



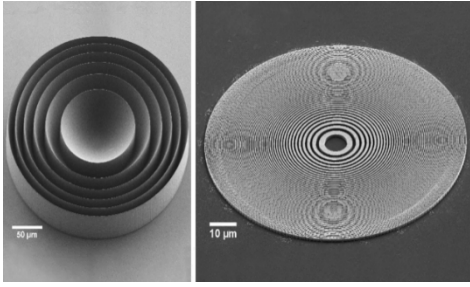
University  
of Basel

Department of  
Biomedical Engineering

# DBE Newsletter

## December 2020

### Congratulations



#### on the Nano Argovia funding for Prof. Bert Müller and Dr. Georg Schulz

[The project with the acronym ACHROMATIX](#) focuses on the development of an achromatic X-ray lens for lab-based imaging. Such a lens will enable laboratory-based tomography with sub-100 nm resolution for biomedical and materials science. Therefore, it is likewise interesting for DBE and SNI. Dr. Georg Schulz and Prof. Bert Müller successfully applied for Nano Argovia funding of the Swiss Nanoscience Institute (SNI) together with the partners at Paul Scherrer Institute (Dr. Joan Vila-Comamala and Dr. Christian David) as well as the industrial partner XRnanotech (Dr. Florian Döring).



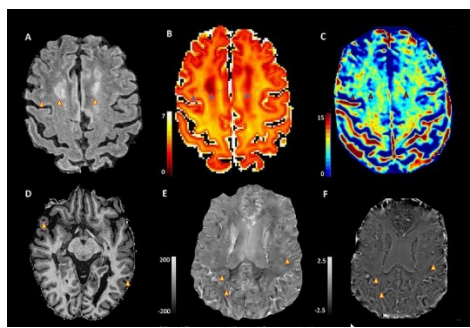
**on FAG-grants for Dr. Claudia Lenz, Dr. Iris Schulz, Prof. Philippe Cattin, Dr. Özgür Yaldizli**  
The «Freiwillige Akademische Gesellschaft Basel» (FAG) has selected three DBE-related projects for funding: From the Institute of Forensic Medicine Dr. Claudia Lenz for a project on temperature correction in post-mortem MRI and and Dr. Iris Schulz for one on single cell isolation in forensic genetics; Prof. Philippe Cattin (CIAN) with PD Dr. Özgür Yaldizli for research on deep learning for the evaluation of a longitudinal multiple sclerosis cohort study. The three projects will receive a sum total of 200'000 SFR for a duration of two years.



#### on the publication of the book "New Trends in Medical and Service Robotics"

Due to the pandemic situation the Medical Robotics Week 2020 (MRW 2020), organized by Prof. Georg Rauter, Prof. Philippe Cattin, Prof. Azhar Zam from DBE as well as Prof. Robert Riener from ETH, had to be postponed to June 2021. However, [the proceedings](#) of this year's 7<sup>th</sup> International Workshop on Medical and Service Robots (MESROB 2020) conference, which formed part of the Medical Robotics Week 2020, have been published. The presentation of the accepted papers will be postponed to next year's conference (MESROB 2021 within MRW2021). Please find more information about it on [DBE news](#).

### Highlighted



#### Research Center for Clinical Neuroimmunology and Neuroscience Basel ("RC2NB")

The newly founded research center "RC2NB" coordinates and intensifies research in the field of multiple sclerosis and neuroimmunology. It is the logical continuation of a decade-long commitment and internationally renowned, clinically oriented research for people with multiple sclerosis (MS) and other neuro-immunological diseases. NC2NB is headed by Prof. Ludwig Kappos and Workstream II is led by Prof. Jens Kuhle and DBE Prof. Cristina Granziera who focuses her research on innovative imaging techniques, in particular on better visualization of axonal damage and myelination. The Department of Clinical Research published an interesting [article in their magazine DKForum](#) about the RC2NB.



#### When women rise: Dr. Jeanette A. von Jackowski in sci five

BMC researcher and Bottmedical AG co-founder Dr. Jeanette A. von Jackowski is interviewed in sci five magazine as part of a portrait series that showcases some of the inspiring and multi-talented females currently active in the entrepreneurial field. Dr. von Jackowski talks about the founding of DBE spin-off Bottmedical AG, her inspiration for research and innovation, and special challenges for female entrepreneurs. Please find the [full article in sci five here](#).



#### MIRACLE Winter School 2020

How to present research projects in video? PhD students and postdocs tackled this question during this year's MIRACLE Winter School, which took place from 7.-8.12.2020 via zoom. With the support of Dr. Reinhard Wendler from DBE and Catrin Hofstetter from SRF, the participants learned how to shoot their own short films and presented them afterwards within a "film festival" at the end of the course. Thanks to all for the lively participation!

### About us – We welcome the new Smart Implants Group



Group Leader PD Dr. mult. Florian M. Thieringer, MHBA is an oral- and cranio-maxillo-facial surgeon and a medical 3D expert. He is Privatdozent (Ass. Professor) for oral and cranio-maxillo-facial surgery at the University Hospital Basel (USB) and head of the Medical Additive Manufacturing (MAM) research group at the DBE. Since 2016 FMT is co-director of the multidisciplinary 3D Print Lab at the USB, since 2020 co-principal investigator of the MIRACLE II project and head of the Smart Implants Group.



Dr. Neha Sharma is a PhD candidate at the MAM Research / Smart Implants Group. She is a maxillofacial surgeon and obtained her specialist master's degree in India 2013. For her PhD she works on the integration and implementation of 3D printing technologies in Cranio-Maxillofacial Surgery at the point-of-care, i.e. the fabrication of patient-specific implants (PSIs) using high-performance polymers (PEEK), digital workflows and virtual surgical planning in surgical treatment processes.



Dr. Shuaishuai Cao will join MIRACLE II in January 2021 as part of the Smart Implants Group. He finished his Master of Dentistry in 3D printing and oral- and maxillofacial surgery at Guangzhou Medical University in China. His PhD research will focus on developing innovative bio-inks and composite biomaterials, including material synthesis and interfacial interactions of biomaterials with hard and soft tissues.



Michaela Maintz will start her PhD in the Smart Implants Group of MIRACLE II as well as at the Institute for Medical Engineering and Medical Informatics at the University of Applied Sciences Northwestern Switzerland (FHNW). Recently, she completed her Master's Degree in Life Sciences specializing in Biomedical Engineering. Her focus is the study of predictive modelling and validation of osteosynthesis in craniomaxillofacial surgery.



Dr. Mirja Michalscheck started working as Research Project Manager for the Smart Implants Group. She holds 8 years of project management experience, working for international organizations such as the UN FAO, the Asian Development Bank and the European Commission. In her new function, Mirja co-organizes the activities of the Swiss MAM team at the DBE and links it with the 3D Print Lab activities at the University Hospital of Basel.



## About us – Changes in the DBE's executive board



### Thank you, Reinald Brunner!

Prof. Reinald Brunner, who has been member of the executive board and deputy head of the DBE since 2015, decided to resign from his duties at the DBE due to his forthcoming retirement as senior / deputy chief physician at the UKBB. Reinald's contributions to the DBE's development are manifold and highly appreciated. He not only contributed mentoring and advice based on his longstanding membership to the faculty, but in 2017, when the current head was on sabbatical, Reinald Brunner also headed the DBE. Dear Reinald, thank you very much!



### Welcome to Raphael Guzman as a new member of the board!

The DBE's assembly elected Raphael Guzman, deputy chief physician for neurosurgery at USB, as new member of the executive board. His election is a serendipity for the DBE, because on one hand he is a neurosurgeon at USB and UKBB and collaborates with many researchers at the DBE in Allschwil and on the other hand he is also involved in various committees at the DBM and therefore can link different views. Welcome on board!

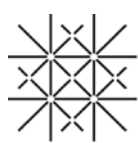


### Prof. Ludwig Kappos elected deputy head

The assembly further elected Ludwig Kappos as new deputy head of the department. He is a member of the DBE's executive board since the DBE was founded in 2015 and has supported it in many cases in front of the medical faculty.

The DBE's executive board should be equally composed of members from the natural sciences and medicine. Currently, the professors Ludwig Kappos and Raphael Guzman represent the clinicians, whereas Pablo Sinues, Philippe Cattin and Oliver Bieri represent the scientists and engineers.

## Events



University  
of Basel

Department of  
Biomedical Engineering

### First DBE PhD-Day, March 19, 2021 @ 14:00 - 17:00 CET

The first DBE PhD Networking Event takes place in March 2021 with the goal of bringing together researchers, students, and leaders of the department in an informal atmosphere to make new contacts and discover what expertise can be found within the department. For this first edition, the focus will lie on research groups situated outside the main DBE campus in Allschwil - you will have the opportunity to get to know them through virtual lab tours and interactive Q&A sessions. Additionally, some of the Master Theses currently being carried out at the DBE will be presented in virtual poster sessions. Please find more information including the registration [here](#).



### SNF-Media courses for researchers

[Media training courses](#) are aimed at interested researchers in Switzerland who would like to improve their skills in dealing with the media. Academic researchers need to master the craft of writing non-scientific texts for a large number of purposes, such as adapting a research topic for the general public, preparing content for a website or writing press releases. Due to a lack of demand for the English media training, the communication courses are held in German and French.



### Webinar series «MDR Readiness Q&A», December 17, 18 or 21, 2020

In less than six months – on May 26, 2021 – the Medical Devices Regulation (MDR) and the corresponding Swiss Medical Devices Ordinance (MedDO) will come into force. There are no indications that the Mutual Recognition Agreement (MRA) will be updated next. The decision to apply the third country requirements must be taken by each company itself. As an association, the Swiss Medtech wants to provide advice and support. Therefore they offer a [webinar series «MDR Readiness Q&A»](#) to ask your questions to renowned experts your questions directly.

## Research Funding Deadlines



Botnar Research  
Centre for  
Child Health

### BRCCH Postdoctoral Excellence Programme

This call aims to foster the next generation of researchers in pediatric health. The application deadline is January 13th, 2021 at 17.00 CET via the [BRCCH's grants portal](#).

### 2021 SNSF Scientific Image Competition

Share the beauty of your research! The Swiss National Science Foundation invites researchers to submit their photographs, images and videos to the [SNSF Scientific Image Competition](#). This year, in addition to the official jury, the public will be able to choose their favorite works from among those submitted since 2017.

The submission deadline is January 31, 2021.

### Postdoc.Mobility

[Postdoc.Mobility fellowships](#) support postdocs who wish to conduct a research stay abroad. For Early Postdoc.Mobility, now integrated into Postdoc.Mobility, there will be no further calls. The submission deadline is February 1, 2021.

### Eccellenza

[SNSF Eccellenza Professorial Fellowships](#) are aimed at highly qualified researchers who aspire to a permanent professorship. Eccellenza supports them in achieving their goal by allowing them to lead a generously funded research project as an assistant professor with their team at a Swiss higher education institution. The SNSF recently updated the regulations of all career funding schemes. As a result, further Eccellenza Grants will be no longer offered. The submission deadline is February 1, 2021.

### JSPS Postdoctoral Fellowships 2021

[The programme "JSPS Postdoctoral Fellowships"](#) enables researchers in Switzerland to stay in Japan for 12 to 24 months. Researchers interested in the fellowships are invited to submit their applications by February 17, 2021.

### Doc.Mobility@unibas 2021



### Doc.Mobility@unibas

The call is aimed at [doctoral students at the University of Basel](#) who wish to improve their scientific profile at a research institute abroad. If they have been enrolled at the University of Basel for 12 months prior to the submission of the application and do not already have funding from the Swiss National Science Foundation they can apply.

Submission deadline 1 March 2021.

## Reminder

# Finance & Controlling

### Annual closure of accounts – University of Basel

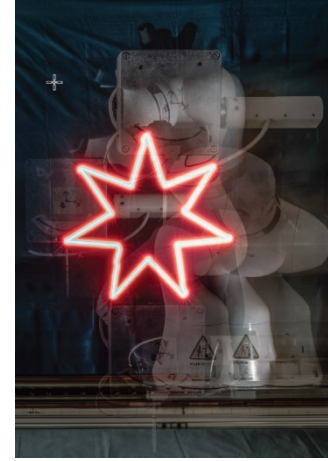
All bills and expenditure claims from 2020 must be forwarded on January 11, 2021 at the very latest. After that date, the budget of 2020 will be closed by the University. We recommend to submit all bills/claims even before the holidays. All receivable invoices must be submitted to [finanzen@unibas.ch](mailto:finanzen@unibas.ch) by December 23, 2020 at the latest. **Please pay attention, on January 1, 2021 a new accounting plan will be applied. The new accounts will have 7 digits instead of the 5 digits known so far.** More information on this will follow soon.

## Season's Greetings



We sincerely thank you  
for the enriching cooperation  
and your valuable support.

We wish you a peaceful and healthy New Year!



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.

You would like to publish news in the newsletter?

Please write us to [news-dbe@unibas.ch](mailto:news-dbe@unibas.ch)



Universität  
Basel



Universitätsspital  
Basel

