

THE BULLETIN 446

THE ROYAL SOCIETY OF NEW SOUTH WALES

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November 2020

For Your Diary

• 18 Nov

Einstein's Discoveries, the Origin and Shape of the Universe

• 02 DEC

<u>Safeguarding Planetary</u> <u>Health in the Anthropocene</u> <u>Epoch</u>

• 09 DEC

<u>Dispelling Climate Change</u> <u>Myths Using Ocean Physics</u>



Patron of The Royal Society of NSW

Her Excellency The Honourable

Margaret Beazley AC QC

Governor of New South Wales

1288TH OGM AND OPEN LECTURE

Where have all the ulcers gone — long time passing?

Wednesday, 11 November 2020



Professor Thomas Borody FRSN Centre for Digestive Diseases

Professor Adrian Lee FRSN UNSW Sydney

Date/time: Wednesday 11 November 2020, 6:30 PM

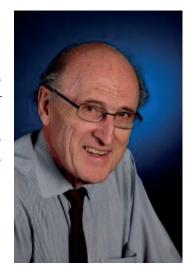
Venue: Zoom Webinar
Entry: No charge
Enquiries: via email

All are welcome.

See page 3 for more information

From the President

Dear Reader, if you are a member of our Royal Society you will have received a recent email, asking you to vote on an important question: whether or not the Society should adopt new Rules, to replace the present Rules and By-laws. I can already feel your eyes glazing over, but please persist! As I discovered when we conducted our COVID-induced on-line ballot for Council positions earlier this year, the present Rules are deeply unsatisfactory. As a hypothetical example, if a person were to stand for the three positions of Vice-President, Secretary, and Council member, on the reasonable principle that the person prefers the first office, but would accept the second, and if not that then the third, then under the present Rules it could turn out that the one person could finish up holding all three positions! There are many other bizarre provisions. The new rules make the sensible determination that once a person is elected to a more senior position,



they are removed from consideration for the others. The present rules are also very much out of date. For example, they do not cater clearly for electronic ballots, which are not only what we so successfully conducted in 2020, but also what we might well decide to do in the future, in order to allow more of our members to participate in our Society.

Your invitation to vote should have arrived on 26 October, as a personalised message with the Subject Heading 'Royal Society of NSW: Ballot for approval of alterations to the Society's Rules'. It takes only a few moments to vote. Please do so!

It is delightful for me to acknowledge that at the recent 2020 NSW Premier's Awards for Science and Engineering, four out of the ten awardees are Fellows our Royal Society. The NSW Scientist of the Year is Professor Edward Holmes FRS FRSN FAA, recognised for 30 years of research in the emergence, evolution and spread of viruses. In the other awards, Professor Suzanne O'Reilly AM FRSN FAA of Macquarie University received the Prize for Excellence in Mathematics, Earth Sciences, Chemistry or Physics; Professor Merlin Crossley FRSN of UNSW Sydney was a joint recipient of the Prize for Excellence in Medical Biological Sciences; while Professor Ewa Goldys FRSN FTSE of UNSW Sydney received the Prize for Leadership in Innovation in NSW. And to add to the plaudits, Professor Thomas Maschmeyer FAA FRSN FTSE from the School of Chemistry, University of Sydney, has been awarded the 2020 Prime Minister's Prize for Innovation. Full details on all these awards are on our website, at https://royalsoc.org.au/.

Ian H Sloan AO FRSN FAA President, Royal Society of NSW

1288th OGM and Open Lecture

Where have all the ulcers gone — long time passing?

Professor Thomas Borody FRSN Centre for Digestive Diseases

Professor Adrian Lee FRSN UNSW Sydney

Date: Wednesday 11 November 2020, 6:30 PM **Venue**: Zoom Webinar (Obtain help in getting

started with Zoom)
Entry: No charge
Enquiries: via email

All are welcome.



Great NSW Discoveries

This is the first presentation in the series *Great NSW Discoveries*, a sequence of presentations documenting past and present discoveries that have made a difference. In it, Emeritus Professor Lee and Professor Borody will tell little-known stories of the essential contributions by RSNSW Fellows to one of the greatest medical advances in our times. The presentations will be introduced by Emeritus Professor Robert Clancy AM FRSN, and the discussions will be rounded out by Emeritus Professor The Honourable Peter Baume AC DistFRSN.

Summary

In 1982, Robin Warren and Barry Marshall at the Royal Perth Hospital described the presence of squiggly bacteria in the gastric mucosa of patients with Peptic Ulcer Disease (PUD). *Helicobacter pylori* was on the map! They would deservedly be awarded the Nobel Prize for their discovery, which would change the world — medicine would never be the same again. It is not possible for even the modern generation of gastroenterologists to appreciate the way PUD dominated the lives of both patients and doctors 50 years ago — surgical lists were full of patients for gastrectomy, medical wards with patients with uncontrolled pain and complications. Twenty per cent of men had a duodenal ulcer. Emergency rosters meant bleeding or perforated ulcers. Yet today, PUD is rarely seen — a recent analysis of the impact of *H. pylori* and its eradication over 25 years in Australia shows a saving of 19,000 deaths, and \$10 billion in costs.

(continued overleaf)

1288th OGM and Open Lecture (continued)

Warren and Marshall would have struggled to develop their ideas without the professional support of Professor Adrian Lee, with a long history of study of 'squiggly' bacteria in the gut. His experience in the growth of these bacteria, their role in animal models, and his contributions to diagnosis, vaccine development and the link to cancer, added to the biology and broad understanding of these bacteria, enabling interpretation of the Perth discovery in a biological context. Warren and Marshall understood the importance of eradication to prove causation, but were unable to develop sterilising therapy, so only an association could be claimed. Professor Tom Borody carefully trialled a series of antibiotics to develop the first effective antibiotic combination, enabling for the first time proof of causation of duodenal ulcers. This began a long sequence of contributions to our understanding and treatment of PUD by Borody including addition of PPIs, and development of 'escape' therapy. He worked with the Newcastle group to develop the first 'near-patient' 'yes/no' test, and identified a role for the host response in conditioning outcomes of the 'host-parasite' relationship.

About the speaker

Adrian Lee will discuss 'Adventures with spiral bugs and *Helicobacter*'. Adrian's adventure began in 1967 at the Rockefeller University in New York when he did a post doc with Rene Dubos, one of the grandfathers of the gut microbiome. Moving to UNSW in 1969 as a lecturer in Medical Microbiology, he continued his interest in the bacteria of the mouse intestinal tract, concentrating on the spiral/helical bacteria that colonised gut mucus. He also worked on the spiral pathogen, *Campylobacter jejuni*, and then on the organism that Barry Marshall and Robin Warren had grown from gastric biopsies using his culture techniques. Later, he developed the first animal models of *Helicobacter pylori* infection, including the first vaccine studies and demonstration of *H. pylori*-induced gastric malignancy. For ten years, he travelled the world trying to convince clinicians to treat *H. pylori* infection. Progressing to Professor of Medical Microbiology in 1990, he also worked as a WHO consultant in medical education. In 2000, he left his beloved spiral bugs to cross to the dark side at UNSW, becoming Pro Vice-Chancellor (Education) with a brief to improve the quality of teaching. Retiring in 2006, he carried out consultancies in tertiary education and now writes about his squiggly bugs and runs a choir.

2020 Annual RSNSW + Four Academies Forum

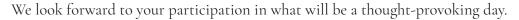
After COVID-19: Creating the Best of Times from the Worst of Times

Date: Thursday 5 November 2020, 8:50 AM–6:30 PM **Venue**: Live streaming from Government House, Sydney

Registration: Via Eventbrite

Program: Download the Program (PDF)

Only a few days to go before this year's very topical RSNSW + Four Academies Forum, which promises to be very well attended via live-streaming. It is not too late for you to <u>register via Eventbrite</u>.





One hundred years after the 1918 Spanish flu claimed more than 50 million lives, pandemics remain on the list of major global risks. They are difficult to predict and invariably alter the course of history in ways we cannot foresee. The impact of this year's COVID-19 pandemic spread quickly well beyond the people it infected, creating massive shifts across society and all sectors of the economy.

The pandemic has exposed the social and economic vulnerabilities of today's highly leveraged and interconnected world. It has also compounded prevailing existential risks for Australia, including the impact of climate change, a decade of household income stagnation, and an erosion of critically important political institutions that underpin national prosperity and our free, open, democratic society.

The Royal Society of New South Wales will again join with the four Learned Academies of Australia to stage our annual Forum in Government House, Sydney, on 5 November under the gracious Vice Regal Patronage of Her Excellency the Honourable Margaret Beazley AC QC, Governor of New South Wales. The Forum will examine how the COVID-19 pandemic has become a wake-up call for all of us to drive a wide-ranging, national program that will create a more resilient, self-sufficient and prosperous Australia.

Transformations achieved already during the pandemic include escalations of telemedicine, automation, and digital commerce and communications, to name but a few. These show us what is possible when the wrecking-ball of a virus exacts its human and economic toll. Our challenge now is to take these transformations further and build the society and institutions we envisage for a much better future.

Acknowledgements

The Royal Society of NSW acknowledges the generous support of Her Excellency the Honourable Margaret Beazley AC QC, Governor of New South Wales, the NSW Government Office of the Chief Scientist and Engineer, and the New South Wales Smart Sensing Network.



Upcoming event: Hunter Branch

Planetary health — safeguarding health in the Anthropocene epoch

Professor Tony Capon Monash University

Date: Wednesday 2 December 2020, 6:00 PM

Venue: Zoom Webinar (Obtain help in getting started with Zoom)

Entry: No charge Enquiries: via email

All are welcome.



About the speaker

Professor Tony Capon directs the Monash Sustainable Development Institute and holds a chair in planetary health in the School of Public Health and Preventive Medicine at Monash University. A public health physician and authority in environmental health and health promotion, his research focuses on urbanisation, sustainable development and human health. He is a former director of the International Institute for Global Health at United Nations University (UNU-IIGH) and has previously held professorial appointments at the University of Sydney and Australian National University. He is a member of the Rockefeller Foundation—Lancet Commission on Planetary Health that published its report 'Safeguarding human health in the Anthropocene epoch' in 2015, and the International Advisory Board for The Lancet Planetary Health.

Two of his recent publications are:

- 'Advancing planetary health in Australia: Focus on emerging infections and antimicrobial resistance.' Hill-Cawthorne et al. *BMJ Global Health* (2019)4(2) e 001283
- 'Human health on an ailing planet historical perspectives on our future.' Dunk JH et al. *NEJM*, 2019, 381(8): 778–782.

Upcoming event: Southern Highlands Branch

Relativity revealed: Einstein's discoveries, the origin and shape of the universe

Ian Bryce

Date: Wednesday 18 November 2020, 6:30 PM Venue: Mittagong RSL, Carrington Room Enquiries and registration: <u>Hubert Regtop</u>

All are welcome.



Registration

This event will be the branch's first face-to-face event since March. Due to social distancing requirements, however, attendance is limited to at most 30 people. Please register for this event with <u>Hubert Regtop</u>, Chair, Southern Highlands Branch of the Royal Society of NSW.

About the speaker

Ian Bryce graduated with a BSc in physics from Monash University, Melbourne, in 1970, followed by Engineering in 1972. He has long experience as an aerospace engineer with Telstra, Optus, and Hawker de Havilland, on aircraft, spacecraft and launch vehicle projects. As Chief Engineer for the Asia Pacific Space Centre, he worked closely with the Russians on a proposed spaceport on Christmas island. With Aerospace Concepts, he developed complex methodologies for risk analysis of weapons and rocket tests at Australia's test site at Woomera. Ian lectured at several universities in space sciences. This includes 7 years at University of NSW, where he created a subject Space Vehicle Design. He has moved to applying the methods of



science to human welfare, including a methodology called Measuring Morality. Ian teaches NSW Primary Ethics, and is active in the Skeptics (Challenge Coordinator) and Humanist societies.

Report: Hunter Branch

by Eugenie Lumbers (Secretary)

A Summary of the Branch's first year of operations

The Hunter Branch of the Royal Society of NSW was launched in October 2019 at a meeting, chaired by the President of the Royal Society of NSW, at which an address by the Chief Scientist of New South Wales was presented.

The Branch Committee had planned to conduct a series of six lectures during 2020, two of which were to be co-badged with the University of Newcastle. However, because of the disruption due to COVID-19, the program was reduced to five events, only the first of which was held face-to-face. Meetings proposed for March and later had to be cancelled, with the program having to be restructured into an online (Zoom webinar) format. A beneficial outcome of this change was the increased availability of the Branch's program to a wider audience through the Royal Society, together with the availability of recorded events on the Society's YouTube channel for convenient, offline consumption.

First Event 2020

This was run in association with a symposium on Mathematics in Industry (organised by Australian and New Zealand Industrial and Applied Mathematics) in January 2020, convened by Professor Natalie Thamwattana of the University of Newcastle. This event was quite successful and was attended by a large audience.

Second Event 2020

The second event was held in May 2020 and was addressed by the Secretary of the Hunter branch, Emeritus Professor Eugenie Lumbers. She spoke on the pathophysiology of COVID-19 and how it causes damage to the heart and other organs — a result of dysfunction of a well-known system, the renin-angiotensin system. This system is significant in causing tissue and organ damage in high blood pressure and diabetes mellitus.

At the time of the talk, there was considerable confusion about the role of this system in acute inflammatory reaction caused by COVID-19. It is interesting to note that a recent report in the Lancet presents prima facie evidence for the hypothesis (Lumbers et al., Front Med, 2020) underlying this presentation (Zoufaly et al., Lancet Respiratory Medicine, published online 24 September 2020).

Third Event 2020

This online event was presented by Prof Pia Ednie-Brown, Professor of Architecture and Chair of Creative Practice Research at the University of Newcastle. She described the personality of the house, 'Avery Green', that she was renovating and the indispensable involvement of anthropomorphism in approaching a house as a person. Her experience of working with 'Avery Green' has been published as a book chapter titled 'A Vital, Architectural Materialism; a House-person's Escape from the Anthropocentric', in *Architectural Materialisms: Nonhuman Creativity*, Maria Voyatsaki (Ed.), Edinburgh University Press. 2018.

Report: Hunter Branch (continued)

Fourth Event 2020

It was planned that this event would be delivered by Prof Alan Finkel in October, but it was subsequently cancelled due to COVID-19. Therefore, a co-badged meeting, in association with the University of Newcastle's 'Looking Ahead Series', was held on 27 October. The lecture was titled 'The Engaged University: advancing research and innovation through powerful partnerships'.

Prof Janet Nelson (Deputy Vice Chancellor, Research and Innovation) showed us novel technologies being developed at the University of Newcastle, including water conservation and new green hydrogen production, powered by solar energy. She led a discussion on engaging partners in research and innovation in the Hunter region and its application. The various speakers were: Ms Morven Cameron, CEO, of Lake Macquarie City Council, which is New South Wales's third largest regional city; Dr Kirsten Molloy, non-Executive Director of HMRI, NRMA and HunterH2O; and Dr Priscilla Tremaine, Research Associate in the School of Engineering at the University of Newcastle.

Of particular interest were the plans by the Lake Macquarie City Council to trial waste collection vehicles powered by hydrogen. The event gave an insight of the University's outreach to the Hunter region.

Fifth Event

This will, again, be held online at 6:00 PM on 2 December 2020. The topic is planetary health, and the speaker is Prof. Tony Capon, Director of the Monash University Sustainable Development Institute. This meeting was originally scheduled for March but was cancelled. Prof Capon's 30-year career of leadership experience spans research education policy and practice. His research focuses on urbanisation sustainable development and human health.

Reports of activities of the Committee of the Royal Society of NSW Hunter Branch

During 2020, Committee meetings of the Branch have been held in January, April, May, August, September, and October, with the most recent meeting being held on 27 October.

The Activities of the Committee have been dominated by the need to rearrange events to cope with limitations imposed by the pandemic. It has also been pursuing an active role in the promotion of its events to local media in the Hunter region, and to the University, as well as to the Royal Society.

The Hunter Branch has plans to fund a medal that will recognise significant achievements promoting the health and welfare of the Hunter region. This medal will be known as the Hunter Medal.

The President and Secretary of the Royal Society of NSW attended the September meeting of the Hunter Branch and provided information concerning the new Strategic Plan, the review of the Society's Rules, and events planned for 2021. The committee felt that it was essential that the value proposition associated with the Strategic Plan be produced as soon as possible in order that the plan can proceed and promote the Society in the Hunter region.

The October meeting discussed further the Strategic Plan, the Rules revision, and the Hunter Medal. The last committee meeting will be held on 2 December, just prior to the Professor Capon's lecture.

Report: Events Committee

by Christina Slade (Chair of Events) & Lindsay Botten (Webmaster)

The Royal Society of NSW has taken to the new format of online meetings with enthusiasm. All Fellows and Members can now join the Sydney, Hunter, and Southern Highland branch meetings.

We have also been experimenting with panel presentations.

On Wednesday 7 October, following the Ordinary General Meeting (OGM)at 6:30 PM, Professor Huw Price FRSN FAHA FBA of the University of Cambridge led a discussion of 'Where now for the study of time?'. Professor Price argued for the 'block universe' account of the metaphysics of time. The direction of time, he suggested, is not a fundamental feature of the universe. Our perception that time is directional is a feature of our psychological makeup. His arguments ranged through quantum mechanics and cosmology. He brought to the discussion two directors of the Centre for Time at the University of Sydney which he had established in 2002: Associate Professor Kristie Miller, a philosopher, and Professor Alex Holcombe, an experimental psychologist who studies how humans perceive and process visual signals. Both suggested that our intuitions about the direction of time can be systematically misleading. The session attracted 83 individual viewers.

On Wednesday 14 September, Emeritus Professor Robert Clancy led a full house of 20 Fellows and Members through his exhibition, 'Charting a course, a 500 year story of discovery and development of Sydney', at the Manly Art Gallery and Museum, Sydney. A welcome chance to meet face-to-face, the event was a fascinating overview of the history of mapping of the region, and an æsthetic revelation. Robert Clancy was both passionate and immensely scholarly in his introduction. It was difficult to persuade the audience to leave. We thank the Manly Art Gallery and Museum and Robert for hosting the event.

Southern Highlands Branch

On Thursday 17 September, Southern Highlands Branch Adjunct Professor Sandra Lynch, Institute for Ethics and Society, University of Notre Dame Australia talked about 'Philosophical ethics and schools: Plan and paradox'. Professor Lynch was a founder of philosophy for children in Australia and brought a deep knowledge of the importance of ethics in the classroom.

Hunter Branch

Professor Janet Nelson, Deputy Vice-Chancellor of the University of Newcastle, was jointly hosted by the Hunter Branch and the University of Newcastle and discussed '<u>The Engaged University</u>: <u>Advancing research and innovation through powerful partnerships</u>' on Tuesday **27 October**. She led a discussion of a panel of experts on the challenges and opportunities offered by collaboration between researchers and communities in sustainable futures and new energy technologies.

(continued overleaf)

Report: Events Committee (continued)

Forthcoming events

The RSNSW and Four Academies Forum at Government House 'After COVID-19: Creating the best of times from the worst of times' will take place on 5 November with a range of outstanding speakers.

On Wednesday II November following the I288th OGM, Emeritus Professor Robert Clancy AM FRSN will introduce Professor Thomas Borody FRSN and Emeritus Professor Adrian Lee FRSN. They will address the Society on 'Where have all the ulcers gone — long time passing?', discussing the role of Helicobacter pylori in Peptic Ulcer Disease.

On Wednesday 18 November, Ian Bryce will address the Southern Highlands Branch on the topic of 'Relativity revealed: Einstein's discoveries, the origin and shape of the universe'. This will mark the Branch's return to face-to-face meetings, albeit with a limited audience of 30, imposed by ongoing requirements for social distancing.

On Wednesday 2 December, Professor Tony Capon of Monash University will address the Hunter Branch on the topic of 'Planetary health: Safeguarding health in the Anthropocene epoch'.

On Wednesday 9 December following the 1289th OGM, Professor Matthew England, FRSN FAA, the 2019 winner of the James Cook Medal, will address the society on the topic of '<u>Dispelling climate change myths</u>— how ocean physics can help explain surprises in the modern-day climate record'.

We hope to be able to recommence face-to-face meetings in the New Year. The first meeting of the year will be held on 3 February and will incorporate the presentation from the 2019 Jak Kelly Award winner and presentations from graduate students who have been awarded Royal Society of NSW Scholarships in 2020.

We urge you to catch up on presentations that you have missed on our <u>YouTube Channel</u> and to follow the Society on <u>Facebook</u>.

The Society and social media

The Society's presence on social media platforms is slowly but surely growing. Our <u>Facebook page</u> and <u>YouTube channel</u> continue to attract and engage followers and viewers, and we continue to build a repository of online events conducted recently on YouTube.

The icons on the right will take the reader to the platforms' respective pages, from where they can follow and subscribe to the Society, and be notified of new content.





RSNSW Fellows awarded Premier's Science & Engineering Prizes

Four Society Fellows have been recognised at the 2020 NSW Premier's Prizes for Science and Engineering, with Professor Edward Holmes FRSN FAA FRS, of the University of Sydney, being awarded the 2020 NSW Scientist of the Year.

In the other awards, **Professor Suzanne O'Reilly** AM FRSN FAA of Macquarie University received the Prize for Excellence in Mathematics, Earth Sciences, Chemistry or Physics; **Professor Merlin Crossley** FRSN of UNSW



Sydney was a joint recipient of the Prize for Excellence in Medical Biological Sciences; while **Professor Ewa Goldys** FRSN FTSE of UNSW Sydney received the Prize for Leadership in Innovation in NSW.

Professor Holmes was recognised for his 30 years of research into the emergence, evolution and spread of viruses, with a focus on how viruses can jump species and manifest as epidemics and pandemics. He came to international prominence in becoming the first to publish the genome sequence of the SARS-CoV-2 coronavirus on 5 January 2020, following communication with a colleague in China. It was this act that triggered the release of genome sequencing data from China, and the start of research efforts to understand the virus, develop rapid testing, and commence the development of vaccines.

Professor Holmes receives \$60,000 as prize money, with category winners each receiving \$5,000.

For further information and background, please read the articles on the <u>Australian Academy of Science website</u> and in the <u>Sydney Morning Herald</u>.

RSNSW Fellow wins Prime Minister's Prize for Innovation

The Royal Society of NSW is delighted that one of its Fellows, Professor Thomas Maschmeyer FRSN FAA FTSE from the School of Chemistry, University of Sydney, has been awarded the 2020 Prime Minister's Prize for Innovation. The Council of the Society warmly congratulates Professor Maschmeyer on this achievement, and this recognition of the impact of his outstanding research.

The award recognises Thomas Maschmeyer for his work that has commercialised fundamental research in fields that address environmental problems: plastic-waste recycling and safe, scalable storage for renewable energy. Professor



Maschmeyer is a catalytic chemist who, over the past two decades, has invented a new, efficient way to convert renewable and plastic-waste inputs into their constituent chemical materials for reuse, and has reimagined zinc-bromide chemistry to develop a completely new solar-energy battery technology.

More on the outstanding achievements of Professor Macshmeyer can be found on the <u>Prime Minister's Prize for Innovation website</u> and the <u>University of Sydney website</u>.

Distinguished Fellowship awarded to Professor Sir Fraser Stoddart

The Council of the Royal Society of NSW is delighted to announce the awarding of a Distinguished Fellowship to Professor Sir Fraser Stoddart FRS DistFRSN FRSE FRSC. The honour Distinguished Fellow of the Royal Society of New South Wales is a prestigious award, limited to 25 living awardees at any time, that recognises internationally-distinguished contributors to science, art, literature, or philosophy.



Sir Fraser is a Scottish-born chemist who shared the 2016 Nobel

Prize for Chemistry 'for the design and synthesis of molecular machines'. He is a graduate of the University of Edinburgh (BSc 1964, PhD 1967), a Fellow of the Royal Society of Edinburgh and the Royal Society of London, and since 1997 he has worked in the USA, most recently at Northwestern University. In addition to the Nobel Prize, Sir Fraser has been awarded many prizes and fellowships including the Albert Einstein World Award of Science (2007), the Davy Medal of the Royal Society (2008) and membership of the National Academy of Sciences (USA, 2014).

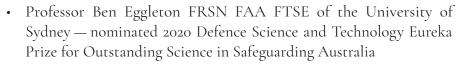
In 2017, Sir Fraser joined UNSW, Sydney to realise his 'New Chemistry' initiative. Visiting each year, Fraser gives lectures to faculty and students and collaborates on a range of exciting chemistry projects involving the manipulation of molecules to effect devices such as switches, sensors and motors.

To read further about the achievements of Professor Sir Fraser Stoddart, please visit the <u>Distinguished Fellows</u> page of the Royal Society's website.

Society Fellows finalists in Australian Museum Eureka Prizes

A number of Society Fellows are amongst the <u>Finalists of the 2020 Australian Museum Eureka Awards</u> — the country's most comprehensive national science awards, honouring excellence across the areas of research and innovation, leadership, science engagement, and school science.

Amongst the finalists in this year's Prizes are:





- Professor Maria Kavallaris AM FRSN of UNSW Sydney and the Children's Cancer Institute and Professor Robert Park FRSN of the University of Sydney — each nominated for the 2020 CSIRO Prize for Leadership in Innovation and Science
- Professor Karu Esselle FRSN nominated for the 2020 University of Technology Sydney Eureka Prize for Outstanding Mentor of Young Researchers.

The Awards will be announced at an online ceremony on the evening of 24 November 2020.

Council and Office-Bearers 2020/2021

The current Council and office-bearers of the Society are:

Patron	Her Excellency The Honourable Margaret Beazley AC QC, Governor of New South Wales
President	Emeritus Professor Ian Sloan AO FRSN
Vice-Presidents	Emeritus Professor Brynn Hibbert AM FRSN (immediate past President)
	<u>Dr Susan Pond AM FRSN</u>
	Ms Judith Wheeldon AM FRSN
Hon. General Secretary	Mr Bruce Ramage MRSN
Hon. Editorial Secretary	Emeritus Professor Robert Marks FRSN
Hon. Treasurer	Mr Richard Wilmott MRSN
Hon. Librarian	Mr John Hardie FRSN
Hon. Webmaster	Emeritus Professor Lindsay Botten FRSN
Councillors	Mr Ian Bryce MRSN
	Emeritus Professor Robert Clancy AM FRSN
	<u>The Hon. Virginia Judge FRSN</u>
	Mr Stuart Midgley MRSN
	Emeritus Professor Bruce Milthorpe FRSN
	Ms Nyrie Palmer MRSN
	Emerita Professor Christina Slade FRSN
	Adjunct Professor Robert Whittaker AM FRSN
Hunter Branch Representative	<u>Professor George Willis FRSN FAA</u>
Hon. Secretary, Southern Highlands Branch	Ms Anne Wood FRSN

Editor: <u>Jason Antony</u>

