

## 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	<b>Mihi Whakatau</b> <i>Registration required</i> <i>Please wait outside the room until you are invited in</i>	Conway C5
8.00am-8.15am	<b>Comfort break</b>	
<b><u>Introductory remarks</u></b>		
8.15am-8.30am	<b>Convenors</b>	Conway C2
<b><u>Data sovereignty</u></b>		
8.30am-9.00am	<b>Dr. Karaitiana Taiuru (AI01)</b> Taiuru & Associates <i>Māori AI &amp; Data Sovereignty: Embedding Values.</i>	Conway C2
<b><u>AI in Health session I</u></b> <b>Chaired by Craig Herbold (UC)</b>		
9.00am-9.30am	<b>Ms. Lisa Wong &amp; Mr. Nathan Baker (AI02)</b> University of Auckland <i>The AI in Health Research Network</i>	Conway C2
9.30am-10.00am	<b>Dr. Sandra Hanchard (AI03)</b> 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	<b>Morning Tea</b>	Exhibition Hall E1+E2
<b><u>AI Infrastructure for Research</u></b> <b>Chaired by Jack Flanagan (University of Auckland)</b>		
10.30am-11.00am	<b>Prof. Mengjie Zhang (AI04)</b> Victoria University <i>Artificial Intelligence Research, Key Applications, and Infrastructures at VUW</i>	Conway C2
11.00am-11.30am	<b>Nick Jones ()</b> NeSI <i>Title</i>	Conway C2
11.30am-12.00pm	<b>Sir Peter Gluckman ONZ KNZM FRS (AI05)</b> Koi Tū: Centre for Informed Futures <i>Whither artificial intelligence: implications for science</i>	Conway C2
12.00pm-1.30pm	<b>Lunch</b>	Exhibition Hall E1+E2
<b><u>AI and Molecule Discovery</u></b> <b>Chaired by Jack Flanagan</b>		
1.30pm-2.00pm	<b>Assoc. Prof. Jack Flanagan (AI06)</b> University of Auckland <i>Chemical space travel connects patients to early stage drug discovery science.</i>	Conway C2

2.00pm-2.30pm	<b>Dr. Lauren May (AI07)</b> Monash University <i>Computational Approaches for Small Molecule Drug Discovery</i>	Conway C2
2.30pm-3.00pm	<b>Prof. Natarajan Kannan (AI08)</b> University of Georgia <i>Protein function prediction and classification using language models</i>	Conway C2
3.00pm-3.30pm	<b>Dr. Binh Nguyen (AI09)</b> Victoria University <i>Beyond SMILES: A Multimodal Approach for Enhanced Molecular Property Prediction</i>	Conway C2
3.30pm-4.00pm	<b>Afternoon Break</b>	Exhibition Hall E1+E2
<b>AI and the environment</b> <b>Chaired by Craig Herbold (University of Canterbury)</b>		
4.00pm-4.30pm	<b>Dr. Brent Martin (AI10)</b> 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	<b>Dr. Andrew Lensen (AI11)</b> Victoria University <i>Recognising Taonga with AI: Facial Recognition for Kā kā Conservation Management</i>	Conway C2
5.00pm-5.30pm	<b>A/Prof. Marwan Katurji (AI12)</b> University of Canterbury <i>The role of artificial intelligence in weather system and microclimate research in Antarctica</i>	Conway C2
6.00pm-8.30pm	<b>Poster Session</b>	Exhibition Hall E1+E2
6.00pm-8.00pm	<b>Evening Social Function</b> <i>Sponsored by Decode Science</i>	Exhibition Hall E1+E2

<b>Wednesday 3 September</b>		
<b>Time</b>	<b>Details</b>	<b>Location</b>
<b>AI and Applied Biology</b> <b>Chaired by Bjorn Oback (New Zealand Institute for Bioeconomy Science)</b>		
8.00am-8.30am	<b>Prof. Bing Xue (AI13)</b> Victoria University <i>Artificial Intelligence for Aquaculture</i>	Conway C2
8.30am-9.00am	<b>Dr. Julie Blommaert (AI14)</b> New Zealand Institute for Bioeconomy Science <i>Machine learning to identify genetic growth variants in snapper</i>	Conway C2
9.00am-9.30am	<b>Prof. Allen Rodrigo (AI15)</b> University of Auckland <i>TaxonGPT: Taxonomic Classification Using Generative Artificial Intelligence</i>	Conway C2

9.30am-10.00am	<b>Dr. Marlon Reis (AI16)</b> AgResearch <i>When AI meets two outlaws: Exploring interactions in biological systems, non-invasively.</i>	Conway C2
10.00am-10.30am	<b>Morning Tea</b>	Exhibition Hall E1+E2
<b><u>Health Data and Ethics</u></b> <b>Chaired by Arthur Morley-Bunker (University of Otago)</b>		
10.30am-11.00am	<b>Prof. Gillian Dobbie (AI17)</b> University of Auckland <i>Designing for Dependability: Embedding Reliability and Robustness in AI Systems</i>	Conway C2
11.00am-11.30am	<b>Prof. Robyn Whittaker (AI18)</b> University of Auckland <i>AI Research in Health NZ   Te Whatu Ora</i>	Conway C2
11.30am-12.00pm	<b>Dr. Fiona Callaghan (AI19)</b> Public Health Agency <i>Artificial Intelligence and public health policy: a measles modelling case study</i>	Conway C2
12.00pm-1.00pm	<b>Lunch</b>	Exhibition Hall E1+E2
<b><u>AI in Health session II</u></b> <b>Chaired by Craig Herbold (UC)</b>		
1.00pm-1.30pm	<b>Dr. Wenting Liu (AI20)</b> University of Canterbury <i>Machine Learning Unravel Gene Signatures of Coronary Artery Disease Comorbidity with Periodontitis</i>	Conway C2
1.30pm-2.00pm	<b>Mr. Desalegn Yibeltal Reta (AI21)</b> 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	<b>Dr. Theo Portlock (AI22)</b> Auckland University <i>Rethinking refeeding: Can the neurocognitive developmental delays associated with childhood undernutrition be reversed?</i>	Conway C2
2.30pm-3.00pm	<b>A/Prof. Sarah Cullum and Prof. Gillian Dobbie (AI23)</b> 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	<b>Afternoon Break</b>	Exhibition Hall E1+E2
<b><u>AI and Biology/Imaging</u></b> <b>Chaired by Arthur Morley-Bunker (University of Otago)</b>		
3.30pm-4.00pm	<b>Dr. Davide Mercadante (AI24)</b> 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	<b>Mr. Lachlan Barnes (AI25)</b> University of Auckland	Conway C2

	<i>Bridging Clinical and Consumer Electroencephalography: A Transfer Learning Approach for Artifact Detection</i>	
4.30pm-5.00pm	<b>Stuart Chambers (AI26)</b> 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
	<b>QRW Panel Discussion &amp; Plenary Lecture</b>	
5.30pm-5.40pm	<b>Introduction</b>	Auditorium A3+A4
5.40pm-6.25pm	<b>Panel Discussion on Aotearoa New Zealand's future research, science &amp; innovation sector</b> (moderated by Dr Marie Bradley) <b>Sir Peter Gluckman</b> ONZ KNZM FRSNZ, University of Auckland <b>Professor Emily Parker</b> FRSNZ, Victoria University of Wellington <b>Mark Piper</b> CEO, Plant & Food Research <b>Professor David R. Grattan</b> FRSNZ, University of Otago	Auditorium A3+A4
6.30pm-7.40pm	<b>QRW Plenary Lecture</b> <i>Sponsored by Mediscope International Limited</i> <b>Prof. Tak Mak</b> 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	<b>Evening Social Function</b> <i>Sponsored by Thermo Fisher Scientific</i> Drinks and nibbles The Great QMB Trivia Night with Pierre de Cordovez	Exhibition Hall