Novo Nordisk Foundation Conferences, Symposia and Workshops

Quantitative Modelling of Cell Metabolism

International Conference and Workshop

Quantitative models of cell metabolism enable scientists to explore and explain the molecular basis for homeostasis – the self-regulating processes evolved to maintain metabolic equilibrium. Studying homeostasis is relevant for understanding and treating complex diseases, particularly with the emergence of personalized medicine. It is equally important when we seek to repurpose the cellular machinery for producing desired chemicals, materials and pharmaceuticals.

Recent advances in quantitative omics combined with the emergence of new strategies for formulating and fitting large-scale metabolic models have produced a resurgence of interest in kinetic modelling. This conference will explore ideas and novel methods in quantitative modelling that exploit the rapidly expanding volume of omics data.

The conference will bring together outstanding researchers working on quantitative modelling of cell metabolism to stimulate knowledge exchange and collaborations between research groups and to expose the participants to state-of-the-art methods, tools and approaches.

Date

8–10 June 2020

Hellerup, Denmark

Participation is free of charge.
Registration is on a firstcome firstseved basis.
Registration deadline: 19 May 2020.
Abstract submission deadline (short talk and poster session): 14 March 2020.

To register, please click here ›

Speakers

Bas Teusink, Systems Bioinformatics, Department of Molecular Cell Biology, Faculty of Science, Vrije Universiteit Amsterdam, the Netherlands

Boris Kholodenko, Systems Biology Ireland and-, UCD Conway Institute, University College Dublin, Ireland

Costas Maranas, Chemical and Biological Systems Optimization Lab, Department of Chemical Engineering, Pennsylvania State University, PA, United States

Daniel Zielinski, Systems Biology Research Group, University of California, San Diego, CA, United States

Edda Klipp, Theoretical Biophysics Group, Institute of Biology, Humboldt-Universität zu Berlin, Germany

Elad Noor, Institute of Molecular Systems Biology, Department of Biology, ETH Zurich, Switzerland

Héctor García Martín, Joint BioEnergy Institute and Lawrence Berkeley National Laboratory, CA, United States

Irene Otero-Muras, BioProcess Engineering Group, Instituto de Investigaciones Marinas (IIM-CSIC), Spain

Julio Saez-Rodriguez, Institute of Computational Biomedicine, Faculty of Medicine, Heidelberg University, Germany

Katharina Nöh, Modeling of Biochemical Networks and Cells, Institute of Bio- and Geosciences, Forschungszentrum Jülich GmbH, Germany

Marija Cvijovic, Systems Biology Research Group, Department of Mathematical Sciences, University of Gothenburg, Sweden

Marta Cascante, Integrative Systems Biology, Metabolomics and Cancer Group, Department of Biochemistry and Molecular Biomedicine, University of Barcelona, Spain

Pedro Saa, Department of Chemical and Bioprocess Engineering, Pontifical Catholic University of Chile, Chile

Peter St. John, National Renewable Energy Laboratory, CO, United States

Tomer Shlomi, Cancer Metabolism and Systems Biology Group, Departments of Computer Science and Biology & Lokey Interdisciplinary Center for Life Sciences & Engineering, Technion – Israel Institute of Technology, Israel

Uwe Sauer, Institute of Molecular Systems Biology, Department of Biology, ETH Zürich, Switzerland

Vassily Hatzimanikatis, Laboratory of Computational Systems Biotechnology, Institute of Chemical Sciences and Engineering, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland

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