

Discussion Meeting on Biological Membranes

18 - 19 December, 2015

Co-organized by: Department of Chemical Engineering and
Centre for Biosystems Science & Engineering (CBSSE)
Indian Institute of Science, Bangalore

Venue: Seminar Hall, Department of Chemical Engineering, IISc.

18th December, 2015 (Friday)		
Time	Speaker	Title of The Talk
09:50 - 10:00	Introduction	
10:00 - 10:40	Madan Rao <i>National Center for Biological Sciences, Bangalore</i>	Cell Surface as an Active Composite
10:40 - 11:10	Aravind Penmatsa <i>Indian Institute of Science, Bangalore</i>	The Dopamine Transporter – Behavior in Cubic Phase and Effects of Cholesterol on Structure and Pharmacology.
11:10 - 11:40	Tea Break	
11:40 - 12:10	Anand Srivastava <i>Indian Institute of Science, Bangalore</i>	Role of RNA in Protein Aggregation and HIV-1 Viral Membrane Budding: Insights from Multiscale Molecular Dynamics Modeling
12:10 - 12:40	Richard Morris <i>National Center for Biological Sciences, Bangalore</i>	Using Membrane Hydrodynamics to Probe Conformational Changes in Membrane-Bound Proteins due to Tension
12:40 - 02:00	Lunch	
02:00 - 02:20	Rajat Desikan <i>Indian Institute of Science, Bangalore</i>	Visualising the Membrane Triggered Conformational Change of Cytolysin under the Computational Microscope
02:20 - 02:50	Rahul Roy <i>Indian Institute of Science, Bangalore</i>	Probing Dynamics and Assembly of Pore-Forming Toxins (PFTs) using Single Molecule Imaging
2:50 - 03:10	Nirod Kumar Sarangi <i>Indian Institute of Science, Bangalore</i>	Unravelling Lipid Dynamics with Pore Forming Toxins on Model Biological Membranes using Super Resolution STED-FCS
03:10 - 03:30	Tea Break	

03:30 - 04:00	Samrat Mukhopadhyay <i>Indian Institute of Science Education and Research, Mohali</i>	Membrane-Induced Folding of Alpha-Synuclein
04:00 – 04:20	Xavier Prasanna <i>National Chemical Laboratory, Pune</i>	Interaction of Sphingolipid GM1 with GPCRs
04:20 – 04:50	Himanshu Khandelia <i>University of Southern Denmark (SDU), Denmark</i>	Which Leaflet does Cholesterol Prefer, and Some thoughts on How Vesicles may have Different Transmembrane Electrical Potentials

19th December, 2015 (Saturday)		
10:00 – 10:40	P. B. Sunil Kumar <i>Indian Institute of Technology, Madras</i>	Protein Mediated Active and Passive Routes to Membrane Shape Changes.
10:40 – 11:10	Pramod Pullarkat <i>Raman Research Institute, Bangalore</i>	Properties of Cell Membrane probed using Optical Tweezers.
11:10 – 11:40	Tea Break	
11:40 – 12:20	Raghunathan V A <i>Raman Research Institute, Bangalore</i>	Domains in Model Membranes - An Overview.
12:20 – 12:40	Roobala C <i>Indian Institute of Science, Bangalore</i>	Phase Behaviour and Dynamics of Lipid in Two Component Supported Lipid Bilayers
12:40 – 01:00	Parijat Sarkar <i>Centre for Cellular & Molecular Biology, Hyderabad</i>	Membrane Cholesterol and Actin Cytoskeleton: A dual Mechanism of Regulation