

8th Tri-Regional Developmental Biology and Stem Cell Meeting – Day 1

Thursday, Sept 30th

08:30-09:00 Admission

09:00-09:10 Welcome address, *Sebastian Arnold*

09:10-10:00

Keynote lecture: **Alice MEUNIER**, IBENS, CNRS, INSERM, Paris

“From 2 to 100: how multiciliated cells massively amplify centrioles”

10:00-10:10 Break

10:10-11:10 **Session 1 Chair: Patrick Tschopp**

10:10-10:25 **Roxane Benoit**

IGBMC, University of Strasbourg

Investigate actin nucleation capacities in C. elegans embryo.

10:25-10:40 **Vanessa Weichselberger**

Faculty of Biology, Signalling Campus, University of Freiburg

An affinity based soma-germline interaction is driving egg chamber development.

10:40-10:55 **Nami Sugiyama**

Department of Biomedicine, University of Basel

Distinct Contributions of Partial and Full EMT to Breast Cancer Malignancy.

10:55-11:10 **Minchul Kim**

Stem cell and development, IGBMC / INSERM

The biology of syncytial cells - nuclear differentiation in muscle cells.

11:10-11:30 Break (there will be “breakout rooms”)

11:30-12:15 **Session 2 Chair: Juliette Godin**

11:30-11:45 **Ana Maria Di Pietro Torres**

Department of Environmental Sciences, University of Basel

In vivo functional validation of candidate genes involved in skeletogenic convergence.

11:45-12:00 **Chiara Schröder**

Inst. of Experimental and Clinical Pharmacology and Toxicology, University of Freiburg

Tbx factors recruit SWI/SNF to establish the accessible enhancer landscape for mesoderm and endoderm specification.

12:00-12:15 **Julien Lambert**

IGBMC - Department of Development and Stem Cells, Université de Strasbourg

The SynMuvA lin-15A licences transdifferentiation in C. elegans by antagonising identity safeguarding mechanisms.

12:15-12:40 **Flash talks – Session I** Chair: Peter Walentek

Magdalena Brislinger, Department Internal Medicine IV, University Freiburg Medical Center. *Temporal integration of Notch signaling in mucociliary epithelia.*

Chantal Roubinet, I MRC-LMCB (London) and MRC-LMB (Cambridge), University College London. *Asymmetric nuclear envelope remodelling in mitotic neural stem cells generates sibling nuclei with different identities.*

Jonas Malkmus, DBM Mattenstrasse, Basel. *Spatial regulation by multiple conserved Gremlin1 enhancers provides digit development with cis-regulatory robustness and evolutionary plasticity.*

Reuben Mercier, IGBMC, Strasbourg University. *Extensive NEUROG3 occupancy in the human pancreatic endocrine gene regulatory network.*

Janhvi Jaiswal, Centre for Integrative Signalling Analysis (CISA), Albert Ludwigs University of Freiburg. *Spatial segregation of JNK and JAK/STAT pathways stratifies cell behaviors in damaged tissue domains.*

Geoffrey Soussi, Department of Biodmedicine basel, University of Basel. *Tbx3 function in regulating gene expression during limb development.*

Sophie Quintin, Development and stem cells department, IGBMC. *Distinct mechanisms underlie H2O2 sensing in C. elegans head and tail.*

12:40-13:15 **Flash talk Q&A and discussions in breakout rooms**

8th Tri-Regional Developmental Biology and Stem Cell Meeting – Day 2

Friday, Oct. 1st

08:40-09:00 Admission

09:00-10:00 **Session 3** Chair: Anne-Cecile Reymann

09:00-09:15 **Adam Carte**

Biozentrum, University of Basel

The Nodal signaling gradient is shaped by a co-receptor.

09:15-09:30 **Katharina Schönberger**

Max-Planck-Institute of Immunobiology and Epigenetics, University of Freiburg

Multilayer-omics analysis reveals a non-classical retinoic acid signaling axis that regulates stem cell identity.

09:30-09:45 **Renee Wei-Yan Chow**

Development and Stem Cells, IGBMC

Cardiac forces regulate zebrafish heart valve delamination by modulating Nfatc activity.

9:45-10:00 **Maximilian Haas**

Department Internal Medicine IV, University Freiburg Medical Center

A novel role for Wnt signalling in the specification and differentiation of secretory cell types of the Xenopus mucociliary epidermis.

10:00-10:10 Break

10:10-10:55 **Session 4** Chair: Aimée Zuniga

10:10-10:25 **Giulio Di Minin**

Institute of Molecular Health Sciences (IMHS), ETH Zurich

Regulated ER exit initiates Smoothed activation in Hedgehog signalling.

10:25-10:40 **Christian Altbürger**

Institute for Biology I, Department of Developmental Biology, University of Freiburg

Distinct dopaminergic neuron subtypes are differentially specified by bHLH transcriptional codes.

10:40-10:55 **Shinya Matsuda**

Biozentrum, University of Basel

Asymmetric requirement of Dpp/BMP morphogen dispersal in the Drosophila wing disc.

10:55-11:10 **Flash talks – Session II** Chair: Giorgos Pyrowolakis

Clara-Maria Eil, Institute of Biology I, University of Freiburg. *Cling film – a new regulator of epithelial morphogenesis.*

Sara Monticelli, Institute of Genetics and Molecular and Cellular Biology (IGBMC). *Unraveling the contribution of primitive macrophages on the development of the late immune system.*

Lisa Conrad, Department of Biosystems Science and Engineering, ETH Zurich. *The Biomechanical Basis of Biased Epithelial Tube Elongation in Lung and Kidney Development.*

Vera Wimmers, Clinic for Pediatric and Adolescent Medicine, Pediatric Genetics, University Hospital Freiburg, University Freiburg. *3D modelling of genetic kidney disease in a dish: The indirect impact of metanephric Foxd2 on ureteric budding and tubulogenesis.*

Victorio Palacio, Department of Biomedicine, University of Basel. *The molecular robustness of the self-regulatory limb bud signaling system.*

11:10-11:40 **Flash talk Q&A and discussions in breakout rooms**

11:40-12:30

Keynote lecture: **Stefano PICCOLO**, University of Padua

“How mechanical signals regulate cell behavior”

12:30-12:40 *concluding remarks, Sebastian Arnold*

12:40-13:15 causal meeting in breakout rooms