

MedSci 2025 Programme at a glance

Wednesday, 3 rd September 2025	
3.00pm-5.00pm	MedSci Posters, Exhibition Hall E1+E2 <i>Sponsored by Lab Supply NZ</i>
5.30pm-7.40pm	Panel Discussion & Plenary Lecture, Auditorium <i>Sponsored by Mediscope International Limited</i>
7.45pm-9.30pm	Evening Social Function, Exhibition Hall E1+E2 <i>Sponsored by Thermo Fisher Scientific</i>

Thursday, 4 th September 2025		
9.00am-10.00am	MedSci Plenary Lecture 1 Dr Daniel Bernard , McGill University, Canada	
10.00am-10.30am	Morning Tea	
10.30am-12.30pm	Session 1A: PSNZ Bullivant Prize Finalists	Session 1B: Neuroendocrine control of energy homeostasis and behaviour Speakers: Zane Andrews (Monash University) Chris Hedges (University of Auckland) Kathy Mountjoy (University of Auckland) Aline Boer (University of Otago)
12.30pm-1.30pm	Lunch and Sponsor Demos	
1.30pm-3.30pm	Session 2A: PSNZ Hubbard Prize Finalists PSNZ Paul Hill Research Excellence Award Lecture Free Communication	Session 2B: NZSE Prize Talks NZSE Emerging Researcher Prize Lecture NZSE AGM
3.30pm-4.00pm	Afternoon Tea and Coffee Break	
4.00pm-5.10pm	Session 3A: PSNZ Student Mini-Oral Prize Finalists	Session 3B: Free Communication
5.15pm-6.30pm	MedSci AGM	
7.00pm-late	MedSci & QMB Joint Dinner + Prize-giving, Waitaki room, Te Pae (Ticket only) <i>Sponsored by Thermo Fisher Scientific & Maurice Wilkins Centre</i>	

Friday, 5 th September 2025		
9.00am-10.00am	MedSci Plenary Lecture 2: Prof Yong Xu, University of South Florida, USA	
10.00am-10.30am	Morning Tea	
10.30am-12.00pm	Session 4A: Sweet Pressure: Co-existing high blood pressure and high blood sugar Speakers: Holly Thorpe (U. Waikato) Jingyuan Liang (U. Auckland) Daryl Schwenke (U. Otago) Amanaki STEM Academy Students	Session 4B: Free Communication
12.00pm-1.00pm	Lunch and Sponsor Demos PSNZ AGM	
1.00pm-3.00pm	Session 5A: New ideas and approaches to investigating cardiac pathophysiology Speakers: James McNamara (Murdoch Children's Research Institute, Melbourne) Kim Mellor (U. Auckland) Andrew Taberner (U. Auckland) Johanna Montgomery (U. Auckland)	Session 5B: Regulation and actions of pituitary gonadotrophins Speakers: Michael Pankhurst (U. Otago) Zaramasina Clark (Victoria, U. Wellington) Daniel Bernard (McGill University, Canada) Kelly Walton (U. Queensland)
3.00pm-3.30pm	Afternoon Tea and Coffee Break	
3.30pm-6.00pm	Session 6A: Free Communication	Session 6B: Medical Science and Medical Technologies Speakers: James Sharman (U. Tasmania) Andrew Lowe (Auckland U. of Technology) James McKeage (U. Auckland) Diana Siew (Medtech-iQ Aotearoa)

Wednesday, 3rd September 2025

3.00pm-5.00pm	MedSci posters <i>Sponsored by Lab Supply NZ</i> Exhibition Hall E1+E2
5.30pm-7.40pm	Panel Discussion on Aotearoa New Zealand's future research, science & innovation sector Sir Peter Gluckman ONZ KNZM FRSNZ, University of Auckland Professor Emily Parker FRSNZ, Victoria University of Wellington Mark Piper Transitional CEO, Bioeconomy Science Institute Professor David R. Grattan FRSNZ, University of Otago Moderated by: Dr Marie Bradley Plenary Lecture <i>Sponsored by Mediscope International Limited</i> Prof. Tak Mak Princess Margaret Cancer Centre, University of Toronto and Centre of Oncology and Immunology, University of Hong Kong <i>Beyond immune checkpoint blockade: emerging strategies</i> Auditorium
7.45pm-9.30pm	Evening Social Function <i>Sponsored by Thermo Fisher Scientific</i> Exhibition Hall E1+E2

Thursday, 4th September 2025

9:00am-10:00am	MedSci Plenary Lecture 1: Dr Daniel Bernard McGill University, Canada Conway C5 - live feed to C4 Chair: Greg Anderson		
10.00am-10.30am	Morning Tea Exhibition Hall E1+E2		
10.30am-12.30am	Session 1A: PSNZ Bullivant Prize Finalists Room: Conway C5 Chairs: Karl Iremonger & Helen Waddell (U. Otago)	10.30am-12.30am	Session 1B: Neuroendocrine control of energy homeostasis and behaviour Room: Conway C4 Chairs: Aline Boer (U. Otago)
10.30am - 10.43am	Bullivant Prize Finalist 1: Tharaka Athukorala (U. Otago) <i>Investigating the protective role of the CREBRF rs373863828 variant on maternal metabolic health and gestational diabetes mellitus in a mouse model</i>	10.30am - 11.00am	Zane Andrews (Monash University) <i>Acute stress suppresses feeding circuits and instructs avoidance behaviour</i>
10.43am - 10.56am	Bullivant Prize Finalist 2: Michael Beacom (U. Auckland) <i>Abnormal Rhythmic heart rate patterns after severe asphyxia in preterm fetal sheep: A biomarker for the latent phase of recovery</i>		
10.56am - 11.09am	Bullivant Prize Finalist 3: Joan Chan (U. Otago) <i>Neuronal ryanodine receptor type II and its ultrastructural arrangement in a murine model of Alzheimer's disease</i>		
11.09am - 11.22am	Bullivant Prize Finalist 4: Greer Pugh (U. Auckland) <i>Venous function and central pulse wave velocity are altered in Postural Orthostatic Tachycardia Syndrome (POTS)</i>	11.00am - 11.30am	Chris Hedges (U. Auckland) <i>Longevity-extending and metabolic effects of chronic PI3K inhibition in male and female mice</i>
11.22am - 11.35am	Bullivant Prize Finalist 5: Andy Stewart (U. Otago) <i>Investigating the role of lactogenic hormones in the suppression of fever in late pregnancy</i>		
11.35am - 11.48am	Bullivant Prize Finalist 6: Zoe Ward (U. Otago) <i>Stress and sleep: Investigating the regulation of CRH neuron activity by arousal circuits</i>	11.30am - 12.00pm	Kathy Mountjoy (U. Auckland) <i>New insights into Melanocortin-4 Receptor signalling and appetite regulation</i>
11.48am - 12.01am	Bullivant Prize Finalist 7: Devin Tonkin (U. Otago) <i>Investigating microRNA therapeutics in a 3D model of the ischaemic heart</i>		

12.01pm - 12.14pm	Bullivant Prize Finalist 8: Stian Thomson (U. Auckland) <i>Preserved Haemodynamic Responses to Cardiac Vagus Nerve Activity in an Animal Model of HFpEF</i>	12.00pm - 12.30pm	Aline Boer (U. Otago) <i>Central regulation of body weight by the incretin glucose-dependent insulinotropic polypeptide and associated therapies</i>
12.14pm - 12.27pm	Bullivant Prize Finalist 9: Phoebe Adler (U. Otago) <i>Characterisation of TRPV channel function: implications for vasopressin neuron activity</i>		
12.30pm - 1.30pm	Lunch and Sponsor Demos Exhibition Hall E1+E2		
1.30pm - 3.30pm	Session 2A: PSNZ Hubbard Prize Finalists PSNZ Paul Hill Research Excellence Award Lecture Free Communications Room: Conway C5 Chairs: Laura Bennet & Julia Shanks (U. Auckland)	1.30pm-3.30pm	Session 2B: NZSE Prize Talks NZSE Emerging Researcher Prize Lecture Room: Conway C4 Chairs: Joe Yip & Greg Anderson (U. Otago)
1.30pm - 1.55pm	Hubbard Prize Finalist 1: Alice McDouall (U. Auckland) <i>Treatments for mild hypoxic ischemic injury brain injury</i>	1.30pm - 1.45pm	NZSE MediRay Student Finalist 1: Anita Clark (U. Otago) <i>Investigating the role of prolactin receptors on respiratory adaptation during pregnancy and sleep</i>
		1.45pm - 2.00pm	NZSE MediRay Student Finalist 2: Christopher Egnot (U. Otago) <i>The hypothalamic dopaminergic (A12) neuron: A new player in body weight regulation in rats</i>
1.55pm - 2.20pm	Hubbard Prize Finalist 2: Julia Musgrave (U. Auckland) <i>Slower Cross-Bridge Cycling Drives Changes in Cardiac Mechanoenergetics in Diabetic Human Tissues</i>	2.00pm - 2.15pm	NZSE MediRay Student Finalist 3: Caitlin MacRae (U. Otago) <i>Liver and adipose androgen signaling is unlikely to promote metabolic dysfunction in polycystic ovary syndrome</i>
		2.15pm - 2.30pm	NZSE MediRay Student Finalist 4: Zsaleya Sword-Tua (U. Otago) <i>Pharmacological modulation of the hypothalamic-ovarian-pituitary axis to dampen luteinising hormone hyperpulsatility in polycystic ovary syndrome.</i>
2.20pm - 2.50pm	Paul Hill Research Excellence Award Lecture: Joanne Davidson (U. Auckland) <i>Preventing perinatal ischaemic brain injury – refining old treatments and pioneering novel treatments for the future</i>	2.30pm - 2.45pm	NZSE MediRay Student Finalist 5: Kai Shira Woolf (U. Otago) <i>Selective activation of hypothalamic stress neurons is sufficient to induce physiological dysfunction associated with chronic stress</i>
		2.45pm - 3.00pm	NZSE MediRay Student Finalist 6: Katie Heads (U. Otago)

			<i>Exploring androgen influence on miscarriage in PCOS</i>
2.50pm - 3.05pm	Free communication 2A1: Imran Ahmad (Universiti Sains Malaysia) <i>Burden and its Associated Factors among Informal Caregivers of Diabetic Foot Ulcer Patients</i>	3.00pm - 3.25pm	NZSE Emerging Researcher Prize Lecture: Kaj Kamstra (U. Otago) <i>Extreme endocrine plasticity in a sex-changing fish</i>
3.05pm - 3.20pm	Free communication 2A2: Ian Van Tets (University of Alaska Anchorage) <i>Do rats that frequently drink alcohol deposit fats in a way that increases their risk of type II diabetes?</i>	3.25pm - 4.00pm	NZSE AGM
3.30pm - 4.00pm	Afternoon Tea and Coffee Break Exhibition Hall E1+E2		
4.00pm - 5.30pm	Session 3A: PSNZ Student Mini-Oral Prize Finalists Room: Conway C5 Chairs: JC Han & Carol Bussey (U. Auckland)	4.00pm - 5.30pm	Session 3B: Free Communications Room: Conway C4 Chairs: Kate Thomas (U.Otago) & Ryan Sixtus (U.Auckland)
4.00pm - 4.05pm	Mini-Oral Prize Finalist 1: Raihaan Dalwai (U. Otago) <i>Unravelling the Mechanisms of Atrial Arrhythmia</i>	4.00pm - 4.15pm	Free communication 3B1: Helen Waddell (U. Otago) <i>Exploration of t-tubules in atrial myocytes with atrial fibrillation</i>
4.05pm - 4.10pm	Mini-Oral Prize Finalist 2: Dilsha Gimhani (U. Auckland) <i>Regional Density Profiling of cardiac lymphatics in a Large Animal Model of HFpEF</i>		
4.10pm - 4.15pm	Mini-Oral Prize Finalist 3: Caitlin Low (U. Auckland) <i>Does therapeutic hypothermia protect the white matter after hypoxia-ischemia in the preterm fetal sheep brain?</i>		
4.15pm - 4.20pm	Mini-Oral Prize Finalist 4: Emma McClure (U. Otago) <i>Modelling Genetic Predisposition to Polycystic Ovary Syndrome (PCOS) in zebrafish</i>	4.15pm - 4.30pm	Free communication 3B2: Nicolas Lam (U. Canterbury) <i>Practical identifiability in a viscoelastic respiratory model for mechanical ventilation</i>
4.20pm - 4.25pm	Mini-Oral Prize Finalist 5: Emily Morice (U. Otago) <i>Understanding the Role of Genetic Variation in Immune Biology in Polynesian Populations</i>		
4.25pm - 4.30pm	Mini-Oral Prize Finalist 6: Josephine Morrison (U. Otago) <i>Understanding the regulatory potential of transposable elements in the placenta</i>		
4.30pm - 4.35pm	Mini-Oral Prize Finalist 7: Jaxson Murphy-Winterstein (U. Otago)	4.30pm - 4.42pm	Free communication 3B3: Eilish Dalley (U. Otago)

	<i>'Miniaturizing' Ca²⁺ Imaging for Higher-throughput Screening of RyR2 and RyR2 Variants</i>		<i>Investigating the role of TMEM176b in heart inflammation</i>
4.35pm - 4.40pm	Mini-Oral Prize Finalist 8: Georgia Walsh (U. Otago) <i>The implication of fibrosis in sex-based differences in diabetic cardiomyopathy</i>		
4.40pm - 4.45pm	Mini-Oral Prize Finalist 9: Selina Williams (U. Otago) <i>Understanding the genetic mechanisms underpinning polycystic ovary syndrome</i>	4.42pm - 4.54pm	Free communication 3B4: Ameya Mahale (AUT) <i>A multi-modal sensing approach to monitoring heart arrhythmias for assessing heart failure risk</i>
4.45pm - 4.50pm	Mini-Oral Prize Finalist 10: Mia Wong (U. Auckland) <i>Beyond Cooling: Vasculature as a Novel Target for Add-on Treatments in Perinatal Hypoxic-Ischemic Brain Injury</i>		
4.50pm - 4.55pm	MiniOral Prize Finalist 11: Haitong Luan (Monash U.) <i>Enhancing the expression and activity of the novel hepatokine, activin C</i>	4.54pm - 5.06pm	Free communication 3B5: Tanvi Chandel (AUT) <i>Impact of Device-Related Inaccuracies in Blood Pressure Measurement on Cardiovascular Disease Risk Classification: A Study from New Zealand</i>
4.55pm - 5.00pm	Mini-Oral Prize Finalist 12: Felix Lim (U. Otago) <i>Impact of corticosteroids on arousal and anxiety behaviour in larval zebrafish</i>		
5.00pm - 5.05pm	Mini-Oral Prize Finalist 13: Daniel Lyth (U. Otago) <i>Circular RNA as Markers of Pancreatic β-Cell Mass</i>		
5.05pm - 5.10pm	Mini-Oral Prize Finalist 14: Esau Mhandu (U. Auckland) <i>An innovative system for dynamically loading isolated heart</i>		
5.10pm - 5.15pm	Mini-Oral Prize Finalist 15: Henry Collecutt (U. Auckland) <i>Electrophysiological characterization of TRPV4 S319L, a Māori and Pacific genetic variant</i>		
5:15pm-6.30pm	MedSci AGM		
7.00pm - late	MedSci & QMB Joint Dinner + Prize-giving <i>Sponsored by Thermo Fisher Scientific & Maurice Wilkins Centre</i> Waitaki room, Te Pae Ticket only		

Friday, 5th September 2025

9.00am-10.00am	MedSci Plenary Lecture 2: Prof Yong Xu - University of South Florida, USA Conway C5 - live feed to C4 Chair: Karl Iremonger		
10.00am - 10.30am	Morning Tea Exhibition Hall E1+E2		
10.30am - 12.00pm	Symposium 4A: Sweet Pressure: Co-existing high blood pressure and high blood sugar Room: Conway C5 Chairs: Andrew Lowe (AUT) & Fiona McBryde (U. Auckland) <i>Pūtahi Manawa Healthy Hearts for Aotearoa New Zealand CoRE</i>	10.30am - 12.00pm	Session 4B: Free Communications Room: Conway C4 Chairs: Julia Musgrave & Toan Pham (U. Auckland)
10.30am - 10.50am	Holly Thorpe (U. Waikato) <i>"A healthy heart is a happy heart": Voices from Patients of an Iwi-Health Provider</i>	10.30am - 10.45am	Free communication 4B1: Kate Thomas (U. Otago) <i>Hypoxia enhances exercise induced brain derived neurotrophic factor liberation across the human brain: the role of platelets</i>
10.50am - 11.10am	Jingyuan Liang (U. Auckland) <i>Sweet Pressure epidemiology in Aotearoa</i>	10.45am - 11.00am	Free communication 4B2: Carol Bussey (U. Auckland) <i>P2X3 receptor activation in cardiac-projecting sympathetic neurons associated with cardiac arrhythmias</i>
		11.00am - 11.12am	Free communication 4B4: Milan Hildreth (U. Canterbury) <i>Preliminary Validation of a Breast Impact Measurement System for Female Athletes</i>
11.10am - 11.30am	Daryl Schwenke (U. Otago) <i>Sympathetic control of the heart in obesity - challenges in treatment efficacy</i>	11.12am - 11.24am	Free communication 4B5: Shashika Munasingha (U. Auckland) <i>Inorganic Phosphate Regulation of Mitochondrial Respiration is Impaired in Diabetic Human Myocardium</i>
11.30am - 11.50am	Amanaki STEM Academy Students with Andrew Lowry <i>Codesign For Heart Health Through An Integrated Health And Educational Initiative</i>	11.24am - 11.36am	Free communication 4B6: Arunima Ballav (AUT) <i>An integrated sensor platform for multi-modal chronic wound monitoring</i>

12.00pm - 1.00pm	Lunch and Sponsor Demos Exhibition Hall E1+E2 PSNZ AGM Conway C5		
1.00pm - 3.00pm	Symposium 5A: New ideas and approaches to investigating cardiac pathophysiology Room: Conway C5 Chairs: Kim Mellor (U. Auckland) & Joan Chan (U. Otago)	1.00pm - 3.00pm	Symposium 5B: Regulation and actions of pituitary gonadotrophins Room: Conway C4 Chairs: Greg Anderson (U. Otago) & Zaramasina Clark (Victoria U. Wellington) New Zealand Society of Endocrinology
1.00pm - 1.30pm	James McNamara (Murdoch Children's Research Institute, Melbourne) <i>Defining the molecular basis of cardiomyopathy for precision therapies</i>	1.00pm - 1.30pm	Michael Pankhurst (U. Otago) <i>Gonadotropin hormone stimulation impairs mRNA storage in the final stages of oocyte maturation</i>
1.30pm - 2.00pm	Kim Mellor (U. Auckland) <i>Novel approaches to assessing diastolic dysfunction in rodents</i>	1.30pm - 2.00pm	Zaramasina Clark (Victoria, U. Wellington) <i>Effects of ovarian stimulation with excessive FSH on follicle structure and oocyte function</i>
2.00pm - 2.30pm	Andrew Taberner (U. Auckland) <i>Heart tissues in hydrogels, and the help of a Haligonian</i>	2.00pm - 2.30pm	Daniel Bernard (McGill University, Canada) <i>Novel insights into GnRH signalling in gonadotroph cells</i>
2.30pm - 3.00pm	Johanna Montgomery (U. Auckland) <i>Clinical epicardial fat biopsies for cardiac autonomic investigations</i>	2.30pm - 3.00pm	Kelly Walton (U. Queensland) <i>Ovarian inhibins: Gatekeepers of reproductive and metabolic health in females</i>
3.00pm - 3.30pm	Afternoon Tea and Coffee Break Atrium TBC		

3.30pm - 5:30pm	Session 6A: Free Communications Room: Conway C5 Chairs: Emmet Power (U.Otago) & Mridula Pachen (U. Auckland)	3.30pm - 5:30pm	Symposium 6B: Medical Science and Medical Technologies Room: Conway C4 Chairs: Tet Chuan Lee (AUT) & Kenneth Tran (U. Auckland)
3.30pm - 3.45pm	Free communication 6A1: Rebecca Lord (U. Otago) <i>Is Puberty Timing a Driver of Reproductive Aging? Insights from the GnRH Antagonist Degarelix</i>	3.30pm - 4.00pm	James Sharman (U. Tasmania) <i>After more than 120 years, how do we achieve blood pressure measurement accuracy?</i>
3.45pm - 3.57pm	Free communication 6A2: Sana Atithi (U. Otago) <i>Hunger Says "Walk the Plank": AgRP Neurons in the Regulation of RiskBased Foraging Decisions</i>		
3.57pm - 4.09pm	Free communication 6A3: Oliver Beresford (U. Otago) <i>The Impact of NOX4 Inhibition on ROS and Ca²⁺ Handling in Dystrophic Skeletal Muscle</i>	4.00pm - 4.30pm	Andrew Lowe (AUT) <i>Measuring biopotentials: what we learned from MBIE Research Programme EXGware</i>
4.09pm - 4.21pm	Free communication 6A4: Matin Khalili (AUT) <i>Improved Wearable ECG Measurement During Movement for Ambulatory Applications</i>		
4.21pm - 4.33pm	Free communication 6A5: Connor Papple (U. Canterbury) <i>Phenotypic Symptom Feature Profiles in Polycystic Ovary Syndrome (PCOS) Using Self-Reported Information on r/PCOS</i>	4.30pm - 5.00pm	James McKeage (U. Auckland) <i>Jet injection - facilitating at-home delivery of viscous drugs</i>
		5.00pm - 5.15pm	Diana Siew (Medtech-iQ Aotearoa)