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The Bulletin 507

August 2026

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A message from the President

Dear <<First Name>> <<Last Name>>

The Royal Society of New South Wales remains, in demographic terms, an ageing organisation. Despite efforts over the past decade to diversify our membership, the age profile has been remarkably stable. The Membership Engagement Working Group, led by Council member Professor Sean Brawley, has explored several pathways. Fellowship criteria were broadened to include senior public servants and professionals, and Council has considered models such as Associate Fellowship and corporate membership. As Council member Dr Liz Killen noted in her background paper, however, these approaches are unlikely to draw busy mid-career academics or younger researchers into regular participation



Over recent months, our focus has shifted to the membership of youth and young people. Postgraduate student and early-career researcher award recipients already receive a year of complimentary associate membership. We are now exploring ways to expand associate membership to include senior school students, undergraduates, and early-career researchers. Council has agreed to create an appointed position for an Early Career Researcher, which will require a rule change that we intend to progress promptly. The Royal Societies of Australia — of which we are again a member — has been encouraged by its Patron, Her Excellency the Honourable Ms Sam Mostyn AC, the Governor-General

of Australia, to develop clearer pathways for the engagement of youth and young people. We intend to contribute actively to that national effort.

The question before us is simple: how can the Society help younger people navigate a rapidly changing world of work and knowledge? Following the financial crisis, debates about the future of work became ubiquitous — in universities, political forums, schools, and among parents. Consultancies warned of the hollowing out of middle-skill occupations. Roles that barely existed in 2011, such as *data ethicist*, are now commonplace. The acceleration of AI has sharpened these concerns. There will be opportunities for the technically adept and for those in essential service roles such as aged care, but far fewer in between.

The Society can offer something rare: a welcoming intellectual space for younger members confronting these uncertainties. We aim to involve youth meaningfully in the upcoming Forum and to ensure they feel part of a community that values inquiry, evidence, and thoughtful debate.

Our Fellows continue to contribute to these conversations. On 1 July, at the State Library following the OGM, Scientia Professor Xiaojing Hao FRSN FAA FTSE, an ARC Laureate Fellow from the UNSW Sydney School of Photovoltaic and Renewable Energy Engineering, presented a compelling lecture on [Thin-film photovoltaics and next-generation tandem solar cells](#). On 14 July, Tim Buckley, founder of Climate Energy Finance, addressed *Australia's energy security* at the Union University and Schools Club's *Provocations and Inspirations* lunch. And on 16 July, at the Southern Highlands meeting, Dr Anne Coote reminded us — through her work on the origins and significance of the Society — that we are “*not just a gentleman's club*” but a civic institution with a long tradition of public purpose.

Christina Slade FRSN

[President](#)

[Royal Society of New South Wales](#)

For your diary

The Society's annual events program is published in the online [Events Calendar](#), which is updated regularly. Upcoming events, organised by the Society in the next two months, are listed below and, in greater detail, in the following Events section. Events by cognate and partner organisations are included in the events section of this newsletter.

- [1343rd Ordinary General Meeting and Open Lecture](#) (Wednesday, 5 August 2026, 6.00–7.30 pm AEST, Michael Crouch Room, Mitchell Building, State Library of NSW, Shakespeare Place, Sydney) *The Cultural Value of Water and the Importance of Understanding Water Quality and Climate Change for Aboriginal People*, Professor Bradley Moggridge FRSN FTSE, Associate Dean (Indigenous Leadership and Engagement), Faculty of Science, University of Technology Sydney
- [New England North West Branch Meeting 2026-2](#) (Wednesday, 12 August 2026, 5.00–7.30 pm AEST, NOVA, 122 Faulkner Street, Armidale NSW 2350) *Perspectives on Autism, Neurodiversity, and Resilience*, Professor Vicki Bitsika AM FRSN, Discipline Convenor of Neuroscience, University of New England

- [Southern Highlands Branch Meeting 2026-7](#) (Thursday, 20 August 2026, 6.30–7.30 pm AEST, RSL Mittagong Carrington Room) *The Weather Underwater, and Why it Matters*, Associate Professor Shane Keating, School of Mathematics and Statistics, UNSW Sydney
- [Ideas@theHouse: September 2026](#) (Tuesday, 1 September 2026, 6.15–8.00 pm AEST, Government House Sydney—by invitation for Society members—and live streaming) *The increasing importance of sport in today's world*, Matthew Allen AM, Vice-President, Australian Olympic Committee
- [1344th Ordinary General Meeting and Open Lecture](#) (Wednesday, 2 September 2026, 6.00–7.30 pm AEST, Michael Crouch Room, Mitchell Building, State Library of NSW, Shakespeare Place, Sydney) *Ecosystem restoration at scale, reintroducing native species and managing threats – nearly a decade of the Wild Deserts project*, Scientia Professor Richard Kingsford AO FRSN, Director, Centre for Ecosystem Science, School of Biological, Earth & Environmental Sciences, UNSW Sydney
- [Southern Highlands Branch Meeting 2026-8](#) (Thursday, 17 September 2026, 6.30–7.30 pm AEST, RSL Mittagong Carrington Room) *The Shortest History of Reality*, Professor Geraint Lewis FRSN FLSW FAIP, Professor of Astrophysics, School of Physics, University of Sydney
- [Hunter Branch Meeting 2026-3](#) (Thursday, 24 September 2026, 6.30–7.30 pm AEST, NEX, Newcastle Exhibition and Conference Centre, 309 King Street, Newcastle West) *Healthy Soils, Healthy Hunter: Building a Sustainable Future*, Professor Ravi Naidu, Laureate Professor and Founding Director, Global Centre for Environmental Remediation, University of Newcastle

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News

Royal Society of NSW 2026 Awards: Call for Nominations

The Royal Society of NSW has long recognised distinguished achievements and excellence across the gamut of knowledge through its [Awards Program](#). Its awards are amongst the oldest and most prestigious in Australia.

In 2023, the Society broadened and streamlined its Awards portfolio to recognise recent and evolving fields and disciplines, and emerging as well as established research stars. Today, the Society Awards are made in two main classes reflecting the Society's history: Career Excellence Medals and Discipline Awards and Medals, with additional Awards, Scholarships, and Citations, including Internal Awards for distinguished service to the Society and community.

The Council of the Society is pleased to announce the **call for nominations for the 2026 Awards**, which will commence on 1 July 2026 and close on 30 September 2026. Winners



Awards 2026
Nominations Open
1 July – 30 September

of the Awards will be announced at the final Ordinary General Meeting for 2026 to be held at the State Library of NSW on the evening of Wednesday, 2 December.

This year, nominations are called for the following awards. Please follow the links below for information about each award, specific conditions, nomination instructions, and nomination forms.

[Career Excellence Medals](#)

[RSNSW Aboriginal or Torres Strait Islander Scholar Medal](#)

[RSNSW James Cook Medal — for lifetime career contributions](#)

[RSNSW Edgeworth David Medal — for mid-career researchers](#)

[RSNSW Ida Browne Early Career Medal](#)

[Discipline Awards and Lectureships](#)

[RSNSW Clarke Medal and Lectureship in the Earth Sciences](#)

[RSNSW Walter Burfitt Award in Medical and Veterinary Sciences and Technologies](#)

[RSNSW Award in the Social and Behavioural Sciences](#)

[RSNSW Award in the History and Philosophy of Science](#)

[RSNSW Award in Computer Science and Information Technology \(new award in 2026\)](#)

[Scholarships, Early Career, and Student Awards](#)

[RSNSW Bicentennial Postgraduate Scholarships](#)

[RSNSW Bicentennial Early Career Research and Service Citations](#)

[RSNSW Jak Kelly Postgraduate Award](#)

[RSNSW Service Awards](#)

[RSNSW Medal](#)

[RSNSW Citations](#)

Please consider nominating your colleagues, early career researchers, and postgraduate students who you believe meet the criteria for these awards — an outcome that will certainly recognise their achievements and boost their careers.

Please direct any queries by [email to the RSNSW Awards Committee](#).

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Society welcomes new Members and Fellows: June 2026

The Royal Society of New South Wales warmly welcomed 21 new members to the Society's ranks, effective from 17 June 2025.

Fellows

Dr Bernadette Carmel Boss

Professor John Sydney Croucher

Professor Xiaojing Hao

Professor Jun Huang

Professor Vicki Karaminas

Professor Kenneth John Maher

Professor Sharon Naismith



**New Members
and Fellows**

Professor Xiaobo Qu
Professor Serkan Eylul Saydam

Biographical information about the new Fellows is now available on the [Fellows pages](#) of the website.

Members

Ms Viktoriya Butler
Associate Professor Robert Crowther
Dr Richard Humfry Henchman
Ms Amy Lin
Mr Oliver Gordon Pickford
Professor Andrew Reti Rosenberg
Dr Marilena Salvo
Dr Elizabeth Anne Williams

Associate Members

Ms Krithikaa Gopinath
Ms Violette Emma Rose Perry
Ms Sarah Rajaratnam
Ms Ines Wen

The Society hopes that all new Members and Fellows will greatly benefit from their membership and looks forward to their active participation in the Society's activities and work.

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Appointments and Career Moves: July 2026

The Council of the Society warmly congratulates the following Members and Fellows on their recent career moves, progressions, and appointments.

Professor Barney Glover AO FRSN

FTSE commenced his five-year term as the Chief Commissioner of the Australian Tertiary Education Commission on 1 July 2026. Previously, he was the Chief Commissioner of Jobs and Skills Australia, and before that, the Vice-Chancellor and President of Western Sydney University.

Dr Cathy Foley AO PSM DistFRSN FTSE FAA, President of the Australian Academy of Technological Sciences and Engineering and previously Australia's Chief Scientist, and **Distinguished Professor Brian Falzon FRSN**, Executive Dean of Engineering, Computing, and Science at Western Sydney University, joined the inaugural board of the Advanced Manufacturing Readiness Facility (AMRF), respectively as chair and as a member, from 1 July 2026. The AMRF is a NSW Government initiative to accelerate innovation and support the scale-up of advanced manufacturing and critical technology capability in Australia.



Appointments & Career Moves

Professor Craig Simmons FRSN FAA FTSE was appointed the Deputy Vice-Chancellor (Research and Innovation) at the University of Newcastle (UoN) on 2 June 2026. Previously, he was the Pro Vice-Chancellor of the UoN College of Engineering, Science and the Environment, and he continues to serve in the part-time role of Chief Scientist of South Australia.

Professor Michael Blumenstein FRSN commenced as Vice-President and Executive Dean of the College of Science and Engineering at Flinders University of South Australia on 7 June 2026. Previously, he was Pro Vice-Chancellor (Business Creation and Major Facilities) at the University of Technology Sydney, and before that, the Deputy Dean of the UTS Faculty of Engineering and Information Technology.

Professor Mary O’Kane AC FRSN FTSE became the 15th Chancellor of the University of Queensland on 13 July 2026. She continues in her roles as Chair of the Boards of the Australian Energy Market Operator (AEMO) and Business Events Sydney. Previously, she was Chair of the NSW Independent Planning Commission (2018-2024), the NSW Chief Scientist and Engineer (2008-2018), and Vice-Chancellor of the University of Adelaide (1996-2001).

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Jane McAdam AO FRSN wins the prestigious Gerda Henkel Prize for 2026

Society Fellow and expert on international refugee law, **Scientia Professor Jane McAdam AO FRSN FASSA** of the UNSW Sydney Faculty of Law and Justice, has been recently awarded the Gerda Henkel Prize — one of the world’s most prestigious international awards in the humanities and social sciences, presented by the Gerda Henkel Foundation in Germany.

The Gerda Henkel Prize is a biennial €100,000 award for a scholar whose work has made an outstanding, field-defining contribution to the humanities—

especially history, archaeology, law, and related disciplines. Professor McAdam has received the 2026 prize for her groundbreaking work on climate-related displacement and international refugee law, with the jury praising her for reconstructing the historical record of disaster-related displacement and exposing gaps in current legal frameworks.

The jury’s citation states that ‘Australian legal scholar Jane McAdam is a leading expert worldwide on the rights of refugees. She was one of the first to draw attention to the challenge that forced migration linked to the impacts of climate change creates for international law. In her pioneering research work, she has historically reconstructed the history of disaster-related displacement and relocation, analysed how these were addressed in legal terms, and exposed systematic gaps in current law. Her work stands out for the differentiated approach she takes, which places global warming in the context of the variety of factors behind displacement. Her books have become standard works and have



established displacement in the context of climate change and disaster as a new field of research in international law. As an advisor to the United Nations Refugee Agency (UNHCR) and to countless national and international boards, she brings her scholarly insights to bear directly in political and legal practice. She has enduringly changed our understanding of one of the most urgent challenges of the 21st century and contributed incisively to advancing international legal protection for refugees and human rights.'

Professor McAdam is a Fellow of the Academy of Social Sciences in Australia and the Royal Society of NSW, which she joined in 2025. In 2021, she was appointed an Officer of the Order of Australia (AO) 'for distinguished service to international refugee law, particularly to climate change and the displacement of people.' She won the Australian Human Rights Commission's Law Award in 2022 and was the inaugural winner of the RSNSW Award in the Humanities, Philosophy, and Law in 2024. In May 2025, she addressed the Society on her research in a talk titled '[Rethinking Mobility in a Changing Climate](#)' at the 1331st Ordinary General Meeting and Open Lecture, a [recording of which is available on YouTube](#).

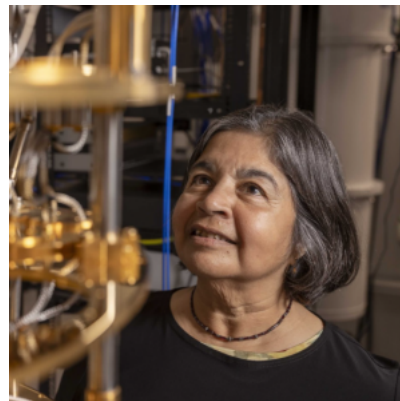
The Council of the Royal Society of NSW warmly congratulates Professor McAdam on this further pinnacle of achievement in her outstanding career.

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Nalini Joshi AO FRSN awarded the 2026 Moyal Medal and Lecture

Society Fellow **Professor Nalini Joshi AO FRSN FAA** has been awarded the 2026 Moyal Medal by Macquarie University. She will receive this medal and deliver the Moyal Lecture at Macquarie University on 30 September 2026.

In her lecture titled 'Mathematics for Quantum Era Security and Trust', Professor Joshi will explore how mathematics underpins the technologies reshaping our world. Late in 2025, Professor Joshi was named the Director of the newly established ARC Centre of Excellence in Mathematics for Quantum Era Security, which is building critical expertise to protect against the expected breakdown of cybersecurity protocols on quantum computers and to build trust in artificial intelligence. In that centre, MathQuEST, deep, untapped reservoirs of mathematical problems and structures will be mined to establish the foundations of complexity for security and to create accelerated methods for AI. The centre is assembling leading researchers from diverse disciplines to deliver a mathematically trained, technologically agile workforce, ensuring Australia's preparedness for grand challenges arising from future quantum computers with dual-use impact across agriculture, defence, health and industry.



The Moyal Medal is awarded annually by Macquarie University for research contributions to mathematics, physics or statistics – the areas of research of the late Professor José Enrique Moyal, who was Professor of Mathematics at Macquarie University between 1973 and 1977.

Professor Joshi is a former President of the Australian Mathematical Society and served as the first Australian Vice-President of the International Mathematical Union. She is a Fellow of the Australian Academy of Science and the Royal Society of NSW, and was appointed an Officer of the Order of Australia in 2016 for distinguished service to mathematics. She was recognised in the October 2019 NSW Premier's Prizes for Science & Engineering for 'Excellence in Mathematics, Earth Sciences, Chemistry or Physics', awarded the George Szekeres Medal from the Australian Mathematical Society in 2020, the ANZIAM Medal by Australia and New Zealand Industrial and Applied Mathematics in 2021, and the Royal Society of NSW Pollock Award and Lectureship in the Physical Sciences and Mathematics in 2024. In 2025, she became the first mathematician to be named NSW Scientist of the Year, recognising both her groundbreaking research and her contributions to the broader scientific community.

The Council of the Society warmly congratulates Professor Nalini Joshi on being awarded the Moyal Medal — the latest accolade in a stellar career.

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June 2026 issue of the Journal & Proceedings is now available

The [June 2026 issue](#) of the *Journal and Proceedings of the Royal Society of NSW* is now available, published online on 22 July 2026 after a short delay.

The printed version of the issue will be posted out to paying subscribers on its return from the printers.

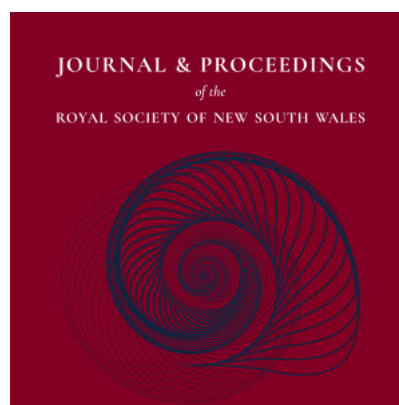
A complete version of this issue is now available for [downloading from this link](#).

The issue contains timely papers and discussions from last November's Royal Society of NSW and the Five Academies Forum on the topic, *AI: The Hope and the Hype*.

It also has a paper by Professor Maria Skills-Kazacos and co-workers on a new kind of battery that she developed — the UNSW Vanadium Flow Battery — now being deployed at solar generation facilities in China. As well as three PhD thesis abstracts and five obituaries, it includes a paper on European scientists in colonial Australia by the late Dr Peter Tyler, a one-time Historian of the Royal Society.

Robert Marks

Editor, Journal and Proceedings of the Royal Society of NSW



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Events

1343rd OGM and Open Lecture — 5 Aug. 2026

The Cultural Value of Water and the Importance of Understanding Water Quality and Climate Change for Aboriginal People

Professor Bradley Moggridge FRSN FTSE

Associate Dean (Indigenous Leadership and Engagement), Faculty of Science
University of Technology Sydney



Date: Wednesday, 5 August 2026

Time: 6.00–7.30 pm AEST

Venue: Michael Crouch Room, Mitchell Building, State Library of NSW

Pre-meeting drinks: A cash bar will operate from 5.30 pm

Registration: [Please register](#) before 2.00 pm AEST on Wednesday, 5 August 2026

Entry: OGM: Members, \$20; Non-members, \$30; Students, \$0 (Visa and Mastercard credit card payments only)

Enquiries: [via email](#) to RSNSW Events

All are welcome

REGISTER NOW

**Please register before
Wednesday, 5 August at 2.00 pm AEST**

Business of the Meeting

The Agenda for the Ordinary General Meeting will be made available on the [Meetings](#) page of the website.

Summary: Australia is the driest inhabited continent on Earth, yet it has been the traditional land of its original inhabitants, Australia's First Peoples (its Indigenous people), for thousands of generations—65,000 years, plus. Protecting water landscapes (surface and groundwater) in a dry place like Australia, along with the protection of cultural values, has always been a high priority for Aboriginal people, and protecting water remains a cultural obligation. Water connects people to Country, carries songs, dances and language through the generations. This connection and understanding of climate are no different; observations, adaptation and lived experience (already having survived sea level rise) put First Peoples of Australia in a place to provide solutions for a modern issue like climate change. Aboriginal and Torres Strait Islander people are adapting now to a changed climate. Seasonal changes, culturally significant species are also adapting and evolving. Through his research and experience, Bradley Moggridge feels very privileged to work towards solutions combining both my ancestral Traditional Knowledge and qualifications in Western science for water and climate.

Bradley Moggridge is a proud Murri from the Kamilaroi Nation living on Ngunnawal Country in Canberra and a Professor of Science and Associate Dean (Indigenous Leadership and Engagement) at the University of Technology Sydney (UTS). He has a PhD in Science from the University of Canberra, an MSc in Hydrogeology from UTS, and a BSc in Environmental Science from the Australian Catholic University.

Professor Moggridge is the Immediate Past President of the Australian Freshwater Science Society (President, 2022–2024), a current Board member with the NSW Environmental Protection Authority, and previously was a member of the Biodiversity Council and the National Youth Science Forum (NYSF). He was appointed as Lead Author for IPCC AR7 Chapter 10, and was accepted as a Fellow of the Academy of Technological Science and Engineering in 2025, and as a Fellow of the Royal Society of NSW in 2026. He is a member of the Wentworth Group of Concerned Scientists and is a Governor of WWF Australia. He is an alumnus of the International Water Centre.

Professor Moggridge has won several awards, including the 2025 RSNSW Aboriginal Scholar Medal, and has presented widely, including at the 2023 UN Water Conference (New York) and at the 2022, 2023 and 2025 SIWI World Water Week (Stockholm), and COP29 in Baku. He has published in his area of expertise in Indigenous Water Knowledge and Climate Change, also finding himself on many committees (local, national and international), adding to his 25 years in water and environmental science, cultural knowledge, regulation, water planning and management. He hopes to encourage Indigenous generations to pursue interests in science and promote his ancestors' knowledge.

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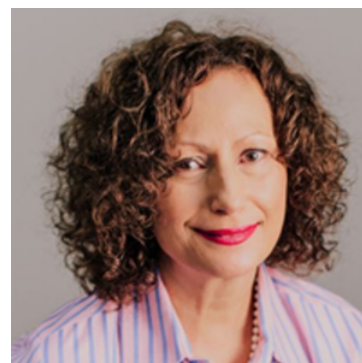
New England North West Branch Meeting 2026-2 — 12 Aug. 2026

Perspectives on Autism, Neurodiversity, and Resilience

Professor Vicki Bitsika AM FRSN

Discipline Convenor of Neuroscience

University of New England



Panellists

Dr Wayne Arnold

Brain Behaviour Research Group, UNE

Jane Weier

Parent and Educator

Georgia Vu

Autism Advocate

Date and Time: Wednesday, 12 August 2026, 5.00–7.30 pm AEST

Venue: NOVA, 122 Faulkner Street, Armidale NSW 235

Registration: [Please register](#) before 2.00 pm AEST on Tuesday, 11 August 2026

Entry: No charge

All are welcome

REGISTER NOW

**Please register before
Tuesday, 11 August at 12.00 noon AEST**

Summary: The frameworks for identifying autism conditions have evolved significantly over recent decades, gradually moving away from narrow diagnostic labels to increased understanding of autism as a natural variation in neurodevelopment, with individuals experiencing a range of assets, strengths, and support needs. As our understanding continues to grow, so does the importance of creating spaces in which perspectives from lived experience, clinical expertise, and research evidence are equally recognised and valued. This community event brings together presenters who will advocate for each of these perspectives with the aim of enhancing the resilience, well-being, and quality of life for autistic individuals across the lifespan.

Professor Vicki Bitsika AM PhD CF FRSN FCCLP has specialised in the diagnosis and treatment of people with neurodevelopmental conditions and mental ill-health for over 30 years. She is a Clinical Psychologist who has consulted in schools and Human Service facilities in Australia and internationally, with a focus on developing training services for educators and mental-health professionals, and techniques for addressing complex behavioural difficulties. She was Founder and Director of the Centre for Autism Spectrum Disorder at Bond University from 2010 to 2019, before joining Biomedical Sciences at the University of New England.

Professor Bitsika was awarded an Australian Learning and Teaching Council citation in 2009 for 'exemplary translation of clinical practice into development of hands-on, innovative, and student-focused curriculum and teaching techniques in Behaviour Management'. She received a Winston Churchill Fellowship in 2010 to investigate specialised intervention technologies for children and adolescents with Autism Spectrum Disorder in the USA and UK. In 2016, Professor Bitsika was made a Member of the Order of Australia (AM) for 'significant service to tertiary education in the field of Autism Spectrum Disorders, as an academic, and as a supporter of people with disabilities'. She was admitted as a Fellow of the Royal Society of NSW in 2023.

She is currently Discipline Convenor for Neuroscience in the School of Science & Technology and Chair of the New England North West Branch of the NSW Royal Society. Her research interests focus on Autism Spectrum Disorder; Neurophysiological and Psychological aspects of anxiety, stress and depression; and Clinical Diagnosis and Assessment. She maintains a clinical practice designed to serve autistic individuals and their families.

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Southern Highlands Branch Meeting 2026-7 — 20 Aug. 2026

The Weather Underwater, and Why it Matters

Associate Professor Shane Keating
School of Mathematics and Statistics
UNSW Sydney

Date: Thursday, 20 August, 6.30–7.30 pm AEST
Venue: RSL Mittagong, Carrington Room
Entry: Members, \$5; Non-members, \$10 (cashless)



payments only)
All are welcome

ENQUIRIES

By email to the Southern Highlands Branch Chair

Summary: Earth's oceans are the engine of the global climate system and the source of food and prosperity for over 3 billion people worldwide. At the same time, the global economy relies on the ocean to transport 90% of all traded goods. It is no exaggeration to say that the ocean plays a vital role in humanity's well-being and prosperity.

In this talk, oceanographer Shane Keating will discuss the importance of the dynamic ocean environment --- the 'weather underwater' --- to the global economy and Earth's climate system. Travelling from the shores of Loch Long, Scotland, to 'Eddy Avenue' off the coast of NSW, Shane will review how our knowledge of Earth's oceans has been methodically built from observational, experimental, numerical and theoretical studies. Finally, Shane will explore some of the ways that artificial intelligence (AI) and data science are enabling new insights and innovations that are changing the way we understand and use the ocean, and how he is creating a 'Google Maps for the Sea' to help the shipping industry save fuel and cut emissions.

Dr Shane Keating is an Associate Professor of Physical Oceanography in the School of Mathematics and Statistics at UNSW Sydney. His research uses powerful mathematical and data science tools to study our oceans from land, sea, and space. Shane is the founder and CEO of [CounterCurrent](#), a UNSW AI spinout company delivering localised ocean forecasts and intelligent routing for ships. CounterCurrent's generative AI ocean forecasting system provides crews with customised forecasts 10,000x faster and cheaper than National Weather Centres, helping the maritime industry optimise routes to cut fuel and emissions. Founded in 2025, CounterCurrent was the first Australian startup to be awarded an AWS Compute for Climate fellowship and was named a 'breakout star' in the Australian Financial Review. Shane is also a passionate [science communicator](#), and his popular articles about science and mathematics have reached over a million readers.

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Ideas@theHouse: 1 Sept. 2026

Ideas@theHouse

presented by

**His Excellency the Honourable
Andrew Bell AC KC, Lieutenant-Governor of NSW**



The increasing importance of sport in today's world

Matthew Allen AM

Vice President

Australian Olympic Committee

Date: Tuesday, 1 September 2026, 6.30–8.00 pm AEST

Venue: Face-to-face (by invitation for Society members) and live streaming from Government House, Sydney

Registration: Registration is not required for the [live stream](#), which commences at 6.30 pm on Tuesday, 1 September 2026.

Entry: No charge

All are welcome to the live stream



LIVE STREAM

**Please join the livestream at
6.30 pm AEST on Tuesday, 1 September**

Summary:

Sport has long been central to Australian identity, but its importance is growing as work patterns and social lifestyles evolve. With more sedentary jobs and increased screen time, participation in sport offers essential physical activity that supports cardiovascular health, strength, and overall well-being. Beyond physical benefits, sport plays a vital role in improving mental health by reducing stress and social isolation. As communities become more digitally connected yet socially fragmented, sporting environments provide meaningful opportunities for connection, teamwork, and belonging. In this changing landscape, sport is not only recreation but a crucial contributor to healthier, more balanced modern Australian lifestyles.

Matthew Allen has been a member of the Australian Olympic Committee Executive since 2017 and Vice President since 2021. He was involved in the bid for the Brisbane 2032 Olympic Games in 2021. He chairs the Australian Olympic Community Foundation, which is focused on providing scholarships to emerging indigenous sporting talent.

He was the second-longest-serving President of Australian Sailing, from 2013 to 2019 and the inaugural Vice-President 2011 to 2013. Whilst President of Sailing, he was the architect of the 'One Management' Structure for the National Sport Federations; this virtual merger of the State Federations of Sailing became the blueprint for National Federations of Sport by the Federal Sports Commission. Since 2020, Matt has been a World Sailing Council member and Chair of the Oceanic and Offshore Committee, the only Australian to chair this Committee.

He is one of Australia's most decorated offshore sailors, being a four-time overall winner, three times as skipper, of the Sydney Hobart Yacht Race and the line honours winner in 2025. He has competed in 33 Sydney Hobart Races. He is a former world champion in the 11 Metre Class, a silver medallist in the Farr 40 Class, a four-time Kings Cup Winner, and was a member of the Arbitration Tribunal for the 35th America's Cup.

He was the Commodore of the Cruising Yacht Club of Australia from 2007 to 2010.

In his past working life, he was President and CEO of UBS Japan and Regional Treasurer of UBS Asia Pacific—with UBS Japan, at the time, being the largest foreign bank in Japan. He is also a former Managing Director of the Swiss Bank Corporation.

He was awarded a Member of the Order of Australia in 2019 for his services to sailing.

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1344th OGM and Open Lecture — 2 Sept. 2026

Ecosystem restoration at scale, reintroducing native species and managing threats – nearly a decade of the Wild Deserts project

Scientia Professor Richard Kingsford AO FRSN

Director, Centre for Ecosystem Science

School of Biological, Earth & Environmental Sciences

UNSW Sydney



Date and Time: Wednesday, 2 September 2026, 6.00–7.30 pm AEST

Venue: Michael Crouch Room, Mitchell Building, State Library of NSW

Pre-meeting drinks: A cash bar will operate from 5.30 pm

Registration: [Please register](#) before 2.00 pm AEST on Wednesday, 2 September 2026

Entry: OGM: Members, \$20; Non-members, \$30; Students, \$0 (Visa and Mastercard credit card payments only)

Enquiries: [via email](#) to RSNSW Events

All are welcome

REGISTER NOW

**Please register before
Wednesday, 2 September at 2.00 pm AEST**

Business of the Meeting

The Agenda for the Ordinary General Meeting will be made available on the [Meetings](#) page of the website.

Summary: Australia has the world's most notorious extinction record for mammals, driving widespread functional loss in our desert ecosystems. The Wild Deserts project is a nationally significant ecological restoration initiative in the Strzelecki Desert of the Sturt National Park in far-northwestern New South Wales. Established in 2016, this project is led by UNSW's Centre for Ecosystem Science and Ecological Horizons, collaborating with the NSW National Parks and Wildlife Service (NPWS) and Taronga Conservation Society. The Wild Deserts Program represents one of the most ambitious attempts to restore arid ecosystems in Australia. It was designed not only to reintroduce seven locally extinct species but to restore ecosystem function at a landscape scale through integrating species' reintroductions, threat management, particularly feral cats, and adaptive data-driven

decision-making. This presentation focuses on the successes and failures of ecosystem restoration at large scales, reflecting the vision of the Wild Deserts Project.

Richard Kingsford is a Scientia Professor at UNSW Sydney and the Director of the Centre for Ecosystem Science. He is a conservation biologist who has worked extensively on ecosystem restoration and threatening processes in Australia. He has led projects in aerial surveys of waterbirds, informing river management, reintroduction of platypuses and reintroductions of locally extinct mammal species. He has expertise in the conservation of ecosystems, particularly freshwater aquatic ecology. He has worked with many different communities and governments across Australia on the conservation management of ecosystems. His research has influenced conservation policy and management, including through involvement on state and federal advisory committees. He leads the Wild Deserts Partnership, focusing on restoring seven locally extinct mammal species to Sturt National Park in far western New South Wales and monitoring, evaluation and research for water for the environment in the Macquarie River and Lower Balonne.

Richard has been a Fellow of the Royal Society of NSW since 2020. His work has been acknowledged by numerous awards, including three Eureka Awards in 2001, 2008, 2015, the Hoffman Medal in 2007 for contributions to global wetland science, and in 2025 he was made an Officer of the Order of Australia (AO) for 'distinguished service to conservation biology, to environmental sustainability research, and to freshwater biodiversity and ecosystems governance.' Richard is also the inaugural winner of the Royal Society of NSW Life Sciences Award in 2025.

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Southern Highlands Branch Meeting 2026-8 — 17 Sept. 2026

The Shortest History of Reality

Professor Geraint Lewis FRSN FLSW FAIP

Professor of Astrophysics

School of Physics

University of Sydney



Date: Thursday, 17 September, 6.30–7.30 pm AEST

Venue: RSL Mittagong, Carrington Room

Entry: Members, \$5; Non-members, \$10 (cashless payments only)

All are welcome

ENQUIRIES

By email to the Southern Highlands Branch Chair

Summary: What is reality? It is one of the oldest and most profound questions in philosophy and science, yet modern discoveries have made the answer more surprising than ever. Drawing on his recently published book, *The Shortest History of Reality*, Geraint's talk traces humanity's evolving understanding of the universe, from the ideas of

the ancient Greeks to Einstein, quantum physics and modern cosmology, revealing how each generation has transformed our picture of what is truly real.

Geraint F. Lewis is a professor of astrophysics at the Sydney Institute for Astronomy, part of the University of Sydney's School of Physics. He has published more than 500 papers across cosmology, galactic archaeology, gravitational lensing and the fundamental nature of the universe, and four books of popular science, including *The Cosmic Revolutionary's Handbook* and *Where Did the Universe Come From?* His latest book, *The Shortest History of Reality*, is out now.

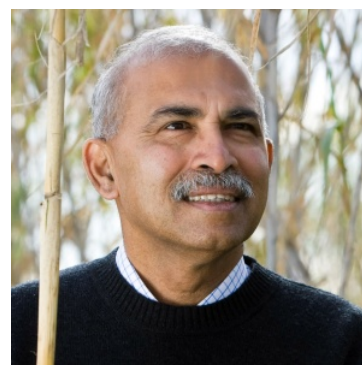
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Hunter Branch Meeting 2026-3 — 24 Sept. 2026

Healthy Soils, Healthy Hunter: Building a Sustainable Future

Professor Ravi Naidu

Laureate Professor and Founding Director
Global Centre for Environmental Remediation
University of Newcastle



Date: Thursday, 24 September 2026

Time: 5.30 pm for 6.00 – 7.00 pm AEST

Venue: NEX, Newcastle Exhibition & Convention Centre, 309 King Street, Newcastle West

Registration: [Please register](#) before 2.00 pm AEST on Thursday, 24 September 2026

Entry: Members, \$15; Non-members, \$25; Students: \$5 (Visa and Mastercard credit card payments only)

Enquiries: [by email](#) to the Hunter Branch Chair

All are welcome

REGISTER NOW

**Please register before
Thursday, 24 September at 2.00 pm AEST**

Summary: Healthy soils are fundamental to the environmental, economic, and social prosperity of the Hunter region. They sustain agricultural production, protect water resources, support biodiversity, store carbon, and provide the foundation for resilient communities. However, the Hunter's long history of coal mining, industrial development, agriculture, and urban expansion has also left a legacy of disturbed landscapes, contaminated land, altered ecosystems, and increasing pressures from emerging contaminants and climate change.

This presentation will explore how restoring and protecting soil health can transform these challenges into opportunities for sustainable regional development. Particular emphasis will be placed on the rehabilitation of coal mines and post-mining landscapes, highlighting how advances in soil science, ecological restoration, landform design, and revegetation can accelerate ecosystem recovery, enhance biodiversity, improve water quality, and

create productive land uses beyond mining. The presentation will also examine innovations in contaminated land assessment and remediation, PFAS management, circular economy approaches, soil carbon, and nature-based solutions that are reshaping the future of environmental stewardship.

Drawing on examples from the Hunter and internationally, the presentation will demonstrate how collaboration between industry, government, researchers, Traditional Owners, and local communities can deliver resilient landscapes that support economic diversification, environmental sustainability, and community wellbeing. By adopting a holistic 'One Health' approach that recognises the interconnectedness of healthy soils, healthy ecosystems, healthy water, and healthy people, the Hunter has a unique opportunity to become a global leader in mine rehabilitation, environmental restoration, and sustainable land management.

Healthy soils are not simply the foundation of a thriving Hunter—they represent one of the region's greatest opportunities to build a resilient, prosperous, and sustainable future for generations to come.

Professor Ravi Naidu is a distinguished global leader in contamination science whose work has reshaped environmental remediation in Australia and internationally. As Director of the Global Centre for Environmental Remediation at the University of Newcastle and Managing Director of CRC CARE, he has pioneered research into agricultural and industrial contaminants, their pathways, and their impacts on human and environmental health. Over more than two decades—including a senior role at CSIRO—he has advanced national and global risk-assessment frameworks and helped build Australia's now multibillion-dollar remediation industry. Naidu has patented multiple technologies targeting toxic residues and wastewater, and leads international capacity-building initiatives to support cleaner, safer environments worldwide.

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Branch and Program Reports

Report from the Activities with Impact Program

The Society provides an active program of events in Sydney and through its Hunter, New England North West, Southern Highlands, and Western NSW branches. With events planned and held recently by the branches reported separately in this Bulletin, this section focuses on the Master Plan's *Activities with Impact* program and events held in Sydney.



Presentation Report: 1342nd OGM & Open Lecture—1 July 2026

On Wednesday, 1 July 2026, an audience of approximately 30 people who attended the 1342nd Ordinary General Meeting of the Royal Society of NSW heard an important talk on world-leading developments of next-generation photovoltaic solar cells for renewable energy production. The presentation, titled '[Thin-film photovoltaics — the enabling engine for next-generation tandem solar cells](#)' was delivered by **Scientia Professor Xiaojing Hao FRSN FAA FTSE**, an ARC Laureate Fellow and the Deputy Director of the ARC Research Hub for Photovoltaic Solar Panel Recycling and Sustainability at the School of Photovoltaic and Renewable Energy Engineering, UNSW Sydney.



Professor Hao's talk presented thin-film photovoltaics as a crucial enabling technology for the next generation of silicon-based tandem solar cells. She began by placing solar energy within the global shift to net-zero emissions, noting its growing role in electricity, buildings, transport, agriculture and solar farms. Silicon photovoltaics have progressed dramatically since the first low-efficiency cells of the 1950s, falling from extremely high costs to today's mass-produced panels. However, modern silicon cells are now approaching their theoretical efficiency limit of about 29.4%, creating a need for new architectures that can exceed 30%, 40%, and potentially approach 50% efficiency.

Professor Hao explained that tandem, or multi-junction, solar cells provide the most feasible pathway forward. By stacking materials with different band gaps, these devices can capture different parts of the solar spectrum more effectively than silicon alone. The key challenge is identifying suitable thin-film top-cell materials that are efficient, stable, scalable, low-cost, sustainable and non-toxic. Candidate materials include perovskites, copper zinc tin sulphide, copper indium gallium sulphide, and other compound semiconductors, but each faces issues such as instability, toxicity, cost, manufacturing complexity or efficiency losses during scale-up.

A major theme of her lecture was on defect control. Professor Hao described how point defects, grain boundaries, dislocations and secondary phases can severely limit absorber quality and device performance. She reviewed research undertaken by her group, which is developing diagnostic tools and processing strategies, including nanoscale characterisation, hydrogen treatment, additive engineering and kinetic control, to identify and mitigate these 'lowest-bar' limitations. She also introduced the concept of transparent conductive adhesive technology, which allows top cells and silicon cells to be fabricated separately and bonded into tandem devices. Such an approach broadens material choices, simplifies integration and supports scalable manufacturing.

Professor Hao concluded her talk by stressing that laboratory efficiency records are not enough: the field must accelerate stable, reproducible and commercially deployable tandem solar technologies.

A [video recording](#) of the presentation and Q&A session is now available on the Society's YouTube channel, while a [collection of images](#) from the occasion is also available for viewing and downloading.

Lindsay Botten
Bulletin Editor

Hunter Branch Report

Presentation Report— 25 June 2026

Offspring and the Influence of PFAS Exposure during Critical Development Periods

Dr Jacinta Martin

Reproductive Biologist and Lecturer

University of Newcastle and the Hunter Medical Research Institute



On the evening of 25 June, Dr Jacinta Martin, a reproductive biologist from the Hunter Medical Research Institute and the University of Newcastle, discussed the critically important topic of 'Offspring and the Influence of PFAS Exposure during Critical Development Periods' at the second meeting for 2026 of the Hunter Branch at the Newcastle Exhibition and Conference Centre before an audience of 30 people.



Dr Martin's presentation focused on emerging research into PFAS (the so-called forever chemicals) and their potential effects across development, reproduction, metabolism and behaviour. This work was inspired by PFAS contamination at Williamtown, near the University of Newcastle, where firefighting foams used at the RAAF base contributed to significant surface and groundwater contamination. Some PFAS concentrations in local monitoring wells were far above Australian drinking water guideline levels, highlighting both local community concern and broader global relevance, as PFAS exposure is now widespread through consumer products, food packaging, water-resistant materials and contaminated environments.

Dr Martin's team developed a mouse model designed to mimic lifelong exposure, beginning before mating and continuing through pregnancy, lactation, weaning and adulthood. Overall fertility measures in exposed mothers were largely unchanged, but exposed litters were smaller at birth. Prenatal assessments suggested fetal number and viability were not affected before birth, implying post-birth factors such as maternal stress or infanticide may be involved. Offspring exposed to PFAS showed increased body weight after weaning, suggesting possible metabolic disruption. They also showed signs of endocrine and reproductive disruption: males had altered anogenital distance, females reached puberty earlier, and adult females had increased ovarian follicle numbers. IVF results were preliminary but suggested reduced blastocyst development despite largely normal fertilisation and early embryo development. Their study also found behavioural changes. Exposed mice showed obsessive-compulsive-like digging behaviour and, particularly in males, increased risk-taking or reduced anxiety-like behaviour. Hormone analysis revealed elevated maternal estradiol during pregnancy, which may help explain

some developmental and behavioural outcomes.

A second major theme of their research was PFAS bioaccumulation. Dr Martin's team is building a "PFAS bioaccumulation atlas" to map how PFAS accumulates across tissues, sexes, ages and physiological states. Early data show strong tissue- and sex-specific patterns, with the liver as a major accumulation site and females generally carrying higher tissue burdens. Finally, the team is exploring edible plant-derived fractions that may bind PFAS, offering a possible future therapeutic strategy to reduce PFAS burden in the body.

A [video recording](#) of Dr Martin's presentation is available from our YouTube channel.

Lindsay Botten
Bulletin Editor

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Southern Highlands Branch Report

Presentation Report— 16 July 2026

Not just another gentlemen's club: the nineteenth-century origins and significance of the Royal Society of New South Wales

Dr Anne Coote Martin
Honorary Associate
Centre for Applied History
Macquarie University



At this July monthly meeting of the Southern Highlands RSNSW, Dr Anne Coote quickly captured the attention of her audience by arguing that, in colonial Australia, the most effective means for fostering local research, as we know it today, lay in the Royal Society's monthly meetings, which began in 1850. This presentation was clearly following that noble tradition.



The meetings always ran on schedule, providing a place for members to present their findings to an interested, expert audience and benefit from the discussion that followed. After the lecture, they could have their research disseminated, and their own names made known internationally via the Society's journal. This encouraged members greatly. They produced and published research of local as well as international significance, including astronomy, botany, zoology, hydrology, geology, ethnology, engineering, public health, photochemistry, food science and economics. What a foundation for today's international advances in science and numerous other disciplines!

It was not surprising to hear from Anne that from the beginning, the Society had had a close relationship with the University of Sydney. In the early years, the university was viewed purely as a centre for the transference, rather than the creation of knowledge — a site for teaching, rather than research. Staff pursued research in their own time and at their own expense. In other words, by encouraging the pursuit of research in so many

ways, the Royal Society had filled a gap in colonial Australia not only for expert amateurs but also for university staff.

Anne Coote is a professional historian and an associate of Macquarie University's Centre for Applied History. One of her research interests is the cultural history of science in colonial Australia. Her book, *Knowledge for a Nation: Origins of the Royal Society of New South Wales*, was published in 2024

Anne Wood
Chair, Southern Highlands Branch

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The Society and Social Media

The Society's presence on our social media channels—[Facebook](#), [LinkedIn](#), [X/Twitter](#) and [YouTube](#)—is engaging an increasing following, and we continue to build our repository of events on YouTube.

Our YouTube channel now has over 1,680 subscribers, while the 247 full-length videos and 'shorts' that are online have received more than 201,000 views.

The social media icons at the end of this newsletter will take the reader to our pages on these platforms, from where you can follow, subscribe, and be notified of new content.

As a Society member, please consider subscribing to our social media channels to support the Society's outreach and encourage your friends, colleagues and members of your networks to do so.

YouTube recordings of recent events

All online presentations and all face-to-face presentations held in Sydney and by the Hunter, New England North West, and Western NSW Branches are recorded and made available on the Society's YouTube channel. These can be accessed directly from our [YouTube channel](#) or the [Presentations](#) page of the RSNSW website.

For convenience, the video links below provide access to current recordings and recent popular recordings. We hope that these will be of interest to members.



YouTube recording of the presentation from the sixth meeting of the Society's Provocations and Inspirations lunchtime series held at the Union, University, and Schools Club in Sydney (14 July 2026), at which Tim Buckley, Founder and Director of Clean Energy Finance, spoke on *Australia's energy security: Technology options in an uncertain world*. A summary of the presentation and a brief biography of the presenter are available from the [online event notice](#).



YouTube recording of the presentation from the 1342nd Ordinary General Meeting (1 July 2026) on *Thin-film photovoltaics — the enabling engine for next-generation tandem solar cells*, delivered by Scientia Professor Xiaojing Hao FRSN FAA FTSE, an ARC Laureate Fellow and Deputy Director of the ARC Research Hub for Photovoltaic Solar Panel Recycling and Sustainability, School of Photovoltaic and Renewable Energy Engineering, UNSW Sydney. A summary of the lecture and a brief biography of the presenters are available from the [online event notice](#).



YouTube recording of the presentation from the Hunter Meeting 2026-2 of the Royal Society of NSW (25 June 2026) on *Offspring and the Influence of PFAS Exposure during Critical Development Periods*, by Dr Jacinta Martin, Reproductive Biologist and Lecturer of the Hunter Institute of Medical Sciences and the University of Newcastle. A summary of the presentation and a brief biography of the presenter are available from the [online event notice](#).



YouTube recording of the presentation from 16 June 2026, Ideas@theHouse titled '*City Futures: from challenge to opportunity – by design*', delivered by the distinguished architect, Leone Lorrimer LFRAIA. The [online event notice](#) provides a summary of the lecture and the presenter's biography.



YouTube recording of the presentation from the 1341st Ordinary General Meeting (10 June 2026) on *The Circular Economy: A pathway to environmental sustainability?*, delivered by Professor Sami Kara FRSN FCIRP FACATECH of UNSW Sydney and Professor Michael Hauschild of the Technical University of Denmark. A summary of the lecture and a brief biography of the presenters are available from the [online event notice](#).



YouTube recording of the presentation from the New England North West Branch Meeting 2026-1 of the Royal Society of NSW (25 March 2026) on *One Health for a Changing World: Forests, Farms and Families*, by Professor David Durrheim AM, Director of Health Protection, Hunter New England Health, NSW and University of New England panellists Professor Natkunam Ketheesan (Moderator), Associate Professor Lorina Barker, Professor Susan Wilson, Associate Professor Gal Winter, and Associate Professor Jacqueline Epps. A summary of the presentation and brief biographies of the presenter and panellists are available from the [online event notice](#).



YouTube recording of the presentation from the 1340th Ordinary General Meeting (6 May 2026) on *Household Electricity Use and Investment*, delivered by Professor Jeffrey Reimers FAA FRSN, Director, International Centre for Quantum and Molecular Structures at Shanghai University, China and Adjunct Fellow in the School of Mathematical and Physical Sciences at the University of Technology Sydney. A summary of the lecture and a brief biography of the presenter are available from the [online event notice](#).



Edited by: [Lindsay Botten](#) FRSN, Vice-President, Royal Society of New South Wales

Disclaimer: Positions expressed in this publication by the authors of articles and event presenters do not necessarily reflect those of the Society.

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