

Programme

Internal Symposium

Research in Biomolecular and Cell Biological Sciences

Wednesday, 15th to Thursday, 16th of September 2010

The Posters session taking place in 1.15 in N100 is open daily during the whole conference. The presenters will be invited to add a photograph of the representing author(s) to foster the detection by interested participants.

15th of September

08:00 Conference Registration starts – entrance lecture hall B1 in N100, Biocenter, Campus Riedberg

Chair:

09:00 - 09:40 Opening lecture by **Christian Q. Scheckhuber**
"The impact of mitochondrial function, dynamics and quality control on organismal aging"

Session I: Chemical Biology and Nanobiology

09:40 – 10:00 **Alexander Kleefen**
"Lab on the Chip: Membrane translocation through multiplexed nanopore arrays"

10:00 – 10:20 **Christian Gunwald**
"In situ assembly of macromolecular complexes triggered by light"

10:20 – 10:50 *Coffee Break*

10:50 – 11:10 **Rike Müller-Werkmeister**
"Vibrational Energy Flow in Artificial Aminoacids investigated by 2D-IR-spectroscopy"

11:10 – 11:30 **Clara Menge**
"Development of photoswitchable nucleic acid analogues"

11:30 – 11:50 **Florian Schäfer**

"Caged nucleic acids for biological applications"

11:50 – 12:50 *Lunch break*

Session II: RNA Biology

Chair:

- 12:50 – 13:10 **Dominik Barthelme**
"Function of the twin-ATPase ABCE1 in ribosome recycling"
- 13:10 – 13:30 **Ivan Krstic**
"PELDOR spectroscopy on the neomycin-responsive riboswitch"
- 13:30 – 13:50 **Christian Peifer**
"An Insight into the function of Rrp8p as a protein involved in ribosome biogenesis"
- 13:50 – 14:10 **Roman Martin**
"Helicase – RNA interaction"
- 14:10 – 14:40 *Coffee Break*

Session III: Membrane Biology Part I

Chair:

- 14:40 – 15:00 **Sandra Wollschlag**
"Time resolved solid-state NMR spectroscopy reveals enzymatic mechanism of the lipid regulator *E.coli* diacylglycerol kinase"
- 15:00 – 15:20 **Peter Mayerhofer**
"Nascent PEX3 can co-translationally integrate into the ER membrane"
- 15:20 - 15:40 **Thorsten Althoff**
"Single particle cryo-EM of a supercomplex of the mitochondrial respiratory chain"
- 15:40 - 16:00 **Camilo Perez**
"From structure to function: Na⁺ coupled transport and allosteric regulation in BetP"
- 16:00 – 21:00 *Poster Session*

16th of September

Session IV: Membrane Biology Part II

Chair:

- 09:00 - 09:20 **Michael Zick**
"The two isoforms of the dynamin-like GTPase Mgm1 - their proteolytic formation and distinct functions -"
- 09:20 - 09:40 **Ye Gao**
"Structural and functional characterization of respiratory chain supercomplex mainly containing complex III and IV isolated from hyperthermophilic eubacterium *Aquifex aeolicus*"
- 09:40 - 10:00 **Bertram Daum**
"Ultrastructural arrangement of macromolecular complexes in bioenergetic membranes by electron cryo-tomography"

10:00 – 10:20	Janin Burkhardt "A secretin takes shape: Structure and function of a DNA translocator complex in <i>Thermus thermophilus</i> "
10:20 – 10:50	<i>Coffee Break</i>
10:50 – 11:10	Anna Krokfors "Toponomics approach to JNCL"
11:10 – 11:30	Ute Hellmich "NMR and EPR spectroscopy on the ABC multidrug transporter LmrA"
11:30 – 11:50	Eva Biegel "Novel sodium ion pumps in an anaerobic bacterium"
11:50 – 12:10	Florian Mayer "Structure and function of archaeal ATP synthases"
12:10 – 13:20	<i>Lunch break</i>
13:10 – 13:30	Michael Jaehme "Cell-free expression of membrane proteins for structural studies"
13:30 – 13:50	Bodo Tillmann "Protein translocation revisited"
13:50 – 14:10	Thomas Crisman "Symmetry in the structure of the aspartate transporter GltPh suggests the conformation of an alternate state"
14:10 – 14:40	<i>Coffee Break</i>

Session V: Signalling Networks

Chair:

14:40 – 15:00	Roger Draheim "Engineering two-component signal output with protein-membrane interactions"
15:00 – 15:20	Julia Geiger "Molecular mechanism of dendritogenesis"
15:20 – 15:40	Jagdeep Kaur "Structural genomics of prokaryotic secondary active transporters"
15:40 – 16:00	Alexander Hahn "Transcription factors in stress response"
15:40 – 16:00	Aycan Senturk "EphrinB ligands are functional co-receptors for reelin signaling to regulate neuronal migration"
16:00 - 16:15	Group Photograph in front of fontaine
16:15 – 21:00	Poster Session