

Programme Day 1 Wednesday, March 1, 2023

- 09:00 Registration / Coffee
10:20 Welcome by the CIBSS Speaker Team
Wolfgang Driever, Carola Hunte, Wilfried Weber

SESSION 1 Signal integration at receptor complexes

Chair: Wolfgang Schamel

- 10:30 Jiri Friml (ISTA, Klosterneuburg)
Knowns and unknowns in auxin signalling
10:55 Claudine Kraft (University of Freiburg)*
Spatial confinement and avidity drive autophagosome formation
11:20 Nikolaus Pfanner (University of Freiburg)
Mitochondrial machineries for import and assembly of proteins
11:45 Carola Hunte (University of Freiburg)
Regulators of sodium/proton exchangers
12:10 Nadine Wössner (University of Freiburg)
Novel approach to modulate T cell activation: from molecular
mechanism to control of function
12:25 Lunch break

SESSION 2 Integration of physical and chemical signals

Chair: Elke Barbez

- 14:00 Alba Diz-Munoz (EMBL Heidelberg)
More than the sum: How does a composite interface govern function
at the cell surface
14:25 Robert Grosse (University of Freiburg)**
Regulation, function and disease mechanism by nuclear actin
assembly
14:50 GV Shivashankar (ETH Zürich)
Nuclear mechanotransduction and cell-state transitions

- 15:15 Florencia Sanchez (University of Frankfurt)
Ligand-free in situ confinement for GPCR activation and signal
transduction

15:40 Coffee break

SESSION 3 Signal integration by transcriptional and epigenetic complexes

Chair: Thomas Laux

- 16:10 Nelson O. Gekara (University Medical Center Freiburg)
Role of DNA sensors in Innate Immunity and Genome Stability
16:35 Sebastian Arnold (University of Freiburg)***
Signalling to chromatin: The epigenetic logic of first lineage specification
during pluripotency exit
17:00 Sukayna Guhathakurta (MPI-IE Freiburg)
MOF is an epimutational enzyme ensuring mitochondrial integrity via
protein acetylation
17:15 **POSTER FLASH TALKS**
17:45 **POSTER SESSION 1** and get-together with finger food

Programme changes:

* This talk was originally scheduled for Session 7, Friday, March 3, 10:20

**This and all following programme points were moved forward by one timeslot

***This and all following programme points were moved forward by two timeslots

Programme Day 2 Thursday, March 2, 2023

SESSION 4

Signal integration by signaling pathway components

Chair: Peter Walentek

- 09:00 Crina Nimigean (Weill Cornell Medical College, New York)
Mechanism of lipid and voltage gating in cyclic nucleotide-modulated ion channels
- 09:25 David Mick (Saarland University, Homburg)
Primary cilium proteome dynamics during active Hedgehog signaling revealed by APEX-based proximity labeling
- 09:50 Sonja Albers (University of Freiburg)
PP2A, a key signalling hub throughout evolution
- 10:15 Michael Rape (UC Berkeley)
Ubiquitin-dependent stress signaling at the crossroads of development and disease
- 10:40 Svenja Wöhrle (University Medical Center Freiburg)
NEK7 accelerates NLRP3 inflammasome activation
- 10:55 Coffee break

SESSION 5

Integration of signals with metabolism

Chair: Anna Köttgen

- 11:30 Katrin Kierdorf (University of Freiburg)*
Stress test for phagocytes: new insights on *Drosophila* macrophages and how they help to control systemic cytokine levels and energy mobilization during oxidative stress
- 11:55 Thomas Langer (MPI Köln)**
Programming cell fate by mitochondrial proteolysis
- 12:20 Nils Wiedemann (University of Freiburg)**
Mitochondrial biogenesis: Targeting signal-mediated protein translocation and membrane insertion
- 12:45 Nils Göran-Larsson (Karolinska Institut, Stockholm)**
Expression of mammalian mtDNA and organization of the respiratory chain

- 13:10 Sjon Hartman (University of Freiburg)
Remember the Rain: Unravelling How Plants Encode and Use Flooding Stress Memory

- 13:25 Lunch break

14:15 MEET THE SPEAKERS

SESSION 6

Signalling integration across temporal and spatial scales

Chair: Björn Lillemeier

- 14:45 Thomas Ott (University of Freiburg)*
Engineering symbiont-induced organogenesis in non-host plants
- 15:10 Ertugrul Özbudak (Cincinnati Children's Hospital Medical Center)
Reengineering somite segmentation without the vertebrate segmentation clock
- 15:35 Anne-Kathrin Classen (University of Freiburg)
Spatio-temporal organization of tissue repair and regeneration
- 16:00 Guillermo Martínez Ara (EMBL Barcelona)
Optogenetic manipulation of shape in cerebral organoids
- 16:25 Christian Schröter (MPI Dortmund)
Embryo-like stem cell aggregates reveal new signaling mechanisms for mammalian axis patterning
- 16:40 Coffee break
- 17:15 **POSTER FLASH TALKS**
- 17:45 **POSTER SESSION 2**
- 19:30 Get-together with drinks and music

Programme changes:

* Changed speaker and talk

** Changed order of talks

Programme Day 3 Friday, March 3, 2023

09:00 Welcome
Stefan Rensing, Vice-President for Research and Innovation, University of Freiburg

SESSION 7 Integration of intrinsic and extrinsic / environmental signals

Chair: Thomas Ott

09:05 Michael J. Holdsworth (University of Nottingham)
Integration and adaptation to environmental signals through the plant N-degron pathways

09:30 Jürgen Kleine-Vehn (University of Freiburg)
Growth integration in plants

09:55 Nina Cabezas-Wallscheid (MPI-IE)
Regulation of hematopoietic stem cell dormancy

10:20 Mingjie Zhang (Southern Univ. of Science and Technology, Shenzhen)**
Phase separation in synapse formation and function

10:45 Dolf Weijers (Wageningen University)
Towards the evolutionary roots of auxin response

11:10 Coffee break

SESSION 8 From Control of function to innovation

Chair: Henning Jessen

11:40 Wilfried Weber (University of Freiburg)
Molecular optogenetics – Programming gene expression with light

12:05 Natalie Köhler (University Medical Center Freiburg)
Defensins as treatment approach for acute graft-versus-host disease

12:30 Luc Brunsveld (University of Eindhoven)
Alternative modes of regulation of Nuclear Receptor activity – from ligands to function

12:55 Anna Wolfers (University Medical Center Freiburg)
A STAT1 variant beyond the gain- or loss-of function dichotomy offers opportunity for targeted intervention

13:10 Barbara Di Ventura (University of Freiburg)
Requirements for mammalian promoters to decode transcription factor dynamics

13:25 Farewell remarks and end of meeting by the CIBSS Speaker Team

13:30 Lunch

End of the 2023 CIBSS Symposium

Programme changes:

* Changed speaker and talk

**This talk was originally scheduled for Session 1, Wednesday, March 1, 10:55