

Department of Biomedical Engineering

DBE Newsletter September 2020

Congratulations



to Prof. Georg Rauter on his appointments as an associate member of NCCR Robotics and as chair of IFToMM Switzerland

Georg Rauter has been appointed associate member of the National Centre of Competence in Research (NCCR) «Robotics». As associate member, Georg Rauter and his BIROMED-Lab will contribute to a holistic view of robot development from the idea to industrial-grade devices that are based on user-centered designs, expertise in human-robot-human interaction, human-in-the-loop strategies, force sensing technologies, and semiautonomous and autonomous robot-operation for surgical and rehabilitation tasks.

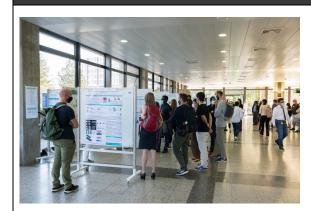
Georg Rauter additionally became designated chair of the Swiss member organization of the International Federation for the Promotion of Mechanism and Machine Science (IFToMM). In his new role, Georg Rauter will focus on efforts to attract a young audience and promote interest in the emerging field of robotics. Please find more detailed information on <u>DBE news</u>.



to Dr. Tino Töpper on the Science Slam Award 2020 at the Swiss Medtech Day

The audience of the Swiss Medtech Day voted Tino Töpper «Science Slammer of the Year 2020» for his presentation of Bottmedical's R&D project <u>«Tongue fitness training for sleep & speech therapy»</u>. Bottmedical AG, the Swiss deep-tech spin-off from the Department of Biomedical Engineering, is working on launching an innovative solution for snoring and sleep apnea therapies. More information on DBE news.

Events



Retrospect: An almost normal 6th DBE Research Day

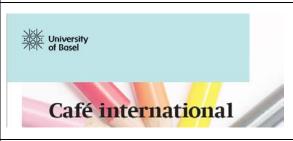
This year's Research Day of the Department of Biomedical Engineering took place on September 8, at the «Zentrum für Lehre und Forschung» of the University Hospital Basel. More participants than ever before (about 130 physical and 60 virtual) followed 14 talks, 11 speed pitches and two posters sessions. Despite a large number of Covid-19 protective measures, the Research Day again stimulated inspired discussions about clinical problems and technological possibilities and generated new ideas and cooperation between bench and bedside. Please find the article on DBE news including a link to the pictures and a selection of the posters from the Research Day.

The next DBE Research Day will take place on September 7, 2021 at «Zentrum für Lehre und Forschung». Save the date!



MEDTECH@noon – Composites for Medical Devices: Advantages and Challenges, October 7 Composites have very specific advantages which are based on their tailor-made material combination. How can these advantages be implemented in medical devices under the current regulatory and economic requirements? The expert panel will try to answer this question during the one-hour webinar, starting at noon.

<u>The webinar series Medtech@noon</u> offers an insight into innovations and new technologies with promising approaches for the medical device industry. The entire event will be held in English and is free of charge. <u>Please register here</u> until one day before the event



Café international, City Tour, October 14.

information here and the registration form.

The next Café international will take place on October 14, 2020 as a city walk. The topic of the tour is «Thirst for knowledge — hunger for travel» and will be conducted by the association «Frauenstadtrundgang» of the University of Basel. Please register here until September 30, 2020 (limited number of participants!). More information can be found in the flyer.



Seminar: Research with patient data – Further use of data from clinical routine, October 27. The clinical research update seminar for researchers at the University Hospital Basel offers an overview over the legal and ethical framework of data research and shows how data packages can be obtained. The seminar will take place on October 27, 2020. Please find more

Research Funding



The SNSF recently updated the regulations of all career funding schemes. Please check them!

Call for Ambizione proposals

<u>Ambizione grants</u> are aimed at young researchers who wish to conduct, manage and lead an independent project at a Swiss higher education institution. The submission deadline is November 1, 2020.

PRIMA

<u>PRIMA grants</u> are aimed at outstanding researchers who have great potential to become professors in their future career. PRIMA grantees conduct an independent research project at the level of a group leader with their own team at a Swiss research institution. PRIMA grants cover the grantee's salary and project costs for a five-year period.

The submission deadline is November 1, 2020.

Sinergia

<u>Sinergia</u> promotes the interdisciplinary collaboration of two to four applicants who propose breakthrough research. Breakthrough research calls into question or goes beyond existing models, theories, doctrines, research approaches, methods, etc. The submission deadline is December 1, 2020.

SNF website – calls for proposals

Check the <u>SNF website</u> regularly to get an overview about the latest calls for proposals.

Good to know



Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

New regulations for medical devices

The Swiss Federal Council has approved the revision of the Medical Devices Ordinance (MepV) as well as the new Ordinance on Clinical Trials for Medical Devices (KlinV-Mep), which are based on the <u>new EU regulations</u>. The implementation will take place gradually.

August 1, 2020: Implementation of the divergent provisions governing the placing on the market and putting into service of medical devices which have not undergone a conformity assessment procedure.

May 26, 2021: Entry into force of the provisions on obligations for market introduction, market surveillance or new clinical trial requirements.

About us







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.

We welcome new members at the DBE:

- Linda Bühl who just began her PhD at the Laboratory of Functional Biomechanics of Prof. Annegret Mündermann completed her Master's Degree in Sports Science with the profile «Movement and Technology» at the Karlsruhe Institute of Technology (KIT). Her work focuses on the clinical and detailed functional outcome 2 years after surgery of the anterior cruciate ligament (ACL). She will compare two operative treatment techniques, the ACL reconstruction and the ACL repair with a synthetic augmentation (InternalBrace) and further compare these results to healthy subjects.
- Eleonora Croci started her PhD also at the Functional Biomechanics Laboratory, led by Prof. Annegret Mündermann. She obtained her Master of Science in Biomedical Engineering at the ETH Zürich in 2019. She then worked in the MedTech industry for a year. In her PhD project, she studies the influence of additional weight carrying on load-induced changes in glenohumeral translation in patients with rotator cuff tear.
- Melissa Osterwalder started her PhD in the research group of Prof. Bert Müller. She
 obtained her Master's degree in Nanoscience at the University of Basel with her major
 in physics, where she had performed her Master thesis in the Quantum- and
 Nanoelectronics group of Prof. Christian Schönenberger. In her PhD project, she works
 as member of the X-ray tomography team on the generation of a synchrotron
 radiation-based atlas of the entire human brain with unprecedented resolution,
 involving suitable preparation of the human brain, the data acquisition procedure and
 proper handling and analysis of big data.

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