

DBE Newsletter July 2022

Department of Biomedical Engineering

Events



Congratulations



The 8th DBE Research Day will take place at the ZLF on August 30, 2022. Again this year

The program of the 8th DBE Research Day is available

we were able to create an attractive program with the motto "Innovation Through Collaboration". Check the program <u>here</u> and do not forget to <u>register online</u>, if you are interested into discovering the work of our researchers via various presentations, tandem talks, poster sessions but also short films!

to Prof. Bert Müller and Dr. Griffin Rodgers on a New Chapter in Histology

Histology is the gold standard for cellular resolution histopathological analysis. However, tissue morphology and density are irreversibly changed by the preparation steps, which include chemical fixation, dehydration, embedding, staining, and physical slicing. These manipulations make it difficult to draw conclusions about living tissues. In two recent publications, Dr. Griffin Rodgers and Prof. Bert Müller have provided convincing evidence that virtual histology based on X-ray imaging can overcome these limitations. Find more details at DBE news.



to Prof. Pablo Sinues on the Medical Certification for Breath Test

The <u>DBI-EPIbreath® Test</u> developed by Prof. Pablo Sinues' Deep Breath Intelligence Spin-Off has received its medical certification. The system supports healthcare providers to make faster and better decisions regarding epilepsy medication. From a simple blow of breath, the DBI-EPIbreath® Test is able to quickly determine antiseizure medication concentration in the patient's system.

About us - Highlighted





New GRID on the Block

Well, it's certainly not entirely new, but we have seen a lot of progress at the GRID since the last update! On June 9, 2022 interested DBE members met on Zoom and discussed about concerns and ideas for the new place. We talked about mailboxes, space for posters, old furniture, window blinds, a quiet area, switch from desktop to laptop computers, first aid kits and first aid representatives. In the meantime, we have also started to collect ideas for the meeting rooms at the GRID and received very interesting and fun suggestions. Find more about it at DBE news <u>here</u>. To monitor the process and take part in the change management, check the (internal) <u>DBE@GRID website</u>.

DBE Summer School 2022

After two difficult years impacted by Covid, the DBE Summer School 2022 was finally held in person again, this time in the beautiful Black Forest in Grafenhausen, Germany. 20 students from the PhD program in Biomedical Engineering as well as colleagues from Swiss TPH participated in this exciting event and immersed themselves in the topic of Big Data from various angles such as supercomputing, machine learning, fairness, data engineering, ethics, and data science. Please find more details about the event at <u>DBE</u> <u>news</u>.

About us – We welcome



Oumeymah Cherkaoui, who started her Ph.D. in the Planning and Navigation group of the MIRACLE project. After receiving her M.Sc. in Physics from ETH in Zürich, she began in 2021 as an intern at DBE in the CIAN group led by Prof. Philippe Cattin, working on non-invasive stage identification of Liver fibrosis with 4DMRI. During her Ph.D., she will investigate fiber-based shape sensing solutions for navigating flexible tools in minimally invasive surgeries.

Calls & Research Funding Deadlines



2nd Innovation Booster Robotics Call for Proposals

The 2nd NTN Innovation Booster Robotics Call is open until September 15, 2022 for any stakeholders in the Swiss robotics ecosystem. The focus key areas are Mobile Robots & Manipulators and Medical & Biomedical Robots. A support of up to max. 25.000 CHF is granted to the winning team. Please find the guidelines and application form within the 2022 Summer Newsletter Innovation Booster Robotics.

Continuation of SNSF Advanced Grants & SNSF Swiss Postdoctoral Fellowships in 2022 On behalf of the Swiss government, the SNSF will continue its transitional measures <u>"SNSF Advanced Grants" and "SNSF Swiss Postdoctoral Fellowships"</u> in 2022. As of August 1 and September 1, respectively, the two calls will open on the SNF website, and all important information will be available there.

Postdoc.Mobility

<u>Postdoc.Mobility</u> fellowships support postdocs who wish to conduct a research stay abroad. Submission deadline: August 1, 2022.

BRIDGE Proof of Concept

The new call for <u>BRIDGE Proof of Concept</u> projects is open until September 5, 2022. Young researchers who want to apply their research results and realize an innovative product or service can submit their project proposal.

Doc.CH

The <u>Doc.CH</u> grants are awarded by the SNSF to promising researchers who wish to write a dissertation in the humanities and social sciences in Switzerland on a topic of their own choice. Submission deadline: September 15, 2022.



