

## Thursday June 16<sup>th</sup>, 2022

- 9:00-9:30 **Welcome and coffee in the Génopode hall**
- 9:30-12:00 **SINGLE CELL ATLAS**  
Chair [Prof Julia Santiago Cuellar](#) UNI Lausanne Department of Plant Molecular Biology
- 9:30 [Prof Bert De Rybel](#) Vlaams Instituut voor Biotechnologie, Belgium  
*Studying plant vascular development at single cell resolution*
- 10:10 [Dr Yan Ma](#) UNI Lausanne Department of Plant Molecular Biology  
*Dissecting plant signaling specificity in a single cell type*
- 10:35 Coffee break in the Génopode hall**
- 10:55 [Prof Bart Deplancke](#) EPFL Laboratory of Systems Biology and Genetics  
*Engineering next generation single cell phenomics technologies*
- 11:35 [Surbhi Rana](#) UNI Lausanne Department of Plant Molecular Biology  
*A single-cell morpho-transcriptomic map of brassinosteroid action in the Arabidopsis root*
- 12:00-13:00 **Lunch in the Génopode hall**
- 13:00-14:55 **DISENTANGLING DIVERSITY IN MICROBIOMES USING LONG READ SEQUENCING**  
Chair [Prof Philipp Engel](#) UNI Lausanne Department of Fundamental Microbiology
- 13:00 [Prof Matthew Loose](#), University of Nottingham, UK  
*Adventures in adaptive sampling - from human panels to viral amplicons*
- 13:40 [Vincent Somerville](#) UNI Lausanne Department of Fundamental Microbiology  
*Strain-level resolved metagenomics of Swiss hard cheese starter cultures*
- 14:05 [Disha Tandon](#) UNI Bern Institute for Infectious Diseases  
*Analyzing full-length 16S rRNA gene amplicons of a low-complexity microbial community using nanopore sequencing*
- 14:30 [Lucas Paoli](#) ETH Zürich Institute of Microbiology  
*Resolving the genomic structure of an uncultivated natural products superproducer with low input long-read metagenomics*
- 14:55-15:25 **Coffee break in the Génopode hall**
- 15:25-17:20 **SEQUENCING WITH HIGH FIDELITY LONG READS, NO COMPROMISE ON DATA QUALITY**  
Chair [Dr Julien Marquis](#) UNI Lausanne Genomic Technologies Facility
- 15:25 [Prof Mark Blaxter](#) Wellcome Sanger Institute, UK  
*Sequence everything: biological insights from chromosomally complete genomes*
- 16:05 [Prof Robert Waterhouse](#) UNI Lausanne Department of Ecology and Evolution  
*Scaling up sequencing for the European Reference Genome Atlas (ERGA) initiative*
- 16:30 [Caroline Meier](#) CHUV Institut de Microbiologie  
*Multiplex long amplicon sequencing: antigenic variation of the pathogenic fungus *Pneumocystis**
- 16:55 [Dr Estella Poloni](#) UNI Genève, Department of Genetics and Evolution  
*Assessing phenotype-genotype matching in a metabolism involving a pharmacogene*
- 17:20 **Apero in the Génopode hall**

## Friday June 17<sup>th</sup>, 2022

- 9:00-9:30 **Welcome and coffee in the Génopode hall**
- 9:30-12:10 **IMAGING, GENOMICS AND MACHINE LEARNING**  
Chair [Prof Sven Bergmann](#) UNI Lausanne Department of Computational Biology
- 9:30 [Prof Peter Claes](#) KU Leuven, Belgium  
*Imaging genetics of human face and brain shape*
- 10:10 [Dr Mattia Tomasoni](#) Hôpital ophtalmique Jules-Gonin  
*The genetics of vessel tortuosity: what can you learn from 200,000 retina images?*
- 10:35 Coffee break in the Génopode hall**
- 11:05 [Prof Bogdan Draganski](#) UNI Lausanne Laboratoire de Recherche en Neuroimagerie  
*Brain imaging data analysis – beyond the eye-balling approach*
- 11:45 [Dr Jonas Richiardi](#) Lausanne University Hospital and UNI Lausanne  
*Graph-based machine learning for imaging genetics: from brains to hearts*
- 12:10-13:40 **Lunch in the Génopode hall**
- 13:40-16:00 **EVOLUTION OF COMPLEX GENOME REGIONS: LONG-READ SEQUENCING ELUCIDATES EVOLUTION OF NON-RECOMBINING CHROMOSOMES, CENTROMERIC REGIONS, AND REPEAT LANDSCAPES**  
[Prof Tanja Schwander](#) UNIL Department of Ecology and Evolution
- 13:40 [Prof Amanda Larracuente](#) University of Rochester, USA  
*Intragenomic conflict in *Drosophila*: satellite DNA and meiotic drive*
- 14:30 [Dr Thomas Badet](#) UNI Neuchâtel Laboratory of Evolutionary Genetics  
*Long-read sequencing elucidates how transposon activity shapes short-term genome evolution of fungal pathogens*
- 14:50 Coffee break in the Génopode hall**
- 15:20 [Dr William Toubiana](#) UNI Lausanne Department of Ecology and Evolution  
*Tandem repeat evolution under variable strengths of selection*
- 15:40 [Dr Envel Kerdaffrec](#) UNI Fribourg Department of Ecology and Evolution  
*Evolution and maintenance of an adaptive inversion polymorphism in *D. melanogaster**

Many thanks to our sponsors for their financial contribution to this event



Registration is free  
but mandatory ([LINK](#))

