The 35th Annual Queenstown Molecular Biology Meeting
Thursday 4 September – Friday 5 September, 2025
Te Pae, Christchurch, New Zealand

Wednesday 3 September		
Time	Details	Location
QRW Plenary Lecture		
5.30pm-5.40pm	Introduction	Auditorium A3+A4
5.40pm-6.25pm	Panel Discussion on Aotearoa New Zealand's future research, science & innovation sector (moderated by Dr Marie Bradley) Sir Peter Gluckman ONZ KNZM FRSNZ, University of Auckland Professor Emily Parker FRSNZ, Victoria University of Wellington Mark Piper, Transitional CEO, Bioeconomy Science	Auditorium A3+A4
	Institute Professor David R. Grattan FRSNZ, University of Otago	
6.30pm-7.40pm	Plenary Lecture Sponsored by Mediscope International Limited Prof. Tak W Mak Princess Margaret Cancer Centre, University of Toronto and Centre of Oncology and Immunology, University of Hong Kong Beyond immune checkpoint blockade: emerging strategies	Auditorium A3+A4
7.45pm-9.30pm	Evening Social Function sponsored by Thermo Fisher Scientific Drinks and Nibbles The Great QMB Trivia Night with Pierre de Cordovez	Exhibition Hall E1+E2

Thursday 4 September			
Time	Details	Location	
	Biology Research in Space		
	Chaired by Craig Herbold (University of Canterbury)		
8.30am-8.50am	Assoc. Prof. Sarah Kessans Q1	Conway C2+C3	
	University of Canterbury, New Zealand		
	Bringing Kiwi science to new heights: developing		
	platforms for biological research in microgravity		
8.50am-9.10 am	Dr Brian Russell Q2	Conway C2+C3	
	Auckland University of Technology, New Zealand		
	Space Medicine, AI, and Earth-Independent Clinical		
	Decision Support: Enabling Autonomy in Deep Space		
	Missions		
9.10am-9.25am	Dr Vanessa Morris Q3	Conway C2+C3	
	University of Canterbury, New Zealand		
	Cosmic radiation triggers thiol-based amyloid		
	formation of the human tumour suppressor p16		

9.25am-9.40am Dr David Hooks Q4 AgResearch Ltd., Palmerston North, New Zealand Sustainable Biofabrication in Space: Microgravity Production of Bacterial Nanocellulose via Synthetic Microbial Communities 9.40am-10.00am Zach Preston Q5 Dawn Aerospace Practical Pathways to Microgravity Research with Dawn Aerospace 10.00am-10.30am Morning Tea Exhibition Hall Molecular Physiology Across Systems Chaired by Vanessa Morris (University of Canterbury) 10.30am-11.00am Prof. Marc Pellegrini Q6 Walter & Eliza Hall Institute of Medical Research, Melbourne, Australia	
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10.30am-11.00am	
Walter & Eliza Hall Institute of Medical Research, Melbourne, Australia	
Melbourne, Australia	}
Death Becomes Them – Host Cells and their viruses	
11.00am-11.20am Dr Amy Yewdall Q7 Conway C2+C3	}
University of Canterbury, New Zealand	
Droplets that organise life	
11.20am-11.40am Dr Angus Lindsay Q8 Conway C2+C3	}
University of Canterbury, New Zealand	
Dystrophin-deficiency disrupts skeletal muscle	
biomechanics	
11.40am-12.00pm Prof. Gavin Reid Q9 Conway C2+C3	}
University of Melbourne, Australia	
Integrated Multi-omics and Lipid-Protein Interactome	
Analysis to Characterise the Role of Aberrant Lipid	
Metabolism in Multisystem Mitochondrial Disease	
12.00pm-1.30pm Lunch Exhibition Hall	E1+E2
Commercialization in Life Sciences	
Chaired by Hilary Sheppard (University of Auckland)	
1.30pm-1.50pm Prof. Tak W Mak Q10 Conway C2+C3	}
Princess Margaret Cancer Centre, University of	
Toronto and Centre of Oncology and Immunology,	
University of Hong Kong	
From Basic Research to Real World Impact	
1.50pm-2.10pm Dr Stuart M Chambers Q11 Conway C2+C3	}
Brightfield Therapeutics, South San Francisco, USA	
Navigating academic and industry uses of induced	
pluripotent stem cell-derived definitive	
haematopoiesis	
2.10pm-2.30pm Irina Miller Q12 Conway C2+C3	}
Daisy Lab, New Zealand	
The development and commercialisation of	
recombinant dairy proteins	
2.30pm-2.50pm Dr Taylor Hibbard Q13 Conway C2+C3	}
Bontio Bio, New Zealand	
Commercialisation of a novel class of anti-parasitic	
compounds from nature	
2.50pm-3.10pm Dr Christophe Collet Q14 Conway C2+C3	}

	Scion group/BSI From Bench to Bioreactor: Collaborative Scale-Up Solutions for Biotech Start-Ups	
3.10pm-3.30pm	Panel discussion with the session speakers (moderated by Andrew Munkacsi)	Conway C2+C3
3.30pm-4.00pm	Afternoon Break	Exhibition Hall E1+E2
4.00pm-5.30pm	Poster Session Sponsored by Mediray NZ Ltd & Eppendorf & Miltenyi Biotec	Exhibition Hall E1+E2
7.00pm-late	QMB & MedSci Conference Dinner Sponsored by Thermo Fisher Scientific and Maurice Wilkins Centre Ticket only. Please wear your name badge	Waitaki room, Te Pae

Time	Details	Location
	AGM and prize session	
8.00am-8.45am	Annual general meeting of the QMB society	Conway C2+C3
8.45am-9.00am	Poster awards presentation	Conway C2+C3
9.00am-9.20am	illumina™ Emerging Researcher Award 2025 Q15	Conway C2+C3
9.20am-9.40am	The Queenstown Molecular Biology Society Māori Early-Career Researcher Award 2025 Q16	Conway C2+C3
9.40am-10.00am	Thermo Fisher Scientific award for excellence in molecular biology 2025 Q17	Conway C2+C3
10.00am-10.30am	Morning Tea	Exhibition Hall E1+E2
10.000111 10.300111	Molecular Ecology and Evolution	- Exmortion Han E1 · E2
	Chaired by Bjorn Oback (Plant & Food Research)	
10.30am-10.45am	Dr Sarah Knight Q18	Conway C2+C3
	University of Auckland, New Zealand	00
	Exploring Aotearoa New Zealand's yeast diversity	
10.45am-11.00am	Dr Catherine Collins Q19	Conway C2+C3
	University of Otago, New Zealand	,
	Population structure in New Zealand Rattus rattus	
11.00am-11.15am	Dr James Davies Q20	Conway C2+C3
	Victor Chang Institute, Australia	
	The structural basis of carnitine transport	
11.15am-11.30am	Dr Alana Alexander Q21	Conway C2+C3
11.154111 11.504111	University of Otago, New Zealand	Conway C21C3
	From Ice Age to Isolation: Historical Demography and	
	Inbreeding Depression in New Zealand's Endemic	
	Hector's and Māui Dolphins	
11.30am-11.45am	Sarah Manners	Conway C2+C3
	University of Canterbury, New Zealand	
	Boiling over Bad Smells: Harnessing Thermophilic	
	Enzymes to Sniff out Volatile Sulfur Compounds in	
	Wine	
11.45am-12.00pm	Assoc. Prof. Evelyn Sattlegger Q22	Conway C2+C3
	Massey University, New Zealand	
	Towards Dissecting the Molecular Mechanisms	
	Underlying GCN2 Activation – A Protein Kinase with	
40.00	Known Links to Health and Disease	E MANY AND EASE
12.00pm-1.00pm	Lunch	Exhibition Hall E1+E2
	<u>Technology & Molecular Medicine</u> Chaired by Arielle Sulit (University of Otago Christchur	ch)
1.00pm-1.20pm	Assoc. Prof. Simon Hinkley Q23	Conway C2+C3
1.00μπ-1.20μπ	Victoria University of Wellington, New Zealand	Conway CZTC3
	The application of heparan sulfate as a human	
	therapeutic	

1 20nm 1 25	Jordon Lima 024	Conway C2+C2
1.20pm-1.35pm	Jordon Lima Q24	Conway C2+C3
	University of Otago, New Zealand	
	Māu Tēnā Kīwai o te Kete, Māku Tēnei: Equitable	
	Application of Circulating Tumour DNA to the NZ	
1 25mm 1 50 · · ·	Māori Population.	Commun. C2 : C2
1.35pm-1.50pm	Dr Hilary Sheppard Q25	Conway C2+C3
	University of Auckland, New Zealand	
	Optimised high rates of gene editing for skin	
4.502.05	engineering applications	6
1.50pm-2.05pm	Keri Multerer Q26	Conway C2+C3
	Victoria University of Wellington, New Zealand	
	The contribution of gene-gene and gene-environment	
	epistasis to polygenic risk predictions for common,	
2.05	complex diseases	0 00 00
2.05pm-2.25pm	Prof. Tony Kettle Q27	Conway C2+C3
	University of Otago Christchurch, New Zealand	
	Neutrophils produce hydrogen cyanide and cyanogen	
2.25 2.42	chloride during inflammation	6 62 62
2.25pm-2.40pm	Ben Buttle Q28	Conway C2+C3
	University of Auckland, New Zealand	
	Using Advanced Genome Editing Techniques to	
	Reprogramme T-cells for Cancer Immunotherapy	
2.40pm-3.00pm	Prof. Tim Woodfield Q29	Conway C2+C3
	University of Otago Christchurch, New Zealand	
	Bioprinting of 3D in vitro Organoid Models for	
	Investigating Tissue Fusion in Healthy and Diseased	
	Microenvironments	
3.00pm-3.30pm	Afternoon Break	Conway Atrium
	Cellular Biology: Mechanisms & Models	1
	Chaired by Amy Osborne (University of Canterbury)	
3.30pm-4.00pm	Dr Grace Q Gong Q30	Conway C2+C3
	University of Cambridge, United Kingdom	
	Can activation of an oncoprotein do good things?	
4.00pm-4.15pm	Dr Adam Middleton Q31	Conway C2+C3
' '	University of Otago, New Zealand	,
	Decoding protein degradation with structural biology	
	and machine learning	
4.15pm-4.30pm	Emilie Hamzah Q32	Conway C2+C3
	University of Canterbury, New Zealand	
	Thiolate oxidation of ankyrin repeat proteins triggers	
	transition into amyloid structures	
4.30pm-4.45pm	Dr Artem Efremov Q33	Conway C2+C3
	Institute of Systems and Physical Biology, Shenzhen	30
	Bay Laboratory, China	
	Mechanosensitive endonuclease ANKLE1 processes	
	chromatin bridges by cleaving mechanically strained	
	DNA	
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4.45pm-5.00pm	Dr Davide Mercadante Q34 University of Auckland, New Zealand Martini3-NMR: empowering coarse-grained simulations with AI-predicted NMR observables	Conway C2+C3
5.00pm-5.15pm	Dr Nina Dickerhof Q35 University of Otago Christchurch, New Zealand Targeting antioxidant systems in Streptococcus pneumoniae	Conway C2+C3
5.15pm-5.35pm	Abigail Schwartfeger Q36 University of Canterbury, New Zealand Caspase-8 amyloid aggregation: A redox-driven switch in cell fate	Conway C2+C3