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| **QRW Programme**  **Biomolecular Interactions and Engineering QMB Satellite Symposium**  1 September – 2 September, 2019, Rydges Hotel, Queenstown, New Zealand | | |
| **Sunday 1 September** | | |
| **Time** | **Details** | **Room** |
| 9:00-9:10am | **Opening remarks:** Ren Dobson | **Rees Room** |
| **Session 1**  Chair: Volker Nock and Adele Williamson | | |
| 9:10–9:40am | **Keynote (K1) Olwyn Byron**  University of Glasgow, Scotland  ***The spins: bacterial aldehyde-alcohol dehydrogenase forms spiral complexes critical for activity*** | **Rees Room** |
| 9:40–10:00am | **Invited (I1) Jenny Malmstrom**  University of Auckland, New Zealand  ***Protein driven iron mineralisation: self-assembly towards functional nanostructures*** | **Rees Room** |
| 10:00–10:30am | **Keynote (K2) Tim Cooper**  Massey University, New Zealand  ***Evolvability and its basis: adaptation of experimentally evolved bacteria*** | **Rees Room** |
| 10:30–11:00am | **Morning Tea** | **Trade Area** |
| **Session 2**  Chairs: Margie Sunde and Paul Gardner | | |
| 11:00–11:30am | **Keynote (K3) Laura Domigan**  University of Auckland, New Zealand  ***Lens protein biomaterials for use in ocular surgery*** | **Rees Room** |
| 11:30–11:50pm | **Invited (I2) Michael Griffin**  University of Melbourne, Australia  ***Cryo-EM of the malaria parasite PA28/20S proteasome complex reveals an unusual activation mechanism with implications for artemisinin sensitivity*** | **Rees Room** |
| 11:50–12:10pm | **Invited (I3) Brendon Green**  ADVANCED BIOTECH NZ, New Zealand  ***ABNZ - Bovine collagen for wound care*** | **Rees Room** |
| 12:10–12:30pm | **Selected (S4) Michal Bernach**  University of Canterbury, New Zealand  ***Artificial leaf surfaces and fluorescently labelled bacteria to investigate phyllosphere microbiology*** | **Rees Room** |
| 12:30–1:30pm | **Lunch** |  |
| **Session 3**  Chairs: Karen Fleming and Peter Mace | | |
| 1:30–2:00pm | **Keynote K4**) **Margaret Sunde**  University of Sydney, Australia  ***Viral proteins that mimic host protein interactions to undermine antimicrobial defenses*** | **Rees Room** |
| 2:00–2:20pm | **Selected (I5) Vanessa Morris**  University of Canterbury, New Zealand  ***Cysteine oxidation triggers amyloid fibril formation by the tumour suppressor p16*** | **Rees Room** |
| 2:20–2:35 pm | **Selected (S1) Mihnea Bostina**  University of Otago, New Zealand  ***Using Cryo-EM to understand seneca valley virus specific tropism for cancer cells*** | **Rees Room** |
| 2:35–3:00pm | **Keynote (K5) Dominika Elmlund**  Monash University, Australia  ***The TAFs of TFIID bind and rearrange the topology of the TATA-less RPS5 promoter*** | **Rees Room** |
| 3:00–3:30pm | **Afternoon Tea** |  |
| **Session 4**  Chairs: Tim Cooper and Emma Petrie | | |
| 3:30–3:50pm | **Invited (I6) Paul Gardner**  University of Otago, New Zealand  ***Protein expression is controlled by the accessibility of translation initiation sites*** | **Rees Room** |
| 3:50–4:10pm | **Invited (I7) Will Barker**  Mint Innovation, New Zealand  ***A biometallurgical approach to recovering gold from electronic waste*** | **Rees Room** |
| 4:10–4:30pm | **Poster Plugs** | **Rees Room** |
| 4:30–6:30pm | **Poster Session (with beer/wine)** | **Rees Room** |
| 7:00pm – late | **Conference Dinner – Winnies (shared with Infectious Diseases)** |  |

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| **Monday 2 September** | | |
| **Time** | **Details** | **Room** |
| **Session 5: Membrane Protein Structure and Function (shared with Infectious Diseases)**  Chair: Jane Allison | | |
| 9:00–9:35am | **Keynote (K6) Karen Fleming**  John Hopkins University, USA  ***From Chaperones to the Membrane with a BAM!*** | **Queenstown Room** |
| 9:35–9:55am | **Invited (I6) Ren Dobson**  University of Canterbury, New Zealand  ***Insane in the membrane: Biology of bacterial sialic acid metabolism.*** | **Queenstown Room** |
| 9:55–10:30am | **Keynote (K7) Michelle Dunstone**  Monash University, Australia  ***Pore forming proteins of the immune system: What happens when there are no target-recognition domains?*** | **Queenstown Room** |
| 10:30am – 11:00am | **Morning Tea** |  |
| **Session 6**  Chair: Laura Domigan and Michael Griffin | | |
| 11:00–11:20am | **Keynote (K8) Juliet Gerrard**  University of Auckland, New Zealand  ***Protein nanotechnology: towards applications*** | **Rees Room** |
| 11:20–11:40pm | **Invited (I7) Volker Nock**  University of Canterbury, New Zealand  ***Using Lab-on-a-Chip technology to reduce complexity in plant-fungi interaction studies*** | **Rees Room** |
| 11:40–11:55pm | **Selected (S2) Akash Bhattacharya**  Beckman Coulter, USA  ***How does a “scorched earth” enzyme work? Experimental and computational studies on the human antiretroviral restriction factor SAMHD1.*** | **Rees Room** |
| 11:55–12:10pm | **Selected (S3) Esteban Cruz**  University of Sydney, Australia  ***Multifunctional gold nanoparticles targeted against HER2-amplified cells for selective delivery of cytotoxic payloads*** | **Rees Room** |
| 12:10–12:30pm | **Keynote (K9) Elizabeth Ostrowski**  Massey University, New Zealand  ***Population genetics of allorecognition in the social amoeba*** | **Rees Room** |
| 12:30–2:00pm | **Lunch** |  |
| **Session 7**  Chair: Olwyn Byron and Dominika Elmlund | | |
| 2:00–2:30pm | **Keynote (K10) Tom Laue**  University of New Hampshire, USA  ***High concentration protein solutions: insights from analytical ultracentrifugation and analytical electrophoresis*** | **Rees Room** |
| 2:30–2:50pm | **Selected (S4) Adele Williamson**  University of Waikato, New Zealand  ***Repair outside the box? Structural and functional diversity of bacterial ATP-dependent DNA ligases*** | **Rees Room** |
| 2:50–3:10pm | **Invited (S5) Alexander McLellan**  University of Otago, New Zealand  ***Promoters to drive Chimeric Antigen Receptor (CAR) T cell therapy*** | **Rees Room** |
| 3:10–3:30pm | **Invited (I8) Emma Petrie**  Walter + Eliza Hall Institute, Australia  ***Learning from viral inhibitory proteins to block the pathway to necroptotic cell death*** | **Rees Room** |
| 3:30–4:00pm | **Afternoon Tea** |  |
| **Session 8:**  Chair: James Murphy and Vanessa Morris | | |
| 4:00–4:25pm | **Keynote (K11) Jane Allison**  University of Auckland, New Zealand  ***Elucidation of allosteric mechanism via network analysis of molecular dynamics simulation*** | **Rees Room** |
| 4:25–4:40pm | **Invited (S6) Adam Middleton**  University of Otago, New Zealand  ***Discovery of two inhibitors of ubiquitin chain growth and their future in cells*** | **Rees Room** |
| 4:40–5:00pm | **Invited (I10) Peter Mace**  University of Otago, New Zealand  ***Using helices to cope with stress*** | **Rees Room** |
| 5:00–5:30pm | **Keynote (K12) Tuomas Knowles**  University of Cambridge, England  ***Protein self-assembly and misassembly*** | **Rees Room** |
| 5:30–5:35pm | **Concluding remarks** | **Rees Room** |