

PROGRAM | MONDAY 3 JUNE

08:45 - 09:15 Registration & coffee

08:15 - 09:20 Welcome by Kevin Verstrepen

Session 1

INDUSTRIAL BIOTECHNOLOGY/METABOLIC ENGINEERING Chair: Kevin Verstrepen

- 09:20 - 09:55 Systems Biology of Yeast Metabolism
Jens Nielsen, *Chalmers University of Technology & DTU Biosustain, SE*
- 09:55 - 10:30 Yeast-based ethanol production: improving product yield and robustness by metabolic engineering
Jack Pronk, *Department of Biotechnology, Delft University of Technology, NL*
- 10:30 - 11:00 Coffee break
- 11:00 - 11:35 Rapid engineering of microbes using the Ginkgo Foundry and Codebase
Narendra Maheshri, *Ginkgo Bioworks, US*
- 11:35 - 12:10 Development of an oral Live Biotherapeutic Product for IBD: exploiting microbiome expertise to accelerate clinical development
Sam Possemiers, *ProDigest BVBA, BE*
- 12:10 - 12:45 The place to be for metabolic engineering: the ER
Alain Goossens, *VIB-UGent Center for Plant Systems Biology, BE*
- 12:45 - 13:00 *Selected Talk:* Design and Synthesis of RNA Thermoregulators to Control Metabolic Flux in the Production of Essential Metabolites and Therapeutic Molecules
Jose Ruben Morones-Ramirez, *Universidad Autonoma de Nuevo Leon, MX*
- 13:00 - 13:45 Lunch
- 13:45 - 14:45 Poster Session - Odd numbers

Session 2

SYNTHETIC BIOLOGY Chair: Johan Thevelein

- 14:45 - 15:20 Biosynthesis of Complex Plant-Derived Natural Products
Christina D. Smolke, *Antheia & Stanford University, US*
- 15:20 - 15:55 Development of synthetic biology tools to investigate cellular burden in bacteria and engineer more robust gene expression
Francesca Ceroni, *Department of Chemical Engineering, Imperial College London, UK*
- 15:55 - 16:10 *Selected Talk:* Engineering bugs for the discovery of new drugs against diseases caused by protein misfolding and aggregation
Georgios Skretas, *National Hellenic Research Foundation, GR*
- 16:10 - 16:15 *Sponsored Talk:* Expand Your Possibilities with ZEISS
Cicerone Tudor, *Zeiss, BE*
- 16:15 - 16:45 Coffee break & Meet the Editor session
- 16:45 - 17:20 An orthogonal synthetic biology toolbox for the optimisation of microbial cell factories
Marjan De Mey, *Metabolic Engineering of Microorganisms (MEMO) group, Centre for Synthetic Biology (CSB), Ghent University, BE*
- 17:20 - 17:55 Genetically-encoded biosensors for bioprocess development
Karen Polizzi, *Department of Chemical Engineering, Imperial College London, UK*
- 17:55 - 18:55 Reception
- 19:00 - 20:00 Guided tour to the conference restaurant
- 20:00 - 22:30 Conference dinner @ De Hoorn

08:45 - 09:20 Welcome coffee

Session 3

MICROBIAL COMMUNITIES/HOST-PATHOGEN INTERACTIONS Chair: Jan Michiels

- 09:20 - 09:55** Quantitative, population-level microbiome monitoring - the Flemish Gut Flora project
Jeroen Raes, *VIB-KU Leuven Center for Microbiology, BE*
- 09:55 - 10:30** Exploring microbial communities using single-cell isotope probing
David Berry, *Department of Microbiology and Ecosystem Science, University of Vienna, AT*
- 10:30 - 11:00** Coffee break
- 11:00 - 11:35** Insect Microbiomes: Biomedical model and target for insect pest control
Angela E. Douglas, *Cornell University, US*
- 11:35 - 12:10** Using a four-species synthetic bacterial community to degrade industrial oils
Sara Mitri, *Department of Fundamental Microbiology, University of Lausanne, CH*
- 12:10 - 12:25** *Selected Talk:* Asthma prevention and increased gut microbiota resilience: a new probiotic application for *Lactobacillus rhamnosus* GR-1?
Irina Spacova, *University of Antwerp, BE*
- 12:25 - 13:15** Lunch
- 13:15 - 14:15** Poster Session - Even numbers

Session 4

NOVEL APPROACHES Chair: Han Remaut

- 14:15 - 14:50** Using microbes to map drivers of phenotypic change: within and between species
Dan F. Jarosz, *Stanford University, US*
- 14:50 - 15:25** Solar panels on yeast: Inorganic biohybrids for enhanced photochemical production
Neel Joshi, *Wyss Institute at Harvard University, US*
- 15:25 - 15:40** *Selected Talk:* Broadening the Host-Specificity of MAGE
Timothy M Wannier, *Harvard Medical School, US*
- 15:40 - 16:10** Coffee break
- 16:10 - 16:45** How telomeres control cell proliferation: lessons from budding yeast
Maria Teresa Teixeira, *CNRS, Sorbonne Université, PSL Research University, Laboratory of Molecular and Cell Biology of Eukaryotes, Institut de Biologie Physico-Chimique, FR*
- 16:45 - 17:20** Elucidating and controlling heterogeneity in fermentations
Morten Sommer, *DTU Biosustain, DK*
- 17:20 - 17:55** *Writing the yeast genome*
Jef Boeke, *NYU Langone Health, US*
- 17:55 - 18:05** Poster prize ceremony and closing remarks by Nico Callewaert