



University  
of Basel

Department of  
Biomedical Engineering



# 9<sup>th</sup> DBE Research Day

The Department of Biomedical Engineering –  
innovative research from bench to bedside



Tuesday, 29 August 2023  
Zentrum für Lehre und Forschung  
Hebelstrasse 20, CH-4031 Basel  
Register now: [dbs-events.dbe.unibas.ch](https://dbs-events.dbe.unibas.ch)

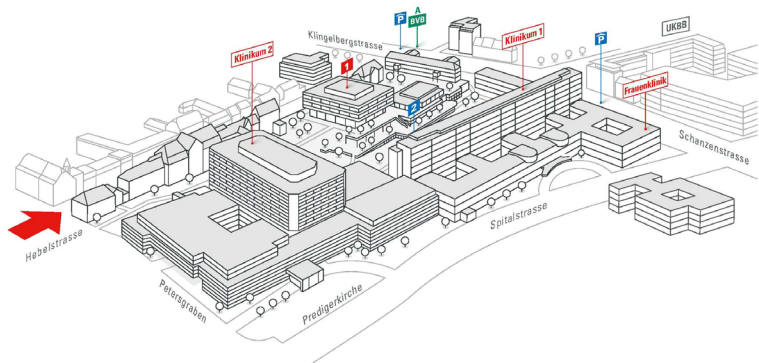
# Dear Guests and Colleagues

Last December, the Department of Biomedical Engineering has moved to the Grand Réseau d'Innovation et de Développement (GRID) in Allschwil. Our new spaces boost our team spirit by bringing our research groups closer together. In our Science Lounge researchers, guests, teachers, and students meet and inspire each other to new ideas.

With the move many parameters have changed, but our central goals have remained the same: Bridging the gap between engineering and medicine by focusing basic research on actually solving clinical problems right from the start.

Likewise, the DBE Research Day remains our most important event to stay in close contact with our partner hospitals. It was, is, and will be, the platform for an informal exchange about ongoing research, pressing problems, unused opportunities and crazy ideas. So we are pleased to welcome you to the 9<sup>th</sup> DBE Research Day at the «Zentrum für Lehre und Forschung» of the University of Basel.

Prof. Philippe Cattin  
Department Head

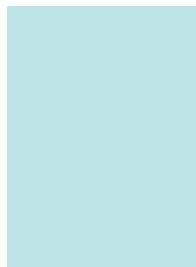


- 1 Zentrum für Lehre und Forschung (ZLF), Hebelstrasse 20
- 2 Ausgang Hebelstrasse, Universitätsspital Basel und ZLF
- P City Parking Einfahrt Schanzenstrasse oder Einfahrt Klingelbergstrasse
- A Bus 31, 33, 34, 36, 38 – Universitätsspital

# Agenda

## 29 August 2023

<b>8.45</b>	<b>Prof. Philippe Cattin &amp; Prof. Carol Hasler</b>	<b>Welcome to the DBE Research Day</b>
8.55		«A steep rise or how to get rid of pigeon poo» by Dr. Reinhard Wendler
<b>9.00</b>	<b>Session 1</b>	<b>Chair: Dr. Claudia Lenz</b>
9.00	Dr. Alina Senst, Janine Schulte & Valérie Gallinet	Decoding the genetic evidence: A multi-perspective approach
9.15	Prof. Anne Mündermann, Prof. Andreas M. Müller & Prof. Daniel Baumgartner	Who steps up for the rotator cuff?
9.30	Dr. Christine Tanner & Dr. Guido Sigron	How to grow together: Distraction osteogenesis
<b>9.45</b>	<b>Poster Session &amp; Coffee Break</b>	
<b>11.00</b>	<b>Session 2</b>	<b>Chair: Prof. Carlalberta Verna</b>
11.00	Dr. Ben Suter & Dr. Olivier Braissant	Shedding (and collecting) light on bilateral brain processing
11.15	Jokin Zubizarreta, Paul Friedrich & Prof. Florian Thieringer	Get smart or get out: The rise of intelligent implants
11.30	Dr. Ilaria Callegari, Dr. Matthias Weigel & Dr. Riccardo Galbusera	Afterlife
11.45	Mohammad Khair Nahhas, Prof. Georg Rauter & Prof. Jens Türp	Bruxism theatre
<b>12.00</b>	<b>Poster Session &amp; Lunch Break</b>	
<b>13.00</b>	<b>Session 3</b>	<b>Chair: Prof. Elke Viehweger</b>
13.00		«The knife is not enough» by Dr. Maren Roche
13.05	Prof. Andreas A. Müller	Biomimetic treatment for inborn malformations
13.20	Dr. Prasad Nalabothu	AI & smartphone for 3D orofacial cleft reconstruction in low resource settings
13.35	Till Schnabel	Data-driven 3D infant modeling for medical treatment and surgery planning
<b>13.50</b>	<b>Break</b>	
<b>14.10</b>	<b>Session 4</b>	<b>Chair: Prof. Eva Scheurer</b>
14.10		«Magnetic Resonance Physics & Methodology» by Jessica Schäper, Dr. Roya Afshari & Dr. Santhosh Iyyakkunnel
14.15	Prof. Oliver Bieri	MRI: Past and future perspectives
14.30	PD Dr. Grzegorz Bauman	Advances in lung MRI
14.45	Jessica Schäper	<sup>23</sup> Na relaxometry of the brain
<b>15.00</b>	<b>Award Ceremony</b>	<b>Chair: Prof. Pablo Sinues</b>
<b>15.30</b>	<b>Prof. Cristina Granziera</b>	<b>Closing Remarks</b>



## **Contact**

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