



VBC CRYO-EM SYMPOSIUM

November 23 - 24, 2023

Vienna BioCenter, IMP Lecture Hall



PROGRAMME

THURSDAY, 23RD NOVEMBER 2023

14.00 – 15.00 Registration

15.00 – 15.10 Opening (David Haselbach)

SESSION 1 CHAIR: FLORIAN SCHUR

15.10 – 15.40 **TZVIYA ZEEV-BEN MORDEHAI**, Utrecht University, NL
"Cellular' single particle analysis reveals sperm flagellum molecular diversity and evolution"

15.40 – 15.55 **ABSTRACT TALK T1 – MEG LOVATT**, University of Leeds, UK
"From engram to tomogram: the in-tissue molecular architecture of synapses in memory circuits"

15.55 – 16.10 **ABSTRACT TALK T2 – HO THUY DUNG NGUYEN**, Human Technopole, IT
"Advancing in situ cryo-ET to the next dimension: tomography on organoids"

16.10 – 16.40 **MICHAEL GRANGE**, Rosalind Franklin Institute, UK
"In-tissue structural biology and multimodality using plasma FIB/SEM"

16.40 – 18.30 Poster Session 1 (odd numbers) + Wine and Cheese

FRIDAY, 24TH NOVEMBER 2023

SESSION 2 CHAIR: DAVID HASELBACH

09.00 – 09.30 **ARNE MÖLLER**, University of Osnabrück, DE
"CryoEM Analyses of ABC Transporters under the influence of substrates, ligands and lipids"

09.30 – 09.45 **ABSTRACT TALK T3 – CIARA PUGH**, University of Copenhagen, DK
"MAASTY: A (dis)ordered copolymer for structural determination of human membrane proteins in native lipid nanodiscs."

09.45 – 10.00 **ABSTRACT TALK T4 – LUKAS SUSAC**, Goethe University Frankfurt, DE
"Structure of a fully assembled tumor-specific T cell receptor ligated by pMHC"

10.00 – 10.30 **GUILIA ZANETTI**, Birkbeck College, UK
"Mechanisms of COPII-mediates membrane remodelling"

10.30 – 11.00 Coffee Break

SESSION 3 CHAIR: CLEMENS PLASCHKA

11.00 – 11.30 **SEBASTIAN KLINGE**, Rockefeller University, USA
"Witnessing ribosome assembly coming into focus"

11.30 – 11.45 **ABSTRACT TALK T5 – HELMUT BERGLER**, University Graz, AT
"Hierarchy of rRNA domain folding in early 90S pre-ribosomal particles / SSU processome"

11.45 – 12.00 **ABSTRACT TALK T6 – YESHVEER SINGH**, John Innes Centre, UK
"Bimodular architecture of bacterial effector SAP05 drives ubiquitin-independent targeted protein degradation"

12.00 – 12.15 **ABSTRACT TALK T7 – SARAH PETERL**, Heidelberg University, DE
"Cryo-electron tomography reveals structural details of pleomorphic influenza A virus entry mechanisms"

12.15 – 12.30 **ABSTRACT TALK T8 – GURUDATT PATRA**, University of Strasbourg, FR
"Cryo correlative light and electron tomography of mitotic chromosomes reveals condensin localization."

12.30 – 12.45 **ABSTRACT TALK T9 – GUENDALINA MARINI**, CSSB, DE
"Structural journey of an insecticidal protein against western corn rootworm"

12.45 – 13.05 **SPONSOR TALK – REBECCA THOMPSON** (Thermo Fisher)
"Challenges and Frontiers in CryoEM"

13.05 – 15.00 Lunch + Poster Session 2 (even numbers)

SESSION 4 CHAIR: CARRIE BERNECKY

15.00 – 15.30 **ALICIA MICHAEL**, Biozentrum, Basel CH/IST Austria, AT
"Capturing transcription factors in their native chromatin environment"

15.30 – 15.45 **ABSTRACT TALK T10 – PATRICIA ROTHE**, IMP, AT
"An integrative model of the human intron-lariat spliceosome (ILS)"

15.45 – 16.00 **ABSTRACT TALK T11 – ANGEL VERGARA CRUCES**, John Innes Centre, UK
"Structure of the Plant Plastid-Encoded RNA Polymerase"

16.00 – 16.15 **ABSTRACT TALK T12 – WOLFRAM SEIFERT DAVILA**, EMBL, DE
"Cryo-EM structures of human and yeast TFIIC reveal a multi-step mechanism for tRNA gene promoter recognition"

16.15 – 16.45 **DONG SI**, University of Washington, USA - (remote)
"Fast, Accurate, and Fully Automated Macromolecular Complex Structure Modeling from 3D Cryo-EM"

16.45 – 17.00 Closing remarks and Awards (Thomas Heuser)

17.00 Reception