

Department of Biomedical Engineering

# DBE Newsletter October 2024

# Congratulations



## to Prof. Rauter on being elected as new member of the DBE Executive Board

On October 22, the members of the DBE Assembly elected Prof. Georg Rauter in a gripping neck-and-neck contest with three other excellent candidates as new member of the DBE Executive Board. Read more in the DBE news.



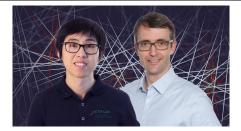
## to Prof. Sinues on being re-elected as head of the DBE Teaching Commission

The members of the DBE Assembly unanimously re-elected Prof. Pablo Sinues as head of the DBE Teaching Commission, a clear expression of appreciation and of his excellent work and gratitude for his resilient commitment. Read more in the DBE news.



#### to Dr. Ferda Canbaz on her election as member of the SSBE Board

Dr. Ferda Canbaz is a new board member of the Swiss Society for Biomedical Engineering. The visionary SSBE focuses on creating and maintaining a comprehensive network of players in research, education, manufacturing, and politics in and around biomedical engineering. As member of the board, Dr. Ferda Canbaz will be responsible for the SSBE Research Award and the Student Award. Read more in the DBE news.



## to Dr. Jiqing Wu and Prof. Viktor Kölzer who received a 15,000 CHF award

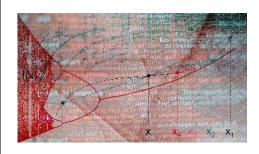
The team from the Computational & Translational Pathology Laboratory (CTPLab) have been awarded an extraordinary contribution of 15,000 CHF from the HEMMI Foundation. Their award project, titled "Causal inference in application to large-scale randomised clinical trials of endometrial cancer" aims to improve personalised EC patient care by developing novel Aldriven causal approaches.

# About us - Highlighted



## Prof. Thieringer about 3D Printing's Impact on Oral and Craniomaxillofacial Surgery

Of all the key technologies, 3D printing is currently among those that are developing the fastest. One of the drivers of innovation is craniomaxillofacial surgery, which is either creating new solutions itself or adapting others for its workflows. In a contribution to the CMF Guest Blog of the AO Foundation, Prof. Florian Thieringer reports on the current state of affairs, likewise in a conversation with Kety S. of 3D Adept. Read the blog post as well as and learn that 3D printing fits into craniomaxillofacial surgery like a perfect implant.



# Making AI Fit for Ethnic Diversity in Dermatology

Prof. Alexander Navarini and PhD student Philippe Gottfrois from the "Digital Dermatology" are training algorithms to diagnose skin diseases in Africa, collaborating with researchers in Madagascar, Malawi, and Guinea. They presented their findings at MICCAI 2024 in Marrakesh. As part of the PASSION project, they address AI bias, which can cause misdiagnoses when models trained on European skin types are used for African patients. Partnering with teams from multiple African and Swiss locations, they collected 4,901 images from 1,653 African patients to develop a baseline machine learning model for diagnosing eczema, fungal infections, scabies, and impetigo in various subpopulations. Read more in the



# More Students than Ever – and More Mobility!

For the first time, our DBE Master's Program has over 100 students enrolled. This growth highlights the appeal of biomedical engineering. Launched in 2018 with 16 students, the program has steadily expanded, accelerating in 2023 with the start of the Joint Master Program with FHNW. We expect even more students signing up in the coming years. Students now have more mobility options, including participation in the Swiss-European Mobility Program with the University of Strasbourg's HealthTech Master. This opportunity allows three students annually to join the program, broadening their academic and professional horizons. Read more in the DBE News.

# About us – We welcome



**Andrea Leuthard,** who started her PhD in the Magnetic Resonance Physics & Methodology group led by Prof. Oliver Bieri, is focusing her research on functional lung MRI. Andrea holds a Master's degree in solid-state physics and environmental physics and is looking forward to expanding her knowledge in medical physics. What fascinates Andrea about MRI physics, among other things, is its direct impact on clinical applications.



**Lukas Schönenberger,** who started his MD-PhD with the Translational Imagining in Neurology (ThINk) group, led by Prof. Cristina Granziera. He completed his master's degree in Medicine at the University of Basel. During his PhD, Lukas will focus on the investigation of remyelinating lesions in Multiple Sclerosis. In his project he will use ultra-high spatial resolution MRI and Imaging Mass Cytometry to characterize Multiple Sclerosis lesions in postmortem brains.

# **Events (in Basel)**



## Fundamentals of Intellectual Property for Scientists | November 7 | Basel

Are you a scientist interested in protecting your research? Would you like to better understand intellectual property (IP) and how patents can secure your inventions? The BRCCH and Unitectra cordially invite you to join our seminar, specifically designed for scientists, in which Unitectra will clarify the essentials of IP and patents. This session will equip you with the necessary knowledge to navigate the complexities of intellectual property rights, from understanding patent basics to learning how to protect your innovations. More information and registration.



## Long Nights of Careers | November 7 | Basel

The Long Night of Careers is an event where the focus is on career perspectives, networking and information about starting a career. It is aimed at all students of all faculties and all study levels (Bachelor, Master, Doctorate). Discover career perspectives, explore new opportunities, and attend various workshops and insightful talks on career entry. Fun, food and drink will be provided, as well as free headshots and CV checks. The formats are mainly in German, some in English. More information.



#### The International Annual Conference on AI in Health | November 11-12 | Basel

Hosted by the University of Applied Sciences and Arts (FHNW), this event will explore cuttingedge AI applications in diagnostics, therapeutics, and digital twins in healthcare. Attendees from academia, industry, and clinical practice will engage in dynamic sessions, workshops, and discussions on the future of AI-driven healthcare. More information.



## **Empowering Women in Science | November 14 | Basel**

Every female scientist has a story that can inspire you! Despite commencing their careers with equal fervor and capability as their male counterparts, women encounter systemic obstacles that lead to their underrepresentation, particularly in senior roles. Factors such as gender bias, academic culture, family responsibilities, and excessive service commitments contribute to this disparity, perpetuated further by implicit biases in hiring and promotion processes. Therefore, Athena's Journey provides a platform to empower women in science. This time with Dr. Christine Blume, assistant/postdoc at the DBM. More information and registration.



## UKBB Research Day | November 15 | Basel

Join for an exciting day filled with new impressions, insights, and interesting discussions! For the first time, the Research Day takes place in the high-tech building of the Biozentrum Basel, just next door to the UKBB. The day will feature short presentations and poster sessions of projects from UKBB research groups, including a dedicated session for Master's students. As always, awards will be given to the most outstanding contributions. More information and registration.



## Role Model Talks – Feel the startup groove | November 19 | Basel

Starting a business takes courage! To take this step, it is all the more valuable to learn from the stories of those who already went through it! Join the Role Model Talks, to hear the stories of entrepreneurs: Ruben Herrendorff, CEO at NXI Therapeutics and Marija Plodinec, Co-Founder and CEO at ARTIDIS. At this event you will be inspired and encouraged for your own business endeavours. During the event we will also introduce the Innosuisse "Business Concept" — Entrepreneurship Training, which will take place again in the spring, registration starting at the end of November. More information and registration.

# **Events (other)**

# Biomedical Engineering Networking Event | November 7 | Bern

BERN BIOMEDICAL ENGINEERING NETWORK EVENT

Are you a biomedical start-up or thinking of founding one? Don't miss this networking event. Presentations from Innosuisse and the start-up club will highlight different funding and support tools. Euresearch will present the Horizon Europe funding opportunities. You will also hear from testimonials of start-ups. More information.



# Forum Cinfo | November 22 | Bern

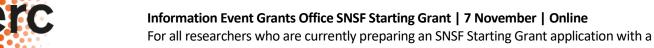
Held every two years, the event combines a career fair and a conference, providing a comprehensive platform to navigate your career, gain insights from experienced practitioners, and network with fellow professionals and organisations. More information. DBE PhD students can receive a 50% discount on tickets by sending an email to pphs@unibas.ch.

# **Calls & Research Funding**



# ERC Grants

<u>ERC Consolidator Grant Call 2025</u>: deadline January 14, 2025, for applicants with 7-12 years post PhD experience. Get in touch with <u>grants@unibas.ch</u>, they offer support and advice.



department or faculty of the University of Basel as host institution. Please register by sending an e-mail to grants@unibas.ch indicating your future host department or faculty at the University of Basel.



# Funding opportunities from private foundations

Do you need additional funds for an ongoing research project? Do you plan a short pilot project? Do you plan a longer research or training stay? Are you looking for other funding beyond the major and known funding opportunities? Why not look for private funding instead or in addition? Here you find an overview of private funding organizations in Basel, many exclusively for researchers at the University of Basel.

## Postdoctoral Fellowships 2024

<u>Postdoctoral Fellowship</u> grants for early-career researchers aiming to consolidate their scientific knowledge and develop their academic career in Switzerland. Submission deadline: December 2, 2024

## **Starting Grants 2025**

An <u>SNSF Starting Grant</u> comes after several years of research after the PhD, or an equivalent qualification or medical degree, during which time the grantees have already conducted research independently and contributed to impactful research in their field. The scheme is open to all disciplines and topics; researchers of any nationality may apply. Applicants can request a budget of up to CHF 1.8 million for a period of five years. Submission deadline: January 15, 2025

Applicants require a support letter: This is a general confirmation from the Vice President for Research which is provided by the Grants Office. We kindly ask you to submit the Grants Tool entry by December 16, 2024 at the latest.

## National Centres of Competence in Research (NCCRs)

Long-term research on strategic topics: the SNSF is launching a new series of <u>National Centres</u> of <u>Competence in Research (NCCRs)</u> on behalf of the federal government. This new call is thematically open and is aimed at all disciplines. Submission deadline: February 3, 2025.

Check out the **SNSF website** for further calls.

At the Department of Biomedical Engineering, we translate basic science and engineering into medical knowledge and healthcare innovations. We provide high quality education and capacity building for academics, clinicians, and industrial partners. The DBE is a joint venture of the University of Basel, the University Hospital Basel and the University Children's Hospital Basel.

**Swiss National** 

**Science Foundation** 

You would like to publish news in the newsletter? Please write us to news-dbe@unibas.ch





