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ARC Centre for Cryo-electron Microscopy of Membrane Proteins Research Symposium 2025



THURSDAY-FRIDAY 13TH & 14TH NOVEMBER 2025

IN-PERSON ONLY, BIO21 INSTITUTE AUDITORIUM, PARKVILLE

PROGRAM | Thursday 13th November

Registration | 9:00 AM - 9:20 AM

Welcome note | 9:20 AM - 9:30 AM

Prof. Patrick Sexton, ARC CCEMMP Director

Opening keynote | 9:30 AM - 10:30 AM | Chair: Dr. Ashleigh Kropp

A/Prof. Alastair Stewart, Victor Chang Cardiac Research Institute

Snapshots of membrane transport: Sodium-dependent and proton-powered proteins

Morning tea & poster viewing | 10:30 AM - 11:00 AM

Morning session | 11:00 AM - 12:30 PM | Chair: Dr. Sepideh Valimehr

11:00 AM - 11:30 AM

Ania Beyger, Monash University

Structural and pharmacological characterisation of CXCR3 isoforms and their modulation by therapeutic antagonists

11:30 AM - 12:00 PM

Mahmuda Yeasmin, Monash University

Structural basis of positive allosteric modulator selectivity at the muscarinic acetylcholine receptor

12:00 PM - 12:30 PM

Dr. Carus Lau, Victor Chang Cardiac Research Institute

Probing early inactivation events in hERG using the scorpion toxin CnErg1

Lunch & poster viewing | 12:30 PM - 1:30 PM

Afternoon session 1 | 1:30 PM - 3:00 PM | Chair: Thomas Ficker

1:30 PM - 2:00 PM

Dr. Rhys Grinter, The University of Melbourne

Quinone-transporting filaments extend the respiratory chain of Gram-positive bacteria

2:00 PM - 2:30 PM

Dr Luca Troman, The University of Melbourne

The Pam Pilus – a novel pilus system within candidate phyla radiation bacteria

2:30 PM - 3:00 PM

Javaid Jabbar, The University of Melbourne

Lysine acetylation: A switch for OPA1-mediated membrane remodeling

Afternoon tea & poster viewing | 3:00 PM - 3:30 PM

Afternoon session 2 | 3:30 PM - 4:30 PM | Chair: Dr. Naveen Vankadari

3:30 PM - 4:00 PM

Dr. Joshua Hardy, WEHI

ProteinDJ: a high-performance and modular protein design pipeline

4:00 PM - 4:30 PM

Daniel Fox, The University of Melbourne

AI-designed protein inhibitors can block hemoglobin binding and inhibit growth of pathogenic E. coli

Social function & networking | 4:30 pm - 6:00 pm

PROGRAM | Friday 14th November

Morning session 1 | 9:30 AM - 10:30 AM | Chair: Jhonnatan Reales-Gonzalez

9:30 AM - 10:00 AM

Kenta Ishii, Monash University

Integrating structural and dynamic perspectives to understand a next-gen obesity drug

10:00 AM - 10:30 AM

Michaela Kaoullas, Monash University

Structural perspectives on activating the M4 muscarinic acetylcholine receptor

Morning tea & poster viewing | 10:30 AM - 11:00 AM

Morning session 2 | 11:00 AM - 12:30 PM | Chair: Somavally Dalvi

11:00 AM - 11:30 AM

Dr. Sakshi Khosa – Heinrich Heine University, Germany

Lock-and-key substrate recognition in the multidrug ABC transporter Pdr5 from Saccharomyces cerevisiae

11:30 AM - 12:00 PM

Dr. Fabian Munder, The University of Melbourne

A potent protein antibiotic kills Pseudomonas aeruginosa by inhibiting the BAM complex

12:00 PM - 12:30 PM

Dr. Sarah Mueller, Australian National University

The structural basis of nickel import in Proteus mirabilis

Lunch & poster viewing | 12:30 PM - 1:30 PM

Closing keynote | 1:30 PM - 2:30 PM | Chair: Dr. Brooke Hayes

Prof. Wai-Hong Tham, Australian National University/ Walter & Eliza Hall Institute of Medical Research

Blocking malaria parasite transmission: Insights from cryo-EM of an endogenous fertilization complex

Prizes & closing remarks | 2:30 PM - 2:45 PM | Dr. Aidan Grosas

CCeMMP Business Meeting (members only) | 2:45 PM onwards

Prizes

CCeMMP Poster Prize

Winner receives \$300 AUD and a 3D printed protein model of your choice.

Runner up receives \$100 AUD.

Most Popular Oral Presentation Prize (as voted by peers)

3D printed protein model of your choice and a 2D structure print of your choice.

View abstracts:

