



REDOX DRIVEN ION PUMPS AND OTHER MEMBRANE PROTEINS

A Workshop of the German-French PhD College
“Membranes and Membrane Proteins” UFA 0407

Université de Strasbourg, France
Alberts-Ludwig Universität Freiburg, Germany

9:30 BIENVENUE

I. ASSEMBLY AND TRANSPORT

10:00-10:20 Gregorz Pawlik, Institute for Biochemistry and Molecular Biology, Faculty of Medicine, University of Freiburg

Role of CcoH and CcoS for the assembly of cytochrome cbb₃-oxidase in *Rhodobacter capsulatus*

10:20-10:40 Sebastian Schröder, Institute for Biochemistry and Molecular Biology, Faculty of Medicine, University of Freiburg

Two putative copper chaperones involved in the assembly of cbb₃-cytochrome-c-oxidase in *Rhodobacter capsulatus*

10:40-11:00 Laure Journet, IREBS, FRE 3211, Ecole Supérieure de Biotechnologie de Strasbourg, CNRS and University of Strasbourg

The fate of ferric-pyoverdine after uptake across the outer membrane of *Pseudomonas aeruginosa*

11:00-11:30 PAUSE



II. SODIUM PUMPING

11:30-12:15 Blanca Barquera, Rensselaer Polytechnic Institute, Department of Biology, Troy, NY, USA

Respiratory enzymes that pump sodium: A unique window into the mechanistic enzymology of energy transduction

III. PROTEIN PROTEIN INTERACTION

12:15-12:35 Yashvin Neehaul, Institut de Chimie UMR 7177, Labo de Spectroscopie Vibrationnelle et Electrochimie des Biomolécules, Université de Strasbourg

Electrochemical and FTIR spectroscopic study of the [Cc552-CuA] complex in *Thermus thermophilus*

12:45-14:05 LUNCH (registered participants only)

IV. PROTON PUMPING

14:15-15:00 Thorsten Friedrich, Institut für Organische Chemie und Biochemie, Albert-Ludwigs-Universität Freiburg

Ion-Translocation by the *Escherichia coli* NADH:ubiquinone oxidoreductase (complex I)

15:00-15:20 Ruth Hielscher, Institut de Chimie UMR 7177, Labo de Spectroscopie Vibrationnelle et Electrochimie des Biomolécules, Université de Strasbourg

Nucleotide-induced conformational movements in the NADH:ubiquinone oxidoreductase from *Escherichia coli*

15:20-15:40 Stefan Steimle, Institut für Organische Chemie und Biochemie, Albert-Ludwigs-Universität Freiburg

H⁺-Translocation by a complex I variant missing a hydrophobic subunit

V. MODEL COMPOUNDS

15:40-16:00 Frédéric Melin, Institut de Chimie UMR 7177, Labo de Spectroscopie Vibrationnelle et Electrochimie des Biomolécules, Université de Strasbourg

Electrochemical and FTIR studies of some synthetic models of the bimetallic active site heme a₃ CuB of cytochrome *c* oxidase