

University
of Basel

Department of
Biomedical Engineering

DBE Newsletter

August 2020

Congratulations



Project MIRACLE
Minimally Invasive Robot-Assisted
Computer-guided Laserosteotomy

to the MIRACLE team on receiving 12 million CHF from the Werner Siemens Foundation for MIRACLE II

The Werner Siemens Foundation is topping up their funding for the DBE flagship project MIRACLE by CHF 12 million. During the first project phase, which started in 2015, the project aims at developing a robotic endoscope to perform contact-free bone surgery with laser light. The second phase (2022-2027) will involve combining the developed individual systems into a modular robot, which can be individually configured for the planned surgical procedure and which already includes the operating table and lamps. More information can be found [here](#).



to Prof. Pablo Sinues, recipient of the 4th SGMS Award

The Swiss Group for Mass Spectrometry (SGMS) grants its 4th SGMS Award to Pablo Sinues. The SGMS award is awarded to promising scientists working in Switzerland or promising Swiss scientists working abroad, for outstanding independent research in the field of mass spectrometry. The SGMS jury with this price acknowledged Pablo Sinues' cross-disciplinary expertise, his highly innovative and productive work and his key contributions to the analysis of exhaled breath by ambient mass spectrometry. Please find more information on [DBE news](#).

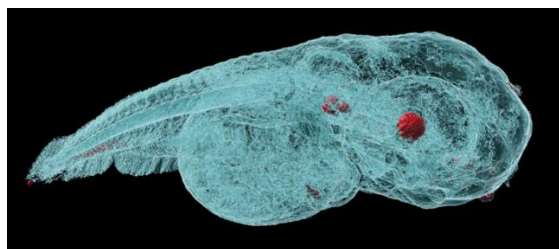


to Philippe Valmaggia on the 1st MD-PhD SNF Grant at the DBE

Within their "National MD-PhD Programme", the Swiss Academies of Arts and Science and the Swiss National Science Foundation are [funding the PhD project of Philippe Valmaggia](#) at CIAN. The National MD-PhD Programme aims to equip medical doctors interested in research with the skills necessary for a career as clinician and scientist. [Valmaggia's project](#) will address the question of time-resolved 3D Optical Coherence Tomography Angiography for novel biomarkers in cooperation with Prof. Hendrik Scholl of the [Institute of Molecular and Clinical Ophthalmology](#).

As part of the DBE master's program, Philippe Valmaggia has successfully completed his degree in Biomedical Engineering with a thesis in the CIAN group of Prof. Philippe Cattin this spring.

DBE-Groups Highlighted



BMC group on Uni News – Tiny fish under a giant camera

Metal-based nanoparticles are a promising tool in medicine – as a contrast agent, transporter of active substances, or to thermally kill tumor cells. Up to now, it has been hardly possible to study their distribution inside an organism. Researchers at the University of Basel have used a three-dimensional imaging method to take high-resolution captures inside zebrafish embryos. Please find the complete article about the latest developments of the BMC group from Prof. Bert Müller on the [Uni News](#).



frontiers
in Physics

Prof. Najat Salameh and Prof. Mathieu Sarracanie have been featured in the Rising Stars collection of Frontiers in Physics

The paper provides an overview on low field MRI research over the past 5 years and how it could complement clinical MRI. It revives the old debate between high and low field MRI with a fresh, up-to-date twist. Najat Salameh and Mathieu Sarracanie from the AMT Center show that the old dream of Low-Field MRI is alive and kicking. Please find more information with the full paper [here](#).

Events



6th DBE
Research Day
The Department of Biomedical Engineering –
innovative research from bench to bedside

6th DBE Research Day, September 8, 2020, Zentrum für Lehre und Forschung (ZLF), Basel

This year's DBE Research Day will take place on September 8, 2020 from 8:45 to 16:30 at the "Zentrum für Lehre und Forschung" (ZLF) at the University Hospital. The program of the Research Day is very attractive, so don't hesitate to inform your academic collaborators and industry partners to join us on this day! You can find the [program on our website](#). Join us for this special opportunity to get insight into new developments with two sessions of presentations, posters and speed pitches. The posters will be presented by their creators and the three best posters will receive a prize

Admission is free but [online registration](#) is mandatory and places are restricted due to Covid-19-protection.



Insights into COVID-19 Research, free webinars on September 2, 9 & 16, 2020

The BRCCH cordially invites to join 3-part free webinar series on COVID-19. The webinars will highlight the BRCCH's ongoing collaborative research efforts in Switzerland regarding COVID-19, as well as dip into the global conversation about the current challenges and latest developments in the race to respond to the pandemic, with a focus on low- and middle-income countries. Please find more detailed information about the webinars [here](#).

Research Funding

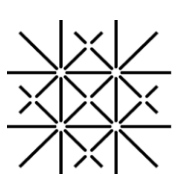


BRIDGE Proof of Concept

The sixteenth call for [BRIDGE Proof of Concept](#) projects is open until September 7, 2020. Young researchers who want to apply their research results and realize an innovative product or service can submit their project proposal [here](#).

Spirit (rolling call for pre-proposals)

The [Spirit](#) funding is awarded to research projects with clearly defined goals that are submitted by excellent research consortia from two to four countries. Researchers from all disciplines can apply for a SPIRIT grant; the topics are chosen by the researchers themselves. The submission deadline is December 31, 2020.



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Announcement for Innovation Projects – The Propelling Grant

The University of Basel has established a new funding opportunity to propel your groundbreaking & scientifically sound ideas towards future startup success. Successful applicants are required to demonstrate scientific excellence and breakthrough potential and to provide realistic information about the commercial viability of the proposed innovation, as well as a first draft strategy about the steps to reach the market / patients / customers. Please find all the details & documents about the application process [here](#).

Good to know



Breakthrough in negotiations with large publishing houses, the universities and the SNF
Thanks to new agreements between universities and the three biggest publishing houses Elsevier, Springer Nature and Wiley, it's free of charges for researchers to publish articles in more than 4000 journals from now on. Please find more detailed information about the agreement [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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