



Preliminary Program*

Tuesday August 20, 2024: Pre-conference Seminar Chaired by Sina Saxer, FHNW

The pre-conference seminar is designed for early-career researchers and participants seeking to acquire state-of-the-art background knowledge relevant to the BIC 2024 conference. It will provide introductory presentations on the two key topics: immune disease interfaces and mRNA. Additionally, it will provide industry insights into these topics and showcase digital innovations in Biointerfaces.

The workshop format will enable personalized and informal engagement between early-career scientists and keynote/invited speakers. Students and early-career scientists as well as participants from industry and government are welcome to attend.

8.30	Registration
9.00	Welcome
9.10	Introduction to Biomaterials Prof. Dr. David Grainger, University of Utah
9.50	Coffee break
10.20	Immune disease interfaces – Introduction Tbc
11.00	Immune disease interfaces – Industry insights Tbc - Novartis
11.40	Lunch and more – Ask the experts anything
13:10	Immune disease interfaces - Computational insights Tbc
13:50	mRNA Therapeutics – Introduction Prof. Dr. Chantal Pichon, University of Orleans, CNRS
14:30	Coffee break
15:00	mRNA Therapeutics - Industry insights Dr. Tilo Netzer, Lonza
15:40	mRNA Therapeutics - Computational insights Tbc
16:20	Wrap up & Transfer
17.00	Social event in Basel
20.00	End of the day



Wednesday August 21, 2024 – Day 1

8.00	Registration
9.00	Welcome FHNW – Falko Schlottig Basel Area representative
9.15	Opening Keynote: Prof. Dr. David Grainger <i>Allogenic mesenchymal cell sheet properties in regenerative medicine strategies</i>
10.10	Coffee break
	Session 1: mRNA Chaired by: Oya Tagit
10.40	Keynote 1: Prof. Dr. Chantal Pichon, University of Orleans <i>Messenger RNA vaccines and therapeutics</i>
11.10	Invited talk 1: Dr. Tilo Netzer, Lonza <i>Optimizing GMP manufacturing of mRNA Lipid Nanoparticles</i>
11.50	Contributed talk
12.05	Lunch, posters, exhibition, and networking
	Session 2: Biomaterials Chaired by: Simone Schuerle
13.20	Keynote 2: Prof. Dr. Suzie Hwang Pun, University of Washington <i>Biomaterials for cancer immunotherapy applications</i>
14.00	Contributed talk
14.15	Contributed talk
14.30	Technology pitches by exhibitors (4)
15.20	Coffee break
	Session 3: Biomaterials Chaired by: Katharina Maniura
15.50	Keynote 3: Prof. Dr. Joachim Spatz, Max Plank Institut <i>Bottom-up designs of synthetic cells, its application and skin models</i>
16.30	Invited talk 3: Dr. Nicholas Reynolds, La Trobe Institute for Molecular Sciences <i>Unravelling the role of amyloids in viral infections</i>
17.00	Contributed talk
17.20	Poster Session Apéro – Lobby



Thursday August 22, 2024 – Day 2

8.00	Registration
8.30	Welcome
	Session 4: Computational approaches / Labs of the future Chaired by: Johannes Textor
9.00	Keynote 4: Dr. Gregoire Altan-Bonnet, National Cancer Institute <i>Building models of CAR-T signal integration, using automatized/dynamic high-dimensional dynamic profiling</i>
9.40	Invited talk 4: Prof. Dr. Dagmar Iber, ETH Zürich D-BSSE <i>Data-based, predictive models to understand cell signalling for tissue and organoids</i>
10.10	Contributed talk
10.30	Coffee break
11.00	Contributed talk
11.20	Contributed talk
11.40	Technology pitches by exhibitors (2): <ul style="list-style-type: none">• IGZ Instruments
12.00	Lunch, posters, exhibition and networking
	Session 5: Immune disease interfaces Chaired by: Li Tang
13.30	Keynote 5: Prof. Dr. Carole Bourquin, University of Geneva <i>Nanomaterials for drug delivery in cancer and inflammation</i>
14.10	Invited talk 5: Dr. Inge Wortel, Radboud University <i>When motility matters: simulating host-pathogen interactions during Listeria invasion of the gut epithelium</i>
14.40	Contributed talk
15.00	Contributed talk
15.20	Coffee break
	Session 6: Mechanobiology and mechanoimmunology Chaired by: Michael Nash
15.50	Keynote 6: Prof. Dr. Khalid Salaita, Emory University <i>DNA Mechanotechnology: nucleic acids that sense and generate molecular forces enable a new class of biomedical applications and diagnostics</i>
16.30	Contributed talk
17.00	Contributed talk
17.30	End of Day 2



19.00	Conference Dinner in Basel (extra fee applies)
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Friday August 23, 2024 – Day 3

8.00	Registration
8.30	Welcome
	Session 7: Bioprinting and biofabrication Chaired by: Markus Rimann and Maurizio Gullo
9.00	Keynote 7: Prof. Dr. Massimo Mastrangeli, Delft University of Technology <i>Microelectromechanical organs-on-chip</i>
9.40	Invited talk 7: Prof. Dr. Bart Spee, Utrecht University <i>Liver adult stem cells for advanced in vitro models and whole organ engineering</i>
10.10	Contributed talk
10.30	Coffee break
	Session 8: Science to market Chaired by: Canet Acikgoz and Samantha Paoletti
11.00	Keynote 8: tbc
11.30	Contributed talk
11.50	Contributed talk
12.10	Lunch, posters, exhibition, and networking
13.30	Closing Keynote (virtual): Prof. Dr. Molly Stevens, University of Oxford <i>Designing and translating materials for advanced therapeutics and biosensing</i>
	Q&A with Dr. Stevens
14.30	Poster Prizes Announcement
14.50	Closing remarks
15.00	End of the conference