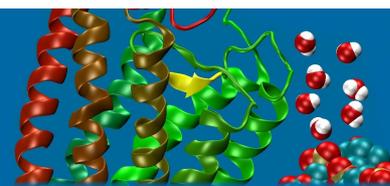


Structural Biology *of* Membrane Proteins



E-bulletin of Marie-Curie Integrated Training Network - SBMPs

June 2012

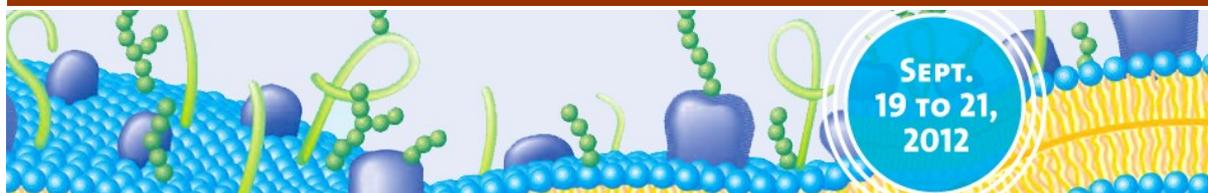
**Conferences and workshops related to membrane proteins
in 2012:**

BioMembrane Days in Potsdam

19-21 September, 2012

Max Planck Institute, Potsdam-Golm, Germany

<http://biomembrane-days.mpikg.mpg.de/>



Description:

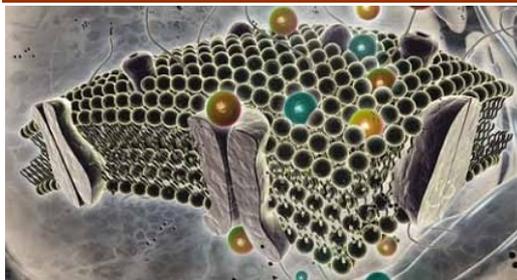
Membranes form the intricately shaped compartments of life. The Biomembrane Days in Potsdam highlight recent advances in understanding the morphology and molecular organization of biomimetic and biological membranes. A central topic of the conference is the interplay of curvature and composition that governs membrane shapes. Other topics include membrane domains, membrane proteins, cell adhesion, and dynamic processes.

The Royal Society of Chemistry:

Lipids and Mebrane Biophysics

11 - 13, September 2012, Burlington House, London, UK

<http://www.rsc.org/ConferencesAndEvents/RSCConferences/FD161/>



IOP Institute of Physics
Biological Physics Group

British Biophysical Society

Description:

One of the key challenges in biophysics and chemical biology is gaining an understanding of the underlying physico-chemical basis of the highly complex structure and properties of biomembranes. It used to be thought that the lipid component played a mainly passive role, simply acting as a self-assembled bilayer matrix within which the active protein components functioned. However, it has now become clear that there is an intimate two-way interplay between the lipid and the protein components in determining membrane structure, organization and dynamics, and that lipids play many active roles in biological function. Concepts such as lateral segregation and domain formation, lateral pressure, curvature and curvature elasticity have attracted enormous interest in recent years, although their validity when applied to real biomembranes remains unclear or even obscure.

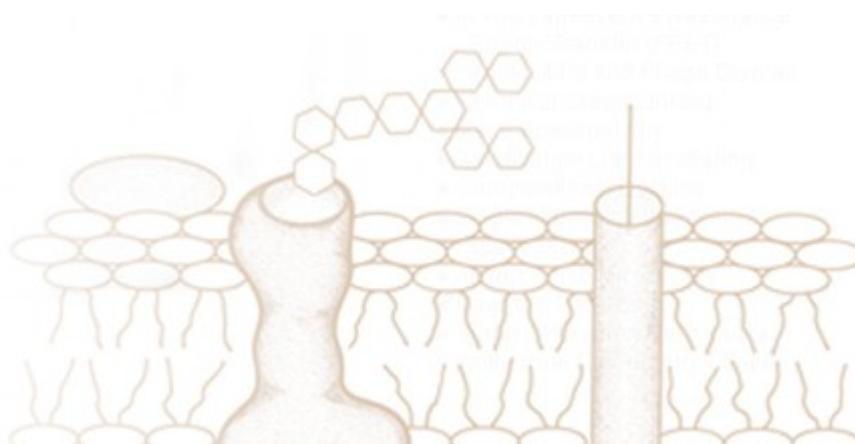
This Faraday Discussion will consider recent developments in the study of biomembrane structure, ordering and dynamics, with particular emphasis on the roles of lipids in these phenomena. As well as discussing new experimental and theoretical findings and novel methodologies, the meeting will focus on exploring the relevance of concepts from amphiphile self-assembly and soft matter physics to understanding biomembranes.

Lipid-Protein Interactions in Membranes:

Implications for Health and Disease

1 – 5 November 2012, Hyderabad, India

<http://www.biophysics.org/2012india/>



Description:

Membrane proteins occupy a central role in cellular physiology. Almost 50% of all proteins encoded by a eukaryotic genome are membrane proteins. As a result, ~50% of biological processes take place on membranes.

This meeting, which will take place in the Centre for Cellular and Molecular Biology (CCMB), Hyderabad, India, will focus on contemporary issues in this area with special emphasis on lipid interactions of membrane proteins and possible implications in health and disease. Breakthroughs in membrane protein research has been rather slow in the past due to technical difficulties in crystallizing membrane proteins and lack of appropriate techniques to monitor lipid-protein interactions in situ in natural membranes. Tremendous advances in membrane protein crystallography in the last few years, coupled with powerful molecular dynamics and microscopic approaches, have started to change this scenario. It is against this backdrop that this thematic meeting is taking place.

Bringing together the minds of leading researchers across various areas of contemporary membrane research will provide novel information and insight into membrane processes. This may help to develop robust models for function and interaction of membrane proteins, while enhancing our ability to design better therapeutic strategies to combat diseases related to malfunctioning of membrane proteins and receptors.

The information about new **conferences**, **courses** and **workshops** related to membrane proteins as well as some important news related to **SBMPs** (including meetings, publications etc.) please send to **Slawomir Filipek** (sfilipek@chem.uw.edu.pl).
