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YSA – YOUNG SCIENTIST ASSOCIATION
MEDICAL UNIVERSITY OF VIENNA

20th YSA PhD Symposium

27th – 28th May 2025
Medical University of Vienna
Program and General Information

www.meduniwien.ac.at/ysa

Welcome to the 20th YSA PhD Symposium



Markus Müller

Rector of the Medical University
of Vienna

Dear Colleagues,

Curiosity is a key driving force for young scientists like you as you advance in your career. To support you on this journey, MedUni Vienna organizes the YSA PhD Symposium. This special event provides excellent opportunities for scientific discussions and the development of essential career skills.

The PhD Symposium is a great chance for doctoral students to present their progress to a broader audience. Driven by curiosity, this event fosters a supportive environment where students can receive valuable feedback - not only from experienced scientists but also from fellow researchers. This exchange enriches their work, inspires new ideas, and helps them make an even greater impact.

We are excited to have you join us at the YSA PhD Symposium!

A stylized, handwritten signature in black ink, consisting of a long, sweeping horizontal line followed by a series of loops and a final upward stroke.

Markus Müller

Rector of the Medical University of Vienna



Stefan Böhm

Curriculum Director, PhD Programme
and Doctorate Programme in
Applied Medical Science

Dear Colleagues,

It is my personal pleasure and a privilege to be able to welcome all of you at the 20th PhD Symposium at the Medical University Vienna. Last year we were celebrating the 20th birthday of our university, and this year we are grateful and proud to be able to host number 20 within this series of symposia. Once again, this year's meeting is organized by the Young Scientist Association (YSA) of our university and maintains the high standards of previous meetings. We are particularly honoured and grateful to have such expert keynote speakers from around the world at this 20th YSA symposium.

The aim of the PhD Symposium is to provide an opportunity for our doctoral students to present their thesis work not only to their supervisors and thesis committee members, but also in front of other academic colleagues. By doing so, our young colleagues can get feedback on their research from leading scientists of the Medical University Vienna and from fellow students. Hopefully, this will help our doctoral candidates to further increase the impact of their thesis projects. Moreover, the Symposium offers an opportunity to meet doctoral students from other thematic programs, to learn about their work, and to discuss various aspects of a doctoral student's daily life with people having an unrelated scientific background.

I would like to thank all authors for their participation and contribution to the high level of research data that are going to be presented within the next two days. I also wish to extend special thanks to the YSA board for organizing once again this exciting symposium, to the keynote speakers for sharing their expertise, and to all sponsoring companies for their support.

I hope all of you will enjoy the PhD Symposium from both, a scientific and a social point of view. Accordingly, I wish all of you two days full of new insights, success, and pleasure!

A handwritten signature in black ink, appearing to be 'SB' followed by a stylized flourish.

Stefan Böhm

Director of the Doctoral School of the Medical University of Vienna

Welcome to the 20th YSA PhD Symposium



Michaela Fritz

Vice Rector for Research and Innovation

Dear participants, dear PhD students,

It gives me great pleasure to welcome you to the 20th YSA PhD Symposium at the Medical University of Vienna. This milestone event underlines our strong commitment to promoting scientific excellence and collaboration among our young researchers.

Over the years, the YSA PhD Symposium has evolved into a dynamic platform that brings together PhD students from over 20 different programs. It offers you a unique opportunity to present your research, engage in stimulating discussions and build networks that will support your future career.

I would like to sincerely thank the Young Scientist Association and the organizing committee for their dedication in preparing this symposium. Their efforts have been instrumental in creating a great academic and social event. A warm welcome and special thanks to all the national and international speakers who will share their ideas and insights with us, and to all the participants who will take the opportunity to listen, learn, and connect.

I encourage all attendees to actively participate in the sessions, challenge ideas, and embrace the spirit of collaboration that defines our scientific community. Together, we can advance medical science and make meaningful contributions to society.

Wishing you a successful and inspiring symposium and all the best for your academic journey.

Best regards,

A handwritten signature in black ink, reading "Michaela Fritz". The signature is fluid and cursive, with a large, stylized "M" and "F".

Michaela Fritz
Vice Rector for Research and Innovation



Anita Rieder

Vice Rector for Education

Dear PhD Students,

The Medical University of Vienna wants to be the place where doctoral students will develop into young scientists who are fascinated by science and find attractive opportunities to start successful careers in science. The YSA Symposium 2025 with its exciting scientific program is a great place to meet and discuss, to learn and exchange experiences and ideas. The annual symposium became an important part of the PhD experience and curriculum. The number of young researchers in our Doctoral Programs is promising, promising for a future of scientific development and evolution, young researchers being deeply engaged to improve population health and welfare.

The 1.500 doctoral students at the Medical University Vienna, 40 % of them coming from abroad, will find a broad and inspiring scientific and learning environment, not only new buildings but great research opportunities. Our efforts in innovating our Doctorate Programs have led to the implementation of a very successful PhD Recruitment Process, the Physicians Researcher Pathway Scholarships we provide every year for selected doctoral students working as fulltime physicians, the MDPHD Program for medical students since 2009 and the upcoming ambitious new MDPHD Study Program.

Lucy Taylor, a PhD student, wrote in *"Nature"* (2018), *"Enjoy your PhD! It can be tough, and there will be days when you wish you had a "normal" job, but PhDs are full of wonderful experiences and give you the opportunity to work on something that fascinates you."* And to close with the Nobel laureate Katalin Karikó in *"Nobel Conversations"* (2023) who said, *"Getting grants and support, you have to work for it... but I loved to write grants... every time I learned so much, I had to read, read and learn."*

We wish you a successful YSA Symposium 2025!

Anita Rieder
Vice Rector for Education



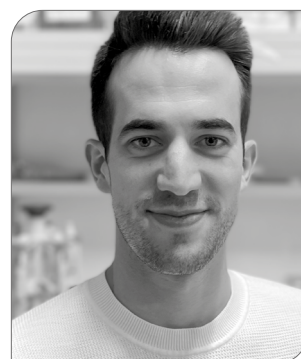
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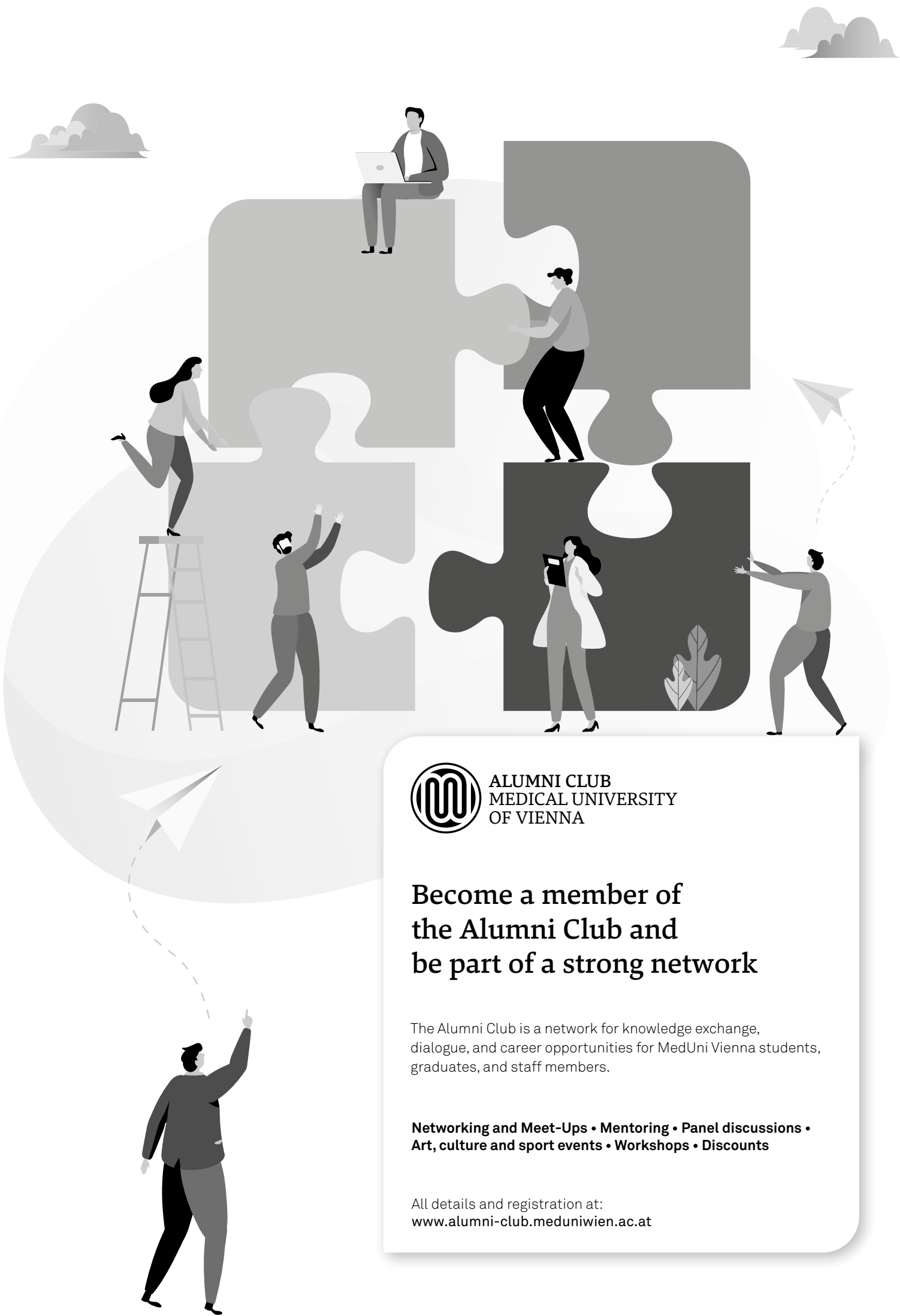
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Become a member of the Alumni Club and be part of a strong network

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**Networking and Meet-Ups • Mentoring • Panel discussions •
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All details and registration at:
www.alumni-club.meduniwien.ac.at

YSA – Young Scientist Association Medical University of Vienna

Organization of the 20th YSA PhD Symposium 2025

Background

Starting with the first Symposium in 2005, we have not only become a tradition of the Medical University of Vienna, but over the years we have also become a renowned event in the academic community of Austria.

The YSA PhD Symposium makes it possible for all PhD students to enhance their knowledge about new methods and technologies available, exchange data and information with other students and improve their presentation skills. Additionally, participants can discuss in a multidisciplinary scientific environment and get valuable suggestions and critical input from experts in different fields.

Over 2.000 PhD research projects have been presented at the YSA PhD Symposium over the course of the last 20 years, contributing to the development of each young scientist's career.

Mission Statement and Activities

- Improving networking between young scientists of the Medical University of Vienna and beyond
- Organizing scientific meetings such as the YSA PhD Symposium, workshops and lectures of international speakers with an outstanding expertise in their field
- Establishing a link between postgraduate students and the board of the Medical University of Vienna

Contact

YSA – Young Scientist Association of the Medical University of Vienna

ysa@meduniwien.ac.at

www.meduniwien.ac.at/ysa

www.instagram.com/ysa.meduniwien

Congress Information

Science | Networking event

We would like to invite all participants (speakers, presenters, officials) from the Symposium to join our after-symposium social event, taking place in the nice setting of the **Van Swieten Saal** on **May 28th 2025** starting at **7 pm**.

There will be the Award Ceremony

- Science | Art
- best oral/poster presentation
- DJ
- all you can eat/drink
- and much more.

Join the Science | Networking event!

Registration

Registration will take place at the registration desk, which is located in the admission area at Level 7 of the Hörsaalzentrum.

Registration Fee

Admission to all scientific sessions is free

Language

Official congress language is English

Congress Venue

Keynote Lectures, Oral Sessions and Poster Slam will take place in the Hörsaalzentrum 3, Level 7 at the University Hospital Vienna

Poster Sessions will take place on both Level 7 and Level 8 of the Hörsaalzentrum.

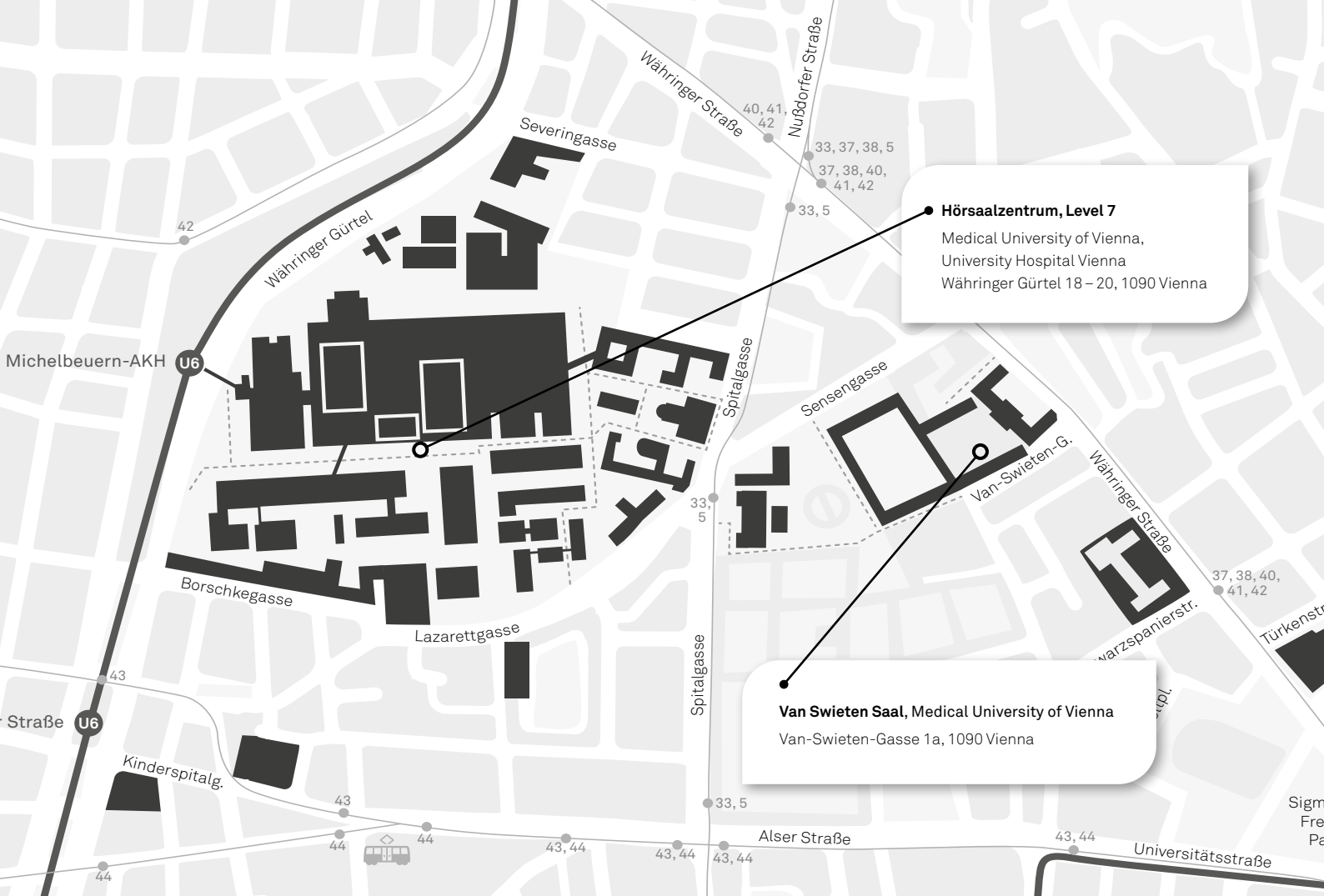
Wi-Fi

free

Open network: MedUni Events

login information is also available at the registration desk

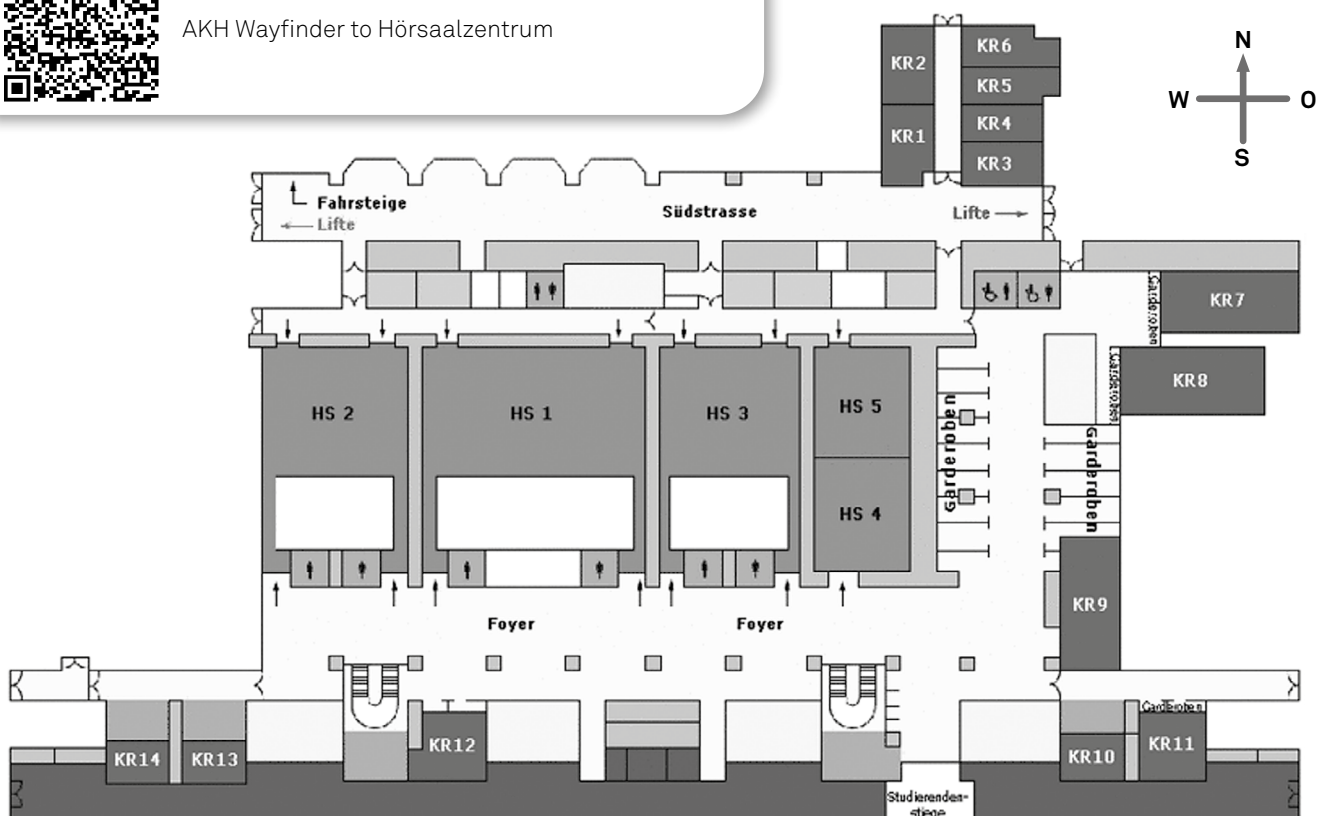




For detailed information how to get there please visit:
[google.at/maps](https://www.google.at/maps), [wienerlinien.at](https://www.wienerlinien.at) or [vor.at](https://www.vor.at)



AKH Wayfinder to Hörsaalzentrum



20th YSA PhD Symposium Program

DAY 1 27th May 2025

9.00 – 9.30 am **Welcome by the University and YSA**

9.30 – 10.30 am KEYNOTE LECTURE 1 ROXANNE KEYNEJAD > p. 18
Gender is a social determinant of mental health:
evidence and action

10.30 – 11.10 am **Oral Session 1 Neuroscience**

11.10 – 11.20 am **Poster Slam 1**

11.20 am – 12.20 pm **Poster Session 1**

12.20 – 1.20 pm Lunch Break

1.20 – 2.20 pm KEYNOTE LECTURE 2 CHRISTINE FALK > p. 19
Tissue-Resident Memory T and NK cells in
human lung transplantation and cancer

2.20 – 3.00 pm **Oral Session 2 Immunology**

3.00 – 3.10 pm **Poster Slam 2**

3.10 – 4.10 pm **Poster Session 2**

4.10 – 4.30 pm Coffee Break

4.30 – 5.30 pm KEYNOTE LECTURE 3 CAROLINE BOUDOUX > p. 20
It Goes Without Saying:
Taking the Guesswork Out of Your PhD

5.30 – 6.10 pm **Oral Session 3 Mixed Session**

6.10 – 6.20 pm Closing Session

Further information



DAY 2 28th May 2025

9.00 – 9.05 am **Opening**

9.05 – 9.15 am **Poster Slam 3**

9.15 – 9.55 am **Poster Session 3**

9.55 – 10.55 am **KEYNOTE LECTURE 4** **EVELIEN SMITS** > p. 21
Cellular immunotherapy with dendritic cells or CAR-NK cells to treat hematological and solid tumors: from bench to bedside

10.55 – 11.35 am **Oral Session 4** **Malignant diseases**

11.35 – 11.45 am **Poster Slam 4**

11.45 am – 12.45 pm **Poster Session 4**

12.45 – 1.45 pm Lunch Break

1.45 – 2.45 pm **KEYNOTE LECTURE 5** **LEONID SAZANOV** > p. 22
Respiratory complex I and supercomplexes – structure and function of huge molecular machines

2.45 – 3.25 pm **Oral Session 5** **Physics/Medical imaging**

3.25 – 3.45 pm **Publication Award**

3.45 – 4.05 pm Coffee Break

4.05 – 4.15 pm **Poster Slam 5**

4.15 – 5.15 pm **Poster Session 5**

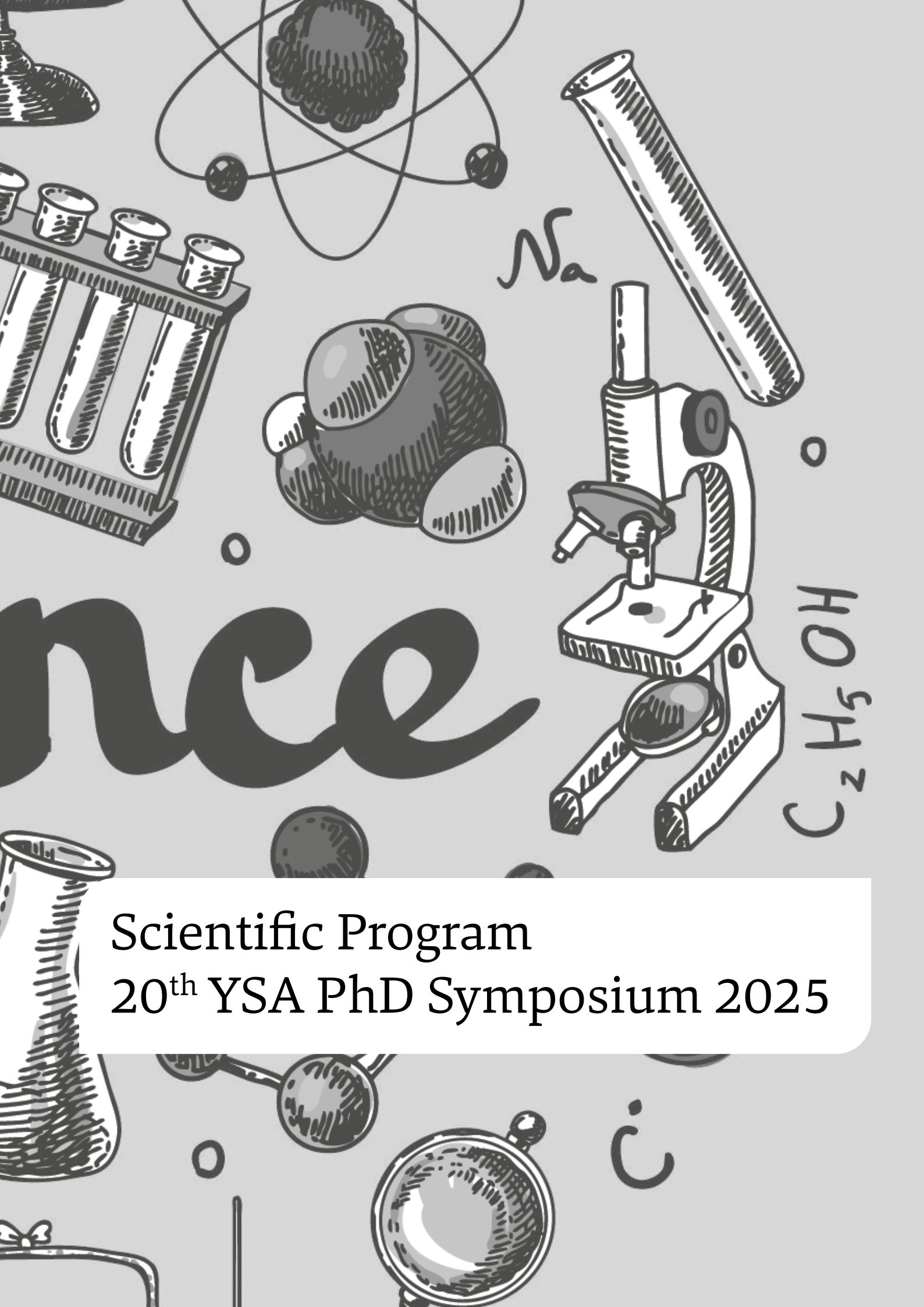
5.15 – 6.15 pm **Dora Brücke-Teleky Award Presentation**

6.15 – 6.30 pm Closing Session

7.00 pm – 1.00 am Award winners + Science | Networking event

Science





Scientific Program
20th YSA PhD Symposium 2025

Keynote Lecture 1

Roxanne Keynejad

Consultant Psychiatrist and Clinical Senior Lecturer at King's College London



Roxanne Keynejad is a Consultant Psychiatrist and Clinical Senior Lecturer at King's College London. Her research aims to address the social determinants of women's mental health with a particular focus on gender-based violence.

Her research collaborations include psychological intervention development and piloting in Ethiopia and mental health training for medical students in Somaliland. She is an active member of Circle U. European University Alliance and is committed to strengthening decolonial understanding in global mental health research.

Tuesday, 27th May 2025,
9.30 – 10.30 am

**Gender is a social determinant of mental
health: evidence and action**

Keynote Lecture 2

Christine Falk

Full professor for Transplant Immunology and director of the Institute of Transplant Immunology at Hannover Medical School



Christine S. Falk, PhD., is full professor for Transplant Immunology and director of the Institute of Transplant Immunology at Hannover Medical School (MHH) since 2010.

She focuses on mechanisms of ischemia/reperfusion injury mediated innate and adaptive immunity. Regarding rejection after transplantation, the Falk lab focuses on tissue-resident memory T and NK cells, especially in the lung, and their potential role in immunotherapy of lung cancer. She graduated as PhD at the Institute of Immunology at Ludwig-Maximilians University in Munich, Germany, in the field of tumor immunology and continued to work on T and NK cell recognition of solid tumors as postdoc fellow at the Institute of Molecular Immunology, Helmholtz Centre Munich.

In 2004, she received her Venia Legendi at LMU for Human Immunology. 2006 – 2010, she worked at the German Cancer Research Centre (DKFZ) in Heidelberg, Germany, as group leader of the Research Group “Immune Monitoring” with a strong interest in the improvement of cancer immunotherapy by understanding the mechanisms involved in treatment resistance.

Tuesday, 27th May 2025,

1.20 – 2.20 pm

**Tissue-Resident Memory T and NK cells in
human lung transplantation and cancer**

Keynote Lecture 3

Caroline Boudoux

Full professor of engineering physics at Polytechnique Montreal



Full professor of engineering physics and rookie entrepreneur Prof. Boudoux obtained her PhD from the Harvard-MIT Health Sciences and Technology program (USA). She then completed a post-doctoral fellowship at Ecole Polytechnique (France) before starting her laboratory in 2007 at Polytechnique Montreal (Canada). Her research topics range from laser-tissue interactions to novel instruments for biomedical imaging. With a colleague and strategic investors, she later founded Castor Optics, a spin-off company commercializing a new line of double-clad fiber couplers.

**Tuesday, 27th May 2025,
4.30 – 5.30 pm**

**It Goes Without Saying:
Taking the Guesswork Out of Your PhD**

Keynote Lecture 4

Evelien Smits

Full Professor at the University of Antwerp



Evelien Smits is Full Professor at the University of Antwerp, head of the Center for Oncological Research (CORE), chair of the Department and co-founder of the recognized research excellence consortium with 9 promotors and more than 100 research members, the Integrated Personalized and Precision Oncology Network (IPPON; www.uantwerp.be/ippon).

The strategic mission of her research is to improve the quality-of-life and the lifespan of cancer patients by increasing the applicability of immunotherapy, both in terms of number of responsive cancer types and number of responsive patients. Therefore, Evelien Smits has got a passion for developing novel immunotherapeutic strategies to treat cancer by combining immune activation and tackling immunosuppression. The major research lines of her team are on cell therapy using natural killer cells or dendritic cells and on immune checkpoints. In addition, she is co-principal investigator of academic investigator-driven cell therapy studies at the Center for Cell Therapy and Regenerative Medicine at the Antwerp University Hospital. Her research comprises the full spectrum from basic research till clinical studies and she has proven to be able to bring new discoveries from the bench to the bedside. Amongst other prizes, in 2017 Evelien Smits received the FWO/FNRS AstraZeneca Foundation Award for her research achievements in the domain of immunotherapy.

She has got several national and international collaborations and a broad international network, evidenced by her obtained grants (including Horizon Europe CANCERNA and MSCA Doctoral Network PlasmACT), research visits, co-publications and memberships of consortia such as COST IMMUNO-model and COST PlasTHER. She has got 175 Web of Science-indexed articles (h-index 50; 9000 citations) as part of the evidence that she achieved characterization of the tumor immune microenvironment and that she successfully investigates novel combination strategies in different cancers, both preclinically and clinically.

Wednesday, 28th May 2025,

9.55 – 10.55 am

**Cellular immunotherapy with dendritic cells
or CAR-NK cells to treat hematological and
solid tumors: from bench to bedside**

Keynote Lecture 5

Leonid Sazanov

Professor at the Institute of Science and Technology Austria



Leonid Sazanov is a Professor leading research group “Structural Biology of Membrane Protein Complexes” at the Institute of Science and Technology Austria.

He uses cryo-electron microscopy and X-ray crystallography to study structure and mechanism of membrane-embedded molecular machines from the domain of bioenergetics. His group solved the first structures of bacterial and mammalian respiratory complex I, V/A-type ATPase and proton-translocating transhydrogenase. Leonid was born in Belarus, obtained PhD in Biophysics from Moscow State University in Russia, and performed research in UK at the University of Birmingham, Imperial College London and MRC Laboratory of Molecular Biology. Since 2000 he was a group leader in the MRC Mitochondrial Biology Unit in Cambridge and moved to ISTA in 2015. Leonid is a member of EMBO and a Fellow of the Royal Society.

Wednesday, 28th May 2025,

1.45 – 2.45 pm

**Respiratory complex I and supercomplexes –
structure and function of huge molecular
machines**

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Notes

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MEDICAL UNIVERSITY
OF VIENNA

Gustav Klimt, Medicine

With the help of artificial intelligence, Österreichische Galerie Belvedere and Google Art & Culture were able to reconstruct the palette used in Klimt's Faculty Paintings in their Klimt versus Klimt project. You can see the results on the facade of the Medical University of Vienna's Anna Spiegel building, which was unveiled in November 2024.

A selection of merchandising products will soon be available in the MedUni Vienna Shop.



www.meduniwien.ac.at/en/klimt-medical-allegory



**Our country
needs people
who believe
in themselves.**

**And a bank that
believes in them.**

#believeinyourself