TRR 83 Transregional Collaborative Research Centre 83
Heidelberg - Bonn - Dresden
Molecular Architecture and Cellular Functions of Lipid/Protein Assemblies

3. International SFB/Transregio 83 Symposium

Molecular Architecture and Cellular Functions of Lipid/Protein Assemblies

Heidelberg, May 19/20, 2022

Program

Scientific Organizers:

Thomas Söllner
Britta Brügger

Venue

Marsilius Kolleg
Im Neuenheimer Feld 130.1
Ruprecht-Karls-Universität Heidelberg
69120 Heidelberg

Participation in the meeting is free of charge

We gratefully acknowledge support by:

Deutsche Forschungsgemeinschaft

Thursday – May 19, 2022	
Session I:	**Lipid transfer and storage**
8.30 – 9.00 a.m.	*Registration*
9.00 – 9.10 a.m.	*Welcome* Thomas Söllner
9.10 – 9.45 a.m.	Role of affinity in intracellular lipid transfer **Guillaume Drin** Centre National de la Recherche, Valbonne
9.45 – 10.20 a.m.	Imaging of lipid transport processes **André Nadler** MPI of Molecular Cell Biology and Genetics, Dresden
10.20 – 10.55 a.m.	The phase of fat: Mechanisms and physiology of lipid storage **Tobias Walther** School of Public Health, Harvard University
10.55 – 11.30 a.m.	*Coffee break and poster session*
11.30 – 12.05 p.m.	Protein Targeting to Lipid Droplets – The Janus Face of PEX19 **Bianca Schrul** Saarland University
Session II:	**Translocation across membranes**
12.05 – 12.40 p.m.	Unconventional protein secretion mediated by protein translocation on the ERGIC **Liang Ge** Tsinghua University
12.40 – 1.50 p.m.	*Lunch*
1.50 – 2.25 p.m.	Glypican-1 drives unconventional secretion of the tumor cell survival factor FGF2 **Walter Nickel** Heidelberg University
2.25 – 3.00	Mechanisms of membrane protein biogenesis by the GET insertase complex **Irmi Sinning** Heidelberg University
Session III:	**Lipids in health and disease**
3.00 – 3.35 p.m.	Lipid-dependent assembly and budding of emerging viral pathogens **Robert V Stahelin** Purdue University
3.35 – 4.10 p.m.	*Coffee break and poster session*
4.10 – 4.45 p.m.	Lipid Remodelling in Flavivirus Infection **Eva Herker** Marburg University
4.45 – 5.20 p.m.	Comparative analysis of hepatitis C virus and SARS-CoV-2 replication compartments **Ralf Bartenschlager** University Hospital Heidelberg
5.20 – 5.55 p.m.	Discovery of an endogenous Lipid that triggers innate immune activation in metaflammation **Eicke Latz** University of Bonn
7.00 p.m.	*Dinner at the restaurant Helmstätter Herrenhaus*

Friday – May 20, 2022	
Session IV:	**Membrane Organization**
9.00 – 9.35 a.m.	Chemical Biology Tools to Study Lipid Metabolism and Function **Howard Riezman** University of Geneva
9.35 – 10.10 a.m.	The Transverse and Lateral Organization of the Mammalian Plasma Membrane **Ilya Levental** University of Virginia
10.10 – 10.45 a.m.	Supported and pore-spanning membranes as tools to investigate membrane organization **Claudia Steinem** University of Goettingen
10.45 – 11.20 a.m.	*Coffee break and poster session*
11.20 – 11.55 a.m.	Molecular organization and function of the apical junctional complex **Alf Honigmann** MPI of Molecular Cell Biology and Genetics, Dresden
11.55 – 12.30 p.m.	Selected future challenges where computational sciences could support experimental research **Ilpo Vattulainen** University of Helsinki
12.30 – 1.05 p.m.	New tools to follow lipid transport at the ER-lysosome interface **Doris Höglinger** Heidelberg University
1.05 – 2.15 p.m.	*Lunch*
2.15 – 2.50 p.m.	Super-resolved live biophysical imaging of membranes without photobleaching-induced signal loss **Pablo Carravilla** University of Jena
Session V:	**Lipids and signaling**
2.50 – 3.25 p.m.	Fingerprints of the stressed endoplasmic reticulum **Robert Ernst** Saarland University
3.25 – 4.00 p.m.	Ca^{2+}-activated sphingomyelin scrambling and turnover mediate ESCRT-independent lysosomal repair **Joost Holthuis** Osnabrück University
4.00 – 4.35 p.m.	*Coffee break and poster session*
4.35 – 5.10 p.m.	Assembly and dynamics of cytokine receptor signaling complexes **Jacob Piehler** Osnabrück University
5.10 – 5.45 p.m.	Regulation of RTK transmembrane signaling by lipids **Ünal Coskun** Faculty of Medicine, TU Dresden
7.00 p.m.	*Dinner at the restaurant Molkenkur*