



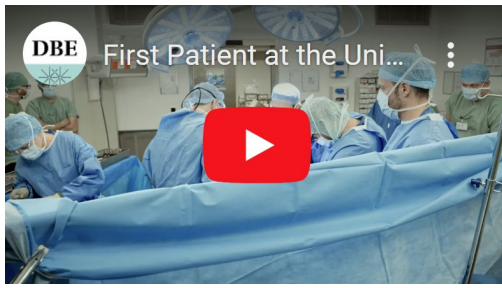
University
of Basel

Department of
Biomedical Engineering

DBE Newsletter

September 2023

Congratulations



to Prof. Thieringer and his Smart Implants research group together with the Neurosurgery team under the direction of Prof. Guzman on the first implantation of an in-house produced 3D implant. This August, at the University Hospital Basel, a patient was implanted with an artificial skull cap that was manufactured in-house. The implant was fabricated for the patient at the USB using 3D printing. After years of research and development, especially within the frame of the DBE PhD project of Dr. Neha Sharma, the USB has become the first hospital in Europe to successfully produce cranial PEEK implants through the 3D printing process that meet international medical device standards. Find more details including the video at [DBE News](#).



on the Swiss DINNO Award to Prof. Georg Rauter and Cédric Duverney

Prof. Rauter and Cédric Duverney are the winners of the Swiss DINNO Award for their Seezer project in collaboration with Brütsch Elektronik AG. Gripping and handling small, sensitive or unstructured objects with precision remains a challenge for automation. "Seezer – The seeing tweezers" is a "seeing" robot gripper with interaction force measurement which solves this problem successfully and cost-efficiently.



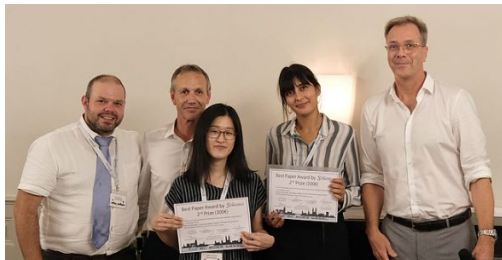
to all the prize winners at the 9th DBE Research Day

Andrea Zirn from the Forensic Medicine & Imaging Research at the Institute of Forensic Medicine has won the Master's Thesis Prize 2022/2023 of the Master's Program in Biomedical Engineering for her Master's Thesis on "Automated detection of cardiac and neurological causes of death in post mortem CT data", PD Dr. Christof Stieger and team won the course award for the course "Biomedical Acoustics" and the poster awards were given to Michaela Maintz (gold), Murali Karnam (silver) and Cédric Duverney (bronze). Check out the pictures of the day [here](#).



to Alexandra Migga on her Master's Thesis Award

Alexandra Migga, member of the BMC group has won the Master's Thesis Award from the Alumni of Human Medicine Basel for her Master's Thesis on "Human tooth cementum, paraffin-embedded nerve and zebrafish embryo: Comparative three-dimensional imaging study with micrometer resolution". Her work and thesis played a pivotal role in the granted SNSF R'Equip & University Investment project allowing the DBE to purchase two world-class micro-CTs.



to Michaela Maintz and Yukiko Tomooka on the Stäubli Best Paper Award

Michaela Maintz and Yukiko Tomooka from the MIRACLE II Project won the [2nd prize for the Stäubli Best Paper Award](#) with their abstract title "In situ minimally invasive 3D printing for bone and cartilage regeneration - a scoping review" at the CURAC 2023 conference.

About us – Highlighted



2023 Annual Meeting of the SSBE hosted at the University of Basel

The Biomaterials Science Center (BMC) of the DBE organized the 2023 Annual Swiss Society for Biomedical Engineering (SSBE) Meeting with almost 100 participants. The program comprised of two keynotes, ten oral presentations and 43 posters about the latest developments and trends in biomedical engineering with a focus on imaging and image analysis. Find more details including the booklet with all abstracts [here](#).



This was the 9th DBE Research Day

For the 9th time the DBE invited speakers and guests involved in the translational research process at the DBE to its Research Day. The focus was on building an environment that is optimized for the creation of new ideas. As this involves serious as well as playful elements, the agenda represented a blend of exactly these elements to the 200 participants. Check out the impressions of our Research Day on [DBE News](#).



This was the Medical Robotics Week and CURAC 2023

This year, the Medical Robotics Week consisted of a workshop series, the CURAC 2023 conference and the Innovation Booster Robotics with 140 participants. Hosted by Prof. Rauter and his BIROMED-Lab, the event showcased the fact that Basel is well on its way to becoming a medical robotics hotspot. Find more details [here](#).

About us – We welcome



Carina Schmidt, who started her PhD in the BIROMED-Lab led by Prof. Georg Rauter. Before, Carina studied Electrical Engineering and Information Technology at KIT in Germany. She specialized in biomedical engineering and wrote her master's thesis on image processing for medical robotics. During her PhD, she will work in the MIRACLE project to develop a robot for minimal-invasive dentistry.

Events



Open Science Seminar: Principles and Practices for Better Research, online

Registrations for the [seminar for Better and Open Science](#) are open. In these seminars the [questions of correctness and reproducibility of published research](#) will be explored. These issues will be investigated with invited speakers and journal clubs where students will have to make a short presentation. It takes place online every Thursday in the autumn semester from 16:30 – 17:30. Students can receive 1 KP. Lectures with invited speakers are open also to a [registered](#) external audience.



BLUTSPENDE SRK BEIDER BASEL

DBE blood donation day: October 4, GRID Allschwil

The blood donation center will park their bus for the DBE and its neighborhood in the center of the GRID building complex. If you are generally healthy, heavier than 50kg and 18 years or older, you most likely will be able to donate. Your donation may save someone's life. [Registration](#) is possible in different languages.

SWISS MEDTECH

National Regulatory Conference, October 18, BERNEXPO Congress 1.3

The "National Regulatory Conference" will focus on all regulatory aspects that affect the medtech industry today and in the near future. In addition to the current content around MDR/IVDR and the Swiss MdeDO/IVDO, the conference will also address the use of health data and reporting on sustainability topics. Register [here](#).



UKBB Research Day 2023, November 10, 8:30 – 18:00, Basel

You are invited to join the UKBB Research Day with the motto "Basic and clinical sciences – neighbours collaborating through translational research". The day will be filled with new impressions, insights, and interesting discussions! To conclude the day, an Apéro riche is offered which provides a great opportunity to network with other attendees. Don't forget to register [here](#).

Calls & Research Funding Events and Deadlines



SNSF & Innosuisse funding scheme information events

In October and November 2023, the SNSF and Innosuisse will hold three online information events for researchers. Find all details including the dates [here](#).

Spirit

[SPIRIT](#) facilitates knowledge exchange between researchers in Switzerland and researchers in a range of low- and middle-income countries. Submission deadline: November 2, 23.

Agora: Call for proposals

[Agora](#) supports projects that prioritize the involvement of a wider public in scientific research. The scheme aims to disseminate knowledge about science and foster dialogue between researchers and society: November 20, 23.

PROMYS – Support for researchers in Bulgaria

The new [PROMYS](#) program supports researchers from EU-27 countries or Switzerland who are seeking an assistant professorship in Bulgaria. Submission deadline: November 30, 23.

SNSF Swiss Postdoctoral Fellowships (SPF)

[Grants](#) for early-career researchers wishing to consolidate their scientific training and pursue their academic career in Switzerland. Submission deadline: December 1, 23.

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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