



University
of Basel

Department of
Biomedical Engineering

DBE Newsletter

July 2025

Congratulations



Habilitation and Venia Docendi for PD Dr. Claudia Lenz

Claudia has received her habilitation and Venia Docendi for Experimental Medicine from the University of Basel, marking an important milestone in her career and in our department's commitment to academic excellence. For the past 5 years, she has successfully led the [Forensic Medicine & Imaging Research Group](#), and has demonstrated an outstanding commitment to the education of our students and young researchers.



Habilitation and Venia Docendi for PD Dr. Joël Lavanchy

Joël has received his habilitation and Venia Docendi for Visceral Surgery from the University of Basel. This recognition underlines both his personal achievements and our department's commitment to academic excellence. As deputy head of the [Digital Surgery Lab](#), Joël is at the forefront of research in the field of surgical data science, with a particular focus on innovative surgical video analysis.



2025 ON/EORS Orthoregeneration Award for Esma Bahar Tankus

Esma's award-winning abstract "3D Bioprinting of Osteochondral Units with Human Nasal Chondrocytes Using a Granular Composite of Hyaluronic Acid, Collagen, and Hydroxyapatite," was selected by the ON Foundation and presented at the 33rd EORS Annual Meeting in Davos. [Read more.](#)

About us – Highlights



MIRACLE^{II} on the world stage – live from the Swiss Pavilion in Osaka

The MIRACLE^{II} Project, funded by the Werner Siemens Foundation, is currently taking part in the exhibition "Life" at the Swiss Pavilion of the EXPO 2025 in Osaka, Japan, from 11 June to 12 August 2025. Organized by Presence Switzerland and Swissnex Japan, MIRACLE^{II} presents its innovations in the field of virtual reality, robotics, laser technology and 3D-printing. Around 8000 visitors per day learn more about MIRACLE^{II} as an example for Swiss innovation. [Impressions from the event.](#)



MIRACLE^{II} at Theaterplatz, Basel

From 9 to 11 July 2025, the MIRACLE^{II} project transformed the Theaterplatz in Basel into a mobile laboratory for biomedical engineering supported by the Karlsruhe Institute of Technology. At interactive stations, young and old alike were able to learn more about virtual reality, laser technology, robotics and 3D printing. Around 500 visitors were able to find out about the latest developments and listen to inspiring talks by scientists and clinicians. Children enjoyed ice cream made right before their eyes using liquid nitrogen (thanks to the Department of Physics, University of Basel). The Trio Ora accompanied the program with jazz music. [Impressions from the event.](#)



Capacity building and networking event on AI for science

We welcomed postdocs and PhD students from institutions across the Netherlands, Germany, France, and Switzerland for an intense and inspiring program. With expert-led workshops by Réka Mihálka, Mirko Bischofberger, and Vincent Ginis, we explored how artificial intelligence is shaping the future of scientific writing, teaching, and communication. The event sparked meaningful discussions, hands-on learning, and new cross-border connections. [Have a look at the impressions on LinkedIn.](#)



New cooperation agreement with Kyoto Institute of Technology

The Department of Biomedical Engineering and the Kyoto Institute of Technology have officially signed a cooperation agreement to strengthen collaboration in both education and research. This cooperation creates opportunities for joint research projects for innovative medical technologies, exchange programs, and shared teaching.



From Tokyo to Basel: Yukiko Tomooka in Uniplus

In an interview with Uniplus Magazine, Yukiko Tomooka, a PhD student at BIROMED-Lab, shares her journey as a young researcher in Basel and at the Department of Biomedical Engineering (DBE). [Read more.](#)



Breath Analysis for Safer Pediatric Anesthesia

Researchers led by Prof. Pablo Sinues have made significant strides in improving anesthesia monitoring for children through breath analysis. This innovative approach offers a promising solution to the challenge of optimizing propofol dosing — a critical but complex task due to pediatric patients' unique physiological responses. [Read more.](#)

About us – We welcome



Ece Özkan Elsen has joined DBE as Tenure-Track Assistant Professor and leads the Analytics and Informatics for Child Health (AICH) group. Her research focuses on developing interpretable, fair, and generalizable machine learning models that integrate multimodal data to support diagnosis and care in paediatrics.

Events



DBE Research Day | 5 September 2025 | Biozentrum, Basel
We look forward to seeing you at the 11th DBE Research Day at the Biozentrum! Come to enjoy an exciting [program](#) and learn about our progress in bridging the gap between medicine and engineering but also to celebrate the bold ideas and collaborative spirit that will propel us into the future! Participation is free, but [registration is mandatory](#).



Clinic Meets Data Science Symposium | 29 August 2025 | Institute of Pathology, Basel
The one-day symposium is dedicated to the presentation of computational and translational research projects connected to the University Hospital Basel and will include external national and international keynote speakers. [More information & registration](#).



Joint Conference of the Swiss (SSBE), Austrian (ÖGBMT) and German Societies for Biomedical Engineering | 9 – 11 September 2025 | FHNW MuttENZ
Use the chance of being included in a 'Lightening Talk' session as 7-minutes oral presentation and submit your research: the late breaking abstract submission is still open until 30 July. Or just register to take part to learn about the recent developments in biomedical engineering and to network. [More information here](#).



UKBB Research Day | 31 October 2025 | Biozentrum, Basel
Save the date and join the [UKBB Research Day](#) (University’s Children Hospital Basel) in October 2025. The detailed program will follow and abstract submission deadline is 7 Sep 2025.

Calls & Awards & Research Funding



Call for Junior Group Leaders | Application deadline: 11.08.2025
Join the DBE as Junior Group Leader – drive innovative, translational research within our cutting-edge competence clusters and shape the future of science! If you intend to apply for a major grant as a Starting Grant with the DBE as your host, you first have to apply to become a Junior Group Leader at the DBE. Application deadline: 11.08.2025. [More information](#).



Postdoc.Mobility | Submission deadline: 05.08.2025
[Postdoc.Mobility](#) fellowships support researchers after the doctorate who wish to conduct a research stay abroad. The fellowships are aimed at researchers with a doctorate and at researchers who will complete their doctorate within nine months after the submission deadline.

Agora | Submission deadline: 16.09.2025
[Agora](#) supports projects that prioritise the involvement of a wider public in scientific research. The scheme aims to disseminate knowledge about science and foster dialogue between researchers and society.

Project funding | Submission deadline: 1.10.2025
The [project funding](#) scheme enables qualified researchers to independently carry out projects on topics and research objectives of their own choosing.

Check out the [SNSF website](#) for further calls.



Bridge Proof of Concept | Submission deadlines: 15.09.2025 and 1.12.2025
The “[BRIDGE 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 their efforts to implement and apply their research results with an economic and/or societal partner.

Info event Grants Office: Bridge Proof of Concept Writing Workshop on 2 Sep 2025. [More info](#).



European Research Council Starting Grant | Submission deadline: 14.10.2025
With an ERC Starting Grant you can work independently and show that you have potential to be a research leader. Researchers of any nationality with 2-7 years of experience since completion of PhD can apply.



EIC Accelerator | Submission deadline: 1.10.2025
The [EIC Accelerator](#) is a funding programme under Horizon Europe that offers support to start-ups that:

- have an innovative, game changing product, service or business model that could create new markets or disrupt existing ones in Europe and even worldwide
- have the ambition and commitment to scale up
- are looking for substantial funding, but the risks involved are too high for private investors alone to invest

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.

Would you like to publish news in the newsletter?
Please write us at communication-dbe@unibas.ch



Universität
Basel



Universitätsspital
Basel

