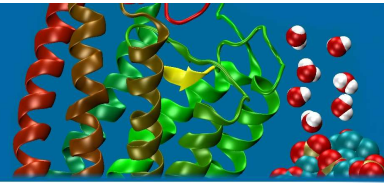




Structural Biology of Membrane Proteins



FIRST ANNUAL MEETING PROGRAMME

of the

Structural Biology of Membrane Proteins (SBMPs)

Marie Curie Integrated Training Network

ITQB-UNL, Lisbon, Portugal

June, 4th-6th, 2009

Thursday, June 4th
(ITQB auditorium)

14:00-14:30 **Welcome address:**

ITQB-UNL: Prof José Artur SIMÕES, director of ITQB-UNL

ITQB-UNL: Dr Margarida ARCHER, “Membrane Protein Cristallography”
group leader

CNRS-IPBS: Prof. Alain MILON, “NMR and interactions membrane-proteins”
group leader

Chair: Margarida Archer

14:30-15:05 **Title to be announced** – Daniel Müller, University of Technology, Germany

15:05-15:20 **Characterization of molecular interactions to switch the functional State of G protein coupled receptors (GPCRs)** – Shiho Kawamura, University of Technology, Germany

15:20-15:35 **Mechanical characterization of a bacterial cyclic nucleotide modulated potassium channel** – Patrick Bosshart, University of Technology, Germany

15:35-15:50 **Expression and structural analysis of AQP6** – Michael Zocher, University of Basel, Switzerland

15:50-16:05 **Structural and functional characterization of AQP6 and V2R** – André Krueger, University of Basel, Switzerland

16:05-16:40 **The M4-lipid sensor model of nAChR-lipid interactions** – John Baenziger, University of Ottawa, Canada

Chair: Daniel Mueller

17:10-17:45 **Fast biosynthesis of GFP molecules – a single molecule fluorescence pre-study of the folding of proteins into membranes** – Alexander Katranidis, Forschungszentrum Jülich, Germany

17:45-18:20 **Investigations of the γ -secretase structure and the stability areas of rhodopsin** – Slawomir Filipek, International Institute of Molecular and Cell Biology, Poland

- 18:20-18:55 **Developing the applications of amphipols to membrane protein studies. An update** – Jean-Luc Popot, Institute of Physical Chemical Biology, France
- 18:55-19:30 **Fluorinated surfactants** – Cécile Breyton, Institute of Physical Chemical Biology, France
- 19:30-19:45 ***E. coli*-phage T5 recognition: Structural study of the FhuA-pb5 complex** – Ali Flayan, Institute of Physical Chemical Biology, France

Friday, June 5th

ITQB auditorium

Chair: Eva Pebay-Peyroula

- 8:30-9:05 **The membrane-embedded sensory rhodopsin/transducer system: Complex formation and light activation as seen by solid-state NMR spectroscopy** – Marc Baldus, University of Utrecht, Netherlands
- 9:05-9:20 **Title to be announced** – Marie Renault, University of Utrecht, Netherlands
- 9:20-9:35 **Structural and functional characterization of 5-HT3 receptor** – Menno Tol, Ecole Polytechnique Fédérale de Lausanne, Switzerland
- 9:35-10:10 **Expression strategies for the production of high quality G-protein coupled receptors and other integral membrane proteins in an individualized cell-free system** – Friederike Junge, J.W. Goethe-University, Germany
- 10:10-10:45 **Title to be announced** – Vladimir Shirokov, Institute of Protein Research, Russia

Chair: Marc Baldus

- 11:30-12:05 **pH-Dependent Transmembrane Peptide Insertion: Mechanism and Uses** – Donald Engelman, University of Yale, USA
- 12:05-12:40 **Title to be announced** – Hartmut Oschkinat, Forschungsverbund Berlin e.V, Germany
- 12:40-13:00 **Dynamic Nuclear Polarization and Solid State NMR: applications to membrane proteins** – Trent Franks, Forschungsverbund Berlin e.V, Germany

Chair: Frank Bernhard

- 14:00-14:35 **The X-ray structure of the membrane-bound cytochrome c quinol dehydrogenase NrfH in complex with cytochrome c nitrite reductase NrfA** – Margarida Archer, University of Lisbon, Portugal
- 14:35-14:55 **Heterologous overexpression and functional characterization of membrane proteins from *Archaea*** – Miguel Pessanha, ITQB-UNL, Portugal
- 14:55-15:10 **Sugar transporters in lactic acid bacteria** – Przemyslaw Nogly, University of Lisbon, Portugal
- 15:10-15:45 **Orientation and dynamics of sterols, peptides and proteins in membranes** – Alain Milon, Institute of Pharmacology and Structural Biology, France

- 15:45-16:00 **Solution state NMR structure determination of PorA, the major porin of *Corynebacterium glutamicum*** – Parthasarathi Rath, Institute of Pharmacology and Structural Biology, France
- 16:00-16:10 **Structure – dynamics - function of OmpA protein from *klebsiella pneumoniae*: a joint ssNMR – AFM – EM – SMFS approach** – Iordan Iordanov, Institute of Pharmacology and Structural Biology, France

Chair: Alain Milon

- 17:00-17:30 **Round table** – network collaborations, practical courses, visiting scientists
- 17:30-18:05 **Title to be announced** – Gregg Siegal, ZoBio, Netherlands
- 18:05-18:20 **Application of Target Immobilized NMR Screening to membrane proteins** – Dan Chen, ZoBio, Netherlands
- 18:20-18:55 **Structure-function of mitochondrial carriers: crystal structures combined to *in situ* studies** – Eva Pebay-Peyroula, Institute of Structural Biology, Grenoble, France
- 18:55-19:10 **Developing the overproduction of functional HIV co-receptors** – Lina Siauciunaite, Institute of Structural Biology, Grenoble, France
- 19:10-19:25 **Structure-function of mitochondrial carriers: crystal structures combined to *in situ* studies** – Vera S. Moiseeva, Institute of Structural Biology, Grenoble, France
- 19:25-19:40 **Investigation of intercellular communication. Structure-function studies of connexins** – Alina A. Remeeva, Institute of Structural Biology, Grenoble, France