

AI Meeting Programme

Tuesday 2 September – Wednesday 3 September, 2025
Te Pae, Christchurch, New Zealand

Tuesday 2 September

Time	Details	Location
7.30am-8.00am	Mihi Whakatau <i>Registration required</i> <i>Please wait outside the room until you are invited in</i>	Conway C5
8.00am-8.15am	Comfort break	
<u>Introductory remarks</u>		
8.15am-8.30am	Convenors	Conway C2
<u>Data sovereignty</u>		
8.30am-9.00am	Dr. Karaitiana Taiuru (AI01) Taiuru & Associates <i>Māori AI & Data Sovereignty: Embedding Values.</i>	Conway C2
<u>AI in Health session I</u> Chaired by Craig Herbold (UC)		
9.00am-9.30am	Ms. Lisa Wong & Mr. Nathan Baker (AI02) University of Auckland <i>The AI in Health Research Network</i>	Conway C2
9.30am-10.00am	Dr. Sandra Hanchard (AI03) University of Auckland <i>Exploring AI-mediated patient and provider relationships: a study protocol for codesign with Pacific heart failure patients</i>	Conway C2
10.00am-10.30am	Morning Tea	Exhibition Hall E1+E2
<u>AI Infrastructure for Research</u> Chaired by Jack Flanagan (University of Auckland)		
10.30am-11.00am	Prof. Mengjie Zhang (AI04) Victoria University <i>Artificial Intelligence Research, Key Applications, and Infrastructures at VUW</i>	Conway C2
11.00am-11.30am	Nick Jones (AI05) University of Auckland <i>AI Infrastructure for science: for one, for all</i>	Conway C2
11.30am-12.00pm	Sir Peter Gluckman ONZ KNZM FRS (AI06) Koi Tū: Centre for Informed Futures <i>Whither artificial intelligence: implications for science</i>	Conway C2
12.00pm-1.30pm	Lunch	Exhibition Hall E1+E2
<u>AI and Molecule Discovery</u> Chaired by Jack Flanagan		
1.30pm-2.00pm	Dr. Lauren May (AI07) Monash University <i>Computational Approaches for Small Molecule Drug Discovery</i>	Conway C2

2.00pm-2.30pm	Prof. Natarajan Kannan (AI08) University of Georgia <i>Protein function prediction and classification using language models</i>	Conway C2
2.30pm-3.00pm	Dr. Binh Nguyen (AI09) Victoria University <i>Beyond SMILES: A Multimodal Approach for Enhanced Molecular Property Prediction</i>	Conway C2
3.00pm-3.30pm	Assoc. Prof. Jack Flanagan (AI10) University of Auckland <i>Chemical space travel connects patients to early stage drug discovery science.</i>	Conway C2
3.30pm-4.00pm	Afternoon Break	Exhibition Hall E1+E2
AI and the environment Chaired by Craig Herbold (University of Canterbury)		
4.00pm-4.30pm	Dr. Brent Martin (AI11) Bioeconomy Science Institute <i>From wetlands to wildings: the use of deep learning softmax probabilities for environmental monitoring.</i>	Conway C2
4.30pm-5.00pm	Dr. Andrew Lensen (AI12) Victoria University <i>Recognising Taonga with AI: Facial Recognition for Kākā Conservation Management</i>	Conway C2
5.00pm-5.30pm	A/Prof. Marwan Katurji (AI13) University of Canterbury <i>The role of artificial intelligence in weather system and microclimate research in Antarctica</i>	Conway C2
6.00pm-8.30pm	Poster Session	Exhibition Hall E1+E2
6.00pm-8.00pm	Evening Social Function <i>Sponsored by Decode Science</i>	Exhibition Hall E1+E2

Wednesday 3 September		
Time	Details	Location
AI and Applied Biology Chaired by Bjorn Oback (New Zealand Institute for Bioeconomy Science)		
8.00am-8.30am	Prof. Bing Xue (AI14) Victoria University <i>Artificial Intelligence for Aquaculture</i>	Conway C2
8.30am-9.00am	Dr. Julie Blommaert (AI15) New Zealand Institute for Bioeconomy Science <i>Machine learning to identify genetic growth variants in snapper</i>	Conway C2
9.00am-9.30am	Prof. Allen Rodrigo (AI16) University of Auckland <i>TaxonGPT: Taxonomic Classification Using Generative Artificial Intelligence</i>	Conway C2

9.30am-10.00am	Dr. Marlon Reis (AI17) AgResearch <i>When AI meets two outlaws: Exploring interactions in biological systems, non-invasively.</i>	Conway C2
10.00am-10.30am	Morning Tea	Exhibition Hall E1+E2
<u>Health Data and Ethics</u> Chaired by Arthur Morley-Bunker (University of Otago)		
10.30am-11.00am	Prof. Gillian Dobbie (AI18) University of Auckland <i>Designing for Dependability: Embedding Reliability and Robustness in AI Systems</i>	Conway C2
11.00am-11.30am	Prof. Robyn Whittaker (AI19) University of Auckland <i>AI Research in Health NZ Te Whatu Ora</i>	Conway C2
11.30am-12.00pm	Dr. Fiona Callaghan (AI20) Public Health Agency <i>Artificial Intelligence and public health policy: a measles modelling case study</i>	Conway C2
12.00pm-1.00pm	Lunch	Exhibition Hall E1+E2
<u>AI in Health session II</u> Chaired by Craig Herbold (UC)		
1.00pm-1.30pm	Dr. Wenting Liu (AI21) University of Canterbury <i>Machine Learning Unravel Gene Signatures of Coronary Artery Disease Comorbidity with Periodontitis</i>	Conway C2
1.30pm-2.00pm	Mr. Desalegn Yibeltal Reta (AI22) University of Auckland <i>AI-Based Drug-Drug Interaction Prediction: A Scoping Review of Model Robustness, Clinical Relevance, and Implementation Challenges</i>	Conway C2
2.00pm-2.30pm	Dr. Theo Portlock (AI23) Auckland University <i>Rethinking refeeding: Can the neurocognitive developmental delays associated with childhood undernutrition be reversed?</i>	Conway C2
2.30pm-3.00pm	A/Prof. Sarah Cullum and Prof. Gillian Dobbie (AI24) University of Auckland <i>Using machine learning with routinely collected health data for identification of dementia risk in Aotearoa New Zealand</i>	Conway C2
3.00pm-3.30pm	Afternoon Break	Exhibition Hall E1+E2
<u>AI and Biology/Imaging</u> Chaired by Arthur Morley-Bunker (University of Otago)		
3.30pm-4.00pm	Dr. Davide Mercadante (AI25) The University Of Auckland <i>AI-based implementation of NMR-guided potentials for dramatically coarse-grained protein simulations.</i>	Conway C2
4.00pm-4.30pm	Mr. Lachlan Barnes (AI26) University of Auckland	Conway C2

	<i>Bridging Clinical and Consumer Electroencephalography: A Transfer Learning Approach for Artifact Detection</i>	
4.30pm-5.00pm	Stuart Chambers (AI27) University of Otago, Christchurch <i>Real-Time, Label-Free Assessment of hPSC Quality Using AI-Powered Cell Counting and Colony Morphology Analysis</i>	Conway C2
	QRW Panel Discussion & 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 Institute Professor David R. Grattan FRSNZ, University of Otago	Auditorium A3+A4
6.30pm-7.40pm	QRW 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 A3+A4
7.45pm-9.30pm	Evening Social Function <i>Sponsored by Thermo Fisher Scientific</i> Drinks and nibbles The Great QMB Trivia Night with Pierre de Cordovez	Exhibition Hall