

**CEF-Symposium: Structures, Mechanism and Dynamics of Membrane Complexes**  
**September 24- 25, 2015**

**Thursday, September 24<sup>th</sup>**

**9:00 Registration**

**9:30-9:40 Opening remarks**

**Session I:** Chair - Ulrich Brandt, Radboud University Nijmegen

**9:40 - 10:30 Eitan Bibi, Weizmann Institute of Science**

*Challenging dilemmas in elucidating the pathway of membrane protein biogenesis*

**10:30 - 11:10 Robert Tampé, Institute of Biochemistry, Frankfurt**

*New insights into complex translocation machineries via integrative approaches*

**11:10 - 11:40 Coffee**

**11:40 - 12:20 Clemens Glaubitz, Institute of Biophysical Chemistry, Frankfurt**

*New mechanistic aspects of the ABC exporter MsbA revealed by solid-state NMR*

**12:20 - 13:00 Eric Geertsma, Institute of Biochemistry, Frankfurt**

*X-ray structure and functional properties of a prokaryotic SLC26 transporter*

**13:00 - 14:00 Lunch**

**Session II:** Chair - Robert Tampé, Institute of Biochemistry Frankfurt

**14:00 - 14:50 Adam Lange, Leibniz Institute Berlin**

*Hybrid models of secretion needles, type I pili and cytoskeletal bactofilin filaments*

**14:50 - 15:30 Beate Averhoff, Institute of Molecular Biosciences, Frankfurt**

*DNA transfer goes extreme: Unique features of the DNA transporter in *Thermus thermophilus**

**15:30 - 16:10 Volker Zickermann, Institute of Biochemistry II, Frankfurt**

*Mitochondrial complex I - structure, biogenesis, and function of a giant proton pump*

**16:10 - 16:40 Coffee**

**16:40 - 17:20 Ilka Wittig, Institute of Biochemistry II, Frankfurt**

*Dynamics in mitochondrial complexes*

**17:20 - 18:00 Karen Davies, Max-Planck Institute of Biophysics, Frankfurt**

*Mitochondrial ATP synthases and membrane curvature*

**19:00 Conference dinner at the Orangerie, Bad Homburg (walking distance)**

**Friday, September 25<sup>th</sup>**

**Session III:** Chair – Nina Morgner, Institute of Physical and Theoretical Chemistry Frankfurt

**9:00 - 9:50** **Sigal Ben-Yehuda, Hebrew University Jerusalem**  
*On the characteristics and dynamics of bacterial nanotube*

**09:50 - 10:30** **Achilleas Frangakis, Institute of Biophysics, Frankfurt**  
*Cellular junctions investigated by cryo-electron tomography*

**10:30 - 11:00** **Coffee**

**11:00 - 11:40** **Werner Kühlbrandt, Max-Planck Institute of Biophysics, Frankfurt**  
*Cryo-EM of membrane protein complexes*

**11:40 - 12:20** **Gerhard Hummer, Max-Planck Institute of Biophysics, Frankfurt**  
*Molecular simulation of protein dynamics and function*

**12:20 - 13:20** **Lunch**

**Session IV:** Chair – Werner Kühlbrandt, Max-Planck Institute of Biophysics Frankfurt

**13:20 - 14:10** **Christoph von Ballmoos, University of Bern**  
*Membrane fusion as a tool for co-reconstitution of membrane proteins into liposomes*

**14:10 - 14:50** **Inga Hänelt, Institute of Biochemistry, Frankfurt**  
*Exploring the structural and mechanistic basis of substrate translocation via the K<sup>+</sup> transporter KtrAB*

**14:50 - 15:30** **Robert Ernst, Institute of Biochemistry, Frankfurt**  
*Eukaryotic sensors for membrane lipid saturation*

**15:30 - 15:35** **Closing remarks**

**15:35 - 16:00** **Farewell coffee**