



Message from the Acting Chief Executive—July 2018

July 16, 2018

I'm pleased to be able to bring you the July newsletter. July is generally a quieter month after our annual celebration of science in May, but there is still plenty to communicate as our programs progress and activities across the sector continue.

This month has seen the formation of the new International Science Council, with the organisation's founding General Assembly held in Paris. We are looking forward to ongoing engagement with the Council after 64 years of involvement at many levels with the former International Council for Science.

Other international activities include the recent Lindau Nobel Laureates Meeting, the election of Professor Frances Separovic to the Regional Committee of ISC for Asia and the Pacific, an international congress to be held

in Australia, and the Australia–Americas internship program.

We have three major events planned for National Science week in August, including Dr Karl and Academy Fellow Professor Veena Sahajwalla in Canberra. We also invite you to join us for Falling Walls Lab Australia in September, and be inspired by the 20 young Australian researchers selected for the event.

There is a push to improve the qualifications of science and maths teachers in all Australian schools, with the Academy supporting increasing STEM teacher graduates and advocating for support for existing teachers. And we say farewell and thank you to Denis Goodrum and Shelley Peers, who for many years have been leading lights in STEM education in Australia and internationally.

Our extraordinary impact across social media continues to grow, but we rely on sourcing solid scientific information for our videos and articles. Find out what



David Perceval

we need and how to contact us **(page 10)** if you have an idea for a video or article, or would like to provide expert review of our content before it goes live.

In July, our Chief Executive Anna-Maria Arabia is spending time at the Royal Society of London, an organisation with which we have a long and collegial relationship. She is then taking a well-earned break and will return to work in August.

David Perceval

Newly-formed International Science Council to provide a unified voice

July 06, 2018

The newly-formed International Science Council has met for the first time at its founding General Assembly in Paris.

A new board was elected at the meeting, with South African mathematician Daya Reddy announced as President and New Zealander Peter Gluckman as President-elect.

The International Science Council is a merger of the former International Council for Science and International Social Science Council. The Council is set to champion both the natural and social sciences, providing a unified voice to respond to the scientific and societal challenges of the future.

The Academy represented Australian science at the historic meeting, with a delegation consisting of the current and former Foreign Secretaries and the directors of International Programs and Future Earth Australia.

The Academy has represented Australia on the International Council for Science since 1954, and is looking forward to continuing as an active and valued member of the newly merged organisation.



The Academy delegation at the General Assembly (from left): Tayanah O'Donnell, Director Future Earth Australia; Professor Cheryl Praeger, former Foreign Secretary; Professor Elaine Sadler, Foreign Secretary; and Nancy Pritchard, Director International Programs. They are with Professor David Black, Academy Fellow and former Secretary-General of the International Council for Science.

STEM graduates important but let's support existing teachers as well

July 09, 2018

The Australian Academy of Science has welcomed Federal Education Minister Simon Birmingham's statement about the importance of qualified science and maths teachers in Australian schools.

The Academy said there aren't enough well-trained and well-supported science and maths teachers to be placed in all Australian schools and pointed to alarming decreases in student enrolments in advanced

science and maths subjects, particularly among girls.

Attracting more STEM graduates into teaching and ensuring better STEM training for teacher trainees is part of the solution, however, only about five per cent of the teaching workforce turns over each year so this is a long-term strategy—we need to do a much better job supporting our existing teachers in the meantime.

With support from the Australian government, industry, philanthropists and some state governments, the Australian Academy of Science



The Academy is committed to developing and delivering inquiry-based science curriculum resources and teacher professional learning programs, including a maths learning program.

is committed to developing and delivering inquiry-based science curriculum resources and teacher professional learning programs, recently expanding to a national maths learning program.

The Academy has engaged with over 70% of Australian science teachers, and delivered professional learning workshops to over 23,000 teachers over the past decade.

This has taught us that targeted professional development for existing teachers—particularly those without formal training in their disciplines, and those teaching in regional and remote areas—is critical and urgent if we are to give all teachers the skills and confidence to engage and inspire their students to pursue maths and science.

Evidence shows that programs like the Academy's *Primary Connections*, *Science by Doing* and *ReSolve: Maths by Inquiry* work, however, they have not been implemented in all schools. The Academy stands willing and able to work with state governments and the Federal Government to do more.

National Science Week events: Dr Karl, the Science of Sport, and the Science of Us

July 16, 2018

Dr Karl in Canberra—a free event for secondary schools

Dr Karl Kruszelnicki just loves science to pieces. After all, science is a way to not get fooled. Dr Karl's media career spans more than 30 years, talking about science in radio, TV, newspapers and books—of which there are 43 with more on the way.

Along with Dr Karl, this exciting event will feature 'waste warrior' and Academy Fellow, Professor Veena Sahajwalla. Attendees be able to ask questions of Dr Karl, and have their Dr Karl book signed (BYO book or purchase at the event).



Schools are invited to attend this exciting Dr Karl event in National Science Week.

Download and share this poster: science.org.au/files/userfiles/events/newsletters/118/karl-poster.pdf

Schools show

**11 am – 12.30pm,
Friday 17 August**

**National Convention
Centre Canberra**

Great moments in future careers

Science is probably the best possible 'mental toolbox' that you can have. It will let you change your career many times. Dr Karl will discuss future careers in genetics, engineering, basic physics, computer science and the big one—our environment. There are three messages of hope for the future: we can fix global warming, today's students are on average 9 IQ points smarter than their parents and teachers, and we are living in the most peaceful time in human history.

Bookings are essential—schools interested in attending this session should email:

reception.can@ticketek.com.au

The public event in the evening with Dr Karl is fully booked.

The Science of Sport Sydney

**6.00 – 7.30 pm
(refreshments 5.30 – 6.00 pm),
Wednesday 15 August**

**Charles Perkins Centre,
University of Sydney**

Hear from four outstanding speakers at our free Sydney event as we delve into sport science and public health. You'll also have an opportunity to ask questions of each speaker.

How do you motivate the physically inactive to get moving?

Strategic Policy Lead at Sport NZ, Kay Thomson, knows what it takes to tackle inactivity on a national scale, including playing a key role in getting the UK's inactive citizens moving. With Australia's most recent National Health Survey finding nearly one in three Australians are insufficiently active, Kay will discuss the lessons learnt from the UK experience and how public participation in sport can make a difference to a nation's health.

Does 'carb loading' really work?

Metabolic biochemist Dr Kieron Rooney from the University of Sydney will discuss the latest research on carb loading in relation to diet and exercise. Kieron's research has investigated the role of diet and physical activity for fuel storage and utilisation, and how these relate to health conditions such as obesity and Type 2 diabetes.

Does the Soccer World Cup get people off the couch?

For public health researcher Professor Adrian Bauman from the University of Sydney, physical inactivity is the most inexcusable affliction of the modern world. But can events like the Soccer World Cup get people off the couch? Adrian will explore the connection between elite events and community participation in sport, as well as other positive outcomes that 'trickle down' from these events. Adrian oversees a diverse research program including chronic disease prevention, physical activity, sedentary behaviour, nutrition, obesity and diabetes.

What can athletes and consumers learn from each other when it comes to caffeine consumption?

Dr Louise Burke will discuss the pros and cons of using caffeine, including habitual daily caffeine intake, to boost sports performance. Louise has 35 years' experience as a sports dietitian, including the last 27 years as the Head of Sports Nutrition at the AIS. Louise has also written a number of books on sports nutrition, as well as nearly 300 peer-reviewed publications and book chapters. She is Chair in Sports Nutrition at the Australian Catholic University.

The Science of Sport is a Sydney Science Festival event, part of National Science Week. Booking is highly recommended as this event is likely to fill quickly.

More about this event:
[science.org.au/news-and-events/
events/science-of-sport-sydney](http://science.org.au/news-and-events/events/science-of-sport-sydney)

The Science of Us: Your mental health Canberra

**6.00 – 7.00 pm
(refreshments 5.30 – 6.00 pm),
Tuesday 14 August**

The Shine Dome, Canberra

Join us at this event focusing on mental health in our series 'The Science of Us'. Professor Mike Kyrios from Flinders University and Professor Helen Christensen from the Black Dog Institute will explain the latest research in the area of mental health, and how it has been, and can be, influenced by technology. They will explore emerging ways in which technology is adversely affecting our mental health, and ways technology can be used to effect positive outcomes for those at risk.

The Science of Us: Your Mental Health is a National Science Week event and booking is highly recommended as this event is likely to sell out.

More about this event:
[science.org.au/news-and-events/
events/public-speaker-series/
science-us/your-mental-health](http://science.org.au/news-and-events/events/public-speaker-series/science-us/your-mental-health)

Academy Fellows receive international recognition

June 25, 2018

The Australian Academy of Science congratulates Academy Fellows Martin Green, Terry Hughes and Brian Walker on recent international recognition of their research.

James Cook University Distinguished Professor Terry Hughes received the Prince Albert II of Monaco Foundation's 2018 Climate Change Award. eurekaalert.org/pub_releases/2018-06/acoe-crs062118.php

The award recognises Professor Hughes's contribution to advancing understanding of the influence of rapid climate change on the world's coral reefs.

The Foundation's awards ceremony, now in its 11th year, honours key international figures and organisations who have made an exceptional commitment to safeguarding the planet. Previous recipients include Dr Jane Goodall, Professor David Suzuki and Sir David Attenborough.



Professor Martin Green



Professor Terry Hughes. Image courtesy of ARC Centre of Excellence for Coral Reef Studies

Solar expert UNSW Scientia Professor Martin Green has become the first Australian to win a prestigious Global Energy Prize for his research, development and educational activities in the field of photovoltaics.

newsroom.unsw.edu.au/news/science-tech/solar-expert-first-australian-win-international-energy-prize

The annual Global Energy Prize honours outstanding achievements in research and technology



Dr Brian Walker

that are addressing the world's pressing energy challenges. Professor Green shares the prize and \$820,000 prize money this year with Russian scientist Sergey Alekseenko, an expert in thermal power engineering.

Dr Brian Walker, from CSIRO and the Australian National University, has received the 2018 Blue Planet Prize, an international environmental award sponsored by Japan's Asahi Glass Foundation.

senatorbirmingham.com.au/global-recognition-for-australian-researcher/

He is only the second Australian in the award's history to claim the prize, which recognises outstanding achievements in scientific research and its application in solving global environmental problems.

The award recognises Dr Walker's achievements as a pioneer of 'resilience science' in social-ecological systems.



Professor Calum John Drummond FTSE accepting the Ian Wark Medal

One scientist's journey in advanced materials and product development in Australia

July 09, 2018

The contributions to Australian science and industry by the late Sir Ian William Wark CMG CBE FAA FTSE were commemorated this month with the Australian Academy of Science's Ian Wark Medal and Lecture.

The award was inaugurated in 1987, two years after Sir Ian's death, and was created by the Academy through a legacy received from Sir Ian and donations by his friends. It recognises research which contributes to the prosperity of Australia through the advancement of scientific knowledge and its application.

This year the Ian Wark Medal was awarded to Professor Calum

John Drummond FTSE, Deputy Vice-Chancellor Research and Innovation at RMIT University.

Professor Calum Drummond has made outstanding contributions to advancing the fundamental understanding of the key factors governing molecular assembly, and particle and surface interactions in liquids.

A hallmark of his research has been the use of sophisticated high-throughput preparation and characterisation techniques to fast track the creation of materials, and the determination of the structure and properties of materials, at the nanoscale.

This fundamental research in chemistry has enabled the development and commercialisation of advanced high-performance materials for economic and societal benefit.

The materials have been applied in diverse areas including energy storage, medical therapy and diagnosis, household consumer and industrial large-scale uses.

Seventy-five people attended the presentation dinner in Melbourne to hear Professor Drummond's lecture titled: 'One scientist's journey in advanced materials and product development in Australia.'

Watch a video about Professor Drummond's award:

[youtube.com/watch?v=klQmVCXbMRA](https://www.youtube.com/watch?v=klQmVCXbMRA)

More information about the Ian Wark award:

[science.org.au/opportunities-scientists/recognition/honoric-awards/career-awards/ian-wark-medal-and-lecture](https://www.science.org.au/opportunities-scientists/recognition/honoric-awards/career-awards/ian-wark-medal-and-lecture)

Nominations will be open in early 2019 for the 2020 award.



Emerging researchers to star in Falling Walls Lab Australia—and you can be there

July 16, 2018

An exciting event in September will showcase the innovative ideas of 20 emerging Australian researchers—and you are invited to see it happen.

The third Falling Walls Lab Australia will take place on Tuesday 11 September at the Shine Dome in Canberra, hosted by the Academy in partnership with the Embassy of Germany in Canberra and the German–Australian Chamber for Industry and Commerce.

This event will be an inspiring innovation forum for 20 young Australian researchers, social scientists, academics, entrepreneurs and professionals across all disciplines to present their research work, business model, innovative project, social initiative or idea in just 3 minutes, on stage in front of peers and a distinguished audience from academia and business.

Be part of the audience

This event is open to anyone, and entry is free. However, we suggest you book early as seats are limited and will fill quickly. Please book your seat by Friday 31 August.

science.org.au/news-and-events/events/falling-walls-lab-australia



Amy Shepherd presented on scientific publishing practices at the Lindau Nobel Laureate meeting in June.

Lindau meeting among recent international highlights

July 16, 2018

Lindau Nobel Laureate meeting

In late June, eight top young Australian scientists were supported by the Science and Industry Endowment Fund and the Academy to attend the 68th Lindau Nobel Laureate Meeting in Germany. The delegation was led by Academy Fellow Professor Jennifer Martin. A total of 600 young scientists from 84 nations had the opportunity to interact with, and learn from, 39 Nobel Laureates.

The young Australian scientists were:

- Dr Lee Ashton, Nutrition, University of Newcastle
- Dr Ryan Farr, Circulating biomarkers, CSIRO
- Ms Jessica Kretzmann, Chemistry, University of Newcastle
- Ms Hayley McNamara, Immunology, Australian National University

- Mr Gregory Quaife-Ryan, Cardiac development and regeneration, University of Queensland
- Dr Elena Schneider, Respiratory medicine, University of Melbourne
- Ms Amy Shepherd, Neuroscience, Florey Institute of Neuroscience and Mental Health
- Dr Yuan Zhou, Genetics, University of Tasmania

Nobel Laureate Fellows at the meeting were Professor Peter Doherty and Professor Robin Warren, along with Corresponding Members Professor Elizabeth Blackburn and Professor Rolf Zinkernagel.

The week-long meeting, covering medicine and physiology, included topics on the circadian clock, personalised medicine, genetic engineering and the role of science in a ‘post-factual’ era. A panel discussion was held on scientific publishing practices, on which Australian participant Amy Shepherd was selected to present.



Professor Frances Separovic will represent Australia on the Regional Committee for Asia and the Pacific.

Fellow to represent Australia on regional committee

Professor Frances Separovic FAA has been elected to the Regional Committee for Asia and the Pacific (RCAP) for the newly-formed International Science Council. This will give Australia the opportunity to participate in the Regional Office's activities, such as promoting the development of science throughout Asia and the Pacific and strengthening the voice of developing country scientists in this region.

International biochemistry and molecular biology congress to be held in Australia

The Australian Society for Biochemistry and Molecular Biology (ASBMB) will be hosting the 2024 International Union of Biochemistry and Molecular Biology (IUBMB) Congress.

The Academy is the Australian member of IUBMB, and Professor Janet Macaulay from Monash University is a member of the union's Executive Board. Professor Macaulay is also a member of the Academy's National Committee for Biomedical Sciences.

Scientific congresses such as this are immensely beneficial presenting platforms and promotional opportunities for Australian science. They are also beneficial for our economy: each week-long event attracts several thousand international delegates, with an estimated average daily expenditure of \$232 by each delegate visiting Australia. The Academy's membership of the International Council for Science has enabled 40 such events between 2007 and 2017, bringing an estimated \$118 million to Australia.

More international news

- Newly-formed International Science Council to provide a unified voice (**page 2**)
- Academy Fellows receive international recognition (**page 5**)
- Academy the starting point for Australia–Americas internship program (**page 9**)



The interns from Argentina, Brazil, Colombia and the US met at the Shine Dome in Canberra.

Academy the starting point for Australia–Americas internship program

July 16, 2018

A large group of PhD students from Argentina, Brazil, Colombia and the US gathered at the Academy in mid June as the starting point for the this year's Australia–Americas PhD Research Internship Program.

The program is providing 40 second- and third-year PhD students in education, science and engineering with opportunities to conduct research in Australian institutions and to initiate personal relationships with their Australian counterparts over eight to twelve weeks during the North American summer. The participants of the program are being hosted by universities, CSIRO divisions, government departments and research institutions.

The two-day orientation program in Canberra included a welcome by the Academy's Chief Executive Anna-Maria Arabia and representatives of the Department of Education and Training, as well



A visit to Tidbinbilla Nature Reserve near Canberra was part of the interns' welcome by the Academy.

“ Thank you for the introduction to the culture and country's history. It has given me significant background and understanding of things I have already experienced while here in my host city. Also, the orientation gave us a great opportunity to develop relationships with other participants so we can explore and experience many of the great things this country has to offer together. ” Program participant

as site visits to Parliament House and Tidbinbilla Nature Reserve. The Academy hosted a dinner at the Shine Dome that was attended by Fellows and representatives of relevant Embassies.

The internship program is funded by the Australian Government Department of Education and Training.

#ResearchInternAU18

Scientists are full of ideas—and we want to know about them!

July 16, 2018

The Academy is having an extraordinary impact in the online world. Our overall social media following has grown from 30,000 to nearly half a million since October last year. This phenomenal growth rate is solely due to our highly focused and professional work in producing original video, article and image campaigns, and partnering with mainstream news organisations to communicate quality, verified science.

Do you have ideas?

Scientists can provide a rich and virtually endless source of inspiration and expertise on an enormous range of topics. We're looking for ideas from Fellows, early- and mid-career researchers, National Committee members—in fact any scientist—on scientific research that is likely to be of wide general interest, and that may be of interest to media.

All ideas are welcome, as long as they're backed by science. In particular, if you have had an interesting paper that has been

accepted but not yet published, and that you think has potential to really make a splash, you can share a draft with us under embargo—email it with a short summary to video@science.org.au.

Indicate which journal it will be published in and when you expect publication. We will let you know if we are able to produce content based on your work—and can assure you that we will not publish anything until your paper has been released by the journal.

We can produce videos and articles fairly quickly, but the more time we have the better the product will be.

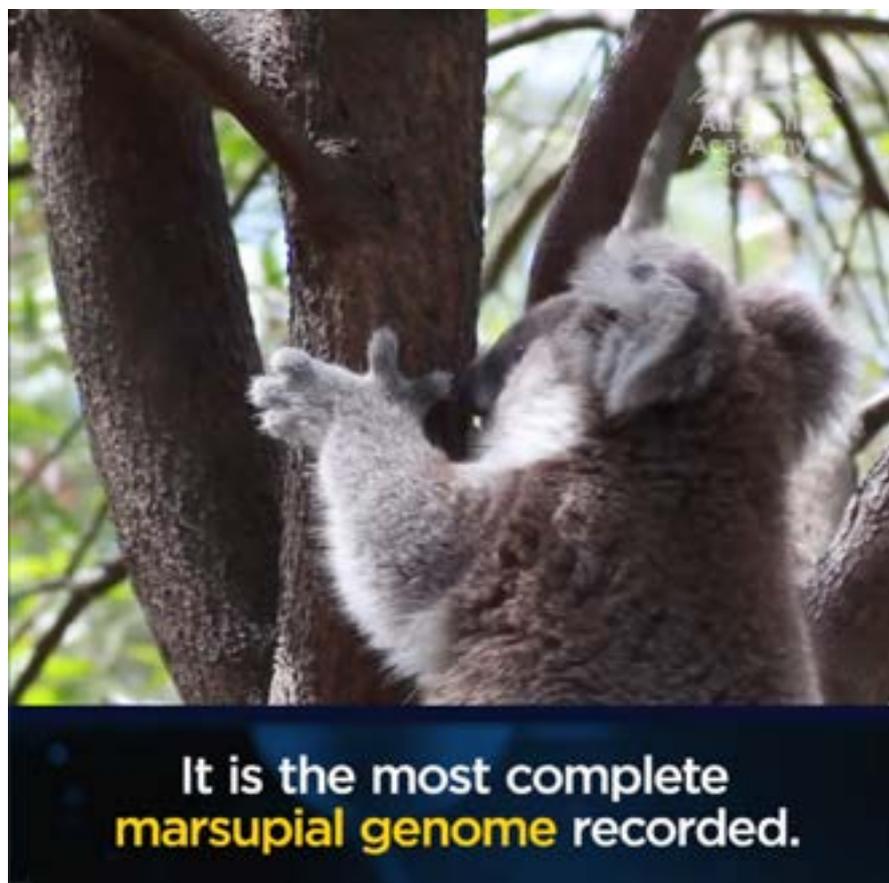
Expert reviewers essential

We also regularly reach out to Fellows and other experts to review our videos and articles before publication to make sure

the science is accurate. Thank you to all who have supported us so far, and please let us know if you'd like to be contacted as an expert, and what your field is.

You can see all our social media content by visiting science.org.au/curious and following the links to the our social media accounts. Make sure you're following the Academy's social media channels if you aren't already.

As an example of our work, this recent video on the koala genome had more than 100,000 views on Facebook within a few days of release. Two Academy Fellows, Professor Jenny Graves and Professor Marilyn Renfree, were co-authors on the Nature Genetics paper that was the source of the science.



BREAKING: Koalas—the scientific achievement that could protect this iconic Aussie animal.
facebook.com/AustralianAcademyofScience/videos/1723863407691183/

Leading science educators' achievements celebrated

July 16, 2018

The Academy has said thank you and farewell to two STEM education leaders—Denis Goodrum and Shelley Peers—who have inspired thousands of teachers and students in Australia and made significant contributions to international education.

Denis Goodrum

Colleagues, friends and family met at the Academy in June to celebrate a lifetime of achievements in science education by Professor Denis Goodrum, who has retired.

Denis served the Academy in various leadership roles over the last 26 years and played a pivotal role in shaping science education and curriculum development in Australia and overseas.

He was most recently Executive Director of Science by Doing, a comprehensive online science program for Years 7 to 10 funded by the Australian Government and available free to all Australian students and teachers. This groundbreaking program is used by two-thirds of Australian science teachers and many thousands of students. It has stimulated interest in science and provided teachers with resources and professional learning to teach creatively and effectively while meeting curriculum requirements.

I think the resources and the whole Science by Doing program is quite literally the best resource available for interactive and meaningful science teaching. I wanted to thank



Denis giving his farewell speech.



Academy Fellows and staff were joined by Denis's family and friends at his farewell.

you and your team for designing everything in this magnificent set of curriculum activities.' Maths and science teacher, Queensland

Denis started with the Academy in 1992 after many years teaching and researching science education. He led the project that developed the Academy's curriculum resource Primary Investigations, the forerunner to the current Primary Connections: Linking science with literacy program.

Over the past two decades, in addition to developing primary

and high school programs at the Academy, Denis has led science education research teams and collaborations in the US and Australia, was appointed Dean of Education at the University of Canberra, and advised the Australian Government on the future of science education.

Fortunately the Academy will not be without Denis's skills completely—he will continue to consult on the development of online adaptive learning and formative assessment.

Shelley Peers

Ms Shelley Peers AM was Director of Primary Connections from 2005 to 2013 and Director of Funded Projects from 2013 to 2018, including oversight of Australian Government funded components.

PrimaryConnections: Linking science with literacy is an innovative program developed by the Academy that links the teaching of science with the teaching of literacy in primary schools.

The program's inquiry-based approach focuses on developing students' knowledge, understanding and skills in both science and literacy. Primary Connections provides curriculum resources and a comprehensive and practical professional learning program to support teachers in the classroom.

Shelley has made a significant contribution to more than 23,000 Australian teachers engaging with Primary Connections

professional learning, with more than 35 exemplary curriculum unit resources being developed to support teachers. In 2014, Shelley was recognised as a Member of the Order of Australia for significant service to primary education, particularly to science, curriculum development and professional organisations. Additional honours received by Shelley include the 2012 Purkwa Laureate, a Grand Prize of the French Academy of Sciences, and a 2009 Churchill Fellowship to study inquiry-based primary school science education in the US, UK and Europe.

The Academy thanks Shelley for her commitment and contribution to primary science education in Australia, and warmly wishes her well in the future.



Shelley has been a leader in primary STEM education.

Mark Oliphant's role in WWII generates national interest

July 13, 2018

The Academy's journal, *Historical Records of Australian Science*, recently published a fascinating article on the role that Academy founder Mark Oliphant played during WWII.

publish.csiro.au/HR/HR18008

In 1943, Mark Oliphant arrived on the Manhattan Project as a leading member of the British mission. Inside the laboratory he was a measured and skilful physicist, but outside he was a bull that charged headlong into the gates of secrecy and the unholy communion of science, politics and military.



Shelley with Academy Fellow and Nobel Laureate, Professor Brian Schmidt, soon after he was awarded the Nobel Prize. Professor Schmidt has been a strong supporter of school STEM teaching for many years.



Sir Mark Oliphant AC KBE FAA FRS FTSE

General Leslie Groves, the man in charge of the Manhattan Project, became agitated at the naivety of the self-absorbed scientists and provided an insight on America's secret post-war intentions of an atomic monopoly. Oliphant, not a man to let explosive knowledge pass him by, headed to the British Embassy in Washington to send a secure report to London that escalated all the way to the top of Britain's war time leadership. Oliphant was sounding a horn to warn that Britain's own atomic ambitions and scientific freedoms were under imminent threat.

The journal article by Darren Holden was covered by *The Conversation*, *Late Night Live*, Australian Science Channel and *Cosmos*.

The May paper that received much of the attention was preceded by an article in January that set the scene on Oliphant's involvement in the American atomic bomb project. publish.csiro.au/HR/HR17023

More articles, and memoirs

Paul Fraser is the lead author on the third of the journal's articles by CSIRO scientists describing the history of Australia's greenhouse gas research. Following two articles on the study of carbon dioxide emissions, Fraser and his colleagues address the issues of non-CO₂ gases such as nitrogen oxide and fluorocarbons.

publish.csiro.au/HR/HR17016

This issue also has an article on research conducted by Professor Ian Rae on the establishment of a radiocarbon dating laboratory in Melbourne's Museum of Applied Science. Professor Rae also wrote the biographical memoir for chemical physicist Professor Jim Morrison

publish.csiro.au/HR/HR17021.

Other biographical memoirs describe the careers of two other Australian science leaders. Professor Laurie Nichol

publish.csiro.au/HR/HR17024

was a biochemist and twice a university vice-chancellor, while Professor Brian Kay

publish.csiro.au/HR/HR17022

was an expert on mosquitoes and their impact on public health because of the viruses they carry.

There is an interesting selection of book reviews, while the *Bibliography of Australian Science* for 2017 is also published.

Journal now publishing 'online early'

Who can possibly wait six months for the next issue of *Historical Records of Australian Science* to arrive? Not us! That's why CSIRO Publishing is now publishing articles 'online early'—where the peer-reviewed and edited version of record is published online before inclusion in an issue. This is an important adjunct to formal publication in a journal that has only two issues a year.

Find out more about *Historical Records of Australian Science*

publish.csiro.au/hr/

About the Journal,

including how you can receive an email alert when an issue is published

publish.csiro.au/journals/earlyalert.

Fellows can access the articles for free via a link on the Fellows Only section of the Academy website (requires log-in). All memoirs are published on the Academy website after publication in the journal.

Opportunities for scientists—July 2018

July 16, 2018

Victoria Prize for Science and Innovation

Recognises leadership, determination and creativity, highlighting the many ways in which research and development of international significance are conducted in Victoria.

More information on the Victoria Prize for Science and Innovation: veski.org.au/vicprize-criteria

Applications close **25 July 2018**

Victoria Fellowships

Recognises the important role of innovation in Victoria's economic future and the need for Victorians to be skilled in science, technology, engineering and mathematics

More information on the Victoria Fellowships: veski.org.au/vicfellow-criteria

Applications close **25 July 2018**

Hideyo Noguchi Africa Prize—JSPS

The prize aims to honour individuals or organisations with outstanding achievements in the fields of medical research or medical services—100 million Yen.

More information on the Hideyo Noguchi Africa Prize: <http://www.jsps.go.jp/english/e-noguchiafrica/>

Applications close **31 July 2018**

2019 Australian of the Year Awards

Celebrates the contributions of those leading Australians who excel in their chosen field or who make outstanding achievements for the betterment of others.

More information on the 2019 Australian of the Year Awards: australianoftheyear.org.au/nominate/

Applications close **31 July 2018**

Fellows update—July 2018

July 16, 2018

Honours and awards to Fellows

- **Professor Martin Green AM FAA FRS FTSE**—Global Energy Prize
- **Professor Terry Hughes FAA**—Prince Albert II of Monaco Foundation Award for Climate Change
- **Dr Brian Walker FAA FTSE**—Blue Planet Prize