



University
of Basel

Department of
Biomedical Engineering

DBE Newsletter

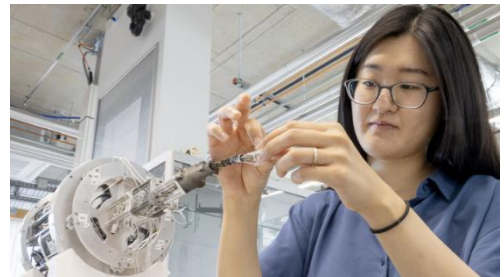
July 2026

Congratulations



Dr. sc. ETH Barbara Postolka awarded grant for ankle foot orthoses research

Barbara has been awarded a CHF 80,000 Excellent Junior Researcher Grant from the University of Basel for her research on ankle foot orthoses (AFOs). Her project seeks to better understand the impact of foot orthosis on neuromuscular function and identify key parameters describing these effects. This work could pave the way for new individualized orthosis configurations and patient-centered rehabilitation strategies. [Read more.](#)



Cartilage repair grant for Dr. Yukiko Tomooka

Yukiko has secured a CHF 80,000 Excellent Junior Researcher Grant from the University of Basel for her research on a miniature robotic system for minimally invasive cartilage repair. She is working on improving the precision of cartilage defect preparation, a critical step in successful cartilage surgery. Conducted at BIROMED-Lab in collaboration with CIO, the project integrates a high-power fiber-optic laser into a miniature robot capable of navigating the confined environment of the human knee joint and performing targeted cartilage ablation. [Read more.](#)



FLOAT rehabilitation robot: Innosuisse grant for Dr. Georg Rauter and Dr. Lauren Chee

Georg and Lauren have secured an Innosuisse grant of CHF 890,000 for the project “Enhancing FLOAT Performance with Intelligent Movement Prediction and Optimized, Activity-Specific Control”. In partnership with the Rehabilitation Clinic of Rheinfelden and Reha-Stim Medtec AG, the project focuses on developing FLOAT, an innovative rehabilitation robot developed to support overground gait training in patients with mobility impairments. [Read more.](#)



New appointed Junior Group Leaders

On June 25, three Junior Group Leaders were appointed following their successful presentations at the Applicant Seminar:

- **Dr. Marco Barbieri:** Multiparametric evaluation of osteosarcopenia using magnetic resonance imaging.
- **Dr. Maxime Lafarge:** Mining rare proteins from diagnostic histopathology slides.
- **Dr. Magdalena Solyga:** Predictive processing-based biomarkers for brain disorders.

The Department congratulates them on this achievement!

About us – highlighted



European patent granted for breath-based drug monitoring

Researchers from the University of Basel and the University Children’s Hospital Basel (UKBB) have been awarded a European patent for a novel method enabling non-invasive, real-time drug monitoring through exhaled breath. The technology delivers rapid insights into drug concentrations within minutes and has already shown promising results in pediatric epilepsy patients at UKBB. Developed in collaboration with the University of Zurich, this marks an important step toward more personalized and patient-friendly care. [Read more.](#)



A mini robot to simplify dental treatment

Researchers from the BIROMED-Lab have developed MIR (Miniature Intraoral Robot), a prototype dental robot designed to automate tooth preparation for crowns. Developed with partners from the Universities of Zurich and Bern and Camlog Biotechnologies, this technology could reduce the number of appointments required for treatment. [Watch the video!](#)



International collaboration explores AI-based prediction in pediatric hip imaging

An international partnership has been launched between researchers from the AICH research group and the Swiss Mongolian Pediatric Project (SMOPP) to advance research in pediatric hip imaging using artificial intelligence. The partners will develop multimodal AI models to support clinical decision-making in pediatric hip diagnostics, by combining SMOPP’s dataset of pediatric imaging and clinical data collected in Mongolia with the machine learning expertise Prof. Dr. Ece Özkan Elsen’s team. [Read more.](#)



The DBE shines at Summer Grümpeli Football Cup

The DBE made a strong showing at the Swiss Innovation Park’s Grümpeli Football Cup, fielding two teams. The Bionic Bebbis not only secured 3rd place but also took home the award for Most Creative Team Name. Congratulations to all who participated!

About us – we welcome



Yuri Shak-Tschurr has joined Dr. Daniela Vavrecka-Sidler's team as a Research Coordinator. She leads the development of a mentoring and support network for Postdocs, focusing on capacity building and career development. Yuri holds a BA in Communication and Media Research from the University of Fribourg and a MA in European Studies from the University of Basel. She previously worked in communications roles across the private and non-profit sectors.



Abiyuga Thanabalasingam has joined the Center for Medical Image Analysis & Navigation (CIAN) as a PhD candidate under the supervision of Prof. Dr. Philippe Cattin. As a member of the remEDy project team, she is working on machine learning approaches to identify and reduce mistriage in emergency departments, with the goal of supporting more efficient triage decisions and enhancing patient safety.

Career



AlumniBasel Mentoring Program: Become a mentor!
Become a Mentor and support students from the University of Basel as they enter their professional lives! The Alumni mentoring program of the University of Basel and AlumniBasel connects mentors and mentees to support and advise students on their way into the world of work, promote their personal development, share practical experience or point out career opportunities and alternative paths. [Read more.](#)



Researchers in Switzerland gain free access to Open Research Europe
Starting in autumn 2026, all researchers in Switzerland will be able to publish their articles on Open Research Europe free of charge. Funded by a consortium of 15 organizations, including the SNSF, this milestone expands free and transparent publishing opportunities for Swiss science. [Read more.](#)



Junior Research Group Leader at DBE | Submission deadline: 12.10.2026
Join the DBE as Junior Group Leader and drive innovative, translational research within our cutting-edge competence clusters to shape the future of science. Candidates must be supported by a mentor (i.e a Senior Group Leader). Applications will be reviewed by the DBE Executive board. See [DBE website](#) for further details.

Upcoming Events



Writing, but how? Free writing consultations | August 6 | University Main Library Basel
Are you writing your master’s or doctoral thesis and struggling with writer’s block? Try a free 30-minutes written language consultation with the Language Center of the University of Basel. The Center is offering free sessions on August 6 at the University Main Library. Registration is mandatory. [More information.](#)



Career Day for Postdocs | November 13 | Hotel Odelya Basel
Explore diverse career paths within and beyond academia at the Career Day for Postdocs. Connect with peers, gain insights, and reflect on your professional future. All postdocs are also invited to the Anniversary Celebration of the Career Advancement Office and Junior Researchers Committee immediately following the event. Registration opens on September 16. [More information.](#)

Research Funding



SNSF Scientific Exchanges Regulations: What’s new?
To clarify certain rules, and respond to growing demand, the SNSF has revised the [framework](#) for Scientific Exchanges. The new regulations will come into force on January 1st, 2027.
Ambizione | Submission deadline: 03.11.2026
This [funding scheme](#) supports early-career researchers wishing to conduct, manage, and lead an independent project at a Swiss higher education institution.
See [SNSF website](#) for further calls.



Smarter Medicine Research Grant | Submission deadline: 21.08.2026
The [Smarter Medicine Research Grant 2026](#) supports Swiss research projects on deprescription with up to CHF 20,000 per project. Up to three projects will be funded, aiming to generate new insights for smarter medicine, improve patient care, and reduce low-value care.



ERC Plus grants: opportunity for ambitious research | Submission deadline: 02.09.2026
The European Research Council (ERC) has announced an extraordinary new funding scheme: [ERC Plus grants](#). These grants, worth up to EUR 7 million each, are designed to support high-impact, long-term research projects across all disciplines.



BRIDGE Proof of Concept for early-career researchers | Submission deadline: 07.09.2026
The [Proof of Concept funding scheme](#) fosters the further development of scientific results to evaluate their market and/or societal potential. It supports researchers on their way to entrepreneurship or in their efforts to implement and apply their research results with an economic and/or societal partner.



EIT Health Transformative Healthcare Instrument | Submission deadline: 16.09.2026
EIT Health is offering [funding](#) for high-potential European start-ups in biotech, medtech, digital health, AI, and biomarkers or diagnostics. The initiative supports product development, commercialization, and fundraising preparation for innovations addressing unmet clinical needs. Applications open on July 15.

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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