

Freiburg Cryo-EM Facility

Opening Symposium

Monday, 28.10.2024

13:00 – 13:15 Opening remarks (HS Chemie, Albertstr. 21)

Session 1: chair: Susana Andrade

13:15 – 13:45 **Raimund Dutzler** (University of Zürich)
Volume-regulated Anion Channels: from Biophysics to Disease

13:45 – 14:05 **Carola Hunte**
*Supramolecular Association and Assembly of Molecular Respiratory
Machineries*

14:05 – 14:25 **Khaled Selim**
*The P_{II} Signaling Superfamily: A New Paradigm for Orchestrating
Cellular Homeostasis*

14:25 – 14:45 **Oliver Einsle**
Structure and Dynamics in the Assembly of Complex Metal Sites

14:45 – 15:15 **Sebastian Hiller** (Basel Biocenter)
Killing the Prokaryotic and the Eukaryotic Cell at the Membrane

15:15 – 15:45 Coffee Break

Session 2: chair: Thorsten Hugel

15:45 – 16:15 **Thermo Fisher**
Current Developments in Cryo-electron Tomography

16:15 – 16:35 **Sonja-Verena Albers**
Do Bacteria have Archaeella?

16:35 – 16:55 **Fernando Ormeño** (AG Susana Andrade)
*Structural Characterization of Archaeoglobus fulgidus Amt2 and
Amt2:GlnK2 complexes*

16:55 – 17:15 **Gunhild Layer**
*Structure and function of the nitrogenase-like reductase CfbCD
involved in coenzyme F₄₃₀ biosynthesis*

17:15 – 18:00 **Stefan Raunser** (MPI for Molecular Physiology, Dortmund)
Unlocking the Secrets of Heart Muscle Structure

Tuesday, 29.10.2024

- 09:00 – 10:00 A guided tour of the Cryo-EM facility (and some coffee)
Lobby, Chemie III, Albertstr. 21
Stefan Steimle
- 10:00 – 10:15 Opening remarks (HS Chemie, Albertstr. 21)
Stefan Rensing, Deputy Rector Research and Innovation
Lutz Hein, Dean, Faculty of Medicine
Bernhard Breit, Dean, Faculty of Chemistry and Pharmacy
Wolfgang Driever, Excellence Cluster CIBSS
Chris Meisinger, SFB 1381
- 10:15 – 10:30 **Stefan Steimle:** Using the Cryo-EM Facility: Procedures and Pricing
- Session 3:** chair: Thorsten Friedrich
- 10:30 – 11:00 **Timm Maier** (Basel Biocenter)
Taming the beast: How complex assembly controls substrate phosphorylation by mTOR
- 11:00 – 11:20 **Miriam Odermatt** (AG Matthias Boll)
Structural analysis of menquinone-dependent membrane proteins
- 11:20 – 11:40 **Liudmila Andreeva** (University Tübingen)
NLRP3 Inflammasome Activation: Human NLRP3 Cages and Beyond
- 11:40 – 12:00 **Luca Mérono** (AG Thorsten Friedrich)
N2 Coordination - A Key Player in Complex I
- 12:00 – 12:30 **Bruno Klaholz** (IGBMC Illkirch)
Structure of the Human Ribosome at 1.9 Å Resolution Determined by Cryo-Electron Microscopy
- 12:30 Closing remarks