



University
of Basel

Department of
Biomedical Engineering

DBE Newsletter

July 2021

Events



7th DBE Research Day on Tuesday, September 7, 2021

This year's DBE Research Day will take place on September 7, 2021 from 8:45 to 17:00 at the "Zentrum für Lehre und Forschung" (ZLF), University Hospital Basel. The program focuses on translational research and brings together researchers and practitioners from different disciplines. So don't hesitate to inform your academic collaborators and industry partners to join us on this special day! You can find [the program on our website](#). We will have different sessions with DBE Highlights & Startups, Translational Tandems, presentations of the Evaluated Group and an Award Ceremony. Admission is free, but [online registration](#) is required from everyone.



Save the date for the DBE Party on September 9, 2021 on a boat on the Rhine!

With normality slowly returning, DBE members are cordially invited to a party to celebrate together the many successes and highlights of the last year and we are especially looking forward to finally seeing everyone in person again. We will have a dinner in a relaxed atmosphere from 6 to 10 pm on the boat Rhystärn on the Rhine. Please save the date and [register online](#).



Journal Editing in Health Sciences 2021 – Online Course

This course of the Swiss School of Public Health (SSPH+) teaches participants how to make responsible decisions in all phases of peer review when editing manuscripts. PhD students from all disciplines of the health sciences who have published at least two articles as first authors can register now. The course will take place from October 29 to November 29, 2021 and is divided into 6 phases. Registration needs to be done until September 30, 2021 [here](#).

About us – We welcome



Prof. Adamina, Dr. Lenz, Dr. Santini and Dr. Stieger as new (Junior) Group Leaders.

The DBE Executive Board has approved the application of Dr. Francesco Santini to be recognized as a DBE Group Leader and of Prof. Michel Adamina, Dr. Claudia Lenz and Dr. Christof Stieger as a DBE Junior Group Leader. In one of the next DBE newsletters, the new groups will be presented with their field of research.



Dr. Sandra Drusová, who started her postdoc in the BLOG group lead by Prof. Azhar Zam. She's an optical physicist with a PhD degree from University of Twente in the Netherlands and her research interests include development of optical sensors and measurement methods. In the BLOG group she will work on miniaturizing optoacoustic feedback systems for smart laser surgery and integrating the feedback systems.



Esma Tankus, who started as a research assistant in the Smart Implants/Swiss MAM group under the supervision of PD Dr. Florian Thieringer. She conducted her master thesis at the Adolphe Merkle Institute in Fribourg and later joined the tissue engineering group at the Department of Biomedicine (DBM) in Basel. Her project at the Smart Implants group in collaboration with the DBM focuses on the application of 3D-bioprinting for cartilage regeneration.



Fengze Wang, who also joined the Smart Implants group, is a med. dent candidate working on 3D-printing scaffolds to repair bone defects. Fengze holds a Bachelor degree in dentistry from Binzhou Medical University and a master degree in Oral Clinical Medicine from the Fourth Military Medical University in China, where he did his master thesis on the reconstruction of complicated jaw defects caused by tumor or trauma.



Rosa Visscher, who does her PhD in the Biomechanics of Movement group led by Prof. Elke Viehweger and Prof. Reinald Brunner from the UKBB. For the past three years, Rosa has been working on supporting clinical decision making for pediatric movement disorders as part of a collaborative project between the UKBB and the Neuromuscular Biomechanics group at ETH Zurich. During her PhD she will look into the contribution of peripheral and central control of gait towards toe-walking behavior in children with cerebral palsy.

Congratulations



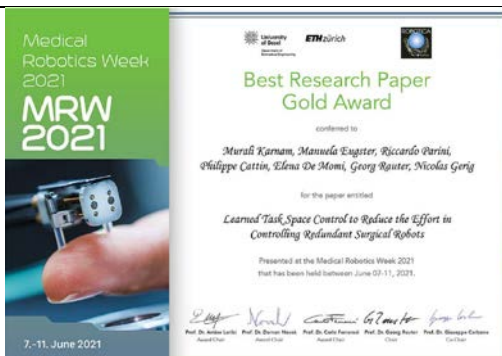
to Prof. Rauter on the NCCR Robotics Grant for an Origami-Based Human-Robot Interface

The NCCR Robotics has granted Prof. Georg Rauter of the DBE and Prof. Jamie Paik of EPFL about 200.000 SFR for the development of an "Origami-Based Human-Robot-Interface for Stabilizing Deployable Miniature Robots for Minimal-Invasive Laser Surgery". Prof. Rauter will appear as coordinator of this project within the National Center for Competence in Research Robotics. Find more information at [DBE news](#).



to the Members of the THINK Group, where Things are Going Great!

Dr. Reza Rahmanzadeh won the first prize for the best oral presentation in the prestigious "Quantitative MRI Study group" at the ISMRM 2021, where, in addition, Prof. Cristina Granziera was invited to give a plenary lecture. This summer she became co-president of the Swiss MS Society. And furthermore, the group has published a new paper in "Neurology", a prestigious high-impact journal. Find more about their success on [their news-page](#).



to the 6 Award Winners and Organizers of the Medical Robotics Week 2021!

More than 230 participants joined the [Medical Robotics Week 2021](#) which took place virtually from June 7-11, 2021. Not only the organizers from the DBE and their teams did a brilliant job, but also our researchers: out of 15 prizes for [best papers and posters](#), 6 prizes went to DBE members including the Gold Awards for the best poster contribution and for the best research paper at MESROB 2021 and a Silver Award for best contribution at AUTOMED 2021. If you want to know more [watch the videos](#) about the "making of" and about our research groups on YouTube.

Collaborations



Deep Breath Intelligence Started Strategic Collaboration with Bayer over Sleep Apnea

The [DBI](#), a spin-off of the DBE which implements advanced molecular breath analysis by combining high resolution mass spectrometry with advanced artificial intelligence, announces a strategic collaboration with Bayer AG (Leverkusen, Germany) in the SPRAY-SMART study of a new nasal drug for Obstructive Sleep Apnea Syndrome (OSAS). More information can be found [in this press release](#).



Paving the Way: DBE– DKF Alliance for a Regulatory Framework

As a joint effort, the DBE and DKF are making it possible to overcome the new regulatory hurdles for medical device development in academia and to quickly make available the most innovative developments in biomedical engineering research. Interested to find out more? [Read the article in the DKF-Forum](#).

Calls & Research Funding Deadlines



Latest Calls for Proposals of the SNF

[Here](#) you can find the regularly updated page which gives you the latest information about new calls and research funding deadlines of the SNF.

Good to know



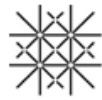
Digital Healthcare in Switzerland is Lagging Behind – Article of "Handelskammer"

Networked, digital health data enables more efficient research and development in the life sciences, new therapies for patients and reduces the cost of healthcare for society. However, according to the "Handelskammer beider Basel" Switzerland is behind in the digitization of healthcare. As a result, the attractiveness of the life sciences industry in the Basel region - a driving force of the Swiss economy - is suffering. To prevent this, the Life Sciences Cluster Basel is campaigning for a digital healthcare system with concrete measures and political instruments. Please find the full article [here](#).

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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