



BioProNET2 12th Annual Science Meeting

Manchester Institute of Biotechnology, Manchester M1 7DN

October 15th-16th 2025



	Day 1 October 15th
11:00-12:30	Early Career Session <i>Introductory session on personal skills development for early career researchers in both academia and industry immediately prior to the main scientific sessions in the morning of October 15th (contributed by the Innovate UK-funded RESILIENCE Leadership Accelerator Programme, delivered by Dr Tony Bradshaw)</i>
12:00-13:00	<i>Lunch</i>
Session 1 – 13:00 13:25 13:50 14:15 14:25	Session 1 - Engineering Biology enables New Products and Processes? Chair: Alan Dickson Simon Fischer , Boehringer Ingelheim Pharma, Biberach - Repurposing Nature's Secrets: Discovery of a Novel Chimeric Transposase to Advance Mammalian Cell Factories Matt Dale , Concinnity, Edinburgh - RNA-Based Control Systems for Precise Regulation of Gene Expression Jeannette Gebel , Ningaloo, Cologne - Harnessing Light for Robust and Dynamic Control of Gene Expression in Bioproduction and Beyond. Javier Bravo Venegas , University of Manchester - Challenging CHO cell death: novel anti-apoptotic targets for extended biomanufacturing (selected short talk) Daniel Mulvihill , University of Kent - A High-Throughput Multiwell-Plate based Approach for the combined Expression, Export and Assay of Recombinant Proteins (selected short talk)
14:35 -16:05	<i>Break & POSTER SESSION</i>
16:05 – 17:30	Session 2 – Sustainability – Someone Else's Problem? <i>This interactive session will initiate with a short presentation by David Gruber (Ipsen) in relation to the industrial perspective of sustainability in biomanufacture and how these considerations are influencing how we, in all we do, need to direct our technologies and approaches.</i> <i>A Sustainability Decision Jam will follow. Here we will step back and observe our bioprocessing industry from different "sustainability" lenses (technical, financial, human dynamics, ...). Together (all BioProNET2 participants) we will identify and address specific issues with sustainable biomanufacturing of existing and emerging biotherapeutics. The result will be a clear set of low-hanging-fruits and long-term opportunities for BioProNET2 and its members to take action.</i> <i>This co-creation exercise will be led by Simone Dimartino (University of Edinburgh) and Maria Papathanasiou (Imperial). We expect the session will result in a whitepaper.</i>
17:30-18:00	<i>Informal POSTER SESSION: Close of Day 1</i>
19:30-22:00	RECEPTION & CONFERENCE DINNER

	Day 2 October 16th
09:00 09:25 09:50 10:15 10:25	Session 3 - Staying in (Process) Control – Will AI help? Chair: Paul Dalby Antonio Roldao, IBET, Lisbon - Enabling integrated continuous biomanufacturing for virus-based expression systems Diego Oyaruzun, University of Edinburgh - Machine learning approaches for cell factory optimization Vincenzo di Cerbo, Cell & Gene Therapy Catapult -Deciphering AAV production dynamics in HEK293 clones through multi-omics profiling Eva Antonopoulou, Fujifilm Biotechnologies - Use of Computational Fluid Dynamics in bioprocess development and manufacturing (selected short talk) Vishwanathgouda Maralingannavar, Lonza Biologics - Harnessing High-Throughput Technologies to mimic lab-scale bioreactors (selected short talk)
10:35-11:35	<i>Break & POSTER SESSION</i>
11:35 12:00 12:25 12:50 13:00	Session 4 – Making Downstream Even Better for New Modalities? Chair: Bernie Sweeney Mark Howarth, University of Cambridge - The Spy toolbox for vaccine and therapeutic design Dan Bracewell, UCL - Adsorption-Based Separations for Biological Products: Expanding Dimensions for Intracellular Delivery Vectors Bernadette Byrne, Imperial College London - Analysis of mAb in solution, on-column and underflow using ATR-FTIR and Raman spectroscopy Emma Burman, UCL - Isolation and characterisation of extracellular vesicles derived from mesenchymal stem cells and HEK293 cells using nanofiber-based ion exchange chromatography (selected short talk) Sujeong Yang, Astrea Bioseparations - Nanofiber-Based Anion Exchange Purification: Advancing Scalable Manufacturing of Oncolytic Viruses and Lentiviral Vectors (selected short talk)
13:10-14:00	<i>Lunch</i>
14:00 14:25 14:50	Session 5 – Really? Novel systems bring tomorrow closer. Chair: Mark Smales Nicki Panoskaltsis / Sakis Mantalaris, Trinity College Dublin - Developing a metabolomics database for cellular therapeutics Jordan Turnbull, Fuse Vectors - Cell-Free Innovation: Better and Faster Viral Vectors for All. Jane Farrar, Trinity College Dublin - Shedding Light on Eye Disorders – Elucidating Causes, Designing Gene Therapies
15:15 –15:30	<i>Meeting closure and awards for early talks and poster presentations</i>