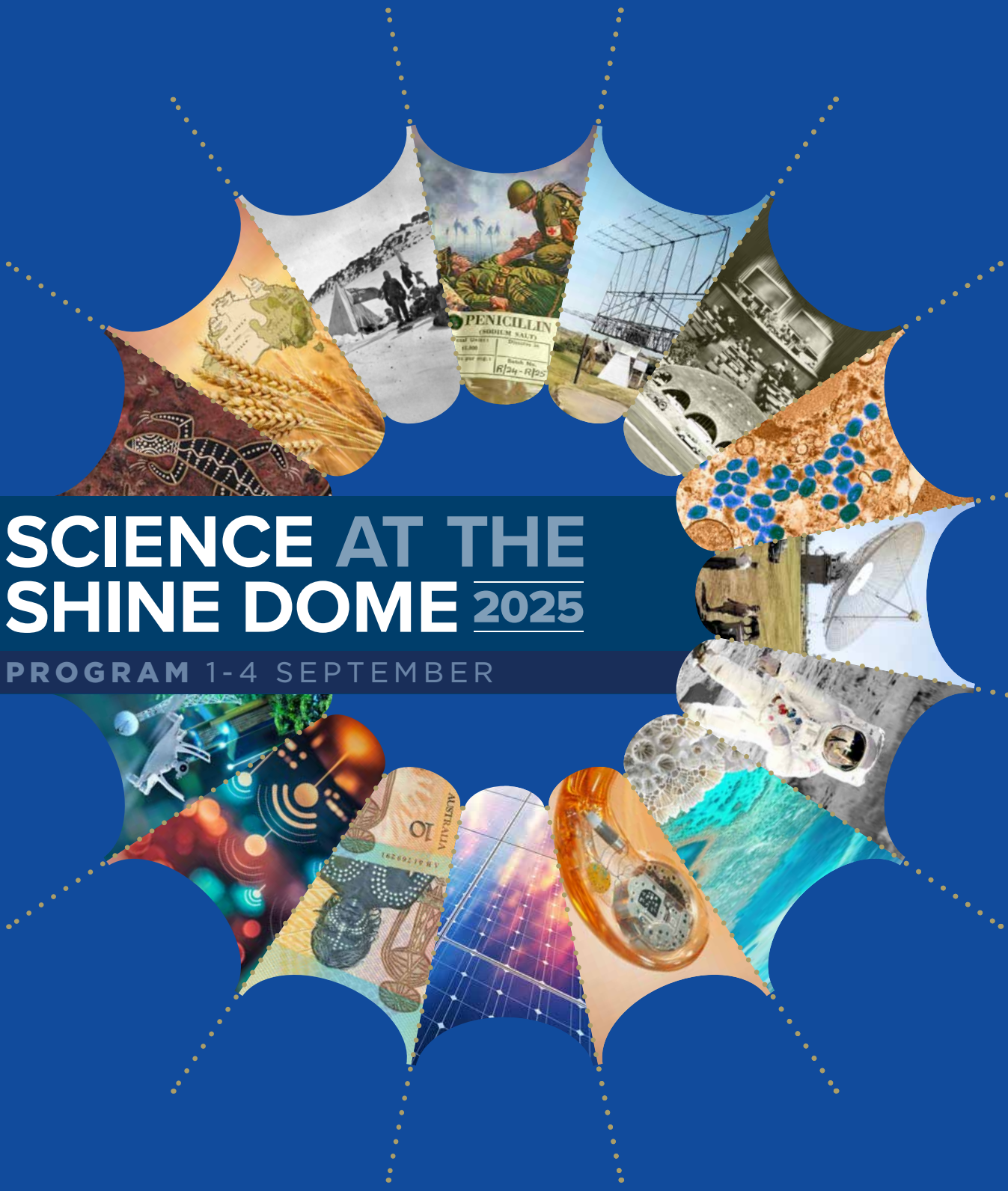
Australian Academy of Science



SCIENCE AT THE SHINE DOME 2025

PROGRAM 1-4 SEPTEMBER

ACKNOWLEDGEMENT OF COUNTRY

The Australian Academy of Science acknowledges and pays respects to the Traditional Owners of all the lands on which the Academy operates, and where its Fellows and employees live and work.

The Academy recognises Australia's Aboriginal and Torres Strait Islander peoples as the first innovators and scientists of this land, and honour their enduring connection to Country, from which we are committed to learn. We pay our respects to, and recognise the cultural authority of, their Elders past and present.

The Academy is honoured to have Aunty Violet Sheridan at Science at the Shine Dome 2025 on Tuesday morning to officially welcome all guests to Country and the Shine Dome for this event.

RECONCILIATION ACTION PLAN

Our vision for reconciliation is that the contributions to scientific knowledge from Australia's First Nations peoples are respected and celebrated, and that we draw on diverse knowledges, including Traditional Knowledges, to build a stronger, more innovative and sustainable nation and world.

The Academy seeks to make systemic, strategic and sustainable contributions across the STEM sector to support reconciliation between Aboriginal and Torres Strait Islander and non-Indigenous peoples, ensuring that Aboriginal and Torres Strait Islander peoples are empowered to engage in science and enjoy the benefits of science.

Now midway through our Innovate Reconciliation Action Plan (Innovate RAP), which was launched at Science at the Shine Dome 2024, we continue to move forward and ensure our reconciliation activities remain at the forefront of the work we do.

For more information, scan the QR code.

RAP Innovate artwork created by:
Richard Allan, Director, Traditional Core.

Cover artwork: Designed by Leah Albert for the Australian Academy of Science • **Australia's first scientists.** *'Mirning Country'.* CREDIT: Presten Warren • **'Federation' wheat 1901**–William Farrer. *1920s Map of Australian sheep and wheat growing areas.* SOURCE: NLA • **Australasian Antarctic Expedition 1911–14**–Frank Stillwell. *Camp at Madigan Nun[atak] – Stillwell, Laseron, Close.* SOURCE: Fenner Archives • **Penicillin 1939–41**–Sir Howard Florey. *1944 WWII Vintage Schenley Lab Ad, and penicillin produced during WWII* • **The Sea Cliff Interferometer 1946**–Ruby Payne-Scott, Joe Pawsey and Lindsay McCready. *Antenna at Dover Heights.* SOURCE: CSIRO • **The Shine Dome opening 1959**–Sir Mark Oliphant. SOURCE: Fenner Archives • **Smallpox vaccine program**–Frank Fenner. *Micrograph of cell containing smallpox viruses* • **Murriyang/ Parkes radio telescope 1961**–CSIRO. *'The Dish'.* SOURCE: CSIRO • **Apollo 11 ground tracking and broadcasting support 1969.** *Astronaut Buzz Aldrin on the moon.* SOURCE: NASA • **First female president of the Australian Academy of Science 1970**–Dorothy Hill. *Fossil coral mapping. The Great Barrier Reef, QLD* • **Cochlear ear implant 1978**–Graeme Clark. *Cochlear implant showing components* • **PERC solar cell 1983**–Martin Green. *Solar panels* • **Polymer banknote 1988**–David Solomon. *Commemorative $10 banknote* • **Wireless local area network (WLAN) 1990**–CSIRO. *WiFi icons* • **Future of science.** *Australian Academy of Science Public Speaker Series 2025.*

AUSTRALIAN ACADEMY OF SCIENCE PRESIDENT'S WELCOME

It is my great pleasure to welcome you to Science at the Shine Dome 2025, the Australian Academy of Science's flagship event where our community gathers in the home of Australian science, united by our shared commitment to scientific excellence.

This is an opportunity for us to collaborate, share knowledge and work together to shape the future of science in Australia and beyond.

Although it has been a tumultuous time for many in science since we last met here, the Academy continues to draw upon the scientific expertise and excellence of its Fellowship and the broader research community to influence policy and to shape the local, regional and global science landscape.

To capture opportunities stemming from the unprecedented disruption of the US research enterprise, the Academy has established the Where Science Lives: Global Talent Attraction Program to attract stellar talent to our shores.

In Australia, our ongoing contributions to the Strategic Examination of Research and Development provide an innovative and progressive reimagining of how research and development could be conducted and funded in ways that realise science's full potential to benefit all Australians.

At our National Symposium on Thursday 4 September, we will be launching our seminal report *Australian Science, Australia's Future: Science 2035*, a never-been-done-before systematic assessment of Australia's science capability against its future need. We will present a national picture of where we stand, and what we must do to strengthen science for the decades ahead.

Looking to the region, the Academy was proud to have played a key role in the establishment of the new Pacific Academy of Sciences through its leadership of the International Science Council (ISC) Regional Focal Point for Asia and the Pacific (RFP-AP). As the regional hub for the ISC, the RFP-AP has significantly elevated Australia's profile in science diplomacy, fostering deep and strategic partnerships across the Asia-Pacific. I am also most grateful to the many Fellows who have lent their time to mentor early-career researchers from the region via our Asia-Pacific Academic Mentoring Program.

Over the course of this week, we will celebrate remarkable achievements in Australian science. We are here to honour the Fellows elected to the Academy in 2025, and to recognise the outstanding contributions of Academy awardees. The dedication and pioneering work of all of those we celebrate continue to push the boundaries of knowledge, advancing our nation and the world, and inspiring future generations of scientists.

I am delighted to be joined this week by Academy Council members, who will assist with the formalities and presentations across the event. Our Council members are volunteers, and they shape and guide the work of the Academy and its Fellowship. On the following pages, you will find more information about Council members and their roles.

Together, we extend our heartfelt congratulations to our newly elected 2025 Fellows and awardees. Their achievements are a source of pride for all and a beacon of excellence in the scientific community. I also express my deepest gratitude to all those who continue to support and advance science for the benefit of all.

This gathering is a tribute to the collective strength of our scientific community.

I look forward to connecting with you, celebrating science and being inspired by your work.

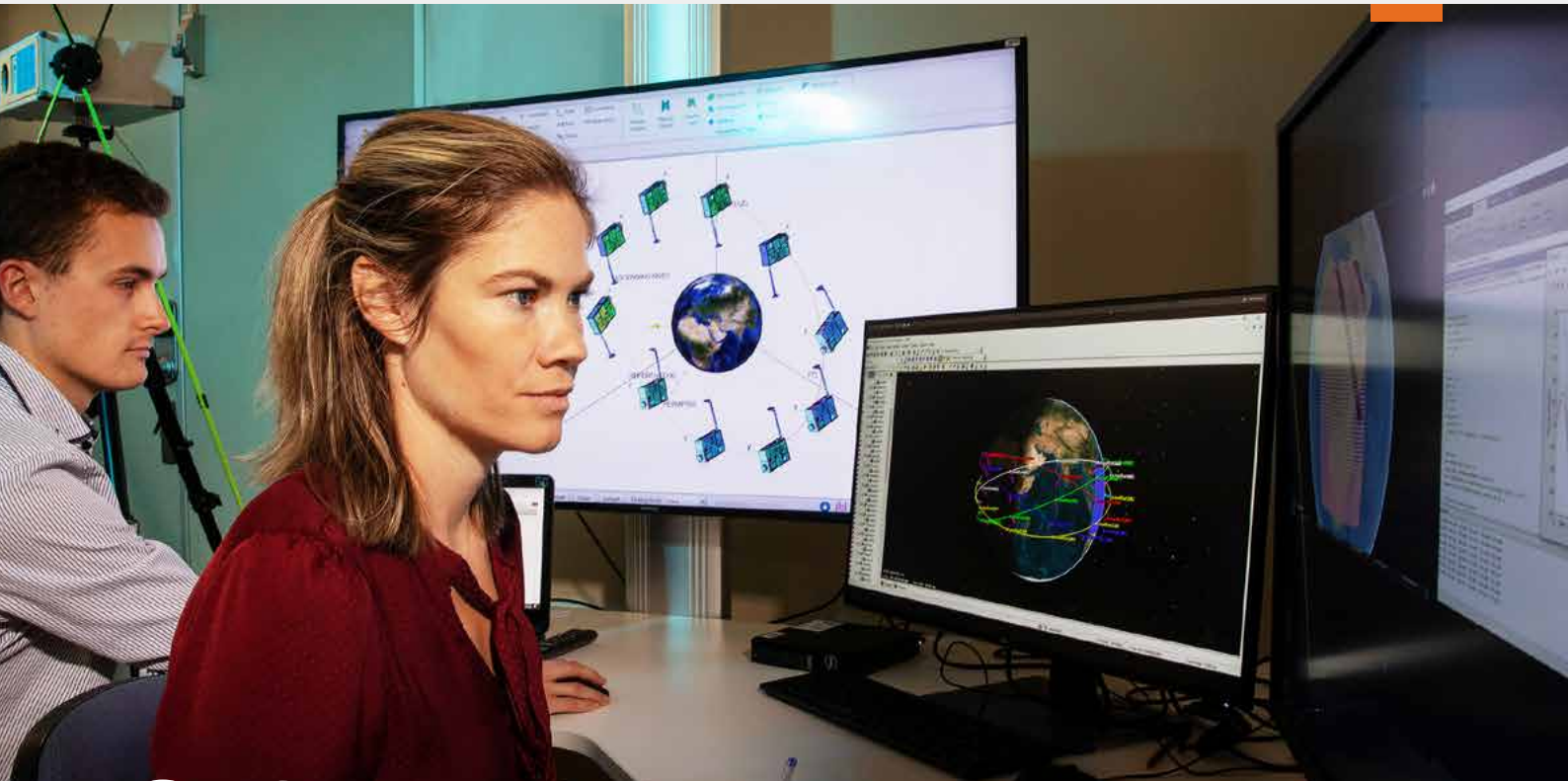
Thank you, and once again, welcome to Science at the Shine Dome 2025.

Professor Chennupati Jagadish **AC PresAA FRS FREng FTSE**
President, Australian Academy of Science

> "This is an opportunity for us to collaborate, share knowledge and work together to shape the future of science in Australia and beyond."

Australian Government
Defence

focus
scale
impact



Safeguarding Australia through innovation, science and technology.

Defence employs Australia's brightest scientists, engineers, IT specialists and technicians to deliver scientific advice and technology solutions to enhance Australia's defence and national security.

Underpinned by a philosophy of achieving more, together, the Defence science and technology program is shaped by three key drivers:

- Focusing on larger science and technology programs supporting Defence strategic priorities.
- Increasing scale by partnering with the national science and technology enterprise and international partners.
- Delivering impact and a capability edge through streamlined and secure innovation pathways.

Visit our website to learn more about what we do, our priorities and what partnering mechanisms are available to Australia's national science and technology ecosystem.

Defence is...

increasing collaborative research

connecting uni's, industry and PFRAs

growing defence innovation capability

investing in emerging and future tech

implementing new research security

achieving more, together.

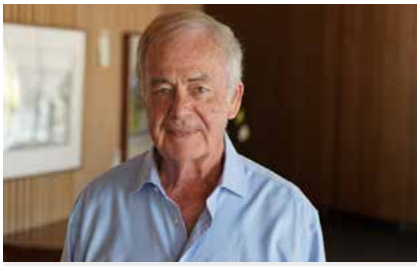
www.dst.defence.gov.au | @DefenceScience

Defending Australia and its National Interests
www.defence.gov.au

AUSTRALIAN ACADEMY OF SCIENCE COUNCIL

PRESIDENT

Professor
Chennupati Jagadish
AC PresAA FRS FREng FTSE



SECRETARY BIOLOGICAL SCIENCES AND VICE PRESIDENT

Professor
Bob Graham
AO FAA FAHMS

SECRETARY PHYSICAL SCIENCES AND VICE PRESIDENT

Professor
Ivan Marusic
FAA FTSE FRS

TREASURER

Professor
Barbara Nowak
FAA (not in attendance)

FOREIGN SECRETARY

Professor
Frances Separovic
AO FAA

SECRETARY SCIENCE POLICY

Professor
Margaret Sheil
AO FAA FTSE

SECRETARY EDUCATION

Professor
Lyn Beazley
AO FAA FTSE

SPOKESPERSON FOR ENGAGEMENT

Professor
Stephen Simpson
AC FAA FRS

SPOKESPERSON FOR INTEGRITY

Professor
Jim Williams
AO FAA FTSE
(not in attendance)

CONTENTS

PROGRAM

Colour coding in the program matches the lanyards worn by delegates.

New Fellows · EMCRs · Awardees · Event partners

MONDAY 1 SEPTEMBER 2025

MONDAY	8.30am	**Main Foyer**	**Registrations** open all day
	8.45am – 9.45am	**Ian Potter House Ballroom**	**ISC Asia-Pacific Mentoring Program, Mentee Meet and Greet** (invitation only)
	10.00am – 12.00pm	**Dorothy Hill Room**	**EMCR Workshop: Grant writing** (registered participants only) *Developing a robust grant proposal, The GrantEd Group*
		Ian Potter House Ballroom	**EMCR Workshop: Science in international affairs and diplomacy** (registered participants only) *Understanding the role of science in international affairs and diplomacy*
		Becker Room	**EMCR Workshop: Future Earth Australia (FEA) National Strategy** (registered participants only) *Research with impact: a national strategy for biodiversity and climate, FEA*
		Ian Potter House President's Meeting Room	**ISC Advisory Council Meeting** (invitation only)
	1.00pm	**Lunch**	**Jaeger Room**
	2.30pm	**Ian Wark Theatre**	**Falling Walls Lab Australia**
	4.00pm	**Afternoon tea**	**Jaeger Room**
	4.30pm	**Ian Wark Theatre**	**Falling Walls Lab Australia** winners announced
	5.00pm – 7.00pm	**Ian Potter House Marquee**	**Evening networking function**
	5.30pm – 7.30pm	**Shine Dome**	**New Fellows Briefing, Tour and Academy Showcase** (invitation only)

TUESDAY 2 SEPTEMBER 2025

TUESDAY

8.00am	**Main Foyer**	**Registrations** open all day
	Arrival tea/coffee	**Jaeger Room**
8.30am – 10.30am	**Dorothy Hill Room**	**EMCR Forum Executive Planning Session** (invitation only)
8.30am	**Ian Wark Theatre**	**Welcome to Country: Aunty Violet Sheridan**, Ngunnawal Elder
		President's Welcome: Professor Chennupati Jagadish AC PresAA FRS FREng FTSE President, Australian Academy of Science
		New Fellows 2025 Charter Book Ceremony
		Professor David Adams FAA FAHMS, University of Wollongong
		Professor Gabrielle Belz FAA FAHMS, University of Queensland
		Dr Pep Canadell FAA FTSE, CSIRO
		Professor Deli Chen AO FAA, University of Melbourne
		Professor Helen Christensen AO FAA FAHMS FASSA, UNSW Sydney
		Professor Tamara Davis AM FAA, University of Queensland
		Professor Jeff Errington FAA FRS, University of Sydney
		Professor Xiaojing Hao FAA FTSE, UNSW Sydney
		Professor Mark Howden AC FAA FTSE, Australian National University
		Professor David Huang FAA FAHMS, WEHI
		Professor Trevor Ireland FAA, University of Queensland
		Dr Marlene Kanga AO FAA FTSE, Rux Energy Pty Ltd
		Professor Robert Mahony FAA, Australian National University
		Professor Richard Middleton FAA, University of Newcastle
		Professor Christina Mitchell AO FAA FAHMS, Monash University
		Associate Professor Andrew Nash FAA FTSE, CSL Limited
		Professor Jessica Purcell FAA, Monash University
		Professor Clare Scott AM FAA FTSE FAHMS, WEHI
		Professor Aidan Sims FAA, University of Wollongong
		Professor Michael Stumpf FAA, University of Melbourne
		Professor Rajeev Varshney FAA FRS, Murdoch University
		Professor Guoxiu Wang FAA, University of Technology Sydney
		Professor Nicole Webster FAA, University of Tasmania
		Professor Tony Weiss AM FAA FTSE FAHMS, University of Sydney
10.30am	**Morning tea**	**Jaeger Room/Dorothy Hill Room/Lawns**
	Main Foyer	**Group photo of New Fellows** (meet in main foyer)
	Becker Room	**Portraits of New Fellows** **Portraits of Awardees**
11.00am – 12.30pm	**Ian Potter House Marquee**	**ISC Asia-Pacific Academic Mentoring Program Launch** (invitation only)
11.00am	**Ian Wark Theatre**	**New Fellows Presentations** (10 minutes + 2-minute Q&A)
		Professor David Adams FAA FAHMS, University of Wollongong *Analgesic conotoxins targeting human sensory neurons via GABAB receptors: mechanisms and implications for pain therapy*
		Professor Gabrielle Belz FAA FAHMS, University of Queensland *The guardians within: illuminating the dark matter of the immune system*
		Dr Pep Canadell FAA FTSE, CSIRO *The emergence of carbon-climate feedbacks in the Earth system*
		Professor Deli Chen AO FAA, University of Melbourne *Nitrogen for sustainable food production and environment*
		Professor Helen Christensen AO FAA FAHMS FASSA, UNSW Sydney *The impact of technology on mental health care*
		Professor Tamara Davis AM FAA, University of Queensland *Adventures on the dark side of the Universe*
		Professor Jeff Errington FAA FRS, University of Sydney *L-form bacteria – from basic science to recurrent infection*
12.45pm	**Lunch**	**Jaeger Room/Dorothy Hill Room/Lawns**
	Main Foyer	**Group photo of Lindau Delegates** (meet in main foyer)
	Becker Room	**Portraits of New Fellows** **Portraits of Awardees**
	Ian Potter House Ballroom	**Lindau Delegate Lunch** (invitation only)

TUESDAY	1.45pm – 3.15pm	Ian Potter House Ballroom	**ISC Asia-Pacific Mentor Training Session** (invitation only)
	1.45pm	Ian Wark Theatre	**New Fellows Presentations** (10 minutes + 2-minute Q&A)
			Professor Xiaojing Hao FAA FTSE, UNSW Sydney *Mastering defect dynamics – from atomic building blocks to high-efficiency solar cells*
			Professor David Huang FAA FAHMS, WEHI *Targeting BCL2 for treating blood cancers*
			Professor Trevor Ireland FAA, University of Queensland *A cosmochemist's view of the solar system*
			Dr Marlene Kanga AO FAA FTSE, Rux Energy Pty Ltd *The innovation imperative for the lucky country*
			Professor Robert Mahony FAA, Australian National University *Equivariant systems theory*
			Professor Richard Middleton FAA, University of Newcastle *Feedback, dynamics and control: the quiet achiever*
			Professor Christina Mitchell AO FAA FAHMS, Monash University *The role of phosphoinositide regulation in membrane biology*
	3.30pm	Afternoon tea	Jaeger Room/Dorothy Hill Room/Lawns
		Main Foyer	**ISC Asia-Pacific Mentoring Program group photo** (meet in main foyer)
		Becker Room	Portraits of New Fellows Portraits of Awardees
	4.00pm	Ian Wark Theatre	Platinum Partner Address **Professor Tanya Monro AC FAA FTSE**, Chief Defence Scientist, Department of Defence
			New Fellows Presentations (10 minutes + 2-minute Q&A)
			Professor Mark Howden AC FAA FTSE, Australian National University *The costs and benefits of climate change action vs inaction*
			Associate Professor Andrew Nash FAA FTSE, CSL Limited *Targeting Factor XIIa – development of a novel therapy for the prevention of hereditary angioedema*
			Professor Jessica Purcell FAA, Monash University *The geometry of knots*
			Professor Clare Scott AM FAA FAHMS, WEHI *Exquisite targeting of cancer susceptibilities: when is it enough?*
			Professor Aidan Sims FAA, University of Wollongong *Quantum curve-sketching*
			Professor Michael Stumpf FAA, University of Melbourne *From blackboard to blueprint: CellMaps and synthetic biology*
	5.30pm		Close of session
	5.30pm – 7.30pm	Ian Potter House Marquee	**Spring Soiree Networking Function**, presented by GSK **Presentation of the GSK 2025 Award for Research Excellence** More information available on page 25 of this program

WEDNESDAY 3 SEPTEMBER 2025

WEDNESDAY	8.30am	Main Foyer	**Registrations** open all day
		Arrival tea/coffee	Jaeger Room
	9.00am	Ian Wark Theatre	**President's Welcome: Professor Chennupati Jagadish AC PresAA FRS FREng FTSE** President, Australian Academy of Science
			Diversity and Inclusion Partner Address **Professor Alan Rowan FAA**, Executive Institute Director, University of Queensland Australian Institute for Bioengineering and Nanotechnology
			Charter Book signing **Professor Alan Rowan FAA**, University of Queensland (elected 2020)
			New Fellows Presentations (10 minutes + 2-minute Q&A)
			Professor Rajeev Varshney FAA FRS, Murdoch University *Decoding crops, delivering impact*
			Professor Guoxiu Wang FAA, University of Technology Sydney *Battery technologies driving clean energy transition*
			Professor Nicole Webster FAA, University of Tasmania *Microbial seas in a changing climate*
			Professor Tony Weiss AM FAA FTSE FAHMS, University of Sydney *Tropoelastin as a driver of 3D complex architectures and enhanced cell performance*
	10.15am	Morning tea	Jaeger Room/Dorothy Hill Room/Lawns
		Main Foyer	**EMCR group photo** (meet in main foyer)
		Becker Room	Portraits of New Fellows Portraits of Awardees

WEDNESDAY

10.45am	**Ian Wark Theatre**	**2025 Matthew Flinders Lecture** **Professor Yuri Kivshar FAA**, Australian National University *Metamaterials and metaphotonics*
		2025 Ruby Payne-Scott Lecture **Professor Jane Visvader FAA FAHMS FRS**, WEHI *From the breast stem cell hierarchy towards therapeutics and prevention*
		2025 Suzanne Cory Medal **Professor Steven Chown FAA**, Monash University *Functional traits, physiological diversity and the distribution of life on Earth*
		2025 Hannan Medal **Professor Noel Cressie FAA**, University of Wollongong *NASA/ESA's Mars Sample Return mission: Bayesian statistics for planetary protection*
12.15pm	**Lunch**	**Jaeger Room/Dorothy Hill Room/Lawns**
	Ian Potter House Marquee	**Awardees, Supporters and Donors Lunch** (invitation only)
	Ian Potter House Ballroom	**Future Earth Australia Lunch** (invitation only)
	Becker Room	**Portraits of New Fellows** **Portraits of Awardees**
1.15pm	**Ian Wark Theatre**	**2025 Jaeger Medal** **Professor Hugh O'Neill FAA FRS**, Monash University *The stochastic factor in determining Earth's chemical composition*
		2025 David Craig Medal **Professor Alison Rodger FAA**, Australian National University *Inferring how molecules behave from their interaction with light*
		2025 Thomas Ranken Lyle Medal **Professor George Willis FAA**, University of Newcastle *The scale function on totally disconnected groups*
		2025 Nancy Millis Medal **Associate Professor Natasha Hurley-Walker,** Curtin University *Transforming our view of the radio sky*
		2025 Jacques Miller Medal **Professor James Hudson**, QMIR Berghofer Medical Research Institute *Bioengineered human cardiac tissue: a therapeutic and a model system*
2.45pm	**Afternoon tea**	**Jaeger Room/Dorothy Hill Room/Lawns**
	Main Foyer	**Awardees group photo** (meet in main foyer)
	Becker Room	**Portraits of New Fellows** **Portraits of Awardees**
3.15pm	**Ian Wark Theatre**	**Medal Presentations for 2025 Awardees**
		2025 Anton Hales Medal **Associate Professor Stijn Glorie**, University of Adelaide
		2025 Christopher Heyde Medal **Associate Professor Anita Liebenau**, UNSW Sydney
		2025 Dorothy Hill Medal **Dr Linda Armbrecht**, University of Tasmania
		2025 Fenner Medal **Associate Professor Katherine Moseby**, UNSW Sydney **Associate Professor Daniel Noble**, Australian National University
		2025 Gottschalk Medal **Associate Professor Amy Cain**, Macquarie University **Associate Professor Shom Goel**, Peter MacCallum Cancer Centre
		2025 John Booker Medal **Associate Professor Qianbing Zhang**, Monash University
		2025 Le Fèvre Medal **Dr Fengwang Li**, University of Sydney
		2025 Moran Medal **Professor Margarita Moreno-Betancur**, Murdoch Children's Research Institute and University of Melbourne
		2025 Pawsey Medal **Associate Professor Claudia Lagos**, University of Western Australia **Dr Daria Smirnova**, Australian National University
		2025 Ruth Stephens Gani Medal **Dr Ira Deveson**, Garvan Institute of Medical Research
		2025 Aboriginal and Torres Strait Islander Scientist Award **Dr Mitchell Gibbs**, University of Sydney **Associate Professor Shannon Kilmartin-Lynch**, Monash University
		2025 Max Day Environmental Science Fellowship Award **Rebecca Greening**, University of Adelaide **Dr Nina Wootton**, University of Adelaide
4.30pm		**Close of session**

Australian Government

THE PRIME MINISTER'S PRIZES FOR SCIENCE 2026

It begins with you

Who will you nominate for the 2026 Prime Minister's Prizes for Science?

The Prime Minister's Prizes for Science celebrate demonstrated achievements in scientific research, research-based innovation, the practice of Aboriginal and Torres Strait Islander knowledge systems, and excellence in science teaching.

Recipients receive national recognition and up to $250,000.

If you know an individual, team or a group deserving recognition, nominate them for 1 of the 8 categories in the 2026 Prime Minister's Prizes for Science.

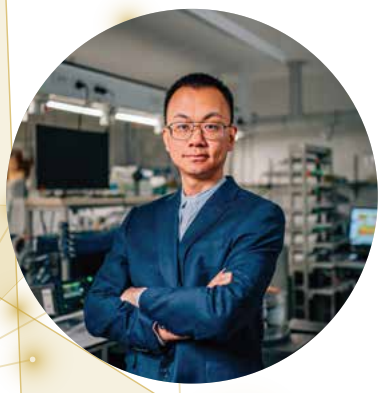
Nominations open later this year.

Scan the QR code to find out more at **industry.gov.au/pmprizes**

Contact the Prizes at **pmprizes@industry.gov.au**

"Receiving this Prize was both an unexpected honour and very humbling. It brought immense excitement and pride, while also offering a meaningful opportunity to highlight the vital role of paediatric anaesthesia and medical care we provide to our young patients."

Professor Britta Regli-von Ungern-Sternberg AM FAHMS
Chair of Paediatric Anaesthesia, The University of Western Australia
2024 Frank Fenner Prize for Life Scientist of the Year



"Winning the 2024 Malcolm McIntosh Prize for Life Scientist of the Year was outstanding recognition for not only myself but the whole team. It has given us a renewed sense of hope for the work we have been doing."

Distinguished Professor Tianyi Ma FRSC
Centre for Atomaterials and Nanomanufacturing, RMIT
2024 Malcolm McIntosh Prize for Physical Scientist of the Year

GALA DINNER

WEDNESDAY	6.30pm – 11.00pm	**QT Canberra**	**Gala Dinner**, supported by University of Sydney **Keynote address** **Senator the Hon Tim Ayres** Minister for Science and Minister for Industry and Innovation **Presentation of the 2025 Matthew Flinders Medal** **Professor Yuri Kivshar FAA**, Australian National University **Presentation of the 2025 Ruby Payne-Scott Medal** **Professor Jane Visvader FAA FAHMS FRS**, WEHI *More information available on page 41 of this program.*

THURSDAY 4 SEPTEMBER 2025 NATIONAL SYMPOSIUM

THURSDAY	8.00am	**Main Foyer**	**Registrations** open all day
		Arrival tea/coffee	**Jaeger Room**
	8.30am	**Ian Wark Theatre**	**National Symposium:** ***Australian Science, Australia's Future: Science 2035***
			Opening remarks: Professor Margaret Sheil AO FAA FTSE Secretary Science Policy, Australian Academy of Science
			Address: The Hon Dr Andrew Charlton MP Assistant Minister for Science, Technology and the Digital Economy
			Address: Professor Chennupati Jagadish AC PresAA FRS FREng FTSE President, Australian Academy of Science
			Address: Professor Stephen Garton AM FAHA FASSA President, Australian Academy of the Humanities
	9.30am	**Morning tea**	**Jaeger Room/Dorothy Hill Room/Lawns**
	10.15am	**Ian Wark Theatre**	**Findings of** ***Australian Science, Australia's Future: Science 2035***
			Professor Ian Chubb AC FAA FTSE, Convenor of *Australian Science, Australia's Future: Science 2035*
			Dr Hayley Teasdale, Head Science Policy and Advice, Australian Academy of Science
	12.00pm	**Lunch**	**Jaeger Room/Dorothy Hill Room/Lawns**
	1.00pm	**Ian Wark Theatre**	**Panel: Practical implications of the findings of** ***Australian Science, Australia's Future: Science 2035***
			Chair: Professor Peter Shergold AC FASSA, Chair, Australian Research Council
			Professor Kate Darian-Smith FASSA, President, Academy of the Social Sciences in Australia
			Professor Barney Glover AO FTSE, Commissioner, Jobs and Skills Australia
			Joseph Mitchell, Assistant Secretary, Australian Council of Trade Unions
			Professor Lynette Russell AM, Monash Indigenous Studies Centre, Monash University
			Professor Margaret Sheil AO FAA FTSE, Vice Chancellor, QUT and Secretary Science Policy, Australian Academy of Science
			Dr Caroline Smith, Head, Centre for Education and Training, Australian Industry Group
			Martijn Wilder AM, Chair, National Reconstruction Fund
	2.30pm	**Short break**	
	2.45pm		**Panel: Implications for the Strategic Examination of Research and Development (SERD)**
			Chair: Robyn Denholm, Chair, Strategic Examination of Research and Development
			Tony Cook PSM, Secretary, Department of Education
			Professor Susan Dodds FAHA, Deputy Chair, Australian Research Council and Policy Lead, Australian Academy of the Humanities
			Professor Mark Ferguson, Chair, European Innovation Council, former Chief Scientific Adviser to the Government of Ireland
			Rosemary Huxtable AO PSM, Chair, National Health and Medical Research Strategy
			Meghan Quinn PSM, Secretary, Department of Industry, Science and Resources
			Adjunct Professor Peter Rossdeutscher AM, Chair, Industry Innovation and Science Australia
	4.15pm		**Closing reflections: Professor Chennupati Jagadish AC PresAA FRS FREng FTSE** President, Australian Academy of Science
			Closing remarks: Professor Margaret Sheil AO FAA FTSE Secretary Science Policy, Australian Academy of Science
	4.30pm		**Close of session**
	4.45pm	**Coaches to airport: meet outside main entrance of the Shine Dome**	

ASSOCIATED EVENTS
MONDAY 1 SEPTEMBER

Early- and mid-career researcher (EMCR) workshops

DEVELOPING A ROBUST GRANT PROPOSAL

Facilitated by:
Dr Tamar Sztal,
The GrantEd Group

This workshop will walk research grant applicants through the four essential elements of a robust proposal: significance, quality, innovation and feasibility.

Each attendee will come away with answers to these questions for their own research projects:

- Who needs your research, within and outside of academia?
- What appropriate methodologies, methods, design elements or concepts do you need to ensure a high-quality project?
- What novel and innovative elements are built into your research plan, and how have you balanced this with risk?
- What involvement do you need from other organisations, policymakers, practitioners, networks or researchers to ensure your research is significant and feasible?

UNDERSTANDING THE ROLE OF SCIENCE IN INTERNATIONAL AFFAIRS AND DIPLOMACY

Facilitated by:
Professor Steven Chown FAA

This workshop is designed for EMCRs interested in understanding and engaging in science diplomacy. Through interactive discussions, expert insights and practical exercises, participants will explore how science diplomacy shapes global collaboration and policy, and how EMCRs can contribute to these efforts.

Participants will learn what science diplomacy is, why it matters, and its relevance to EMCRs. Attendees will reflect on their current engagement with science diplomacy and learn about key pathways to engage in science diplomacy.

Discussions will feature real-world scenarios, focusing on challenges in international science diplomacy, strategies for navigating these challenges, and opportunities for EMCRs to engage in global initiatives.

RESEARCH WITH IMPACT: A NATIONAL STRATEGY FOR BIODIVERSITY AND CLIMATE

Facilitated by:
Kate Nairn and Nazanin Hosseinpour,
Future Earth Australia

This workshop forms part of the co-design process for Future Earth Australia's strategy on biodiversity and climate change. Our aim is for early-career researchers and practitioners to develop a deeper understanding of how biodiversity and human rights intersect in both policy and practice.

Through this workshop, participants will be introduced to Future Earth Australia's transdisciplinary approach to strategy development and gain some insight into how diverse knowledge systems and sectors can be integrated. Most importantly, attendees will have the opportunity to contribute their voices, perspectives and lived experiences to the co-design of a national strategy, helping shape more inclusive, just and forward-looking outcomes.

Australian Academy of Science | emcrforum

The EMCR (Early- and Mid-Career Researcher) Forum is the voice of Australia's future scientific leaders. If you're an EMCR and want to contribute to improving the national research environment, become a member to hear about opportunities.

International Science Council Regional Focal Point for Asia and the Pacific: Academic Mentoring Program

Photo: Javier Allegue Barros, Unsplash.

The Asia-Pacific Academic Mentoring Program connects early-career researchers (ECRs) from Asia and the Pacific with senior scientists and scientific leaders from across Australia. The program aims to guide young scientists to become future leaders in academia within their home region.

Following a successful pilot year in 2024, the Asia-Pacific Academic Mentoring Program is running a second round of the program in September 2025.

The program will run for one year, with monthly online meetings between the mentor and the mentee. The International Science Council Regional Focal Point for Asia and the Pacific (ISC RFP-AP) is providing financial support to the selected ECRs to assist in international travel to take part in the program launch in Canberra in September 2025.

Mentees and mentors are also being supported by the ISC RFP-AP to attend Australia's premier science event, Science at the Shine Dome.

The Academy is delighted to welcome all mentees and mentors from across Australia and the Asia-Pacific region to participate in the event, as well as additional side events, meetings and workshops.

For more information about the ISC RFP-AP please use the QR code below.

International Science Council
Regional Focal Point for Asia and the Pacific

Falling Walls Lab Australia

The Falling Walls Science Summit is an international three-day conference held in Berlin each year, inspired by the fall of the Berlin Wall on 9 November 1989.

The question of every Falling Walls gathering is: Which walls will fall next? The conference fosters discussion on research and innovation and promotes the latest scientific findings.

The goal of the Falling Walls Lab is to advance scientific and entrepreneurial visions, and to initiate and promote exchange between outstanding talents and innovative thinkers across disciplines. The Lab is a fast-paced and exciting event that provides a platform for young researchers to share their ideas for solving grand challenges to help shape a more sustainable future.

Falling Walls Labs are organised by independent partners of the Falling Walls Foundation and are held in locations across the globe, with the winners from each Lab being invited to present at the global finale in Berlin on 7 November 2025.

This year's Australian finale is being held the day prior to Science at the Shine Dome 2025. Everyone is invited to join the audience at the Shine Dome to hear from the Australian finalists, and to find out who will win a place in the Berlin event.

For information about the event and the finalists, please use the QR code below.

FALLING WALLS LAB

NEW FELLOWS 2025

Professor David Adams FAA FAHMS

University of Wollongong

Professor David J. Adams is an internationally recognised leader in membrane physiology and neuroscience. He currently serves as Professor of Neurophysiology at the University of Wollongong. His pioneering research investigates the function and modulation of membrane receptors and ion channels, using molecular biology and electrophysiological techniques. Over the past 25 years, Professor Adams has characterised the mechanisms of action of novel venom-derived peptides, advancing our understanding of ion channel structure and contributing to the development of potential therapeutics for chronic neuropathic and visceral pain. He has held several prominent leadership roles, including Chair of Physiology and Head of the School of Biomedical Sciences at the University of Queensland, President of the Australian Physiological Society, Director of the Health Innovations Research Institute at RMIT University, and CEO and Executive Director of the Illawarra Health and Medical Research Institute.

Analgesic conotoxins targeting human sensory neurons via GABAB receptors: mechanisms and implications for pain therapy

Marine cone snail venom contains small, disulfide-rich peptides known as conotoxins, which target a wide range of membrane receptors, ion channels and transporters. Several conotoxins that selectively inhibit neuronal voltage-gated calcium channels show promise in preclinical models of chronic pain. Our research has led to the development of analgesic α-conotoxins that modulate calcium and potassium channels in sensory neurons via G protein-coupled receptors. Specifically, we identified gamma-aminobutyric acid type B (GABAB) receptor-mediated inhibition of calcium channels and potentiation of potassium channels as key mechanisms. These effects were replicated in human pluripotent stem cell-derived sensory neurons, where α-conotoxins significantly reduced action potential firing. Since pain signals are encoded by firing frequency, decreasing calcium influx and increasing potassium conductance through GABAB receptor activation offers a novel and promising strategy to suppress neuronal excitability. These findings support the potential of α-conotoxins as targeted, non-opioid therapies for managing chronic visceral and neuropathic pain.

Professor Gabrielle Belz FAA FAHMS

University of Queensland

Professor Gabrielle Belz trained in veterinary medicine and surgery. She has made major contributions to the field of immunology for which she was awarded a Doctor of Veterinary Science, has received the Australian Academy of Science's Gottschalk Medal and a Howard Hughes Medical Institute Investigator Award, and is a Clarivate Highly Cited Researcher. She has major interests in understanding the cellular and molecular factors that shape innate and adaptive immune responses that lead to long-term protective memory. Using sequencing and imaging approaches, her group aims to unravel the architecture of the mucosal immune system of the gut and lung – defining how these cells orchestrate immune homeostasis, protection against tissue damage and invasion that results in tissue disruption.

The guardians within: illuminating the dark matter of the immune system

The immune system is a vast, dynamic network operating largely in the shadows of our understanding – constantly surveilling, responding and adapting to protect the body. Key cellular sentinels – such as dendritic cells, innate lymphoid cells and memory T cells – orchestrate this hidden world of defence with exquisite precision. Understanding how immunity is initiated, maintained and sometimes subverted, particularly in the context of infection, cancer and chronic inflammation, is a fascinating puzzle. Uncovering the developmental pathways and regulatory circuits of immune cell fate has illuminated how immune responses are tailored across tissues and time. These findings have set the landscape for how we might harness the immune system to generate better vaccines or immunotherapies by engineering immune cells to control infections, autoimmunity and cancers.

Dr Pep Canadell FAA FTSE

CSIRO

Dr Josep (Pep) Canadell is a Chief Research Scientist in CSIRO's Environment Research Unit, Chief Lead Investigator in the Climate Systems Hub of the National Environmental Science Program, and Executive Director of the Global Carbon Project, a global consortium of scientists under the umbrella of Future Earth and a scientific partner of the World Climate Research Programme. Dr Canadell focuses on collaborative and highly integrative research to develop national, continental and global budgets and trend analyses of the main greehouse gases, including carbon dioxide, methane and nitrous oxide. He also studies the size and vulnerability of Earth's

carbon sinks and pools, carbon-climate feedbacks and pathways to net-zero emissions, including land-based carbon sequestration. He uses a robust understanding of regional and global biogeochemical cycles to inform the formulation of sub-national, national and international policy and actions to mitigate climate change.

The emergence of carbon-climate feedbacks in the Earth system

About half of all carbon dioxide emissions from human activities, primarily the combustion of fossil fuels and land clearing, are absorbed by natural CO_2 sinks on land and in the ocean. This extraordinary planetary service plays a crucial role in slowing climate change. However, is this removal fraction a constant feature of Earth's system, or will it change in response to a warming climate? Dr Canadell will explain what controls the carbon sinks, the changes we are already observing, and the consequences of altering the sink strength for managing the remaining carbon budget towards climate stabilisation.

Professor Deli Chen AO FAA

University of Melbourne

Professor Deli Chen is a Distinguished Professor of Soil and Environment Research in the School of Agriculture, Food and Ecosystem Sciences at the University of Melbourne, and Director of the ARC Research Hub for Smart Fertilisers. Professor Chen's research focuses on the nitrogen dynamics of plant-soil systems, efficiency of nitrogen fertiliser, animal waste management, mitigation of greenhouse gas emissions and remediation of environmental pollution. His research and reach have been recognised by Clarivate in the top 1% internationally for his publication citations. Professor Chen's research achievements have been recognised with the IFA Norman Borlaug Plant Nutrition Award (2024), as a lifetime Honorary Member of the International Union of Soil Sciences (2024), and he is a Fellow of the Soil Science Society of America, Soil Science Australia and American Society of Agronomy. He was honoured as an Officer of the Order of Australia (AO) in 2024 for distinguished service to sustainable agriculture.

Nitrogen for sustainable food production and environment

Nitrogen (N) fertiliser is responsible for food production that feeds over half of the global population, costing primary producers around $200 billion per year, but only less than half is recovered by crops. This represents a huge financial loss to farmers, but the societal cost to human and ecosystems health is much higher, due to the emissions of potent greenhouse gas nitrous oxide, air pollutant ammonia and nitrate contamination of waterways. Professor Chen has taken taken multi-disciplinary approaches to address these highly complex challenges. His team developed high-efficiency nitrogen fertilisers, quantified N loss pathways, and

formulated strategies to mitigate greenhouse gas emissions from crop and livestock systems. They applied 'big data' analytics to synthesise global N data and established a framework for the evidenced-based N index for agricultural products, and a N credit system to share responsibilities of N pollution among farmers, suppliers, consumers and governments.

Professor Helen Christensen
AO FAA FAHMS FASSA
UNSW Sydney

Professor Helen Christensen is a UNSW Scientia Professor in the Discipline of Psychiatry and Mental Health at UNSW Sydney, and the former Executive Director and Chief Scientist at Black Dog Institute. Professor Christensen is an internationally recognised expert on using technology to deliver evidence-based interventions for the prevention and treatment of depression, anxiety, suicide and self-harm. She has been an international leader in developing multi-level interventions for reducing self-harm in Australia. Her research also encompasses prevention of mental health problems in young people through school-based and e-health interventions, the use of digital phenotyping and AI in large-scale clinical and population-based trials.

The impact of technology on mental health care

Since 2000, the internet has facilitated early intervention for anxiety and depression, enabling millions worldwide to access effective interventions without needing a therapist. Mobile applications offer 'just-in-time' interventions during crises when clinicians are unavailable. Recent advancements include the use of chatbots: AI-driven tools that provide therapeutic conversations; AI in research: enhanced methodologies for delivering randomised controlled trials more efficiently; and digital phenotyping: the use of smartphone data for personalised interventions. However, the rapid adoption of these technologies poses risks. Social media usage has been linked to negative health outcomes among youth, raising concerns about its impact. Chatbots are largely untested. We need to investigate the potential harms of technology on mental health while continuing to develop safe, effective tools for mental health care that can be used globally, and for little cost.

Professor Tamara Davis AM FAA
University of Queensland

Professor Tamara Davis is a theoretical cosmologist, specialising in bridging the gap between cosmology theory and observations with a focus on dark energy. Throughout her career she has fortified the foundations on which modern cosmology is built. She led the cosmological analyses of several major astronomical surveys, including the recent Dark Energy Survey supernova cosmology that quintupled the number of distant supernovae ever measured. Her team has made robust measurements of the homogeneity-scale of the Universe, proposed a new way of measuring galactic distances, put upper limits on the mass of the neutrino, and measured time dilation in distant supernovae. She is Deputy Director of the Centre of Excellence for Gravitational Wave Discovery and leader of the Australian Dark Energy Survey. Her accolades include the Nancy Millis Medal from the Australian Academy of Science, the Astronomical Society of Australia's Ellery Lectureship, and an Order of Australia.

Adventures on the dark side of the Universe

Little did Professor Davis know when watching Star Wars as a kid that she'd spend her career studying the 'dark side'. What is the dark energy that's accelerating the expansion of the Universe? Discovered a quarter of a century ago, it appears to have some sort of anti-gravity property. Now we have zeroed in on how it's changed over the last 10 billion years. Using thousands of supernovae and millions of galaxies, we've mapped the cosmos and discovered to our surprise that dark energy may be changing with time. Along the way we've measured time dilation in distant supernovae, measured gravitational waves, and are closing in on mapping the entire observable Universe. This talk will touch on these aspects of what is a very exciting time for astrophysics.

Professor Jeff Errington FAA FRS
University of Sydney

Professor Jeff Errington has spent much of his research career studying fundamental questions about the structure and function of bacterial cells, including endospore formation, chromosome replication and segregation, cell division and cell morphogenesis. His lab was one of the pioneers in the application of digital fluorescence imaging methods to bacteria, underpinning emergence of the field of bacterial cell biology. Professor Errington's contributions to basic science have been recognised by election to various learned societies, including Fellowship of the Australian Academy of Science and the Royal Society. He founded two successful spinout companies, Prolysis Ltd and Demuris Ltd, the latter of which was recently acquired by US-based Odyssey Therapeutics.

L-form bacteria – from basic science to recurrent infection

Bacterial cells are miniscule but immensely sophisticated replicating molecular machines. The good ones are crucial for all the chemical cycles that keep the planet habitable, while some of the bad ones cause terrible infectious diseases. Antibiotics such as penicillin revolutionised health care, beginning in the 1940s, but we need new ones to prevent the ever-increasing threat from resistance. Over the last 40 or so years Professor

Errington's lab has studied basic features of bacterial cells including chromosome replication, cell growth and cell division – all functions that are potentially susceptible to new antibiotic chemicals. Most recently, they have focused on strange bacterial variants called 'L-forms' that completely lack the normally essential cell wall that is the target of penicillin. They are gathering evidence which shows that L-forms are probably responsible for important recurrent infections, such as of the urinary tract, and developing new compounds to kill L-forms and therefore prevent recurrence.

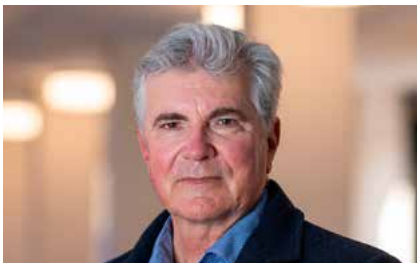
Professor Xiaojing Hao FAA FTSE

UNSW Sydney

Professor Xiaojing Hao is Scientia Professor and Deputy Director of ARC Research Hub for Photovoltaic Solar Panel Recycling and Sustainability at the University of New South Wales Sydney. She obtained her PhD in the School of Photovoltaic and Renewable Energy Engineering of UNSW in 2010. Her research focuses on low-cost, high-efficiency thin film solar cells and tandem solar cells for both solar photovoltaic and solar fuel applications. She has led her group in achieving a number of efficiency records on emerging thin film solar cells including kesterite (CZTS), antimony chalcogenide and perovskite solar cells. Professor Hao was the recipient of the inaugural Australian Renewable Energy Agency Postdoctoral Fellow, ARC DECRA Fellow, and ARC Future Fellow. She has been awarded more than 20 prestigious awards and prizes, including the 2020 Prime Minister's Prizes for Science: Malcolm McIntosh Prize for Physical Scientist of the Year, and the 2021 Australian Academy of Science Pawsey Medal.

Mastering defect dynamics – from atomic building blocks to high-efficiency solar cells

While silicon solar cells are close to approaching their theoretical efficiency limit, their tandem cells, which deliver higher power output per unit area, are urgently needed for further reducing cost and enabling wider deployment. The key challenge lies in finding the top cells to pair with silicon. The development of high-performance top cells hinges on a cyclical process of defect investigation, understanding and control. Much like a master Lego builder who adds, removes and swaps bricks to achieve a flawless model, semiconductor scientists refine precursor formulations, adjust growth conditions and apply targeted post-treatments to choreograph defect dynamics, ultimately crafting the ideal 'atomic architecture' for high-performance solar cells. Beginning with an overview of the physical origins and impact of defect types (0D, 1D, 2D and 3D defects), this talk will highlight how we reveal, understand and develop defect control strategies that lead to record efficiency breakthroughs of several top cell material candidates, and discuss future opportunities and challenges in accelerating tandem cells development.



Professor Mark Howden AC FAA FTSE

Australian National University

Emeritus Professor Mark Howden is a Vice Chair of the Intergovernmental Panel on Climate Change (IPCC) and was until recently Director of the ANU Institute for Climate, Energy and Disaster Solutions and Chair of the ACT Climate Change Council. He contributes to several other major science and policy advisory bodies. Professor Howden has worked on climate variability, climate change, innovation and adoption issues for almost 40 years in partnership with many industry, community and policy groups via both research and science-policy roles, and is a high-profile public communicator. He helped develop the national and international greenhouse gas inventories that underpin the Paris Agreement and pioneered sustainable ways to reduce emissions. He has been a major contributor to the IPCC since 1991, with a record number of roles across all four IPCC dimensions: climate science, impacts and adaptation, mitigation and GHG inventories, sharing the 2007 Nobel Peace Prize with other IPCC contributors and Al Gore.

The costs and benefits of climate change action vs inaction

The public discourse on climate change is becoming increasingly divorced from both the evidence base and the lived reality of people in Australia and across our region. Much of the media and political attention remains focused on the costs of transitioning from fossil fuel-based electricity supplies towards renewables, ignoring that this sector is only about 30% of our emissions profile (and hence omits the opportunities from other sources) and largely missing the many benefits of an effective energy transition. Similarly, there is media coverage of the growing cost of individual climate extreme events but the dots are often not joined to give an overall picture, nor are the benefits of adaptation options covered. This lack of an overview is arguably hampering rational debate as to our desired overall trajectory and in the process costing us and future generations dearly. This presentation will address the overall costs of climate action vs inaction.

Professor David Huang FAA FAHMS

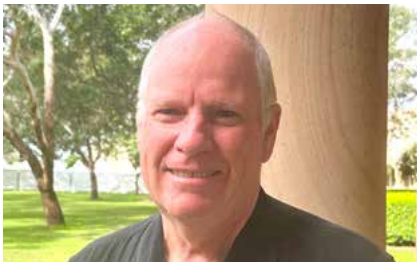
WEHI

Professor David Huang is a laboratory head at the Walter & Eliza Hall Institute (WEHI) and Professor, University of Melbourne. Since 2000, Professor Huang has led an independent research program

studying the mechanisms regulating cell death in mammalian cells, understanding how its deregulation leads to cancers, and how it can be therapeutically targeted. Basic research discoveries from his laboratory have contributed significantly towards the development of small molecules, such as venetoclax, designed to target the BCL2-regulated cell survival pathway which has transformed the treatment of certain blood cancers.

Targeting BCL2 for treating blood cancers

Targeting BCL2 with venetoclax has transformed the treatment of many blood cancers. Now approved in Australia and around the world for chronic lymphocytic leukaemia (CLL) and acute myeloid leukaemia (AML), venetoclax is also being explored in clinical trials for other blood cancers and solid tumours. This breakthrough can be traced back to pioneering research at WEHI which discovered that BCL2 promotes cells survival, an unexpected finding at the time. Subsequent intensive research, including pivotal ones, and WEHI's collaboration with industry partners led to the creation of BH3 mimetics, drugs designed to mimic the BH3-only proteins which are the physiological antagonists of BCL2 and its pro-survival relatives, such as MCL1. These efforts culminated in venetoclax, a BH3 mimetic selectively targeting BCL2. Its transformative potential was first demonstrated in clinical trials here in Australia. This presentation will trace the journey of the BH3 mimetics from discovery to clinical impact.



Professor Trevor Ireland FAA

University of Queensland

Professor Trevor Ireland's research is based in the broad areas of isotope geochemistry and cosmochemistry. He is particularly known for developing analytical techniques for samples, ranging from the preservation of interstellar stardust in meteorites through to the earliest development of Earth's crust, hydrosphere and atmosphere. His work on meteorites includes dating the oldest known materials in the solar system (at 4,567 million years) and measuring isotopic compositions of grains in meteorites that can trace their parentage back to supernovae and red giant stars.

A cosmochemist's view of the solar system

Detailed knowledge of the materials and distributions of those materials in the solar system have fundamental implications for the processes active in the formation of a planetary system. We have the serendipitous samples delivered by meteorites, but we still lack detailed context for these samples. Sample-return missions have been carried out for the Moon, a comet, the Sun, and recently two asteroids. These samples all provide context to our solar system, and in particular the distribution of elements and isotopes within it.

Dr Marlene Kanga AO FAA FTSE

Rux Energy Pty Ltd

Dr Marlene Kanga was National President of Engineers Australia and President of the World Federation of Engineering Organizations (WFEO), where she successfully led the proposal for UNESCO to declare 4 March as World Engineering Day for Sustainable Development. Dr Kanga is inaugural Co-Chair of Elevate, to increase women's participation in STEM; chairs the Institution of Chemical Engineers Safety Centre, with 100+ industry members globally; is a non-executive director of large Australian organisations in energy, water, transport and innovation; and a director of a company that is commercialising Australian research in hydrogen storage. Dr Kanga is a Fellow of the Australian Academy of Technological Sciences and Engineering, a Foreign Fellow of the ASEAN Academy of Technology and Engineering, an international Fellow of the Royal Academy of Engineering and a Foundation Fellow of the International Science Council. She was awarded an Officer of the Order of Australia for distinguished service to engineering, as a global leader and role model to women.

The innovation imperative for the lucky country

Australia has an excellent education system and world class-universities that undertake cutting edge research. Yet Australia has been falling in the rankings of the world's innovative nations. With the energy transition and the development of new technologies, there is an imperative for Australia to translate its research into commercialised outcomes that will benefit the nation and society. Dr Kanga will talk about Australia's position in the innovation race and the imperative for innovation, especially in engineering and technology, and present perspectives on how other nations are fostering and supporting their innovative sectors. She will present information on how her company is commercialising Australian research and achieving global success and technology leadership.

Professor Robert Mahony FAA

Australian National University

Professor Robert Mahony is a Professor in the School of Engineering at the Australian National University. He leads the Systems Theory and Robotics Group that undertakes research in non-linear systems and control with applications in robotics and computer vision. He played a pioneering role in developing non-linear filters for attitude estimation, an enabling technology in the early development of aerial robotic vehicles that underpins the modern multi-billion-dollar drone industry. He did seminal work on the control of quadrotor vehicles and was one of the champions in their early development and worldwide adoption. In other work, Professor Mahony developed geometric optimisation algorithms for eigenspace computation, developed algorithms for visual state estimation, and did fundamental work in designing asynchronous algorithms for processing event camera data.

Equivariant systems theory

Operating autonomous systems – such as cars, trucks, articulated vehicles, aeroplanes, blimps, rotor-craft, submersibles and surface vessels – safely in the real world depends on high-performance robust nonlinear control. State-of-the-art control design methodologies for these systems exploit problem-specific structure such as feedback linearisation, passivity and differentially flatness in order to obtain high performance and guarantee robustness. A core challenge in advancing nonlinear systems and control theory is to identify classes of control systems of real-world importance along with design paradigms for control and observer design tailored to those systems. Surprisingly, exploiting symmetry of non-linear control systems has not been considered as an effective design paradigm until quite recently. In his talk, Professor Mahony will show how symmetry can be exploited to obtain high-performance robust state estimation and control algorithms for a broad class of autonomous systems, why the associated theory is different from that developed in classical physics, and discuss some of the success stories of his research in the last few years.

Professor Richard Middleton FAA

University of Newcastle

Emeritus Professor Richard H Middleton received his PhD from the University of Newcastle, NSW. He has had visiting appointments at Urbana-Champaign, Michigan and the Hamilton Institute in Ireland. He has been awarded the Australian Telecommunications and Electronics Research Board Outstanding Young Investigator award, the Edgeworth-David Medal, and the M.A. Sargent Award. He is a Fellow of IEEE and IFAC. Professor Middleton has served as Head of Department of Electrical and Computer Engineering at the University of Newcastle; panel member and sub panel chair for the ARC; President of the IEEE Control Systems Society; as Director of the ARC Centre for Complex Dynamic Systems and Control; and as panel PE7 chair of the European Research Council Starting Grants Committee. His research interests include a broad range of control systems theory and applications.

Feedback, dynamics and control: the quiet achiever

Feedback, dynamics and control describes interacting systems involving repeated or continual sensing, computation, and communication and corrective actions/adjustments. Control systems underpin a huge array of

natural and artificial systems.
In the artificial world, control is an essential unsung hero of our modern technological society. In most cases, whether by artificial design, evolution or arising by other natural means, feedback is a low-complexity mechanism capable of achieving high performance, without detailed physical system knowledge and despite the presence of exogenous disturbing factors. In his talk, Professor Middleton will explore some of his key contributions to this area, including early work on adaptive control (a forerunner to the more modern reinforcement learning), later work on performance limitations and trade-offs in feedback control, and 'feedback' from applications to control systems science.

Professor Christina Mitchell

AO FAA FAHMS

Monash University

Professor Christina Mitchell is physician scientist and Executive Dean of the Faculty of Medicine, Nursing and Health Sciences at Monash University.
She graduated in Medicine (MBBS) from Melbourne University and did a PhD at Monash University on natural anticoagulants. She undertook a post-doctoral fellowship at Washington University on phosphoinositide signalling. Her research has characterised the metabolic pathways that regulate phosphoinositide signalling, in particular PI 3-kinase. Her group purified and characterised the inositol polyphosphate 5-phosphatases, and delineated their substrates and via genetically modified mouse models their role in development and disease. She was appointed Dean of Medicine, Nursing and Health Sciences at Monash University in 2011. She has been awarded the Lemberg medal (ASBMB) and became a Fellow of the Australian Academy of Health and Medical Sciences in 2014. She was awarded an Order of Australia (AO) in 2019 for service to haematology and medical research.

The role of phosphoinositide regulation in membrane biology

Phosphoinositides (PIs) are membrane-bound phospholipids, derived from the reversible phosphorylation of PI by the opposing actions of PI kinases and phosphatases. PIs influence endocytosis and intracellular receptor trafficking, cell metabolism, autophagy, cell proliferation and migration.

PI phosphatases encompass multiple enzyme families that hydrolyse specific phosphate groups from the inositol ring of PIs. Genetic mutations that alter the function or expression of phosphoinositide phosphatases are causative of severe developmental syndromes and/or contribute to human diseases such as cancer, metabolic disorders and neuropathies. The ten-enzyme family of inositol polyphosphate 5-phosphatases (5-phosphatases) were originally identified as regulators of PI(4,5)P2 and PI(3,4,5)P3 signalling that impacted on cell migration, endocytosis and cell proliferation. Primary cilia are evolutionarily conserved microtubule-based organelles that extend from the plasma membrane. PI regulation by 5-phosphatases has emerged as essential in maintaining cilia integrity. INPP5E mutations are causative of the human ciliopathies Joubert and MORM. More recently, INPP5K mutations were found to be causative of another rare developmental disease associated with muscle disease and mental retardation. Interestingly, INPP5K in muscle regulates the terminal phases of autophagy, specifically autophagic lysosomal reformation, by regulating the interconversion of PI(4,5)P2 to PI(4), which is essential for the budding, elongation of tubules from autolysosomes and their scission to make new lysosomes during prolonged autophagy.

Associate Professor Andrew Nash FAA FTSE

CSL Limited

Following an eight-year academic career at the University of Melbourne, Dr Andrew Nash transitioned to industry R&D where he has spent 28 years in a variety of research and executive leadership positions. While his industry career commenced at R&D start-up company AMRAD, he spent the last 18 years at CSL where he held the position of Chief Scientific Officer and Head of Research. In this role he provided overarching scientific leadership and is directly responsible for CSL's global research activity. During his career, Dr Nash has championed the translation of Australian biomedical research outcomes into new therapies for unmet medical need, led multiple projects that have transitioned into clinical programs, and contributed significantly to the development of an Australian workforce and the supporting infrastructure that is a prerequisite for a successful Australian-based biopharmaceutical sector. Recently retired from CSL, he currently has Board roles at the Burnet Institute and Brandon Capital Partners.

Targeting Factor XIIa – development of a novel therapy for the prevention of hereditary angioedema

Hereditary angioedema (HAE) is a debilitating and potentially life-threatening autosomal dominant genetic disorder characterised by recurring episodes of severe swelling, often accompanied by pain. In these patients, impaired C1 esterase inhibitor (C1-INH) activity leads to uncontrolled activation of Factor XII, which in turn activates the plasma kallikrein–kinin system and results in overproduction of the vasoactive peptide bradykinin. As a potentially novel approach to the treatment of these patients, Dr Nash's team used phage display technology to engineer a fully human monoclonal antibody (garadacimab) that binds FXIIa such that the CDR-H3 inserts deep into the S1 pocket to potently inhibit proteolytic activity. Garadacimab (or closely related surrogate reagents) were demonstrated to be highly effective in animal models of HAE and, following GLP studies that demonstrated safety in non-human primates, the molecule progressed into a clinical development program. In a Phase III study involving 65 HAE patients 12 years and older, monthly garadacimab administration significantly reduced HAE attacks and had a favourable safety profile. Garadacimab (brand name Andembry) has recently been approved by a number of regulatory agencies including the FDA, MHRA and TGA for the prophylactic treatment of HAE.

Professor Jessica Purcell FAA

Monash University

Professor Jessica Purcell is a mathematician, specialising in low-dimensional geometry and topology. She studies mathematical spaces called three-manifolds, which have important practical applications to crystallography and materials science, computer vision, and other fields. Professor Purcell is particularly well known for her work applying geometric techniques to mathematical knots, for example using difficult tools from geometric analysis to analyse changes in geometry of knotted objects. Her contributions have been recognised with a number of awards and invitations to present at high-profile international events. She has also been involved in significant leadership and mentoring activities and the promotion of science, particularly mathematical science.

The geometry of knots

Knots are familiar objects, arising in shoe laces and phone chargers around the world. But the mathematics of knot theory is both broad and deep, with applications ranging from quantum physics to protein molecules. Professor Purcell will describe some of the major open questions in knot theory, and how to use tools from geometry to address them.

Professor Clare Scott AM FAA FAHMS

WEHI

Professor Clare Scott, a clinician scientist, leads the Ovarian and Rare Gynaecological Cancers laboratory at WEHI and works as a medical oncologist at the Peter MacCallum Cancer Centre and Royal Women's and Royal Melbourne hospitals. Professor Scott's clinical expertise is in gynaecological cancers and coordinating care for patients with rare cancers. She has 25 years' experience in clinical cancer genetics, working in familial cancer clinics. Her laboratory focuses on making pre-clinical models in which to study drug resistance in rare gynaecological cancers. She set up the national WEHI Stafford Fox Rare Cancer Program to facilitate the study of many rare cancer types which are poorly researched. Professor Scott also set up the Australian Rare Cancer Portal so that expert rare cancer care and research could be streamlined for individuals, no matter where they live.

Exquisite targeting of cancer susceptibilities: when is it enough?

A series of very long term responses, perhaps even cures, have been observed for certain targeted therapies in specific cancer contexts. One context is the use of first-line maintenance PARP inhibitor therapy (PARPi) in DNA repair defective high grade serous ovarian cancer (HRD OC), particularly if BRCA2 is mutated. Over the last decade, Professor Scott's team has defined specific mechanisms of PARPi susceptibility and resistance in OC and other rare gynecological cancer types. They hypothesise that the emergence of a range of drug resistance mechanisms are more likely to occur in the absence of effective immune regulation early in the cancer journey. More recently they identified immune biomarkers of long-term response in OC in their SOLACE2 trial, as well as of effective

cancer control in 'super-survivors' – people who control 3–7 cancers or more in their lifetime and die at the same age as the general population. Understanding and reproducing these immune responses presents unparalleled opportunities for cancer control and prevention.

Professor Aidan Sims FAA

University of Wollongong

Professor Aidan Sims completed his PhD in operator algebras at the University of Newcastle. After a postdoc there he moved to a permanent position at the University of Wollongong and was promoted to Professor in 2012. He recently moved to UNSW to lead the new Quantum Mathematics Research Cluster, dedicated to research at the nexus of quantum mathematics, physics, engineering and computer science.

Quantum curve-sketching

These days, we are so familiar with sketching graphs and surfaces to understanding calculus and hence the mathematics of classical physics, that we forget what an important advance the idea was when Decartes developed it. But the challenges of quantum physics, and the associated mathematics, are a forceful reminder of how difficult it is to develop intuition without a good visual model. Professor Sims will discuss the problem of describing the mathematics of quantum physics – namely operator algebras – via intuitive models, and some of his work on approaches to this problem.

Professor Michael Stumpf FAA

University of Melbourne

Professor Michael Stumpf is Professor for Theoretical Systems Biology and an ARC Laureate Fellow. He studied physics and mathematics in Tübingen and Göttingen, and completed his DPhil in statistical physics at Oxford in 1999. After this he moved into biology, first in zoology at Oxford and then at University College London. From 2003 until 2018 he was Professor for Theoretical Systems Biology at Imperial College London. He moved to the University of Melbourne in 2018. Professor Stumpf's research is focused on cell-fate decision making processes

and the development of new computational, mathematical and statistical approaches to investigate cellular processes. In addition to shedding light on fundamental processes underpinning living systems, he also uses these approaches in synthetic biology to guide the behaviour of cellular processes and systems.

From blackboard to blueprint: CellMaps and synthetic biology

While developmental biology has largely progressed through observational studies, from the beginning of the 20th century this seemingly intricate, bewilderingly complex, yet robust, process has also fascinated mathematicians and theoretical physicists. Professor Stumpf will discuss how we can get insights into the fundamental processes underpinning living systems from increasingly detailed mathematical models called CellMaps. These models summarise our understanding and hypotheses about cellular processes and provide 'digital twins' for cells that we can use, alongside and in support of experimental studies, to gain deeper insights into, for example, cell-fate decision making processes. How much detail we can and should include is an important, and as yet unanswered, question. He will highlight some of the applications of CellMaps, including in synthetic biology, where they can serve as blueprints in the design of new cellular systems for use in engineering biology and biotechnology.

Professor Rajeev Varshney

FAA FRS

Murdoch University

Professor Rajeev K. Varshney is a globally renowned agricultural scientist recognised for his pioneering contributions to crop genomics and molecular breeding. He serves as Director of the Centre for Crop and Food Innovation, the WA State Agricultural Biotechnology Centre, and International Chair in Agriculture and Food Security at Murdoch University. He previously held key leadership roles at ICRISAT (a CGIAR institute) and IPK-Gatersleben in Germany. Professor Varshney has spearheaded the decoding of genomes for more than a dozen crops and developed genomic tools that have fast-tracked the development of climate-resilient, high-yielding varieties. With over 500 publications and numerous global accolades – including election to the Royal Society – he has significantly advanced global food and nutritional security, benefiting smallholder farmers across Asia and Africa and now contributing to the future of Australian agriculture.

Decoding crops, delivering impact

In an era of climate uncertainty, rising global food demands and evolving consumer preferences, advancing agricultural science is more critical than ever. Professor Varshney's research team focuses on decoding the genomes of key crops – such as wheat, chickpea, peanut, papaya and banana – and leveraging this knowledge to accelerate the development of climate-resilient, high-yielding and nutrient-rich varieties. By integrating genomics with breeding and seed systems, they have led international initiatives that have delivered improved crops to millions of smallholder farmers across Asia and Africa. Now based in Australia, their efforts are contributing to national agricultural innovation by applying global expertise to local challenges and extending these advancements to benefit international agriculture. This presentation highlights major milestones – from genome sequencing and QTL discovery to the deployment of genomics-assisted breeding – and underscores the translational nature of this science: from lab to field to impact. When aligned with farmers' needs, science becomes a transformative force for sustainable development and global food security.

Professor Guoxiu Wang FAA

University of Technology Sydney

Professor Guoxiu Wang is the Director of the Centre for Clean Energy Technology and a Distinguished Professor at the University of Technology Sydney (UTS). A leading expert in materials chemistry, electrochemistry and energy storage, his research focuses on advanced battery technologies and energy conversion systems. He currently serves as an Associate Editor for the journals Electrochemical Energy Reviews and Energy Storage Materials. Professor Wang's research encompasses lithium-ion, lithium-air, lithium-sulfur, and sodium-ion batteries, as well as electrocatalysis for hydrogen production. He has published over 800 peer-reviewed journal articles, which have attracted more than 92,000 citations and an h-index of 166 (Google Scholar). He has been consistently recognised as a Clarivate Highly Cited Researcher in materials science and chemistry. Professor Wang is an ARC Industry Laureate Fellow and an elected Fellow of the European Academy of Sciences.

Battery technologies driving clean energy transition

Global warming and climate change pose existential threats to our planet, driven primarily by the continued use of fossil fuels for energy. Achieving net-zero emissions requires a rapid transition away from fossil fuels toward renewable energy sources. However, renewables such as solar and wind are inherently intermittent, relying on weather conditions for electricity generation. Battery technology plays a crucial role in overcoming this challenge by enabling the reliable integration of renewable energy into the grid and powering the electrification of transport systems. In his talk, Professor Wang will briefly introduce his team's achievements in several advanced battery technologies. These include lithium-air batteries and

high-energy lithium metal batteries for electric vehicles; low-cost rechargeable batteries such as sodium-sulfur batteries and zinc-ion batteries for grid-scale renewable energy; rational design of electrolyte systems for improving the safety of high-energy batteries; and facile and sustainable recycling of spent lithium-ion batteries.

Professor Nicole Webster FAA

University of Tasmania

Professor Nicole Webster is Executive Director at the Institute of Marine and Antarctic Studies, University of Tasmania where she has responsibility for improving understanding of temperate marine, Southern Ocean and Antarctic environments, their resources, and their roles in the global climate system through research, education and outreach. Professor Webster is an experienced science leader across both academia and government. From 2021–24 Professor Webster was Chief Scientist of the Australian Antarctic Program where she worked to develop innovative and collaborative pathways needed to improve understanding, management and conservation of this wild and fragile ecosystem. For the previous two decades, Nicole worked as Principal Research Scientist at the Australian Institute of Marine Science and Professor at the Australian Centre for Ecogenomics, University of Queensland where she undertook research to uncover the contributions of microscopic life to marine ecosystem health.

Microbial seas in a changing climate

Coral reefs depend on intricate bacterial symbioses that facilitate essential ecosystem functions including nutrient cycling, host immunity and larval recruitment. These microbial partnerships, evolved over millions of years, are increasingly threatened by climate change – with cascading effects on ecosystem stability. Rising temperatures can trigger stress responses in both hosts and their microbial communities, leading to symbiont loss and altered metabolic functions that adversely impact host health. Ocean acidification can compound these effects by shifting microbial community composition and reducing the effectiveness of bacterial settlement cues essential for coral recruitment. These changes further compromise the capacity for reef recovery and regeneration. Furthermore, climate-driven changes in bacterial communities can alter biogeochemical cycling processes that maintain reef productivity. Understanding and monitoring these microbial shifts is essential for predicting reef resilience and developing effective conservation strategies in our changing oceans.

Professor Tony Weiss

AM FAA FTSE FAHMS

University of Sydney

Professor Anthony Weiss is the McCaughey Chair in Biochemistry and NHMRC Leadership Fellow in the Charles Perkins Centre, University of Sydney. He is the world leader in molecular studies of tropoelastin, the key protein building-block that gives tissue its elasticity, and its assembly to make elastin protein biomaterials that accelerate tissue damage repair. Awards include the Prime Minister's Prize for Innovation, Eureka Prize for Innovation in Medical Research, NSW Premier's Prize for Science and Engineering Leadership in Innovation, ATSE's Clunies Ross Award and the Australian Academy of Science Ian Wark Medal. Professor Weiss is on 14 editorial boards, a company founder, an inventor on 174 granted international patents in 23 patent families, and has 270 publications. He is Chair, Fellows of Tissue Engineering and Regenerative Medicine, and prior to that President of the Tissue Engineering and Regenerative Medicine International Society and President of the Matrix Biology Society of Australia and New Zealand.

Tropoelastin as a driver of 3D complex architectures and enhanced cell performance

In every species of mammal, bird and reptile, and across almost the entire vertebrate world, the skin, lung, arteries and other tissues require elasticity to function. What bestows this elasticity is the protein elastin, which in turn is assembled from the structural protein building-block tropoelastin. We have found that tropoelastin can promote the repair of many types of damaged tissues, and identified collaboratively that tropoelastin can allow stem cells to delay senescence while retaining phenotype and function. Despite these critical abilities, and even though the tropoelastin gene is essential, paradoxically the production of tropoelastin drops precipitously with age. Professor Weiss will present advances in our mechanistic understanding in the use of tropoelastin to deliver organised elastin in vascular walls during replacement-repair in vivo, promote heart muscle survival and recovery in an in vivo model of ischemic injury, and help heal surgical wounds.

Absent new Fellows

Also elected in 2025, but unable to join us, are:

Professor Jürgen Götz FAA FAHMS

Professor Derek Leinweber FAA

Dr Donna Strickland

FAA FRS Nobel Laureate

(Corresponding Member)

Professor Hiro Suga FAA

(Corresponding Member)

45 Years of Impact

Celebrating 45 years of the GSK Award for Research Excellence

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ACADEMY AWARDS 2025

Premier honorific awards 2025

Premier honorific awards are the Academy's most prestigious awards, recognising researchers of the highest standing over a career of whatever length.

MATTHEW FLINDERS MEDAL AND LECTURE

The Matthew Flinders Medal and Lecture is a Premier career award that recognises scientific research of the highest standing in the physical sciences, and honours the contributions of Australia's early scientific researchers.

Professor Yuri Kivshar FAA
Australian National University

Professor Yuri Kivshar received his PhD in 1984 in Kharkov, Ukraine. He left the Soviet Union in 1989 and after several visiting positions in Europe, he settled in Australia in 1993. He has been a Fellow of the Australian Academy of Science since 2002, and also a Fellow of Optica, APS, SPIE and IOP. He has received many awards, more recently the 2022 Max Born Award (Optica, former OSA) and the 2025 ZEISS Research Award (Germany). Professor Kivshar's research interests include nonlinear physics, metamaterials and nanophotonics.

Metamaterials and metaphotonics

Professor Kivshar will introduce the field of metamaterials, and its follow-up development termed as metaphotonics. He will also summarise recent advances. The word metamaterials was coined about 25 years ago, with 'meta' taken from the Greek word μετά meta meaning beyond, and it is used to describe artificial, man-made materials engineered to have unusual properties typically rarely or never observed in nature. Metamaterials are usually composed from subwavelength elements (often called meta-atoms) made of conventional materials such as metals and dielectrics, and they are arranged in simple or complex lattices. The meta-atoms can be engineered at will by varying their material, shape, size and lattice arrangement, creating their collective 'smart' properties for manipulating electromagnetic, acoustic or even seismic waves. The recently emerged field of Mie-resonant metaphotonics (also called Mie-tronics) employs resonances in high-index dielectric nanoparticles and dielectric metasurfaces aiming for novel applications of subwavelength optics and photonics.

RUBY PAYNE-SCOTT MEDAL AND LECTURE

The Ruby Payne-Scott Medal and Lecture is a Premier career award that recognises female researchers of the highest standing in the physical and/or biological sciences. It is one of the most prestigious career awards of the Academy and honours Ruby Payne-Scott's pioneering contribution to radiophysics and radio astronomy.

Professor Jane Visvader

FAA FAHMS FRS

WEHI

Professor Jane Visvader is Joint Head of the Breast Cancer Laboratory and the Division of Cancer Biology and Stem Cells at the Walter and Eliza Hall Institute of Medical Research (WEHI), and holds a professorial appointment at the University of Melbourne. Her primary research interests are directed towards understanding the breast epithelial hierarchy and elucidating cells susceptible to breast oncogenesis. Her laboratory's contributions to the mammary gland field include the prospective isolation of mouse and human mammary stem cells; the definition of key regulators of lineage commitment and differentiation; and the identification of luminal progenitors as the 'cell of origin' in BRCA1 mutation carriers. Professor Visvader is a Fellow of the Australian Academy of Science, the Australian Academy of Health and Medical Sciences, the Royal Society (London) and the American Association for Cancer Research.

From the breast stem cell hierarchy towards therapeutics and prevention

Led by Professor Visvader and Professor Geoff Lindeman, the team's research centres on understanding cellular and molecular mechanisms that contribute to normal mammary gland development and breast cancer. They have focused on unravelling the normal cell types that reside in breast tissue, cellular relationships and molecular regulators, and how these cells are perturbed during the early stages of neoplasia. The identification of stem and progenitor cells in breast tissue has led to the definition of a normal cellular differentiation hierarchy, with implications for identifying cells prone to cancer and new therapeutic targets for breast cancer prevention and treatment. The identification of cells of origin in breast tissue from women who carry a pathogenic BRCA1 variant has culminated in an international phase III prevention trial for BRCA1 carriers. They have also applied high resolution 3D imaging and single cell expression profiling to study aberrant areas within precancerous tissue and heterogeneity among cancer cells. These technologies are also being applied to dissect and understand the role of the tumour microenvironment in breast oncogenesis.

Career honorific awards 2025

Career honorific awards recognise lifelong achievement in the outstanding contribution to the advancement of science.

DAVID CRAIG MEDAL

The David Craig Medal is awarded in honour of the outstanding contribution to chemical research of Emeritus Professor David Craig AO FAA FRS. It recognises contributions of a high order to any branch of chemistry by active researchers. The recipient of this medal delivers several public lectures across Australia.

Professor Alison Rodger FAA

Australian National University

Professor Alison Rodger is Director of the Research School of Chemistry at the Australian National University, having previously been at Macquarie University and the universities of Warwick, Oxford and Cambridge. She received BSc, PhD and DSc from the University of Sydney, MA from Oxford, DSc from Warwick, and BA from Chester. She was Unilever Fellow at St Catherine's College, Oxford, Violette and Samuel Glasstone Fellow at St Hilda's College, Beatrice Dale Fellow at Newnham College Cambridge, and an Overseas Scholar of the Royal Commission for the Exhibition of 1851. At Warwick and Macquarie she was founding director of doctoral training centres. She is passionate about supporting early-career researchers, especially those working across disciplines.

Inferring how molecules behave from their interaction with light

Molecules and molecular structures make up the world in which we live but they are too small to see directly, so we need to develop instrumentation that measures what they are and how they behave on a molecular scale. Before designing an experiment, it is important to decide what questions one needs to answer – sometimes a simple measurement is all that is required. Reflecting on David Craig's research, Professor Rodger will show how polarised light enhances what we can measure with absorbance and emission spectroscopic techniques whether the target is DNA, a biopharmaceutical drug, or a bioactive product with a complex matrix. As we look to the future, it is important that molecular scientists emphasise doing chemistry sustainably. This often requires formulating a challenge, such as reducing the cost (financial, labour, environmental) of solvent disposal, and using our expertise, such as spectroscopy, to help solve it.

HANNAN MEDAL

The Hannan Medal recognises outstanding research in any of the fields of statistical science, pure mathematics, and applied mathematics and computational mathematics, and is made in one of those three areas in turn at two-yearly intervals. It honours the contribution to time series analysis of Professor E J Hannan FAA FASSA, Professor of Statistics at the Research School of Social Sciences of the Australian National University. In 2025 it recognises outstanding research in statistical science.

Professor Noel Cressie FAA

University of Wollongong

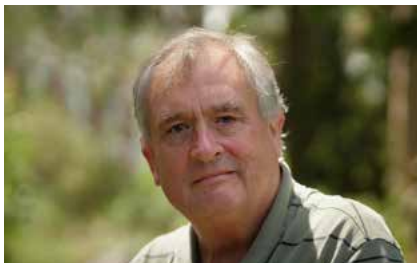
Professor Noel Cressie is Distinguished Professor of Statistics and Director, Centre for Environmental Informatics, University of Wollongong. His four books include the highly cited 'Statistics for Spatial Data' and two award-winning co-authored books on spatio-temporal statistics. He has published over 350 articles, chapters, reviews and discussions in scholarly journals; edited books and magazines; and is currently ranked first in Australia (88th globally) in mathematics by Research.com. Professor Cressie is a world leader in environmental informatics, including analysing NASA's satellite observations of atmospheric CO_2. He uses (empirical-)Bayesian statistical models to do 'big science', including for NASA/ESA's Mars Sample Return mission and Securing Antarctica's Environmental Future. Awards include the international R.A. Fisher Award and Lectureship and the Pitman Medal from the Statistical Society of Australia. He is a Fellow of the Australian Academy of Science and the Royal Society of NSW, among others.

NASA/ESA's Mars Sample Return mission: Bayesian statistics for planetary protection

The Mars Sample Return (MSR) mission of NASA and ESA (European Space Agency) involves the collection and return to Earth circa 2040 of samples from the surface and atmosphere of Mars. A 'tiger team' of scientists released a report in 2024 on planetary protection from potential biohazards in the returned samples. This lecture develops the Bayesian statistical design used to determine how many subsamples will be needed for biohazard testing. There are no data available since the samples are still on Mars. However, there is prior astrobiological knowledge, and a Bayesian statistical approach can direct how that knowledge can be used. The number of subsamples is seen to depend on a prespecified risk-tolerance threshold (such as one in a million) and three other quantities that originate from the Bayesian design. Monte Carlo simulation is used in a digital twin to compute the number of subsamples needed for biohazard testing of each sample tube returned from Mars.

JAEGER MEDAL

The Jaeger Medal is a career award made in honour of the contribution of Professor John Jaeger FAA FRS to Australian Earth science. The award is made to a scientist for investigations of a high order into the solid Earth or its oceans carried out in Australia or having some connection with Australian Earth science. Although work carried out during a candidate's entire career is taken into consideration, special weight is given to recent research.



Professor Hugh O'Neill FAA FRS

Monash University

Professor Hugh O'Neill is an Earth scientist whose career has focused on experimental petrology and geochemistry. His work has aimed at advancing our understanding of how rocky planets form, using experimental and theoretical studies of the thermodynamic properties of minerals and melts to solve large-scale geological problems. Professor O'Neill has contributed to the understanding of several key questions relating to our planet, including the chemical composition of Earth and how it differs from other planets; the origin of the Moon; the geochemical evolution of Earth's mantle; and the origin of basalts. His current research interests include the composition of Earth compared to other rocky planetary bodies, the solubilities of volatile species in magmas, diffusion and other transport properties of minerals, the trace-element geochemistry of basalts, and X-ray absorption spectroscopy of geomaterials. Professor O'Neill is an adjunct at Monash University and has a part-time position at the Guangzhou Institute of Geochemistry, China.

The stochastic factor in determining Earth's chemical composition

Evaluating the chemical composition of Earth requires synthesising not only a large amount of data but also the implications of these data for how large-scale tectonic processes have operated over the history of Earth. The Earth composition model is, in spirit, a summary of both geological and cosmochemical knowledge. The ensuing challenge is then to match the model composition with physical models of planetary accretion. From this dialectic, it emerges that small variations in processes that are essentially stochastic during accretion can result in substantial changes in several chemical factors that have determined the ability of Earth to have developed life. This insight has the implication for recognising Earth-like exoplanets that are also suitable for life (as we know it): just because an exoplanet has Earth's mass and radial distance from a star of solar composition is insufficient. Atmospheric composition would seem to be the only criterion.

SUZANNE CORY MEDAL

The Suzanne Cory Medal recognises outstanding research in all of the biological sciences, being awarded in alternate years in the biomedical sciences and in all of the biological sciences excluding biomedical sciences. It is a career award that is open to any biological science researcher regardless of time since their major degree. It honours the contributions made to science by Professor Suzanne Cory AC FAA FRS who, as a molecular biologist, has made major contributions to understanding the genetic causes of cancer. In 2025 it recognises outstanding research in the biological sciences excluding biomedical sciences.

Professor Steven Chown FAA

Monash University

Professor Steven Chown is Professor of Biological Sciences at Monash University, and Director of Securing Antarctica's Environmental Future, an Australian Research Council Special Research Initiative. His research concerns biodiversity patterns and their evolution; conservation responses to environmental change; and the human–environment intersection in natural, agricultural and urban settings, including the science–policy nexus. For many years Professor Chown has represented the international Scientific Committee on Antarctic Research (SCAR) at the Antarctic Treaty Consultative Meetings, which set policy for and regulate the region. He was Australia's first President of SCAR in the organisation's more than 65-year history, and was elected an Honorary Life Member of SCAR in 2021. Professor Chown is a Fellow of the Australian Academy of Science, and an International Honorary Member of the American Academy of Arts and Sciences. He has received numerous awards for his work.

Functional traits, physiological diversity and the distribution of life on Earth

Life is not uniformly distributed across the planet, nor across time. Places differ in their living diversity and in the histories of that diversity. How and why they do so is one of the oldest questions in biology. It is also one of the most contemporary; not only because of the need to understand how our human actions are changing life across the planet and the consequent implications for us, but also because the story of life is the story of our lives. Changes in data availability, computing and theory have all revealed surprising new twists to these tales. Some have come from considering older data – such as on physiological variation – in novel ways. Others have come from entirely fresh perspectives on long-standing questions such as the role functional diversity plays in determining the spatial and temporal variation of life's richness. As we unveil deeper perspectives on life's diversity, the scale of its loss becomes more profoundly disturbing.

THOMAS RANKEN LYLE MEDAL

The Thomas Ranken Lyle Medal is a career award that commemorates the contribution of Sir Thomas Ranken Lyle FRS to Australian science and industry generally, and in particular to his own fields of physics and mathematics. The purpose of the medal is to recognise outstanding achievement by a scientist in Australia for research in mathematics or physics.

Professor George Willis FAA

University of Newcastle

Professor George Willis completed a BSc(Hons) at the University of Adelaide and a PhD in mathematics at Newcastle University, UK. The original focus of his research was on functional analysis and the relationship between algebraic and topological properties of infinite-dimensional spaces. After holding positions in Australia and Canada, he moved to a teaching and research position at the University of Newcastle in NSW. Coinciding with that move, his research focus shifted to topological groups when a breakthrough made concerning totally disconnected, locally compact groups led him to initiate a new investigation of the symmetry of network structures. He has been co-editor and then Editor of the Journal of the Australian Mathematical Society. His research has been recognised with election to the Australian Academy of Science and the award of the Gavin Brown and George Szekeres prizes of the Australian Mathematical Society.

The scale function on totally disconnected groups

Totally disconnected groups account for the symmetry of networks. Whereas many groups have linear representations that allow techniques from linear algebra, such as eigenvalues and eigenvectors, to be used in analysis of the groups, that is not the case for totally disconnected groups. The scale is an integer-valued function on a totally disconnected group that partially substitutes for eigenvalues and certain subgroups affiliated with the scale substitute for eigenvectors. These ideas are the starting point for new directions in the study of totally disconnected groups. In particular, they reveal the key role of regular trees in the understanding of infinite symmetric networks.

Mid-career honorific awards 2025

Mid-career awards recognise outstanding contributions to the advancement of science by researchers between eight and 15 years post-PhD in the calendar year of nomination.

JACQUES MILLER MEDAL

The Jacques Miller Medal for Experimental Biomedicine honours the contributions made to science by Professor Jacques Miller AC FAA FRS that include the discovery of the function of the thymus and the identification, in mammalian species, of the two major subsets of lymphocytes and their functions. The award recognises research of the highest standing in the field of experimental biomedicine.

Professor James Hudson

QMIR Berghofer Medical Research Institute

Professor James Hudson runs the Cardiac Bioengineering lab at QIMR Berghofer. His lab has brought together engineering and cell biology disciplines to develop human cardiac organoids, including foundational technologies currently in clinical trials. As the inaugural recipient of the Snow Medical Fellowship, he is now generating a 'Cardiopedia' aiming to provide a comprehensive map of the molecular processes governing cardiac function. His work bridges basic science through to drug discovery for heart failure and targeting the pathological biological processes in heart failure. Professor Hudson regularly publishes leading innovations in cardiovascular research in the top journals in his field. For his work he has been awarded the Metcalf Prize from the National Stem Cell Foundation of Australia and the Jian Zhou Medal from the Australian Academy of Health and Medical Sciences.

Bioengineered human cardiac tissue: a therapeutic and a model system

Professor Hudson's lab created human heart muscle tissue with distinct requirements – as a patch cellular therapy for heart failure and as a miniaturised drug discovery platform. He will provide a brief overview of his lab's studies on heart failure using patches, and describe the project to generate 'Cardiopedia', a gene-transcriptome-function in silico model for human heart muscle. His lab has already used this data to provide critical novel insights into heart disease and he will present a variety of different applications and discoveries it has recently uncovered – including foundational data for the development of next generation bromodomain extra-terminal protein inhibitors for inflammation-driven heart failure.

NANCY MILLIS MEDAL

The Nancy Millis Medal honours the contributions made to science by Professor Nancy Millis AC MBE FAA FTSE and recognises her importance as a role model for women aspiring to be research leaders. The award recognises outstanding research and leadership by women in any branch of the physical and biological sciences.

Associate Professor Natasha Hurley-Walker

Curtin University

Associate Professor Natasha Hurley-Walker leads the Our Galaxy research group at the Curtin University node of the International Centre for Radio Astronomy Research. She primarily observes with large radio telescopes, especially the Murchison Widefield Array, and has led several wide-area sky surveys which have advanced astrophysics in many fields. Her well-received TEDx talk on radio astronomy has been viewed over two million times, and as a TEDx Kings Park board member and Guest Curator, she has mentored several other speakers to the stage. For her astrophysical research, outreach, and work on gender equity in STEM, she has been named a WA Tall Poppies Scientist of the Year, an ABC Top 5 Scientist, a Superstar of STEM, the Astronomical Society of Australia Anne Green Mid-Career Researcher of the Year, and one of ABC Triple J's Hottest 100 Scientists.

Transforming our view of the radio sky

The celestial sky shines with electromagnetic waves spanning a vast range of wavelengths. Radio observations reveal some of the Universe's most energetic phenomena – magnetic interactions, exotic objects and explosive events. Thanks to cutting-edge radio telescopes, the Australian outback is now one of the best places on Earth to explore these cosmic mysteries. In her talk, Associate Professor Hurley-Walker will share how her creative methods and bold projects with Australian instruments have reshaped our perspective of the radio sky: producing, for the first time, a 'radio colour' map that reveals details of complex astrophysical processes, and unlocked the time domain, leading to the identification of a completely novel class of cosmic sources. These breakthroughs are helping position Australian astronomy at the forefront of discovery as we prepare for the era of the world's largest radio telescope, now taking shape in Western Australia.

Early-career honorific awards 2025

Early-career awards recognise outstanding contributions to the advancement of science by researchers no more than 10 years post-PhD in the calendar year of nomination.

ANTON HALES MEDAL

The Anton Hales Medal recognises outstanding research in the Earth sciences and honours the contributions to the Earth sciences by Professor Anton Hales FAA. Professor Hales was the founding director of the Research School of Earth Sciences at the Australian National University.

Associate Professor Stijn Glorie

University of Adelaide

Associate Professor Stijn Glorie is an ARC Future Fellow and Associate Professor at the University of Adelaide. His research focuses on the development and application of a variety of radiometric dating methods to constrain the thermo-tectonic history of the continental crust. Associate Professor Glorie has 15 years of experience in thermochronology and he has led the development and application of novel geochronological methods using in situ reaction cell mass-spectrometry (Lu-Hf, Re-Os and Rb-Sr decay systems).

CHRISTOPHER HEYDE MEDAL

The Christopher Heyde Medal honours the contributions to mathematics by Professor Christopher Charles Heyde AM FAA FASSA. Professor Heyde was the Foundation Dean of the School of Mathematical Sciences at the Australian National University, and Professor Emeritus of Statistics at Columbia University, New York. In 2025 it recognises outstanding achievement in pure mathematics, applied, computational and financial mathematics.

Associate Professor Anita Liebenau

UNSW Sydney

Associate Professor Anita Liebenau is recognised internationally as a leading mathematician working in extremal and probabilistic combinatorics. Originally from Germany, she got her PhD from the Freie Universitat Berlin, had postdoc positions at Warwick University and Monash University, was a Decra Fellow, and is now at UNSW. She has worked on enumeration problems of large discrete structures such as regular graphs, problems in Ramsey theory and combinatorial games played on graphs. Among her many achievements, she developed a breakthrough method for enumerating regular graphs, leading to the first progress since 1989. She has also proved important results on thresholds for games on graphs, and has made major contributions towards resolving the Erdős–Hajnal conjecture.

DOROTHY HILL MEDAL

The Dorothy Hill Medal honours the contributions of Professor Dorothy Hill AC CBE FAA FRS to Australian Earth science, and her work in opening up tertiary science education to women. It recognises outstanding research in the Earth sciences by women researchers.

Dr Linda Armbrecht

University of Tasmania

Dr Linda Armbrecht is a marine biologist and senior lecturer at the Institute for Marine and Antarctic Studies, University of Tasmania. Her research focuses on the reconstruction of marine ecosystems with an emphasis on the Antarctic environment, where research into resilience and sustainability is critical due to climate change. Dr Armbrecht specialises in paleo-genomics techniques, in particular the analysis of ancient DNA from the seafloor (sedaDNA). These novel approaches allow her to track complex species-level and ecosystem-wide changes over many thousands of years, knowledge that can be directly applied to predicting future changes and management of marine ecosystems, fisheries and keystone species.

FENNER MEDAL

The Fenner Medal recognises outstanding contributions to science by Professor Frank Fenner AC CMG MBE FAA FRS. It recognises outstanding research in biology (excluding the biomedical sciences).

Associate Professor Katherine Moseby

UNSW Sydney

Associate Professor Katherine Moseby is a Conservation Biologist at the University of New South Wales. She focuses on ecological research that can lead to policy change and on-ground conservation action. She spends considerable time working in Australia's remote deserts and is interested in understanding the processes of ecosystem restoration, mammal conservation and rewilding. Her research interests include ecosystem restoration, predator–prey interactions and improving the reintroduction success of threatened species. Associate Professor Moseby has co-founded four conservation research partnerships including Arid Recovery and Middleback Alliance in SA, Wild Deserts in NSW, and Tetepare Island in the Solomon Islands. She has previously worked for universities, governments, industry groups and NGOs and has a strong focus on collaboration.

Associate Professor Daniel Noble

Australian National University

Associate Professor Daniel Noble is spearheading global initiatives to improve biostatistical analyses of ecological and evolutionary studies. He has developed analytical approaches to deal with existing data, methods to estimate missing data, and user-friendly software for data extraction. His new tools are invaluable to biologists but are also used globally by scientists in fields as diverse as psychology and genetics.

GOTTSCHALK MEDAL

The Gottschalk Medal recognises outstanding research in the biomedical sciences and honours the contributions to science of Professor Alfred Gottschalk FAA.

Associate Professor Amy Cain

Macquarie University

Associate Professor Amy Cain gained her BSc (Hons I) and PhD in microbiology from the University of Sydney. She then worked in Cambridge (UK) at the Wellcome Sanger Institute, developing bespoke genomics techniques to examine antibiotic resistance, and in Malawi, tracking hospital-acquired infections at the Malawi-Liverpool-Wellcome Clinical Research Program. Next, she joined Vertex Pharmaceuticals, working between Oxford (UK) and Boston (USA) learning drug discovery. Associate Professor Cain then moved back to Australia as an ARC DECRA Fellow to establish her own group at Macquarie University. Currently she is an ARC Future Fellow, Associate Professor at the School of Natural Sciences, Macquarie University and Director of the Galleria Research Facility. Associate Professor Cain's team uses functional genomics to tackle antibiotic resistance in hospital pathogens and develop new antibiotics. She also takes synthetic biology approaches to build new-to-nature microbes that can recycle end-of-life plastics.

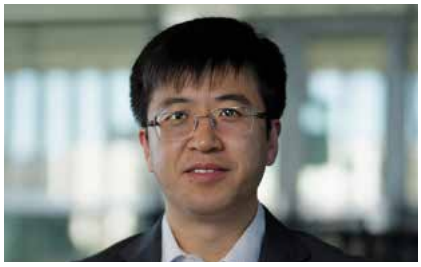
Associate Professor Shom Goel

Peter MacCallum Cancer Centre

Associate Professor Shom Goel is a physician-scientist at the University of Melbourne and Peter MacCallum Cancer Centre, where he co-leads the Cancer Biology and Therapeutics Program. He completed his doctoral and postdoctoral research at Harvard Medical School, returning to Australia in 2019. Alongside clinical practice as an oncologist and triallist, he leads a research lab focused on cell cycle biology, epigenetics, and cancer immunology. His notable work on cyclin-dependent kinases in cancer has been published in leading journals including *Cancer Cell, Nature, Nature Cancer,* and *Cancer Discovery.* Associate Professor Goel serves as Global or Translational PI on multiple breast cancer clinical trials informed directly by his laboratory findings. He previously chaired the American Society of Clinical Oncology Education Committee, and recent accolades include a Snow Fellowship and an Era of Hope Scholar Award from the US Department of Defense.

JOHN BOOKER MEDAL

The John Booker Medal in Engineering Science recognises outstanding research in engineering mechanics that addresses problems in the static and dynamic response of physical systems within engineering and applied mathematics disciplines. It honours the work of Professor John Robert Booker AO FAA.



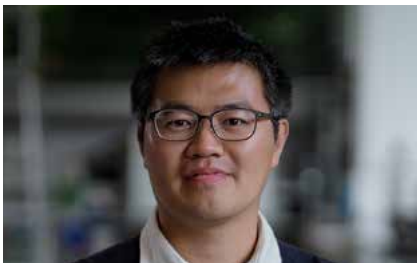
Associate Professor Qianbing Zhang

Monash University

Associate Professor Qianbing Zhang received his PhD from EPFL (Swiss Federal Institute of Technology in Lausanne), followed by postdoctoral research at the University of Cambridge before joining Monash University in 2015. He has been an Associate Professor and Director of Research in the Department of Civil and Environmental Engineering at Monash University since 2022. He currently serves as Editor-in-Chief of the Q1 journal *Tunnelling and Underground Space Technology*, Vice President of the International Society for Rock Mechanics and Rock Engineering, and is a Fellow of Engineers Australia and a Chartered Professional Engineer. He received an ARC Discovery Early Career Researcher Award (DECRA) in 2020 and has published over 130 Scopus-indexed papers with more than 8,000 citations. Associate Professor Qianbing Zhang's research focuses on sustainable and resilient underground infrastructure in response to global challenges. He has pioneered a systematic modelling platform for assessing infrastructure risks due to environmental changes, enhancing sustainability and resilience. His innovative framework supports the evaluation of carbon emissions and establishes benchmarks for construction practices. He has also developed technologies that improve safety and energy efficiency in mining operations.

LE FÈVRE MEDAL

The Le Fèvre Medal for research in chemistry commemorates the work of Professor Raymond James Wood Le Fèvre FAA FRS. Its purpose is to recognise outstanding basic research in chemistry.



Dr Fengwang Li

University of Sydney

Dr Fengwang Li is a Senior Lecturer at the University of Sydney and Flagship Program Lead at the ARC Centre of Excellence for Green Electrochemical Transformation of Carbon Dioxide ($GETCO_2$). With a PhD from Monash University and postdoctoral training from the University of Toronto, his research focuses on electrochemical transformation of Earth-abundant feedstock into valuable chemicals and sustainable fuels with particular interest in CO_2 capture and conversion and green hydrogen/ammonia production. Dr Li has published over 100 peer-reviewed articles in top journals, including *Nature* and *Science*, and is a Clarivate Highly Cited Researcher. His accolades include a 2024 ARC Future Fellowship, RACI A.M. Bond Medal, 2023 winner of the Australian Museum Eureka Prize for Outstanding Early Career Researcher, 2021 MIT Technology Review 35 Innovators Under 35 (China), and a 2020 ARC Discovery Early Career Researcher Award (DECRA).

MORAN MEDAL

The Moran Medal recognises the contributions to science of Patrick Alfred Pierce Moran FAA FRS. Its purpose is to recognise outstanding research by scientists in one or more of the fields of applied probability, biometrics, mathematical genetics, psychometrics and statistics.

Professor Margarita Moreno-Betancur

Murdoch Children's Research Institute and University of Melbourne

Professor Margarita Moreno-Betancur established and leads an internationally recognised hub of innovation and expertise in statistical methods for observational studies, supported by competitive fellowship and grant funding. Her team conducts methodological research in the areas of causal inference and missing data while contributing their expertise to health research studies, particularly in life course and social epidemiology. Professor Moreno-Betancur has made broad-ranging contributions to the supervision, training and mentoring of the next generation of biostatisticians at the master, PhD and postdoctoral levels. She is co-Director of the Clinical Epidemiology and Biostatistics Unit at the Melbourne Children's campus, and steering group member for the Victorian Centre for Biostatistics (ViCBiostat), the Melbourne Children's LifeCourse platform of cohort studies, and the Master of Biostatistics at the University of Melbourne. She was awarded the Horizon Lecture by the Statistical Society of Australia in 2023.

PAWSEY MEDAL

The Pawsey Medal recognises the contributions to science in Australia by Professor Joseph Pawsey FAA FRS. Its purpose is to recognise outstanding research in physics.

Associate Professor Claudia Lagos

University of Western Australia

Associate Professor Claudia Lagos is a computational astrophysicist expert on galaxy formation and evolution, and their interplay with the formation of the cosmic web. She has led and contributed to the development of a series of state-of-the-art theoretical tools to study galaxy formation and evolution which are at the forefront of the field. Dr Lagos has made groundbreaking contributions to the subject of the role of baryons (gas) in the evolution of galaxies, including its role in the chemical and angular momentum evolution of galaxies and in the promotion and suppression of the formation of stars. She is the lead developer of the influential semi-analytic model of galaxy formation, 'Shark'.

Dr Daria Smirnova

Australian National University

Dr Daria Smirnova received her PhD in physics from the Australian National University (ANU), followed by work experience in the USA, Russia, Japan and Australia. Since 2019, she has consecutively held two prestigious fellowships supported by the ARC: the Discovery Early Career Researcher Award and, currently, the Future Fellowship at the ANU. Dr Smirnova develops innovations at the nexus of fundamental physics of topological photonic phases and nanoscale material design towards nanodevices capable of high-speed and low-loss signal processing with light. She put forward new methods to probe and generate topological photonic states using radiative properties and optical nonlinearities in patterned photonic materials, in particular ultrathin nanostructured metasurfaces. The designed topological photonics architectures manipulate light-matter waves in an unusual way and prototype functional modules for high-performance computing, data protection, low-threshold nanolasers and lab-on-chip instruments to be integrated into microchips of everyday devices.

RUTH STEPHENS GANI MEDAL

The Ruth Stephens Gani Medal honours the contribution to human cytogenetics of Ruth Stephens Gani. It recognises distinguished research in human genetics, including clinical, molecular, population and epidemiological genetics and cytogenetics.

Dr Ira Deveson

Garvan Institute of Medical Research

Dr Ira Deveson is an early/mid-career researcher specialising in genomic technology development, clinical genomics and bioinformatics. He leads the Genomic Technology research lab at the Garvan Institute, as well as Garvan's long-read sequencing facility. He is a Garvan Faculty member and Conjoint Lecturer at UNSW. Dr Deveson aims to develop, adopt, optimise and validate new techniques that may shed new light on the genome, show how these can be used to address unsolved challenges in genomic medicine and facilitate their eventual translation into clinical practice. Dr Deveson's team has led the adoption of new technologies for long-read DNA sequencing (LRS) in Australia, allowing us to resolve the most complex, repetitive regions of the human genome for the first time, and to reliably identify new classes of genetic variation that are difficult to identify with existing technologies. By generating a more complete snapshot of a patient's genome, his team is applying LRS to improve our understanding and diagnosis of inherited disease.

Aboriginal and Torres Strait Islander Scientist Award 2025

This award recognises research in the physical and biological sciences, allowing interdisciplinary and sociocultural research that could straddle the social sciences and humanities, by outstanding Aboriginal and Torres Strait Islander PhD students and early- and mid-career scientists. It aims to support their research and/or the expansion and growth of their research networks and international knowledge exchange through visits to relevant international centres of research.

Dr Mitchell Gibbs

University of Sydney

Dr Mitchell Gibbs is a proud Thunghutti man through kinship of the Dunghutti nation and a dedicated marine scientist whose work bridges Indigenous knowledge and Western scientific practices. Based at the University of Sydney, his research focuses on the restoration of marine ecosystems, particularly oyster reefs, by incorporating traditional Indigenous practices and perspectives. Dr Gibbs's research emphasises the importance of co-designing restoration initiatives with Indigenous communities, ensuring that traditional ecological knowledge informs contemporary environmental management strategies. In addition to his research, he is an advocate for policy changes that incorporate Indigenous voices in environmental decision-making. He has led projects aimed at influencing public policy to better integrate Indigenous insights within coastal habitat restoration efforts. Dr Gibbs's dedication extends to education and public engagement. He has been featured in discussions on reconciliation and the role of Indigenous knowledge in science, emphasising the need for mutual respect and collaboration between Indigenous and non-Indigenous communities.

Associate Professor Shannon Kilmartin-Lynch

Monash University

Associate Professor Shannon Kilmartin-Lynch is an Associate Dean (Indigenous) and Associate Professor at Monash University's Faculty of Engineering. His research explores the intersections of Indigenous knowledge systems, sustainable materials science and environmental justice, with a particular focus on co-designed governance frameworks for land and resource management. He has received national and international recognition for his work on bio-based concrete technologies, Indigenous-led research models, and circular economy strategies. His practice is grounded in long-standing partnerships with Traditional Owner groups and community-based research ethics.

Max Day Environmental Science Fellowship Award 2025

The Max Day Environmental Science Fellowship Award assists PhD students or early-career researchers with their research. It provides funding support toward research expenses, courses and the cost of travel. The award honours Dr Maxwell Frank Cooper Day AO FAA who spent a lifetime championing entomology, conservation and forestry, as well as helping other scientists.

Ms Rebecca Greening

University of Adelaide

Ms Rebecca Greening is a PhD Candidate at the University of Adelaide whose research interests lie in understanding the interactions between native plants, soil and livestock to inform effective restoration and sustainable management of Australia's rangelands. Her ongoing project utilises the 100-year livestock and rabbit excluded TGB Osborn Vegetation Reserve as an ecological baseline, comparing it to adjacent land at Koonamore, South Australia.

Dr Nina Wootton

University of Adelaide

Dr Nina Wootton is an expert in plastic and microplastic pollution, science communication and education, and is passionate about incorporating Indigenous knowledge into marine management. Based at the University of Adelaide, her interdisciplinary research spans marine ecology, social science and science communication. Nina works closely with government, communities and First Nations groups on projects ranging from microplastic monitoring to sustainable aquaculture. She delivers marine education programs across South Australia and the Northern Territory and co-hosts a marine science podcast (Ocean Pod). Nina is a South Australian 2025 Young Tall Poppy and completed her PhD in 2022.

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Australian Academy of Science

SCIENCE AT THE SHINE DOME 2025 *Gala Dinner*

6.30PM – 11.00PM, WEDNESDAY 3 SEPTEMBER, QT CANBERRA

This evening brings together people from across the Australian science sector to connect as a community and celebrate excellence.

Guests will mingle and network with Academy Fellows, Academy awardees, Members and Senators of the Australian Parliament, Nobel laureates, Chief Scientists, senior representatives from the research, education and industry sectors, government officials, members of the diplomatic community, and researchers from all disciplines and career levels.

The Welcome to Country will be delivered by Selina Walker, Ngunnawal leader and Co-Chair of the ACT Reconciliation Council.

The keynote address will be delivered by Senator the Hon Tim Ayres, Minister for Science and Minister for Industry and Innovation.

During the evening, the Academy's most prestigious medals for 2025 will be presented:

2025 MATTHEW FLINDERS MEDAL presented to **Professor Yuri Kivshar** FAA

2025 RUBY PAYNE-SCOTT MEDAL presented to **Professor Jane Visvader** FAA FAHMS FRS

More information on these premier awards can be found in the Academy awards section of this program.

We are delighted to be able to bring this event to you with the generous support of our Science at the Shine Dome Gala Dinner Partner, the University of Sydney.

Pre-dinner drinks are being served from 6.30pm, with formal proceedings beginning at 7.00pm.

Dress code: formal (black tie optional).

NATIONAL SYMPOSIUM
4 SEPTEMBER 2025

AUSTRALIAN SCIENCE, AUSTRALIA'S FUTURE: SCIENCE 2035

There has never been a national effort to systematically assess Australia's science capability against our future need – until now.

Over the past 18 months, the Australian Academy of Science has embarked upon one of the most ambitious policy efforts in our history: *Australian Science, Australia's Future: Science 2035*.

At this year's National Symposium, we share the findings and implications of our assessment of Australia's science capability. We have drawn on data that is not publicly available, and we present new research and analysis that provides an evidence base to inform policy decisions.

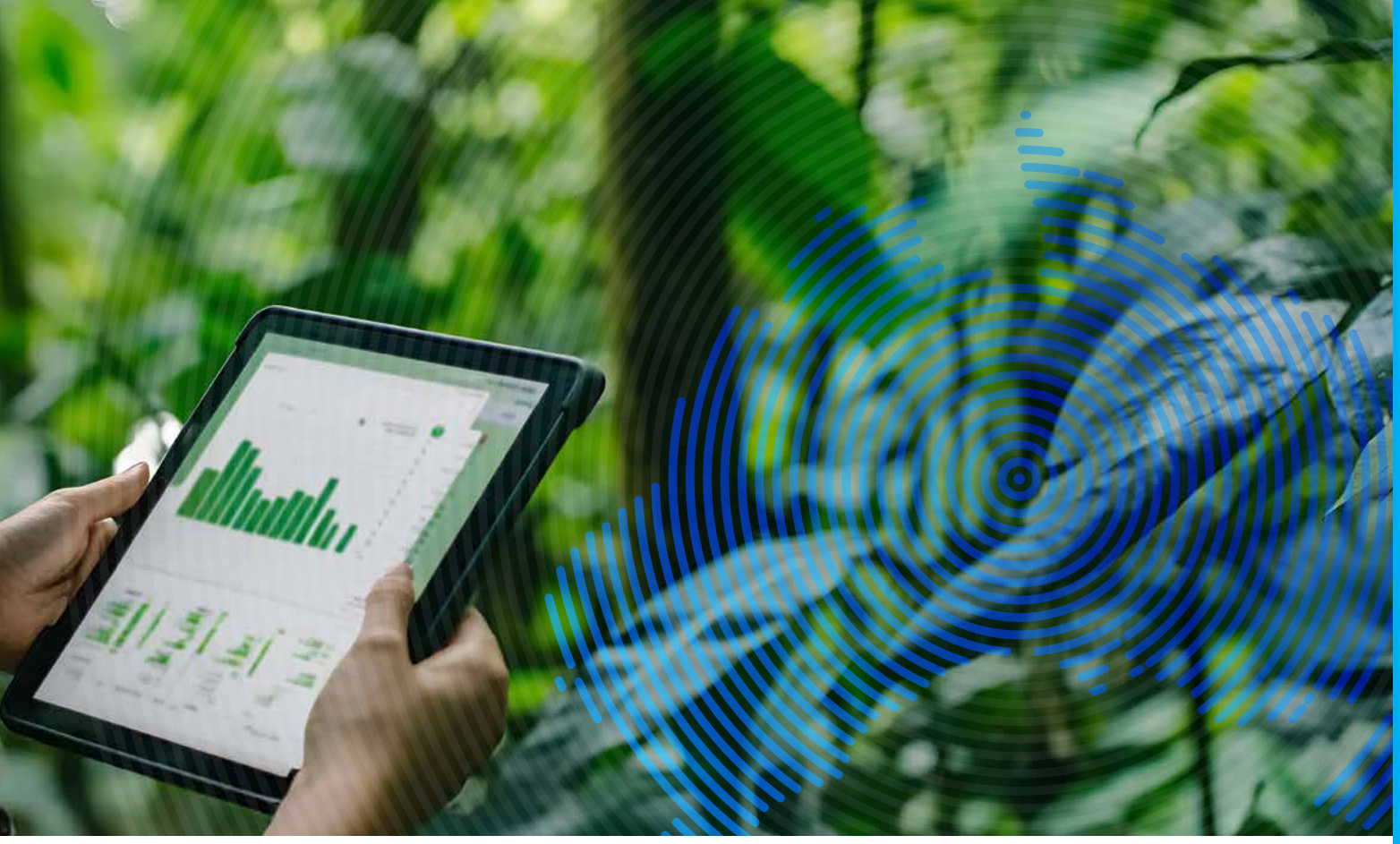
We are in the midst of unprecedented global change. Geopolitical uncertainty has become the norm, while technology is accelerating at a pace not seen since the Industrial Revolution, leading to both opportunities and vulnerabilities.

Productivity is slowing, the population is ageing, science and maths participation in schools is declining, and our economy lacks diversity, relying on too few industries to be resilient to shocks. For a prosperous future, Australia requires a science and technology uplift – both in terms of skills and capability.

Do we have the national science capability we need to rise to this challenge? Today's National Symposium will unpack this question.

Drawing on a comprehensive analysis of capability gaps, workforce trends and strategic dependencies, the event will present a national picture of where we stand, and what we must do to strengthen science so it can support our nation in the decades ahead.

This event will explore the findings of this study, including gaps in our science capabilities, and the reform required to put Australia on track to meet our national ambitions.



NATIONAL SYMPOSIUM CONVENOR

Emeritus Professor Ian Chubb AC FAA FTSE

Project Chair, *Australian Science, Australia's Future: Science 2035*

Emeritus Professor Ian Chubb has had a distinguished career across the university and government sectors.

Professor Chubb was Chief Scientist for Australia (2011–2016). Throughout his career, he has been a strong advocate for higher education, serving as Vice-Chancellor of the Australian National University (2001–2011), Vice-Chancellor of Flinders University (1995–2000), Senior Deputy Vice-Chancellor of Monash University (1993–1995), Deputy Vice-Chancellor of the University of Wollongong and Honorary Professor of Biology (1986–1990). Professor Chubb was elected a Fellow of the Australian Academy of Science in 2017 for his science advocacy.

Most recently, Professor Chubb was Chair of the Intergovernmental Policy Reform Group, which leads national reforms to strengthen and streamline the health and medical research regulatory and operating environment, including the National One Stop Shop for clinical trials. He is a panel member of the Strategic Examination of Research and Development, which will help grow our core science and innovation capability. He was also Secretary Science Policy at the Australian Academy of Science from 2022 to 2025.

Professor Chubb is project Chair of the Academy's flagship initiative *Australian Science, Australia's Future: Science 2035*, as well as Convenor of this National Symposium to deliver and discuss its findings.

SPEAKERS AND PANEL MEMBERS

Tony Cook PSM
Secretary, Department of Education (Commonwealth)

Tony Cook is Secretary of the Australian Government Department of Education, having previously held the position of Deputy Secretary of the Higher Education, Research and International Group.

Prior to commencing with the department, Mr Cook was Director General of the Department of Education, Queensland. He previously held the role of Associate Secretary for Schools and Youth in the former Australian Government Department of Education and Training, and has held senior executive positions within the Victorian public service.

In October 2013, he was made Honorary Fellow of the Australian Council for Education Leaders. In January 2014, he was awarded the Public Service Medal for outstanding public service in driving school policy and funding reform in Australia.

Mr Cook is a registered primary school teacher with a major in early childhood education. He holds a Bachelor of Education from the Queensland University of Technology.

Professor Kate Darian-Smith FASSA
President, Academy of the Social Sciences in Australia

Professor Kate Darian-Smith is President of the Academy of the Social Sciences in Australia, commencing in 2025, and Professorial Fellow at the School of Historical and Philosophical Studies, University of Melbourne.

Professor Darian-Smith is an internationally acclaimed historian, with numerous books, chapters and journal articles on Australian and Imperial histories of war, settler-Indigenous relations, childhood, education, media, migration and cultural heritage.

A former editor of *Australian Historical Studies*, she sits on the Editorial Advisory Board, Documents on Australian Foreign Policy, DFAT. Other ministerial appointments include the Board, Australia-Japan Foundation, and Council, Australian Museum of Democracy, OPH.

Professor Darian-Smith has served on the ARC College of Experts, is past President, International Australian Studies Association, and held Director and advisory roles with government, museums and cultural organisations. An experienced academic leader, she has been Executive Dean and Pro-Vice Chancellor, University of Tasmania, and Director, Australian Centre, Head of School and Deputy/ Associate Dean, University of Melbourne.

Robyn Denholm
Chair, Independent Panel, Strategic Examination of Research and Development

Robyn Denholm is a leading global technology executive. Ms Denholm is the Chair of the Board of Directors of Tesla Inc., Chair of Wollemi Capital Group, Chair of the Federal Government's Strategic Examination of Research and Development, Board Director of Blackbird Ventures, Board Director of the Technology Council of Australia, and a board advisor to several leading Australian technology companies.

In 2021, Ms Denholm founded Wollemi Capital Group (WCG), the Denholm family office, with a mission to invest in ventures that deliver a positive impact. In 2024, as part of its investments, WCG formed a consortium to acquire the Women's National Basketball League, advancing women's basketball in Australia. This followed WCG's earlier acquisition of Hoops Capital, making it the owner of the Sydney Flames and Sydney Kings – Australia's only basketball club with both female and male athlete representation.

In recognition of her contributions, Ms Denholm was awarded a Doctor of Business (Honoris Causa) by UNSW in 2019.

Emerita Professor Susan Dodds FAHA

Deputy Chair, Australian Research Council and Policy Lead, Australian Academy of the Humanities

Susan Dodds is Professor Emerita in philosophy at La Trobe University, a Fellow and member of Council of the Australian Academy of the Humanities, and Deputy Chair of the Board of the Australian Research Council. Professor Dodds has extensive experience in higher education, including more than a decade in executive roles.

Professor Dodds is a philosopher working at the intersections of political philosophy, bioethics and feminist philosophy. She has held ARC Discovery and Linkage grants and was Chief Investigator and ethics, policy and public engagement theme lead for the ARC Centre of Excellence for Electromaterials Science. Her current research projects include work on bioethics policymaking in pluralist democracies, human vulnerability, and the ethical and social impacts of 3D Bioprinting.

Professor Dodds was one of the three panel members (with Professor Margaret Sheil and Professor Mark Hutchinson) who authored the 2023 report, Trusting Australia's Ability: Review of the Australian Research Council Act 2001.

Emeritus Professor Mark Ferguson

Chair, European Innovation Council, former Chief Scientific Adviser to the Government of Ireland

Emeritus Professor Mark Ferguson is Co-Chair of the US–Ireland R&D Partnership, and Rapporteur/lead author of the European Commission report on the next Horizon Europe program. He was previously Founding Chair of the European Innovation Council, Director General of Science Foundation Ireland, Chief Scientific Adviser to the Irish Government, Professor and Dean University of Manchester, and Co-Founder and CEO of Renovo Group.

Professor Stephen Garton AM FAHA FASSA

President, Australian Academy of the Humanities

Professor Stephen Garton is Professor of History and Principal Advisor to the Vice-Chancellor at the University of Sydney. He has also served as Provost, Senior Deputy Vice-Chancellor and Interim Vice-Chancellor at the University of Sydney. Professor Garton is currently President of the Australian Academy of the Humanities.

Professor Barney Glover AO FTSE

Commissioner, Jobs and Skills Australia

Professor Barney Glover began his five-year term as Commissioner of Jobs and Skills Australia on 15 April 2024.

Professor Glover is a distinguished academic leader, an accomplished mathematician and mathematics educator with significant experience in developing strong relationships with the vocational education sector. He is well respected for his engagement with First Nations Australians and disadvantaged communities.

Professor Glover is a Fellow of the Australian Academy of Technological Sciences and Engineering, a Fellow of the Royal Society of NSW, and a Member of the Australian Institute of Company Directors. He is also a member of the Accord Implementation Advisory Committee.

He has served on the boards of a diverse range of corporate organisations and several state and national centres covering areas such as health and medical research, energy, mineral exploration and telecommunications.

Rosemary Huxtable AO PSM

Chair, National Health and Medical Research Strategy

Rosemary Huxtable has been appointed to develop the National Health and Medical Research Strategy (National Strategy). Ms Huxtable brings a wealth of experience in government policy, financial management and strategic leadership, particularly within the Australian Public Service. Her previous roles, including her tenure as Secretary of the Department of Finance, have equipped her with a deep understanding of the complexities involved in managing large-scale initiatives such as this strategy.

Ms Huxtable's specific experience in health and aged care policy makes her uniquely qualified to guide the strategy's development. The strategy will be supported by an extensive consultation process across many different stakeholder groups in the health and medical research sector.

Professor Chennupati Jagadish AC PresAA FRS FREng FTSE

President, Australian Academy of Science

Professor Chennupati Jagadish is an Emeritus Professor of Physics and Electronic Materials Engineering in the Research School of Physics at the Australian National University. He has published more than 790 journal papers in semiconductor physics, materials science, optoelectronics and nanotechnology.

Professor Jagadish is Editor-in-Chief of *Applied Physics Reviews*, editor of two book series, and serves on editorial boards of 20 other journals. He is a Fellow/Foreign Fellow of 16 science and/or engineering academies in Australia, the US, the UK, Europe, China and India. He has received many Australian and international awards, including a UNESCO medal for his contributions to the development of nanoscience and nanotechnologies, the IUMRS Somiya Award, IEEE Nanotechnology Pioneer Award, Lyle Medal, Boas Medal, Beattie Steel Medal and Pravasi Bharatiya Samman award from the President of India in 2023.

Professor Jagadish has been an Australian Research Council (ARC) Federation Fellow and an Australian Laureate Fellow. Professor Jagadish is a Fellow of the Royal Society and has received honorary doctorates from Surrey and Nottingham Trent universities. He was elected a Fellow of the Australian Academy of Science in 2005 and became President of the Academy in 2022.

Joseph Mitchell

Assistant Secretary, Australian Council of Trade Unions

Joseph Mitchell was re-elected as Assistant Secretary at the Australian Council of Trade Unions (ACTU) Congress in June 2024.

Mr Mitchell joined the ACTU in 2016, where he has been Political Director and a Policy Officer, as well as working with the Innovation and Growth Taskforces.

Most recently, he led the ACTU Centre for Workers' Capital.

Mr Mitchell grew up in Canberra, and like many young Australians, worked as a waiter through high school and university at local cafes and restaurants.

As ACTU Assistant Secretary, he is passionate about winning a better future for working people and growing the union movement.

Mr Mitchell has a Bachelor of Economics and Bachelor of Arts from the Australian National University and a Graduate Certificate in Applied Finance from the University of New South Wales.

Meghan Quinn PSM

Secretary, Department of Industry, Science and Resources

Meghan Quinn is Secretary of the Department of Industry, Science and Resources.

Ms Quinn brings a wealth of experience to this role from her former positions at Treasury, the Department of Prime Minister and Cabinet and the Bank of England.

Throughout her career, she has provided advice on a wide range of economic policy areas including financial markets, superannuation, corporate governance, international relations, structural reform, industry policy, macroeconomics, climate change mitigation, forecasting and modelling.

Ms Quinn holds a Master of Economics from the London School of Economics and a Bachelor of Economics (First Class Honours) from the University of Western Australia. She was awarded a Public Service Medal in 2009 for outstanding public service in the development of climate change policy.

Adjunct Professor Peter Rossdeutscher AM

Chair, Industry Innovation and Science Australia

Adjunct Professor Peter Rossdeutscher is the Independent Chair of Industry Innovation and Science Australia, appointed by the Australian Government to lead national strategy and program oversight across innovation, research, technology, investment and industry. His role brings together government, business, research institutions, entrepreneurs, and communities to strengthen national capability and drive long-term impact.

With over two decades of board and executive leadership, Adjunct Professor Rossdeutscher has guided global tech enterprises, supported international scale-ups, and advised mission-driven organisations across corporate, growth-stage and not-for-profit sectors. He brings board-level insight into critical technologies and their application to uplift economic impact – including leadership on AI adoption, quantum technology, data and digital innovation. His focus includes strategic risk, innovation governance and long-term value creation.

Adjunct Professor Rossdeutscher contributes to national and global discussions on industry transformation, clean energy, entrepreneurship and commercialisation. He is the author of Moonshot Applied and Co-Founder of initiatives including First Nations X, Quantum Girls, and Sovereign Green Compute.

Professor Lynette Russell AM

Laureate Professor, Monash University

Professor Lynette Russell is a Sir John Monash Distinguished Professor and Australian Research Council Laureate Fellow. She is focused on developing an anthropological approach to the story of the past. Her historical interests are far ranging – across the 16th to the 20th centuries, from Aboriginal people in the maritime industry, the Gunditjmara and Wurundjeri people of Victoria, to the last 1,000 years of encounter history. She is currently examining Dutch, Spanish, Portuguese and Makassan encounters and contacts.

Professor Margaret Sheil AO FAA FTSE
Vice Chancellor, QUT and Secretary Science Policy, Australian Academy of Science

Professor Margaret Sheil has served as Vice-Chancellor of Queensland University of Technology (QUT) since 2018. In addition to leading QUT, she is the lead Vice-Chancellor for Research and Innovation, and Chair of the Research, Innovation and Commercialisation Committee for Universities Australia. She also represents Universities Australia as a member of the University Foreign Interference Taskforce Steering Group and the Ministerial Expert Council on University Governance.

Professor Sheil holds several other prominent roles, including Chair of the Board of the Queensland Museum Network, Chair of the Reef 2050 Independent Expert Panel, Chair of the Queensland Vice-Chancellors' Committee, and Secretary Science Policy on the Australian Academy of Science Council.

She is a Fellow of the Australian Academy of Science, the Australian Academy of Technological Sciences and Engineering (ATSE), the Royal Australian Chemical Institute (RACI), and the Australian and New Zealand Society for Mass Spectrometry (ANZSMS).

Her previous leadership roles include Provost at the University of Melbourne and Chief Executive Officer of the Australian Research Council. She holds a Bachelor of Science and a PhD in Physical Chemistry from UNSW.

Professor Peter Shergold AC FASSA
Board Chair, Australian Research Council

Professor Peter Shergold is Emeritus Chancellor at Western Sydney University. Previously, he was Secretary of the Department of the Prime Minister and Cabinet. He now chairs a range of public, private and community boards, including the NSW Education Standards Authority and the James Martin Institute for Public Policy.

He has held other key roles, including: senior leadership positions in the Australian Public Service spanning two decades; CEO and Chair of the Centre for Social Impact; Chair of the TEQSA Advisory Council and the Higher Education Standards Panel; and Chancellor of Western Sydney University. Professor Shergold is a Fellow of the Academy of Social Sciences in Australia (FASSA), the Australia and New Zealand School of Government, the Institute of Public Administration Australia, the Australian Institute of Company Directors and the Australian Institute of Management.

Dr Caroline Smith
Head, Centre for Education and Training, Australian Industry Group

Dr Caroline Smith leads the Australian Industry Group's Centre for Education and Training, which drives bold new thinking on education and training in the context of work. As a senior leader specialising in future skills, employment and economic policy, Dr Smith has had a distinguished career dedicated to empowering individuals, businesses and communities. Her focus includes economic and skills development, labour markets, workforce planning and the future of work. With her extensive expertise in innovative policy and projects in federal and state governments and peak bodies, Dr Smith's insights have been recognised through awards such as the Australian-American Fulbright Professional Scholarship in Vocational Education and Training.

Dr Hayley Teasdale
Head, Science Policy and Advice, Australian Academy of Science

Dr Hayley Teasdale is passionate about using science and technology to benefit our planet and people. Dr Teasdale leads the Science Policy and Advice team at the Australian Academy of Science to deliver evidence-based science policy projects. Dr Teasdale has developed influential science advice across diverse areas, including immunisation, RNA manufacturing, supercomputing and artificial intelligence. She is experienced in developing innovative methods for producing science policy advice. She was named Women's Agenda Emerging Leader in Science in 2024 for her work developing new methods for science advice that were inclusive of Traditional Knowledges.

Dr Teasdale is a researcher turned entrepreneur, has worked for multiple start-ups in Australia and the US, and has been involved in research translation and commercialisation in the fields of health tech and robotics. Dr Teasdale holds a PhD in Health and a Master of Business Administration specialising in technology.

Martijn Wilder AM
Chair, National Reconstruction Fund Corporation

Martijn Wilder is Co-Founder and CEO of Pollination. Prior to co-founding Pollination, he had a distinguished career in international climate law and finance, including as a Partner at international law firm Baker & McKenzie. Mr Wilder has previously held several key governance positions across the Australian Government's key decarbonisation finance agencies, including roles as Chair of the Board of the Australian Renewable Energy Agency, Founding Director of the Clean Energy Finance Corporation and Chair of Low Carbon Australia. He was also Chair of the Victorian Government's Independent Panel on Victoria's 2035 Climate Change Target, Chair of WWF (Australia) and Director of the Climate Council. He is currently Chair and Governing Board Member of Renewable Energy and Energy Efficiency Partnership (Vienna).

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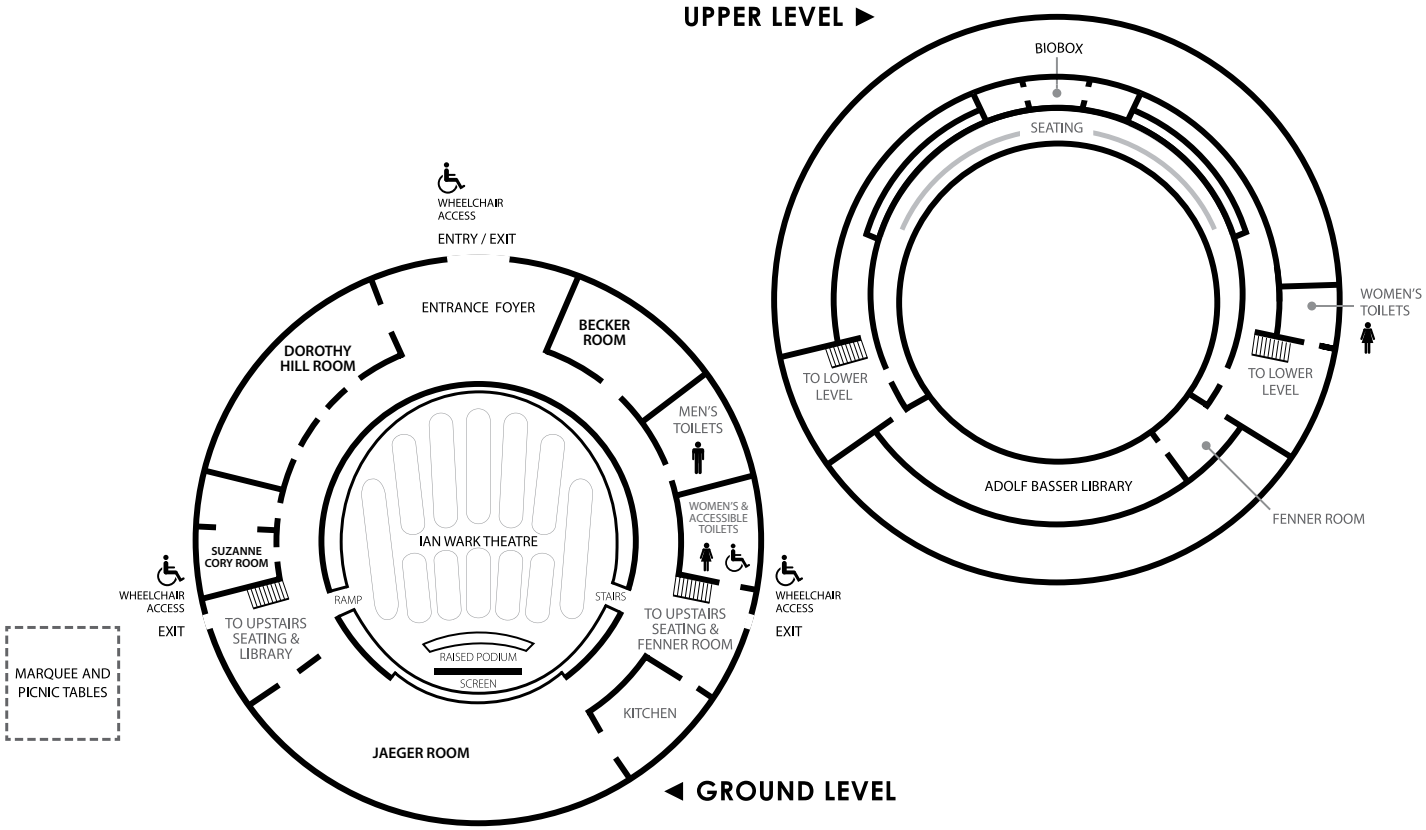
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TO LOWER LEVEL
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BECKER ROOM
DOROTHY HILL ROOM
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WOMEN'S & ACCESSIBLE TOILETS
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SUZANNE CORY ROOM
RAMP
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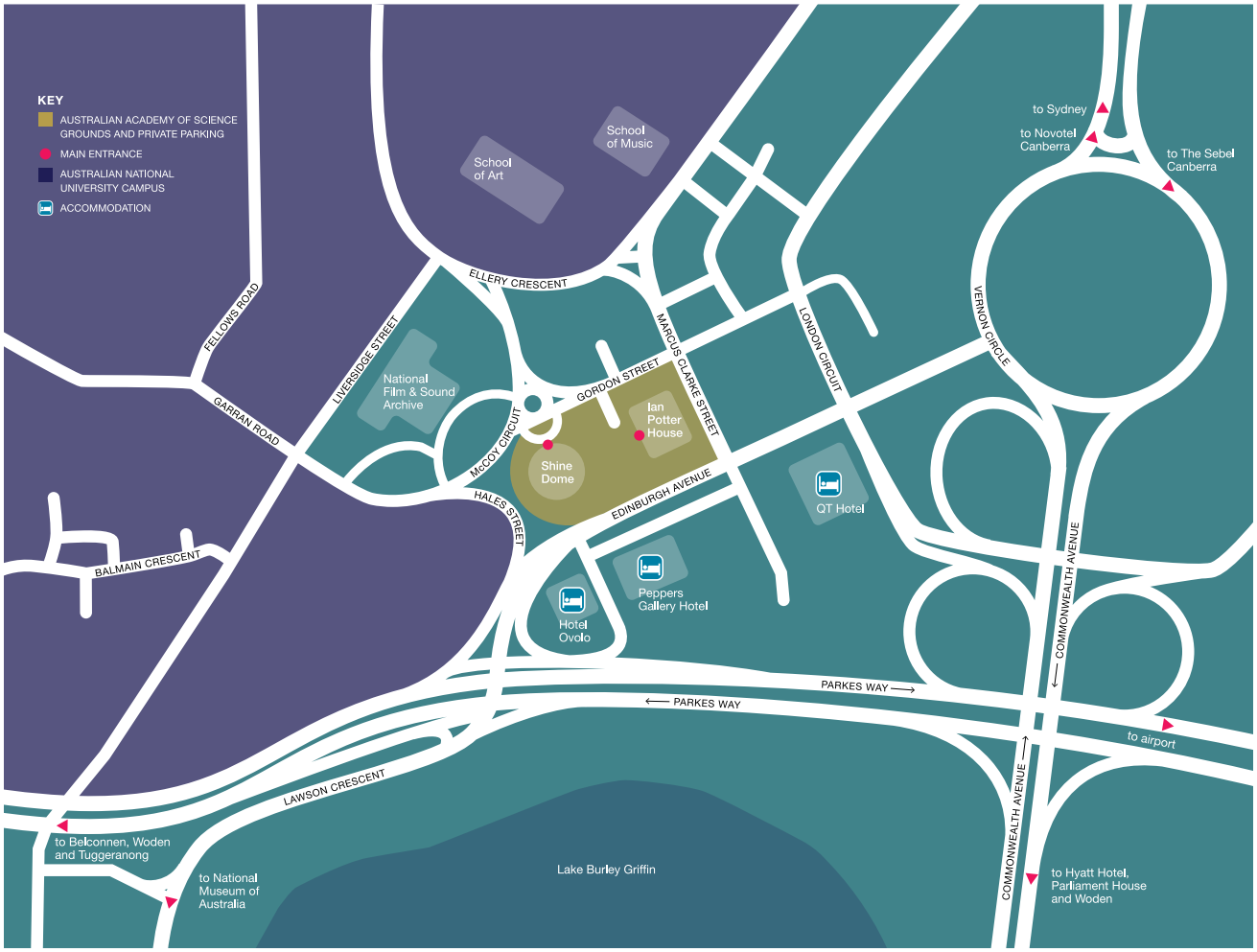
WHEELCHAIR ACCESS
EXIT
TO UPSTAIRS SEATING & LIBRARY
TO UPSTAIRS SEATING & FENNER ROOM
WHEELCHAIR ACCESS
EXIT
RAISED PODIUM
SCREEN
KITCHEN
JAEGER ROOM
MARQUEE AND PICNIC TABLES
◀ GROUND LEVEL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National Film & Sound Archive
GORDON STREET
Ian Potter House
GARRAN ROAD
McCOY CIRCUIT
Shine Dome
HALES STREET
EDINBURGH AVENUE
QT Hotel
BALMAIN CRESCENT
Peppers Gallery Hotel
Hotel Ovolo
COMMONWEALTH AVENUE
PARKES WAY
PARKES WAY
to airport
LAWSON CRESCENT
to Belconnen, Woden and Tuggeranong
to National Museum of Australia
Lake Burley Griffin
COMMONWEALTH AVENUE
to Hyatt Hotel, Parliament House and Woden

EVENT INFORMATION

Code of Conduct

By registering for and attending any Science at the Shine Dome 2025 function, in-person or online, attendees agree to adhere to the Australian Academy of Science's Participant Code of Conduct. The code is available at science.org.au/code-conduct.

Event app

The Science at the Shine Dome event app is available through app stores for attendees to download. The app contains the event program, the full printed program, information about the event and speakers, as well as an in-app messaging function to connect with other attendees. Instructions on how to download and access this app are on the back of your name badge. Please see information desk staff if you need assistance.

Information desk

An information desk in the main foyer of the Shine Dome will be staffed from 8.00am to 5.00pm each day of the event. For any assistance or event queries, please see Academy staff at this information desk.

Lanyard colours

Colour coding in the program matches the lanyards worn by attendees.

- **Fellows:** yellow
- **New Fellows:** red
- **Awardees:** green
- **EMCRs:** purple
- **Guests:** blue or white
- **Event partners:** orange

Group photos and individual portraits

Group photos will be taken at the following times. Please meet in the main foyer at your designated time.

Tuesday morning tea:
Fellows elected in 2025

Tuesday lunch:
Lindau Delegates

Tuesday afternoon tea:
Asia-Pacific Academic Mentoring Program participants

Wednesday morning tea:
All EMCRs

Wednesday afternoon tea:
Awardees from 2025

For portraits, new Fellows and awardees are invited to make their way to the Becker Room (located in the Shine Dome, adjacent to the main foyer) during any lunch, morning tea or afternoon tea break on Tuesday or Wednesday.

Luggage

Academy staff at the information desk can store luggage onsite. Please note that luggage is stored at your own risk.

Parking

Limited free car parking is available in the Academy's Gordon Street carpark, accessible via 9 Gordon Street, Acton ACT 2601. Bicycle parking is available at the venue. Additional pay parking areas are available within short walking distances to the Shine Dome. The forecourt area of the Shine Dome is set down only.

Public transport

The Shine Dome is a short walk from public transport stops. More information on public transport options can be found at www.transport.act.gov.au.

Taxis

Academy staff at the information desk can book taxis for attendees as required.

Coach to airport

Coaches to the airport from the Shine Dome will be provided at 4.45pm on Thursday 4 September. There is no charge, and no bookings are required. Please be at the main entrance of the Shine Dome with your luggage at this time.

Accessibility

Two accessible parking spaces are available within the Academy car park. The ground floor of the Ian Wark Theatre, as well as the Jaeger Room, Dorothy Hill Room, and amenities are all wheelchair accessible. Due to the heritage nature of the building, however, doorways into the venue are only equipped for access by standard wheelchairs.

Hearing assistance

The Ian Wark Theatre, both upstairs and downstairs, is equipped with an Infrared Hearing Loop. See Academy staff at the information desk to obtain a receiver and required attachments.

Mobile phones

Attendees are asked to respect speakers and other guests by switching phones to silent while events are in session. However, attendees are encouraged to engage with the Academy on social media, using the hashtag #ShineDome25.

Quiet room

The Suzanne Cory Room in the Shine Dome is available for those who require a quiet space.

Children and parents

Children are welcome to attend all parts of Science at the Shine Dome. They must be accompanied at all times by a parent or guardian. A range of activity packs are available for children at the information desk in the main foyer.

Those breastfeeding are welcome to breastfeed anywhere at the event, and the Suzanne Cory Room in the Shine Dome is available if a quiet space is preferred. Full parent room facilities are also available in Ian Potter House.

First aid

For any emergency or medical assistance, please notify staff at the information desk in the main foyer. A number of Academy staff are first aid qualified, and can assist if required.

Wi-Fi

Complimentary Wi-Fi 'Academy-Guest' can be accessed throughout the venue. No password is required. If your device is an Apple MacBook, it may not be able to join a public Wi-Fi network, in which case please use 'Academy-Function' with password 'Function2025'.

Event livestream

The Science at the Shine Dome livestream covers all ceremonies, lectures and presentations in the Ian Wark Theatre. Those travelling to or from the event, and those unable to attend in person, are invited to tune in to this livestream. The livestream is available via the QR code.

Academy staff contacts

General event enquiries

Lisa Crocker: 0488 044 186
Jamie Evans: 02 6201 9488

Media enquiries

Academy Media: 02 6201 9444

New Fellows

Helen Longdon: 02 6201 9404

Awardees

Kira Scaife: 02 6201 9467

Early- and mid-career researchers

Penny Brew: 02 6201 9421

Lindau Delegates

Lynn Allan: 02 6201 9461

Asia-Pacific Academic Mentoring Program

Nina Maher: 02 6201 9434

Engage online

Tune in to the livestream.

#ShineDome25

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THE SHINE DOME

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