

QRW Programme

Proteins

3 – 4 September, 2015

Rydges Hotel, Queenstown, New Zealand

Thursday 3 September		
Time	Details	Location
8:50am - 9:00am	Opening remarks: Drs Jane Allison & Monica Gerth	Ben Lomond Restaurant
Session 1		
Chair: Dr. Monica Gerth, University of Otago		
9.00am – 9:35am	Prof. Frances Arnold (P1) California Institute of Technology, USA <i>Innovation by evolution: expanding the enzyme universe</i>	Ben Lomond Restaurant
9.35am – 9:55am	Assoc. Prof. David Ackerley (P2) Victoria University, New Zealand <i>Discovery, engineering and applications of non-ribosomal peptide synthetase and phosphopantetheinyl transferase enzymes</i>	Ben Lomond Restaurant
9:55am – 10.15am	Dr. Viktor Stein (P3) University of Queensland, Australia <i>Protease-based synthetic sensing and signal amplification</i>	Ben Lomond Restaurant
10.15am – 10.35am	Prof. Bridget Mabbutt (P4) Macquarie University, Australia <i>Bio-inspired tectons: Lsm protein rings as RNA-responsive nano-scaffolds</i>	Ben Lomond Restaurant
10.35am – 11.00am	Morning Tea	Trade Area
Session 2		
Shared with Computational Genomics Satellite		
Chair: Dr. Jane Allison, Massey University		
11.00am – 11.35am	Prof. Keith Dunker (P5) Indiana University, USA <i>Intrinsically disordered protein and the origins of complex multicellular organisms</i>	Ben Lomond Restaurant
11.35am – 11.55pm	Dr. Tamsyn Hilder (P6) Australian National University, Australia <i>Binding of fullerenes and nanotubes to the mechanosensitive channel of large conductance: A possible new class of antimicrobials</i>	Ben Lomond Restaurant
11.55pm – 12.15pm	Dr. Peter Bond (P7) Agency for Science, Technology & Research (A*STAR), Singapore <i>Multiscale dynamics of the dengue virus envelope</i>	Ben Lomond Restaurant
12.15pm – 12.35pm	Nicole Wheeler (CG8) University of Canterbury, New Zealand. <i>A profile-based method for the detection of deleterious genetic variation</i>	Ben Lomond Restaurant
12.35pm – 1.30pm	Lunch	Trade Area
Session 3		
Chair: Dr. Grant Pearce, University of Canterbury		
1.30pm – 2.05pm	Prof. Jacqui Matthews (P8) sponsored by Bio-Rad Laboratories University of Sydney, Australia <i>Assembly of a cell-specific transcription factor complex</i>	Ben Lomond Restaurant
2.05pm – 2:25pm	Dr. Thomas Dever (P9) sponsored by Maurice Wilkins Centre National Institutes of Health, USA <i>Substrate recognition by the kinases and phosphatases that modify translation factor eIF2</i>	Ben Lomond Restaurant

2:25pm – 2:45pm	Thomas Clairfeuille (P10) University of Queensland, Australia <i>Structural basis of protein cargo transport by sorting nexin 27 and the retromer complex sorting machinery</i>	Ben Lomond Restaurant
2:45pm – 3:05pm	Dr. Peter Mace (P11) University of Otago, New Zealand <i>Molecular mechanism of CCAAT-Enhancer Binding Protein (C/EBP) recruitment by the Trib1 pseudokinase</i>	Ben Lomond Restaurant
3.05pm – 3:30pm	Afternoon Tea	Trade Area
Session 4 Chair: Dr. Wayne Patrick, University of Otago		
3.30pm – 3.45pm	Dr. Emma Andrews (P12) University of Waikato, New Zealand <i>The mycobacterial PhoH2 proteins are type II toxin antitoxins coupled to RNA helicase domains</i>	Ben Lomond Restaurant
3.45pm – 4.00pm	Gabrielle Watson (P13) Monash University, Australia <i>Developing potent and specific inhibitors of the Grb7 breast cancer target using phosphotyrosine mimetics and bicyclic peptides</i>	Ben Lomond Restaurant
4.00pm – 4.15pm	Hariprasad Venugopal (P14) University of Auckland, New Zealand <i>High resolution Cryo-electron microscopy structure of human peroxiredoxin-3 filament reveals the assembly of a putative chaperone</i>	Ben Lomond Restaurant
4:15pm – 4:45pm	Poster Plugs (20 x 1 min + any announcements)	Ben Lomond Restaurant
4:45pm – 6:45pm	Poster Session (with beer/wine) <i>sponsored by Bio-Rad Laboratories</i> Shared with Computational Genomics	Level 5 area & Wakatipu Rm
7.00pm – late	Informal Dinner at Winnie's <i>Sponsored by SciMed</i> Shared with Computational Genomics	Winnies

Friday 4 September		
Time	Details	Location
Session 5		
Chair: Prof. Juliet Gerrard, University of Auckland		
9.00am – 9.35am	Dame. Prof. Carol Robinson (P15) <i>sponsored by Pharmaco/Bio-Techne</i> University of Oxford, UK <i>Mass spectrometry of membrane proteins - the lipid connection</i>	Queenstown Rm
9.35am – 9.55am	Dr. Megan O'Mara (P16) Australian National University, Australia <i>Understanding multidrug transporter function: can substrate specificity and promiscuity co-exist</i>	Queenstown Rm
9.55am – 10.15am	Dr. Esther Bulloch (P17) <i>sponsored by Thermo Fisher Scientific</i> University of Auckland, New Zealand <i>Investigating the transition of a three-helix bundle protein from a molten globule to a fully-folded state</i>	Queenstown Rm
10:15am – 10:35am	Dr. Richard Birkinshaw (P18) Monash University, Australia <i>T cell receptor recognition of CD1a presenting self-lipid antigens</i>	Queenstown Rm
10.35am – 11.00am	Morning Tea	Trade Area
Session 6		
Chair: Dr. Renwick Dobson, University of Canterbury		
11.00am – 11.30am	Prof. Vic Arcus (P19) <i>sponsored by Bio-Rad Laboratories</i> University of Waikato, New Zealand <i>Reconstructed Ancestral Enzymes and Enzyme Evolution in vivo</i>	Queenstown Rm
11:30am – 11.45pm	Thu Ho (P20) University of Auckland, New Zealand <i>Functional and structural analysis of the transcriptional repressor KstR from Mycobacterium tuberculosis</i>	Queenstown Rm
11:45am – 12:00 pm	Dr. Miguel Ramirez (P21) University of Otago, New Zealand <i>Characterization and engineering of the diol dehydratase from Clostridium autoethanogenum</i>	Queenstown Rm
12.00pm – 12.30pm	Prof. Emily Parker (P22) <i>sponsored by Thermo Fisher Scientific</i> University of Canterbury, New Zealand <i>Exposing hidden allostery</i>	Queenstown Rm
12.30pm – 2.00pm	Lunch and themed discussions	Trade Area & Queenstown
Session 7		
Chair: Assoc. Prof. Shaun Lott, University of Auckland		
2.00pm – 2.35pm	Prof. Grant Jensen (P23) California Institute of Technology/HHMI, USA <i>How electron cryotomography is opening a new window into bacterial cell biology</i>	Queenstown Rm
2.35pm – 2.55pm	Prof. Joel Mackay (P24) University of Sydney, Australia <i>A NuRDs, NuDes and (re)modelling</i>	Queenstown Rm
2:55pm – 3:15pm	Dr. Celine Valery (P25) RMIT University, Australia <i>Atomic view of a generic pH-driven conformational switch motif</i>	Queenstown Rm
3.15pm – 3.35pm	Dr. David Goldstone (P26) University of Auckland, New Zealand <i>Trim5α assembles to recognise retroviral infection and activate signalling</i>	Queenstown Rm
3:35pm – 3.45pm	Closing Remarks and Poster Prizes Drs Monica Gerth & Jane Allison	Queenstown Rm
3.45pm	Afternoon Tea Available	Level 5 Area