



Universität
Basel

Department of
Biomedical Engineering



7th DBE Research Day

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



Tuesday, 7 September 2021
Zentrum für Lehre und Forschung
Hebelstrasse 20, CH-4031 Basel
Register now: dbe-events.dbe.unibas.ch

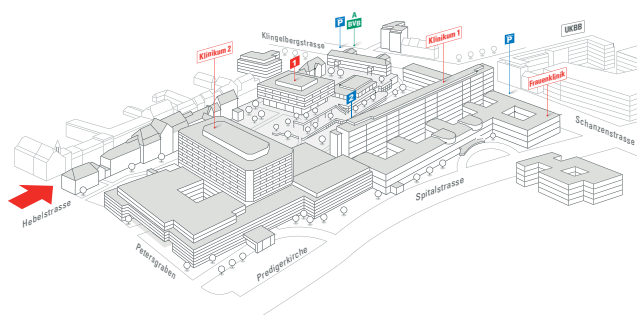
Dear Guests and Colleagues

One of the most important lessons Covid-19 has taught us is how important it is to communicate – not only in research and innovation. Communication is the very basis for resilience in times of perpetual acceleration. Therefore, it is of utmost importance that we meet in all possible ways to share our ideas and perspectives, positions, and decisions. The 7th Research Day of the Department of Biomedical Engineering is a perfect opportunity to do just that.

This year we selected «Translational Research» as the main topic, since for us at the DBE, clinical problems are our primary source of inspiration. They show us the way and help us focus on truly relevant goals. So, we want to get better at bringing together clinical problems and potential technical solutions. And that means bringing together people with different competencies, encouraging them to engage in inspired exchange, and refreshing our bonds of friendship. We, therefore, specifically organized a new tandem format on this Research Day, where two speakers from different fields together present their joint project in a fun and inspiring way.

You are cordially invited to join us at the 7th DBE Research Day – see you at the «Zentrum für Lehre und Forschung» of the University Hospital Basel!

Prof. Dr. Philippe C. 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

7 September 2021

8.45	Prof. Philippe Cattin & Prof. Michael Bornstein	Welcome to the DBE Research Day The challenge of «meaningful» research – what is a hype, what has impact?
9.00	Session 1: DBE Highlights	Chair: Prof. Eva Scheurer
9.00	Prof. Elke Viehweger	Patient perceived and objectively-measured biomechanical outcome in pediatric orthopedics: implication for clinical research
9.15	PD Dr Andreas Müller	More data & less surgery. Data driven health solutions for facial anomalies
9.30	Dr Iris Schulz	Potential and limits of novel technologies in forensic genetic
9.45	Prof. Najat Salameh	MSK and interventional imaging using low-field MRI
10.00	Poster Session & Coffe Break	
11.25	Session 2: Translational Tandems	Chair: Prof. Reinald Brunner
11.25	Prof. Sabina De Geest & Prof. Georg Rauter	Nursing robotics: a relieve for nurses in the near future
11.35	Prof. Marios Psychogios & Prof. Cristina Granziera	Found in translation: when (neuro)imaging does it all
11.45	PD Dr Magdalena Filipowicz Sinnreich & Prof. Philippe Cattin	Non-invasive stage identification of hepatic fibrosis using 4D-MRI
11.55	Dr Monika Astasov-Frauenhoffer & Dr Olivier Braissant	Biomedical engineering and dentistry: So much to do together
12.05	Prof. Alexander Navarini & Prof. Azhar Zam	Smart laser resurfacing in dermatology
12.15	Poster Session & Lunch Break	
14.00	Session 3: Evaluated Group	Chair: Prof. Hans-Florian Zeilhofer
14.00	Prof. Bert Müller	Employing physics for oral health research
14.15	Melissa Osterwalder	Cutting-edge X-ray imaging for cells and tissues
14.30	Dr Bekim Osmani	Building a soft interface for brain and spinal cord stimulation
14.45	Session 4: DBE Startups	Chair: Prof. Hans-Florian Zeilhofer
14.45	Dr Tino Töpfer	Bottmedical – Science crafted to life
14.55	Prof. Pablo Sinues	Towards clinical breath tests
15.05	Coffee Break	
15.35	Session 5: DBE Highlights	Chair: Prof. Urs Fischer
15.35	PD Dr Florian Thieringer	From bench to bedside: Virtual surgical planning and 3D: Printing for regenerative surgery
15.50	Prof. Andrea Barbero	LAROCARE: LAsEr-assisted ROBot-guided CARtilage Regeneration
16.05	Prof. Ludwig Kappos	dreaMS: Developing digital biomarkers for MS research and management
16.20	Prof. Oliver Bieri	When research meets ISO
16.35	Award Ceremony	Chair: Prof. Pablo Sinues
16.35	Best Poster Award	Committee: Dr Marco Fiorito, Dr Antal Horvath, Dr Claudia Lenz, Dr Bekim Osmani, Dr Muhamed Barakovic
16.50	Best Master Thesis Award	tba
16.55	Best Course	tba
17.00	Prof. Niklaus Friederich	Closing remarks