

Biotechnet Conference Report: Biointerfaces International Conference 2024







Quick Facts



FHNW Muttenz, August 20-23, 2024



150 participants from 19 countries Academics, start-ups, suppliers, clinicians



40 + invited and contributed Talks
Pre-conference seminar for early career researchers
Technology pitches by exhibitors
Start-up panel discussion on path to market



40+ posters



4 poster prizes



20 sponsors and exhibitors, including 11 technology pitches



Organized by: FHNW (chair), ETH Zürich, Competence Centre TEDD / ZHAW, Empa

Takeaway



BIC 2024 featured a special focus on mRNA interfaces and immune disease interfaces, in addition to the usual topics of biomaterials, bioprinting, and biosensing.



Next event in 2027 at EPFL

Session Highlights

Pre-conference seminar for early-career researchers

The pre-conference seminar provided participants with introductory presentations on key biointerface topics including:

- A keynote by Prof. Dr. David Grainger, University of Utah (US): Immuno-modulation with biomaterials what are we modulating?
- 6 presentations about academic and industry advances in the 2 special topics of the 2024 edition: mRNA interfaces and immune disease interfaces

Keynote talks by session

- mRNA session: Prof. Dr. Chantal Pichon, INSERM University of Orleans (FR): Messenger RNA vaccines and therapeutics.
- Immune disease interfaces session: Prof. Dr. Suzie Hwang Pun, University of Washington (USA): Biomaterials for cancer immunotherapy applications.
- **Biomaterials session:** Prof. Dr. Joachim Spatz, Max Plank Institut (DE): Bottom-up designs of synthetic cells, its application and skin models.
- Mechanobiology session: Prof. Dr. Khalid Salaita, Emory University (US): DNA
 Mechanotechnology: nucleic acids that sense and generate molecular forces
 enable a new class of biomedical applications and diagnostics.
- **Bioprinting and biofabrication session:** Prof. Dr. Massimo Mastrangeli, Delft University of Technology (NL): Microelectromechanical organs-on-chip.
- Biosensing and diagnostics session: Prof. Dame Molly Stevens DBE FRS FREng, University of Oxford (UK): Designing and translating materials for advanced therapeutics and biosensing

Technology pitches by exhibitors

11 innovative organizations from across industry presented their expertise and technologies:

- Swiss Nanoscience Institute
- Oerlikon
- IGZ Instruments
- CSEM
- Nanosurf
- Quantum Design
- Bruker
- CELLnTEC
- Milian
- Merck
- Lino Biotech

Panel session with start-ups

3 start-ups provided insights into their path to market:

- Bionomous: Dr. Frank Bonnet, CEO
- CompagOs: Dr. Chris Steffi, Co-Founder and CSO
- MUVON Therapeutics: Dr. Deana Mohr, CEO