



Monday 22 February

12:00 - 14:00	Registration
14:00 - 14:10	Welcome and opening remarks
14:10 - 15:00	Opening Plenary Lecture - Harnessing plant metabolic diversity Anne Osbourn, John Innes Centre, UK

Session I - Technology & Tools I. Chair: T. Overton

15:00 - 15:30	Invited Lecture - Characterisation and Foundries in Synthetic Biology Richard Kitney, Imperial College London, UK
15:30 - 15:50	Engineering Synthetic Morphology of <i>Pseudomonas putida</i> for Biodegradation Pablo I. Nickel, CNB-CSIC, Spain
15:50 - 16:10	Orthologous, light-inducible protein expression platform in yeast <i>Saccharomyces cerevisiae</i> Katrin Messerschmidt, University of Potsdam, Germany
16:10 - 16:40	<i>Coffee break</i>
16:40 - 17:00	Synthetic Microbial Consortia as Next-Generation Cell Factories Suvi Santala, Tampere University of Technology, Finland
17:00 - 17:20	Synthetic biology toolbox and application for recombinant protein production in <i>Pichia pastoris</i> Roland Prielhofer, Austrian Centre of Industrial Biotechnology, Austria
17:20 - 18:30	Poster flash session
18:30 - 20:00	<i>Drinks reception and poster session</i>
20:00	<i>Welcome buffet</i>

Tuesday 23 February

Session 2 - Bionanoscience. Chair: Louise Horsfall

09:10 - 09:30	Engineering and Redesign of Bacterial Microcompartments Martin J Warren, University of Kent, UK
09:30 - 09:50	Yeast Culturing in 1.5nL Microbioreactors Elif Gençtürk, Boğaziçi University, Turkey
09:50 - 10:10	Tailored synthetic affinity reagents for purification purposes Cecilia Roque, Universidade Nova de Lisboa, Portugal
10:10 - 10:30	Probing the Bio-Nano Interface Using Synthetic Biology Urtu Ozgur Safak Seker, Bilkent University, Turkey
10:30 - 10:50	Metal decontamination and nanoparticle production using synthetic biology Matthew Edmundson, University of Edinburgh, UK
10:50 - 11:30	<i>Coffee break</i>

Session 3 - Biosynthetic Pathways and Enzyme Synthetic Biology. Chair: Louise Horsfall

11:30 - 12:00	Implementing biosynthetic pathways into yeasts: Strategies for compact and stable pathway design Martina Geier, Austrian Centre of Industrial Biotechnology, Austria
12:00 - 12:20	Cell free protein synthesis: Systems Biology meets Synthetic Biology Martin Siemann-Herzberg, University Stuttgart, Germany
12:20 - 12:40	Synthetic biology approaches to engineer new pathways for the production of plant secondary metabolites Joana L. Rodrigues, University of Minho, Portugal
12:40 - 13:00	Refactoring the TOL biodegradative pathway for aromatic pollutants of pWWO plasmid of <i>Pseudomonas putida</i> Danilo Pérez-Pantoja, CSIC, Spain
13:00 - 14:20	<i>Lunch and poster session</i>

Tuesday 23 February

14:20 - 15:10 Plenary Lecture - Novel tools for engineering of eukaryotic microbes
Jussi Jöntti, VTT Technical Research Centre of Finland, Finland

Session 3 - Technology & Tools II. Chair: Jeff Cole

15:10 - 15:30 Design, optimization, and application of regulatory RNA devices
Neil Dixon, University of Manchester, UK

15:30 - 15:50 Towards the rational design of generic synthetic core promoters and 5' untranslated regions (UTRs) for yeast
Rui M. C. Portela, Universidade Nova de Lisboa, Portugal

15:50 - 16:30 *Coffee break*

16:30 - 16:50 Evaluating the effect of metabolic stress on a reduced, stable *E. coli* genome
Jillian M. Couto, University of Glasgow, UK

16:50 - 17:20 Synthetic promoter libraries - new designs, calibration and orthogonality
Nick Wierckx, RWTH Aachen University, Germany

17:20-17:40 The Pdu microcompartment from *Lactobacillus diolivorans*
Hannes Rußmayer, BOKU – University of Natural Resources and Life Sciences, Vienna, Austria

18:30 - 20:00 Open meeting of EBBS – EFB Bioengineering & Bioprocessing Section

20:00 *Conference dinner*

Wednesday 24 February

09:30 - 10:10 Invited Lecture - Application of synthetic biology tools: Designed enzyme cascades and inexpensive high-level production of synthetic proteins
Birgit Wiltschi, Austrian Centre of Industrial Biotechnology, Germany

Session 4 – Metabolic Engineering & Chemical Manufacture. Chair: Jens Schrader

10:10 - 10:30 Metabolic engineering of *Pseudomonas putida* S12 for the production of styrene
Maike Otto, RWTH Aachen University, Germany

10:30 - 10:50 Use of transporter plug-ins in building effective microbial cell factories for chemical and fuel production
Frank Baganz, University College London, UK

10:50 - 11:10 Construction of a synthetic metabolic pathway for biosynthesis of the non-natural methionine precursor 2,4-dihydroxybutyric acid
J. M. Francois, University Toulouse, France

11:10 - 11:40 *Coffee break*

11:40 - 12:10 Methanol-based industrial biotechnology: Engineering *Methylobacterium extorquens* for the production of chemicals from methanol
Jens Schrader, DECHEMA Research Institute, Germany

12:10 - 12:30 Towards Synthesis of Human Milk Oligosaccharides using Transglycosidase Enzymes
J.D. Mikkelsen, The Technical University of Denmark, Denmark

12:30 - 12:50 Engineering *Corynebacterium glutamicum* for the production of 2,3-butanediol
Dušica Radoš, Universidade Nova de Lisboa, Portugal

12:50 - 14:10 *Lunch*

Wednesday 24 February

14:10 - 14:40 Improving 2-butanol production and tolerance in *Saccharomyces cerevisiae*
Joakim Norbeck, Chalmers University of Technology, Sweden

Session 5 – Tools & Technologies III. Chair: Ana Cecília Roque

14:40 - 15:00 Order and chaos: building a synthetic genome and inducing random large-scale rearrangements
Benjamin A Blount, Imperial College London, UK

15:00 - 15:20 CamOptimus: A self-contained, user-friendly multi-parameter optimisation platform for non-specialist experimental biologists
Duygu Dikicioglu, University of Cambridge, UK

15:20 - 15:40 The need of high-throughput screening in synthetic biology
Jan Dines Knudsen, University of Milano-Bicocca, Italy

15:40 - 16:00 Closing remarks

16:00 Departure