Program

* + **Day 0 (Length = ½day)**
    - **Arrival & Check-in 9-18**

* + **Day 1 (Length = 1 day)**
    - **Morning session 1 - Biophysics and Molecular Modeling** (10 min + 3 minute buffer/presenter (52 min), Q&A 20 min + 3 min changeover to next session) **Moderator Sophie (Novo Nordisk), John (MSD) 9-10:15**
      * **David Salah, Boehringer Ingelheim/KIT**: Multiscale modeling of polishing chromatography: A versatile tool for manufacturing assessment and process development
      * **Saeed Izadi, Genentech**: In silico approaches for identifying developability risks in therapeutic antibodies
      * **Julie Robinson, Merck**: Multi-scale modeling: bridging the gap between complexity, speed, and HTS experimentation during early phase downstream process development
      * **Yuanli Song, Sanofi:** Manufacturability Assessment for Adeno-Associated Virus (AAV) CMC Development
      * Q&A
    - **Break 10:15-10:45**
    - **Morning session 2 - Mechanistic (USP)** (10 min + 3 minute buffer/presenter (52 min), Q&A 20 min + 3 min changeover to next session) **Moderator Felix (Roche), Jessica (Genentech), Robert (Digital Process Design) 10:45-12**
      * **Katrin Paul, Novartis:** Improving upstream process performance by combining flux balance analysis (FBA) with inhibition kinetics
      * **Sara Canle Babío, Novo Nordisk:** Mechanistic modeling of a Dynamic Crossflow Filtration for API recovery
      * **Scott Altern, RPI\*:** Modelling of Multimodal Chromatography Using High-throughput Batch Isotherm Data
      * **Christian Kraetzer, MSD:** Kinetic model of a polysaccharide vaccine conjugation process
      * Q&A
    - **Lunch 12-13**
    - **Afternoon session 1 - Mechanistic (DSP)** (10 min + 3 minute buffer/presenter (52 min), Q&A 20 min + 3 min changeover to next session) **Moderator Felix (Roche), Jessica (Genentech), Robert (Consultant) 14:30-15:45**
      * **Jayan Senaratne, MeiraGTx:** Use of mechanistic modelling to design a platform process for the separation of full and empty AAV capsids
      * **Eric Shierly, Regeneron:** Exploring on-column conformational changes during HIC negative mode purification modeling
      * **Dominik Hertweck, Roche:** Application of Colloid Particle Adsorption Models for Flexible Downstream Process Development
      * **Chyi-Shin Chen, Chugai**: Modeling application for early-stage process optimization of a monoclonal antibody in mixed-mode chromatography
      * Q&A
    - **Break 15:45-16:15**
    - **Afternoon session 2 Open mic discussions, topics = Biophysics and Molecular Modeling, Mechanistic & additional ideas related to 16:15-17:15**
    - **Break & poster preparation 17:15-18:30**
    - **Dinner 18:30:20**
    - **Poster session** (24 posters @12 posters/hr, dessert, coffee, drinks) **20-22**

* + **Day 2 (Length = 1 day)** 
    - **Morning session 1 - CFD** (10 min + 3 minute buffer/presenter (52 min), Q&A 20 min + 3 min changeover to next session) **Moderator Steve (Allogene), Robert (Digital Process Design), Deenesh (Novo Nordisk) 16:15-17:30**
      * **Michael Martinetz, Boehringer Ingelheim:** Prepitation - CFD and SDM experimental assisted troubleshooting to enhance production-scale process performance
      * **Pavlos Kotidis, GSK**: Use of Computational Fluid Dynamic & Mechanistic Modelling in Cell Line Selection and Scale-Up
      * **Simone Dimartini, University of Edingburg\***: Machine Learning for morphology optimisation of perfectly ordered stationary phases
      * Presenter 4 Tanja Hermandez, **Novartis**: A probabilistic approach for diversion strategy development in continuous manufacturing
      * Q&A
    - **Morning session 2 - Plant modelling** (10 min + 3 minute buffer/presenter (52 min), Q&A 20 min + 3 min changeover to next session) **Moderator Mariona (Novo Nordisk), Robert (Digital Process Design) 9-10:15**
      * **Simon Lindahl, NN:** Product and Project Allocation in Primary Pharmaceutical Manufacturing
      * **Suzanne Farid, UCL\*,** How can we best design facilities of the future to meet cost of goods, cost of development and sustainability priorities?
      * **John Bagterp Jørgensen, DTU\*:** Modeling, simulation, control and uncertainty quantification for integrated optimization for upstream and downstream processes in mAb production
      * **Tobias Overgaard, NN:** A Causal Framework for Performance Analysis of Full-scale Pharmaceutical Manufacturing Systems
      * Q&A
    - **Break 10:15-10:45**
    - **Invited talks** (15 min/presenter (52 min), Q&A 25 min + 5 min head to lunch) **Moderator Arne (Novo Nordisk), David (MSD) 10:45-12:15**
      * Keynote 1 **Abraham Lenhoff, University of Delaware\*:** The essential chemistry of electrostatic interactions of proteins
      * Keynote 2 **Todd Przybycien, RPI\***: Implementation of the population balance model in CADET and application to the continuous antibody capture via precipitation
      * Keynote 3 **Maya Shevlyakova, CSL Behring**: Future-proofing our data potential: a CSL Behring modelling journey
      * Keynote 4 **Bernt Nilsson, Lund University\***: Automatic modelling and optimization of a chromatography separation
      * Q&A
    - **Lunch 12:15-13:15**
    - **Afternoon session 1 Open mic discussions, topics = CFD, Plant & additional ideas related to ideas 13:15-14:15**
    - **Break 14:15-14:45**
    - **Get ready for closing 16:20-16:30**
    - **Closing 16:30-17:00 -** Arne