

WINTER & SUMMER PERIOD

LEARNING BY DOING



25/26

SUMMER SCHOOL BASIC PROGRAM

OF THE CLINICAL TRANSLATIONAL PROGRAMS

Join our high quality educational program to learn the methods of translational medicine.









PROGRAM SUMMARY

BASIC INFORMATION ABOUT THE PROGRAM

ONE SCHOOL
FIVE COURSES

AT THE END OF THIS SUMMER SCHOOL, THE PARTICIPANTS WILL BE ABLE TO

- Acquire knowledge in translational medicine
- Critically appraise the scientific literature
- Understand the main modern clinical scientific methodologies
- Perform healthcare delivery science
- Conduct independent research work

| WINTER EDITION 2025/ 2026 | | | | | |
|---------------------------|---------------------|---------------|-----------------------|-------------------------|--|
| Application deadline | Interview period | Acceptance by | Course fee payment by | Course period (2 weeks) | |
| December 1 | December 2-5 | December 5 | December 15 | February 16-27 | |

| SUMMER EDITION 2025/ 2026 | | | | | |
|---------------------------|-----------|--------|-----------------------|----------------------------|--|
| Application deadline | | | Course fee payment by | Course period (2 weeks) | |
| May 11, 2026 | May 12-15 | May 15 | May 22 | July 20-31 | |

COURSE DIRECTOR

Péter Hegyi, MD, PhD, DSc, MAE

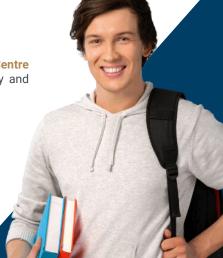
ORGANISERS

The SUMMER SCHOOL is organized jointly by the Centre for Translational Medicine, Semmelweis University and the Translational Medicine Foundation.

TUITION FEES

Application fee: 75 € / person or 350 € / group

COURSE FEE STARTING FROM 1300 €



INTRODUCTION

OF THE COLLABORATING INSTITUTES



SEMMELWEIS UNIVERSITY

Semmelweis University's history started more than 250 years ago in 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 that makes the University an internationally recognised centre of excellence.

TRANSLATIONAL MEDICINE FOUNDATION

- · Apply scientific results and innovations in healthcare.
- Facilitate data exchange between universities, hospitals, and research centers to improve multicenter research quality and efficiency.
- Help the public and professionals implement evidence-based knowledge through various platforms.
- Organize conferences, training, and provide support for research services and human resource selection.

THE HISTORY

OF TRANSLATIONAL MEDICINE IN HUNGARY



The **Translational Medicine (TM)** "learning by doing" education model was launched at Hungary University of Pécs in 2016 under the leadership of Péter Hegyi, who is the course director of this uniquely developed **SUMMER SCHOOL**. In the past five years, almost 50 PhD students and residents have participated in our programs. During this period, more than 300 high-quality publications have been published through scientific research and translational patient care initiatives and support from the **Translational Medicine Foundation**, the University of Pécs, the University of Szeged, and Semmelweis University (*Nature Medicine*). The results have enabled the development and supplementation of several treatment guidelines, allowing for the immediate application of scientific findings in patient care.

Semmelweis University aims to rank among the world's best universities and recognize the importance and high potential of translational medicine. Therefore, in 2021, this program was invited to function on a much bigger scale than before, now under the umbrella of Semmelweis University. As a result, the training at SU has already enrolled over 430 PhD/ MSc students and nearly 100 undergraduate research students.

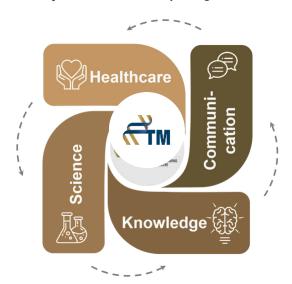
THE IMPORTANCE OF TRANSLATIONAL MEDICINE

The key goal of **Translational Medicine (TM)** is to transform scientific discoveries into tangible benefits for communities. This is crucial because scientific findings are currently underutilized in everyday medical practice, limiting their potential to save lives. In 2016, 1.7 million people under the age of 75 died in Europe, **and 1.2 million of these deaths could have been prevented** with effective public health interventions and better use of medical research.

Recognizing this, **Academia Europaea** launched a groundbreaking project in 2018 to speed up the application of scientific knowledge for the public good. Leading researchers, journal editors, and academic experts came together to develop the **TM cycle**—a model designed to close the gap between science and clinical practice. The TM cycle focuses on generating new scientific insights, making them accessible to healthcare providers, and communicating them effectively to the broader public. This approach aims to deliver more efficient, cost-effective healthcare—and that's where our summer school comes in.

By attending this program, you'll gain hands-on experience with the TM cycle, learning how to apply cutting-edge research directly to patient care. You'll work alongside international experts, growing your professional network and contributing to the future of global healthcare innovation. Join us to help make a real-world impact by transforming research into life-saving solutions.

Don't miss the chance to join the movement improving healthcare for everyone!



SUMMER SCHOOL PROGRAM

WHAT WE OFFER

The **SUMMER SCHOOL** mainly focuses on the second and third steps of the TM cycle. The program helps students to become critical consumers of medical research papers, to gather primary data on health issues through questioning and observation, and to conduct biomedical research. Students will gain an understanding of the planning of clinical research, including systematic reviews, patient registries, and clinical trials, by designing and extending projects in study groups, which are led by experienced members of the TM Centre.

THE THREE PILLARS OF THE PROGRAM

HARD SKILL

SOFT SKILL

BIOSTATISTICS

THE SUMMER SCHOOL FOCUSES ON THE MAIN MODERN HEALTHCARE DELIVERY SCIENTIFIC METHODOLOGIES OF TM

- **1. Systematic Reviews and Meta-Analysis:** Learn the essentials of meta-analyses and their role in evidence-based medicine, including designing systematic search strategies, reading forest plots, and assessing the validity of findings.
- 2. Patient Registries: Explore the practical aspects of developing and managing patient registries, from planning and IT infrastructure to data management, ethical approvals, and publication.
- **3. Clinical Trials:** Gain an overview of experimental study designs, focusing on study planning, randomization, bias, and interpreting cause-effect relationships in clinical research.
- **4. Biostatistics:** Understand the basics of statistical methods in medical sciences, including hypothesis testing, survival analysis, and ROC curve analysis to better interpret scientific data.
- **5. Soft Skills in Clinical Research:** Focus on critical soft skills such as time management and presentation skills, which are essential for effective clinical research and professional development.

KEY OUTCOMES

- Learn core concepts of healthcare delivery science and translational medicine.
- Gain practical experience in setting up patient registries, clinical trials, and systematic reviews.
- Master formulating clinical questions and sourcing reliable evidence using the PICO model
- Critically appraise clinical research using evidence-based methods.
- Develop essential soft skills like time management, communication, and presentation.

SCHEDULE AND CLASSES

Please note that the daily schedule is subject to adjustments as needed to enhance the learning experience. We will inform participants in advance of any changes to ensure a smooth and flexible course flow.

WEEK 1

| CET / SGT | MON | TUE | WED | THU | FRI |
|---------------|------------------------------------|-------------------------------|----------------------------|---------------------------|---------------------------|
| 07:00 / 13:00 | Introduction to Program | Data Management | Time Management | Basic Statistics | Figure Interpretation |
| 08:00 / 14:00 | Clinical Registries Overview | Registry Publication | Effective Communication | Descriptive Statistics | Biostatistics Overview |
| 09:00 / 15:00 | Data Collection | Registry IT Infrastructure | Presentation Skills | Hypothesis Testing | Diagnostic Tests |
| 10:00 / 16:00 | BREAK | | | | |
| 11:00 / 17:00 | Study Design | eCRF Development | Team Collaboration | Survival Analysis | Decision Errors |
| 12:00 / 18:00 | Registry Development | Ethical Approvals | Problem Solving | ROC Curves | Questionnaires |
| 13:00 / 19:00 | Q&A | Q&A | Q&A | Q&A | Q&A |

WEEK 2

| CET / SGT | MON | TUE | WED | THU | FRI |
|---------------|-------------------------------|------------------------|---------------------------------|----------------------------|-------------------------|
| 07:00 / 13:00 | Clinical Trial Design | Trial Protocols | Meta-Analysis Overview | PICO Model | Article Writing |
| 08:00 / 14:00 | Randomization | Study Execution | Systematic Review Design | Evidence Synthesis | Structuring Research |
| 09:00 / 15:00 | Bias in Trials | Patient Recruitment | Forest Plots | Publication Preparation | Critical Review |
| 10:00 / 16:00 | BREAK | | | | |
| 11:00 / 17:00 | Study Analysis | Data Analysis | Bias in Reviews | Research Gaps | Final Discussion |
| 12:00 / 18:00 | Cause-Effect Relationships | Ethics in Trials | Meta-Analysis Interpretation | Study Limitations | Closing Remarks |
| 13:00 / 19:00 | Q&A | Q&A | Q&A | Q&A | Q&A |

APPLICATION HOW TO JOIN OUR PROGRAM





COURSE INFORMATION

TARGET AUDIENCE

- Degree/ studies in health sciences (Candidate, BSc, MSc, MD, DMD, etc.) is preferred.
- Good English communication skills are recommended (minimum B2 level; see details here).

PARTICIPANT LIMIT

To preserve efficacy, the course will start with a minimum of 12 attendees.

STUDY LOAD

8 hours of course and 1 hour of lunch break per day. Each day, the course starts at 8 AM (GMT+1)

REQUIRED DOCUMENTS

For this course, you are required to upload the following documents when applying:

- Motivation Letter
- CV

Application with proof of application fee payment must be submitted by the application deadline. In case of transfer difficulties, an electronic certificate is acceptable.

IMPORTANT DATES

- Deadline for application December 1, 2025 / May 11, 2026
- Interview period December 2-5, 2025 / May 12-15, 2026
- Acceptance by December 5, 2025 / May 15, 2026
- Course fee payment by December 15, 2025 / May 22, 2026
- Course period (2 weeks) February 16-27, 2026 / July 20-31, 2026

RESPONSIBILITIES OF THE CENTRE FOR TRANSLATIONAL MEDICINE

The Centre will provide access to the training materials in case of successful recruitment, but this does not cover the technical requirements for access, in particular a stable internet connection and computer equipment. The application fee covers the costs of the application procedure, and the Centre does not undertake to reimburse the costs of unsuccessful applications. Students who are successfully admitted will be offered a training contract by the Centre. Hungarian law will apply to the application process and the training as a whole.

FINANCING INFORMATION

COSTS

Application fee: 75 € / person

In case of group registration larger than 10 participants: 350 € / group

Course fee for groups (in case of in-person participation):

12-25 participants: 1600 € / person
25-40 participants: 1500 € / person
41-60 participants: 1400 € / person
61 or more participants: 1300 € / person

20% discount in case of online participation

+20% in case of a different time period (in case of 12+ participants)

Students are expected to cover:

- Round-trip air transportation
- Health insurance
- · Medical liability insurance
- Living expenses
- Cost of general medical examination and vaccines

PAYMENT

After completing the registration form, you will receive the payment details via email.



IT ASSISTANCE

IMPORTANT HELP



In case of online course, Zoom will serve as our online communication platform. To ease the use of the software, our admin will be there to provide help where needed.

What you are going to need:

- Zoom account
- · Stable internet connection

Please arrive to the Zoom meetings **20 minutes prior** to the session time.

Security is a key aspect of Zoom meetings, so for your safety a passcode will be sent alongside the classes' link. Also, there will be other measurements adding an additional layer of security, for example preventing you from unmuting or renaming yourselves during a lesson, in order to limit distractions.

Never share your meeting ID or passcode publicly (such as on social media).



CONTACT US

FOR MORE INFORMATION

Should you need any further information, please do not hesitate to contact us! Also feel free to check out our and our partner's online content as well.

ORGANIZATION NAME

Semmelweis University, Centre for Translational Medicine

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OUR WEBSITES

tm-centre.org, semmelweis.hu/tmk

YOUTUBE CHANNEL

Translational Medicine Foundation

NATIONAL ACADEMY OF SCIENCES

edu-sci.org

ACADEMIA EUROPAEA

ae-info.org



NOTES



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