PAULESCU", BUCHAREST, ROMANIA

### TOPIC

Diabetes mellitus across pancreatic diseases

### VISION

Decrease the burden of Diabetes Mellitus.

### PROJECT 1

Investigating therapeutic options for preventing/delaying Diabetes Mellitus in prediabetic patients: a systematic review and meta-analysis.

### PROJECT 2

Investigating the beta cell function failure during acute pancreatitis: registry analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Péter Hegyi, Stefania Bunduc

YEAR III

PHD

AGE 31

### MISSION

Improve prognosis of pancreatic disease patients by achieving well-controlled Diabetes Mellitus.





FIELD OF RESEARCH  
**GASTROENTEROLOGY**





# RESEARCH FIELD GASTROENTEROLOGY

The Gastroenterology Research Group is one of the largest within the program, bringing together physicians, dietitians, and psychologists dedicated to advancing research in digestive and metabolic health. Their work encompasses a wide range of topics within gastroenterology, hepatology, pancreatology, and related fields, with a strong focus on both clinical and psychosocial aspects of patient care. Key research areas include pancreatic and colorectal cancer diagnostics and therapy, interventional and diagnostic endoscopy, acute and chronic pancreatitis, pancreaticobiliary disorders, inflammatory bowel disease, hepatology, metabolic syndrome, and gastrointestinal bleeding. Complementary studies address caregiver mental health, psychotherapy, dietetics, and the complex interactions between psychological well-being and gastrointestinal disease. Through multidisciplinary collaboration, systematic reviews, clinical trials, and translational research, the group aims to improve prevention, diagnosis, and treatment of gastrointestinal and metabolic diseases. Their collective work contributes to advancing integrated patient care and bridging the gap between clinical medicine, nutrition, and mental health.

## SUPERVISORS

28

★ TOP SUPERVISORS ★



**PÉTER HEGYI**  
19 student



**BÁLINT ERŐSS**  
9 student



**STEFANIA BUNDUC**  
5 student

Alexandra Mikó, Andrea Szentesi (*Supervisor of the month: 2023 December*), Andrea Uhlyarik, Bogdan Ionel Tamba, Brigitta Teutsch, Catalin-Victor Sfarti, Emese Mihály (*Supervisor of the month: 2023 May*), Eszter Szalai, István Hritz, Katalin Földváriné Lenti (*Supervisor of the month: 2023 August, 2025 January*), Katalin Márta, Krisztina Hagymási (*Supervisor of the month: 2023 February*), László Földvári-Nagy (*Supervisor of the month: 2025 January*), Nándor Faluhelyi, Nóra Hosszúfalusi, Orsolya Dohán (*Supervisor of the month: 2025 February*), Petra Anna Golovics, Peter Banovcin, Pál Miheller, Péter Jenő Hegyi (*Supervisor of the month: 2023 April, 2024 March*), Rita Nagy, Szilárd Váncsa, Tamás Gonda, Tibor Gyökeres, Vasile Liviu Drug

## STUDENTS

40

**YEAR I** Alexandra Sharykina, Anna Esztella Doszpoly, Daniel Marino, Dina Abu Al-Samen, Gergely Soós, Hajnalka Németh, Roxana Grigorovici, Yoon Kee Beck

**YEAR II** Arnold Marchis, Dóra Demeter, Gegely Kollányi, Kálmán János Zsigmond, Sándor Orbán, Zoltán Imre Bánfalvi, Zsófia Németh, Zsófia Román

**YEAR III** Dalma Köves-Dobszai, Ioana-Irina Rezuş, Jázmin Németh, Jimin Lee, Orsolya Eperjesi, Veronika Lillik

**YEAR IV** Bálint Gellért, Bettina Csilla Budai, Cai Gefu, Dániel Steve Bednárik, Diana Elena Floria, Dorottya Tarján, Edina Tari, Endre Botond Gagyi, Hajnal Székely, Jakub Hoferica, Mónika Bernadett Lipp, Panagiotis Paraskveopoulos, Petrania Martinekova, Ruben Zsolt Borbély, Adrienn Nikolett Kovács

**YEAR V** Dániel Pálinskás, Olga Julia Zahariev



## ALEXANDRA SHARYKINA

PHD STUDENT

**TOPIC**

New Insights into Current and Emerging Therapeutic Challenges in Microscopic Colitis

**VISION**

Improve the quality of life for patients with Microscopic colitis.

**PROJECT 1**

Investigating the Prevalence of Helicobacter Pylori in Patients with Microscopic Colitis: A Systematic Review and Meta-analysis

**PROJECT 2**

Assessing the Efficacy of Tofacitinib versus Vedolizumab in Budesonide-Nonresponsive Microscopic Colitis: A Randomized Clinical Trial Protocol

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Emese Mihály

YEAR I	PHD
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AGE 25

**MISSION**

Provide patients with Microscopic colitis the highest standard of care.

**E-MAIL**

sharykinaalexandra5@gmail.com



## ANNA ESZTELLA DOSZPOLY

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

**TOPIC**

New Insights into the Psychological Burden and Risk Factors in Caregivers of Gastrointestinal Cancer Patients

**VISION**

Provide the best psychological support for GI cancer caregivers.

**PROJECT 1**

Investigating the Prevalence of Anxiety and Depressive Symptoms in Caregivers of Gastrointestinal Cancer patients: A Systematic Review and Meta-Analysis

**PROJECT 2**

Investigating the Psychological Risk Factors for Anxiety and Depressive symptoms in Caregivers of Pancreatic Cancer Patients: Protocol of Prospective Observational Clinical Study

**EDUCATION**

psychologist

**SUPERVISOR(S)**

Péter Hegyi, Eszter Szalai

YEAR I	PHD
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AGE 27

**MISSION**

Alleviate caregiver burden in GI cancer caregivers.

**E-MAIL**

doszpolyannaeszter@gmail.com



## DANIEL MARINO

NYU LANGONE HEALTH, NEW YORK CITY, UNITED STATES

**TOPIC**

Mucinous Cystic Lesions and Pancreatic Cancer

**VISION**

Prevent pancreatic cancer.

**PROJECT 1**

Investigating the Characteristics of Pancreatic Cancer Arising from Pancreatic Mucinous Lesions: A Systematic Review and Meta-analysis

**PROJECT 2**

Investigating Risk Factors between IPMN and non-IPMN Derived Pancreatic Cancer: A Retrospective Registry Analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Péter Hegyi, Tamás Gonda

YEAR I	MSC
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AGE 32

**MISSION**

Determine the impact of pancreatic mucinous lesions on pancreatic cancer.

**E-MAIL**

daniel.marino@nyulangone.org



## DINA ABU AL-SAMEN

AL-AHLIYYA AMMAN UNIVERSITY, JORDAN

**TOPIC**

Novel Therapeutic Approaches in Pancreatic Cancer

**VISION**

Improve survival and quality of life in pancreatic cancer patients.

**PROJECT 1**

Investigating the Clinical Characteristics and Outcomes of Pancreatic Cancer Patients Treated with Ablative Therapies: A Systematic Review and Meta-analysis

**PROJECT 2**

Investigating the Effect of Antibiotic Use on Survival Outcomes in Pancreatic Cancer: A Systematic Review and Meta-analysis

**EDUCATION**

pharmacist

**SUPERVISOR(S)**

Péter Hegyi, Stefania Bunduc

YEAR I	PHD
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AGE 33

**MISSION**

Identify effective and personalized therapeutic strategies.

**E-MAIL**

dina\_uni@yahoo.com



## GERGELY SOÓS

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

**TOPIC**

Importance of Nutritional Status in Pancreatitis

**PROJECT 1**

Investigating the Predictive Value of Nutritional Status on Mortality and Severity in Acute Pancreatitis: A Systematic Review and Meta-analysis

**EDUCATION**

dietitian

**VISION**

Better nutritional status of pancreatitis patients.

**PROJECT 2**

Investigating the Risk Factors for Bodyweight Change in Patients with Acute Pancreatitis: A Registry analysis

**SUPERVISOR(S)**

Péter Hegyi, Eszter Szalai

**YEAR I****PHD**

AGE 26

**MISSION**

Provide evidence-based suggestions in nutrition.



## HAJNALKA NÉMETH

HETÉNYI GÉZA HOSPITAL AND ONCOLOGY CENTER, SZOLNOK

**TOPIC**

New Insights into Routes of Administration of Systemic Therapies and Surveillance in Colorectal Cancer

**VISION**

Improve the treatment for cancer patients.

**PROJECT 1**

Comparing the Efficacy and Safety of Oral Capecitabine + Irinotecan (CapIRI) to Intravenous 5-Fluorouracil + Irinotecan (Folfiri) Chemotherapy in Metastatic Colorectal Cancer: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**PROJECT 2**

Comparing the Effectiveness of High to Low Frequency CT Surveillance in Stage II-III Colorectal Cancer: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Bálint Erőss, Andrea Uhlyarik

**YEAR I****PHD**

AGE 48

**MISSION**

Explore optimal surveillance and administration of therapies.



## ROXANA GRIGOROVICI

SAINT SPIRIDON EMERGENCY HOSPITAL, IASI

**TOPIC**

New Perspectives in the Etiopathogenesis and Diagnosis of Pancreatic Cancer

**VISION**

Early detection of all pancreatic cancer patients.

**PROJECT 1**

Comparing the Diagnostic Accuracy of EUS, CT and MRI in Detecting Small Pancreatic Lesions: A Systematic Review and Network Meta-analysis

**EDUCATION**

medical doctor

**PROJECT 2**

Investigating the Association between Metallome Profile and Pancreatic Cancer: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Péter Hegyi, Catalin-Victor Sfarti, Stefania Bunduc

**YEAR I****PHD**

AGE 26

**MISSION**

Identify the best tools for diagnosing pancreatic cancer at an early stage.



## TOM BRAND

SEMMELWEIS UNIVERSITY

**TOPIC**

New Insights in Infected Walled-Off Pancreatic Necrosis

**VISION**

Reduce mortality and improve quality of life in patients with walled-off pancreatic necrosis.

**PROJECT 1**

Investigating the Bacterial Profile in Suspected Infection of Walled-off Pancreatic Necrosis: A Systematic Review and Meta-analysis

**EDUCATION**

medical student

**PROJECT 2**

Investigating the Efficacy of Early Conversion to Targeted Antibiotic Therapy with Suspected Infection in Walled-off Pancreatic Necrosis: A Protocol for a Randomised Controlled Trial

**SUPERVISOR(S)**

Péter Jenő Hegyi

**YEAR I****MD-PHD**

AGE 27

**MISSION**

Implement evidence-based results to improve the treatment for walled-off pancreatic necrosis.





## YOON KEE BECK

PHD STUDENT

**TOPIC**

New Insights in Diagnosis of Biliary Sepsis in Patients with Cholangitis

**PROJECT 1**

Investigating the Added Value of Bile Culture to Antibiotic Treatment in Patients with Cholangitis Undergoing ERCP: A Systematic Review and Meta-analysis

**EDUCATION**

student

**VISION**

Offer the best treatment and reduce mortality for patients with cholangitis.

**PROJECT 2**

Comparing the Effectiveness of Targeted and Empirical Antibiotics in Patients with Cholangitis Undergoing ERCP: A Randomized Controlled Trial

**SUPERVISOR(S)**

Bálint Erőss

**YEAR I****PHD**

AGE 30

**MISSION**

Decreasing diagnostic time for patients with cholangitis.



## ARNOLD MARCHIS

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

**TOPIC**

New perspectives on transplantation in the treatment of cancer and diabetes.

**VISION**

Offering the best medical or surgical options to cancer and diabetic patients and improve the level of healthcare offered in Eastern Europe et plus.

**PROJECT 2**

Comparing Liver Transplantation to Systemic and Regional Therapies in Unresectable Hepatic Malignancy: A Systematic Review and Meta-analysis.

**SUPERVISOR(S)**

Bálint Erőss, Szilárd Vánca

**YEAR II****PHD**

AGE 28

**MISSION**

Learning from the best in the field, find knowledge gaps, improve current standards and policies for treatment of diabetes.



## DÓRA DEMETER

HUNGARIAN DEFENSE FORCES MEDICAL CENTRE

**TOPIC**

Nutrition Therapies in inflammatory bowel diseases.

**VISION**

Better nutritional care for patients worldwide.

**PROJECT 2**

Investigating the effect of GLP-1 analogs on disease activity and body weight in obese inflammatory bowel disease patients: prospective interventional study.

**SUPERVISOR(S)**

Tibor Gyökeres, Petra Anna Golovics

**YEAR II****PHD**

AGE 30

**MISSION**

Highlighting the role of nutrition therapy in standard of care.



## GERGELY KOLLÁNYI

ST. IMRE TEACHING HOSPITAL, BUDAPEST

**TOPIC**

ERCP-guided pancreatic procedures.

**VISION**

Patients having comfort and the best possible care.

**PROJECT 2**

Investigating the safety and efficacy of transpapillary drainage of pancreatic fluid collections with different indications, a Systematic Review and Meta-analysis.

**SUPERVISOR(S)**

Bálint Erőss, Szilárd Vánca

**YEAR II****PHD**

AGE 29

**MISSION**

Improving the safety and efficacy of endoscopic procedures.

**PROJECT 3**

Cancer risk in medical professionals, a Eurostat analysis.

**E-MAIL**

gkollanyi@gmail.com





## KÁLMÁN JÁNOS ZSIGMOND

HUNGARIAN DEFENSE FORCES MEDICAL CENTRE

### TOPIC

Antibiotic Prophylaxis For ERCP.

### VISION

Increase the safety of ERCP.

### PROJECT 1

Investigating the safety and effectiveness of antibiotic prophylaxis for ERCP: systematic review and meta-analysis.

### PROJECT 2

Investigating the effectiveness of antibiotic prophylaxis in patients with biliary obstruction undergoing ERCP: randomized controlled trial.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Tibor Gyökeres

### YEAR II

### PHD

AGE 34

### MISSION

Optimize patient preparation for ERCP through research.



## SÁNDOR ORBÁN

TÂRGU MURES EMERGENCY CLINICAL COUNTY HOSPITAL

### TOPIC

New insights on the treatment of metastatic gastroenteropancreatic neuroendocrine tumors.

### VISION

Advanced treatment of gastroenteropancreatic neuroendocrine tumors improves survival and quality of life.

### PROJECT 1

Investigating the effect of primary tumor resection prior to PRRT in metastatic GEP-NET patients: A Systematic Review and Meta-analysis.

### PROJECT 2

Investigating the safety and effectiveness of surgical excision of primary tumor in well-differentiated metastatic PNET: SEER Registry analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Orsolya Dohán

### YEAR II

### PHD

AGE 27

### MISSION

Finding the best combination and sequence of treatment modalities for these patients.



## ZOLTÁN IMRE BÁNFALVI

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

### TOPIC

Diagnostics of Pancreatic Neoplasms.

### VISION

Patients with suspected pancreatic neoplasias should be diagnosed as early and efficiently as possible.

### PROJECT 1

Comparing the Diagnostic Accuracy of EUS-FNB to On-site Evaluations in the Diagnostics of Pancreatic Neoplasias: Systematic Review and Meta-analysis.

### PROJECT 2

Investigating the Effectiveness of DOAC and LWMH Therapies in the Treatment of Splanchnic Venous Thrombosis in Acute Pancreatitis Patients after Discharge: A Multicentered Randomised Non-Inferiority Trial.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Péter Jenő Hegyi

### YEAR II

### PHD

AGE 26

### MISSION

Identifying the most reliable and accurate diagnostic methods.



## ZSÓFIA NÉMETH

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

### TOPIC

Psychological Aspects of Health Promotion and Disease Prevention.

### VISION

An evidence-based health care system that bridges mental and physical health, promoting the well-being of individuals and communities.

### PROJECT 1

Investigating the Prevalence of Gastrointestinal Diseases among Patients with Eating Disorders: A Systematic Review and Meta-analysis.

### PROJECT 2

Investigating the Effect of Social Support on Lifestyle Risk Factors and Chronic Diseases among European Citizens: A Eurostat Database Analysis

### EDUCATION

psychologist

### SUPERVISOR(S)

Péter Hegyi, Andrea Szentesi

### YEAR II

### PHD

AGE 26

### MISSION

Promoting psychological research for better patient care and exploring the potential of psychological interventions.

### PROJECT 3

Investigating Diabetes Preventive Lifestyle Interventions After Pancreatitis A Protocol for a Randomized Control Trial.

### E-MAIL

nemethzsofi.mail@gmail.com





## ZSÓFIA ROMÁN

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

### TOPIC

Risk Factors for Pancreatic Cancer.

### VISION

Improved prognosis of pancreatic cancer, saving years of life lost.



### PROJECT 1

Investigating the Effect of Hemoglobin A1c Level on the Onset and Risk of Pancreatic Cancer: A Systematic Review and Meta-analysis.

### EDUCATION

nutritional scientist

### PROJECT 2

Comparing the Patient Characteristics and Natural History of Early and Late Onset Pancreatic Cancer: Systematic Review and Meta-analysis.

### SUPERVISOR(S)

Péter Hegyi, Stefania Bunduc

### YEAR II

### PHD

AGE 27

### MISSION

Exploring the association between glucose metabolism alterations and diagnosis of pancreatic cancer.



## DALMA KÖVES-DOB SZAI

INSTITUTE FOR TRANSLATIONAL MEDICINE, UNIVERSITY OF PÉCS

### TOPIC

The effect of obesity on the progression and outcome of acute inflammatory diseases

### VISION

Aiding physicians in risk assessment and decision making about obese patients.



### PROJECT 1

Investigating the effect of metabolic syndrome factors on the outcome of acute pancreatitis: Systematic Review and Meta-Analysis

### EDUCATION

healthcare manager

### PROJECT 2

Investigating the effects of metabolic syndrome on the outcome of COVID19: Registry analysis.

### SUPERVISOR(S)

Péter Hegyi, Andrea Szentesi

### YEAR III

### PHD

AGE 29

### MISSION

Comprehensively address all factors related to obesity for deeper understanding the way they interact with each other.



## IOANA-IRINA REZUS

"SFANTUL SPIRIDON" COUNTY EMERGENCY HOSPITAL

### TOPIC

Management of pancreatic cancer: from diagnosis to end-stage treatment

### VISION

Better management for patients with pancreatic cancer.



### PROJECT 1

Investigating the efficacy and safety of therapeutic procedures for chronic pain in unresectable pancreatic cancer: a systematic review and meta-analysis.  
*Diagnostics (Basel)*, Q2, 3.000

### EDUCATION

medical doctor

### PROJECT 2

Investigating the diagnostic accuracy of different imaging techniques in pancreatic cancer staging: a systematic review and meta-analysis.  
*Transl Gastroenterol Hepatol*, Q2, 2.500

### YEAR III

### PHD

AGE 27

### MISSION

Assess new diagnostic and treatment methods and implement them into healthcare.

### E-MAIL

ioanairinarezus@yahoo.co.uk



## JÁZMIN NÉMETH

DEPARTMENT OF SURGERY, TRANSPLANTATION AND GASTROENTEROLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

Oncocardiology in digestive system cancer

### VISION

The prognosis of patients with pancreatic cancer can be improved by addressing non-cancer-related morbidity.



### PROJECT 1

Investigating the prevalence of cardiovascular morbidity in pancreatic cancer: systematic review and meta-analysis.

### EDUCATION

medical student

### PROJECT 2

Investigating the prevalence and risk factors of cardiac cachexia in cancer patients: a systematic review and meta-analysis.

### SUPERVISOR(S)

Péter Hegyi, Stefania Bunduc

### YEAR III

### PHD

AGE 25

### MISSION

Provide further evidence-based recommendations on the management of cardiovascular comorbidities, which can help improve patients prognosis.

### E-MAIL

nemethjazmin222@gmail.com



## JIMIN LEE

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

The Relationship of Acute Pancreatitis and Cancer

**VISION**

Improve the prognosis of cancer.

**PROJECT 1**

Investigating the Effect of Acute Pancreatitis to the Development of Pancreatic Cancer: Systematic Review and Meta-analysis.

*Clin Transl Gastroenterol, Q1, IF: 3.000*

**PUBLISHED****PROJECT 2**

Investigating the Effect of Pre-existing Malignant Tumors on the Outcome of Acute Pancreatitis: A Registry Analysis.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Péter Hegyi, Stefania Bunduc

**YEAR III****PHD**

AGE 25

**MISSION**

Explore the relationship of acute pancreatitis with cancer.



## ORSOLYA EPERJESI

DEPARTMENT OF INTERNAL MEDICINE, TOLDY FERENC HOSPITAL

**TOPIC**

The importance of pancreatic exocrine insufficiency in pancreatic diseases

**VISION**

Optimized management of patients with pancreatic exocrine insufficiency

**PROJECT 1**

Investigating the effects of PERT after Acute Pancreatitis: A Systematic Review and Meta-analysis.

**PROJECT 2**

Investigating the predictive risk factors of pancreatic exocrine insufficiency after acute pancreatitis: a systematic review and meta-analysis.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Péter Hegyi, Stefania Bunduc

**YEAR III****PHD**

AGE 30

**MISSION**

Optimization of pancreatic enzyme replacement therapy management in early post-acute pancreatitis patients.



## VERONIKA LILLIK

1ST DIVISON OF INTERNAL MEDICINE, FEJÉR COUNTY SZENT GYÖRGY UNIVERSITY TEACHING HOSPITAL

**TOPIC**

Investigating the cardiac complications associated with acute pancreatitis

**VISION**

Decrease the mortality of acute pancreatitis (AP) by foregoing the preventable complications.

**PROJECT 1**

Investigating the cardiac complications associated with acute pancreatitis: a systematic review and meta-analysis.

**PROJECT 2**

Protocol development for understanding the cardiac status during and after Acute Pancreatitis: Prospective observational clinical research.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Péter Hegyi, Rita Nagy

**YEAR III****PHD**

AGE 29

**MISSION**

Try to conduct a high-quality research to understand the effect of AP on the cardiac status.



## BÁLINT GELLÉRT

DEPARTMENT OF SURGERY, TRANSPLANTATION AND GASTROENTEROLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Gastroenterology - Pancreaticobiliary

**VISION**

Reducing mortality and morbidity related to pancreaticobiliary diseases.

**PROJECT 1**

Understanding the role of different endoscopic retrograde cholangio-pancreatography (ERCP) techniques following the Roux-en-Y gastric bypass (RYGB) procedure – systematic review and meta-analysis. *Obes Surg, Q1, IF: 2.900*

**PUBLISHED****PROJECT 2**

Improving the endoscopic management of walled-off pancreatic necroses by comparing two treatment strategies – clinical trial.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

István Hritz

**YEAR IV****PHD**

AGE 36

**MISSION**

Enhancement of the safety and efficacy of different endoscopic interventions used in the management of pancreaticobiliary disorders.

**E-MAIL**

gellert.balint89@gmail.com



## BETTINA CSILLA BUDAI

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

### TOPIC

Gastroenterology - Acute pancreatitis

### VISION

Nutrition is a corner stone in the multimodal care of all cancer patients.



### PROJECT 1

Investigating the risk factors for malnutrition in patients with gastrointestinal cancer: a systematic review and meta-analysis

### PROJECT 2

Investigating the effect of amino acid supplementation in digestive tract cancer patients: a systematic review and meta-analysis

### EDUCATION

dietitian

### SUPERVISOR(S)

Péter Hegyi, Stefania Bunduc

### YEAR IV

### PHD

AGE 29

### MISSION

To carry out scientific activity to bring innovation in the nutrition therapy of cancer.



## CAI GEFU

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

Gastroenterology - Acute pancreatitis

### VISION

Improving the prognosis of acute pancreatitis patients: Less common etiologies.



### PROJECT 1

Investigating the effects of concomitant virus infections on clinical outcomes in acute pancreatitis: a systematic review and meta-analysis.

*Pancreatology, Q1, IF: 2.800*

### PUBLISHED PROJECT 2

Identifying the association between serum lipids and their metabolites and the outcome of COVID-19 : a systematic review and meta-analysis.

### EDUCATION

biologist

### SUPERVISOR(S)

Péter Hegyi

### YEAR IV

### PHD

AGE 27

### MISSION

Explore the effects of virus infection in GI system.



## DÁNIEL STEVE BEDNÁRIK

HEIM PÁL CHILDREN'S HOSPITAL

### TOPIC

Gastroenterology - C.Diff

### VISION

Every patient should have the chance to get the best possible therapies in healthcare against Clostridioides difficile infection.



### PROJECT 1

Comparing the effectiveness and safety of different therapies in Clostridioides difficile infection in adults.

*The Lancet Regional Health - Europe, D1, IF: 13.600*

### PUBLISHED PROJECT 2

Comparing the effectiveness and safety of different therapies in Clostridioides difficile infection in pediatric patients

### EDUCATION

medical doctor

### SUPERVISOR(S)

László Földvári, Katalin Földváriné Lentz

### YEAR IV

### PHD

AGE 31

### MISSION

Find the best possible therapies in healthcare against Clostridioides difficile infection.



## DIANA ELENA FLORIA

SAINT SPIRIDON EMERGENCY HOSPITAL IASI, ROMANIA

### TOPIC

Gastroenterology - GERD-PPI

### VISION

To improve the clinical management of patients with Gastro-Esophageal Reflux Disease (GERD).



### PROJECT 1

Therapeutic Effects of Acid-Suppressive Medications in Adults with Non-specific Chronic Cough: Systematic Review and Meta-analysis. *Sci Rep, D1, IF: 4.600*

### PUBLISHED PROJECT 2

Risk of Clostridioides difficile infection in Adults with Treatment with Proton Pump Inhibitors: Systematic Review and Meta-analysis. *Gut Microbes, D1, IF: 11.000*

### EDUCATION

medical doctor

### SUPERVISOR(S)

Bálint Erőss, Vasile Liviu Drug

### YEAR IV

### PHD

AGE 30

### MISSION

To assess the efficacy and safety of acid-suppressive drugs.

### PROJECT 3

### PUBLISHED

Psychological interventions improve mental health in inflammatory digestive diseases: a systematic review and meta-analysis of randomized controlled trials *Therap Adv Gastroenterol, Q1, IF: 3.400*

### E-MAIL

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## DOROTTYA TARJÁN

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

**TOPIC**

Gastroenterology - Pancreatology

**VISION**

To contribute to clearer guidelines.

**PROJECT 1****PUBLISHED**

Identifying early predictors for infected necrosis in acute pancreatitis: a systematic review and meta-analysis. *J Clin Med*, Q1, IF: 3.900

**PROJECT 2****PUBLISHED**

Investigating the safety and effectiveness of cholecystectomy in pregnant women with acute pancreatitis: registry-analysis. Meta-Analysis. *Int J Mol Sci*, D1, IF: 5.600

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Péter Hegyi, Alexandra Mikó

**YEAR IV****PHD**

AGE 29

**MISSION**

To improve the management of acute pancreatitis.

**PROJECT 3****PUBLISHED**

Acute pancreatitis severity prediction: it's time to use artificial intelligence: perspective article with case reports *United European Gastroenterol J*, D1, IF: 6.700

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## EDINA TARI

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

**TOPIC**

Gastroenterology - Pancreaticobiliary

**VISION**

To improve patient care in acute gastrointestinal diseases.

**PROJECT 1****PUBLISHED**

Morphology of the papilla can predict a higher rate of post-ERCP adverse events: systematic review and meta-analysis. *Gerontology*, Q1, IF: 3.500

**PROJECT 2****PUBLISHED**

Early resuscitation with vasopressor and fluid versus fluid resuscitation alone in hemodynamically unstable patients with acute gastrointestinal bleeding: protocol for a multicentre randomized controlled trial; feasibility trial. *Therap Adv Gastroenterol*, Q1, IF: 4.200

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Bálint Erőss

**YEAR IV****PHD**

AGE 28

**MISSION**

To conduct high-quality researches in acute gastrointestinal diseases.

**PROJECT 3****PUBLISHED**

At admission hemodynamic instability is associated with increased mortality and rebleeding rate in acute gastrointestinal bleeding: a systematic review and meta-analysis. *Sci Rep*, D1, IF: 4.600

**E-MAIL**

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## ENDRE BOTOND GAGYÍ

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Gastroenterology - Pancreatitis

**VISION**

Gaining professional knowledge about the progression of pancreatitis, to identify more patients with early chronic pancreatitis.

**PROJECT 1****PUBLISHED**

The Risk Factors of Acute Pancreatitis Progression into Recurrent Acute Pancreatitis and Chronic Pancreatitis: A Systematic Review and Meta-analysis. *Therap Adv Gastroenterol*, Q1, IF: 4.200

**PROJECT 2****PUBLISHED**

The Proportion of Chronic Pancreatitis patients without any prior acute pancreatitis episode and the associated factors: A Systematic Review and Meta-analysis.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Bálint Erőss

**YEAR IV****PHD**

AGE 28

**MISSION**

To highlight and emphasize the importance and to make better recommendations to patients by understanding the progression of acute pancreatitis into RAP and CP.

**E-MAIL**

endre.gg@gmail.com



## HAJNAL SZÉKELY

DEPARTMENT OF SURGERY, TRANSPLANTATION AND GASTROENTEROLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Gastroenterology - IBD

**VISION**

To improve the quality of IBD patient's care.

**PROJECT 1****PUBLISHED**

Anti-tumor necrosis factor-alpha has lower rates of venous thromboembolism than conventional therapy in Inflammatory Bowel Diseases - Systematic review and meta-analysis. *J Crohns Colitis*, D1, IF: 8.000

**PROJECT 2****PUBLISHED**

Protocol of a prospective, multicenter, 12-month, parallel-group, comparative study of changes in the hemostatic profile of Inflammatory Bowel Disease patients in relation to disease characteristics and anti-inflammatory medication

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Pál Miheller

**YEAR IV****PHD**

AGE 50

**MISSION**

Extend the knowledge regarding important clinical aspects of this complex systemic disease.

**PROJECT 3**

Venous thromboembolic events in Inflammatory Bowel Disease patients in Hungary: a nationwide cohort study based on the National Health Insurance Fund database (2014-2023)

**E-MAIL**

szhajni75@yahoo.com



## JAKUB HOFERICA

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Gastroenterology - Hepatology

**VISION**

To promote evidence-based medicine in gastroenterology.

**PROJECT 1**

Investigation of chronic liver disease effect on outcomes in acute pancreatitis: Systematic review and meta-analysis. *Sci Rep, D1, IF: 4.600*

**PUBLISHED****PROJECT 2**

Investigating the application of fecal microbiota transplantation in alcoholic hepatitis: Systematic review and meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Péter Jenő Hegyi, Peter Banovnic

**YEAR IV****PHD**

AGE 31

**MISSION**

To better understand risk factors in gastroenterology.

**E-MAIL**

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## MÓNICA BERNADETT LIPP

SEMMELWEIS UNIVERSITY

**TOPIC**

Gastroenterology - Pancreatology

**VISION**

Take action on quality of care.

**PROJECT 1**

Investigating the effect of the fatty pancreas on the risk of pancreatic cancer: a systematic review and meta-analysis. *Cancers (Basel), Q1, IF: 5.200*

**PUBLISHED****PROJECT 2**

Understanding the role of metabolic changes in disease progression on GOULASH-trial patients following acute pancreatitis: register analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Péter Hegyi, Alexandra Mikó

**YEAR IV****PHD**

AGE 32

**MISSION**

To improve the clinical assessment of patients with pancreatic disorders and metabolic abnormalities.

**E-MAIL**

lipp.monika@gmail.com



## PANAGIOTIS PARASKVEOPoulos

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Gastroenterology - Pancreaticobiliary

**VISION**

Improve palliation of critically ill patients.

**PROJECT 1**

The Addition of Antegrade Stenting in Patients Undergoing Hepaticogastrostomy for Malignant Biliary Obstruction Offers Better Outcomes: A Systematic Review & Meta-Analysis. *Therap Adv Gastroenterol, Q1, IF: 4.200*

**PUBLISHED****PROJECT 2**

Efficacy of different EUS-guided biliary drainage techniques

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Bálint Erőss

**YEAR IV****PHD**

AGE 29

**MISSION**

Find a proper idea and implement it properly.

**E-MAIL**

panag.parask@gmail.com



## PETRANA MARTINEKOVA

CANDENA SLOVAKIA

**TOPIC**

Gastroenterology - Hepatology

**VISION**

Improve the care for patients with liver diseases with evidence-based and personalized approach.

**PROJECT 1**

Comprehensive Analysis of Vitamin-D Supplementation in Patients with Chronic Liver Disease: a Systematic Review and Meta-analysis of Randomized Controlled Trials *Nutr Rev, D1, IF: 4.900*

**PUBLISHED****PROJECT 2**

Diagnostic Accuracy of Biomarkers in Cirrhotic Patients with Bacterial Infections: a Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Krisztina Hagymási

**YEAR IV****PHD**

AGE 31

**MISSION**

Investigate the current evidence of micro and macronutrients in chronic liver diseases and the early detection of bacterial infections in cirrhotic patients.

**E-MAIL**

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## RUBEN ZSOLT BORBÉLY

BAJCSY-ZSILINSZKY HOSPITAL AND CLINIC

### TOPIC

Gastroenterology - Radiology

### PROJECT 1

Growing Risk of Splanchnic Vein Thrombosis in the Early Phase of Acute Pancreatitis: a systematic review and meta-analysis. *UEG J, Q1, IF: 6.000*

### VISION

Advance the understanding and treatment of acute pancreatitis.

### PUBLISHED PROJECT 2

Investigating the effect of CT calculated body composition on the outcomes of patients with acute pancreatitis: a retrospective analysis of a clinical trial. *UEG J, Q1, IF: 5.800*

### PUBLISHED PROJECT 3

Incidence and management of splanchnic vein thrombosis in pancreatic diseases

### E-MAIL

drborbelyruben@gmail.com



### YEAR IV

### PHD

AGE 31

### MISSION

Enhance the diagnostic and prognostic value of CT imaging in acute pancreatitis.



## ADRIENN NIKOLETT KOVÁCS

DEPARTMENT OF INTERNAL MEDICINE AND HAEMATOLOGY,  
SEMMELWEIS UNIVERSITY

### TOPIC

Gastroenterology - Diabetes mellitus

### VISION

Decrease unnecessary insulin administration in ketosis-prone type 2 diabetes mellitus.

### PROJECT 1

Prevalence and clinical characteristics of ketosis-prone type 2 diabetes among patients with diabetic ketoacidosis: meta-analysis. *Diabetes Metab Res Rev, D1, IF: 8.000*

### PUBLISHED PROJECT 2

Long-term follow-up of Hungarian patients with new-onset diabetic ketoacidosis: cohort analysis.

### YEAR V

### PHD

AGE 32

### MISSION

Increase awareness about ketosis-prone type 2 diabetes and improve its management.



## DÁNIEL PÁLINKÁS

DEPARTMENT OF GASTROENTEROLOGY,  
HUNGARIAN ARMY MEDICAL CENTRE

### TOPIC

Gastroenterology - Gastrointestinal bleeding

### VISION

Improve the management of gastrointestinal bleeding patients.

### PROJECT 1

No association between gastrointestinal rebleeding and DOAC therapy resumption: a systematic review and meta-analysis. *Biomedicines, Q1, IF: 4.700*

### PUBLISHED PROJECT 2

Consequences of restarting anticoagulation after GIB: cohort analysis.

### YEAR V

### PHD

AGE 38

### MISSION

Find the best way of anticoagulation resumption after GIB.

### PROJECT 3

TIMING of dirEcT Oral anticoagulant therapy resumption after acute non-variceal upper gastrointestinal bleeding (TIME-TO study): protocol of a non-inferiority multicentre randomised clinical trial

### E-MAIL

dr.d.palinkas@gmail.com



## OLGA JULIA ZAHARIEV

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

### TOPIC

Gastroenterology - Diabetes mellitus

### VISION

A world where preventable diabetes mellitus is prevented.

### PROJECT 1

Identifying patients at risk of developing diabetes after acute pancreatitis: a prognostic meta-analysis. *Front Med (Lausanne), Q1, IF: 3.900*

### PUBLISHED PROJECT 2

The EFFeCT Of dietary fat content on the Recurrence of pancreatitis (EFFORT): multicenter randomised controlled trial.

### YEAR V

### PHD

AGE 31

### MISSION

Shift health policy towards prevention and educate patients.

### E-MAIL

olga.zaharieva@gmail.com





## SÁRA BOGNÁR

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

### TOPIC

Gastroenterology - Psychotherapy

### VISION

Cancer patients receive personalized psychological support which will increase their quality of life.



### PROJECT 1

Investigating the effect of psychological interventions on quality of life and survival in patients with cancer: a systematic review and meta-analysis of RCTs. *Sci Rep*, *D1*, *IF: 4.600*

### EDUCATION

medical doctor

### PUBLISHED PROJECT 2

Investigating the degree of psychological burden of patients with pancreatic cancer: a systematic review and meta-analysis.

### SUPERVISOR(S)

Péter Hegyi, Katalin Márta

YEAR V

PHD

AGE 35

### MISSION

I am committed to implement psychological support in the standard of care from the time of the diagnosis until the end of treatment irrespectively of the outcome of the disease.

### E-MAIL

bognar.sara@gmail.com



# FIELD OF RESEARCH **SURGERY**





# RESEARCH FIELD SURGERY

The Surgery Research Group brings together doctoral candidates specializing in both general and plastic surgery, with research spanning a wide range of operative and reconstructive disciplines. Their work focuses on advancing surgical techniques, improving perioperative outcomes, and integrating innovation into clinical practice. Key research areas include abdominal and pancreatic surgery, colorectal cancer management, anastomotic leakage prevention, inflammatory bowel disease-related surgery, and oncologic procedures involving the gastrointestinal tract. In the field of reconstructive and plastic surgery, projects explore breast reconstruction and other restorative surgical techniques that enhance functional and aesthetic recovery. Through clinical studies, translational research, and evidence-based evaluations of surgical outcomes, the group aims to refine modern surgical care and promote safer, more effective, and patient-centered operative solutions.

## SUPERVISORS

13

★ TOP SUPERVISORS ★



**ZOLTÁN KLÁRIK**

3 student

Adrienn Bíró, Attila Bursics, Attila Szijártó, Ákos Szűcs, Bálint Erőss, Levente Sára, László Piros, Pál Miheller, Péter Hegyi, Szabolcs Ábrahám (*Supervisor of the month: 2024 January*), Szabolcs Várbíró, Zsolt Káposztás

## STUDENTS

13

**YEAR I** Enikő Tóth, Milad Ahmad Pour

**YEAR II** Dóra Léna Fedorcsák, Levente Doleviczényi, Péter Pál, Tamás Tölgyes, Vivien Szilvia Balla

**YEAR III** Ágnes Fodor, Loretta Enikő Nyírády, Lőrinc András Ullmann

**YEAR IV** András Mihály Géczi, Laura Mária Tóth, Sarolta Beáta Kávási



## ENIKŐ TÓTH

DEPT. OF SURGERY, TRANSPLANTATION, AND GASTROENTEROLOGY,  
SEMELWEIS UNIVERSITY



### TOPIC

New Insights in Surgical Oncology for Pancreatic Cancer

### VISION

Improving the overall survival of patients with pancreatic cancer.

### YEAR I

### PHD

AGE 35

### MISSION

Offer evidence-based surgical strategies to patients with advanced pancreatic adenocarcinoma.

### PROJECT 1

Investigating the Safety and Efficacy of Extended Surgery in Pancreatic Cancer: A Systematic Review and Meta-analysis

### PROJECT 2

Artery-first Approach in Open and Minimally Invasive Pancreatoduodenectomy: A Systematic Review and Meta-analysis

### EDUCATION

medical doctor

### SUPERVISOR(S)

Bálint Erőss, László Piroš

### E-MAIL

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## MILAD AHMAD POUR

SOMOGY COUNTY KAPOSI MÓR TEACHING HOSPITAL, KAPOSVÁR



### TOPIC

New Horizons on Navigation Systems in Abdominal Surgery

### VISION

Increasing the safety of liver surgery.

### PROJECT 1

Investigating the Safety and Effectiveness of Navigation Systems in Liver Cancer Surgery: A Systematic Review and Meta-analysis

### PROJECT 2

Evaluation of the Safety and Effectiveness of Virtual Reality-Assisted Surgical Planning in Liver Cancer Surgery: A Randomized Controlled Trial Pilot Study

### EDUCATION

medical doctor

### SUPERVISOR(S)

Zsolt Káposztás, Adrienn Bíró

### YEAR I

### PHD

AGE 31

### MISSION

Integrate navigation system technology into routine surgery planning.

## TAMÁS TÖLGYES

DEPARTMENT OF SURGERY AND SURGICAL ONCOLOGY,  
UZSOKI TEACHING HOSPITAL



### TOPIC

Multimodal Treatment Strategies in Resectable Pancreatic Cancer.

### VISION

Provide the most effective treatment to patients with pancreatic cancer.

### PROJECT 1

Comparing the Effectiveness of Neoadjuvant Chemotherapy to Upfront Surgery in Resectable Pancreatic Cancer: Systematic Review and Meta-Analysis

### PROJECT 2

Investigating the Effect of Prognostic Factors on Overall Survival following Pancreatic Surgery: Cohort Analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Attila Bursics

### YEAR II

### PHD

AGE 34

### MISSION

Investigating the different therapeutic modalities in resectable pancreatic cancer.

### E-MAIL

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## VIVEN SZILVIA BALLA

SOMOGY COUNTY KAPOSI MÓR TEACHING HOSPITAL, KAPOSVÁR



### TOPIC

PET/MRI in Pancreatic Cancer: Advancing Prognostication.

### VISION

Improved pancreatic cancer survival.

### PROJECT 1

Investigating the Prognostic Accuracy of PET/MRI on Resectability of Pancreatic Cancer: Systematic Review and Meta-analysis.

### PROJECT 2

Investigating the Predictive Accuracy of PET/MRI on Resectability of Pancreatic Cancer: Retrospective Cohort Analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Zsolt Káposztás, Adrienn Bíró

### YEAR II

### PHD

AGE 27

### MISSION

Looking for the best imaging modalities to improve treatment and surgical outcomes in pancreatic cancer.

### PROJECT 3

Investigating the Effect of Stereotactic Radiation on Survival in Inoperable Locally Advanced Pancreatic Cancer: A Retrospective Cohort Study

### E-MAIL

ballavivi@gmail.com



## ÁGNES FODOR

DEPARTMENT OF SURGERY, DÉL-BUDAI CENTRAL HOSPITAL  
SZENT IMRE UNIVERSITY TEACHING HOSPITAL

**TOPIC**

Investigating the oncological outcomes after colorectal cancer surgery.

**VISION**

Improve the care and the outcomes for patients after colorectal cancer surgery.

**PROJECT 1**

Investigating the effect of anastomotic leakage on oncological outcomes in patients after colorectal cancer surgery: a systematic review and meta-analysis.

**PROJECT 2**

Investigating the Role of Intraoperative Colonoscopy to Detect Anastomotic Leakage in Colorectal Cancer Surgery: A Systematic Review and Meta-analysis.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Szabolcs Ábrahám

**YEAR III****PHD**

AGE 36

**MISSION**

Investigate the impact of anastomotic leakage on oncological outcomes after colorectal cancer surgery.

**E-MAIL**

drfodoragi@gmail.com



## LÖRINC ANDRÁS ULLMANN

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

New Insights in the Prognosis of Pancreatic Ductal Adenocarcinomas

**VISION**

Combine research and knowledge in the surgical treatment of pancreatic cancer.

**PROJECT 1**

Investigating the prognostic relevance of micro-RNA analysis in pancreatic tumors: a systematic review and meta-analysis.

**PROJECT 2**

Investigating The Prognostic Relevance of KRAS-ctDNA analysis in Pancreatic Ductal Adenocarcinoma: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Ákos Szűcs

**YEAR III****PHD**

AGE 27

**MISSION**

Research how different pancreatic tumor mutations lead to different prognoses.

**E-MAIL**

ulmannlorinc@gmail.com



## LAURA MÁRIA TÓTH

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

**TOPIC**

Gastroenterology - Surgery - IBD

**VISION**

Provide the best achievable therapy to IBD patients.

**PROJECT 1****PUBLISHED****PROJECT 2**

Comprehensive analyse of the effect of obesity on postoperative complications in UC: Systematic review and meta-analysis.  
*Annals of Gastroenterological Surgery, D1, IF: 2.700*

A comparison of pouch surgical techniques in ulcerative colitis: systematic review and meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Pál Miheller

**YEAR IV****PHD**

AGE 29

**MISSION**

Contribute to the clarification of some questionable parts in the surgical care of IBD patients.

**E-MAIL**

laura.toth.0504@gmail.com



## SAROLTA BEÁTA KÁVÁSI

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Gastroenterology - Surgery

**VISION**

Improve the immediate postoperative and quality of life of patients following colorectal cancer surgery.

**PROJECT 1****PUBLISHED****PROJECT 2**

End-to-end anastomosis provides similar quality-of-life, compared with other reconstructive techniques six months following Total Mesorectal Excision: systematic review and meta-analysis of randomized controlled trials.  
*Eur J Surg Oncol, D1, IF: 3.800*

Extralevel Abdominoperineal Excision Improves Overall Survival Compared to Standard Abdominoperineal Excision: A Systematic Review and Meta-Analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Szabolcs Ábrahám, Péter Hegyi

**YEAR IV****PHD**

AGE 31

**MISSION**

Bring the latest scientific data to clinical use in the surgical field.

**E-MAIL**

kavasisarolta@yahoo.com



## DÓRA LÉNA FEDORCSÁK

MD/PHD STUDENT

## TOPIC

Optimizing Techniques and Outcomes in Implant-Based Breast Reconstruction.

## VISION

Provide the best possible surgical care to breast cancer patients.

YEAR II

PHD

AGE 23

## MISSION

Determining which adjunctive materials can help achieve a better surgical and aesthetic outcome.

## PROJECT 1

Investigating the Effect of Adjunctive Materials on Implant-Based Breast Reconstruction Outcomes in Irradiated Patients: Systematic Review and Meta-analysis.

## PROJECT 2

Investigating the efficacy and safety of NPWT in prosthetic breast reconstruction: A Systematic Review and Meta-analysis.

## EDUCATION

medical doctor

## SUPERVISOR(S)

Zoltán Klárik

## E-MAIL

dorafedorcsak@gmail.com



03/25

## LEVENTE DOLEVICZÉNYI

DEPARTMENT OF SURGERY, TRANSPLANTATION AND GASTROENTEROLOGY, SEMMELWEIS UNIVERSITY

## TOPIC

Prevention of breast cancer surgery complications.

## VISION

Improved post-operative quality of life of women with breast cancer.

YEAR II

PHD

AGE 28

## MISSION

Assessing the different available surgical techniques and strategies in breast cancer.

## PROJECT 1

Investigating the efficacy and safety of steroids in the prevention of seroma formation after mastectomies: systematic review and meta-analysis.

## PROJECT 2

Comparing the efficacy and safety of different techniques in reducing donor site morbidity after latissimus dorsi muscle harvest: systematic review and meta-analysis.

## EDUCATION

medical doctor

## SUPERVISOR(S)

Zoltán Klárik

## E-MAIL

levente.dole@gmail.com



## PÉTER PÁL

MD/PHD STUDENT

## TOPIC

Functionality and Aesthetics in Plastic Surgery.

## VISION

Maximized patient health and satisfaction in plastic surgery.

YEAR II

PHD

AGE 25

## MISSION

Identifying and implementing the safest, most effective plastic surgical procedures.

## PROJECT 1

Comparing the Efficacy of Different Treatments for Keloids: A Systematic Review and Network Meta-analysis.

## PROJECT 2

Comparing the Efficacy of Different Treatments for Hypertrophic Scars: A Systematic Review and Network Meta-analysis.

## EDUCATION

medical doctor

## SUPERVISOR(S)

Levente Sára

## E-MAIL

petrpal2000@gmail.com



## LORETTA ENIKŐ NYIRÁDY

CENTRE FOR TRASLATIONAL MEDICINE, SEMMELWEIS UNIVERSIT

## TOPIC

Oncoplastic breast surgery and its clinical significance.

## VISION

Find the best technique, which results in the safest oncological and the best aesthetic outcome.

YEAR III

PHD

AGE 24

## MISSION

To aim for perfection in breast reconstruction.

## PROJECT 1

Investigating the safety and effectiveness of volume displacement and replacement techniques in oncoplastic breast-conserving surgery: a systematic review and meta-analysis.

## PROJECT 2

Investigating the Effect of Different BMI Levels on the Clinical Outcomes in Patients Undergoing Oncoplastic Breast Surgery or Reconstruction

## EDUCATION

medical student

## SUPERVISOR(S)

Zoltán Klárik, Attila Szijártó

## E-MAIL

lorettanyirady@gmail.com





## ANDRÁS MIHÁLY GÉCZI

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY,  
SEMMELWEIS UNIVERSITY



### TOPIC

Obstetrics, gynecology - Plastic surgery

### PROJECT 1

Investigating the effect of female genital  
beautification and rejuvenation on  
patient reported outcomes.  
*J Ovarian Res, D1, IF: 2.900*

### EDUCATION

medical student

### VISION

To find the best methods, which allow the  
best functional and aesthetical outcome.

### PUBLISHED PROJECT 2

The impact of aesthetic breast surgery on  
lactation. A systematic review and meta-  
analysis.

### SUPERVISOR(S)

Szabolcs Várbíró, Levente Sára

YEAR IV

PHD

AGE 31

### MISSION

To aim for perfection in aesthetic surgery.

### E-MAIL

gandrasmihaly@gmail.com



FIELD OF RESEARCH

# INTERVENTIONAL RADIOLOGY





# RESEARCH FIELD INTERVENTIONAL RADIOLOGY

The Interventional Radiology Research Group brings together doctoral candidates focusing on one of the most rapidly evolving and minimally invasive fields of modern medicine. Their research encompasses a wide spectrum of image-guided diagnostic and therapeutic procedures with direct clinical relevance across oncology, urology, and gynecology. Key research topics include prostatic artery embolization, radioembolization, thermal ablation, minimally invasive gynecologic interventions, and the development of advanced navigation systems. By combining radiological expertise with technological innovation, the group aims to enhance treatment precision, reduce patient risk, and improve recovery outcomes. Through translational and clinical research, the group contributes to advancing minimally invasive therapies and expanding the role of interventional radiology in personalized, image-guided patient care.

## SUPERVISORS

4



ANDRÁS BIBOK



DÉNES BALÁZS HORVÁTHY



PÁL ÁKOS DEÁK



VIKTOR BÉRCZI

## STUDENTS

8

**YEAR I** Alexandra Elena Chichiharu, Boglárka Tóth, Kázmér István Hartyánszky, Kincső Poncsák

**YEAR II** Alexandra Ádám, Shahar Adar

**YEAR III** Mátyás Rédei, Petra Sólymos



## ALEXANDRA ELENA CHICHIRAU

REGIONAL INSTITUTE OF ONCOLOGY, IASI, ROMANIA



### TOPIC

Optimizing Embolic Agents for Prostatic Artery Embolization

### VISION

Improve quality of life in benign prostatic hyperplasia (BPH).

### PROJECT 1

Comparing Safety and Efficacy of Liquid Embolic Agents vs Microparticles in Prostatic Artery Embolization: A Systematic Review and Meta-analysis

### PROJECT 2

Exploring the Clinical Role of Liquid Embolic Agents in Prostatic Artery Embolization: A Clinical Study

### EDUCATION

medical doctor

### SUPERVISOR(S)

András Bibok, Dénes Balázs Horváthy

### YEAR I

### PHD

AGE 30

### MISSION

Support the integration of Prostatic Artery Embolisation (PAE) into routine practice.



## BOGLÁRKA TÓTH

SEMMELWEIS UNIVERSITY



### TOPIC

Role of Transarterial Radioembolisation in the Treatment of HCC Patients with Portal Vein Thrombosis

### VISION

Improve the prognosis of advanced stage liver tumors.

### YEAR I

### MD-PHD

AGE 23

### MISSION

Explore the safety and efficacy of TARE in HCC patients with portal vein thrombosis.

### PROJECT 1

Comparing the Safety and Efficacy of Transarterial Radioembolisation versus Systemic Therapy in Liver Tumors with Portal Vein Thrombosis: A Systematic Review and Meta-analysis

### PROJECT 2

Investigating Transarterial Radioembolisation in case of Liver Tumors Associated with Portal Vein Thrombosis: A Randomized Controlled Trial

### EDUCATION

medical student

### SUPERVISOR(S)

Dénes Balázs Horváthy, András Bibok

### E-MAIL

bogi8.toth@gmail.com



## KÁZMÉR ISTVÁN HARTYÁNSZKY

SOUTH BUDA CENTRAL HOSPITAL – SAINT IMRE UNIVERSITY TEACHING HOSPITAL, BUDAPEST, HUNGARY



### TOPIC

The Role of Thermal Ablation for Treating Lung Metastases

### VISION

The safest and most efficient individualized treatment for cancer patients.

### YEAR I

### PHD

AGE 27

### MISSION

To create a high-quality multidisciplinary decision system.

### PROJECT 1

Investigating the Efficacy and Safety of Cryoablative, Radioablative, and Microwave Ablative Techniques in Colorectal Lung Oligometastases: A Systematic Review and Meta-analysis

### PROJECT 2

Comparing the Efficacy and Safety of Cryoablative, Radioablative and Microwave Ablative Techniques in Colorectal Lung Oligometastases: A Prospective Study

### EDUCATION

medical doctor

### SUPERVISOR(S)

Dénes Balázs Horváthy, Pál Ákos Deák

### E-MAIL

hartyanszky98@gmail.com



## KINCSŐ PONCSÁK

SEMMELWEIS UNIVERSITY



### TOPIC

Technical and Clinical Innovations in Uterine Artery Embolization

### VISION

Empowering women with choices beyond invasive surgical procedures.

### YEAR I

### MD-PHD

AGE 22

### MISSION

Exploring the impact of uterine fibroid embolization on fibroid treatment.

### PROJECT 1

Investigating the Safety and Efficacy of Preoperative Uterine Artery Embolization in Symptomatic Uterine Fibroids: A Systematic Review and Meta-analysis

### PROJECT 2

Investigating the Safety and Efficacy of Different Arterial Accesses in Uterine Artery Embolization: A Systematic Review and Meta-analysis

### EDUCATION

medical student

### SUPERVISOR(S)

Viktor Bérczi

### E-MAIL

kincso.poncsak@gmail.com



## ALEXANDRA ÁDÁM

MD/PHD STUDENT

### TOPIC

The role of radioembolization in patients with liver tumors.

### VISION

Patients with liver tumor having less invasive way of treatment.



### PROJECT 1

Investigating the effect of radiation lobectomy in patients with liver tumors: systematic review and meta-analysis.

### EDUCATION

medical student

### PROJECT 2

Investigating the safety and efficacy of radioembolization in patients with hepatocellular carcinoma: Retrospective cohort study

### SUPERVISOR(S)

Dénes Balázs Horváthy, András Bibok

**YEAR II**

**PHD**

AGE 26

### MISSION

Improving the role and impact of interventional radiology through the wider use of radioembolization in oncological therapy.



## SHAHAR ADAR

MD/PHD STUDENT

### TOPIC

The Role of Alternative Treatment Methods in Lung Cancer.

### VISION

Increased quality of life and the survival rate of patient with lung cancer.



### PROJECT 1

Evaluating the Efficacy and Safety of Radiotherapy, Surgical resection and Lung ablation in the Treatment of Patients with Early-Stage Non-Small Cell Lung Cancer (NSCLC): Systematic Review and Meta-analysis.

### EDUCATION

medical doctor

### PROJECT 2

Evaluating the Safety and Efficacy of Lung Cryoablation and Surgery For The Treatment of Early-Stage NSCLC: Randomized Controlled Trial.

### SUPERVISOR(S)

Dénes Balázs Horváthy

**YEAR II**

**PHD**

AGE 29

### MISSION

Conducting comprehensive analysis of different treatment strategies for lung cancer.



## MÁTYÁS RÉDEI

MEDICAL IMAGING CENTRE, SEMMELWEIS UNIVERSITY

### TOPIC

Impact of Navigational Systems on CT-guided Interventions.

### VISION

Enhance CT-guided interventions with advanced navigational systems for safer and more effective patient outcomes.



### PROJECT 1

Investigating the Safety and Effectiveness of Navigational Systems for Patients Undergoing CT-Guided Intervention: a systematic review and meta-analysis.

### EDUCATION

medical doctor

### PROJECT 2

Comparing complication rates: PEARL protocol vs standard method in CT-guided pulmonary biopsies.

### SUPERVISOR(S)

Dénes Balázs Horváthy

**YEAR III**

**PHD**

AGE 27

### MISSION

To thoroughly research navigational systems' impact on CT-guided interventions, assessing safety and effectiveness comprehensively.



## PETRA SÓLYMOS

MEDICAL IMAGING CENTRE, SEMMELWEIS UNIVERSITY

### TOPIC

Investigating radioembolization as an option in the treatment of liver tumors.

### VISION

Prolong the life of patients with liver tumors using radioembolization as treatment.



### PROJECT 1

Investigating the safety and efficacy of 166Ho radioembolization in patients with liver tumor: a systematic review and meta-analysis.

*Cancers (Basel), Q1, IF: 4.500*

### EDUCATION

medical doctor

### PUBLISHED

### PROJECT 2

Comparing the predictive value of different test isotopes during radioembolization planning in patients with hepatocellular carcinoma: a retrospective cohort study

### SUPERVISOR(S)

Dénes Balázs Horváthy

**YEAR III**

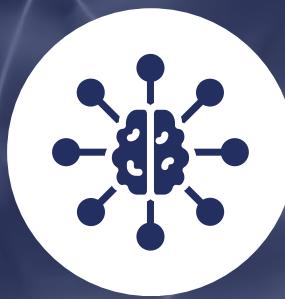
**PHD**

AGE 27

### MISSION

Determine the efficacy and safety of the isotopes in clinical use.

FIELD OF RESEARCH  
**NEUROSCIENCE &  
PSYCHIATRY**





# RESEARCH FIELD NEUROSCIENCE & PSYCHIATRY

The Neurosciences and Psychiatry Research Group brings together doctoral candidates engaged in multidisciplinary research across neurology, psychiatry, neurosurgery, and clinical psychology. Their projects encompass both basic and clinical aspects of brain health, focusing on neurodegenerative, psychiatric, and neuro-oncological disorders, as well as neurological rehabilitation and psychophysiological assessment. Research topics include traumatic brain injury, stroke recovery, dementia, epilepsy, multiple sclerosis, myasthenia gravis, schizophrenia, anxiety, and disorders of consciousness. Several studies also address psychiatric comorbidities in somatic diseases, pharmacotherapy for substance use disorders, psychological interventions, and advanced psychometric and eye-tracking methodologies. Through clinical research, neuropsychological testing, and translational studies, the group aims to advance understanding of brain function, behavior, and recovery. Their collective work contributes to improving prevention, diagnosis, and treatment strategies in neurological and psychiatric care.

## SUPERVISORS

14



ANDRÁS ATTILA HORVÁTH

4 student

Alotti Nasri, Anna Szűcs, Bence Gunda, Gábor Duray (*Supervisor of the month: 2024 January, 2024 October*),  
Gábor Lovas, János Réthelyi, Miklós Garami (*Supervisor of the month: 2022 February, 2022 October, 2024 February*),  
Péter Hegyi, Rita Nagy, Szabolcs Kéri (*Supervisor of the month: 2023 September*),  
Tamás Terebssy, Xénia Gonda, Zsolt Illés

## STUDENTS

19

YEAR I	Amit Lucatz, Boglárka Gréta Kertész, Hedvig Boros, Judit Lippai, László Kovács, Majed Abu Shenar, Márton Szombathelyi
YEAR II	Arashk Árpád, Zabihi, Shir Galin, Tamás Óvári
YEAR III	Alexander Kancsev, Esra Zhubi, Eszter Radics, Tibor Dániel Fehér, Tímea Lázár
YEAR IV	Danuta Szirmai, Orsolya Lányi
YEAR V	Márk Pavlekovic



## AMIT LUCATZ

SEMMELWEIS UNIVERSITY

**TOPIC**

Novel Psychopharmacological Utilizations

**VISION**

Improve patients' quality of life through novel psychopharmacological approaches.

**PROJECT 1**

Investigating the Efficacy of Dopamine 2/3 Partial Agonists in Substance Use Disorder: A Systematic Review and Meta-analysis

**PROJECT 2**

Comparing the Safety and Efficacy of ADHD Medications in Comorbid Substance Use Disorders: A Systematic Review and Meta-analysis

**EDUCATION**

medical student

**SUPERVISOR(S)**

Anna Szűcs, János Réthelyi

**YEAR I****MD-PHD**

AGE 27

**MISSION**

Evaluate innovative treatments to shape future psychiatric care.

**E-MAIL**

amitluc97@gmail.com



## BOGLÁRKA GRÉTA KERTÉSZ

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

**TOPIC**

Effectiveness of Psychological and Pharmacological Interventions Across Diverse Clinical Populations

**VISION**

Improve the quality of life of patients with psychological impairment.

**PROJECT 1**

Investigating the Efficacy of Pharmacological and Psychological Interventions for ADHD: A Systematic Review and Meta-analysis

**PROJECT 2**

Investigating the Effect of Post-standard Cognitive Behavioral Therapy among Inflammatory Digestive Diseases: A Systematic Review and Meta-analysis

**EDUCATION**

psychologist

**SUPERVISOR(S)**

Xénia Gonda

**YEAR I****PHD**

AGE 24

**MISSION**

Provide the best-fitting psychological intervention to patients with psychological impairment.

**E-MAIL**

bogikertesz10@gmail.com



## HEDVIG BOROS

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

**TOPIC**

Psychological Factors in Treatment of Pancreatic Cancer

**VISION**

To enhance psychological well-being in pancreatic cancer patients.

**PROJECT 1**

Investigating the Effect of Depression and Anxiety on Clinical Outcomes in Pancreatic Cancer: A Systematic Review and Meta-analysis

**PROJECT 2**

Psychological Factors influencing Treatment Decision and Quality of Life in Pancreatic Cancer Patients: A Prospective Clinical Study

**EDUCATION**

psychologist

**SUPERVISOR(S)**

Xénia Gonda

**YEAR I****PHD**

AGE 24

**MISSION**

To link psychological well-being to better treatment uptake.

**E-MAIL**

hedi.boros00@gmail.com



## JUDIT LIPPAI

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

**TOPIC**

Integrating Mindfulness into Gastrointestinal Cancer Care

**VISION**

To improve the emotional wellbeing of GI cancer patients.

**PROJECT 1**

Investigating the Effect of Mindfulness-Based Interventions on Anxiety and Depression in Patients with Gastrointestinal Cancer: A Systematic Review and Meta-analysis

**PROJECT 2**

Investigating the Psychological Benefits of Mindfulness in Gastrointestinal Cancer: A Prospective Clinical Study

**EDUCATION**

psychologist

**SUPERVISOR(S)**

Xénia Gonda

**YEAR I****PHD**

AGE 30

**MISSION**

To determine the effectiveness of mindfulness practices in reducing emotional distress among GI cancer patients.

**E-MAIL**

lippaijudit2@gmail.com



## SHIR GALIN

ZIV MEDICAL CENTRE TZFAT ISRAEL

### TOPIC

Heart Rate Variability and Depression: Patterns Across Health and Disease.

### PROJECT 1

Investigating the Accuracy in Predicting Depression through Heart Rate Variability in Non-depressed Population: Systematic Review and Meta-analysis.

### EDUCATION

psychologist

### VISION

Reduced mortality and improved lives through psychology.

### PROJECT 2

Exploring the Link between Multiple Sclerosis, Depression and Heart Rate Variability: A Prospective Observational Study.

### SUPERVISOR(S)

Szabolcs Kéri

### YEAR II

### PHD

AGE 42

### MISSION

Integrating psychological Dimensions into everyday healthcare and policy.



## TAMÁS ÓVÁRI

DEPARTMENT OF PSYCHIATRY, MARKUSOVSKY TEACHING HOSPITAL, SZOMBATHELY

### TOPIC

Heart rate variability in anxiety disorders.

### VISION

A world where every individual has the tool to diagnos anxiety disorder.

### PROJECT 1

Investigating the correlation between heart rate variability and anxiety severity as measured by standardized anxiety scales: A Systematic Review and Meta-analysis.

### EDUCATION

medical doctor

### PROJECT 2

Comparing different therapeutic approaches in patients with anxiety disorder: systematic review and meta-analysis.

### SUPERVISOR(S)

Alotti Nasri, Gábor Duray

### YEAR II

### PHD

AGE 33

### MISSION

Integrating HRV analysis into clinical practice for personalized, effective management of anxiety disorders.



## ALEXANDER KANCSEV

JÓSA ANDRÁS HOSPITAL NYÍREGYHÁZA

### TOPIC

The association between metabolic syndrome and cognitive dysfunctions in schizophrenia.

### VISION

Schizophrenia being a manageable condition compatible with a fulfilling life.

### PROJECT 1

Investigating the effect of impaired glucose homeostasis on cognitive functions in schizophrenia: a systematic review and meta-analysis.  
*Sci Rep, Q1, IF: 3.900*

### PUBLISHED PROJECT 2

Investigating the association between cognition, visual dysfunctions, and metabolic syndrome in patients with schizophrenia Registry establishment and analysis

### EDUCATION

medical doctor

### SUPERVISOR(S)

Szabolcs Kéri

### YEAR III

### PHD

AGE 36

### MISSION

Understand the relationship between metabolism and cognitive dysfunctions in schizophrenia.



## ESZTER RADICS

DEPARTMENT OF ANATOMY, HISTOLOGY AND EMBRYOLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

The link between cognitive training and neuroplasticity in mild cognitive impairment.

### VISION

All preventable dementia cases are prevented.

### PROJECT 1

Investigating the effectiveness of cognitive training in adults: a systematic review and meta-analysis.

### PROJECT 2

Advancing initiatives of dementia risk reduction: A Survey.

### EDUCATION

cognitive neuroscientist

### SUPERVISOR(S)

András Attila Horváth

### YEAR III

### PHD

AGE 30

### MISSION

Evaluate and optimize cognitive trainings to delay or prevent dementia.





## SHIR GALIN

ZIV MEDICAL CENTRE TZFAT ISRAEL

### TOPIC

Heart Rate Variability and Depression: Patterns Across Health and Disease.

### PROJECT 1

Investigating the Accuracy in Predicting Depression through Heart Rate Variability in Non-depressed Population: Systematic Review and Meta-analysis.

### EDUCATION

psychologist

### VISION

Reduced mortality and improved lives through psychology.

### PROJECT 2

Exploring the Link between Multiple Sclerosis, Depression and Heart Rate Variability: A Prospective Observational Study.

### SUPERVISOR(S)

Szabolcs Kéri

### YEAR II

### PHD

AGE 42

### MISSION

Integrating psychological Dimensions into everyday healthcare and policy.



## TAMÁS ÓVÁRI

DEPARTMENT OF PSYCHIATRY, MARKUSOVSKY TEACHING HOSPITAL, SZOMBATHELY

### TOPIC

Heart rate variability in anxiety disorders.

### VISION

A world where every individual has the tool to diagnos anxiety disorder.

### PROJECT 1

Investigating the correlation between heart rate variability and anxiety severity as measured by standardized anxiety scales: A Systematic Review and Meta-analysis.

### EDUCATION

medical doctor

### PROJECT 2

Comparing different therapeutic approaches in patients with anxiety disorder: systematic review and meta-analysis.

### SUPERVISOR(S)

Alotti Nasri, Gábor Duray

### YEAR II

### PHD

AGE 33

### MISSION

Integrating HRV analysis into clinical practice for personalized, effective management of anxiety disorders.



## ALEXANDER KANCSEV

JÓSA ANDRÁS HOSPITAL NYÍREGYHÁZA

### TOPIC

The association between metabolic syndrome and cognitive dysfunctions in schizophrenia.

### VISION

Schizophrenia being a manageable condition compatible with a fulfilling life.

### PROJECT 1

Investigating the effect of impaired glucose homeostasis on cognitive functions in schizophrenia: a systematic review and meta-analysis.  
*Sci Rep, Q1, IF: 3.900*

### PUBLISHED PROJECT 2

Investigating the association between cognition, visual dysfunctions, and metabolic syndrome in patients with schizophrenia Registry establishment and analysis

### EDUCATION

medical doctor

### SUPERVISOR(S)

Szabolcs Kéri

### YEAR III

### PHD

AGE 36

### MISSION

Understand the relationship between metabolism and cognitive dysfunctions in schizophrenia.



## ESZTER RADICS

DEPARTMENT OF ANATOMY, HISTOLOGY AND EMBRYOLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

The link between cognitive training and neuroplasticity in mild cognitive impairment.

### VISION

All preventable dementia cases are prevented.

### PROJECT 1

Investigating the effectiveness of cognitive training in adults: a systematic review and meta-analysis.

### PROJECT 2

Advancing initiatives of dementia risk reduction: A Survey.

### EDUCATION

cognitive neuroscientist

### SUPERVISOR(S)

András Attila Horváth

### YEAR III

### PHD

AGE 30

### MISSION

Evaluate and optimize cognitive trainings to delay or prevent dementia.





## TIBOR DÁNIEL FEHÉR

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

### TOPIC

The Importance of Social Psychoneuroimmunology in Chronic Pancreatitis.

### PROJECT 1

Investigating the prevalence of anxiety and depression in patients with pancreatitis: a systematic review and meta-analysis.

### EDUCATION

medical doctor

### VISION

Patient-care where GI problems will be better prevented, mitigated and cured by a psychosocial medicine.

### PROJECT 2

Investigating the Risk Factors of Anxiety and Depression in Acute Pancreatitis Patients: A Prospective Observation Study.

### SUPERVISOR(S)

Péter Hegyi, Rita Nagy

### YEAR III

### PHD

AGE 33

### MISSION

The development of psychosocial interventions and prevention programs.



## TÍMEA LÁZÁR

UNIVERSITY OF PÉCS

### TOPIC

The utility of risk scores in the prediction of dementia in adults.

### PROJECT 1

Investigating the predictive value of dementia risk scores in adults: a systematic review and meta-analysis.

### EDUCATION

medical doctor

### VISION

All dementia cases can be predicted before the onset of symptoms.

### PROJECT 2

Determining the most influential components of dementia risk scores in adults: Machine-learning based cohort analysis.

### SUPERVISOR(S)

András Attila Horváth

### YEAR III

### PHD

AGE 30

### MISSION

Find the best risk score to accurately predict dementia.



## LÁSZLÓ KOVÁCS

COUNTY EMERGENCY CLINICAL HOSPITAL OF TÂRGU MUREŞ, ROMANIA

### TOPIC

New Therapeutic Insights for Patients with Traumatic Brain Injury

### PROJECT 1

Investigating the Effectiveness of Non-invasive Brain Stimulation on Cognitive Functions of Traumatic Brain Injury Patients: A Systematic Review and Meta-analysis

### EDUCATION

medical doctor

### VISION

Restoring function and independence for brain injury patients.

### PROJECT 2

Effects of Non-Invasive Brain Stimulation on Cortical Synaptic Neuroplasticity: Systematic Review and Meta-analysis

### SUPERVISOR(S)

Miklós Garami

### YEAR I

### PHD

AGE 26

### MISSION

Integrate effective neurostimulation techniques into cognitive rehabilitation.



## MAJED ABU SHENAR

AL-AHLIYYA AMMAN UNIVERSITY, JORDAN

### TOPIC

Neuroplasticity through Task-Oriented Training

### PROJECT 1

Investigating the Efficacy of Task-oriented Training in Stroke Patients: A Systematic Review and Meta-analysis

### EDUCATION

physiotherapist

### VISION

To enhance neurological recovery in stroke patients.

### PROJECT 2

Investigating the efficacy of AI-Driven Adaptive Neurorehabilitation In Amputees patients : A systematic review and Meta-analysis

### SUPERVISOR(S)

Tamás Terebessy

### YEAR I

### MSC

AGE 25

### MISSION

Improving neuroplasticity in stroke patients.





## MÁRTON SZOMBATHELYI

SEMMELWEIS UNIVERSITY

**TOPIC**

Diagnostic Advances in Pediatric Central Nervous System Tumors

**VISION**

Enabling earlier and safer cancer diagnosis for children.

**PROJECT 1**

Investigating the Diagnostic Sensitivity of Circulating Tumor DNA in Pediatric Central Nervous System Tumors: A Systematic Review and Meta-analysis

**PROJECT 2**

Investigating the Effects of Early Palliative Care on Health-Related Outcomes Among Advanced Cancer Patients

**EDUCATION**

MEDICAL STUDENT

**SUPERVISOR(S)**

Miklós Garami

**YEAR I****MD-PHD**

AGE 24

**MISSION**

Explore the possibilities of liquid diagnostic methods in pediatric oncology.



## ESRA ZHUBI

DEPARTMENT OF NEUROLOGY, UNIVERSITY CLINICAL CENTER OF KOSOVO

**TOPIC**

Treatment of ischemic stroke.

**VISION**

Early treatment of stroke and disability-free patients.

**PROJECT 1****PUBLISHED****PROJECT 2**

Investigating the predictive accuracy of magnetic resonance imaging (MRI) for worse outcomes in stroke patients who underwent intravenous thrombolysis (IVT): a systematic review and meta-analysis. *Geroscience*, *Di*, *IF: 5.400*

Comparing combined intravenous thrombolysis and endovascular thrombectomy and direct endovascular thrombectomy in acute basilar artery strokes: a systematic review and meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Bence Gunda

**YEAR III****PHD**

AGE 30

**MISSION**

Make a meaningful impact on stroke prevention and treatment through extensive research.

**E-MAIL**

esrazhubi@gmail.com



## DANUTA SZIRMAI

NATIONAL INSTITUTE OF MENTAL HEALTH, NEUROLOGY AND NEUROSURGERY

**TOPIC**

Neuropsychiatry - Consciousness

**VISION**

To provide the best care for patients in coma.

**PROJECT 1****PUBLISHED****PROJECT 2**

Assessing the prognostic power of EEG connectivity measures in patients with disorders of consciousness. *Helijon*, *Q1*, *IF: 4.000*

Assessing the prognostic power of EEG measures in patients with disorders of consciousness.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

András Horváth

**YEAR IV****PHD**

AGE 32

**MISSION**

Bring research closer to clinical practice.

**PROJECT 3**

“Disorders of consciousness through global neurophysiological measures” with the Coma Science Group, Blegium, Liège

**E-MAIL**

danuta.petals@gmail.com



## ORSOLYA LÁNYI

DEPARTMENT OF PSYCHIATRY AND PSYCHOTHERAPY,  
SEMMELWEIS UNIVERSITY

**TOPIC**

Neuropsychiatry - Schizophrenia

**VISION**

Understanding the biological background of schizophrenia-spectrum disorders.

**PROJECT 1****PUBLISHED****PROJECT 2****PUBLISHED**

Investigating motor cortical TMS-EMG protocols as new biomarkers for schizophrenia: a systematic review and meta-analysis. *Schizophrenia (Heidelberg)*, *Di*, *IF: 5.400*

Investigating thalamocortical connectivity with resting-state fMRI in schizophrenia: a systematic review and meta-analysis *Biol Psychiatry Cogn Neurosci Neuroimaging*, *Di*, *IF: 5.700*

**EDUCATION**

psychologist

**SUPERVISOR(S)**

Gábor Csukly

**YEAR IV****PHD**

AGE 28

**MISSION**

To study the potential neurophysiological and neuroimaging characteristics of schizophrenia.

**E-MAIL**

lanyi.orsi@gmail.com



## MÁRK PAVLEKOVICS

SEMMELWEIS UNIVERSITY, JAHN FERENC SOUTH-PEST HOSPITAL AND CLINIC

### TOPIC

Neurology - Myasthenia Gravis

### VISION

Personalized therapies based on evidence and well-organized patient care systems for patients with neuroimmune disorders.



### PROJECT 1

To compare the efficacy and safety of plasmaexchange and intravenous immunoglobulin in moderate to severe Myasthenia Gravis Relapse: a systematic review and meta-analysis  
*Biomedicines, Q1, IF: 4.700*

### PUBLISHED PROJECT 2

NMOSD and MOGAD Registry update (2015-2021)

### EDUCATION

medical doctor

### SUPERVISOR(S)

Gábor Lovas, Zsolt Illés

### YEAR V

### PHD

AGE 35

### MISSION

Introducing an up-to-date decision support tool for doctors in all regions of Hungary via a well-designed registry-based platform.

### PROJECT 3

Clinical evaluation of rituximab treatment experience in myasthenia gravis.

### E-MAIL

mrkpavlekovich@gmail.com



## ARASHK ÁRPÁD ZABIHI

HUNGARIAN DEFENSE FORCES MEDICAL CENTRE

### TOPIC

Novel insights into the neurosurgical interventions for patients with drug-resistant epilepsy.

### VISION

Improved the quality of life for patients with epilepsy.



### PROJECT 1

Investigating the safety and efficacy of minimally invasive neurosurgical interventions in patients with periventricular nodular heterotopia related drug-resistant epilepsy: systematic review and meta-analysis.

### PROJECT 2

Investigating minimally invasive surgical outcomes in patients with drug-resistant mesial temporal lobe epilepsy: systematic review and meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

András Horváth

### YEAR II

### PHD

AGE 31

### MISSION

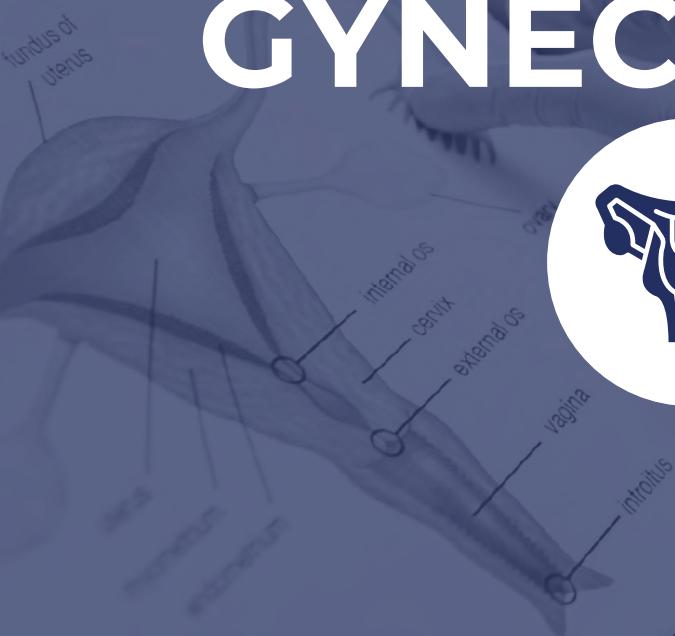
Investigating innovative minimally invasive neurosurgical interventions to improve the standard of care.

### E-MAIL

zabihi\_arashk@outlook.com

FIELD OF RESEARCH

# OBSTETRICS & GYNECOLOGY





# RESEARCH FIELD OBSTETRICS AND GYNECOLOGY

The Gynecology and Obstetrics Research Group brings together a large number of doctoral candidates dedicated to advancing women's health and pregnancy care through multidisciplinary research. Their work spans the full continuum of reproductive and perinatal medicine, encompassing gynecologic oncology, fertility and reproductive health, maternal-fetal medicine, and preventive care. Key research topics include breast, endometrial, and cervical cancers; diseases in pregnancy; prenatal screening and risk assessment; noninvasive prenatal testing; and the developmental origins of health and disease. Further areas of investigation cover pelvic organ prolapse surgery, endometriosis, fertility and nutrition, perinatology, and endocrine and infectious conditions affecting reproductive health. Through clinical studies, systematic reviews, and translational research, the group aims to improve diagnostic precision, enhance maternal and fetal outcomes, and promote evidence-based practices in obstetrics and gynecology. Their collective efforts contribute significantly to advancing women's health and reproductive medicine across all stages of life.

## SUPERVISORS

21



NÁNDOR ÁCS

13 student

Anikó Gál, Attila Bokor, Balázs Lintner, Csaba Demendi, Dezső Csúpor (*Supervisor of the month: 2021 November*), Ferenc Bánhidy, Gábor Szabó, Gábor Varga (*Supervisor of the month: 2023 June*), János Gidai, Levente Sára, Miklós Sipos, Márton Keszthelyi, Márton Vezér, Petra Nóna Merkely, Péter Nyirády (*Supervisor of the month: 2022 March*), Sándor Valent (*Supervisor of the month: 2025 April*), Szabolcs Várbiró, Zsolt Melczer, Zsófia Benkő, Ágnes Mayer

## STUDENTS

33

**YEAR I** Áron Péter Fekete, Balázs Boldizsár Pete, Lilian Hanna Schmek, Motahareh Pourshahroundi, Olivér Solymosi, Zsuzsanna Pallagi

**YEAR II** Ádám Vincze, Anita Gréta Perényi, Begüm Kepkep, Botond Boldizsár Bényi, Dávid Márai, Máté Szabolcs Botos, Tímea Gabriella Hercsik

**YEAR III** András Cébely-Lénárt, Árpád Ágoston Jankó, Boglárka Túri, Gökçe Can, Hanna Gizaw, Kincső Lőrincz, Leila Tigharghar, Lőrinc Frivaldszky, Zihan Suo, András Harajka, Dénes Péter Kovács

**YEAR IV** Gábor Vleskó, Isabel Pinto Amorim das Virgens, István Madár, Márton Kónya, Máté Éliás, Rita Zsuzsanna Vajna

**YEAR V** Ákos Mátrai, Balázs Komoróczy, Eszter Hoffmann



## ÁRON PÉTER FEKETE

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Frontiers in Noninvasive Prenatal Diagnosis

**PROJECT 1**

Investigating the Diagnostic Accuracy of Noninvasive Prenatal Tests in the Detection of DiGeorge Syndrome: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**VISION**

None of the fetuses with genetic disorders go undiagnosed prenatally.

**PROJECT 2**

Investigating the Diagnostic Accuracy of Noninvasive Prenatal Tests in the Detection of Monogenic Diseases: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Nándor Ács, Csaba Demendi

**YEAR I****PHD**

AGE 35

**MISSION**

Review the existing diagnostic options and find a more effective solution.

**E-MAIL**

feketearon@gmail.com



## BALÁZS BOLDIZSÁR PETE

SEMMELWEIS UNIVERSITY

**TOPIC**

Imaging Diagnostics of Endometriosis

**PROJECT 1**

Investigating the Diagnostic Accuracy of Magnetic Resonance Imaging and Transvaginal Sonography for Endometriosis in Women of Reproductive Age: A Systematic Review and Meta-analysis

**EDUCATION**

medical student

**VISION**

Early and non-invasive diagnosis of endometriosis.

**PROJECT 2**

Investigating the Diagnostic Accuracy of Magnetic Resonance Imaging and Transvaginal Sonography for Adenomyosis in Women of Reproductive Age: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Gábor Szabó

**YEAR I****MD-PHD**

AGE 24

**MISSION**

To find the optimal imaging modality for diagnosing endometriosis early.

**E-MAIL**

pete.balazs1@gmail.com



## LILIAN HANNA SCHMEK

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

From Prediction to Precision: Evidence-Based Strategies to Improve High-Risk Pregnancy Care

**PROJECT 1**

Investigating the predictive accuracy of PAPP-A for preeclampsia in the first trimester: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**VISION**

Reducing the number of preterm births worldwide.

**PROJECT 2**

Investigating the Diagnostic Accuracy and Clinical Impact of Amniocentesis for Detecting Intra-amniotic Infection in Women with Preterm Premature Membrane Rupture: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Csaba Demendi, Nándor Ács

**YEAR I****PHD**

AGE 34

**MISSION**

Implement pre-eclampsia risk assessment as part of standard prenatal care

**E-MAIL**

schmek.lili@gmail.com



## MOTAHAREH POURSHAHROUDI

SEMMELWEIS UNIVERSITY

**TOPIC**

Effects of Maternal Lifestyle Factors on Offspring Neurodevelopment

**PROJECT 1**

Investigating the Maternal Metabolic Conditions as a Risk of Offspring ASD and ADHD: A Systematic Review and Meta-analysis

**EDUCATION**

public health specialist

**VISION**

A world where maternal health leads to healthy child development.

**PROJECT 2**

Investigating the Maternal Medication Use as a Risk of Offspring ASD and ADHD: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Nándor Ács

**YEAR I****PHD**

AGE 26

**MISSION**

Identify maternal factors linked to offspring neurodevelopmental disorders.

**E-MAIL**

motaahreh.pourshahroudi@gmail.com



## OLIVÉR ZSOMBOR SOLYOMOSI

SEMMELWEIS UNIVERSITY

**TOPIC**

Sexually Transmitted Infections in Pregnancy

**PROJECT 1**

Investigating the Effect of Maternal Gonorrhea on Pregnancy and Neonatal Outcomes: A Systematic Review and Meta-analysis

**EDUCATION**

medical student

**VISION**

Safer pregnancies, free from sexually transmitted infections.

**PROJECT 2**

Comparing the Efficacy and Safety of Antibiotic Regimens for Chlamidia Trachomatis Infection During Pregnancy: A Systematic Review and Meta-Analysis

**SUPERVISOR(S)**

Zsolt Melczer

**YEAR I****MD-PHD**

AGE 24

**MISSION**

Raise awareness and educate on STIs in pregnancy.



## ZSUZSANNA PALLAGI

EZÜST KÍGYÓ PHARMACY, HUNGARY

**TOPIC**

New Therapeutic Approaches in Breast Cancer Treatment

**PROJECT 1**

Investigating the Efficacy and Safety of Phosphoinositide 3-kinase or Protein Kinase B Pathway Inhibitors in Patients Suffering from Metastatic or Locally Advanced Breast Cancer with PI3KCA Mutation: A Systematic Review and Meta-analysis

**EDUCATION**

pharmacist

**VISION**

Increase the application of the latest anticancer therapies.

**PROJECT 2**

Investigating the Efficacy of Natural Products in the Treatment and Prevention of Oral Mucositis in Breast Cancer Patients with Anticancer Therapy: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Dezső Csúpor

**YEAR I****PHD**

AGE 25

**MISSION**

Explore the efficacy and safety of new therapeutic options in breast cancer treatment.



## ÁDÁM VINCZE

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Fertility sparing treatments in gynecological cancers.

**PROJECT 1**

Investigating the efficacy and safety of the fertility sparing treatment in early stage cervical cancer  $\geq 2$  cm: systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Women can keep their ability to reproduce even after the appropriate oncological treatment.

**PROJECT 2**

Investigating the efficacy and safety of the fertility-sparing treatment in atypical hyperplasia and endometrial cancer: A Systematic Review and Meta-analysis.

**SUPERVISOR(S)**

Balázs Lintner, Richárd Tóth

**YEAR II****PHD**

AGE 29

**MISSION**

Finding the best fertility sparing treatment for gynecological cancer patients.



## ANITA GRÉTA PERÉNYI

INSTITUTE OF PANCREATIC DISEASES, SEMMELWEIS UNIVERSITY

**TOPIC**

Assessment of nutritional habits of pregnant women.

**PROJECT 1**

Investigating the efficacy and safety of PUFA supplementation on carbohydrate metabolism parameters among gestational diabetic patients: systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Normalize gestational diabetes with lifestyle medicine, nutritional counseling.

**PROJECT 2**

Investigating the effects of diet composition and micronutrient intake on carbohydrate metabolism parameters and the development of GDM in pregnant women: an observational study.

**SUPERVISOR(S)**

Nándor Ács, Zsolt Melczer

**YEAR II****PHD**

AGE 34

**MISSION**

Identifying the dietary factors modulating the therapeutic response in this population.





## BEGÜM KEPKEP

SEMMELWEIS UNIVERSITY

### TOPIC

Assisted reproductive technology.

### PROJECT 1

Investigating the effect of oocyte gene mutations on fertility outcomes during assisted reproductive technology: A Systematic Review and Meta-analysis.

### EDUCATION

medical doctor

### VISION

Decreased psychological burden on couples during assisted reproduction.

### PROJECT 2

Investigating the effect of antioxidant supplementation fertility outcomes during assisted reproductive technology: A Systematic Review and Meta-analysis.

### SUPERVISOR(S)

Miklós Sipos

### YEAR II

### PHD

AGE 25

### MISSION

Finding safe and effective techniques to increase the success of assisted reproduction.



## BOTOND BOLDIZSÁR BÉNYI

SEMMELWEIS UNIVERSITY

### TOPIC

Natural orifice specimen extraction in benign intraabdominal lesions.

### VISION

Improved quality of life in patients who suffer from benign intestinal lesions

### PROJECT 2

Investigating the safety and efficacy of NOSE in the treatment of benign intestinal lesions: systematic review and meta-analysis.

### SUPERVISOR(S)

Nándor Ács, Attila Bokor

### YEAR II

### MD-PHD

AGE 25

### MISSION

Finding the most effective surgical technique for the treatment of benign intraabdominal lesions.



## DÁVID MÁRAI

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

Prediction and prognosis of preeclampsia.

### VISION

Reduced maternal and fetal morbidity and mortality.

### PROJECT 2

Investigating dairy consumption as a protective factor for preeclampsia in pregnant women: a systematic review and meta-analysis.

### SUPERVISOR(S)

Sándor Valent

### YEAR II

### PHD

AGE 29

### MISSION

Providing proper and early diagnosis and treatment for severe preeclampsia.



## MÁTÉ SZABOLCS BOTOS

FEJÉR COUNTY SZENT GYÖRGY UNIVERSITY TEACHING HOSPITAL

### TOPIC

Adenomyosis and infertility.

### VISION

Improved pregnancy outcomes for women with adenomyosis.

### PROJECT 2

Comparing the efficacy and safety of fertility-sparing treatment options for adenomyosis: systematic review and meta-analysis.

### SUPERVISOR(S)

Miklós Sipos

### YEAR II

### PHD

AGE 28

### MISSION

Finding the most effective assisted reproduction protocol for infertile women with adenomyosis.





## TÍMEA GABRIELLA HERCSIK

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Oral Contraceptives and Cancer Risk.

**VISION**

Lower rates of malignancies.

**PROJECT 1**

Investigating the Effect of Oral Contraceptive Use on the Risk of Hematological Cancers: Systematic Review and Meta-analysis.

**PROJECT 2**

Investigating the Effect of Oral Contraceptive Use on the Risk of Lung Cancer: Systematic Review and Meta-analysis.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Ferenc Bánhid

**YEAR II****PHD**

AGE 28

**MISSION**

Providing preventive measures for hematological and lung cancers.

**E-MAIL**

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## ANDRÁS CZÉBELY-LÉNÁRT

SEMMELWEIS UNIVERSITY

**TOPIC**

The application of Enhanced Recovery After Surgery protocol to improve patient outcomes after surgeries.

**VISION**

No patients will undergo unnecessary preoperative interventions.

**PROJECT 1**

Investigating the patient outcomes in bowel resection surgeries with and without mechanical bowel preparation: a systematic review and meta-analysis.

**PROJECT 2**

Investigating the advantages of early-feeding versus fasting after bowel resection: a systematic review and meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Balázs Lintner

**YEAR III****PHD**

AGE 30

**MISSION**

Emphasize leaving the old methods behind based on the Enhanced Recovery After Surgery recommendations.

**E-MAIL**

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## ÁRPÁD ÁGOSTON JANKÓ

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Effect of oral contraceptives on metabolic balance.

**VISION**

Find potential physiological changes and long-term health implications for individuals using these medications.

**PROJECT 1**

Investigating the effect of oral contraceptives on carbohydrate metabolism in women of reproductive age: a systematic review and meta-analysis.

**PROJECT 2**

Investigating the effect of oral contraceptives on lipid metabolism in women of reproductive age: a systematic review and meta-analysis.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Szabolcs Várbiró, Márton Keszthelyi

**YEAR III****PHD**

AGE 26

**MISSION**

Identify a high-risk population and determine the optimal combination in terms of metabolic parameters.

**E-MAIL**

jankoarpi@gmail.com



## BOGLÁRKA TÚRI

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Altered vaginal flora in pregnancy.

**VISION**

Pregnant women will have better outcomes due to professional prenatal care.

**PROJECT 1**

Investigating the effect of genital mycoplasmas on adverse pregnancy outcomes: a systematic review and meta-analysis.

**PROJECT 2**

Investigating the effect of genital mycoplasmas on adverse outcomes in pregnancies at risk for preterm birth: a systematic review and meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Zsolt Melczer

**YEAR III****PHD**

AGE 33

**MISSION**

To find new possibilities of screening and treatment of genital mycoplasmas in pregnancy.

**E-MAIL**

dr.feher.boglarka@gmail.com



## GÖKÇE CAN

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

The Role of Various Physiotherapy Modalities in the Treatment of Pelvic Pain Syndromes.

### VISION

Endometriosis pain will be alleviated with the knowledge of advanced physiotherapy methods.



### PROJECT 1

Investigating the effectiveness of physiotherapy methods in women with endometriosis-associated pelvic pain: a systematic review and meta-analysis.  
*Pain Med, Q1, IF: 3.000*

### PUBLISHED PROJECT 2

Investigating the effectiveness of physiotherapy methods in women with menstrual pain: a systematic review and meta-analysis.

### EDUCATION

physiotherapist

### SUPERVISOR(S)

Ágnes Mayer, Nándor Ács

### YEAR III

### PHD

AGE 27

### MISSION

Enhance the quality of physiotherapy treatments for patients, resulting in better patient outcomes and overall well-being.



## HANNA GIZAW

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

The effect of paternal age on the development of congenital anomalies.

### VISION

Better antenatal care and higher quality of life for the newborns.



### PROJECT 1

Investigating the influence of paternal age on the development of congenital anomalies: a systematic review and meta-analysis.

### PROJECT 2

Investigating the influence of paternal age on the development of congenital anomalies in the Hungarian population between 1980 and 2009: a population based study.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Nándor Ács, János Gidai

### YEAR III

### PHD

AGE 28

### MISSION

Provide evidence on optimal paternal age for having children.



## KINCSŐ LŐRINCZ

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

Uterine closure layering following cesarean section.

### VISION

Post-cesarean section women without complications.



### PROJECT 1

Investigating the efficacy and safety of different cesarean section layering techniques: a systematic review and meta-analysis.

### PROJECT 2

Comparison of safety and efficacy between laparoscopic myomectomy and traditional laparotomy for patients with uterine fibroids: a systematic review and meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Ferenc Bánhid, Márton Vezér

### YEAR III

### PHD

AGE 27

### MISSION

Finding the c-section closure technique with the least amount of complications.



## LEILA TIGHARGHAR

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

The risk factors of preterm birth and their management.

### VISION

Make cervical insufficiency an easily manageable disease.



### PROJECT 1

Investigating the efficacy of different therapeutic modalities for cervical insufficiency on prevention of preterm birth: a systematic review and meta-analysis.

### PROJECT 2

Investigating the link between cervical insufficiency and the development of pelvic organ prolapse: a systematic review and meta-analysis.

### EDUCATION

dentist

### SUPERVISOR(S)

Nándor Ács, Petra Nóna Merkely

### YEAR III

### PHD

AGE 29

### MISSION

Find the most effective treatment for cervical insufficiency by applying up to date scientific results.

### E-MAIL

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## LÓRINC FRIVALDSZKY

BETHESDA CHILDREN HOSPITAL

### TOPIC

Novel approaches in prevention of postpartum depression.

### VISION

Improve quality of life of women undergoing cesarean section.



### PROJECT 1

Investigating the efficacy and safety of esketamine on postpartum depression in women undergoing cesarean section: a systematic review and meta-analysis. *J Psychiatr Res*, Q1, IF: 3.700

### PUBLISHED PROJECT 2

Investigating the efficacy and safety of immediate postpartum administration of long-acting reversible contraception methods: a systematic review and meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Márton Keszthelyi

### YEAR III

### PHD

AGE 28

### MISSION

Find pharmacological methods that can prevent postoperative complications and improve the quality of life of women undergoing cesarean section.



## ZIHAN SUO

IMPERIAL COLLEGE LONDON

### TOPIC

The relation between maternal factors and birth defects.



### PROJECT 1

Investigating the association between maternal risk factors and cardiac birth defects: a systematic review and meta-analysis.

### EDUCATION

biostatistician

### VISION

Increased mother awareness and education and fewer cardiac birth defects.

### PROJECT 2

Investigating the association between maternal medication and cardiac birth defects: a systematic review and meta-analysis.

### SUPERVISOR(S)

Nándor Ács

### YEAR III

### PHD

AGE 25

### MISSION

Provide closer maternity counseling to prevent cardiac birth defects.



## ANDRÁS HARAJKA

MEDICAL STUDENT

### TOPIC

Obstetrics, gynecology - Oncology



### PROJECT 1

Investigating the effect of oral contraceptive use on endometrial cancer risk: a systematic review and meta-analysis. *Acta Obstet Gynecol Scand*, D1, IF: 3.500

### EDUCATION

medical doctor

### VISION

Revealing the effect of oral contraceptive use on cancer risk.

### PROJECT 2

Investigating the effect of oral contraceptive use on ovarian cancer risk: a systematic review and meta-analysis

### SUPERVISOR(S)

Nándor Ács

### YEAR IV

### PHD

AGE 27

### MISSION

Supporting the decision making process of women when choosing contraception method.

### PROJECT 3

Investigating the effect of oral contraceptive use on the risk of other cancer types: a systematic review and meta-analysis

### E-MAIL

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## DÉNES PÉTER KOVÁCS

DEPARTMENT OF OBSTetrics AND GYNECOLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

Infertility



### PROJECT 1

Investigating the effect of Human Papillomavirus infection on adverse birth outcomes: a systematic review and meta-analysis. *Acta Obstet Gynecol Scand*, D1, IF: 4.300

### EDUCATION

medical doctor

### VISION

Emphasize the importance of prevention, help improve reproduction rates.

### PROJECT 2

Investigating the association between lipid profile and various pregnancy complications: a systematic review and meta-analysis

### SUPERVISOR(S)

Ferenc Bánhid

### YEAR IV

### PHD

AGE 31

### MISSION

All people should be able to create a healthy family.

### E-MAIL

kovacsdenespeter@gmail.com



## GÁBOR VLESKÓ

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Obstetrics, gynecology - Reproduction medicine

**VISION**

To expand knowledge on contraception in the world, so that every women can avoid unwanted pregnancy.

**PROJECT 1**

Investigating the efficacy and safety of combined parenteral and oral contraceptives in reproductive aged women. A systematic review and meta-analysis. *J Clin Med*, Q1, IF: 3.900

**PUBLISHED****PROJECT 2**

Investigating the role of obesity on hormonal contraceptives. A systematic review and meta-analysis.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Szabolcs Várbiró, Levente Sára

**YEAR IV****PHD**

AGE 45

**MISSION**

To find new information that can help a wide population of women to choose the best option for contraception.



## ISABEL PINTO AMORIM DAS VIRGENS

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Obstetrics, gynecology - Nutrition

**VISION**

Pregnancy can have better outcomes through early detection of anemia and implementation of nutritional interventions.

**PROJECT 1**

Investigating the association of iron-deficiency anemia on pregnancy outcomes: a systematic review and meta-analysis. *Front Nutr*, Q1, IF: 5.000

**PUBLISHED****PROJECT 2**

Investigating the association of iron-deficiency anemia on congenital anomalies: a systematic review and meta-analysis

**EDUCATION**

dietitian

**SUPERVISOR(S)**

Nándor Ács

**YEAR IV****PHD**

AGE 31

**MISSION**

To raise awareness among pregnant patients regarding the effects of anemia.

**PROJECT 3**

Investigating the effect of anemia on congenital anomalies

**E-MAIL**

isabel.amorim17@gmail.com



## ISTVÁN MADÁR

DEPARTMENT OF OBSTetrics AND GYNECOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Obstetrics, gynecology - Oncology

**VISION**

I believe that every endometrial cancer patient's life quality and length can be improved using novel methods.

**PROJECT 1**

Transvaginal ultrasound and magnetic resonance imaging in the preoperative stratification of endometrial cancer: a systematic review and meta-analysis. *Cancers (Basel)*, Q1, IF: 5.200

**PUBLISHED****PROJECT 2**

Systemic therapy for recurrent or advanced endometrial cancer: a systematic review and meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Nándor Ács, Gábor Szabó

**YEAR IV****PHD**

AGE 34

**MISSION**

To improve the management of endometrial cancer patients by applying up to date scientific results.

**E-MAIL**

madaristvan22@gmail.com



## MÁRTON KÓNYA

PREVENTREND KFT.

**TOPIC**

Genetics – Non-invasive prenatal testing (NIPT)

**VISION**

Increase the effectiveness of genetic tests.

**PROJECT 1**

Investigating the Accuracy of Non-Invasive Prenatal Testing (NIPT) for Rare Chromosome Abnormalities: a systematic review and meta-analysis. *PLoS One*, Q1, IF: 3.700

**PUBLISHED****PROJECT 2**

Non-Invasive Prenatal Testing - Background of false positive cases: a systematic review and meta-analysis

**EDUCATION**

biologist

**SUPERVISOR(S)**

Anikó Gál

**YEAR IV****PHD**

AGE 51

**MISSION**

Help pregnant women find a good decision and experts in genetic consultation.

**PROJECT 3**

GW-NIPT results - Retrospective cohort study

**E-MAIL**

konya.marton@czezelintezet.hu



## MÁTÉ ÉLIÁS

DEPARTMENT OF GYNECOLOGY, SZENT BORBÁLA HOSPITAL

### TOPIC

Obstetrics, gynecology - Endocrinology

### VISION

In the future, having a child above 40 years of age won't be a question of luck anymore, but the result of good quality, safe and effective treatment.



### PROJECT 1

Investigating the effects of platelet-rich plasma (PRP) treatment on fertility for women with diminished ovarian reserve: a systematic review and meta-analysis. *J Ovarian Res*, Q1, IF: 4.000

### PUBLISHED PROJECT 2

Effect of intraovarian PRP pretreatment on IVF results in diminished ovarian reserve patients: a randomized control trial

### EDUCATION

medical doctor

### SUPERVISOR(S)

Szabolcs Várbiró, Miklós Sipos

### YEAR IV

### PHD

AGE 31

### MISSION

Improving the treatment of infertility with robust scientific evidence.



## RITA ZSUZSANNA VAJNA

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

Obstetrics, gynecology - Endocrinology

### VISION

Finding the best therapy option for higher ovulation rate, endometrial thickness and pregnancy rate in women with PCOS.



### PROJECT 1

Strong early impact of letrozole on ovulation induction outperforms clomiphene citrate in PCOS women: a systematic review and meta-analysis. *Pharmaceuticals (Basel)*, Q1, IF: 4.600

### PUBLISHED PROJECT 2

Investigating the efficacy of herbal remedies on metabolism and on endocrine status in women with PCOS: a systematic review and meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Szabolcs Várbiró, Levente Sára

### YEAR IV

### PHD

AGE 35

### MISSION

With the best therapy more women with PCOS can have a child.



## ÁKOS MÁTRAI

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

Obstetrics, gynecology - Infectology

### VISION

Provide optimal pregnancy care that contributes to the birth of healthy fetuses.



### PROJECT 1

First-trimester influenza infection increases the odds of non-chromosomal birth defects: a systematic review and meta-analysis. *Viruses*, Q1, IF: 4.700

### PUBLISHED PROJECT 2

Investigation of the effects of maternal influenza during pregnancy on birth defects in the Hungarian Population between 1980 and 2009: a population based case-control study, cohort analysis. *J Clin Med*, Q1, IF: 3.900

### EDUCATION

medical doctor

### SUPERVISOR(S)

Nándor Ács

### YEAR V

### PHD

AGE 35

### MISSION

Highlight the risk of infectious diseases during pregnancy.



## BALÁZS KOMORÓCZY

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

Obstetrics, gynecology - Preterm birth

### VISION

To prevent adverse pregnancy outcomes e.g. preeclampsia and preterm birth to reduce avoidable fetal and maternal complications.



### PROJECT 1

Optimal dose of Aspirin that prevents adverse pregnancy outcomes: a systematic review and meta analysis *J Clin Med*, Q1, IF: 3.000

### PUBLISHED PROJECT 2

Screening for spontaneous preterm birth in singleton pregnancies: protocol of an observational study

### EDUCATION

medical doctor

### SUPERVISOR(S)

Zsófia Benkő, Nándor Ács

### YEAR V

### PHD

AGE 35

### MISSION

To develop a reliable screening model for pregnancy complications leading to preterm birth.



## ESZTER HOFFMANN

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, SEMMELWEIS UNIVERSITY



### TOPIC

Obstetrics, gynecology - Perinatology

### VISION

Contribute to the prevention of preterm birth.

### PROJECT 1

Routine screening of vaginal flora during pregnancy reduces the odds of preterm births: a systematic review and meta-analysis: a systematic review and meta-analysis. *Sci Rep, D1, IF: 4.100*

### PUBLISHED

### PROJECT 2

Investigating the efficacy of treatment of abnormal vaginal flora during pregnancy to reduce the rate of preterm birth and premature rupture of membranes: a systematic review and meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Csaba Demendi, Nándor Ács

### YEAR V

### PHD

AGE 32

### MISSION

Improving the protocol for the treatment and prevention of vaginal infection during pregnancy.

### PROJECT 3

Genetic variation associated with preterm birth: protocol of a genomic study

### E-MAIL

[h.eszter@icloud.com](mailto:h.eszter@icloud.com)

FIELD OF RESEARCH

# ORTHOPAEDICS & TRAUMATOLOGY





# RESEARCH FIELD ORTHOPAEDICS & TRAUMATOLOGY

The Orthopaedics and Traumatology Research Group unites doctoral candidates and clinicians specializing in musculoskeletal medicine, injury management, and surgical innovation. Reflecting the close relationship between orthopaedics, traumatology, and sports medicine, the group's research spans both surgical and rehabilitative aspects of locomotor disorders and injuries. Key research areas include hip and knee surgery, total joint arthroplasty, shoulder and ankle injuries, chronic wrist pain, developmental hip dysplasia, and postoperative rehabilitation. Advanced diagnostic techniques—such as motion tracking and biomechanical analyses—are also explored to improve surgical precision and functional recovery. Through clinical research, biomechanical modeling, and translational studies, the group aims to enhance understanding of musculoskeletal pathologies and optimize patient outcomes following injury or reconstructive surgery. Their work contributes to the continuous development of modern orthopaedic and trauma care.

## SUPERVISORS

16

★ TOP SUPERVISORS ★



**ZOLTÁN BEJEK**

3 student

Ákos Zahár, Eszter Éva Virág-Tulassay, Gergely Holnapy, Gergely Pánics, György Márk Hangody, György Szőke, Gábor Skaliczki, Imre Sallai, István Domán, Judit Hethéssy, Károly Pap, Orsolya Gresits, Péter Ferdinand (Supervisor of the month: 2024 April), Tamás Bodzay, Tamás Terebessy (Supervisor of the month: 2022 October, 2024 March)

## STUDENTS

16

**YEAR I** Dániel Mihály Péter, Lilla Mayer, Oliver Gersonde, Péter Soma Szőke

**YEAR II** András Zoltán Posta, Dániel Szmola, Nándor József Nemes

**YEAR III** Azamat Bissenov, Eszter Éva Virág-Tulassay

**YEAR V** Bence Stubnya, Csaba Varga, Gyula Domos, Gyula Ferenc Szőcs, Koppány Péter Kocsis, Miklós Máté, Robert de Jonge



## DÁNIEL MIHÁLY PÉTER

SEMMELWEIS UNIVERSITY

### TOPIC

Effectiveness and Optimization of Hydrodistension in the Treatment of Frozen Shoulder

### PROJECT 1

Comparing the Efficacy and Safety of Hydrodistension versus Other Non-surgical Interventions in Frozen Shoulder: A Systematic Review and Meta-analysis

### EDUCATION

medical student

### VISION

A world where frozen shoulder no longer limits quality of life.

### PROJECT 2

Comparing the Efficacy and Safety of Different Hydrodistension Injection Methods in Frozen Shoulder: A Systematic Review and Meta-analysis

### SUPERVISOR(S)

Gábor Skaliczki, Eszter Éva Virág-Tulassay

### YEAR I

### MD-PHD

AGE 25

### MISSION

To provide patients with frozen shoulder an effective therapy from day one.



## LILLA MAYER

DEPARTMENT OF TRAUMATOLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

Novel Strategies in the Management of Hip Surgeries

### PROJECT 1

Investigating the Proportion of Multidrug-resistant Pathogens in Surgical Site Infections Following Hip Surgeries: A Systematic Review and Meta-analysis

### EDUCATION

medical doctor

### VISION

No postoperative septic complications at all.

### PROJECT 2

Investigating the Effect of Preoperative Screening on the Management of Hip Trauma Patients: Non-randomized Prospective Interventional Study

### SUPERVISOR(S)

Tamás Bodzay

### YEAR I

### PHD

AGE 29

### MISSION

Preventing surgical site infections caused by multidrug-resistant pathogens.



## OLIVER GERSONDE

SEMMELWEIS UNIVERSITY

### TOPIC

Clinical Endpoints in Treatment of Chronic Wrist Pain

### PROJECT 1

Investigating Quantifiable Outcome Measurements for Monitoring Improvement in Chronic Wrist Pain: A Systematic Review and Meta-analysis

### EDUCATION

medical student

### VISION

To provide better quality of life for chronic wrist pain patients.

### PROJECT 2

Investigating How Hand Surgeons Measure Outcomes in Daily Practice: A Cross-sectional Web Survey

### SUPERVISOR(S)

Judit Hetthéssy

### YEAR I

### MD-PHD

AGE 22

### MISSION

To individualize wrist pain treatment based on meaningful patient improvements.



## PÉTER SOMA SZŐKE

SEMMELWEIS UNIVERSITY

### TOPIC

Identifying Modifiable Risk Factors for Early Periprosthetic Infection After Primary Arthroplasty

### PROJECT 1

Identifying Modifiable Nutritional Risk Factors of Surgical Site Infection and Acute Periprosthetic Joint Infections after Primary Hip and Knee Arthroplasty: A Systematic Review and Meta-analysis

### EDUCATION

medical student

### VISION

Prevent septic complications in large joint arthroplasty.

### PROJECT 2

Prospective Evaluation of Modifiable Nutritional Risk Factors in Surgical Site Infection and Acute Periprosthetic Joint Infections after Primary Hip and Knee Arthroplasty: A Prospective Clinical Trial

### SUPERVISOR(S)

Imre Sallai

### YEAR I

### MD-PHD

AGE 22

### MISSION

Identify modifiable risk factors.





## ANDRÁS ZOLTÁN POSTA

DEPARTMENT OF ORTHOPAEDICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Residual Symptoms at Total Knee Arthroplasty Surgery.

**PROJECT 1**

Investigating the effect of Esmarch Tourniquet during Total Knee Arthroplasty Surgery: systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Operating people with Knee Osteoarthritis the best possible way.

**PROJECT 2**

Investigating the effect of different subtypes of Tourniquets during Total Knee Arthroplasty Surgery: a Systematic Review and Network Meta-Analysis.

**SUPERVISOR(S)**

Zoltán Bejek

**YEAR II****PHD**

AGE 29

**MISSION**

Studying the different techniques of Total Knee Arthroplasty.

**PROJECT 3**

Assessing the effect of preoperative biomarkers on postoperative outcomes in patients undergoing Total Knee Replacement: Protocol for Longitudinal Cohort Study.

**E-MAIL**

posta.andras13@gmail.com



## DÁNIEL SZMOLA

DEPARTMENT OF ORTHOPAEDICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Novel Approaches in Optimizing Bone Health.

**PROJECT 1**

Investigating the Safety and Efficacy of Physical Training in Post-Fractures Patients: systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Effective healthcare practices for maintaining optimal bone health and patient recovery.

**PROJECT 2**

Investigating the Safety and Efficacy of Nutritional supplementation in Post-Fractures Patients: Systematic Review and Meta-analysis.

**SUPERVISOR(S)**

Péter Ferdinand, Zoltán Bejek

**YEAR II****PHD**

AGE 34

**MISSION**

Identifying the most effective practices and protocols to achieve my vision.

**PROJECT 3**

Investigating the Effect of Nutritional and Exercise Interventions on Mortality in Hip Fracture Patients: Randomized Clinical Trial Protocol

**E-MAIL**

szmolaadaniel@gmail.com



## NÁNDOR JÓZSEF NEMES

FEJÉR COUNTY SZENT GYÖRGY UNIVERSITY TEACHING HOSPITAL

**TOPIC**

Contemporary alignment techniques in total knee arthroplasty.

**PROJECT 1**

Comparing the safety and effectiveness of kinematic and mechanical alignment in total knee arthroplasty: systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Pain-free active life for people with end-stage osteoarthritis.

**PROJECT 2**

Comparing the safety and effectiveness of inverse kinematic alignment and mechanical alignment in total knee arthroplasty: randomized controlled trial.

**SUPERVISOR(S)**

Ákos Zahár, István Domán

**YEAR II****PHD**

AGE 32

**MISSION**

Advancing surgical techniques in total joint arthroplasty.

**E-MAIL**

nandor.j.nemes@gmail.com



## AZAMAT BISSENOV

DEPARTMENT OF ORTHOPAEDICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Mobile motion analysis.

**VISION**

High quality health-conscious behavior and personalized medical care for disabled people.

**PROJECT 1**

Comparing inertial measurement-based motion tracking results with 3D gait analysis results: a systematic review and meta-analysis.

*J Orthop Surg Res, Q1, IF: 2.800*

**PUBLISHED****PROJECT 2**

Evaluating the Validity and Reliability of Inertial Measurement Unit (IMU) for Balance Assessment: A systematic review and meta-analysis

**SUPERVISOR(S)**

Tamás Terebessy, Orsolya Gresits

**YEAR III****PHD**

AGE 31

**MISSION**

Widespread use of mobile motion analysis for easier diagnose and more accurate treatment of musculoskeletal disorders.

**E-MAIL**

bissenov.azamat@phd.semmelweis.hu





## ESZTER ÉVA VIRÁG-TULASSAY

DEPARTMENT OF ORTHOPAEDICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Comparison of different therapies for acute anterior shoulder dislocation.

**PROJECT 1**

Investigating the safety and efficacy of different therapies for acute anterior shoulder dislocations- Systematic Review and Network Meta-Analysis.

**EDUCATION**

medical doctor

**VISION**

Finding the most optimal treatment for acute anterior shoulder dislocation.

**PROJECT 2**

Comparing the Accuracy and Consistency of 3D MRI with 3D CT in Assessing Glenohumeral Instability.

**SUPERVISOR(S)**

Gábor Skaliczki

**YEAR III****PHD**

AGE 29

**MISSION**

Compare therapies considered internationally suitable.

**E-MAIL**

tulassay.eszter@gmail.com



## BENCE STUBNYA

DEPARTMENT OF ORTHOPAEDICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Orthopedics, traumatology - Knee surgery.

**PROJECT 1**

Comparison of the safety and efficacy of different surgical approaches in total knee arthroplasty: a systematic review and meta-analysis.

*J Arthroplasty, D1, IF: 4.435*

**EDUCATION**

medical doctor

**PUBLISHED****PROJECT 2**

Comparison of the safety and efficacy of subvastus and medial parapatellar approaches in total knee arthroplasty: observational clinical trial.

**SUPERVISOR(S)**

Zoltán Bejek

**YEAR V****PHD**

AGE 30

**MISSION**

Our Mission is to find the most effective approach for TKA.

**PROJECT 3**

Total knee arthroplasty registry analysis

**E-MAIL**

bence@stubnya.hu



## CSABA VARGA

DEPARTMENT OF ORTHOPAEDICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Orthopedics, traumatology - Foot and ankle surgery.

**PROJECT 1**

Obesity increases the odds of ankle prosthesis revision: a systematic review and meta-analysis.

*Foot Ankle Int, D1, IF: 2.700*

**EDUCATION**

medical doctor

**VISION**

A high-quality up to date professional foot surgery in Hungary.

**PROJECT 2**

Investigating the effect of diabetes on the outcomes of ankle prosthesis: a systematic review and meta-analysis

**SUPERVISOR(S)**

Gergely Holnápy

**YEAR V****PHD**

AGE 38

**MISSION**

To avoid the unappropriate surgical interventions in foot surgery practice.

**E-MAIL**

dr.vargacsaba001@gmail.com



## GYULA DOMOS

DEPARTMENT OF ORTHOPAEDICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Orthopedics, traumatology - Developmental hip dysplasia.

**PROJECT 1**

Identifying the risk factors of failure in the treatment of congenital hip dislocation a systematic review and meta-analysis.

*Effort Open Rev, D1, IF: 3.400*

**EDUCATION**

medical doctor

**VISION**

To ensure the highest quality treatment for pediatric patients - to build one of the best pediatric orthopedic centers in Europe.

**PROJECT 2**

The results of primary complex surgical treatment in congenital hip dislocation retrospective cohort analysis.

**SUPERVISOR(S)**

György Szőke

**YEAR V****PHD**

AGE 47

**MISSION**

To introduce the best available treatment methods in every field of pediatric orthopaedics, to work out new treatment protocols.

**E-MAIL**

domosgy@gmail.com



## GYULA FERENC SZŐCS

DEPARTMENT OF TRAUMATOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Orthopedics, traumatology - Knee surgery.

**VISION**

Decrease the number of total knee arthroplasties in Hungary.

**PROJECT 1**

Comparing the safety and efficacy of meniscal repair and meniscectomy during anterior cruciate ligament reconstruction: a systematic review and meta-analysis. *Journal of Orthopaedic Translation*, Q1, IF: 6.600

**PUBLISHED****PROJECT 2**

Investigating the safety and efficacy of intra-articular injections in the treatment of knee osteoarthritis: a systematic review and network meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

György Márk Hangody

**YEAR V****PHD**

AGE 34

**MISSION**

Increase the use of knee cartilage preserving practices.



## KOPPÁNY PÉTER KOCSIS

DEPARTMENT OF TRAUMATOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Orthopedics, traumatology - Diagnosis of ankle injuries.

**VISION**

Faster and more accurate diagnosis for the ligament injured patients.

**PROJECT 1**

Comparing the diagnostic accuracy of ultrasound and MRI assessing lateral ankle ligament injury: a systematic review and meta-analysis. *Injury*, D1, IF: 2.500

**PUBLISHED****PROJECT 2**

Comparing the diagnostic accuracy of ultrasound and MRI assessing medial collateral injury of the knee: cohort study.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Károly Pap

**YEAR V****PHD**

AGE 40

**MISSION**

Learn, overview the literature and get practise in MSK US.



## MIKLÓS MÁTÉ

DEPARTMENT OF TRAUMATOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Orthopedics, traumatology - Knee surgery

**VISION**

To bring along and also develop our center which is already well known for cartilage care and repairment.

**PROJECT 1**

No Significant Difference in Signs of Osteoarthritis after Anterior Cruciate Ligament Injuries comparing Surgical and Conservative Treatment: a systematic review and meta-analysis

**PROJECT 2**

The Role of Anterior Cruciate Ligament Reconstruction in the Development of Osteoarthritis in Less Than 5 Years and After 10 Years. Retrospective X-ray follow-up study

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Gergely Pánics, László Hangody

**YEAR V****PHD**

AGE 32

**MISSION**

To help decision-making for daily practice, to have more clear picture about post traumatic osteoarthritis.

**PROJECT 3**

Early signs of posttraumatic osteoarthritis after isolated anterior cruciate ligament tear. Comparing injured versus contralateral healthy knee. Prospective cohort MRI follow-up study

**E-MAIL**

drmatemiklos@gmail.com



## ROBERT DE JONGE

DEPARTMENT OF TRAUMATOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Orthopedics, traumatology - Knee surgery

**VISION**

Understand the nature of sports injuries. Provide better care and life quality for knee injured patients.

**PROJECT 1**

Non-operative Treatment is an Effective Option for Isolated Anterior Cruciate Ligament Injuries: a systematic review and meta-analysis. *Orthop J Sports Med*, Q1, IF: 2.600

**PUBLISHED****PROJECT 2**

Comparing the Outcomes of Reconstruction Alone and Combined with Anterolateral Extra-Articular Procedures in the Treatment of Anterior Cruciate Ligament Injury: a systematic review and network meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Gergely Pánics, László Hangody

**YEAR V****PHD**

AGE 31

**MISSION**

Resolve disagreements and controversies of anterior cruciate ligament injury and therapy.

**E-MAIL**

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FIELD OF RESEARCH  
**PEDIATRICS**





# RESEARCH FIELD PEDIATRICS

The Pediatrics Research Group is one of the largest within the program, comprising a diverse community of doctoral candidates engaged in research across the full spectrum of pediatric medicine. Their work spans numerous clinical and interdisciplinary fields, including pediatric oncology and hematology, neurology, gastroenterology, nephrology, critical care, infectology, endocrinology, and neonatology. Research topics include conditions such as anorexia nervosa, autism spectrum disorder, cerebral palsy, spinal muscular atrophy, cystic fibrosis, inflammatory bowel disease, cardiac failure, and placental and umbilical cord pathologies. Several projects also focus on emerging and cross-cutting areas such as microbiota research, digital health, long COVID, and the psychosocial and socioeconomic aspects of childhood diseases. Through clinical studies, translational research, and systematic reviews, the group aims to advance the understanding, diagnosis, and treatment of complex pediatric disorders. Their collective work contributes to improving the quality of life and long-term outcomes of children affected by both rare and common diseases.

## SUPERVISORS

27

### ★ TOP SUPERVISORS ★



MIKLÓS GARAMI  
13 student



ANDREA PÁRNOCZKY  
5 student

András Fogarasi (*Supervisor of the month: 2025 April*), Andrea Zsebe, Attila Szabó, Ákos Gasparics (*Supervisor of the month: 2023 March, 2025 March*), Balázs Hankó, Bea Pászthy, Csaba Lódi, Dóra Török, Eszter Tuboly (*Supervisor of the month: 2024 October*), Gábor Kovács, Ibolya Túri, Iuliana Magdalena Starcea, János Major, Katalin Müller (*Supervisor of the month: 2023 February*), Kinga Farkas, Klementina Ocskay (*Supervisor of the month: 2023 October*), Miklós Szabó (*Supervisor of the month: 2023 July*), Mária Judit Molnár, Márta Szegedi, Mónika Horváth, Péter Gaál, Péter Krivácsi, Péter Varga, Viktor Dombrádi, Zsuzsanna Varga

## STUDENTS

42

### YEAR I

Boglárka Patócs, Florina Annamaria Marchis, Julian Dionne, Noémi Sára Podráczky, Zsófia Beáta Wiegand

### YEAR II

Andrea Lábodi, Dávid Horváth, Dóra Luca Bodócs, Mădălina Andreea Beldie

### YEAR III

Ádám Szilágyi, Anita Pfeffer, Barbara Csendes, Blanka Rebeka Bódy, Dorottya Kenesei, Emese Kasznár, Judit Xenia Jockers, Krisztina Szalkay, Miklós Bartók, Nóra Beke, Regina Molnár, Seba Aljomaa, Tímea Lórincz Molnár

### YEAR IV

Ágnes Eszter Tímár, Erika Kolumbán, Gréta Szilvia Major, Janka Kovács, Kinga Anna Budai, Márton Szabados, Nicole Li, Petra Varga, Renáta Mária Kiss-Miki, Vivien Unger, Zsuzsanna Nagy

### YEAR V

Adrienn Krisztina Ferencsikné Kéri, Ágoston Jánosi, Dóra Kornélia Koch, Dorina Rita Bajzát, Kinga Kovács, Márk Viktor Hernádfői, Nóra Zimonyi, Réka Garai



## BOGLÁRKA PATÓCS

PEDIATRIC INTENSIVE CARE UNIT, BÓKAY STREET DEPARTMENT, PEDIATRIC CENTRE, SEMMELWEIS UNIVERSITY

**TOPIC**

New Insights into Catheter-related Thrombosis in Critically Ill Children

**PROJECT 1**

Investigating the Safety and Efficacy of Thromboprophylaxis against Catheter-related Thrombosis in Critically Ill Children: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**VISION**

To find the best approach to prevent CRT in children.

**PROJECT 2**

Investigating the Safety and Efficacy of Thromboprophylaxis against Catheter-related Thrombosis in Critically Ill Children: A Randomized Controlled Trial

**SUPERVISOR(S)**

Csaba Lódi

**YEAR I****PHD**

AGE 26

**MISSION**

Eliminate CRT events in critically ill pediatric patients.

**E-MAIL**

boglarkapatocs@gmail.com



## FLORINA ANNAMARIA MARCHIS

PHD STUDENT

**TOPIC**

New Insights into Neurodevelopmental Disorders in Pediatric Populations

**PROJECT 1**

Investigating the Prevalence of Autism Spectrum Disorder in Infants with Perinatal Brain Injury: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**VISION**

Offer the best support to children with neurodevelopmental disorders.

**PROJECT 2**

Evaluating Maternal Inflammatory Biomarkers during Pregnancy and Their Association with Neurodevelopmental Disorders in Offspring: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Bea Pászthy

**YEAR I****PHD**

AGE 25

**MISSION**

Improve diagnosis and care for children with neurodevelopmental disorders.

**E-MAIL**

annamariamarchis@gmail.com



## JULIAN DIONNE

SEMMELWEIS UNIVERSITY

**TOPIC**

Transformative Medicine for the Child: Appropriate Integration of Complementary Medicine into the field of Pediatrics

**VISION**

More use of integrative medicine in clinical practice.

**PROJECT 1**

Investigating the Safety and Efficacy of Curcumin on Neuropathy: A Systematic Review and Meta-analysis

**EDUCATION**

medical student

**PROJECT 2**

Effects of Curcumin on Inflammation in the Body: Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Miklós Garami

**YEAR I****PHD**

AGE 35

**MISSION**

Inspire, research, and prove the safety and effectiveness of integrative medicine.

**E-MAIL**

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## NOÉMI SÁRA PODRÁCZKY

PEDIATRIC CENTER, SEMMELWEIS UNIVERSITY

**TOPIC**

Interventions for Hypothalamic Obesity in Brain-tumor Survivors

**VISION**

Brain cancer survivorship without lasting limitations.

**PROJECT 1**

Investigating the Efficacy of Multimodal Interventions on Hypothalamic Obesity in Brain Tumor Survivors: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**PROJECT 2**

Investigating the Effects of Early Palliative Care on Health-Related Outcomes Among Advanced Cancer Patients

**SUPERVISOR(S)**

Miklós Garami

**YEAR I****PHD**

AGE 27

**MISSION**

Restore health and quality of life for survivors with hypothalamic obesity.

**E-MAIL**

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## ZSÓFIA BEÁTA WIEGAND

CSOLNOKY FERENC HOSPITAL, VESZPRÉM

**TOPIC**

Prenatal Medication Exposure and the Risk of Neurodevelopmental Disorders

**PROJECT 1**

Investigating the Effect of Prenatal Acetaminophen Exposure as a Risk Factor on Neurodevelopmental Disorders: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**VISION**

Provide safe and effective medication for pregnant women.

**PROJECT 2**

-

**SUPERVISOR(S)**

Bea Pászthy

**YEAR I****PHD**

AGE 29

**MISSION**

Investigate the safety of maternal medication.

**E-MAIL**

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## ANDREA LÁBODI

BÁCS KISKUN COUNTY HOSPITAL, KECSKEMÉT

**TOPIC**

Optimizing the nutrition of critically ill children by timing and dosing.

**PROJECT 1**

Investigating the effect of higher levels of protein intake on mortality and recovery of critically ill children: systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Adequate nutrition for critically ill children for improved survival.

**PROJECT 2**

Investigating the optimal timing of parenteral nutrition on mortality and recovery of critically ill children: randomized controlled trial.

**SUPERVISOR(S)**

Csaba Lódi

**YEAR II****PHD**

AGE 33

**MISSION**

Investigating the optimal nutritional therapy of critically ill children for better outcomes.

**E-MAIL**

labodi.andrea@gmail.com



## DÁVID HORVÁTH

BETHESDA CHILDREN'S HOSPITAL

**TOPIC**

The Role of Mental Health Status in Pediatric Inflammatory Bowel Disease.

**PROJECT 1**

Investigating the effect of psychological interventions on disease activity and quality of life of pediatric IBD patients: systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Pediatric IBD patients despite their illness have excellent quality of life.

**PROJECT 2**

Investigating the effect of depression and anxiety on disease activity in newly diagnosed pediatric IBD patients: prospective observational study.

**SUPERVISOR(S)**

János Major, Katalin Müller

**YEAR II****PHD**

AGE 36

**MISSION**

Identify every kind of psychological intervention that improves the health and quality of life of pediatric IBD patients.

**E-MAIL**

hordav@gmail.com



## DÓRA LUCA BODÓCS

HEIM PÁL CHILDREN'S HOSPITAL

**TOPIC**

Neurocognitive Development of Children with Perinatal Insults.

**PROJECT 1**

Investigating the prognostic accuracy of different biomarkers for detection of neurocognitive deficits in children with neonatal encephalopathy: systematic review and meta-analysis.

**EDUCATION**

psychologist

**VISION**

Give every child the chance to speak on time.

**PROJECT 2**

Investigating the prognostic accuracy of different biomarkers for detection of developmental language disorder in children with neonatal encephalopathy: Retrospective Cohort Study.

**SUPERVISOR(S)**

Miklós Szabó, Zsuzsanna Varga

**YEAR II****PHD**

AGE 25

**MISSION**

Revealing the early indicators of language difficulties and its connections to perinatal insults.

**E-MAIL**

bodocsluca10@gmail.com



## MĂDĂLINA ANDREEA BELDIE

SAINT MARY EMERGENCY CHILDREN HOSPITAL

### TOPIC

IgA Vasculitis with nephritis: challenges and updates in the management of pediatric patients.

### VISION

Decreased chronic kidney disease burden in IgA Vasculitis pediatric patients.



### PROJECT 1

Investigating the predictive accuracy of serum and urinary biomarkers for kidney damage in IgA Vasculitis pediatric patients: systematic review and meta-analysis.

### PROJECT 2

Investigating the predictive accuracy of different histological classifications for kidney outcomes in pediatric IgA vasculitis nephritis: A Systematic Review and Meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Csaba Lódi, Iuliana Magdalena Starcea

### YEAR II

### PHD

AGE 28

### MISSION

Improving the management of pediatric patients with IgA vasculitis with nephritis.

### PROJECT 3

Investigating the prevalence of depressive symptoms in adolescents and young adults with chronic kidney disease: Eurostat analysis.

### E-MAIL

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## ÁDÁM SZILÁGYI

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

The Biotechnological Improvements of Clinical Hemato-oncology.

### VISION

Provide new therapeutic solutions in hemato-oncology.



### PROJECT 1

Comparing efficacy and toxicity of CAR T-cell versus conventional therapy in hemato-oncology: a systematic review and meta-analysis.

### PROJECT 2

Long-term effects of car-t cell treatment in Hematological Malignancies: A Systematic Review and Meta-analysis

### EDUCATION

biotechnologist

### SUPERVISOR(S)

Miklós Garami

### YEAR III

### PHD

AGE 28

### MISSION

Show the big picture of our current knowledge about a novel therapeutic option's (CAR T cells) utility in clinical level.

### E-MAIL

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## ANITA PFEFFER

PEDIATRIC CENTER TÚZOLTÓ STREET DEPARTMENT, SEMMELWEIS UNIVERSITY

### TOPIC

Short-term and long-term endocrine effects and side effects of pediatric oncological diseases and their treatment

### VISION

Improve the survival and life quality of oncological patients.

### PROJECT 1

Comparing the Effectiveness and Safety of Available Therapies in Adrenocortical Carcinoma: A Systematic Review and Meta-analysis.  
*J Clin Endocrinol Metab, D1, IF: 5.100*

### PUBLISHED PROJECT 2

Investigating the Efficacy and Safety of Growth Hormone Therapy for Pediatric Brain Tumor Survivors Based on Real-world Data: an International Survey



### EDUCATION

medical doctor

### SUPERVISOR(S)

Miklós Garami, Dóra Török

### YEAR III

### PHD

AGE 29

### MISSION

Identify the least harmful and most effective therapeutic opportunities for oncological patients.

### E-MAIL

anita.pfeffer96@gmail.com



## BARBARA CSENDES

INSTITUTE OF GENOMIC MEDICINE AND RARE DISORDERS, SEMMELWEIS UNIVERSITY

### TOPIC

Impact of new genomic technologies on patient care.

### VISION

Boost the effective utilization of genomic technologies.



### PROJECT 1

Investigating the effectiveness, safety and costs of orphan medicinal products in spinal muscular atrophy: a systematic review and meta-analysis.

### PROJECT 2

Investigating the health-economical impact of orphan medicinal products for patients with spinal muscular atrophy: Prospective follow-up study.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Mária Judit Molnár, Márta Szegedi

### YEAR III

### PHD

AGE 32

### MISSION

Recommend, develop, and support educational and financial policies.

### E-MAIL

csbaboka@gmail.com



## BLANKA REBEKA BÓDY

HEIM PÁL CHILDREN'S HOSPITAL

### TOPIC

The role of gut microbiota in cystic fibrosis

### PROJECT 1

Comparing the gut microbiota in cystic fibrosis patients and healthy individuals: a systematic review and meta-analysis.

### EDUCATION

medical doctor

### VISION

Offer a complication-free life for people with cystic fibrosis.

### PROJECT 2

Investigation of gut dysbiosis in cystic fibrosis patients according to glucose tolerance status: Registry analysis.

### SUPERVISOR(S)

Andrea Párnuczky, Klementina Ocskay

**YEAR III**

**PHD**

AGE 28

### MISSION

Investigating the role of gut microbiota in the disease.



## DOROTTYA KENESEI

ANDRÁS PETŐ FACULTY, SEMMELWEIS UNIVERSITY

### TOPIC

Investigating the Effectiveness of Different Therapeutic Modalities in Cerebral Palsy.

### VISION

Improving the holistic care of people with cerebral palsy.

### PROJECT 1

Investigating the effectiveness of different therapeutic modalities in cerebral palsy: a systematic review and meta-analysis.

Investigating the Effect of Interval Conductive Pedagogical Rehabilitation among People with Cerebral Palsy: A Protocol of a Clinical Trial.

### EDUCATION

conductor

### SUPERVISOR(S)

András Fogarasi, Andrea Zsébe

**YEAR III**

**PHD**

AGE 34

### MISSION

Assessing the most effective therapies for people living with cerebral palsy.



## EMEZE KASZNÁR

HEIM PÁL CHILDREN'S HOSPITAL

### TOPIC

Physical activity in inflammatory bowel disease.

### VISION

Improve the management and quality of life of inflammatory bowel disease patients.

**YEAR III**

**PHD**

AGE 27

### MISSION

Encourage inflammatory bowel disease patients to exercise for reducing disease burden.



## JUDIT XENIA JOCKERS

PEDIATRIC CENTER, TŰZOLTÓ STREET DEPARTMENT, SEMMELWEIS UNIVERSITY

### TOPIC

Investigating the association between the genotype and phenotype of pediatric patients with polyposis syndromes.

### VISION

Improving the quality of life and enhancing chances of survival in patients with polyposis syndrome.

**YEAR III**

**PHD**

AGE 30

### MISSION

Develop a more accurate diagnostic and management protocol by monitoring through the genotype-phenotype association.



### PROJECT 1

Develop a more accurate diagnostic and management protocol by monitoring through the genotype-phenotype association: a systematic review and meta-analysis.

### PROJECT 2

Investigating the Association Between Vitamin D Levels and the Disease Course of Patients with Polyposis: Registry Initiation and Analysis

### EDUCATION

medical doctor

### SUPERVISOR(S)

Miklós Garami

### E-MAIL

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## KRISZTINA SZALKAY

BETHESDA CHILDREN'S HOSPITAL

### TOPIC

Eating and feeding difficulties in children with autism spectrum disorder - From background to tailored treatment.

### PROJECT 1

Investigating the sensory aspects of eating and feeding disorders in autism: a systematic review and meta-analysis.

### EDUCATION

medical doctor

### VISION

Equality for autistic children and their families.

### PROJECT 2

Investigating The effect of autism on developing eating and feeding disorder among patients with sensory processing difficulties: International survey initiation.

### SUPERVISOR(S)

Kinga Farkas

### YEAR III

### PHD

AGE 48

### MISSION

Background clarification for the most effective interventions.



## MIKLÓS BARTÓK

BÁCS KISKUN COUNTY HOSPITAL SZTE ÁOK TEACHING HOSPITAL KALOCSA SITE; NEONATAL, INFANT AND CHILDREN'S DEPARTMENT

### TOPIC

The Importance of Social Determinants in Childhood Patient with Malignancies.

### VISION

Prevent Childhood Malignancies.

### PROJECT 1

Association Between Socioeconomic Measures and the Risk of Childhood Malignancies: a systematic review and meta-analysis.

Investigating Glutamine Effect on Oral Mucositis in Childhood Cancer Patient: Randomized Controlled Trial.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Miklós Garami

### YEAR III

### PHD

AGE 36

### MISSION

Identify and Eliminate Contributing Factors.



## NÓRA BEKE

PEDIATRIC CENTER, TÜZOLTÓ STREET DEPARTMENT, SEMMELWEIS UNIVERSITY

### TOPIC

Treatment Related Cardiotoxicity in Pediatric Oncology.

### VISION

Cancer patients should have good life quality without heart complications.

### PROJECT 2

Investigating The Long-term Side Effects of Additional Cardioprotective Dexrazoxane During Chemotherapy in Childhood Cancer Survivors: Systematic Review and Meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Miklós Garami

### YEAR III

### PHD

AGE 28

### MISSION

Cancer patients should have good life quality without heart complications.



## REGINA MOLNÁR

HEIM PÁL NATIONAL INSTITUTE FOR CHILDREN

### TOPIC

New insights into the development of abnormal glucose tolerance in cystic fibrosis patients.

### VISION

One day cystic fibrosis-related diabetes will not worsen the life quality of cystic fibrosis patients.

### PROJECT 1

Investigating the Prevalence of islet autoantibodies in cystic fibrosis: a systematic review and meta-analysis. *J Cyst Fibros, DI, IF: 5.400*

### PUBLISHED PROJECT 2

Comparison of islet autoantibody levels in cystic fibrosis children with different glucose tolerance status: Cohort analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Andrea Párnoczky, Klementina Ocskay

### YEAR III

### PHD

AGE 27

### MISSION

Providing new screening strategy for earlier diagnosis of cystic fibrosis-related abnormal glucose tolerance.





## SEBA ALJOMAA

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Novel Digital Health Approaches in Oncology.

**PROJECT 1**

Comparing the Effect of Digital Health Interventions on the Quality of Life of Individuals Facing Cancer: Systematic Review and Meta-analysis.

**EDUCATION**

pharmacist

**VISION**

Improve quality of life in oncology via new approaches.

**PROJECT 2**

Hungarian Adaptation and Validation of the Hematology/Oncology Module of the Pediatric Quality of Life Inventory (PedsQL): Cultural Adaptation and Pilot Study.

**SUPERVISOR(S)**

Miklós Garami

**YEAR III****PHD**

AGE 35

**MISSION**

Finding the best digital health interventions for cancer patients.



## TÍMEA LÖRINCZ-MOLNÁR

BETHESDA CHILDREN'S HOSPITAL

**TOPIC**

Develop a more accurate diagnostic and management protocol by monitoring through the genotype-phenotype association.

**PROJECT 1**

Identification of Predictive Factors for Paroxysmal Nonepileptic Events Based on Video-EEG Monitoring: A Systematic Review and Meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Help children and their families dealing with neurological disorders.

**PROJECT 2**

Comparative Analysis of Paroxysmal Nonepileptic Events and Epileptic Seizures in Childhood Based on a Tertiary Centre Video-EEG Registry: Cohort analysis.

**SUPERVISOR(S)**

András Fogarasi

**YEAR III****PHD**

AGE 28

**MISSION**

Improve the diagnosis of paroxysmal events in childhood.



## ÁGNES ESZTER TÍMÁR

HEIM PÁL NATIONAL PEDIATRIC INSTITUTE

**TOPIC**

Pediatrics - IBD

**VISION**

Improve the quality of life of IBD patients through proper treatment.

**PROJECT 1**

Beyond the Gut: A Systematic Review and Meta-analysis of Advanced Therapies for Inflammatory Bowel Disease-associated Extraintestinal Manifestations. *J Chrons Colitis, D1, IF: 8.00*

**EDUCATION**

medical doctor

**PUBLISHED****PROJECT 2**

Investigating the Association between Extraintestinal Manifestations and the Intestinal Disease Course in Children with Inflammatory Bowel Disease: registry analysis. *Pediatr Surg Int, Q1, IF: 1.500*

**PUBLISHED****SUPERVISOR(S)**

Katalin Müller

**YEAR IV****PHD**

AGE 30

**MISSION**

Assess long-term disease outcomes and treatment options of IBD patients with extraintestinal manifestations.



## ERIKA KOLUMBÁN

ANDRÁS PETŐ FACULTY, SEMMELWEIS UNIVERSITY

**TOPIC**

Pediatrics - Conductive education

**VISION**

To improve the life quality of cerebral palsy patients through better rehabilitation and to contribute to world recognition of conductive education.

**PROJECT 1**

Supplementary respiratory therapy improves pulmonary functions in paediatric patients with cerebral palsy: a systematic review and meta-analysis *J Clin Med, Q1, IF: 3.900*

**PUBLISHED****PROJECT 2**

Effects of conductive breathing exercises on pulmonary functions of school-aged children with cerebral palsy: study protocol of a randomized control trial

**EDUCATION**

dentist

**SUPERVISOR(S)**

Péter Gaál, Ibolya Túri

**YEAR IV****PHD**

AGE 49

**MISSION**

To improve the condition of cerebral palsy patients by applying evidence-based breathing exercises in their rehabilitation care.

**E-MAIL**

kolumbanerika@gmail.com



## GRÉTA SZILVIA MAJOR

HEIM PÁL NATIONAL PEDIATRIC INSTITUTE

**TOPIC**

Pediatrics - Placental and umbilical cord pathologies.

**VISION**

To improve the quality of life and extend the life expectancy of newborns via better early management.

**YEAR IV****PHD**

AGE 28

**MISSION**

To optimize the time of cord clamping and dosage of caffeine among preterms.

**PROJECT 1****PUBLISHED**

Investigating the Outcomes of Neonatal Resuscitation With and Without Intact Cord: a Systematic Review and Meta-Analysis. *Pediatr Res*, *D1, IF: 3.600*

**EDUCATION**

medical doctor

**PROJECT 2**

Comparing the Effects of Different Dosages of Caffeine on Neonatal Mortality and Morbidity: a Systematic Review and Meta-Analysis

**SUPERVISOR(S)**

Ákos Gasparics

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## JANKA KOVÁCS

SEMMELWEIS UNIVERSITY

**TOPIC**

Pediatrics - Brain tumor oncotherapy

**VISION**

Improve the life quality and extend the life expectancy of children treated with brain cancer.

**YEAR IV****PHD**

AGE 31

**MISSION**

To provide guidelines for the treatment of diseases involving the CNS (malignancies, hydrocephalus).

**PROJECT 1****PUBLISHED**

Shifting Paradigms: Antibiotic-Impregnated Ventriculoperitoneal-Shunts for Infection Prevention: A Systematic Review and Meta-analysis. *Neurosurgery*, *D1, IF: 4.800*

**EDUCATION**

medical doctor

**PROJECT 2**

Personalized Selumetinib Dosing in Pediatric Neurofibromatosis Type 1: Insights from a Pilot Therapeutic Drug Monitoring Study

**SUPERVISOR(S)**

Miklós Garami

**E-MAIL**

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## KINGA ANNA BUDAI

UNIVERSITY PHARMACY, INSTITUTE OF PHARMACEUTICAL ORGANISATION, SEMMELWEIS UNIVERSITY

**TOPIC**

Pediatrics - Infectology

**VISION**

To improve the effectiveness of antimicrobial therapy and extend the life expectancy of critically ill children.

**YEAR IV****PHD**

AGE 33

**MISSION**

To improve the antibiotic dosing based on serum drug levels and up to date scientific results among critically ill children.

**PROJECT 3**

Monitor the plasma concentrations of antimicrobials from different points of the extracorporeal blood circuit during CKRT therapy

**E-MAIL**

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**YEAR IV****PHD**

AGE 29

**MISSION**

To establish a well designed follow-up system, focusing on quality of life of and psychological well-being of these patients.



## MÁRTON SZABADOS

FACULTY OF MEDICINE, 2ND DEPARTMENT OF PEDIATRICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Pediatrics - Oncology and hematology

**VISION**

Childhood cancer patients and survivors will live a rich and full life.

**YEAR IV****PHD**

AGE 29

**MISSION**

To establish a well designed follow-up system, focusing on quality of life of and psychological well-being of these patients.

**PROJECT 1****PUBLISHED**

Impact of the Tumor Location on Developing Affective Disorders among Childhood Brain Cancer Survivors: A Systematic Review and Meta-analysis. *Child Adolesc Psychiatry Ment Health*, *D1, IF: 5.600*

**PROJECT 2**

The Hungarian Linguistic and Cultural Adaptation of The Minneapolis-Manchester Quality of Life Instrument (MMQL) – Adolescent form.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Miklós Garami

**E-MAIL**

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## NICOLE LI

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

Pediatrics - Acute pancreatitis

### VISION

Improve the quality of life of pediatric oncology patients during and after treatment.



### PROJECT 1

Investigating the Addition of Complementary Chinese Herbal Medicine Among Pediatric Oncology Patients Treated with Conventional Therapies: A Systematic Review and Meta-Analysis.

### PUBLISHED

### PROJECT 2

Safety and Efficacy of Turmeric (Curcuma longa) Extract and Curcumin Supplements in Malignant Oncology Disorders: A Systematic Review and Meta-Analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Miklós Garami

### YEAR IV

### PHD

AGE 23

### MISSION

Confirm the efficacy of TCM and promote the use of TCM complementary therapies.



## PETRA VARGA

HEIM PÁL NATIONAL PEDIATRIC INSTITUTE

### TOPIC

Pediatrics - Oncology and hematology

### VISION

Modernize clinical care and research support in pediatric oncology.



### PROJECT 1

Comparing The Prognostic Accuracy of Prediction Models Used in Childhood Cancer: A Systematic Review and Meta-analysis. *EClinicalMedicine*, D1, IF: 9.600

### PUBLISHED

### PROJECT 2

Building a Prognostic Model Using Machine Learning for Childhood Cancer: A Systematic Review and Meta-analysis

### EDUCATION

medical doctor

### SUPERVISOR(S)

Eszter Tuboly, Andrea Párnoczky

### YEAR IV

### PHD

AGE 27

### MISSION

Bringing in future-proof, global approaches in risk stratification of childhood cancer.



## RENÁTA MÁRIA KISS-MIKI

ZALA COUNTY SZENT RAFAEL HOSPITAL

### TOPIC

Pediatrics - Brain tumor oncotherapy

### VISION

To give a better life with less side effects for pediatric brain tumor survivors.



### PROJECT 1

Proton or Photon? Comparison of Survival and Toxicity Among Pediatric Brain Cancer Patients: A Systematic Review and Meta-analysis. *PLoS One*, Q1, IF: 2.900

### PUBLISHED

### PROJECT 2

Adaptation of Cerebellar Affective Cognitive/Schmahmann Syndrome Scale and Cerebellar Mutism Scale in Hungarian for Children: Questionnaire Adaptation.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Miklós Garami

### YEAR IV

### PHD

AGE 30

### MISSION

To help pediatric brain cancer patients and researchers to improve quality of life.



## VIVIEN UNGER

CSOLNOKY FERENC HOSPITAL

### TOPIC

Pediatrics - Placental and umbilical cord pathologies

### VISION

To provide the highest quality of care to the very preterm infants, the most fragile neonates.



### PROJECT 1

Investigating the relation between the mode of delivery on the mortality and morbidity among extremely and very preterm infants: a systematic review and meta-analysis. *Am J Obstet Gynecol*, D1, IF: 9.800

### PUBLISHED

### PROJECT 2

Characteristics and outcomes of perivable infants in Hungary: a registry analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Akos Gasparics, Péter Varga

### YEAR IV

### PHD

AGE 30

### MISSION

To find the optimal mode of delivery for very preterm neonates and to provide timely and accurate data about perivable preterms in Hungary.



## SZUZSANNA NAGY

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY,  
SEMMELWEIS UNIVERSITY

**TOPIC**

Pediatrics - IVH

**VISION**

Implement new effective and safe neuroprotective methods at national and international level.

**PROJECT 1**

Investigating the Onset of Intraventricular Haemorrhage in Preterm Neonates: A Systematic Review and Meta-analysis  
*JAMA Pediatrics*, *DI*, *IF: 24.700*

**PUBLISHED PROJECT 2**

Onset of Intraventricular Haemorrhage in Preterm Infants: Prospective Observational Trial

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Miklós Szabó

**YEAR IV****PHD**

AGE 43

**MISSION**

To study and validate neuroprotective delivery room stabilization methods in preterm infants.



## ADRIENN KRISZTINA FERENCSIKNÉ KÉRI

HEIM PÁL NATIONAL PEDIATRIC INSTITUTE

**TOPIC**

Pediatrics - Cystic fibrosis

**VISION**

To improve the life quality and extend the life expectancy of cystic fibrosis patients with better clinical assessment.

**PROJECT 1**

Early onset of abnormal glucose tolerance in patients with cystic fibrosis: a systematic review and meta-analysis.  
*J Cyst Fibros*, *DI*, *IF: 5.200*

**PUBLISHED PROJECT 2**

Prevalence of abnormal glucose tolerance in children with cystic fibrosis: a single center prospective cohort analysis (Cystic Fibrosis Related Pancreatic Disorders Registry (CFRPDR)).

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Andrea Párnuczky

**YEAR V****PHD**

AGE 32

**MISSION**

To improve the clinical assessment of cystic fibrosis related glucose abnormalities by applying up to date scientific results.



## ÁGOSTON JÁNOSI

HEIM PÁL NATIONAL PEDIATRIC INSTITUTE

**TOPIC**

Pediatrics - COVID-19

**VISION**

A World with established ground rules in fighting a pandemic.

**PROJECT 1**

Two-thirds of SARS CoV-2 infected school-age children are asymptomatic: a systematic review and meta-analysis.  
*Crit Care*, *DI*, *IF: 8.800*

**PUBLISHED PROJECT 2**

Investigating the effectiveness and safety of TNF-alpha inhibitors in COVID-19 therapy: a systematic review and meta-analysis.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Andre Párnuczky

**YEAR V****PHD**

AGE 31

**MISSION**

Acquiring a deeper understanding of research methods, hence increasing my knowledge in paediatric care.

**PROJECT 3**

Characterization of COVID-19 in Hungarian children - Analysis of 511 prospectively collected patients' data: a registry analysis

**E-MAIL**

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## DÓRA KORNÉLIA KOCH

FACULTY OF MEDICINE, 2ND DEPARTMENT OF PEDIATRICS,  
SEMMELWEIS UNIVERSITY

**TOPIC**

Pediatrics - Oncology and hematology

**VISION**

Achieve the best therapeutic response/ effect with the lowest possible toxicity when using chemotherapeutic agents (e.g. pharmacokinetic modifications).

**PROJECT 1**

Comparison of toxicity levels between bolus injection and continuous vincristine infusion in patients with malignancies: a systematic review and meta-analysis.

**PROJECT 2**

Comparison of pharmacokinetic parameters and toxicity levels between bolus injection and continuous vincristine infusion in children with hematologic malignancies: Protocol and pilot of a prospective randomised trial.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Gábor Kovács

**YEAR V****PHD**

AGE 29

**MISSION**

Prevent severe toxicity of chemotherapeutics in pediatric malignancies.

**PROJECT 3**

Late effects of anti-cancer therapy in children with hematologic malignancies - focus on VIPN cross sectional study and retrospective data analysis

**E-MAIL**

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## DORINA RITA BAJZÁT

HEIM PÁL NATIONAL PEDIATRIC INSTITUTE

### TOPIC

Pediatrics - Pediatric inflammatory bowel disease, Pediatric gastroenterology.

### VISION

Good timing and good methods of surgery elevate the quality of life of children with inflammatory bowel disease.



### PROJECT 1

Safety analysis of preoperative anti-TNF therapy in pediatric IBD after intestinal resection: a systematic review and meta-analysis. *Inflammatory Bowel Diseases*, Q1, IF: 4.900

### PUBLISHED PROJECT 2

Intestinal resections in pediatric Crohn's disease: a nation-wide survey based on the Hungarian Pediatric IBD Registry.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Katalin Müller

### YEAR V

### PHD

AGE 28

### MISSION

Assess the current situation of surgical interventions and improve the quality by communicating the results.



## MÁRK VIKTOR HERNÁDFŐI

FACULTY OF MEDICINE, 2ND DEPARTMENT OF PEDIATRICS, SEMMELWEIS UNIVERSITY

### TOPIC

Pediatrics - Oncology and hematology

### VISION

Improving survival and quality of life in pediatric oncology.



### PROJECT 1

The Burden of Childhood Cancer – Social and Economic Challenges in Adulthood: a Systematic Review and Meta-Analysis *Jama Pediatr*, D1, IF: 26.000

### PUBLISHED PROJECT 2

Efficacy and Side Effect Profile of Dinutuximab Beta Therapy in Hungarian Neuroblastoma Patients: a Registry-based Analysis

### EDUCATION

medical doctor

### SUPERVISOR(S)

Miklós Garami

### YEAR V

### PHD

AGE 31

### MISSION

Define and improve the long-term socioeconomic effects of cancer treatment and research new therapeutical approaches.



## NÓRA ZIMONYI

ANDRÁS PETŐ PRACTICE PRIMARY SCHOOL, SEMMELWEIS UNIVERSITY

### TOPIC

Pediatrics - Cerebral palsy

### VISION

Living in a world in which citizens with CP are a productive and integral part of society.



### PROJECT 1

Executive functions are severely impaired in cerebral palsy: a systematic review and meta-analysis. *J Clin Med*, Q1, IF: 9.800

### PUBLISHED PROJECT 2

Comparison of executive function test results between children with cerebral palsy (CP) and typically developing children: clinical trial.

### EDUCATION

conductor

### SUPERVISOR(S)

Péter Gaál, Ibolya Túri, Viktor Dombrádi

### YEAR V

### PHD

AGE 40

### MISSION

Fully committed to creating a more targeted developmental program for CP patients.

### YEAR V

### PHD

AGE 33

### MISSION

The fact and sensation of SAFETY is natural for our patients.



## RÉKA GARAI

FIRST DEPARTMENT OF PEDIATRICS, SEMMELWEIS UNIVERSITY

### TOPIC

Pediatrics - Long COVID syndrome, Pediatric Emergency

### VISION

To give KINDNESS, CARE, COMFORT.



### PROJECT 1

Clinical assessment of children with long Covid syndrome. *Pediatric Research*, Q1, IF: 3.600

### PUBLISHED PROJECT 2

Thyroid disturbances after Covid-19 and the effect of vaccination in children: a prospective tri-center registry analysis. *J Transl Med*, D1, IF: 7.400

### EDUCATION

medical doctor

### SUPERVISOR(S)

Attila Szabó, Péter Krivácsy

### PROJECT 3

Long COVID syndrome in children: the dysfunction of neutrophilic granulocytes as a possible pathological explanation: registry analysis

### E-MAIL

garai.reka@med.semmelweis-univ.hu

FIELD OF RESEARCH  
**PULMONOLOGY**





# RESEARCH FIELD PULMONOLOGY

The Pulmonology Research Group focuses on a broad range of topics related to respiratory medicine and pulmonary health. Doctoral candidates in this group investigate chronic obstructive pulmonary disease (COPD), sleep apnea, pulmonary fibrosis, and interventional approaches such as embolization, while also exploring cross-disciplinary areas including cancer immunotherapy and metabolic health. Through systematic reviews, clinical studies, and translational research, the group seeks to deepen understanding of respiratory pathophysiology and its systemic connections. Their collective efforts aim to advance diagnostic and therapeutic strategies, contributing to improved outcomes and quality of life for patients with pulmonary and related systemic diseases.

## SUPERVISORS

5



ANTONIU SABINA ANTONELA



BALÁZS NEMES



GÁBOR HORVÁTH



VERONIKA MÜLLER



ZOLTÁN LOHINAI

## STUDENTS

6

**YEAR I** Theodor Penișoară, Tibor Róbert Czégeni

**YEAR II** Anca Cristina Dolhascu

**YEAR III** Anna Boglárka Bardóczki, Dávid Laczkó, Zsombor Zoltán Matic



## THEODOR PENIȘOARĂ

PULMONARY DISEASE UNIVERSITY HOSPITAL, IASI, ROMANIA

**TOPIC**

New Perspectives on Pulmonary Rehabilitation for Chronic Pulmonary Diseases

**PROJECT 1**

Investigating the Effects of Pulmonary Rehabilitation on Patient and Disease-Related Factors in COPD: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**VISION**

To achieve the best quality of life for patients with chronic pulmonary diseases.

**PROJECT 2**

Investigating Associations between Exerkinic Responses and Functional Gains in Chronic Pulmonary Diseases: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Zoltán Lohinai, Antoniu Sabina Antonela

**YEAR I****PHD**

AGE 26

**MISSION**

To identify which patients benefit the most from pulmonary rehabilitation.

**E-MAIL**

theo.penisoara99@gmail.com



## TIBOR RÓBERT CZÉGENI

CLARIO, BUDAPEST, HUNGARY

**TOPIC**

Microbiome-based Interventions on Immunotherapy Outcomes

**VISION**

To improve the overall survival rate of cancer patients.

**PROJECT 1**

Evaluating the Efficacy of Microbiome-based Interventions on Immunotherapy Outcomes in Solid Tumors: A Systematic Review and Meta-analysis

**EDUCATION**

other healthcare profession

**SUPERVISOR(S)**

Zoltán Lohinai

**YEAR I****MSC**

AGE 28

**MISSION**

To evaluate microbiome-based interventions on immunotherapy outcomes.

**E-MAIL**

tibor.czegeni@gmail.com



## ANCA CRISTINA DOLHASCU

INSTITUTE OF PNEUMOPHYSIOLOGY "MARIUS NASTA" BUCHAREST

**TOPIC**

New Horizons in the Treatment and Prevention of CFRD.

**VISION**

All CF patients' glucose metabolism is set to the best level that we can achieve.

**PROJECT 1**

Investigating the Effect of Insulin Therapy in Cystic Fibrosis Patients: A Systematic Review and Meta-analysis.

**EDUCATION**

medical doctor

**PROJECT 2**

Investigating the Effect of Triple Transmembrane Regulator Therapy on Cardiometabolic in CF Patients: A Systematic Review and Meta-analysis.

**SUPERVISOR(S)**

Péter Hegyi, Emese Sipter

**YEAR II****PHD**

AGE 30

**MISSION**

Finding the best therapeutic method which stabilizes glucose metabolism and also improves lung function.

**E-MAIL**

anca.dolhascu95@gmail.com



## ANNA BOGLÁRKA BARDÓCZI

DEPARTMENT OF PULMONOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Potential effects of GLP-1 analogs in obstructive sleep apnea patients.

**VISION**

Provide a better quality of life for people with obstructive sleep apnea by developing novel treatment strategies.

**PROJECT 1**

Potential effects of GLP-1 analogs in obstructive sleep apnea patients: a systematic review and meta-analysis.  
*Sleep Med Rev, D1, IF: 9.700*

**EDUCATION**

medical doctor

**PUBLISHED PROJECT 2**

Comparing the effectiveness and safety of positive airway pressure therapies in Pickwickian syndrome: a systematic review and meta-analysis

**SUPERVISOR(S)**

Gábor Horváth

**YEAR III****PHD**

AGE 29

**MISSION**

Investigate whether the weight loss drugs GLP-1 analogs could help to reduce/eliminate obstructive sleep apnea symptoms.

**E-MAIL**

bardoczi.anna@gmail.com



## DÁVID LACZKÓ

DEPARTMENT OF INTERVENTIONAL RADIOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Investigating the efficiency of arterial and venous endovascular procedures.

**VISION**

Improve the mortality and quality of life of patients with cardiovascular diseases.

**PROJECT 1**

Investigating the effectiveness and safety of embolic agents in bronchial artery embolisation: a systematic review and meta-analysis.

**PROJECT 2**

Investigating particle embolic agents in bronchial artery embolisation: a retrospective cohort study.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Balázs Nemes

**YEAR III****PHD**

AGE 28

**MISSION**

Identify the best available procedures to achieve my vision.

**E-MAIL**

laczkodavid97@hotmail.com



## ZSOMBOR ZOLTÁN MATICS

DEPARTMENT OF PULMONOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Infections in fibrosing interstitial lung diseases.

**VISION**

Infectology will be an inseparable part of the evaluation of interstitial lung diseases.

**YEAR III****PHD**

AGE 33

**MISSION**

Provide evidence-based data that draws attention to the importance of infectology.

**PROJECT 1**

Prevalence of respiratory tract infections in antifibrotic-treated idiopathic pulmonary fibrosis: a systematic review and meta-analysis.

*EClinicalMedicine*, Q1, IF: 9.600

**PUBLISHED PROJECT 2**

Comparative analysis of pulmonary hypertension treatments on the incidence of respiratory tract infections - a systematic review and meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Veronika Müller

**E-MAIL**

maticzsombor@gmail.com

FIELD OF RESEARCH  
**RADIOLOGY**





# RESEARCH FIELD RADIOLOGY

The Radiology Research Group unites doctoral candidates exploring diverse aspects of medical imaging and its clinical applications. Their research encompasses ultrasound diagnostics, urologic and orthopedic imaging, and emerging areas within forensic radiology. By integrating imaging technology with clinical research, the group aims to enhance diagnostic precision, support evidence-based decision-making, and advance the use of radiological methods across multiple medical specialties. Through systematic reviews, meta-analyses, and applied imaging studies, the group contributes to improving both patient care and the scientific foundations of modern radiology.

## SUPERVISORS

6



BOGLÁRKA MARCSA



BRIGITTA TEUTSCH



KLÁRA TÖRŐ



MIKLÓS SZENDRŐI



PÁL ÁKOS DEÁK



PÉTER HEGYI

## STUDENTS

5

YEAR I

Márton Mikó

YEAR III

Benjamin Skribek, György Gulácsi

YEAR V

Péter Misnyovszki, Teodóra Filipov



## MÁRTON MIKÓ

GERIATRIC CLINIC AND NURSING SCIENCE CENTER, SEMMELWEIS UNIVERSITY

**TOPIC**

Novel Insights into POCUS-Enhanced Volume Status Evaluation

**PROJECT 1**

Investigating the Diagnostic Accuracy of Bedside Ultrasound for Hypovolemia in Adults: Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**VISION**

POCUS as standard practice for volume management.

**PROJECT 2**

Investigating the Diagnostic Accuracy of Limited Compression Bedside Ultrasound for Suspected Lower Extremity Deep Vein Thrombosis in Adults: Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Péter Hegyi, Brigitta Teutsch

**YEAR I****PHD**

AGE 37

**MISSION**

Validate POCUS's role in enhancing volume status assessment.



## BENJAMIN SKRIBEK

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Radiology - Urology

**VISION**

Our vision is that minimally invasive therapies will be readily available solutions in the treatment of multiple diseases.

**PROJECT 1**

Investigating the efficacy of minimally invasive interventions versus laparoscopy in the treatment of benign adrenal gland tumors: systematic review and meta-analysis. *Helijon*, Q1, IF: 4.000

**EDUCATION**

medical doctor

**PUBLISHED PROJECT 2**

Investigating the efficacy and safety of minimally invasive interventions in the treatment of low-intermediate risk prostate cancer: systematic review and meta-analysis. *Cancers (Basel)*, Q1, IF: 4.400

**PUBLISHED PROJECT 3**

Shear Wave Elastography as a Predictive Tool for Radiofrequency and Microwave Ablation in Benign Thyroid Tumors

**E-MAIL**

skribekbenjamin@gmail.com

**YEAR IV****PHD**

AGE 30

**MISSION**

We would like to simplify the treatment of patients suffering from various diseases, especially tumors. Our aim is to launch novel, humane, effective and safe therapies.



## GYÖRGY GULÁCSI

DEPARTMENT OF RADIOLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Radiology - Orthopedics

**VISION**

To provide state-of-the-art diagnostic care for patients with bone and soft tissue tumors.

**PROJECT 1**

Investigating the diagnostic accuracy of advanced MRI techniques in patients with cartilage forming bone tumors. Systematic review and meta-analysis.

**EDUCATION**

medical doctor

**PROJECT 2**

Comparing the diagnostic accuracy of conventional MRI assessment and radiomic MRI features for the distinction between enchondroma and atypical chondroid tumor. Retrospective diagnostic test study.

**SUPERVISOR(S)**

Miklós Szendrői

**YEAR IV****PHD**

AGE 39

**MISSION**

To determine the optimal imaging algorithm of chondrogenic bone tumors that can eventuate higher clinical decision-making efficacy.

**E-MAIL**

gulacsi.gyorgy@semmelweis.hu



## PÉTER MISNYOVSZKI

DEPARTMENT OF FORENSIC MEDICINE, SEMMELWEIS UNIVERSITY

**TOPIC**

Forensic radiology

**VISION**

A new, clear methodology on post-mortem evaluation including novel techniques will be established.

**PROJECT 1**

Autopsy or virtopsy: the future of post-mortem analysis, a systematic review and meta-analysis.

**EDUCATION**

medical doctor

**PROJECT 2**

Forecasting by weather: a registry analysis of environmental parameters associated with suicidal death.

**SUPERVISOR(S)**

Klára Törő, Boglárka Marcsa

**YEAR V****PHD**

AGE 32

**MISSION**

Propagate the use of modern post-mortem techniques.

**E-MAIL**

misnyovszki.peter@med.semmelweis-univ.hu





## TEODÓRA FILIPOV

DEPARTMENT OF TRANSPLANTATION AND SURGERY, SEMMELWEIS UNIVERSITY

### TOPIC

Radiology - Urology

### VISION

To lower patient discomfort by offering minimally invasive treatment options and less invasive diagnostic tools.



### PROJECT 1

Ultrasound-based shear wave elastography of fibrosis correlates with biopsy findings in kidney transplanted patients: A systematic review and meta-analysis. *J Nephrol*, Q2, IF: 3.400

### PUBLISHED

### PROJECT 2

Percutaneous US guided cryoablation of fibroadenomas: Protocol for an interventional one arm open label clinical trial.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Pál Ákos Deák

### YEAR V

### PHD

AGE 30

### MISSION

To research novel techniques and stay up to date.

### PROJECT 3

Investigating the effect of cryoablation on fibroadenomas: A retrospective analysis

### E-MAIL

filipovdora@gmail.com



# FIELD OF RESEARCH **UROLOGY**





# RESEARCH FIELD UROLOGY

The Urology Research Group encompasses doctoral candidates investigating a wide spectrum of topics within clinical and experimental urology. Their research focuses primarily on urologic oncology—including bladder, prostate, urothelial, and penile cancers—as well as pediatric urology, andrology, and surgical innovation. Through systematic reviews, meta-analyses, registry-based studies, and other advanced research methodologies, the group aims to deepen understanding of disease mechanisms, improve diagnostic accuracy, and enhance therapeutic outcomes in urological practice. By integrating clinical expertise with evidence-based research, the group contributes to the advancement of modern urology and the improvement of patient care.

## SUPERVISORS

7



PÉTER NYIRÁDY



ATTILA MAJOROS



GERGELY BÁNFI



PÉTER JÓZSEF MOLNÁR



PÉTER RIESZ



TAMÁS SZÉLL



TIBOR SZARVAS

## STUDENTS

8

**YEAR I** Benedek Bakó

**YEAR II** Anikó Katalin Valikovics, Dániel Bacsó, Róbert Vass

**YEAR III** Judit Vargha, Mohammed Altenni

**YEAR IV** András Kubik, Júlia Ács



## BENEDEK BAKÓ

DEPARTMENT OF PEDIATRICS, SEMMELWEIS UNIVERSITY

**TOPIC**

Surgical Management of Hypospadias in Children

**PROJECT 1**

Comparing Two-stage versus One-stage Surgical Approach after Proximal Hypospadias Reconstruction: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**VISION**

To improve the quality of life for patients with hypospadias.

**PROJECT 2**

Urinary and Sexual Function, Quality of Life in Adulthood Following Proximal Hypospadias Repair: A Systematic Review and Meta-analysis

**SUPERVISOR(S)**

Péter Nyírády, Péter József Molnár

**YEAR I****PHD**

AGE 25

**MISSION**

Identifying the most appropriate surgical technique for proximal hypospadias.

**E-MAIL**

bakobeno@gmail.com



## ANIKÓ KATALIN VALIKOVICS

DEPARTMENT OF UROLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Systemic Treatment of Metastatic Prostate Cancer.

**PROJECT 1**

Investigating the efficacy and safety of abiraterone and enzalutamide in patients with metastatic castration-resistant prostate cancer: a systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Patients having the best treatment option for metastatic prostate cancer.

**PROJECT 2**

Investigating the efficacy and safety of abiraterone, apalutamide and enzalutamide in patients with metastatic hormone-sensitive prostate cancer: a systematic review and meta-analysis.

**SUPERVISOR(S)**

Tibor Szarvas

**YEAR II****PHD**

AGE 35

**MISSION**

Finding the drug that significantly improves the quality of life of patients.

**PROJECT 3**

Identifying patients with metastatic prostate cancer who benefit from PSMA-radioligand therapy: a systematic review and meta-analysis.

**E-MAIL**

avalikovics3@gmail.com



## DÁNIEL BACSÓ

MD/PHD STUDENT

**TOPIC**

New Horizons for Treatment of Urachal Cancer.

**PROJECT 1**

Comparing the Efficacy of Different Systemic Therapies of Urachal Cancer: systematic review and meta-analysis.

**EDUCATION**

medical student

**VISION**

Innovative treatment options for urachal cancer.

**PROJECT 2**

Investigating the safety and efficacy of surgery combined with chemotherapy in metastatic urachal cancer: systematic review and meta-analysis.

**SUPERVISOR(S)**

Tibor Szarvas

**YEAR II****PHD**

AGE 25

**MISSION**

Providing a comprehensive overview of urachal cancer treatment experiences.

**E-MAIL**

danibacso@gmail.com



## RÓBERT VASS

DEPARTMENT OF UROLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Inflammatory processes of the urinary tract and its association with genitourinary cancers.

**PROJECT 1**

Investigating the effect of lower urinary tract infections on the incidence rate of bladder cancer in women: systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Reduced incidence of genitourinary cancers.

**PROJECT 2**

Comparing the composition of the urinary microbiome in bladder cancer patients and healthy individuals: systematic review and meta-analysis.

**SUPERVISOR(S)**

Gergely Bánfi, Tamás Széll

**YEAR II****PHD**

AGE 26

**MISSION**

Identifying risk factors for genitourinary cancers.

**E-MAIL**

robertvassjr@gmail.com



## JUDIT VARGHA

DEPARTMENT OF UROLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Novel treatment approaches in penile cancer.

**PROJECT 1**

Comparing efficacy and safety of immunotherapy or chemotherapy in penile cancer patients: a systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Improving the life expectancy of patients with penile cancer.

**PROJECT 2**

Investigating the effectiveness and safety of penile cancer immunotherapy versus chemotherapy, PENCIL study: International survey.

**SUPERVISOR(S)**

Péter Riesz, Péter Nyirády

**YEAR III****PHD**

AGE 40

**MISSION**

Searching for a more effective therapy for advanced penile cancer patients.



## MOHAMMED ALTENNI

PÉTERFY SÁNDOR HOSPITAL

**TOPIC**

Novel Treatment of Advanced Urothelial Cancer.

**PROJECT 1**

Identifying patients who would benefit from enfortumab vedotin in advanced urothelial cancer: a systematic review and meta-analysis.

**EDUCATION**

medical doctor

**VISION**

Serve bladder cancer patients with compassion, professionalism, integrity, and excellence.

**PROJECT 2**

Identifying patients who would benefit from immune checkpoint inhibitors in advanced urothelial cancer: a systematic review and meta-analysis.

**SUPERVISOR(S)**

Tibor Szarvas

**YEAR III****PHD**

AGE 39

**MISSION**

Provide outstanding clinical treatment for patients with urothelial cancer in a strong academic environment.



## ANDRÁS KUBIK

SEMMELWEIS UNIVERSITY

**TOPIC**

Urology - Surgery

**PROJECT 1**

Investigating MMP-7 as a prognostic biomarker in urothelial carcinoma: combined registry and meta-analysis.  
*Int J Mol Sci*, Q1, IF: 6.208

**PUBLISHED****PROJECT 2****PUBLISHED**

Comparison of radical and organ-sparing treatment modalities for non-metastatic small cell bladder cancer: systematic review and meta-analysis.  
*Clin Genitourin Cancer*, Q1, IF: 2.700

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Tibor Szarvas

**YEAR IV****PHD**

AGE 38

**MISSION**

Provide high-quality care for people with urinary bladder cancer.



## JÚLIA ÁCS

DEPARTMENT OF UROLOGY, SEMMELWEIS UNIVERSITY

**TOPIC**

Urology - Gynecology

**PROJECT 1**

Investigating the safety and efficacy of female pelvic organ prolapse surgeries with versus without vaginal implants: a systematic review and meta-analysis.  
*Eur Urol Focus*, D1, IF: 5.400

**PUBLISHED****PROJECT 2**

Investigating risk factors associated with complications of female vaginal pelvic organ prolapse surgeries: a systematic review and meta-analysis.

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Attila Majoros

**YEAR IV****PHD**

AGE 28

**MISSION**

Formulate recommendations for surgical treatment in terms of indications, contraindications, patient selection.

**PROJECT 3**

Investigating risk factors associated with complications of female stress urinary incontinence surgeries: a systematic review and meta-analysis

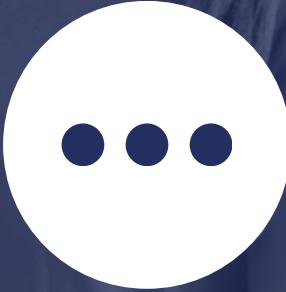
**E-MAIL**

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RESEARCH GROUP  
**MISCELLANEOUS**



...



# RESEARCH GROUP MISCELLANEOUS

The Miscellaneous Research Group brings together doctoral candidates pursuing diverse research topics across a broad range of medical and health-related fields. The group includes studies in space science, public health, sports science, physiotherapy, ophthalmology, otolaryngology, hematology, oncology, emergency medicine, and occupational health. While each student conducts independent research within their specialty, the group maintains a strong collaborative spirit, frequently sharing knowledge and methodological approaches across disciplines. This interdisciplinary interaction fosters innovation and allows members to address complex health-related challenges from multiple scientific perspectives, contributing to the advancement of both clinical and translational research.

## SUPERVISORS

22

### ★ TOP SUPERVISORS ★



RENÁTA PAPP



DEZSŐ CSUPOR



ORSOLYA DOHÁN



PÉTER FERDINANDY



TAMÁS HORVÁTH

Andrea Harnos, Ágnes Takács, Bogdan Ionel Tamba, Dániel Sándor Veres, Gellért Balázs Karvaly, Gergely Agócs, Gergő Merkely, György Tibor Balogh, Kornél Dániel, Máté Jász, Nóra Sydó, Pálma Porrogi, Péter Hegyi, Stefania Bunduc, Szandra Katalin Kovácsné Körmendi, Tamás Horváth, Zoltán Dénes, Zoltán Zsolt Nagy

## STUDENTS

18

**YEAR I** József Dénes Molnár, Mihály Fórián-Szabó, Omar Abu Elyounes, Vo Doan Minh Nhat

**YEAR II** Bertalan Tordai, Dorottya Badacsonyi-Német, István Nicolaus Sándor, Krisztina Kornis, Melinda Piri, Szilárd Lajos Szalczer

**YEAR III** Amir Makolli, Ioana Creanga-Murariu, Viktória Barna, Zsuzsanna Pásztorné Benyó

**YEAR IV** Andrea Tóth-Mészáros, Klára Borbála Körmendi, Márton Rakovics

**YEAR V** Eszter Gulyás

## JÓZSEF DÉNES MOLNÁR

HEIM PÁL NATIONAL PEDIATRIC INSTITUTE, BUDAPEST



### TOPIC

The Role of Precision Medicine in Paediatric Oncology

### VISION

Personalized paediatric oncotherapy.

### PROJECT 1

Investigating the Safety and Efficacy of Mercaptopurine in Paediatric Patient with Acute Lymphoblastic Leukaemia across Different Pharmacogenomic Backgrounds: A Systematic Review and Meta-analysis

### PROJECT 2

Investigating the Role of Genetic Polymorphism in Modulating Vincristine Safety and Efficacy in Acute Lymphoblastic Leukemia: A Systematic Review and Meta-analysis

### EDUCATION

pharmacist

### SUPERVISOR(S)

Péter Hegyi, Pálma Porrogi

### YEAR I

### PHD

AGE 33

### MISSION

Integrate pharmacogenomics into paediatric oncohaematology practice.

## MELINDA PIRI

MARKUSOVSZKY TEACHING HOSPITAL, SZOMBATHELY



### TOPIC

Novel Approaches in Treating Pancreatic Ductal Adenocarcinoma.

### VISION

Pancreatic ductal adenocarcinoma (PDAC) becomes a curable or a chronic disease.

### PROJECT 1

Evaluating the efficacy of multimodal treatments in oligometastatic PDAC: systematic review and meta-analysis.

### PROJECT 2

Investigating the effectiveness of targeted therapies in metastatic PDAC: systematic review and meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Orsolya Dohán

### YEAR II

### PHD

AGE 28

### MISSION

Finding treatment options to enhance survival rates in PDAC.

## IOANA CREANGĂ-MURARIU

"GRIGORE T. POPA" MEDICINE AND PHARMACY UNIVERSITY / REGIONAL INSTITUTE OF ONCOLOGY, IASI



### TOPIC

Cannabinoids in the landscape of cancer

### VISION

Improved quality of life for cancer patients.

### PROJECT 1

Investigating the safety and efficacy of cannabinoids in cancer patients: a systematic review and meta-analysis.  
*Curr Oncol Rep*, Q1, IF: 5.000

### PUBLISHED

### PROJECT 2

Investigating the antitumor activity of cannabinoids in preclinical models: Systematic Review and Meta-analysis.

### EDUCATION

medical doctor

### SUPERVISOR(S)

Péter Hegyi, Stefania Bunduc, Bogdan Ionel Tamba

### YEAR III

### PHD

AGE 29

### MISSION

Decreasing disease burden in cancer patients.

## OMAR ABU ELYOUNES

PHD STUDENT



### TOPIC

Novel Therapies in Inherited Retinal Diseases

### VISION

Inherited Retinal Diseases should be of the past.

### PROJECT 1

Investigating the Safety and Efficacy of Potential Therapies for Cystoid Macular Edema in Retinitis Pigmentosa: A Systematic Review and Meta-analysis

### PROJECT 2

Investigating Efficacy and Safety of Gene Therapy in Retinitis Pigmentosa: A Systematic Review and Meta-analysis

### EDUCATION

medical doctor

### SUPERVISOR(S)

Zoltán Zsolt Nagy, György Tibor Balogh

### YEAR I

### PHD

AGE 26

### MISSION

Identifying novel approaches in management of inherited retinal diseases.

### E-MAIL

omar16899@gmail.com



## SZILÁRD LAJOS SZALCZER

DEPARTMENT OF OPHTHALMOLOGY, SEMMELWEIS UNIVERSITY

### TOPIC

Corneal Healing after Refractive Surgery.

### PROJECT 1

Investigating the Safety and Effectiveness of Different Therapies in the Prevention of Corneal Haze after Refractive Surgeries: Systematic Review and Meta-analysis.

### EDUCATION

medical doctor

### VISION

Refractive surgeries without complications.

### PROJECT 2

Investigating the Long-Term Results of Corneal Cross-Linking in Keratoconus Patients: A Patient Registry Analysis.

### SUPERVISOR(S)

Zoltán Zsolt Nagy, Ágnes Takács

### YEAR II

### PHD

AGE 27

### MISSION

Finding a topical-used medication to prevent corneal haze.

### E-MAIL

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## VO DOAN MINH NHAT

HUE UNIVERSITY OF MEDICINE AND PHARMACY, VIETNAM

### TOPIC

Factors Influencing Outcomes of Thyroid Surgery

### PROJECT 1

Investigating the Effect of Surgical Volume and Specialty on Patient Outcomes after Thyroid Surgery: A Systematic Review and Meta-analysis.

### EDUCATION

medical doctor

### VISION

To enhance the safety and quality of thyroid surgery.

### PROJECT 2

Investigating the Patient Satisfaction and Clinical Outcomes after Robotic Thyroidectomy: A Systematic Review and Meta-analysis.

### SUPERVISOR(S)

Kornél Dános

### YEAR I

### PHD

AGE 31

### MISSION

To identify and address factors influencing thyroid surgical outcomes.

### E-MAIL

vdmnhat@huemed-univ.edu.vn



04/23



## KLÁRA BORBÁLA KÖRMENDY

BAJCSY-ZSILINSZKY HOSPITAL AND CLINIC

### TOPIC

Otorhinolaryngology - Middle ear surgery Lower cholesteatoma recidivism.

### PROJECT 1

Investigating the validity of the Potts congenital cholesteatoma staging system: a systematic review and meta-analysis. *Eur Arch Otorhinolaryngol*, Q1, IF: 2.600

### EDUCATION

medical doctor

### PUBLISHED PROJECT 2

Assessing the rate of recidivism according to EAONO/JOS\* cholesteatoma staging system: a systematic review and meta-analysis.

### SUPERVISOR(S)

Tamás Horváth

### YEAR IV

### PHD

AGE 28

### MISSION

Investigating currently used staging systems and follow-up methods.

### PROJECT 3

Determining the applicability of Fat graft myringoplasty (FGM): protocol of a multi-center study

### E-MAIL

borbkoerm@gmail.com



07/23



## ANDREA TÓTH-MÉSZÁROS

COGNIZANT HUNGARY

### TOPIC

Pharmacology - Phytotherapy

### PROJECT 1

Investigating the effect of adaptogenic plants on stress: a systematic review and meta-analysis. *Journal of Functional Foods*, Q1, IF: 5.600

### EDUCATION

pharmacist

### VISION

To make the application of adaptogens part of the evidence-based medicine.

### PUBLISHED PROJECT 2

Investigating the effect of a single dose Rhodiola rosea extract on cognitive functions in a stressful situation: protocol for a randomized, double-blind, placebo-controlled clinical trial.

### SUPERVISOR(S)

Dezső Csupor

### YEAR IV

### PHD

AGE 46

### MISSION

To investigate the adaptogens' mechanism of action, their clinical efficacy, their safety profile, optimal dose and optimal length of treatment.

### PROJECT 3

Investigating the neuroprotective effects of adaptogenic herbal substances: a systematic review and meta-analysis

### E-MAIL

a.toth.mesz@gmail.com



## ESZTER GULYÁS

UNIVERSITY PHARMACY DEPARTMENT OF PHARMACY  
ADMINISTRATION. SEMMELWEIS UNIVERSITY

### TOPIC

Pharmacology - Musculoskeletal disorders.

### VISION

To facilitate strong cooperation between clinical pharmacists, clinicians and the clinical laboratory concerning the antibiotic therapy of the critically ill.



### PROJECT 1

To investigate the effect of beta-lactam TDM in critically ill patients: a systematic review and meta-analysis. *Sci Rep, D1, IF: 4,600*

### PUBLISHED PROJECT 2

To evaluate the pharmacokinetics-based guidance of colistin therapy: protocol

### EDUCATION

clinical hospital pharmacist

### SUPERVISOR(S)

Gellért Balázs Karvály

### YEAR V

### PHD

AGE 33

### MISSION

To promote antibiotic therapy in intensive care; become an expert in the utilization of antibiotic therapeutic drug monitoring results.

### PROJECT 3

-

### E-MAIL

gulyas.eszter@pharma.semmelweis-univ.hu



## DOROTTYA BADACSONYI-NÉMET

BAJCSY-ZSILINSZKY HOSPITAL AND CLINIC, PHYSICAL THERAPIST

### TOPIC

Correlations of Temporomandibular Disorders with body position and posture.

### VISION

Improving diagnostic accuracy and quality of treatment for patients with Temporomandibular Disorders.



### PROJECT 1

Investigating the prevalence rate of Forward Head Posture among patients with Temporomandibular Disorders: a systematic review and meta-analysis.

### PROJECT 2

Comparing the effectiveness of online vs. face-to-face physiotherapy of Temporomandibular Disorders: a randomized clinical trial.

### EDUCATION

physiotherapist

### SUPERVISOR(S)

Máté Jász,  
Szandra Katalin Kovácsné Körmendi

### YEAR II

### PHD

AGE 28

### MISSION

Exploring physiotherapeutic interventions for the management of Temporomandibular Disorders in affected patients.

### E-MAIL

nemet.dorottya99@gmail.com



## KRISZTINA KORNIS

SELF-EMPLOYED, LECTURER AT SEMMELWEIS UNIVERSITY

### TOPIC

Key Differences in Sex-Specific Outcomes After Anterior Cruciate Ligament Reconstruction.

### VISION

Revolutionize physical therapy assessment and treatment with innovative methods.



### PROJECT 1

Investigating effect of sex on the outcomes of anterior cruciate ligament reconstruction surgery: systematic review and meta-analysis.

### PROJECT 2

Investigating the effect of sex on the prevalence of arthrofibrosis after anterior cruciate ligament reconstruction surgery: systematic review and meta-analysis.

### EDUCATION

physiotherapist

### SUPERVISOR(S)

Nóra Sydó, Gergő Merkely

### YEAR II

### PHD

AGE 34

### MISSION

Exploring innovative strategies in physical therapy by conducting research.

### E-MAIL

kornis.kriszti@gmail.com



## BERTALAN TORDAI

BUDA HEALTH CENTER

### TOPIC

The effect of migration on healthcare.

### VISION

To assist migrants and immigrants in integrating successfully.



### PROJECT 1

Investigating the cardiovascular risks of immigrants in comparison with the host population: systematic review and meta-analysis.

### PROJECT 2

Investigating the prevalence of the cardiovascular risk factors among immigrants in the EU (Eurostat Analysis)

### EDUCATION

medical doctor

### SUPERVISOR(S)

Dániel Sándor Veres, Renáta Papp

### YEAR II

### PHD

AGE 43

### MISSION

Identifying effective interventions for improving the health outcomes of migrants and immigrants.

### E-MAIL

dr.tordai.bertalan@gmail.com



## ISTVÁN NICOLAUS SÁNDOR

THE CENTRAL BANK OF HUNGARY

### TOPIC

Effects of Micro- and Nanoplastics on Health.

### PROJECT 1

Investigating the Effects of Micro and Nanoplastics on Health in Animals: Systematic Review and Meta-analysis.

### EDUCATION

central banker/analyst

### VISION

A World where environmental factors are not deteriorating human health.

### PROJECT 2

Investigating the Effects of Micro and Nanoplastics on Health in Humans: Systematic Review and Meta-analysis.

### SUPERVISOR(S)

Gergely Agócs

### YEAR II

### PHD

AGE 27

### MISSION

Providing the necessary high-quality evidence to policymakers to improve the quality of life.



## MÁRTON RAKOVICS

LORÁND EÖTVÖS UNIVERSITY (ELTE)

### TOPIC

COVID-19 -Statistics

### VISION

Make AI an everyday tool in healthcare.

### PROJECT 1

### PUBLISHED PROJECT 2

Investigating the Efficacy of Early Severity Prediction Models of Covid-19: a systematic review and meta-analysis.  
*Sci Rep, D1, IF: 3.800*

Developing a Novel COVID-19 Severity Prediction Deep Learning Model: analysis of the Covid-19 registry data.

### EDUCATION

sociologist, statistician

### SUPERVISOR(S)

Andrea Harnos

### YEAR IV

### PHD

AGE 39

### MISSION

Develop AI models for disease severity classification problems.



## AMIR MAKOLLI

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

New insights on pharmacokinetic and pharmacodynamic changes of drugs in varied gravitational environments.

### VISION

Enhancing drug effectiveness in space.

### PROJECT 1

Investigating the effect of different gravity levels on pharmacokinetics and pharmacodynamics of drugs: a systematic review and meta-analysis.

### PROJECT 2

Investigating the effect of different gravity levels on pharmacokinetics and pharmacodynamics of drugs in animal models: a systematic review and meta-analysis.

### EDUCATION

pharmacist

### SUPERVISOR(S)

Péter Ferdinand, Renáta Papp

### YEAR III

### PHD

AGE 25

### MISSION

Conducting innovative research to optimize drug utilization in space travel.



## ZSUZSANNA PÁSZTORNÉ BENYÓ

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

Human adaptation to spaceflight.

### VISION

Achieve healthy longevity in space and on Earth.

### PROJECT 1

Investigating the effectiveness of bisphosphonates in preventing altered gravity-related bone loss and renal stone formation: a systematic review and meta-analysis.

### PROJECT 2

Investigating the effect of the duration of altered gravity on body composition in astronauts: a systematic review and meta-analysis.

### EDUCATION

economist

### SUPERVISOR(S)

Nóra Sydó, Renáta Papp

### YEAR III

### PHD

AGE 49

### MISSION

Hungarian TRISH = Translational Research Institute for Space Health.





## MIHÁLY FÓRIÁN-SZABÓ

REHABILITATION CLINIC, SEMMELWEIS UNIVERSITY

### TOPIC

Rehabilitation in Low Back Pain

### PROJECT 1

Investigating the Effects of Exercise Interventions in Low Back Pain: A Systematic Review and Meta-analysis

### EDUCATION

medical doctor

### VISION

Improving rehabilitation outcomes in low back pain with tailored exercise.

### PROJECT 2

Investigating Baseline Patient Characteristics that Influence the Outcomes of Exercise Therapy in Low Back Pain: A Systematic Review and Meta-analysis

### SUPERVISOR(S)

Péter Ferdinandy, Zoltán Dénes

### YEAR I

### PHD

AGE 39

### MISSION

Advancing musculoskeletal rehabilitation through research.



## VIKTÓRIA BARNA

CENTRE FOR TRANSLATIONAL MEDICINE, SEMMELWEIS UNIVERSITY

### TOPIC

Sport-specific biomarkers of endurance and strength sports.

### VISION

Empower athletes to achieve peak performance and optimal health.

### PROJECT 1

Investigating the effect of regular training on changes of bone-related biomarkers in healthy population - Systematic Review and Meta-Analysis.

### PROJECT 2

Investigating the effect of acute training on micronutrient levels in healthy population - Systematic Review and Meta-Analysis.

### SUPERVISOR(S)

Péter Ferdinandy, Nóra Sydő, Renáta Papp

### YEAR III

### PHD

AGE 47

### MISSION

Translate science into practical, actionable recommendations for athletes, coaches, and sports professionals.





# CAMPUS PÉCS





## BENEDEK KASZA

INSTITUTE FOR TRANSLATIONAL MEDICINE, UNIVERSITY OF PÉCS

### TOPIC

The role of lifestyle factors in acute pancreatitis.

### VISION

Improved outcome in pancreatic diseases by a multi-faceted lifestyle approach.



### PROJECT 1

Investigating the effects of modifiable lifestyle-related risk factors on the incidence of acute pancreatitis: systematic review and meta-analysis.

### EDUCATION

biotechnologist

### PROJECT 2

Investigating the correlation between the incidence of lifestyle factors and the incidence of acute pancreatitis in European countries: Eurostat registry analysis.

### SUPERVISOR(S)

Péter Hegyi, Márta Balaskó

**YEAR III**

**PHD**

AGE 33

### MISSION

Identifying the major lifestyle-related risk factors to create preventive recommendations.

### E-MAIL

[kasza.benedek@pte.hu](mailto:kasza.benedek@pte.hu)



## RÉKA MESZÉNA

INSTITUTE FOR TRANSLATIONAL MEDICINE, UNIVERSITY OF PÉCS

### TOPIC

The role of antibiotic resistance and microbiome diversity in different diseases.

### VISION

Enhancing patient care with targeted therapies by better understanding microbial insights.



### PROJECT 1

Investigating the clonal spread and antibiotic susceptibility of NDM-producing bacteria in Baranya County. Experimental research.

### EDUCATION

biologist

### PROJECT 2

Investigating the spread of VIM-gene-carrying integron between different species in Baranya County. Experimental research.

### SUPERVISOR(S)

Péter Hegyi, Márta Balaskó

**YEAR III**

**PHD**

AGE 30

### MISSION

Investigating multidisciplinary methods for the effect of microbial resistance and gut microbiome on patient outcomes.

### PROJECT 3

Comparing the gut microbiome diversity in different severity levels of acute pancreatitis and healthy controls. A Systematic Review and Meta-analysis.

### E-MAIL

[meszena.reka@pte.hu](mailto:meszena.reka@pte.hu)



# CAMPUS **VIENNA**





## AGATA SULEJA

MEDICAL UNIVERSITY OF VIENNA, DEPARTMENT OF UROLOGY

**TOPIC**

New Insights in the Treatment of Castration-Resistant Prostate Cancer

**VISION**

Men with CRPC to have the best care.

**PROJECT 1**

Comparing the Efficacy and Safety of Different Treatments for Castration-Resistant Prostate Cancer in Patients Previously Treated with ARPIs (+/- Docetaxel): A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Olivier Cussenot, Shahrokh Shariat

**YEAR I****MSC**

AGE 26

**MISSION**

To provide high-quality evidence on new treatment regimens in CRPC.



## BIANCA LADMANN

MEDICAL UNIVERSITY OF VIENNA, DEPARTMENT OF UROLOGY

**TOPIC**

New Insights into Bladder Sparing Treatments

**VISION**

Improve treatment strategies in bladder cancer.

**PROJECT 1**

Investigating the Safety and Efficacy of Bladder Sparing Therapies in BCG-unresponsive Non-muscle Invasive Bladder Cancer: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

David D'Andrea, Shahrokh Shariat

**YEAR I****MSC**

AGE 26

**MISSION**

Continuously advancing treatment in bladder cancer.



## CONSTANTIN MANSBART

MEDICAL UNIVERSITY OF VIENNA, DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

**TOPIC**

New Insights in Advanced Breast Cancer Therapy

**VISION**

Best breast cancer treatment for every individual patients.

**PROJECT 1**

Comparing the Safety and Efficacy of Trastuzumab Deruxtecan to Sacituzumab Govitecan in the Treatment of Advanced Breast Cancer: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Carmen Leser

**YEAR I****MSC**

AGE 27

**MISSION**

Treating patients with highly effective and well-tolerated personalized therapy.



## DEBORAH BRET

MEDICAL UNIVERSITY OF VIENNA, DEPARTMENT OF UROLOGY

**TOPIC**

Neoadjuvant Strategies for High-Risk Prostate Cancer

**VISION**

Improve the prognosis of high-risk prostate cancer.

**PROJECT 1**

Investigating the Efficacy and Safety of Neoadjuvant Therapies in High-risk Prostate Cancer undergoing Radical Prostatectomy: A Systemic Review and Network Meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Olivier Cussenot, Shahrokh Shariat

**YEAR I****MSC**

AGE 23

**MISSION**

Provide the best combinations of neoadjuvant therapy.



## HEIDEMARIE OFNER

MEDICAL UNIVERSITY OF VIENNA, DEPARTMENT OF UROLOGY

**TOPIC**

Improving Treatment of Locally Advanced and Oligometastatic Prostate Cancer

**VISION**

Improve outcomes for prostate cancer patients.

**PROJECT 1**

Predicting Response to Perioperative Systemic Therapy in Locally Advanced and Oligometastatic Prostate Cancer Patients: A Registry Analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Nicolai Hübner, Shahrokh Shariat

**YEAR I****MSC**

AGE 26

**MISSION**

Optimize care for locally advanced prostate cancer.

**E-MAIL**

heidemarie.ofner@meduniwien.ac.at



## JULIA HUMMEL JIMENEZ

MEDICAL UNIVERSITY OF VIENNA, DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

**TOPIC**

New Insights in Gynecological Surgery

**VISION**

Advance women's health.

**PROJECT 1**

Comparing the Safety, Efficacy, and Cost-Effectiveness of Different Surgical Methods for Pelvic Organ Prolapse: A Systematic Review, Meta-analysis, and Cost-Effectiveness Analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Barbara Bodner-Adler

**YEAR I****MSC**

AGE 27

**MISSION**

Ensure that women receive the highest evidence care.

**E-MAIL**

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## JULIA WEISS

MEDICAL UNIVERSITY OF VIENNA, DEPARTMENT OF UROLOGY

**TOPIC**

New Insights into Lymphadenectomy in Prostate Cancer

**VISION**

Avoid over- and undertreatment for prostate cancer patients.

**PROJECT 1**

Investigating the Predictive Value of Clinical and Pathological Features for Positive Lymphnodes in PSMA PET Negative Prostate Cancer: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Nicolai Hübner, Shahrokh Shariat

**YEAR I****MSC**

AGE 26

**MISSION**

Identify optimal treatment for prostate cancer patients.

**E-MAIL**

julia.weiss@meduniwien.ac.at



## KATHARINA OBERNEDER

MEDICAL UNIVERSITY OF VIENNA, DEPARTMENT OF UROLOGY

**TOPIC**

Risk Stratification in High-Grade T1 Bladder Cancer

**VISION**

Advance personalized care in bladder cancer.

**PROJECT 1**

Investigating the Predictive Accuracy of Clinical Features on Bacillus Calmette-Guérin Response in T1 High-Grade Bladder Cancer: Post-hoc Analysis of Prospectively Collected Data of a Multicentric ROGUE-1 Registry

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

David D'Andrea, Shahrokh Shariat

**YEAR I****MSC**

AGE 28

**MISSION**

Identify key predictors to outsmart bladder cancer.

**E-MAIL**

katharina.oberneder@meduniwien.ac.at



## LARA KREPLER

MEDICAL UNIVERSITY OF VIENNA, DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

**TOPIC**

Predictive Value of MRI and Ultrasound in Congenital Diaphragmatic Hernia

**VISION**

Provide care that empowers women in pregnancy and beyond.

**PROJECT 1**

Comparing MRI and Ultrasound in Outcome Prediction for Fetal Congenital Diaphragmatic Hernia: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Julia Binder

**YEAR I****MSC**

AGE 26

**MISSION**

Shaping the future of diagnostics and pregnancy care through high-quality evidence.



## MARCIN MISZCZYK

MEDICAL UNIVERSITY OF VIENNA, DEPARTMENT OF UROLOGY

**TOPIC**

AR-V7 Mutation in Metastatic Prostate Cancer

**VISION**

Develop an active clinical research team dedicated to urologic oncology.

**PROJECT 1**

Prognostic and Predictive Value of AR-V7 Mutation in Patients with Advanced Prostate Cancer: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Shahrokh Shariat

**YEAR I****MSC**

AGE 32

**MISSION**

Consistently obtain non-commercial research grants.



## STEPHAN BRÖNIMANN

MEDICAL UNIVERSITY OF VIENNA, DEPARTMENT OF UROLOGY

**TOPIC**

Stronger Patients, Better Outcomes

**VISION**

Cut tumors, not quality of life.

**PROJECT 1**

Investigating the Association of Perioperative Testosterone Levels and Perioperative Outcomes in Men with Clinically Non-Metastatic Bladder Cancer undergoing Radical Cystectomy: Post Hoc Analysis of a Prospective Cohort

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Shahrokh Shariat

**YEAR I****MSC**

AGE 32

**MISSION**

Prove testosterone matters in men with bladder cancer – set thresholds, trigger action.



## SUNAINA WADHWA

MEDICAL UNIVERSITY OF VIENNA, DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

**TOPIC**

New Insights Into POLE Mutation and Endometrial Cancer Therapy

**VISION**

Advance Precision Oncology In Endometrial Cancer

**PROJECT 1**

Investigating the Prognostic and Predictive Value of POLE mutation on Therapeutic Response in Early and Advanced Endometrial Cancer: A Systematic Review and Meta-analysis

**EDUCATION**

medical doctor

**SUPERVISOR(S)**

Nicole Concin, Veronika Seebacher-Shariat

**YEAR I****MSC**

AGE 40

**MISSION**

Integrating molecular classification into routine clinical decision-making

**E-MAIL**

dr.sunaina7@gmail.com

A group of diverse young people, including men and women of various ethnicities, are sitting on bleachers with their hands raised in excitement or cheering. They are all smiling and appear to be at a sports event or a similar gathering. The background is slightly blurred, focusing on the group in the foreground.

# CAMPUS **SZEGED**





## ANDRÁS NÉGYESSY

UNIVERSITY OF SZEGED, SZEGED, HUNGARY

### TOPIC

New Insights into Diagnostic Biomarkers for Prostate Cancer

### VISION

Decrease mortality for patients with prostate cancer.



### PROJECT 1

Investigating the Diagnostic Accuracy of New Biomarkers Compared to PSA in Prostate Cancer Screening: A Systematic Review and Meta-analysis

### PROJECT 2

Investigating the Cardiovascular Effects Induced by Androgen Deprivation Therapy and Androgen Receptor Pathway Inhibitors in Patients with Prostate Cancer: A Systematic Review and Meta-analysis

### EDUCATION

medical doctor

### SUPERVISOR(S)

Tamás Fazekas, Zoltán Bajory

### YEAR I

### PHD

AGE 28

### MISSION

Implement evidence-based results in practice to diagnose prostate cancer earlier.



## NIKOLETT PRIBUS

UNIVERSITY OF SZEGED, SZEGED, HUNGARY

### TOPIC

New Insights into Protocols for Urological Surgery

### VISION

Offer the best nursing care to patients undergoing radical cystectomy.



### PROJECT 1

Comparing the Enhanced Recovery After Surgery (ERAS) to Standard Protocols for Patients Undergoing Radical Cystectomy: A Systematic Review and Meta-analysis

### PROJECT 2

Investigating the Effects of Recreational Ketamine Use on the Bladder: A Systematic Review and Meta-analysis

### EDUCATION

nurse

### SUPERVISOR(S)

Tamás Fazekas, Zoltán Bajory

### YEAR I

### PHD

AGE 27

### MISSION

Implement evidence-based protocols into nursing care.

### E-MAIL

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# GRADUATED

## PHD STUDENTS

Following the launch of TM in Hungary in 2016, **92 PhD thesis** was carried out with the interdisciplinary support of CTM. Among them, those who participated in our hybrid in-house training were labelled "inside", while those who participated in a sub-project facilitated by our centre were labelled "outside". We congratulate them on their excellent performance.

To see the dissertation of our students, scan the **QR code** beside their names.

	<b>KATALIN MÁRTA</b>	D1: 0 Cumulative IF: 64,066	
1	University: University of Pécs	Q1: 20 First author IF: 12,32	
	Type of PhD: inside (faculty)	Q2: 2	
	Date of dissertation: 2019	Q3: 0	
	No. of articles: 22	Q4: 0	
	<b>ADRIENN ERŐSS</b>	D1: 0 Cumulative IF: 28,362	
2	University: University of Pécs	Q1: 7 First author IF: 11,2024	
	Type of PhD: inside	Q2: 3	
	Date of dissertation: 2020	Q3: 0	
	No. of articles: 10	Q4: 0	
	<b>ZSOLT SZAKÁCS</b>	D1: 3 Cumulative IF: 160,303	
3	University: University of Pécs	Q1: 29 First author IF: 37,102	
	Type of PhD: inside (faculty)	Q2: 11	
	Date of dissertation: 2021	Q3: 4	
	No. of articles: 48	Q4: 0	
	<b>DÁNIEL PÉCSI</b>	D1: 0 Cumulative IF: 97,146	
4	University: University of Pécs	Q1: 22 First author IF: 16,324	
	Type of PhD: inside (SMS)	Q2: 6	
	Date of dissertation: 2021	Q3: 1	
	No. of articles: 32	Q4: 0	
	<b>PÉTER VARJÚ</b>	D1: 1 Cumulative IF: 61,477	
5	University: University of Pécs	Q1: 15 First author IF: 9,909	
	Type of PhD: inside	Q2: 2	
	Date of dissertation: 2022	Q3: 2	
	No. of articles: 20	Q4: 0	
	<b>PATRIK KÉRINGER</b>	D1: 1 Cumulative IF: 42,869	
6	University: University of Pécs	Q1: 5 First author IF: 8,69	
	Type of PhD: inside	Q2: 1	
	Date of dissertation: 2022	Q3: 0	
	No. of articles: 9	Q4: 0	

	<b>KLEMENTINA OCSKAY</b>	D1: 6 Cumulative IF: 106,091	
7	University: University of Pécs	Q1: 15 First author IF: 25,164	
	Type of PhD: inside (SMS)	Q2: 2	
	Date of dissertation: 2022	Q3: 0	
	No. of articles: 23	Q4: 0	
	<b>ORSOLYA HUSZÁR</b>	D1: 1 Cumulative IF: 21,459	
8	University: Semmelweis University	Q1: 4 First author IF: 4,39	
	Type of PhD: outside	Q2: 2	
	Date of dissertation: 2020	Q3: 1	
	No. of articles: 11	Q4: 1	
	<b>ÁGNES LILLA SZILÁGYI</b>	D1: 1 Cumulative IF: 26,482	
9	University: University of Szeged	Q1: 4 First author IF: 3,411	
	Type of PhD: outside	Q2: 2	
	Date of dissertation: 2021	Q3: 0	
	No. of articles: 8	Q4: 0	
	<b>PÉTER KUPÓ</b>	D1: 0 Cumulative IF: 19,302	
10	University: University of Pécs	Q1: 3 First author IF: 8,4	
	Type of PhD: outside	Q2: 5	
	Date of dissertation: 2021	Q3: 0	
	No. of articles: 12	Q4: 4	
	<b>ANNA FÁBIÁN</b>	D1: 0 Cumulative IF: 88,759	
11	University: University of Szeged	Q1: 16 First author IF: 17,294	
	Type of PhD: outside	Q2: 6	
	Date of dissertation: 2021	Q3: 2	
	No. of articles: 34	Q4: 8	
	<b>BÁLINT TRIMMEL</b>	D1: 1 Cumulative IF: 20,354	
12	University: Semmelweis University	Q1: 3 First author IF: 9,6	
	Type of PhD: outside	Q2: 2	
	Date of dissertation: 2021	Q3: 0	
	No. of articles: 6	Q4: 0	
	<b>ANIKÓ NAGY</b>	D1: 1 Cumulative IF: 11,385	
13	University: University of Szeged	Q1: 3 First author IF: 3,799	
	Type of PhD: outside	Q2: 3	
	Date of dissertation: 2021	Q3: 1	
	No. of articles: 8	Q4: 0	

	<b>ADRIENN SZABÓ-HALÁSZ</b>	D1: 0 Cumulative IF: 38,862	
14	University: University of Pécs	Q1: 7 First author IF: 3,57	
	Type of PhD: outside	Q2: 6	
	Date of dissertation: 2022	Q3: 0	
	No. of articles: 13	Q4: 0	
	<b>ALEXANDRA BÁLINT</b>	D1: 2 Cumulative IF: 29,444	
15	University: University of Pécs	Q1: 4 First author IF: 13,154	
	Type of PhD: outside	Q2: 4	
	Date of dissertation: 2022	Q3: 0	
	No. of articles: 11	Q4: 0	
	<b>ALEXANDRA DEMCSÁK</b>	D1: 0 Cumulative IF: 24,267	
16	University: University of Szeged	Q1: 6 First author IF: 10,828	
	Type of PhD: outside	Q2: 1	
	Date of dissertation: 2021	Q3: 0	
	No. of articles: 7	Q4: 0	
	<b>SZILÁRD GÓDI</b>	D1: 0 Cumulative IF: 52,075	
17	University: University of Pécs	Q1: 12 First author IF: 2,063	
	Type of PhD: outside	Q2: 6	
	Date of dissertation: 2021	Q3: 2	
	No. of articles: 20	Q4: 0	
	<b>SANG-NGOEN THANYAPORN</b>	D1: 0 Cumulative IF: 20,001	
18	University: Semmelweis University	Q1: 3 First author IF: 5,811	
	Type of PhD: outside	Q2: 2	
	Date of dissertation: 2022	Q3: 0	
	No. of articles: 6	Q4: 1	
	<b>SADAENG WUTTAPON</b>	D1: 0 Cumulative IF: 16,393	
19	University: Semmelweis University	Q1: 3 First author IF: 3,116	
	Type of PhD: outside	Q2: 1	
	Date of dissertation: 2022	Q3: 0	
	No. of articles: 4	Q4: 0	
	<b>BÁLINT ERŐSS</b>	D1: 3 Cumulative IF: 100,529	
20	University: University of Pécs	Q1: 15 First author IF: 6,389	
	Type of PhD: outside (faculty)	Q2: 11	
	Date of dissertation: 2020	Q3: 0	
	No. of articles: 70	Q4: 0	

	<b>DÓRA MOSZTBACHER</b>	D1: 0 Cumulative IF: 45,799 Q1: 11 First author IF: 14,556	
21	University: University of Szeged Type of PhD: outside Date of dissertation: 2020 No. of articles: 14	Q2: 3 Q3: 0 Q4: 0	
	<b>JUDIT BAJOR</b>	D1: 0 Cumulative IF: 102,787 Q1: 18 First author IF: 7,244	
22	University: University of Pécs Type of PhD: outside Date of dissertation: 2020 No. of articles: 183	Q2: 11 Q3: 4 Q4: 1	
	<b>ROLAND HÁGENDORN</b>	D1: 0 Cumulative IF: 29,546 Q1: 7 First author IF: 6,969	
23	University: University of Szeged Type of PhD: outside Date of dissertation: 2020 No. of articles: 9	Q2: 2 Q3: 0 Q4: 0	
	<b>ESZTER CARAMINÉ PÁKAI</b>	D1: 0 Cumulative IF: 59,865 Q1: 12 First author IF: 11,011	
24	University: University of Szeged Type of PhD: outside Date of dissertation: 2020 No. of articles: 14	Q2: 2 Q3: 2 Q4: 0	
	<b>EMŐKE PÓTÓNÉ OLÁH</b>	D1: 0 Cumulative IF: 37,435 Q1: 6 First author IF: 14,886	
25	University: University of Pécs Type of PhD: outside Date of dissertation: 2022 No. of articles: 20	Q2: 2 Q3: 0 Q4: 1	
	<b>ZSÓFIA GABRIELLA PESEI</b>	D1: 1 Cumulative IF: 16,808 Q1: 1 First author IF: 12,26	
26	University: University of Szeged Type of PhD: outside Date of dissertation: 2023 No. of articles: 4	Q2: 0 Q3: 2 Q4: 0	
	<b>DÓRA DOHOS</b>	D1: 1 Cumulative IF: 47,928 Q1: 8 First author IF: 19,978	
27	University: University of Pécs Type of PhD: inside Date of dissertation: 2023 No. of articles: 14	Q2: 2 Q3: 1 Q4: 0	

28	<p><b>MÁRK FÉLIX JUHÁSZ</b></p> <p>University: University of Pécs</p> <p>Type of PhD: inside (SMS)</p> <p>Date of dissertation: 2023</p> <p>No. of articles: 17</p>	<p>D1: 3 Cumulative IF: 66,707</p> <p>Q1: 13 First author IF: 14,777</p> <p>Q2: 1</p> <p>Q3: 0</p> <p>Q4: 0</p>	
29	<p><b>ABA TAMÁS LÓRINCZ</b></p> <p>University: University of Pécs</p> <p>Type of PhD: inside (faculty)</p> <p>Date of dissertation: 2023</p> <p>No. of articles: 9</p>	<p>D1: 0 Cumulative IF: 17,799</p> <p>Q1: 1 First author IF: 8,61</p> <p>Q2: 5</p> <p>Q3: 1</p> <p>Q4: 0</p>	
30	<p><b>RITA NAGY</b></p> <p>University: University of Pécs</p> <p>Type of PhD: inside (faculty)</p> <p>Date of dissertation: 2023</p> <p>No. of articles: 15</p>	<p>D1: 9 Cumulative IF: 132,0</p> <p>Q1: 6 First author IF: 23,0</p> <p>Q2: 0</p> <p>Q3: 0</p> <p>Q4: 0</p>	
31	<p><b>LAJOS SZAKÓ</b></p> <p>University: University of Pécs</p> <p>Type of PhD: inside (faculty)</p> <p>Date of dissertation: 2023</p> <p>No. of articles: 9</p>	<p>D1: 0 Cumulative IF: 30,297</p> <p>Q1: 9 First author IF: 7,973</p> <p>Q2: 0</p> <p>Q3: 0</p> <p>Q4: 0</p>	
32	<p><b>SZILÁRD VÁNCSA</b></p> <p>University: University of Pécs</p> <p>Type of PhD: inside (faculty)</p> <p>Date of dissertation: 2023</p> <p>No. of articles: 47</p>	<p>D1: 13 Cumulative IF: 257,651</p> <p>Q1: 29 First author IF: 31,269</p> <p>Q2: 3</p> <p>Q3: 0</p> <p>Q4: 1</p>	
33	<p><b>NOÉMI ZÁDORI</b></p> <p>University: University of Pécs</p> <p>Type of PhD: inside</p> <p>Date of dissertation: 2023</p> <p>No. of articles: 20</p>	<p>D1: 2 Cumulative IF: 16,808</p> <p>Q1: 15 First author IF: 12,26</p> <p>Q2: 3</p> <p>Q3: 0</p> <p>Q4: 2</p>	
34	<p><b>ÁGNES RITA MARTONOSI</b></p> <p>University: University of Szeged</p> <p>Type of PhD: inside</p> <p>Date of dissertation: 2023</p> <p>No. of articles: 10</p>	<p>D1: 2 Cumulative IF: 25,409</p> <p>Q1: 2 First author IF: 8,76</p> <p>Q2: 2</p> <p>Q3: 2</p> <p>Q4: 0</p>	

35	<b>ANNA NÓRA KANJO</b> University: University of Szeged Type of PhD: inside Date of dissertation: 2023 No. of articles: 5	D1: 2 Cumulative IF: 22,265 Q1: 3 First author IF: 8,003 Q2: 0 Q3: 0 Q4: 0	
36	<b>SZabolcs Kiss</b> University: University of Szeged Type of PhD: inside (faculty) Date of dissertation: 2023 No. of articles: 52	D1: 17 Cumulative IF: 252,571 Q1: 28 First author IF: 20,765 Q2: 7 Q3: 0 Q4: 0	
37	<b>MÁRIA FÖLDI</b> University: University of Szeged Type of PhD: inside (faculty) Date of dissertation: 2023 No. of articles: 14	D1: 8 Cumulative IF: 71,513 Q1: 4 First author IF: 25,641 Q2: 2 Q3: 0 Q4: 0	
38	<b>FANNI ADÉL MEZNERICS</b> University: Semmelweis University Type of PhD: inside (SMS) Date of dissertation: 2023 No. of articles: 13	D1: 2 Cumulative IF: 26,200 Q1: 3 First author IF: 14,100 Q2: 5 Q3: 0 Q4: 0	
39	<b>LUCA TÓTH</b> University: University of Pécs Type of PhD: outside Date of dissertation: 2023 No. of articles: 14	D1: - Cumulative IF: 59,629 Q1: - First author IF: 19,666 Q2: - Q3: - Q4: -	
40	<b>LÁSZLÓ MÁRK CZUMBEL</b> University: Semmelweis University Type of PhD: inside (SMS) Date of dissertation: 2023 No. of articles: 22	D1: 9 Cumulative IF: 78,397 Q1: 10 First author IF: 9,400 Q2: 3 Q3: 0 Q4: 0	
41	<b>ESZTER ÁGNES SZALAI</b> University: Semmelweis University Type of PhD: inside (SMS) Date of dissertation: 2024 No. of articles: 7	D1: 1 Cumulative IF: 27,707 Q1: 5 First author IF: 7,300 Q2: 1 Q3: 0 Q4: 0	

42	<b>CANER TURAN</b> University: Semmelweis University Type of PhD: inside (faculty) Date of dissertation: 2024 No. of articles: 9	D1: 3 Cumulative IF: 54,600 Q1: 6 First author IF: 8,600 Q2: 0 Q3: 0 Q4: 0	
43	<b>BOGLÁRKA PETHŐ</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2024 No. of articles: 5	D1: 2 Cumulative IF: 21,391 Q1: 2 First author IF: 13,400 Q2: 0 Q3: 1 Q4: 0	
44	<b>DORINA GREFF</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2024 No. of articles: 3	D1: 3 Cumulative IF: 15,500 Q1: 0 First author IF: 9,000 Q2: 0 Q3: 0 Q4: 0	
45	<b>BALÁZS HAMAR</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2024 No. of articles: 4	D1: 1 Cumulative IF: 11,500 Q1: 2 First author IF: 7,100 Q2: 0 Q3: 0 Q4: 1	
46	<b>ALEXANDRA CSENKEY</b> University: University of Pécs Type of PhD: outside Date of dissertation: 2024 No. of articles: 7	D1: 1 Cumulative IF: 29,533 Q1: 4 First author IF: 8,596 Q2: 0 Q3: 1 Q4: 0	
47	<b>FANNI KESRŰ</b> University: University of Szeged Type of PhD: outside Date of dissertation: 2024 No. of articles: 3	D1: 0 Cumulative IF: 7,415 Q1: 1 First author IF: 7,415 Q2: 1 Q3: 0 Q4: 1	
48	<b>JÁNOS TOLDI</b> University: University of Pécs Type of PhD: outside Date of dissertation: 2024 No. of articles: 8	D1: 2 Cumulative IF: 14,470 Q1: 1 First author IF: 9,596 Q2: 1 Q3: 0 Q4: 0	

	<b>KATA SZEMES</b>	D1: 3 Cumulative IF: 44,185 Q1: 5 First author IF: 8,600 Q2: 3 Q3: 0 Q4: 1	
<b>49</b>	University: University of Pécs Type of PhD: outside Date of dissertation: 2024 No. of articles: 12		
	<b>GARMAA GANTSETSEG</b>	D1: 4 Cumulative IF: 132,48 Q1: 6 First author IF: 14,400 Q2: 1 Q3: 0 Q4: 1	
<b>50</b>	University: Semmelweis University Type of PhD: inside Date of dissertation: 2024 No. of articles: 13		
	<b>LOTTI LÚCIA KESZTHELYI</b>	D1: 0 Cumulative IF: 5,800 Q1: 1 First author IF: 4,600 Q2: 0 Q3: 0 Q4: 3	
<b>51</b>	University: Semmelweis University Type of PhD: inside Date of dissertation: 2024 No. of articles: 4		
	<b>GERCÓ VILMOS SZABÓ</b>	D1: 1 Cumulative IF: 10,800 Q1: 2 First author IF: 7,800 Q2: 0 Q3: 0 Q4: 0	
<b>52</b>	University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 3		
	<b>ISTVÁN LÁSZLÓ HORVÁTH</b>	D1: 4 Cumulative IF: 23,300 Q1: 1 First author IF: 14,700 Q2: 0 Q3: 0 Q4: 0	
<b>53</b>	University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 5		
	<b>KATA ILLÉS</b>	D1: 1 Cumulative IF: 11,500 Q1: 3 First author IF: 4,100 Q2: 0 Q3: 0 Q4: 1	
<b>54</b>	University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 4		
	<b>ÁDÁM CSIRZÓ</b>	D1: 2 Cumulative IF: 9,900 Q1: 1 First author IF: 5,400 Q2: 0 Q3: 0 Q4: 0	
<b>55</b>	University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 3		

	<b>MÁTYÁS VEZÉR</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 7	D1: 0 Cumulative IF: 8,200 Q1: 3 First author IF: 5,200 Q2: 0 Q3: 1 Q4: 0	
<b>56</b>	<b>BIANCA GOLZIO NAVARRO CAVALCANTE</b> University: Semmelweis University Type of PhD: inside (SMS) Date of dissertation: 2025 No. of articles: 10	D1: 3 Cumulative IF: 29,000 Q1: 4 First author IF: 7,800 Q2: 3 Q3: 0 Q4: 0	
<b>57</b>	<b>ZSUZSANNA DOMOKOS</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 3	D1: 0 Cumulative IF: 10,100 Q1: 3 First author IF: 7,300 Q2: 0 Q3: 0 Q4: 0	
<b>58</b>	<b>KATA KELEMEN</b> University: Semmelweis University Type of PhD: inside (SMS) Date of dissertation: 2025 No. of articles: 12	D1: 11 Cumulative IF: 36,300 Q1: 0 First author IF: 6,400 Q2: 0 Q3: 0 Q4: 0	
<b>59</b>	<b>JÁNOS KÖNIG</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 8	D1: 3 Cumulative IF: 10,700 Q1: 0 First author IF: 7,500 Q2: 0 Q3: 0 Q4: 0	
<b>60</b>	<b>ANNA NÉMETH</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 5	D1: 4 Cumulative IF: 21,000 Q1: 1 First author IF: 9,600 Q2: 0 Q3: 0 Q4: 0	
<b>61</b>	<b>VIKTÓRIA VITAI</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 7	D1: 4 Cumulative IF: 21,340 Q1: 3 First author IF: 8,000 Q2: 0 Q3: 0 Q4: 0	

	<b>PÉTER TAJTI</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 6	D1: 2 Cumulative IF: 32,547 Q1: 3 First author IF: 21,800 Q2: 0 Q3: 0 Q4: 1	
<b>63</b>			
<b>64</b>	<b>ZSOLT HUSZÁR</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 5	D1: 3 Cumulative IF: 29,000 Q1: 2 First author IF: 15,200 Q2: 0 Q3: 0 Q4: 0	
<b>65</b>	<b>KATALIN LUGOSI</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 5	D1: 0 Cumulative IF: 17,630 Q1: 4 First author IF: 8,930 Q2: 0 Q3: 0 Q4: 1	
<b>66</b>	<b>ISTVÁN LÁSZLÓ BARADÁCS</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 4	D1: 0 Cumulative IF: 10,300 Q1: 3 First author IF: 6,800 Q2: 0 Q3: 1 Q4: 0	
<b>67</b>	<b>ANNA EVELIN JUHÁSZ</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 8	D1: 3 Cumulative IF: 14,100 Q1: 0 First author IF: 14,100 Q2: 0 Q3: 0 Q4: 0	
<b>68</b>	<b>TAMÁS FAZEKAS</b> University: Semmelweis University Type of PhD: inside (SMS) Date of dissertation: 2025 No. of articles: 46	D1: 17 Cumulative IF: 186,53 Q1: 16 First author IF: 44,67 Q2: 10 Q3: 1 Q4: 2	
<b>69</b>	<b>ANETT SZABÓ</b> University: Semmelweis University Type of PhD: inside (SMS) Date of dissertation: 2025 No. of articles: 12	D1: 4 Cumulative IF: 46,700 Q1: 7 First author IF: 8,100 Q2: 2 Q3: 0 Q4: 0	

70	<b>ÁDÁM DÁNIEL SZÉLES</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 9	D1: 2 Cumulative IF: 34,300 Q1: 2 First author IF: 15,200 Q2: 5 Q3: 0 Q4: 0	
71	<b>MAHMOUD OBEIDAT</b> University: Semmelweis University Type of PhD: inside (faculty) Date of dissertation: 2025 No. of articles: 21	D1: 13 Cumulative IF: 178.8 Q1: 7 First author IF: 33,300 Q2: 1 Q3: 0 Q4: 0	
72	<b>ANETT RANCZ</b> University: Semmelweis University Type of PhD: inside (faculty) Date of dissertation: 2025 No. of articles: 11	D1: 5 Cumulative IF: 51,500 Q1: 5 First author IF: 7,300 Q2: 1 Q3: 0 Q4: 0	
73	<b>MARIE ANNE ENGH</b> University: Semmelweis University Type of PhD: inside (faculty) Date of dissertation: 2025 No. of articles: 37	D1: 9 Cumulative IF: 155,909 Q1: 27 First author IF: 5,600 Q2: 1 Q3: 0 Q4: 0	
74	<b>PÉTER MÁRTON KULYASSA</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 6	D1: 0 Cumulative IF: 13,600 Q1: 3 First author IF: 6,400 Q2: 2 Q3: 1 Q4: 0	
75	<b>CSENGE ERZSÉBET SZIGETVÁRY</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 5	D1: 0 Cumulative IF: 19,900 Q1: 5 First author IF: 6,800 Q2: 0 Q3: 0 Q4: 0	
76	<b>KINGA KOVÁCS</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 4	D1: 2 Cumulative IF: 17,600 Q1: 1 First author IF: 11,300 Q2: 1 Q3: 0 Q4: 0	

	<b>ESZTER BAKÓ</b>	D1: 1 Cumulative IF: 18,400	
77	University: Semmelweis University	Q1: 3 First author IF: 9,100	
	Type of PhD: inside	Q2: 0	
	Date of dissertation: 2025	Q3: 0	
	No. of articles: 4	Q4: 0	
	<b>DOROTTA BASTIDAS-GERGŐ</b>	D1: 2 Cumulative IF: 51,755	
78	University: Semmelweis University	Q1: 8 First author IF: 5,800	
	Type of PhD: inside	Q2: 2	
	Date of dissertation: 2025	Q3: 0	
	No. of articles: 12	Q4: 0	
	<b>ORSOLYA ZSUZSANNA GRESITS</b>	D1: 1 Cumulative IF: 10,600	
79	University: Semmelweis University	Q1: 3 First author IF: 5,400	
	Type of PhD: inside	Q2: 0	
	Date of dissertation: 2025	Q3: 0	
	No. of articles: 7	Q4: 1	
	<b>LUCA HERGÁR</b>	D1: 2 Cumulative IF: 15,700	
80	University: Semmelweis University	Q1: 2 First author IF: 7,400	
	Type of PhD: inside	Q2: 1	
	Date of dissertation: 2025	Q3: 0	
	No. of articles: 6	Q4: 0	
	<b>KRISZTIÁN BALÁZS KOVÁCS</b>	D1: 1 Cumulative IF: 12,597	
81	University: Semmelweis University	Q1: 2 First author IF: 6,797	
	Type of PhD: inside	Q2: 1	
	Date of dissertation: 2025	Q3: 1	
	No. of articles: 6	Q4: 1	
	<b>VIKTOR WENINGER</b>	D1: 3 Cumulative IF: 18,200	
82	University: Semmelweis University	Q1: 1 First author IF: 9,200	
	Type of PhD: inside	Q2: 0	
	Date of dissertation: 2025	Q3: 0	
	No. of articles: 4	Q4: 0	
	<b>ISTVÁN SZONDY</b>	D1: 2 Cumulative IF: 12,000	
83	University: Semmelweis University	Q1: 1 First author IF: 7,800	
	Type of PhD: inside	Q2: 0	
	Date of dissertation: 2025	Q3: 0	
	No. of articles: 3	Q4: 0	

	<b>NOÉMI ÁGNES VÁMOSI-GALAJDA</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 6	D1: 3 Cumulative IF: 36,300 Q1: 2 First author IF: 16,000 Q2: 1 Q3: 0 Q4: 0	
<b>84</b>	<b>NOÉMI NÓRA VARGA</b> University: Semmelweis University Type of PhD: inside Date of dissertation: 2025 No. of articles: 7	D1: 0 Cumulative IF: 17,500 Q1: 5 First author IF: 7,600 Q2: 0 Q3: 0 Q4: 0	
<b>85</b>	<b>GERGÓ BERKE</b> University: University of Pécs Type of PhD: outside Date of dissertation: 2025 No. of articles: 9	D1: 0 Cumulative IF: 47,700 Q1: 7 First author IF: 33,500 Q2: 2 Q3: 0 Q4: 0	
<b>86</b>	<b>TAMÁS HUSSEIN</b> University: University of Pécs Type of PhD: outside (faculty) Date of dissertation: 2025 No. of articles: 18	D1: 2 Cumulative IF: 118,000 Q1: 14 First author IF: 3,100 Q2: 1 Q3: 1 Q4: 0	
<b>87</b>	<b>EDUARD OSTARIJAS</b> University: University of Pécs Type of PhD: outside Date of dissertation: 2025 No. of articles: 22	D1: 5 Cumulative IF: 84,696 Q1: 8 First author IF: 10,966 Q2: 4 Q3: 2 Q4: 3	
<b>88</b>	<b>ZSÓFIA LILLA RÉVÉSZNÉ VERECZKEI</b> University: University of Pécs Type of PhD: outside Date of dissertation: 2025 No. of articles: 22	D1: 3 Cumulative IF: 30,700 Q1: 3 First author IF: 14,400 Q2: 1 Q3: 0 Q4: 0	
<b>89</b>	<b>ZOLTÁN RUMBUS</b> University: University of Pécs Type of PhD: outside (faculty) Date of dissertation: 2025 No. of articles: 41	D1: 10 Cumulative IF: 157,789 Q1: 19 First author IF: 11,167 Q2: 8 Q3: 0 Q4: 0	

**MÁTYÁS VAJDA**

University:	University of Pécs	D1: 0 Cumulative IF: 8,600
91 Type of PhD:	inside	Q1: 3 First author IF: 4,700
Date of dissertation:	2025	Q2: 0
No. of articles:	3	Q3: 0
		Q4: 0

**GRÉTA PHAM-DOBOR**

University:	University of Pécs	D1: 1 Cumulative IF: 28,112
92 Type of PhD:	inside	Q1: 3 First author IF: 9,256
Date of dissertation:	2025	Q2: 2
No. of articles:	6	Q3: 0
		Q4: 0





# SEMINAR LECTURES

The SU CTM aims to introduce PhD students to some of the world's most outstanding researchers, physician-scientists, pharmaceutical company executives, their career, scientific work, discoveries and thinking of science.

The Seminar Lecturers are invited in close collaboration with the National Biomedical Foundation which runs one of Europe's most prominent undergraduate scientist education program.

The program is to support talented young people interested in biomedical research and to foster their scientific work.

The secondary school part of the program trains more than 1000 high school students nationwide. The university training program is attended by students who go to the university and carry out their scientific research work in one of the cities of the country with higher education in the sciences, such as Budapest, Pécs, Szeged or Debrecen.

The following distinguished scientists have already held a seminar or will hold one this year.

## PAST AND UPCOMING LECTURERS

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### OLE HOLGER PETERSEN

*Professor, Cardiff School of Biosciences, Cardiff University, Wales, UK*

#### DATE OF THE LECTURE(S)

December 9 (Thursday), 2021

December 15 (Wednesday), 2023

6 December 6 (Friday), 2024

#### ABOUT THE LECTURER

Ole Holger Petersen CBE, FMedSci, FRS (born 3 March 1943) is a research professor at Cardiff University where he studies physiology, especially calcium signalling and the pancreas. Prior to this he was Symers Professor of Physiology at the University of Dundee, and then George Holt Professor of Physiology at the University of Liverpool.

Petersen was elected a member of the Academia Europaea in 1988. He was elected a Fellow of the Royal Society (FRS) in 2000 "for his major contributions to the understanding of the cell physiology of calcium signalling", and appointed a Commander of the Order of the British Empire (CBE) in the 2008 New Year Honours, "for services to Science". He is also a Fellow of the Academy of Medical Sciences.

He was the very first in the world to use the patch clamp technique on epithelial cells. Notably, his research decisively accelerated the spread of the patch clamp technique, for which Erwin Neher and Bert Sakmann were awarded the Nobel Prize in 1993.



## PETER DOHERTY

*Nobel Prize Laureate* Veterinarian & immunologist Peter Doherty Institute at the University of Melbourne

### DATE OF THE LECTURE(S)

April 7 (Thursday), 2022 (online)

#### ABOUT THE LECTURER

Peter C. Doherty was born in Brisbane, Australia in 1940. At the age of 17 he applied to the University of Queensland to study veterinary medicine. He graduated with a BSc in 1962 and a MSc degree in 1966, while also completing the rural veterinary and laboratory internships required by the State Department of Agriculture. He then applied for a post at the Moredun Research Institute in Edinburgh and obtained a PhD from the University of Edinburgh in 1970.

Doherty returned to Australia in December 1971 to the Australian National University in Canberra, where he was offered a research post. He "first studied Semliki Forest virus infection in mice, then moved on to lymphocytic choriomeningitis virus (LCMV), which was more suitable for immunoassays. In 1973, he met Rolf Zinkernagel and they started a joint program to study how the immune system's 'killer cells', the T cells, recognize which virusinfected cells to destroy. The discovery soon found practical applications in transplantation, vaccine development, autoimmune disease research and the development of anti-infective drugs.



## TIM HUNT

*Nobel Prize Laureate* biochemist and molecular physiologist

### DATE OF THE LECTURE(S)

April 9 (Saturday), 2021 (online)

April 7 (Monday), 2025

#### ABOUT THE LECTURER

Tim Hunt is a biochemist. With Lee Hartwell and Paul Nurse he shared in the Nobel Prize in Physiology or Medicine in 2001 "for their discoveries of key regulators of the cell cycle". Tim's contribution was the discovery of cyclins, proteins that are crucial for mitosis and other cell cycle transitions. Tim's earlier work focused on the control of haemoglobin synthesis in red blood cells.

Amongst other things, he discovered that double-stranded RNA (normally only found in virus-infected cells) was a powerful inhibitor of protein synthesis and, together with colleagues in the Department of Biochemistry at the University of Cambridge, figured out the mechanism — a protein kinase that phosphorylated an initiation factor. This led Tim to study protein synthesis in clams, sea urchins and eventually frog eggs, which revealed the abrupt disappearance of cyclins in dividing cells from yeast to man. In the end, it turned out that cyclins bind to and activate the enzymes that had been identified by Lee and Paul, the cyclin-dependent kinases (CDKs).



## AARON CIECHANOVER

*Nobel Prize Laureate Israeli biologist*

### DATE OF THE LECTURE(S)

April 5 (Tuesday), 2022

#### ABOUT THE LECTURER

Aaron Ciechanover was born in Haifa in 1947. He received his M.Sc. (1971) and M.D. (1973) from the Hebrew University in Jerusalem. After completing his national service (1973-1976) as military physician, he continued his studies to obtain a doctorate in biological sciences in the Faculty of Medicine in the Technion (1982). There, as a graduate student with Dr. Avram Hershko and in collaboration with Dr. Irwin A. Rose from the Fox Chase Cancer Centre in Philadelphia, USA, they discovered that covalent attachment of ubiquitin to a target protein signals it for degradation. In 2004 they received the Nobel Prize in Chemistry for characterizing the method that cells use to degrade and recycle proteins using ubiquitin.

He is currently a Distinguished Research Professor in the Faculty of medicine at the Technion – Israel Institute of Technology in Haifa, Israel. Aaron Ciechanover won the Nobel Prize shared with Dr. Avram Hershko and Dr. Irwin A. Rose in Chemistry in 2004 for characterizing the method that cells use to degrade and recycle proteins using ubiquitin.



## KURT WÜTHRICH

*Nobel Prize Laureate Swiss chemist/biophysicist*

### DATE OF THE LECTURE(S)

April 5 (Tuesday), 2022 (online)

#### ABOUT THE LECTURER

He was born in Aarberg and studied chemistry, physics, and mathematics at the University of Bern before pursuing his PhD at the University of Basel in 1964. During his graduate studies, Kurt Wüthrich started out working with electron paramagnetic resonance spectroscopy.

As a postdoc he began working with the newly developed and related technique of nuclear magnetic resonance spectroscopy to study the hydration of metal complexes. When he joined the Bell Labs, he started studying the structure and dynamics of proteins. After he returned to Zürich, collaborating with his colleagues, they developed the first two-dimensional NMR experiments, and established the Nuclear Overhauser effect as a convenient way of measuring distances within proteins.

In 2002 Kurt Wüthrich received half of the Nobel Prize in Chemistry for his development of nuclear magnetic resonance spectroscopy for determining the three-dimensional structure of biological macromolecules in solution.



## ERWIN NEHER

*Nobel Prize Laureate German biophysicist*

### DATE OF THE LECTURE(S)

April 6 (Tuesday), 2022

#### ABOUT THE LECTURER

Erwin Neher was born in Landsberg am Lech in 1944. He enrolled at the Munich Technical College in 1963, majoring in physics. After obtaining a BSc degree, he went to the University of Wisconsin on a Fulbright scholarship. In 1967, he returned to Munich, where he began research on the synapses of nerve cells and the ionic currents in their membranes at the Max Planck Institute of Psychiatry. There he met Bert Sakmann, a PhD student working on a similar topic. After obtaining his doctorate, he continued his work at the Max Planck Institute in Göttingen with Bert Sakmann from 1973. Together, they began to develop a technique to measure the function of a single ion channel in a cell; the result of their work, the patch clamp method, was finally published in 1976.

After 1983, his interest turned from ion channels to the inside of the cell, and he investigated cellular responses to nerve stimuli such as hormone secretion and neurotransmitter secretion. In 1991 Erwin Neher and Bert Sakmann won the Nobel Prize for Medicine, for discovering the function of ion channels in cells and for the development of the patch clamp measurement technique.



## JEAN-LOUIS VINCENT

*MD, PhD, Professor of intensive care and intensivist from Brussels, Belgium*

### DATE OF THE LECTURE(S)

February 24 (Thursday), 2022

#### ABOUT THE LECTURER

Professor Jean-Louis Vincent is currently Professor of intensive care medicine at the Université Libre de Bruxelles and intensivist in the Department of Intensive Care at Erasme University Hospital in Brussels, Belgium.

He is a Past-President of the World Federation of Societies of Intensive and Critical Care Medicine (WFSICCM), the European Society of Intensive Care Medicine (ESICM), the European Shock Society (ESS), the Belgian Society of Intensive Care Medicine (SIZ), and the International Sepsis Forum (ISF). He is a member of the Belgian Royal Academy of Medicine and was made a Baron by the King of Belgium. He also received numerous international awards.

He has signed over 1000 peer-reviewed articles, 400 book chapters and 1000 abstracts. He has edited more than 112 books, and is the editor-in-chief of Critical Care, Current Opinion in Critical Care, and ICU Management & Practice. His name appears more than 1300 times in Pubmed, and his work has been cited more than 240,000 times; his H-index is 192.



## GÁBOR ORBÁN

*Chairman of the Foundation for National Health Care and Medical Education & CEO of Gedeon Richter Plc.*

### DATE OF THE LECTURE(S)

March 17 (Thursday), 2022

#### ABOUT THE LECTURER

Appointed Chief Executive Officer of Gedeon Richter Plc. from November 2017. He is the Chairman of the Foundation for National Health Care and Medical Education (Semmelweis University) from August 2021.

Began his professional career as an economist for the National Bank of Hungary and the European Central Bank. He later joined Aegon Asset Management where he worked as a fund manager and the head of the fixed income desk. He served as the state secretary in charge of taxation and the financial sector at the Ministry for National Economy for two and a half years, followed by a year spent at Banque Rothschild where he worked as a consultant. He earned his MA degree at the Budapest University of Economics.



## SHAHROKH SHARIAT

*M.D., Director of the University Clinic of Urology, Vienna & Assistant professor of urology and oncology in New York, Dallas, Prague and Moscow*

### DATE OF THE LECTURE(S)

March 24 (Thursday), 2022

December 6 (Friday), 2024

November 23-25, 2025

#### ABOUT THE LECTURER

Professor Shariat is a leading member of several multi-centre research groups (Bladder Cancer Research Consortium, Bladder Cancer Detection Group and Urothelial Upper Tract Carcinoma Collaboration) and prospective clinical trials. He is a member of numerous academic societies and a reviewer for a scientific journal, for abstracts at meetings and for grants to national and international organizations. He is on the editorial board of journals such as European Urology, BJU International, World Journal of Urology, Current Opinion in Urology (editor-in-chief) and Immunotherapy. He runs a charity for refugees and participates as a physician in two other charitable projects.

His scientific interest is in urological oncology – including molecular mechanisms and markers, early detection, research into the origin and therapy of diseases, translational studies and outcome research. In particular, he is engaged in the discovery, testing and validation of molecular markers related to the biological and clinical properties of prostate and urothelial carcinomas. Also in 2020, he was awarded the very prestigious Doctor Honoris Causa degree by Semmelweis University.



## BOTOND ROSKA

*Neurobiologist, Director of the Institute of Molecular and Clinical Ophthalmology Basel (IOB) and Professor of Medicine and Science at the University of Basel, Switzerland*

### DATE OF THE LECTURE(S)

November 14 (Monday), 2022

#### ABOUT THE LECTURER

Professor Roska's research is focused on visual perception including its principles and pathways of information processes. His laboratory aims to find ways to repair visual dysfunction by investigating the function of the retina, thalamus and the cortex at the level of cell types and circuits, and using the acquired knowledge to understand disease mechanisms and to develop treatments.

Professor Roska has graduated at Semmelweis University in 1995 and earned a PhD in neurobiology at the University of California, Berkeley in 2002. After finishing his PhD, he researched genetics and virology at the Harvard University Medical School. He then continued his work in Basel, Switzerland to establish a research group at the Friedrich Miescher Institute for Biomedical Research while joining the faculty of the University of Basel. He is now founder director of the Institute of Molecular and Clinical Ophthalmology Basel, Switzerland.



## BRUCE A. BEUTLER

*Nobel Prize Laureate immunologist and geneticist director of the Centre for the Genetics of Host Defense at the University of Texas*

### DATE OF THE LECTURE(S)

March 27 (Monday), 2023

#### ABOUT THE LECTURER

Bruce Alan Beutler is an American immunologist and geneticist. He was the first to isolate mouse tumor necrosis factor-alpha (TNF), and to demonstrate the inflammatory potential of this cytokine, proving its important role in endotoxin-induced shock. He discovered an important family of receptors that allow mammals to sense infections when they occur, triggering a powerful inflammatory response. For this work he received the 2011 Nobel Prize in Physiology or Medicine.

Beutler received his undergraduate degree from the University of California at San Diego in 1976, and his MD degree from the University of Chicago in 1981. After two years of residency at the University of Texas Southwestern Medical Center, he became a postdoctoral fellow and then an Assistant Professor at the Rockefeller University. Returning to Dallas in 1986 as an HHMI investigator, he designed recombinant inhibitors of TNF that are widely used in the treatment of rheumatoid arthritis and other inflammatory diseases. Moving in 2000 to the Scripps Research Institute, Beutler developed the largest mouse mutagenesis program in the world, and applied a forward genetic approach to decipher the signaling pathways activated by TLRs.



## RANDY SCHEKMAN

*Nobel Prize Laureate* cell biologist at the University of California, Berkeley

### DATE OF THE LECTURE(S)

December 15 (Wednesday), 2023

March 29-31, 2026

### ABOUT THE LECTURER

Randy Wayne Schekman is an American cell biologist who was awarded the 2013 Nobel Prize in Physiology and Medicine for his research on vesicular transport, which has contributed to our understanding of how molecules produced by cells are delivered to the right place at the right time. His main interests are *saccharomyces cerevisiae*, organelle assembly, intracellular protein transport, assembly of cellular organelles, neurodegenerative disease, regulation of lymphocyte development.

He graduated from high school at Western High School in Anaheim and went on to study at the University of California, Los Angeles (UCLA) in 1966. One of his professors there was Willard F. Libby, who won the Nobel Prize in Chemistry for his invention of radiocarbon dating. He was involved in bacteriophage genetics research during his undergraduate studies and spent a year as an exchange student at the University of Edinburgh. After returning home, he took a summer job at the Biological Laboratories of Harvard University and wrote his first scientific communication based on his research.



## THOMAS C. SÜDHOF

*Nobel Prize Laureate* German-American biochemist professor in the School of Medicine in the Department of Molecular and Cellular Physiology at Stanford University

### DATE OF THE LECTURE(S)

December 15 (Wednesday), 2023

### ABOUT THE LECTURER

Thomas Christian Südhof is a German-American biochemist who was awarded the 2013 Nobel Prize in Physiology and Medicine for his discovery of how neurotransmitter molecules are transported within cells in vesicles in nerve cells. His work initially focused on the mechanism of neurotransmitter release which is the first step in synaptic transmission, and whose molecular basis was completely unknown in 1986. Later on, Südhof's work increasingly turned to the analysis of synapse formation and specification, processes that mediate the initial assembly of synapses, regulate their maintenance and elimination, and determine their properties.

He studied at the university in Aachen, at Harvard University in Cambridge, Massachusetts in the United States, and at the university in Göttingen. He received his Ph.D. from Göttingen's Max Planck Institute for Biophysical Chemistry in 1982. The following year, Südhof moved to the University of Texas Southwestern Medical Centre. In 2008 he moved to Stanford University in Palo Alto, California.



## MARC VAN RANST

*Belgian public health doctor and Professor of Virology at the Katholieke Universiteit Leuven and the Rega Institute for Medical Research*

### DATE OF THE LECTURE(S)

June 14 (Wednesday), 2023

#### ABOUT THE LECTURER

Marc Van Ranst is a Belgian public health doctor and Professor of Virology at the Katholieke Universiteit Leuven (Leuven, Belgium) and the Rega Institute for Medical Research. On 1 May 2007, he was appointed as Interministerial commissioner by the Belgian federal government to prepare Belgium for an influenza pandemic. Professor Van Ranst teaches virology and computational genomics at the Faculty of Medicine at the KU Leuven. Since 1995, he holds an affiliate academic position at the Faculty of Natural Sciences at Charles University in Prague, where he teaches Bioinformatics.

In 2020, during the COVID-19 pandemic, Marc Van Ranst became a member both of the Belgian 'Risk Assessment Group' (RAG), which analyses the risks of coronavirus SARS-CoV-2 for public health, and of the 'Scientific committee Coronavirus' which advises Belgian health authorities on combatting the virus and which makes prognoses on its evolution and spread in Belgium. He published over 270 scientific papers in peer reviewed journals and contributed eight chapters to books on molecular evolution and bioinformatics.



## BRIAN KOBILKA

*Nobel Prize Laureate biologist and chemist, Professor in the Department of Molecular and Cellular Physiology at Stanford University School of Medicine, Co-founder of ConfometRx*

### DATE OF THE LECTURE(S)

April 12 (Friday), 2024

#### ABOUT THE LECTURER

He received a Bachelor's Degree in Biology and Chemistry from the University of Minnesota Duluth, and earned his M.D., cum laude, from Yale University School of Medicine. Kobilka worked in research as a postdoctoral fellow under Robert Lefkowitz at Duke University, where he started work on cloning the  $\beta$ 2-adrenergic receptor. Kobilka moved to Stanford in 1989. He was a Howard Hughes Medical Institute (HHMI) investigator from 1987 to 2003. He was named a member of the National Academy of Sciences in 2011.

Kobilka is the 1994 recipient of the American Society for Pharmacology and Experimental Therapeutics John J. Abel Award in Pharmacology. His GPCR structure work was named "runner-up" for the 2007 "Breakthrough of the Year" award from Science. The work was, in part, supported by Kobilka's 2004 Javits Neuroscience Investigator Award from the National Institute of Neurological Disorders and Stroke. In 2017, Kobilka received the Golden Plate Award of the American Academy of Achievement. As part of Shenzhen's 13th Five-Year Plan funding research in emerging technologies and opening "Nobel laureate research labs", in 2017 he opened the Kobilka Institute of Innovative Drug Discovery at the CUHK Shenzhen campus in Southern China.



## JOHN EU-LI WONG

*Medical oncologist-haematologist, Senior Vice-President of Health Innovation and Translation at the National University of Singapore*

### DATE OF THE LECTURE(S)

April 12 (Friday), 2024

#### ABOUT THE LECTURER

He is actively involved in developing biomedical sciences as a key pillar of Singapore's economy, as well as Singapore's first academic health system between the National University Hospital and NUS. He is also a member of the World Economic Forum Global Agenda Council on Personalized and Precision Medicine; the Nature Index Panel of Senior Medical Advisers; the international editorial board of The American Journal of Medicine; and the editorial board of the Journal of the American Medical Association.

He jointly founded the Cancer Therapeutics Research Group, a multi-national consortium of nine academic institutions, and has served as a member of the International Education Council for Molecular Targeted Therapy for Cancer, the American Society of Clinical Oncology International Affairs Committee, and the International Oncology Foundation advisory board. Also, besides many prestigious award and recognition, he received two Public Administration Medals - a silver and a gold one - at the 2005 and 2006 National Day Awards in Singapore.



## MARTIN CHALFIE

*Nobel Prize Laureate physiologist, former chair of the Department of Biological Sciences at Columbia University*

### DATE OF THE LECTURE(S)

December 6 (Friday), 2024

#### ABOUT THE LECTURER

Born in Chicago and raised in Skokie, Illinois, he pursued science at Harvard, earning a Ph.D. in Physiology in 1977. Despite initial doubts about his research abilities, a successful lab experiment reignited his confidence, leading to postdoctoral work with Sydney Brenner at the MRC Laboratory of Molecular Biology in Cambridge, England. In 1982, he joined Columbia as an Assistant Professor.

Dr. Chalfie's groundbreaking research with *Caenorhabditis elegans* helped establish the first genetic model for mechanosensation. His lab has since explored neuronal differentiation, mechanosensory signaling, microtubule function, and the genetic control of neuronal cell fate. He shared the 2008 Nobel Prize in Chemistry for his introduction of Green Fluorescent Protein (GFP) as a biological marker. An esteemed member of the National Academy of Sciences, National Academy of Medicine, and the Royal Society, he also serves as president of the American Society for Cell Biology and chairs the Committee on Human Rights for the National Academies.



## DAN SHECHTMAN

*Nobel Laureate in Chemistry (2011), Israel*

### DATE OF THE LECTURE(S)

April 8, 2025

#### ABOUT THE LECTURER

Dan Shechtman is an Israeli scientist best known for his discovery of quasicrystals, a groundbreaking finding that challenged long-standing beliefs about atomic structure in solid materials. In 1982, while studying rapidly cooled aluminum–manganese alloys using electron microscopy, Shechtman observed a diffraction pattern indicating a form of order that did not repeat periodically—something considered impossible at the time. His discovery contradicted the accepted laws of crystallography, which stated that crystals could only have repeating, symmetrical structures. Initially met with skepticism and even ridicule from parts of the scientific community, Shechtman's work was later validated through further experimental evidence and theoretical explanations. The discovery of quasicrystals revealed a new type of matter with unique physical properties, such as low friction and poor heat conduction, and inspired research into complex atomic arrangements in materials science. For this revolutionary contribution, Dan Shechtman was awarded the 2011 Nobel Prize in Chemistry, transforming our understanding of how atoms can organize in solids.



## DAVID WEINBERG

*Editor in chief, Gastroenterology, Fox Chase Cancer Center, USA*

### DATE OF THE LECTURE(S)

April 8, 2025

#### ABOUT THE LECTURER

Dr. David S. Weinberg is an American physician-scientist recognized for his influential work in gastroenterology and cancer prevention, particularly in the early detection and management of colorectal cancer. As the Editor-in-Chief of *Gastroenterology*, the leading journal in the field, he plays a key role in shaping scientific discourse and advancing research in digestive diseases. At the Fox Chase Cancer Center in Philadelphia, where he serves as Chair of Medicine, his research has focused on improving colorectal cancer screening strategies, patient adherence to preventive care, and the cost-effectiveness of screening programs.

Dr. Weinberg's work has significantly contributed to refining evidence-based guidelines for cancer screening and prevention, helping reduce mortality from gastrointestinal cancers through earlier diagnosis and better public health interventions. Beyond his research and editorial leadership, he is also known for his commitment to mentoring the next generation of clinicians and scientists, fostering collaboration between clinical practice and research to enhance patient outcomes in gastroenterology and oncology.



## DENNIS LO

*Winner of Lasker-DeBakey Clinical Medical Research Award (2022), Hong Kong*

### DATE OF THE LECTURE(S)

April 8, 2025

#### ABOUT THE LECTURER

Dennis Lo is a molecular biologist from Hong Kong, currently serving as Vice-Chancellor and President of the Chinese University of Hong Kong (CUHK). In 1997, he made a groundbreaking discovery: cell-free fetal DNA circulating in the blood plasma of pregnant women. He then developed non-invasive prenatal testing (NIPT), notably for Down syndrome (trisomy 21), using techniques like massively parallel sequencing to “count” chromosome 21 sequences in maternal blood. This technology has been adopted in dozens of countries, sparing millions of women from riskier invasive procedures like amniocentesis. Beyond prenatal testing, Lo has extended his work on circulating nucleic acids to cancer detection — developing blood-based assays to identify multiple cancer types early on. His achievements have earned him many top scientific honors, including the 2022 Lasker–DeBakey Clinical Medical Research Award for non-invasive prenatal diagnosis, the 2021 Breakthrough Prize, and membership in prestigious academies such as the Royal Society and the U.S. National Academy of Sciences



## JOACHIM FRANK

*Nobel Laureate in Chemistry (2017), Professor at Columbia University, USA*

### DATE OF THE LECTURE(S)

April 8, 2025

#### ABOUT THE LECTURER

Dr. Joachim Frank is a German-American biophysicist renowned for his pioneering work in cryo-electron microscopy (cryo-EM), a technique that revolutionized the way scientists visualize the molecular machinery of life. In the 1970s and 1980s, he developed computational methods that allowed researchers to reconstruct high-resolution, three-dimensional images of biological molecules from thousands of two-dimensional electron microscope images. This innovation overcame major technical barriers in structural biology, enabling the detailed visualization of large biomolecules in their natural states—something previously thought impossible.

For this transformative contribution, Joachim Frank was awarded the 2017 Nobel Prize in Chemistry, shared with Jacques Dubochet and Richard Henderson. His work has provided deep insights into complex biological processes, such as protein synthesis by the ribosome, and continues to drive advances in drug discovery and molecular medicine. As a Professor at Columbia University, Dr. Frank remains at the forefront of structural biology, combining cutting-edge imaging with computational analysis to further unravel the molecular foundations of life.



## PETER RATCLIFFE

Professor of Clinical medicine, Oxford University, UK  
Nobel Prize Laureate in Medicine or Physiology, 2019

### DATE OF THE LECTURE(S)

November 23-25, 2025

#### ABOUT THE LECTURER

Sir Peter John Ratcliffe, FRS, FMedSci (born 14 May 1954) is a British physician-scientist who is trained as a nephrologist. He was a practising clinician at the John Radcliffe Hospital, Oxford and Nuffield Professor of Clinical Medicine and head of the Nuffield Department of Clinical Medicine at the University of Oxford from 2004 to 2016. He has been a Fellow of Magdalen College, Oxford since 2004. In 2016 he became Clinical Research Director at the Francis Crick Institute, retaining a position at Oxford as a member of the Ludwig Institute of Cancer Research and director of the Target Discovery Institute, University of Oxford.

Ratcliffe is best known for his work on cellular reactions to hypoxia, for which he shared the 2019 Nobel Prize in Physiology or Medicine with William Kaelin Jr. and Gregg L. Semenza.

Ratcliffe has received a number of awards, accolades, and honours for his seminal work on hypoxia. He was knighted in the 2014 New Year Honours for services to clinical medicine.



## FRANCIS CHAN

Professor of Medicine and Therapeutics, Director of the Centre for Gut Microbiota Research at CU Medicine, Hong Kong

### DATE OF THE LECTURE(S)

March 29-31, 2026

#### ABOUT THE LECTURER

He is an internationally renowned clinician-scientist in gastrointestinal (GI) bleeding, helicobacter pylori, colorectal cancer prevention and applications of gut microbiota. He is also the co-director of the Microbiota I-Center (MagIC), the first microbiota innovation centre in the Greater Bay Area. Starting his research career more than two decades ago, he is the first in academic history to publish eight first-authored, investigator-initiated, original research articles in *The New England Journal of Medicine* and *The Lancet*. He is also the first scholar in Asia to be profiled by *The Lancet*, in May 2007, underlining his excellence in clinical research. His ground-breaking research has generated over 860 full scientific articles in high-impact international journals, yielding an h-index of over 100. His research on the prevention of non-steroidal anti-inflammatory drug- (NSAID) and aspirin-related GI bleeding has led to major revisions to clinical practice guidelines in the U.S., Europe and the Asia-Pacific region, which assist physicians to communicate with patients, enhancing their understanding of the benefits and risks of aspirin therapy. In recent years, he and his research team have developed a novel faecal test, M3CRC, which can detect polyps and early colon cancers. In 2023, he led the formulation of new clinical practice guidelines with international experts on the use of non-invasive biomarkers for colorectal cancer screening.



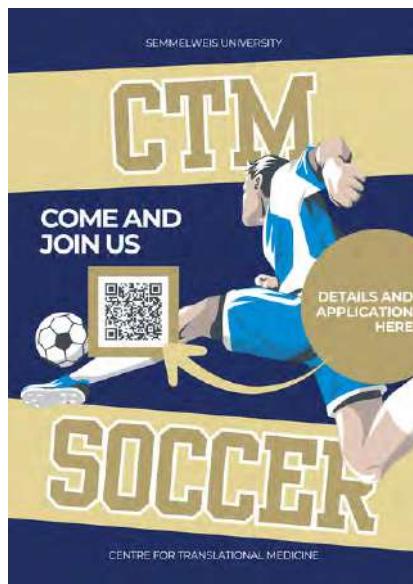
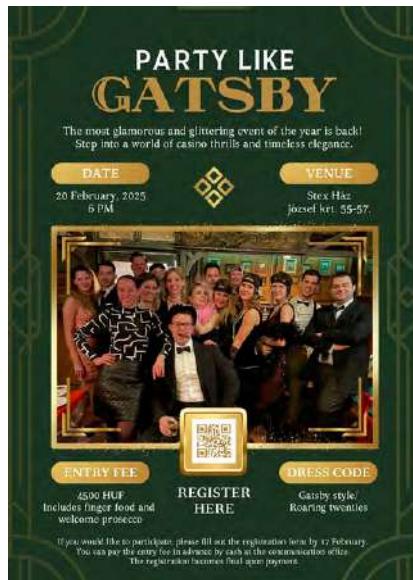
# FREE TIME ACTIVITIES



# FREE TIME ACTIVITIES

## LIFE OUTSIDE OF WORK

Shared experiences outside of the workplace play a key role in building stronger relationships and trust-based collaboration between members of the community. When students, mentors and colleagues meet not only in formal academic settings but also during informal social activities, it creates opportunities for deeper human connections that make everyday work smoother and more effective. These occasions allow participants to step outside the usual professional framework, reduce stress, prevent burnout and return with renewed energy. Our experience shows that even a single shared moment—whether it is a movie night, a themed gathering or an outdoor event—creates points of connection that later make scientific collaboration more natural and efficient. This year we are preparing with a variety of community events: a Halloween party, movie night, board game evening, collaborative painting session, spring picnic with outdoor games and a gathering on Margaret Island, along with further seasonal programs throughout the year. Everyone is welcome to join at any point—whether for a full event or just a short time—because the true value lies in spending meaningful time together. “From shared experiences emerges a shared strength — and it is this strength that drives a scientific community forward.”







**800+**  
PERSON



**50+**  
INSTITUTE



**34**  
COUNTRY



**340+**  
PRESS  
APPEARANCE



**917**  
PROJECT



**267**  
PROJECT  
ACCEPTED &  
SUBMITTED



**498**  
PUBLISHED  
ARTICLE



**24+**  
SEMINAR  
LECTURE



**4.853**  
AVERAGE  
IMPACT FACTOR



**2018.77**  
CUMULATIVE  
IMPACT FACTOR

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