## **PROGRAM**

## Wednesday April 10

08:30-09:00 Registration

09:00-09:10 Hernán LÓPEZ-SCHIER

Research Unit Sensory Biology and Organogenesis, Helmholtz Zentrum München,

Neuherberg DE

Opening remarks and QuanTissue presentation

09:10-10:00 Stanislav SHVARTSMAN

The Department of Chemical and Biological Engineering, Princeton University,

Princeton (NJ) US

"From signals to shapes in tissue morphogenesis"

10:00-10:50 **Alexander AULEHLA** 

Developmental Biology, European Molecular Biology Laboratory (EMBL),

Heidelberg DE

"A quantitative approach to study phase-dynamics of genetic oscillators during

mouse embryo patterning and scaling"

10:50-11:20 Coffee break

11:20-12:10 Miki EBISUYA

Career-Path Promotion Unit for Young Life Scientists, Kyoto University, Kyoto JP

"Genesis of asymmetry through synthetic cell-cell positive feedback"

12:10-13:00 Javier BUCETA

Theoretical and In Silico Modeling of Biological Systems Group

(The.Si.M.Bio.Sys.), Parc Científic de Barcelona, Barcelona ES

"Sonic hedgehog signaling switches the mode of division in the developing

nervous system"

13:00-14:00 Lunch

14:00-14:50 Juan Manuel PEDRAZA

Physics Department, University of the Andes, Bogotá CO

"Bacterial persistence as a stochastic-inducible phenomenon"

14:50-15:40 **Fabian THEIS** 

> Institute of Bioinformatics and Systems Biology, Helmholtz Zentrum München and Institute of Mathematical Sciences, Technische Universität München, Munich DE

"Modeling blood stem cell differentiation on multiple scales"

15:40-16:30 Lucia MARUCCI

Gene Regulation, Stem Cells and Cancer Programme, Centre for Genomic

Regulation (CRG), Barcelona ES

"Mathematical modelling of Wnt/β-catenin dependent somatic cell reprogramming"

16:30-17:30 Pica-pica & Poster Session

## **Thursday April 11**

09:30-10:20 Veronica GRIENEISEN

Computational & Systems Biology, John Innes Centre, Norwich Research Park, Norwich UK

"Computational Approaches to Unraveld Cell & Tissue Polarity"

10:20-11:10 **Jerome SOLON** 

Biomechanics of Morphogenesis Group, Cell and Developmental Biology Programme, Centre for Genomic Regulation (CRG), Barcelona ES

"Closing the gap: mechanisms regulating tissue constriction during drosophila dorsal closure"

11:10-11:40 Coffee break

11:40-12:30 Rico COEN

John Innes Centre, Norwich Research Park, Norwich UK

"A Framework for Tissue Cell Polarity in Plants and Animals"

12:30-13:20 **Shigeru KONDO** 

Graduate School of Frontier Biosciences, Osaka University, Osaka JP "Turing Pattern Formation in the Real Biological System"

13:20-14:30 Lunch

14:30-15:20 **Niels GRABE** 

Hamamatsu Tissue Imaging and Analysis (TIGA) Center, BIOQUANT, University Heidelberg, Heidelberg DE

"Systems-biological analysis of human wound closure using organotypic skin cultures"

15:20-16:10 **Jeremy GREEN** 

Department of Craniofacial Development & Stem Cell Biology, King's College London, London UK

"Patterning and growth in the mouse palate: a periodic Turing system with multiple tissue elongation mechanisms"

16:10-16:30 **James SHARPE** 

Systems Biology Programme, Centre for Genomic Regulation (CRG), Barcelona ES

Closing remarks