

# Annual Congress Biotechnologie 2020+

Preliminary program | October 4th, 2018 at Fraunhofer-Forum Berlin

## »Biological Transformation: Cutting-Edge Technologies in Biomanufacturing«

09:00 Registration

09:30 **Welcome addresses**

### Keynote presentation

**Dr. Patrick Dieckhoff**  
Fraunhofer-Gesellschaft

**Andrea Noske**  
Bundesministerium für Bildung und  
Forschung, BMBF

**Prof. Dr. Christine Lang**  
Bioökonomierat

10:15 Coffee Break (15 min)

10:30 **Session 1 - Lighthouse Projects**

- »MaxSynBio - Avenues towards creating cells from the bottom up«
- »Micro-scale production of industrially relevant molecules«
- »Structure-based design of versatile biosensors for small molecules«
- »Molecules off the conveyor belt«

**Dr. Patrick Dieckhoff**  
**Dr. Seraphine Wegner**  
Max Planck Society

**Dr. Vito Valiante**  
Leibniz Association

**Prof. Dr. Michael Bott**  
Helmholtz Association

**Prof. Dr. Frank Bier**  
Fraunhofer-Gesellschaft

11:30 Break (5 min)

11:35 **Panel discussion (in german)**

12:30 Lunch (45 min)

13:15 **Session 2 - Automated and Molecular Systems in Biotechnology**

- »Modular molecular systems in biotechnology«
- »How the automated lab can contribute to design the digital cell and new bioprocesses«
- »KnowVolution: Redesigning proteins for innovations in catalysis and material science«

**Dr. Stefan Kubick**  
**Dr. Stefan Schiller**  
Albert-Ludwigs-University of Freiburg

**Prof. Dr. Peter Neubauer**  
Technische Universität Berlin

**Prof. Dr. Ulrich Schwaneberg**  
RWTH Aachen

14:00 Postersession & Coffee (30 min)

14:30 **Session 3 - Synthetic Biology**

- »Bionics beyond the Macroscopic World: from Biosynthesis to Bioactivity«
- »Smart Membrane Compartments«
- »Expanding the Synthetic Scope towards Industrial Chemicals through Combination of Chemocatalysis and Biotechnology«
- »Bioswitches, robotics and biodigitalization for synthetic biology«

**Dr. Stefan Kubick**  
**Prof. Dr. Michael Müller**  
Albert-Ludwigs-University of Freiburg

**Prof. Dr. Reinhard Lipowsky**  
Max Planck Institute of Colloids and Interfaces

**Prof. Dr. Harald Gröger**  
University of Bielefeld

**Prof. Dr. An-Ping Zeng**  
Hamburg University of Technology

15:45 Postersession & Coffee (30 min)

16:15 **Session 4 - Glyco Biotechnology**

- »N-glycans, a diagnostic tool for ovarian cancer«
- »The Golgi Glycan Factory (GGF) - Optimized enzyme cascades for glycoconjugate synthesis«
- »Tailored Systems for High Performance Glycoanalysis in Golgi Glycan Factory 2.0«
- »Cell-free Synthesis and Functional Analysis of Membrane Proteins and Glycoproteins«

**Prof. Dr. Frank Bier**  
**Prof. Dr. Véronique Blanchard**  
Charité - Virchow Klinikum

**Prof. Dr. Lothar Elling**  
RWTH Aachen

**Dr. Erdmann Rapp**  
Max Planck Institute for Dynamics of Complex Technical Systems Magdeburg

**Dr. Stefan Kubick**  
Fraunhofer Institute for Cell Therapy and Immunology, Branch Bioanalytics and Bioprocesses

17:15 Final Statements

17:30 End