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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** |