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ASSEMBLY OF COFACTOR CONTAINING PROTEINS

**ALBERT-LUDWIGS UNIVERSITÄT FREIBURG
25. – 26. FEBRUAR 2010**

Workshop organized by the
**International Research Training Group on Membranes and
Membrane Proteins (DFG-GRK 1478)**

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**German-French PhD College “Membranes and Membrane
Proteins” (UFA 0407)**

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**DFG-Research Unit “Dynamics of Bacterial Membrane Proteins”
(DFG-FOR 929)**

**Institut für Biochemie und Molekularbiologie
der Albert-Ludwigs-Universität Freiburg,
Stefan-Meier-Strasse 17, 79104 Freiburg, Germany
Seminarraum 01.006**

Thursday, 25. February 2010

- 12.00 Arrival and Lunch at the Foyer of the Institute
13.30 – 13.45 Hans-Georg Koch, Univ. Freiburg
 Welcome and Introduction

Iron-uptake and Iron-dependent proteins

Chair: Isabelle Schalk, Univ. Strassbourg

- 13.45 – 14.30 **Roland Lill, Univ. Marburg**
 How eukaryotes transport iron to generate heme- and Fe/S-cluster containing proteins
- 14.30 – 14.50 **Gaetan Mislin (AG Schalk)**
 Through the looking-glass: the discovery of an enantio-pyochelin dependent iron uptake in *Pseudomonas*
- 14.50 - 15.10 **Sabrina Noel (AG Schalk)**
 The iron uptake pathway as antibacterial target
- 15.10 – 15.30 **Stefan Steimle (AG Friedrich)**
 Assembly of respiratory complex I
- 15.30 – 16.00 Coffee Break**

Assembly of Respiratory Chain Complexes

Chair: Petra Hellwig, Univ. Strassbourg

- 16.00 – 16.45 **Bernd Ludwig, Univ. Frankfurt**
 Surf1, associated with Leigh syndrome in humans, binds heme *a* during bacterial COX biogenesis.
- 16.45 - 17.05 **Karina Wagner, (AG van der Laan)**
 Assembly and Dynamics of ATP-Synthase supercomplexes
- 17.05 – 17.25 **Heiko Erhardt (AG Friedrich)**
 Dynamics of the OXPHOS complexes
- 17.25 – 17.45 **Gregory Pawlik (AG Koch)**
 Assembly of Cytochrome *cbb*₃ Oxidase
- 17.45 - 18.05 **Sebastian Schroeder (AG Koch)**
 The role of Copper Chaperones for Cytochrome Oxidase assembly

18.15 Dinner and Get-together at the Foyer of the Institute

Friday, 26. February 2010

Cytochrome Biogenesis and Assembly

Chair: Dirk Schneider, Univ. Mainz

- 9.00 – 9.45 **Fevzi Daldal, Univ. of Pennsylvania**
Cytochrome c Biogenesis: The Ccm System
- 9.45 – 10.05 **Mathias Weber (AG Schneider)**
Assembly and stability of a transmembrane *b*-type cytochrome
- 10.05 - 10.25 **Julian Seidel (AG Einsle)**
Bacterial Di-heme Cytochrome c Peroxidases
- 10.25- 10.45 **Youssef El Khoury (AG Hellwig)**
The zinc cations inhibitive effects on the cytochrome *bc*1 complex from *Rhodobacter capsulatus*: Redox induced difference spectroscopic approach

10.45 - 11.15 Coffee Break

Transport, Assembly and Dynamics of Proteins I

Chair: Chris Meisinger, Univ. Freiburg

- 11.15 - 11.35 **David Stroud (AGs Meisinger/Wiedemann)** Echoes from evolution or functional conservation: The POTRA domain in mitochondrial β -barrel biogenesis
- 11.35 – 11.55 **Felix Dempwolff (AG Graumann)**
Dynamics of Flotilin-like proteins in *Bacillus subtilis*
- 11.55 – 12.15 **Barbara Perrone (AG Bechinger)**
Orientation of alpha helix peptides in membranes: Solid State NMR and Circular Dichroism techniques in comparison

Transport, Assembly and Dynamics of Proteins II

Chair: Oliver Einsle, Univ. Freiburg

- 12.15 - 12.35 **Luise Simon (AG Graumann)**
Dynamics of DNA binding proteins in *Bacillus subtilis*
- 12.35 – 12.55 **André Ziegler (AG Seelig)**
Dimerization of the bacterial response regulator PleD as investigated with analytical ultracentrifugation
- 12.55-13.15 **Carlo Maurer (AG Müller)**
TatB forms a multivalent attachment site for Tat precursor proteins

13.15 Closing remarks **Nora Vögtle and Patrick Kuhn (Univ. Freiburg)**

13.30 Lunch and departure