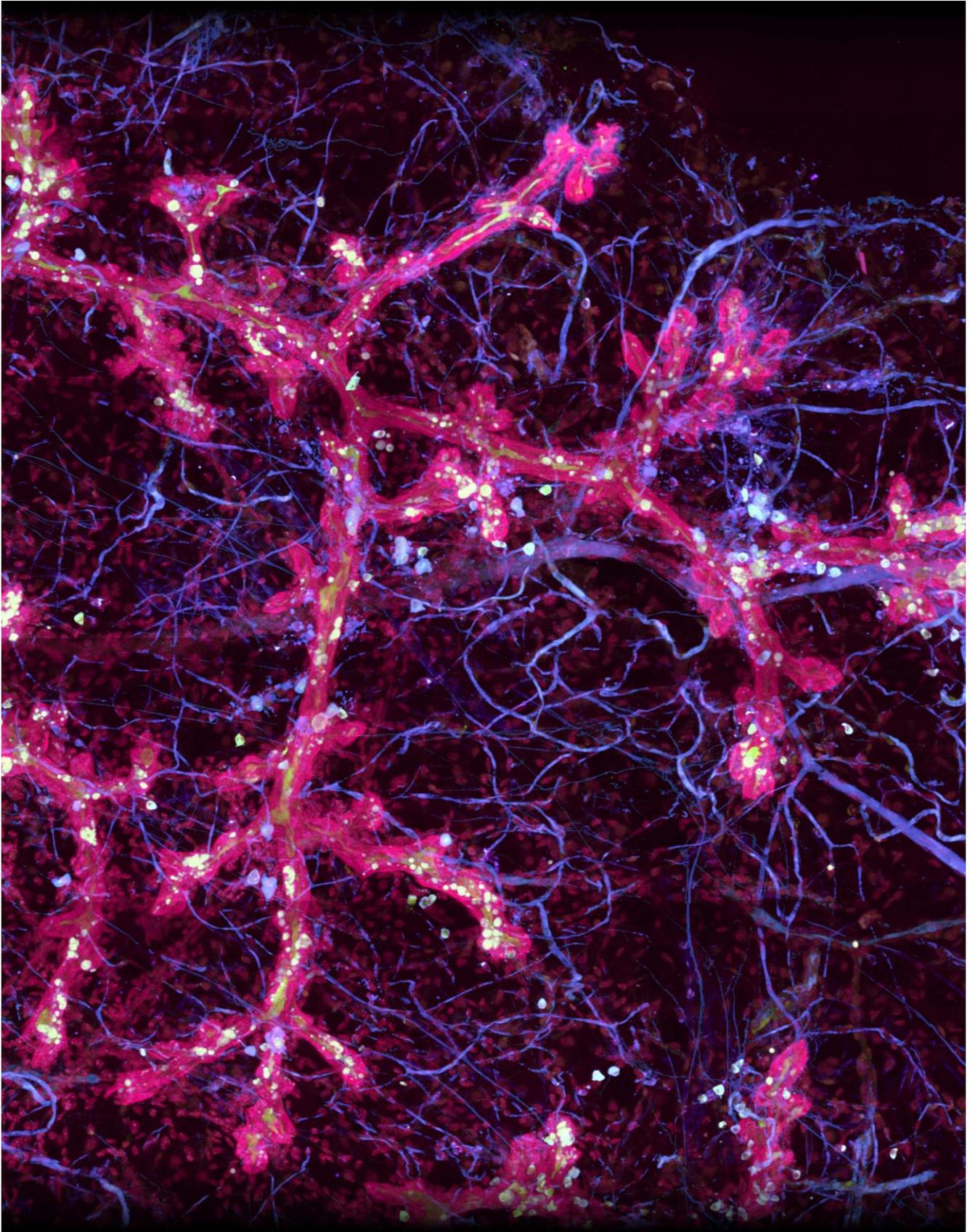


# Annual Symposium Program

3 to 4 March 2026

Melbourne Connect, The Forum  
700 Swanston Street, Carlton

SNOW CENTRE  
FOR IMMUNE HEALTH



# Day One - Tuesday 3 March 2026

TIME	TITLE AND SPEAKERS
9.00am to 9.30am	ARRIVAL AND REGISTRATION
<b>9.30am to 10.25am</b>	<b>SESSION 1 - Chaired by Sir John Savill</b>
9:30am to 9.35am	<b>Welcome and Acknowledgment of Country</b> <i>Sir John Savill and Tom Snow</i>
9.35am to 9.40am	<b>Welcome</b> <i>Ken Smith and Shelley Dolan</i>
9.40am to 10.25am	<b>Predictive Immunology: From Models to Medicine</b> <i>Jason Tye-Din</i>
<b>10.25am to 10.45am</b>	<b>MORNING TEA BREAK</b>
<b>10.45am to 12.15pm</b>	<b>SESSION 2 - Chaired by David Tarlinton</b>
10.45am to 11.45am	<b>Immune Sensing Timers: Decoding Cell Fate (Program 1)</b> <i>Phil Hodgkin, Vanessa Bryant, Susanne Heinzl, Jasmine Yang and Ken Duffy</i>
11.45am to 12.15pm	Discussion
<b>12:15pm to 1.15pm</b>	<b>LUNCH BREAK</b>
<b>1:15pm to 2.45pm</b>	<b>SESSION 3 - Chaired by Clara Gaff</b>
1:15pm to 2:00pm	<b>Keynote: Translational Research in Immunology – From Treatment to Prevention</b> <i>Francisco Leon</i>
2.00pm to 2.10pm	<b>Partnering for Better Science: Inside WEHI's Consumer Program</b> <i>John Hamill</i>
2.10pm to 2.45pm	<b>Panel Discussion: Leveraging patient lived experience to shape the research agenda</b> <i>Samantha Chan, Matthew Rozek, Stephanie Kuo, Sarkes Haweil, Jayne Moxey and Elizabeth Rowe</i>
<b>2.45pm to 3.15pm</b>	<b>GROUP PHOTO and AFTERNOON TEA BREAK</b>
<b>3:15pm to 5:15pm</b>	<b>SESSION 4 - Chaired by Anne Kelso</b>
3.15pm to 4.15pm	<b>Molecular Networks: Understanding Key Immune Signals (Program 2)</b> <i>Daniel Gray, Mengxiao Luo, Stephen Nutt and Julie Tellier</i>
4.15pm to 4.30pm	Discussion
4.30pm to 5.00pm	<b>Immune Profiling: From Cells to DNA (Program 3)</b> <i>Vanessa Bryant and Yaoyuan Zhang</i>
5:00pm to 5:15pm	Discussion
<b>5:15pm to 6.30pm</b>	<b>NETWORKING DRINKS</b>
<b>6.30pm</b>	<b>End of Day One</b>

# Day Two - Wednesday 4 March 2026

TIME	TITLE AND SPEAKERS
8:30am to 9:00am	ARRIVAL – DAY 2
9:00am to 10:30am	<b>SESSION 5 - Chaired by Dianne Campbell</b>
9.00am to 9.20am	<b>Digital Hub: Linking Patient Data to Discovery</b> <i>Ashley Ng</i>
9.20am to 10:15am	<b>Digital Hub: Data Strategy and Alignment to Clinical Cohorts</b> <i>Tony Papenfuss, Tim Spelman and Mark Dowling</i>
10:15am to 10:30am	Discussion
10:30am to 10:45am	<b>MORNING TEA BREAK</b>
10:45am to 1.00pm	<b>SESSION 6 - Chaired by Sir John Savill</b>
10:45am to 11:00am	<b>Project Management: How it supports Snow Centre outcomes</b> <i>Sharon Trevor and Amy Russell</i>
11:00am to 11.25am	<b>Assay Hub: The engine room for standardised data generation</b> <i>Paul Lyons</i>
11:25am to 11:40am	<b>Outcome of internal call out for projects</b>
11.40am to 12:25pm	<b>Collaborations: ENDIA, Twins Research Australia, Fiona Wood Foundation</b> <i>Jennifer Couper, Lucas Calais-Ferreira, and Lucy Barrett</i>
12:25pm to 12:55pm	<b>Panel Discussion: Building impactful collaborations for the Snow Centre</b> <i>Jennifer Couper, Lucas Calais-Ferreira, Lucy Barrett, Ken Duffy, Jason Tye-Din, Paul Lyons, and Vanessa Bryant</i>
12:55pm to 1:00pm	<b>Closing remarks</b> <i>Derek Van Dyk</i>
1:00pm to 2:00pm	<b>LUNCH and End of Symposium</b>
2:00pm to 4:00pm	<b>PSTAC Private Session</b>

# Speakers and Biographies

Speakers and Chairs are listed in order of their appearance in the program.

## Day One

### **Professor Sir John Savill**

**Chair of the Provisional Science and Technical Advisory Committee (PSTAC), Snow Centre for Immune Health**



Professor Sir John Savill graduated in Physiological Sciences from Oxford in 1978 and in Medicine from Sheffield in 1981, receiving a PhD (London) in 1989 after a MRC Clinical Training Fellowship at the Royal Postgraduate Medical School.

Following a spell as a Wellcome Senior Clinical Research Fellow at RPMS, in 1993 he moved to the Chair in Medicine at Nottingham; subsequently relocating in 1998 to the University of Edinburgh as Professor of Medicine, where he set up and became the first Director of the University of Edinburgh/Medical Research Council Centre for Inflammation Research.

Between 2002 and 2017 John served as the University's first Vice-Principal and Head of the College of Medicine and Veterinary Medicine, being knighted in the 2008 New Year's Honours List for services to clinical science. From June 2008 to September 2010, John was Chief Scientist for the Scottish Government Health Directorates (part-time).

In October 2010 he was appointed as Chief Executive of the Medical Research Council, demitting in March 2018. In June 2017 John was appointed to Edinburgh's Regius Chair of Medical Science by HM The Queen, retiring from that post in 2023.

He has been Executive Director of the Melbourne Academic Centre for Health (MACH) since July 2019.

### **Tom Snow**

**Chair of Snow Medical Research Foundation**



Tom Snow is Chair of Snow Medical Research Foundation, which has invested over \$260 million into the Australian medical research sector. Tom Snow is also Chairman of Canberra Airport and was a founder and Co-Chair and of the Equality Campaign, which led and won the successful YES postal plebiscite.

He is a founder of Whitehelm Capital, one of the world's largest independent infrastructure managers. As a Fellow of the Australian Institute of Company Directors, he has had roles including director of Perth Airport, Canberra Airport, Bankstown Airport, Port of Adelaide / Flinders Ports, Etihad Stadium, Peninsula Link, International Parking Group and Whitehelm Capital.

Tom Snow was born and raised in Canberra and has served as Chair of the Canberra Convention Bureau and director of the Australian Science Festival. He is a Rhodes Scholar and is a proud father of three kids.

**Professor Ken Smith**  
**Director, WEHI**



Professor Ken Smith is WEHI's seventh director. He commenced in April 2024 after returning to Australia from the UK, where he had been Head of the Department of Medicine at Cambridge University since 2010.

Throughout his 30-year career, as both a researcher and clinician, Ken has been renowned for his high-quality, innovative research and its impact on patient outcomes. Ken has strong international scientific research links and networks and brings a global outlook to take WEHI into a new era.

He has been instrumental in forming alliances between industry and academia and has first-hand experience in founding start-up companies and commercial experience with the pharmaceutical industry in the UK, US and Europe.

He completed his Doctor of Philosophy at WEHI through the University of Melbourne, supervised by former WEHI director, Sir Gustav Nossal AC, and Professor David Tarlinton. His Bachelor of Medicine and Surgery is from the University of Melbourne.

Ken is a qualified consultant physician (nephrology and general internal medicine) and pathologist (clinical immunology).

**Professor Shelley Dolan**  
**CEO, the Royal Melbourne Hospital**



Professor Shelley Dolan joined the RMH in August 2023 as Chief Executive, having previously served as the Chief Executive of the Peter MacCallum Cancer Centre. Shelley has successfully led large specialist tertiary hospitals in the UK, including as Chief Executive of Kings College Hospital NHS Foundation Trust and Deputy Chief Executive of the Royal Marsden Hospital.

Shelley is a highly respected clinical and research leader with an impressive track record in health care, having successfully led major organisational and cultural change in Victoria and the United Kingdom (UK).

Shelley has a PhD in the early diagnosis of sepsis in cancer patients and a master's degree in advanced practice nursing. She is a Professor (Enterprise) of the Melbourne School of Health Science at the University of Melbourne and is Chair of the Western & Central Melbourne Integrated Cancer Service, a Board member of the Victorian Comprehensive Cancer Centre Alliance, the Melbourne Academic Centre for Health, Melbourne Genomics and CRC Participant Director on the Board of Oncology One. In November 2022, the Minister for Health and Aged Care appointed Shelley as a Member of the Cancer Australia Advisory Council.

**Professor Jason Tye-Din**  
**Director, Snow Centre for Immune Health**



Professor Jason Tye-Din is head of the Coeliac Research Laboratory at WEHI and a gastroenterologist at the Royal Melbourne Hospital. His expertise spans the immune mechanisms of coeliac disease, clinical care of gluten-related disorders, diagnostic discovery and pre-clinical and clinical drug development.

His work aims to improve the health and quality of life of people suffering gastrointestinal immune diseases, particularly those caused by gluten and other foods. He is a Principal Research Fellow at the University of Melbourne, Honorary Research Fellow at the Murdoch Children's Research Institute and is involved in multiple leadership and advisory roles, including to the World Health Organisation and industry.

As a recognised leader in immunology and translational science, Jason's research has been widely published. Most recently, he led the development of a groundbreaking blood test that has the potential to transform the way coeliac disease is diagnosed.

**Professor David Tarlinton**  
**Provisional Science and Technical Advisory Committee (PSTAC), Snow Centre for Immune Health**



Professor David Tarlinton has a BSc from the University of Sydney and PhD from Stanford University, supervised by Len and Lee Herzenberg. He was a post-doctoral fellow with Professor Klaus Rajewsky in Cologne and Sir Gus Nossal AC at WEHI. David was appointed Laboratory Head at WEHI in 1997, a position he held till 2016 when he was appointed Professor and Head of Department of Immunology at Monash University, located at the Alfred Hospital, a position he continues to hold.

David has been President (2011-2012) of the Australian and New Zealand Society for Immunology (ASI), recipient of the Lupus Research Institute (USA) Distinguished Innovator Award (2013), of the Australian Museum Eureka Prize for Scientific Research (2014), the ASI Jacques Miller Senior Travel Award (2014) and is a Life Member of Clare Hall, University of Cambridge (2015). He has published over 190 research papers.

David's research work throughout his career has focused on the development and differentiation of lymphocytes, particularly B cells, during immune responses and autoimmune diseases. He has focused recently on the formation and persistence of immune memory and on the mechanisms of cell differentiation and survival during and after immune challenges, results that have implications for vaccination, autoimmune diseases and cancer of immune cells.

**Professor Phil Hodgkin**  
**Scientific Program Lead, Snow Centre for Immune Health**



Professor Phil Hodgkin has helped transform the understanding of immune regulation with innovative theories and novel experimental approaches. His mathematical models of immune responses are foundational for the SCIH.

Phil's research is focused on the problem of how immune cells process information and regulate outcomes. This has required inventing methods for integrating molecular and cellular dynamics to make predictions of immune function at multiple scales.

Phil is the former President of the Australian and New Zealand Society for Immunology. He is recognised as one of the pioneers of systems immunology.

**Dr Vanessa Bryant**  
**Program 3 Lead, Snow Centre for Immune Health**



Dr Vanessa Bryant's team most recently discovered novel causes of rare antibody deficiencies that have directly led to therapeutic intervention and personalised care for children and adults with immunodeficiency.

Vanessa leads the Victorian Node of the recently established MRFF-funded Australian Alliance for Indigenous Genomics (ALIGN) and co-leads the MRFF-funded Australian ImmunoGenomics Network with Stuart Tangye (Garvan). She previously co-led the successful Melbourne Genomics Immunology Flagship Program and Antibody Deficiency Program of Australian Genomics Genetic Immunology.

Vanessa's skills provide a fundamental molecular and cellular foundation that synergises with clinical pathways of diagnosis and care.

**Dr Susanne Heinzl**  
**Scientific Program Lead, Snow Centre for Immune Health**



Dr Susanne Heinzl is a cellular immunologist whose work has focussed on understanding the rules that govern the activation, survival and differentiation of T and B lymphocytes in health and disease. Her research has provided a critical bridge between identifying molecular controls for cell responses and the use of mathematical models for exploring the impact of genetic mutations and inhibitory drugs on T and B cell responses.

Su led the development of the core assay hub at the SCIH in 2025. She is now co-lead of Program 1 developing quantitative T and B cell assays to measure immune cell differences across individuals and patient cohorts.

Su has worked previously as Senior Research Scientist and Clinical Trial Research Coordinator for Vaxine, where she led the laboratory aspects of clinical trials, including selection, development and documentation of assays for the read out of immune response to immunisations.

She is a former President of the Australian and New Zealand Society for Immunology.

**Jasmine Yang**  
**Program 1 PhD Student, Snow Centre for Immune Health**



Jasmine Yang is the Program 1 PhD student with the Snow Centre for Immune Health. She sits in the Hodgkin lab, Immunology Division, at WEHI.

Her current PhD research focuses on understanding the mechanisms of cell death in T cells - critical players in the immune system. The team are investigating how T cells transition from a resting to an activated state. They hope their research may eventually lead to the development of new treatments for patients with immune deficiencies.

**Professor Ken Duffy**  
**Northeastern University Department of Mathematics and the Department of Electrical and Computer**



Professor Ken Duffy joined Northeastern in 2023 with a joint appointment in the Department of Mathematics and the Department of Electrical & Computer Engineering.

Ken holds a PhD in Mathematics from Trinity College Dublin. He was previously a professor at the National University of Ireland, Maynooth, where he was the Director of the Hamilton Institute, an applied mathematics research centre, from 2016 to 2022.

He was one of three co-Directors of the Science Foundation Ireland Centre for Research Training in Foundations of Data Science, which has funded more than 120 PhD students. He has previously served as interim chair of the Department of Electrical & Computer Engineering at Northeastern University and is currently the chair of the Department of Mathematics.

Ken works in collaborative multi-disciplinary teams to design, analyse, and realise algorithms using tools from probability and statistics. Algorithms he has developed have been implemented in digital circuits and in DNA. He is a co-founder of the Royal Statistical Society's Applied Probability Section (2011), co-authored a cover article of Trends in Cell Biology (2012), is a winner of a best paper award at the IEEE International Conference on Communications (2015), the best paper award from IEEE Transactions on Network Science and Engineering (2019), the best research demo award from COMSNETS (2022), the best demo award from COMSNETS (2023), and the IEEE Military Communications Conference Fred W. Ellersick award for best unclassified paper (2024).

## **Professor Clara Gaff**

### **Provisional Science and Technical Advisory Committee (PSTAC), Snow Centre for Immune Health**



Professor Clara Gaff was the Executive Director of Melbourne Genomics Health Alliance, a twelve-year change program funded by the Victorian Department of Health and ten collaborating member organisations (leading hospitals, academic and research organisations).

Clara has been at the forefront of introducing genetic innovation into health services since the beginning of her career. She leads a diverse portfolio of education, genomic information, and research activities, successfully accelerating the implementation of genomics into the health system.

Under her leadership, the Melbourne Genomics Health Alliance provided the first real-time evidence for genomics in patient care, informed state and federal funding for genomic tests, produced internationally-adopted education resources, and commercialised a world-leading clinical genomic data management platform.

An experienced genetic counsellor, Clara has contributed internationally to ethical and responsible policy, practice and public engagement. She has served on national and international advisory committees on health translation, ethics and genomics, for bodies such as the National Health and Medical Research, Global Alliance for Genomics and Health (GA4GH) and Genome Canada.

## **Dr Francisco Leon**

### **Keynote Speaker and Founder and CEO of Tolerance Bio**



Dr Francisco Leon is an immunologist and entrepreneur. He is the Founder and CEO of Tolerance Bio, a biotech focused on the preservation and regeneration of the thymus to prevent and treat immune diseases to extend healthspan.

Francisco's career spans academia (NIH) and biopharma (BMS, MedImmune/AZ, Centocor/Janssen/JNJ, Celimmune/Amgen, Provention/Sanofi). Two of his co-founded companies were acquired by Pharma: Celimmune, focused on celiac disease, acquired by Amgen in 2017; and Provention Bio, focused on autoimmunity, acquired by Sanofi in 2023.

He has served as co-founder, CEO, CMO, CSO and Board Director of several innovative immunology biotech companies, including active companies Paulex (diabetes), Praetorian (cavities/gingivitis vaccines), Avalor (osteoarthritis), Lapix (autoimmunity), VaxDyn (bacterial vaccines) and Glutenostics (celiac disease diagnostics).

He has co-authored over 100 peer-reviewed scientific articles and book chapters, and over 20 patents, and has led or participated in the development of 6 drugs which have reached the market, most recently teplizumab (TZIELD®) for the delay or prevention of the onset of clinical Type 1 Diabetes.

**Dr John Hamill**  
**Chair, WEHI Consumer Advisory Panel**



Dr John Hamill is Chair of the WEHI Consumer Advisory Panel. He provides strategic leadership and advice to WEHI's leading consumer program.

John is a consultant, advisor, governance expert, and executive coach. He works with governments, regulators and businesses across a broad range of sectors, with a specific focus on regulatory system design, governance, strategy, and consumer engagement.

He is Managing Director of Chronotope Consulting, Member of South East Water Community and Consumer Advisory Council, Board Secretary for Gellibrand Support Services, and Independent Member, Australian Financial Security Authority (AFSA) Regulatory Committee.

He brings significant leadership experience from his time as CEO of the Essential Services Commission of Victoria, where he was responsible for the regulation of water, energy, ports, and local government. He led significant regulatory reforms for water and energy companies focused on improving customer engagement, strengthening support for survivors of family violence, providing more effective support for customers with payment difficulties, and for customers on life support. Prior to that, he was General Manager, Regulation at the Commerce Commission in New Zealand and had a range of roles in the New Zealand public service. He has a PhD in English Literature, is a chorister, a renal transplant and ITP patient.

**Dr Samantha Chan**  
**Clinician Scientist - Immunodeficiency and Allergy, Snow Centre for Immune Health**



Dr Samantha Chan is the Snow Centre Clinician Fellow – Immunodeficiency and Allergy, the Deputy Director of Clinical Immunology and Allergy at the Royal Melbourne Hospital and the Immunodeficiency Lead for the Austin Health Department of Infectious Diseases & Immunology.

She completed her medical degree at the University of Melbourne (MBBS, BMedSc), undertook specialist physician training (FRACP) at the Alfred Hospital and Royal Melbourne Hospital, and earned a Master of Public Health from the University of London.

Samantha completed her PhD at WEHI, studying the interplay of intrinsic and environmental contributors to immunodeficiency through the use of novel gene editing techniques. She has contributed to local and international guidelines on diagnosing and managing inborn errors of immunity and is dedicated to advancing patient care through translational research, leading commercial and investigator-initiated interventional trials.

**Matthew Rozek – Patient Representative**

## **Dr Stephanie Kuo**

### **Clinician Scientist – Kidney Transplant, Snow Centre for Immune Health**



Dr Stephanie Kuo is a nephrologist and general medical physician at the Royal Melbourne Hospital and the Snow Centre Clinician Scientist - Kidney Transplant. Steph has a strong commitment to advancing patient care through both clinical excellence and research.

Steph has developed a particular interest in translational research and renal transplantation, focusing on how emerging scientific discoveries can be applied meaningfully to improve outcomes for people with kidney disease. Her clinical work spans the full spectrum of nephrology and general medicine, and she is recognised for her collaborative, patient-centred approach.

Currently completing a PhD in renal transplantation, Steph is investigating mechanisms that influence graft survival and long-term patient health, with the goal of helping to refine treatment pathways and contribute to evidence-based improvements in transplant practice. She is passionate about integrating research insights into everyday clinical decision-making and is committed to fostering multidisciplinary partnerships that support innovation, education, and high-quality patient care.

## **Sarkes Harweil – Patient Representative**

## **Dr Jayne Moxey**

### **Clinician Scientist – Rheumatology, Snow Centre for Immune Health**



Dr Jayne Moxey is a rheumatologist at the Royal Melbourne Hospital and a Clinician Scientist with the Snow Centre. She is a dedicated and highly skilled consultant rheumatologist who completed her basic physician training at St Vincent's Hospital, Melbourne. She subsequently completed speciality training in Rheumatology at St Vincent's Hospital, Melbourne and the Royal Melbourne Hospital. She completed her medical degree at The University of Melbourne, where she was awarded Dux of her graduating year.

Jayne has considerable experience treating patients with a diverse range of autoimmune and musculoskeletal rheumatological conditions, with particular interest in inflammatory arthritis, systemic autoimmune disorders and vasculitis. She has an empathetic approach and is committed to providing evidence-based, patient-centred care.

Dr Moxey has a strong interest in medical student and junior doctor education. She has completed a Graduate Certificate in Clinical Education at the University of Melbourne and has held teaching roles at the University of Melbourne Medical School, St Vincent's Medical School and the Royal Melbourne Hospital Medical School.

## **Elizabeth Rowe – Patient Representative**

## **Professor Anne Kelso AC**

### **Provisional Science and Technical Advisory Committee (PSTAC), Snow Centre for Immune Health**



Professor Anne Kelso AC was Chief Executive Officer of the National Health and Medical Research Council from 2015 to 2023. In this role, she oversaw the agency's national research grant program, the updating of national codes of research ethics, the development of health guidelines and the regulation of research using human embryos. She served *ex officio* on the Board of the International Human Frontier Science Program Organisation, the Strategy Board of the Global Alliance for Chronic Diseases and a range of Australian Government committees.

In her earlier career, after completing her PhD at the University of Melbourne, Anne undertook research in immunology at the Swiss Institute for Experimental Cancer Research, WEHI, the Queensland Institute of Medical Research and the Doherty Institute, and held leadership roles as Director of the CRC for Vaccine Technology (2000-2006) and the WHO Collaborating Centre for Reference and Research on Influenza (2007-2015). She was elected a Fellow of the Australian Academy of Science and the Australian Academy of Health and Medical Sciences in 2018. In 2023, she was awarded an honorary doctorate in medical science by the University of Melbourne, where she is an honorary professorial fellow.

## **Professor Daniel Gray**

### **Program 2 Lead, Snow Centre for Immune Health**



Professor Daniel Gray's team employs new genetic, single-cell, and imaging-based technologies to address how the immune system makes decisions in the context of autoimmune disease, infection, and cancer.

Daniel's contributions have come through a mixture of large, collaborative, consortia-based research programs, as well as more focused, hypothesis-driven projects to make fundamental discoveries with translational impact.

He is an international leader in how cell death processes impact T cell responses and immunological tolerance: key goals of the modelling of molecular networks program.

## **Dr Mengxiao Luo**

### **Program 2 Research Officer, Snow Centre for Immune Health**



Dr Mengxiao Luo is a research officer at WEHI, working with Professor Daniel Gray.

She earned her master's degree in biomedical science at the University of Melbourne and PhD at WEHI. Mengxiao brings a multi-disciplinary approach to tackling challenging questions, with expertise in drug development, cell biology and human immunology. She collaborates broadly within WEHI and with teams at the Peter Doherty Institute and Monash University.

**Professor Stephen Nutt**  
**Program 2 Lead, Snow Centre for Immune Health**



Professor Stephen Nutt is a Fellow of the Australian Academy of Science and a world-leading expert in molecular immunology. He is a member of the international Immunological Genome Consortium.

Stephen has made significant discoveries relating to the transcriptional processes required for immune cell development and differentiation. Stephen's research focuses on understanding how gene regulatory networks control cellular decisions in the immune system and how to target these processes with new therapeutic approaches. His leadership in these domains will propel the molecular networks and drug discovery programs of the SCIH.

**Dr Julie Tellier**  
**Program 2 Senior Research Officer, Snow Centre for Immune Health**



Dr Julie Tellier is a senior postdoctoral researcher in the Immunology division. Her expertise is in immune cell differentiation and gene expression.

She completed her PhD in Immunology in France in 2008. She then worked at the Centre of Immunology of Marseille-Luminy for 3 years, before joining the laboratory of Professor Stephen Nutt at the end of 2011.

Julie is a member of the international consortium Immgen (the Immunological genome project), a collaborative project that builds mouse genomic datasets as a public resource.

**Dr Yaoyuan Zhang**  
**Program 3 Research Officer, Snow Centre for Immune Health**



Dr Yaoyuan Zhang is a research officer specialising in systems immunology and the immunogenomics of immune disorders. Yaoyuan completed his PhD in the genetics of autoimmune diseases at the John Curtin School of Medical Research of the Australian National University in 2022 under the co-supervision of Associate Professor Julia Ellyard and Professor Carola Vinuesa, where he investigated rare variants in two genes involved in cytokine receptor signalling, SH2B3 and TYK2.

In late 2022, he joined the Masters Laboratory at WEHI, focusing on the therapeutic strategies for neuroinflammation in amyotrophic lateral sclerosis and Parkinson's disease, while also conducting routine analyses of interferon signatures in patients with autoinflammatory conditions within the Australian Autoinflammatory Disease Registry (AADRY). In 2025, Yaoyuan commenced his current role in the Immunogenomics Laboratory led by Dr Vanessa Bryant and the Snow Centre of Immune Health.

# Day Two

## Professor Dianne Campbell

### Provisional Science and Technical Advisory Committee (PSTAC), Snow Centre for Immune Health



Professor Dianne Campbell is an academic Paediatric Immunologist. She has over 28 years of experience in the diagnosis and management of children with allergic disease, with a focus on clinical research in paediatric food allergy.

She served as Chair of Allergy and Clinical Immunology at the Children's Hospital Westmead/ Sydney University (2010-2019), was Chair of the Paediatric Subcommittee for Australian Society for Clinical Allergy and Immunology (2010-2016) and is current lead of the National Allergy Centre of Excellence Training & Innovation Hub (2023-2026).

She is currently an Adjunct Professor (Sydney University) and an honorary Senior Staff Specialist (Children's Hospital at Westmead) and works part-time in biotechnology (DBV-Technologies). She has played major roles in the creation of Australian national prevention of food allergy guidelines, standardisation of food challenges and anaphylaxis education and training for schools and childcare.

## Associate Professor Ashley Ng

### Digital Hub Lead, Snow Centre for Immune Health



Associate Professor Ashley Ng is a clinical haematologist in the Clinical Haematology Department, The Royal Melbourne Hospital and Peter MacCallum Cancer Centre, Clinical Informatics Lead in the Department of Health Services Research at Peter MacCallum Cancer Centre, and Clinician Researcher at WEHI.

At the Clinical Haematology Department, Ashley is an expert in blood cell development, leukaemia research and leukaemia therapy. Ashley is also a member of the acute leukaemia working parties of the Australasian Leukaemia and Lymphoma Group, where Ashley is involved as a principal investigator for Phase I/II/III human clinical trials.

In addition, Ashley co-leads the development of the Clinical and Genomics registries for the Asia Pacific Leukaemia Consortium and is a member of the American Society of Haematology Adolescent and Young Adult Acute Lymphoblastic Leukemia Clinical Guidelines committee.

**Professor Tony Papenfuss**  
**Deputy Director and Computational Biology Theme Leader, WEHI**



Professor Tony Papenfuss is a computational biologist and bioinformatics researcher. He has a PhD in Mathematics. He has been a lab head in the Bioinformatics Division at the Walter and Eliza Hall Institute of Medical Research (WEHI) since 2010. He is the Theme Leader for Computational Biology at WEHI. He held the Lorenzo and Pamela Galli Melanoma Research Fellow at the Peter Mac, where he established the Computational Cancer Biology Program.

His research is focused on the development of bioinformatics methods to help make sense of cancer omics data, and molecular changes in cancer associated with progression

A major emphasis has been on tools for detecting genomic rearrangements in cancer genomes, especially complex rearrangements.

He has previously contributed to a broad range of biology projects, including discovering the origins of neochromosomes in cancer, identifying the tissue of origin of the Tasmanian Devil Facial Tumour, jointly leading the Tamar Wallaby Genome Project, and he continues to lead the scabies mite genome project.

**Professor Tim Spelman**  
**Lead Statistician, Snow Centre for Immune Health**



Professor Tim Spelman is a PhD biostatistician and clinician with over 20 years of experience in statistics and epidemiology. He is one of the world's leading registry/real-world data analysis and pharmaco-epidemiologists and has authored or co-authored over 250 publications in infectious diseases, virology, risk prediction, epidemiology, digital health and artificial intelligence, public health, health economics, immunology, health technology assessment and neurology.

He is currently lead statistician with the Department of Health Services Research at Peter Mac in addition to current roles at St Vincent's Hospital, MSBase international multiple registry at Monash University, senior statistician at the Department of Clinical Neuroscience, Karolinska Institute in Sweden and Head of Data Analytics at the Big Multiple Sclerosis Data Network consortium. He also served as the advising statistician to the Economics Sub-Committee of PBAC between 2014-2022 and as a consultant statistician to the Lancet since 2014

**Dr Mark Dowling**  
**Clinical Integration Lead, Snow Centre for Immune Health**



Dr Mark Dowling is a clinical haematologist within the CAR-T stream at the Peter MacCallum Cancer Centre and Royal Melbourne Hospital, and a clinician scientist within the Centre of Excellence for Cellular Immunotherapy (CoE CIT) Translational Laboratory.

With support from a Victorian Cancer Agency (VCA) mid-career fellowship, Mark is developing novel immunotherapy trials in lymphoma and myeloma.

He has a passion for translational research and is dedicated to improving outcomes for patients with blood cancer.

**Sharon Trevor**  
**Project Manager, Snow Centre for Immune Health**



Sharon is an experienced medical scientist with over 15 years of expertise in clinical trials and studies and laboratory operations, such as quality assurance, regulatory compliance, and project coordination.

With a strong foundation in molecular pathology, haematology, and transplantation immunology, she has managed complex research projects, ensuring adherence to the highest scientific standards. Sharon excels in translating scientific findings into actionable insights while collaborating with diverse teams to drive research excellence.

**Amy Russell**  
**Project Manager, Snow Centre for Immune Health**



Amy has close to 20 years' experience in medical research laboratories, including more than a decade in the Tye-Din Lab at WEHI. Her core scientific background is in coeliac disease research, focused on understanding disease immunopathology to improve diagnostics, therapeutic development and patient outcomes. Her work has spanned basic immunology, translational studies, pre-clinical development and clinical trial support.

She began her career as a Research Assistant and progressed to Program Coordinator, managing a portfolio of academic and pharmaceutical projects with a strong translational emphasis. In parallel, she worked part-time as a Project Manager at AAMRI VIC, supporting initiatives to strengthen the medical research sector through improved translation, collaboration and system capability.

From the start of this year, Amy moved into a Project Manager role at the Snow Centre. She has strong experience working with researchers and clinicians to translate scientific and clinical priorities into practical delivery plans, enabling high-quality research outcomes through structured coordination, communication and collaboration.

**Professor Paul Lyons**  
**Chief Consulting Scientist, Snow Centre for Immune Health**



Professor Paul Lyons guides the team of scientists and clinicians at the Snow Centre to create a research environment that will facilitate groundbreaking research into real-world clinical applications. With over 20 years of experience at the University of Cambridge, Paul is well-equipped to bridge the gap between scientific discovery and clinical impact.

Paul is experienced in investigating how genetic variations influence the immune system and contribute to disease development, as well as genomic approaches to the study of autoimmune disease.

He was involved in the establishment of the Cambridge Hinxton Centre for Translational Research in Autoimmune Disease – aimed at applying expression profiling to the clinical management of autoimmune diseases such as systemic lupus erythematosus and small vessel vasculitis

**Professor Jennifer Couper**  
**ENDIA study Lead, Adelaide University**



Professor Jenny Couper is a clinician researcher and paediatric endocrinologist. She is Academic Lead, Women's and Children's Health, Adelaide University. She leads the Australian early life at-risk cohort (ENDIA study [www.endia.org.au](http://www.endia.org.au)) and Australian diabetes antibody monitoring program (AusDAP).

She co-chairs the ISPAD international early type 1 diabetes advisory group and is a co-author of international guidelines for the management of early type 1 diabetes in children and adolescents.

**Dr Lucas Calais-Ferreira**  
**Director, Twins Research Australia, The University of Melbourne**



Dr Lucas Calais-Ferreira is Director (Head) at Twins Research Australia in the Centre for Epidemiology and Biostatistics, Melbourne School of Population and Global Health, The University of Melbourne. Twins Research Australia hosts one of the largest volunteer-based twin registries for health and medical research in the world. Dr Calais-Ferreira's research focuses on using twin research, genetic epidemiology, and data linkage to improve population health. He is also affiliated with the Centre for Adolescent Health at the Royal Children's Hospital & Murdoch Children's Research Institute, and the Justice Health Group at the enAble Institute, Curtin University.

## Dr Lucy Barrett

Senior research fellow and co-head of the Burn Injury Research Unit at the Fiona Wood Foundation, University of Western Australia



Dr Lucy Barrett is a senior research fellow and co-head of the Burn Injury Research Unit at the Fiona Wood Foundation & the University of Western Australia. Her research is focused on the long-term systemic impacts of burn injury on the immune system, with a particular focus on the effect of non-severe burns in paediatric patients, who are over-represented in the Australian burns population.

Through in-depth immune profiling of samples from paediatric burn patients with healed burn injuries, Dr Barrett has shown that even a non-severe burn injury (defined as affecting <20% of the total body surface area) can lead to chronic immune dysfunction, characterised by persistent changes in circulating cytokines and T cells, indicative of an altered immune trajectory.

Her ongoing work interrogating immune responses to childhood vaccination has also identified changes in B cells, that may leave burn survivors at risk of infection from vaccine-preventable diseases, long after the burn itself has healed.

Given that children aged 0–5 years are the most vulnerable to burn injuries in Australia, there is a critical need to understand how a singular, acute, non-severe injury can trigger ongoing immune dysfunction.

This research will enable the identification of at-risk children and will inform the development of new treatment strategies and interventions to ensure all kids go back to being as happy and healthy as possible after their burn.

## Dr Derek Van Dyk

Executive Director, Snow Medical Research Foundation



Since 2019 Dr Derek Van Dyk and the Snow Medical Team have worked with Tom Snow and the Snow family to establish the initial strategy and direction of the Snow Medical Research Foundation.

Derek has a commercial research background in biotechnology coupled with science and innovation policy experience in Government and university sectors. He completed his PhD at UNSW in biopharmaceutical production and proteomics.

**Front cover image credit:** Immune cells around aged mammary epithelium- Caleb Dawson, Ronja Bruchert and Verena Wimmer.