

Wednesday 8 September

12:00	Welcome and Introductions Paul O'Shea, <i>Chair of Scientific Committee</i>
12:10	Outline of Discussion Format Alice Smallwood and Ellis Crawford, <i>Royal Society of Chemistry Publishing Editors</i>
12:15	Introductory Lecture (Session chair: Paul O'Shea) William DeGrado <i>University of California, San Francisco, USA</i>
13:15	Break
	Session 1: Theoretical and experimental comparisons of simple peptide-membrane systems; towards defining the reaction space (Session Chair: Steve White & John Seddon)
13:45	Molecular interactions of the M and E integral membrane proteins of SARS-CoV-2 Gregory Voth <i>University of Chicago, USA</i>
13:50	Structural changes in the model of the outer cell membrane of gram-negative bacteria interacting with melittin: An in situ spectroelectrochemical study Izabella Brand <i>University of Oldenburg, Germany</i>
13:55	Bcl-xL inhibits tBid and Bax via distinct mechanisms Ana Garcia <i>University of Cologne, Germany</i>
14:00	Discussion
15:00	Break
	Session 1 continued (Session Chair: Robert Gilbert & Amithaba Chattopadhyay)
15:30	Lipid distributions and transleaflet cholesterol migration near heterogeneous surfaces in asymmetric bilayers Peter Tieleman <i>University of Calgary, Canada</i>
15:35	Controllable membrane remodeling by a modified fragment of the apoptotic protein Bax Francisco Barrera <i>University of Tennessee, USA</i>
15:40	Estimating the accuracy of the MARTINI model towards the investigation of Peripheral Protein-Membrane Interactions Stefano Vanni <i>University of Fribourg, Switzerland</i>
15:45	Discussion
16:45	Lightning poster presentations (by invitation of the scientific committee) (Session Chair: Paul O'Shea & John Seddon)
17:00	Poster session
18:00	Close of formal sessions

Thursday 9 September

09:00	Poster session
	Session 2: Theoretical and experimental studies of complex peptide-membrane systems (Session Chairs: Calum Drummond & Susan Perkin)
10:00	Order-disorder transitions of cytoplasmic N-termini in the mechanisms of P-type ATPases Ronald Clarke <i>University of Sydney, Australia</i>
10:05	The influence of phosphatidylserine localisation and lipid phase on the membrane remodelling activity of ESCRT Paul Beales <i>University of Leeds, UK</i>
10:10	Impact of Antimicrobial Peptides on E.coli-mimicking Lipid Model Membranes: correlating structural and dynamic effects using scattering methods Reidar Lund <i>University of Oslo, Norway</i>
10:15	Discussion
11:15	Break
	Session 2 continued (Session Chair: Amithaba Chattopadhyay & Paul O'Shea)
11:45	Caveolin Induced Membrane Curvature and Lipid Clustering: Two Sides of the Same Coin? Durba Sengupta <i>National Chemical Laboratory, Pune, India</i>
11:50	Lipid specificity of the immune effector perforin Bart Hoogenboom <i>University College London, UK</i>
11:55	Discussion
12:35	Break
	Session 3: Behaviour and interactions of proteins and peptides with and within membranes; from simple models to cellular membranes (Session Chair: Lukas Tamm & Patricia Bassereau)
13:35	Peptide Lipidation in Lysophospholipid Micelles and Lysophospholipid-Enriched Membranes John Sanderson <i>Durham University, UK</i>
13:40	Modulation of host cell membrane nano-environment by mycobacterial glycolipids: Involvement of PI(4,5)P2 signaling lipid? Shobhna Kapoor <i>Indian Institute of Technology Bombay, India</i>
13:45	Interactions of polymyxin B with lipopolysaccharide-containing membranes Boyan Bonev <i>University of Nottingham, UK</i>
13:50	Discussion
14:50	Break
	Session 3 continued (Session Chair: Paul O'Shea & John Seddon)
15:20	Membrane Electrostatics Sensed by Tryptophan Anchors in Hydrophobic Model Peptides Depends on Non-Aromatic Interfacial Amino Acids: Implications in Hydrophobic Mismatch Sreetama Pal <i>Centre for Cellular and Molecular Biology, India</i>
15:25	Common principles of surface deformation in biology Aurelien Roux <i>Université de Genève, Switzerland</i>
15:30	Heterogeneity of cell membrane structure studied by single molecule tracking Justin Molloy <i>The Francis Crick Institute, UK</i>
15:35	Discussion
16:35	Close of formal sessions

Friday 10 September

09:00	How to Publish with Impact Laura Daly <i>Royal Society of Chemistry Publishing, UK</i>
	Session 4: Peptide-membrane interactions and biotechnology; enabling next-generation synthetic biology (Session Chair: Amithaba Chattopadhyay & Robert Gilbert)
10:00	The Impact of Antibacterial Peptides on Bacterial Lipid Membranes Depends on Stage of Growth Mibel Aguilar <i>Monash University, Australia</i>
10:05	Antimicrobial peptides: Mechanism of action and lipid-mediated synergistic interactions within the membranes Burkhard Bechinger <i>University of Strasbourg / CNRS, France</i>
10:10	Discussion
10:50	Break
	Session 4 continued (Session Chair: Calum Drummond & Paul O'Shea)
11:20	Antimicrobial peptide activity in asymmetric bacterial membrane mimics Georg Pabst <i>Graz University of Technology</i>
11:25	Virus-inspired designs of antimicrobial nanocapsules Franca Fraternali <i>King's College London, UK</i>
11:30	Discussion
12:20	Concluding Remarks Lecture (Session chair: Paul O'Shea) Patricia Bassereau <i>Institut Curie Paris, France</i>
13:00	Susan Perkin <i>Chair, Faraday Standing Committee on Conferences</i>
13:10	Acknowledgements and presentation of poster prizes
13:15	Close of meeting