

## QRW Programme

### Webster Centre for Infectious Diseases QMB Satellite Symposium: Infectious Diseases and Membrane Proteins

1 September – 2 September, 2019  
Rydges Hotel, Queenstown, New Zealand

## Sunday 1 September

Time	Details	Location
<b><u>Mycobacterium tuberculosis membrane proteins</u></b> <b>Chaired by Associate Professor Shaun Lott (University of Auckland)</b>		
9:00am – 9:05am	<b>Opening remarks: Kurt Krause, Jane Allison</b> University of Otago, University of Auckland	Queenstown Rm
9:05am – 9:40am	<b>Kevin Pethe (Q1)</b> Nanyang Technological University <i>Suffocating Mycobacterium tuberculosis: new approaches for anti-TB drug development</i>	Queenstown Rm
9:40am – 10:15am	<b>Schara Safarian (Q2)</b> Max Planck Institute for Biophysics <i>Structure and mechanism of the cytochrome bd oxidase</i>	Queenstown Rm
10.15am – 10.35am	<b>Greg Cook (Q3)</b> <i>sponsored by New England Biolabs</i> University of Otago <i>Next generation ATP synthase inhibitors to combat drug resistant tuberculosis</i>	Queenstown Rm
10:35am – 11:00am	<b>Morning Tea</b>	Trade Area
<b><u>Virus-host interactions</u></b> <b>Chaired by Professor Richard Cannon (University of Otago)</b>		
11:00am – 11:20am	<b>Miguel Quiñones-Mateu (Q4)</b> <i>sponsored by Thermo Fisher Scientific</i> University of Otago <i>Why are HIV-infected individuals failing antiretroviral treatment in Africa?</i>	Queenstown Rm
11:20am – 11:40am	<b>Merilyn Hibma (Q5)</b> University of Otago <i>Evaluating immune modulation of dendritic cells by extracellular vesicles shed from human papillomavirus type 16-E7 expressing keratinocytes</i>	Queenstown Rm
11:40am – 11:55am	<b>Jan Marzinek (Q6)</b> A*STAR <i>Molecular Details of Dengue Virus Conformational Changes and Interactions with Antibodies</i>	Queenstown Rm
11:55am – 12:15pm	<b>John Taylor (Q7)</b> University of Auckland <i>Secreted forms of a nonstructural glycoprotein encoded by rotavirus activates proinflammatory signaling via Toll-Like Receptor 2: A novel virotoxin-based pathophysiologic mechanism in viral gastroenteritis.</i>	Queenstown Rm
12:15pm – 1:30pm	<b>Lunch</b>	Trade Area
<b><u>Host-pathogen interactions</u></b> <b>Chaired by Dr Joanna Hicks (University of Waikato)</b>		
1:30pm – 2:05pm	<b>Michael Jennings (Q8)</b> Griffith University <i>Glycointeractions: new opportunities to cure and prevent infectious disease</i>	Queenstown Rm

2:05pm – 2:20pm	<b>Tess Malcolm (Q9)</b> Monash University <i>Metal-dependent dynamic equilibrium: A mechanism for regulation of the Plasmodium M17 aminopeptidases?</i>	Queenstown Rm
2:20pm – 2:40pm	<b>Bruce Russell (Q10)</b> sponsored by Thermo Fisher Scientific University of Otago <i>Unravelling the molecular basis for vivax malaria's unhealthy attraction to human reticulocytes</i>	Queenstown Rm
2.40pm – 2.55pm	<b>Matthew McNeil (Q11)</b> University of Otago <i>Essentiality of succinate metabolism in Mycobacterium tuberculosis</i>	Queenstown Rm
3:00pm – 3:30pm	<b>Afternoon Tea</b>	Trade Area
<b>Membrane protein structure and targeting</b> <b>Chaired by Professor Kurt Krause (University of Otago)</b>		
3:30 – 3:50pm	<b>Brian Monk (Q12)</b> University of Otago <i>Drug discovery using the antifungal target lanosterol 14<math>\alpha</math>-demethylase</i>	Queenstown Rm
3:50pm – 4:10pm	<b>Iain Hay (Q13)</b> University of Auckland <i>Bacterial Secretins – Versatile outer membrane pores</i>	Queenstown Rm
4:10pm – 4:30pm	<b>Poster Plugs</b>	Queenstown Rm
4:30pm – 6:30pm	<b>Poster Session (with beer/wine)</b>	Marquee
7:00pm – late	<b>Conference Dinner – Winnies (shared with BIC)</b>	Winnies

<b>Monday 2 September</b>		
<b>Time</b>	<b>Details</b>	<b>Location</b>
<b>Membrane Protein Structure and Function (shared with BIC)</b> <b>Chaired by Associate Professor Jane Allison (University of Auckland)</b>		
9:00am – 9:35am	<b>Karen Fleming (Q14)</b> sponsored by Ngaio Diagnostics Johns Hopkins University <i>From Chaperones to the Membrane with a BAM!</i>	Queenstown Rm
9:35am – 9:55am	<b>Ren Dobson (Q15)</b> University of Canterbury <i>Insane in the membrane: Biology of bacterial sialic acid metabolism</i>	Queenstown Rm
9:55am – 10:30am	<b>Michelle Dunstone (Q16)</b> Monash University <i>Pore forming proteins of the immune system: What happens when there are no target-recognition domains?</i>	Queenstown Rm
10:30am – 11:00am	<b>Morning Tea</b>	Trade Area
<b>Genomics in infectious diseases</b> <b>Chaired by Professor Greg Cook (University of Otago)</b>		
11:00am – 11:35am	<b>Sarah Dunstan (Q17)</b> sponsored by Mediray Doherty Institute <i>Genomics to tame Tuberculosis</i>	Queenstown Rm
11:35am – 11:50pm	<b>Catherine Jia-Yun Tsai (Q18)</b> Auckland University <i>A Novel Peptide Delivery Platform for Mucosal Vaccination Based on Group A Streptococcus Pili</i>	Queenstown Rm
11:50am – 12:10pm	<b>Nikki Moreland</b> sponsored by Abacus dx University of Auckland <i>Is immune priming a major driver for rheumatic fever?</i>	Queenstown Rm
12:10pm – 2:00pm	<b>Lunch and Speed Mentoring</b>	Trade Area
<b>Molecular mechanisms of pathogenesis</b> <b>Chaired by Dr Tim Allison (University of Canterbury)</b>		
2:00pm – 2:35pm	<b>Peter Bond (Q20)</b> A*STAR Singapore <i>Understanding the mechanisms of infectious disease: from atomic to system resolution</i>	Queenstown Rm
2:35pm – 2:55pm	<b>Stephanie Dawes (Q21)</b> University of Auckland <i>RNase HI activity provides metabolic flexibility under antibiotic stress in the mycobacteria</i>	Queenstown Rm
2:55pm – 3:10pm	<b>Chris Greening (Q22)</b> Monash University <i>The hows and whys of F420 biosynthesis in mycobacteria</i>	Queenstown Rm
3:10pm – 3:30pm	<b>Jodie Johnston (Q23)</b> University of Canterbury <i>Targeting menaquinone biosynthesis in the pathogens M. tuberculosis and S. aureus</i>	Queenstown Rm
3:30pm – 4:00pm	<b>Afternoon Tea</b>	Trade Area
<b>Neisseria pathogens</b> <b>Chaired by Dr Joanna Mackichan (Victoria University of Wellington)</b>		
4:00pm – 4:35pm	<b>Maggie So (Q24)</b> University of Arizona <i>Commensal Neisseria kill Neisseria gonorrhoeae through a DNA-dependent mechanism</i>	Queenstown Rm
4:35pm – 4:55pm	<b>Joanna Hicks (Q25)</b> sponsored by Maurice Wilkins Centre University of Waikato	Queenstown Rm

	<i>Cysteine Biosynthesis; Gonorrhoea's weak link?</i>	
4:55pm – 5:30pm	<b>Kate Seib (Q26)</b> Griffith University <i>Advances towards a Neisseria gonorrhoeae vaccine</i>	<b>Queenstown Rm</b>
5:30pm – 5:35pm	<b>Concluding remarks: Kurt Krause, Jane Allison</b>	<b>Queenstown Rm</b>