

IbSB 2016 Program

Thursday 29 September

11.30 *Registration opens*

12.30 *Lunch*

13.00 *Opening*

Session I: High-Resolution Microscopy

13.10-13.50 **Ernst Stelzer**, Goethe University Frankfurt, Germany

Light Sheet-based illumination provides the basis for highly corrected, sensor-based and fully automated microscopy

13.50-14.10 **Zoltan Cseresnyes**, German Rheumatism Research Center Berlin, Germany

Striped Illumination Microscopy with an enhanced iterative processing algorithm provides a novel high-resolution deep-tissue imaging technique

14.10-14.30 **Ronny Förster**, Friedrich Schiller University Jena, Germany

Motion Artefact Detection in Structured Illumination Microscopy

14.30-15.10 *Coffee break*

Session II: Quantitative Bioimage Analysis

15.10-15.50 **Jean-Christophe Olivo-Marin**, Institut Pasteur, France

Quantitative Bioimage Analysis: from cell to numbers

15.50-16.30 **Katrin Heinze**, University of Würzburg, Germany

Robust spatiotemporal analysis of cell-vessel interplay in large tissue specimen

16.30-16.50 **Leena Latonen**, University of Tampere, Finland

Feature based comparison of normal tissue and early pathological lesions in histological images of mouse prostate cancer models

16.50-17.10 **Sabine Fischer**, Goethe University Frankfurt, Germany

Three-dimensional cell-graph analysis reveals distinct spatial patterns of the fate markers NANOG and GATA6 in mouse pre-implantation embryos

17.30 *Poster session and barbecue*

Friday 30 September

Session III: Cell Dynamics: Motility and Morphology I

09.00-09.40 **Erik Meijering**, Erasmus University Medical Center, Rotterdam, The Netherlands

Model-Based Bioimage Analysis of Cell Shape and Motion

09.40-10.00 **Stefanie Dietrich**, Friedrich Schiller University Jena, Germany

Migration and Interaction Tracking for Quantitative Analysis of Phagocyte-Pathogen Confrontation Assays

10.00-10.20 **Feng Wei Yang**, University of Sussex, United Kingdom

A computational analysis framework for cellular and nuclear dynamics driven by experiments

10.20-11.00 Coffee break

Session IV: Cell Dynamics: Motility and Morphology II

11.00-11.40 **Johannes Textor**, Radboud University Medical Center, Nijmegen, The Netherlands

***MotilityLab:
Storing, Sharing, and Analyzing Immune Cell Migration Data***

11.40-12.00 **Michael Haberl**, University Medical Center Göttingen, Germany

***T cell and myeloid cell motility at the BBB:
a mathematical approach to understand inflammatory processes***

12.00-13.00 Lunch break

Session V: Image-derived Modeling

13.00-13.40 **Niels Grabe**, National Center for Tumor Diseases, Heidelberg, Germany

Wound healing revised: A novel reepithelialization mechanism revealed by in vitro and in silico models

13.40-14.00 **Alvaro Gomariz**, ETH Zürich, Switzerland

Applying 3D quantitative microscopy to study global topography and cellular interactions in the bone marrow

14.00-14.20 **Philip Kollmannsberger**, University of Würzburg, Germany

Spatiotemporal mapping of proliferation and extracellular matrix stretch during microtissue growth under geometric confinement

14.20-14.40 **Christine Lang**, ETH Zürich, Switzerland

Image-based Modeling of Organogenesis

14.40 Closing