

# DBE Newsletter February 2025

Department of Biomedical Engineering

# Congratulations



## to Prof. Georg Rauter on securing more funding for his research

Georg (BIROMED-Lab) received 271'493 € from Horizon Europe Marie Sklodowska-Curie for the project "AERIALIST - Doctoral Network on Assistive Health Technology in Unsupervised/Home Settings". He also received 32'5000 CHF from Innosuisse for the project "Plate Explorer – Mobile robotic microscope for cell culture inspection in incubators", together with Dr. Ferda Canbaz and Cédric Schicklin.



#### to Dr. Riccardo Galbusera on this SNSF Postdoc. Mobility Grant.

Riccardo (ThINk) will do an investigation into the pathology, repair mechanisms and iron metabolism in the cerebral cortex of multiple sclerosis patients through ultra-high-resolution quantitative MRI and histology.

# About us – Highlighted



## Exhibition launch: showcasing DBE core facilitates in the SIP innovation lounge

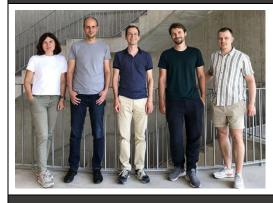
On February 18, 2025, DBE proudly contributed exhibits to the Innovation Lounge at Switzerland Innovation Park Basel Area, showcasing cutting-edge research and technology. The grand opening welcomed 100 guests, featuring a welcome address by Carine Moya and insights from Prof. Philippe Cattin. <u>Read more in the DBE news</u>.



#### PhD Winter School on Scientific Writing & Publishing

The DBE Winter School 2025 revolved around "Scientific Writing & Publishing." At the beautiful village of Wattwiller in Alsace (France), 25 students from the PhD program in Biomedical Engineering, PPHS, and ITI HealthTech Strasbourg participated in workshops on various aspects of scientific writing and publishing, including dedicated time for their own writing projects.

# About us – Spotlight on a young group



The Digital Surgery Lab is focused on advancing surgery through the application of surgical data science and deep learning for the analysis of multimodal surgical data. Established by Prof. Beat Müller, head of digestive surgery, and Dr. Joël Lavanchy, attending surgeon at University Digestive Health Care Center Clarunis, the lab aims to model surgical interventions to develop effective treatments and improve postoperative outcomes. On the picture: Julia Ruppel, Simon Pezold, Joël Lavanchy, Jérôme Kurylec, Jan Liechti, Beat Müller (missing) Janis Neumann (missing). Website.

## About us – We welcome



**Lydia Schönpflug**, who has started her PhD in the Computational and Translational Pathology Lab group led by Prof. Viktor Kölzer. She previously worked as a data scientist within the same group and holds a master's degree in electrical engineering. During her PhD she will focus on making computational pathology algorithms more accessible through compression and simplification, with the final goal of deploying them to low-grade hardware for everyday clinical application.



**Sidaty El Hadramy**, who started as a postdoc in the CIAN lab, led by Prof. Philippe Cattin. After earning a master's degree in computer science from l'École des Mines de Saint-Étienne, France, Sidaty became interested in the intersection of machine learning, physics-based simulation, and medical imaging during his PhD at the University of Strasbourg, France. There, he developed registration methods for real-time liver surgery guidance. He is joining as member of the MIRACLE project.

**Ruslan Soiunov**, who started his PhD in the Swiss Medical Additive Manufacturing group, bioprinting and biosensors subgroup, led by Dr. Valentina Basoli. He holds a Bachelor's in Bioengineering focused on 3D bioprinting and completed a master's thesis on organ-on-a-chip research. His PhD will focus on cartilage and osteochondral bioprinting for maxillofacial joint regeneration, integrating melt electrowritten grafts and microtissues to create biomimetic constructs for advanced joint repair.

## **Events**







How can you integrate your research into political processes? These one-day courses will provide insights into the Swiss political system and how researchers can get involved. Funded by the SNSF, these courses are free of charge for researchers at all career levels and across all disciplines. More information.

## Science communication: Famelab Switzerland local heat | April 29 | Basel

Do you have a passion for science and a knack for storytelling? FameLab Switzerland is back, giving young researchers the chance to captivate audiences with a compelling 3-minute talk on a scientific topic of their choice. Apply by April 7, 2025, and take the stage to showcase your clarity, charisma, and scientific insight!



### Swiss Medtech National Regulatory Conference | October 15 | Bern

Under the theme "Addressing Today's and Tomorrow's Pain Points," the event explores regulatory challenges in the Swiss Medtech industry, including MDR updates, the EU Industrial Clean Deal, and sustainability requirements—both hurdles and opportunities for innovation and growth. More information.

# **Calls & Research Funding**

COST
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COST (European Cooperation in Science and Technology) is a programme that aims to enable breakthrough scientific developments leading to new concepts and products. Submission deadline: 29.04.2025



## JSPS Postdoctoral Fellowships 2025

The postdoctoral fellowships programme offered by the Japan Society for the Promotion of Science (JSPS) enables researchers in Switzerland to stay in Japan for 12 to 24 months. Submission deadline: 30.04.2025

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



## Marie Skłodowska-Curie Actions - Postdoctoral Fellowships

The MSCA PF is an interesting option as the next career step to gain further experience abroad. Through this program, the University of Basel can also host postdocs from other countries for two years. The call opens in April 2025 and has a deadline in September 2025. An information event by Euresearch will take place on April 15.

You would like to publish news in the newsletter?

Please write us at news-dbe@unibas.ch

At the Department of Biomedical Engineering, we translate basic science and engineering into medical knowledge and healthcare innovations. We provide high guality 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.







