

Department of Biomedical Engineering

DBE Newsletter January 2025

Congratulations



to Prof. Dr. med. Viktor Kölzer and team on winning the Dutch Team Science Award

The Dutch Research Council (NWO) has awarded the 50'000 EUR Team Science Award to a team of researchers from Switzerland and the Netherlands, including the University of Basel's Pathology Department and the Department of Biomedical Engineering (DBE). The Team Science Award recognizes the most inspiring and effective research teams that tackle scientific challenges through interdisciplinary collaboration. Read more in the DBE news.



to Prof. Bert Müller on being elected to the new SNSF Research Council

On December 5, Bert has been elected as member of the <u>new Research Council of the Swiss National Science Foundation</u>. He will continue his role from April 1, 2025 to April 30, 2027. Bert is appointed to the Programme Committee Long-term Research and Infrastructures. <u>Read more in the DBE news</u>.



to Prof. Philippe Cattin and Prof. Niklaus Friederich on securing 2.5 million for Transatlantic Capacity Building in Orthopedic Sports Medicine

The Claudine and Hans-Heiner Zaeslin-Bustany Foundation supports transatlantic capacity building in orthopedic sports medicine between the DBE/USB and Duke University's School of Medicine as well as the University of Toronto/Sunnybrook Health Science Center. The DBE will invite surgeons from Duke University and Sunnybrook to Basel and PhD students and postdocs from DBE and USB will be funded to participate in projects and programs in Durham NC and Toronto. Read more in the DBE news.



to Dr. phil. Dr. med. Philippe Valmaggia on winning the RetinAward

Philippe, researcher at the Center for Medical Image Analysis & Navigation (CIAN), has won the 20'000 SFR RetinAward 2024 for his project "Cardiovascular health assessment with electrocardiogram-coupled time-resolved optical coherence tomography". Read more in the DBE news.

About us – Highlighted



Prof. Philipp Cattin's Research in the DKForum

The feature sees the algorithm developed and trained by Philipp and his team holding great potential for further applications and being just the beginning of Al-supported diagnosis and therapy development. Read more in the DBE news.



Prof. Bert Müller & team for the cover of MDPI

Bert and his team are featured on the cover of the current issue of Oral journal. The featured paper describes how to quantify the therapy progress using optically transparent aligners of the start-up Bottmedical AG.



Dr. Ferda Canbaz on Turkish News Channel tv100

Ferda was interviewed by Esra Öz for the Istanbul based channel tv100. In the feature with the title "A new era in knee surgery will begin", Ferda introduces the MIRACLE II System and the different roles of the lasers and feedback systems developed by CIO. Read more in the DBE news.



sciCORE: a user-friendly ecosystem for computational biomedical research

In the last townhall meeting, Thierry Sengstag from sciCORE presented sciCORE services, gave an inside look at sciCORE+, the platform to conduct research with sensitive human data at University of Basel. SciCORE+ is a versatile research environment based on state-of-the-art, security and data-protection principles. You can find more information <a href="hee-th-en-

About us - We welcome



Alexandra Braun, who started her PhD in the Magnetic Resonance Physics & Methodology group led by Prof. Oliver Bieri. Alexandra completed her Master's degree in Physics at ETH Zürich with a focus on medical physics in her Master's Thesis conducted at the Center for Proton Therapy at PSI. In her PhD she will expand her knowledge in MRI physics and focus on the development of next generation MRI methods for improved lung imaging.



Mohammadreza Rezaie, who started his PhD under the supervision of Dr. Morgan Sangeux and Prof. Elke Viehweger. Mohammadreza holds a Bachelor's and Master's degree in Prosthetics and Orthotics, and focused on movement biomechanics and musculoskeletal modelling after his academic studies. In his PhD he will work on understanding the underlying factors contributing to patella instability in children.



Vinamrata Bhardwaj, who started her PhD at the Center for Intelligent Optics (CIO), led by Dr. Ferda Canbaz. She holds a master's degree in Applied Optics from the Indian Institute of Technology, Delhi, where her research focused on advanced imaging and spectroscopic techniques for cancer screening. As part of her PhD, Vinamrata will contribute to the LAROCARE project, aiming to develop a cutting-edge miniaturized Optical Coherence Tomography (OCT) setup integrated with laser ablation technology.

Events



Clinical Research Day | February 6 | Basel

At the <u>DKF Clinical Research Day</u>, you can expect a program with oral, rapid-fire and poster presentations. The keynote lecture will be given by Prof. Keiser on how cutting-edge research is driving new therapeutic approaches and what challenges still exist to sustainably improve health in affected regions.



Swiss Medtech Day | June 25 | Bern

At <u>Swiss Medtech Day</u>, more than 750 people from the medical technology sector, healthcare, research, and science gather annually. Under the title "Mastering Complexity," the event focuses on the numerous challenges surrounding the innovation journey from idea to market-ready product.

Calls & Research Funding

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.



Postdoc.Mobility

<u>Postdoc.Mobility</u> fellowships support researchers after the doctorate who wish to conduct a research stay abroad. Submission deadline: February 3.

UK-Swiss bilateral funding for clinical trials

New funding will soon be available for <u>joint Swiss-UK clinical trials</u> and to support early-career research capacity strengthening. The call for this bilateral clinical trial funding opportunity will open in April 2025.

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



Simplify Horizon Europe: Your Go-to Video Guide for Swiss-Based Applicants

Are you navigating the legal and financial aspects of Horizon Europe? Check out our <u>new video</u> <u>series</u> tailored to Swiss-based applicants! From subcontracting rules and in-kind contributions to budget tables and SERI funding guidelines, each short video breaks down key topics and gives you practical tips.



BRIDGE

BRIDGE is a funding program of the SNSF and Innosuisse. The Discovery scheme supports research and innovation projects from any discipline, with a clear potential for societal or economic impact. Submission deadline: March 25.

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.

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