

# Single-Use Technologies V: Building The Future

## Key note Speakers

- Uwe Gottschalk is Chief Scientific Officer (CSO) at Lonza since July 2017
- Hans-Josef Endres, Director of the Institute for Plastics and Circularity, Leibniz University Hannover
- Patricia Hughes, Sr. Scientific Advisor, Office of Pharmaceutical Manufacturing Assessment, Office of Product Quality, CDER/FDA

## Preliminary ORAL program – status January 13th, 2022

### Session 1 – Single-use in pandemic times – lessons learnt and future outlook

Co-chairs: Yvonne Genzel (Max Planck Institute), Ekta Mahajan (Roche Genentech), Jeff Carter (Cytiva)

- Enablement by single-use technology of production of two billion vaccine doses of adenovirus-vectored vaccine in under a year, Carina Citra Dewi Joe, The University of Oxford, Jenner Institute, United Kingdom
- Proactive and reactive supply chain strategies for risk mitigation, Hana Sheikh, Genentech, United States of America
- Accelerating aseptic filling development in pandemics, Niamh Barry, Cytiva Vanrx, Canada
- Company and assembly redundancy – a case study, Sheryl Kane, Takeda, United States of America
- Implementing X-ray for single use systems Sterilization, Samuel Dorey, Sartorius, France
- Qualifying X-ray Irradiation of Single-Use Systems to Address New Challenges Associated with Single-Use Growth, James Hathcock, Pall Corporation, United States of America
- UNICAN: Dual Capability in Single Use Bioreactors, Ekta Mahajan, Genentech, United States of America
- Building the future with on demand 3D printing, Lena Achleitner, BOKU University of Natural Resources and Life Sciences, Austria

### Session 2 – Sensors and their integration with single-use technology

Co-Chairs: Torsten Mayr (TU Graz) and Jim Furey (PendoTECH)

- Evaluation of Single-use pH, DO, and Foam Sensors for Large Scale Single-use Bioreactors, Nicholas J. Rummel, Genentech, United States of America
- Improving bioreactor performance using mobile sensors, Jonas Bisgaard, Freesense ApS, Denmark
- The impact of baffles and probes on flow and power consumption in single-use bioreactors, Artemis Danae Charalambidou, University College London, United Kingdom

- Single-Use Optical and Electrochemical pH Sensors in Upstream Bioprocessing, Erica Berilla, FDA, United States of America

### Session 3 – Single-Use advantages in continuous and connected processing

Co-chairs: Peter Levison (Pall Biotech) and Mark Brower (Merck)

- Intensified Bioprocessing Enabling Single-use Technologies, Martin Glenz, Pall Biotech, Germany
- From N-1 to purified product in a closed and connected single use technology process Industry , Andreas Castan, Cytiva, Sweden
- Process Intensification: Impact on Cost, Facility Footprint and Sustainability Matrix, Miriam Monge, Sartorius, France
- Single Use Technologies in Continuous Manufacturing: A Regulatory Perspective, Scott Lute, FDA, United States of America
- TBD, TBD, Merck, United States of America

### Session 4 – Single-use adoption in emerging applications

Co-chairs: Qasim Rafiq (UCL) and Diego Schmidhalter (Lonza)

- Process Development for Improved Car-t Production Utilizing an Automated Single Use Perfusion Stirred-tank Bioreactor, Tiffany Hood, UCL, United Kingdom
- Integrated upstream and midstream processing with scalable pre-configured single-use assemblies for accelerated commercial reach, Tania Pereira Chilima, Univercells Technologies, Belgium
- Scale-down of an orbital shaken bioreactor: High cell density cultivation in perfusion mode and virus production, Sven Göbel, Max-Planck Institute, Germany
- Microbiom Product manufacture out of a SU facility set up, TBD, Seres Therapeutics, country,

### Session 5 – Single use and sustainability

Co-chairs : Kristi Budzinski (Roche Genentech) and Nelly Montenay (Sartorius)

- Sustainable Resins for Single-Use Technologies, Hans de Brouwer, SABIC, Netherlands
- Growth through sustainable business model innovation using ICIS Framework Chor Sing Tan, Cytiva, United States of America
- Reduction of Water and Water-related Energy Consumption by In-situ Media and Buffer Preparation on Demand in Continuous Integrated, Alois Jungbauer, BOKU University of Natural Resources and Life Sciences, Austria
- Learning from flexpack industry : closing the loop, Juergen Betz, Südpack, Germany