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# THE PRIME MINISTER'S PRIZES FOR SCIENCE



## 2021 CITATIONS AND PRIZE RECIPIENTS





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## THE PRIME MINISTER'S PRIZES FOR SCIENCE

# Professor Edward C. Holmes FAA FRS

University of Sydney, New South Wales

### 2021 PRIME MINISTER'S PRIZE FOR SCIENCE

- Professor Edward C. Holmes is the global authority on the evolution of viral diseases.
- For almost 30 years, he has pioneered the study of how viruses evolve and jump between species, including humans, to spread and cause disease. His work has laid the foundations for the study of virus evolution, ecology and emergence.
- Using genome sequence data, he has helped determine the origin and spread of major human and animal pathogens, including hepatitis C, HIV, influenza, West Nile, dengue, Zika and Ebola.
- Professor Holmes played a transformative role in the scientific response to COVID-19. In early 2020, he was the first person in the world to publicly share the virus' genome sequence.
- Sharing this data was critical in helping the global response to the pandemic. It fast-tracked research efforts around the world and enabled work on designing a vaccine to begin within days, saving countless lives.
- He is now at the forefront of research on the origins and evolution of COVID-19.
- Professor Holmes' research continues to generate knowledge that is critical to the control and prevention of infectious diseases. He has helped develop the computational tools that enable precise tracking of the spread and evolution of viruses.
- He also pioneered the use of phylogenetic methods to reveal the fundamental mechanisms of how viruses evolve and spread through populations.
- Professor Holmes works in the Sydney Institute for Infectious Diseases and the Charles Perkins Centre at the University of Sydney. He also holds a joint position with the School of Life and Environmental Sciences and the School of Medical Sciences.
- His work will continue to help protect Australia from existing and undiscovered infections, leading our country and the rest of the world into a new age of biosecurity.
- He is a Fellow of the Royal Society (United Kingdom), a Fellow of the Australian Academy of Science, and an Australian Research Council (ARC) Laureate Fellow.





## THE PRIME MINISTER'S PRIZES FOR SCIENCE

### CAREER HIGHLIGHTS

- 2021 General Symbiont Award (with Prof. Yong-Zhen Zhang)
- 2020 NSW Premier's Prize for Science & Engineering
- 2017 Fellow, The Royal Society
- 2017 Australian Laureate Fellow, Australian Research Council
- 2017 NSW Premier's Prize for Science & Engineering (Biological Sciences)
- 2017 Fellow, The Royal Society of New South Wales
- 2015 Fellow, Australian Academy of Science
- 2012 Verne M. Willaman Chair in Life Sciences, The Pennsylvania State University
- 2011 Fellow, National Health and Medical Research Council
- 2010 Fogarty International Centre Director's Merit Award to the Multinational Influenza Seasonal Mortality Study Team, National Institutes of Health
- 2010 Faculty Scholars Medal, The Pennsylvania State University
- 2008 Kavli Fellow, National Academy of Sciences
- 2007 Eberly College of Science Distinguished Senior Scholar, The Pennsylvania State University
- 2006 Affiliate Member, Fogarty International Centre, National Institutes of Health
- 2005 Professor of Biology, The Pennsylvania State University
- 2004 University Lecturer in Evolutionary Biology, University of Oxford
- 2004 Tutorial Fellow in Biological Sciences, New College, University of Oxford
- 2003 Scientific Medal, Zoological Society of London
- 2002 Royal Society University Research Fellow, University of Oxford
- 1998 Fellow by Special Election of St. Catherine's College, University of Oxford
- 1994 Wellcome Trust Fellow in Biodiversity Research, University of Oxford



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## THE PRIME MINISTER'S PRIZES FOR SCIENCE

# Professor Anthony Steven Weiss AM FTSE FRSC FRACI CChem FRSN FAIMBE FAICD FBSE FTERM

University of Sydney, New South Wales

### 2021 PRIME MINISTER'S PRIZE FOR INNOVATION

- Professor Anthony (Tony) Steven Weiss AM is the world's leading authority on tropoelastin, the protein building-block that gives human tissue its elasticity.
- For the past two decades, he has pioneered global research into tropoelastin and elastic fibres, which are found in human tissues ranging from the skin to the lungs and arteries. Elastic fibres play a significant role in the repair of the human body.
- When Professor Weiss began his research program in the 1990s, many believed that it was impossible for tropoelastin to become a successful medical biomaterial.
- He proved them wrong by designing synthetic tropoelastin-based biomaterials, to accelerate and improve the repair of human tissue.
- In 2008, Professor Weiss founded the company, Elastagen, which allowed him to commercialise his research and inventions. The company raised \$35 million in venture capital and grant funding, completed clinical trials and scaled-up production.
- Ten years later Elastagen was sold to Allergan, one of the world's biggest biopharmaceutical companies, for a total of \$334 million. This remains one of the largest transactions ever completed in Australia's life science sector.
- Allergan has since been acquired by AbbVie, which estimates sales for 'next generation bio-stimulatory tropoelastin' at more than \$100 million per product. This is expected to drive significant long-term growth.
- Professor Weiss remains in a scientific advisory role with AbbVie, expanding the intellectual property portfolio for tropoelastin applications. His inventions have generated an incredible 163 granted patents in 21 patent families around the world.
- He is also regarded as an ambassador for Australian innovation, and has given his time to mentor Australian researchers. He offers insight on every aspect of science commercialisation, inspiring both Australian investors and incubators to support the next generation of life science technologies.
- Through his scientific and commercial endeavours, Professor Weiss continues to build capabilities and create jobs in Australia across relevant fields.





## THE PRIME MINISTER'S PRIZES FOR SCIENCE

### CAREER HIGHLIGHTS

- 2021 President, Tissue Engineering and Regenerative Medicine International Society
- 2021 Weickhardt Medal, Royal Australian Chemical Institute
- 2020 National Health and Medical Research Council Leadership Fellow
- 2019 Clunies Ross Award for Knowledge Commercialisation, Australian Academy of Technology and Engineering
- 2018 Elastagen sold to Allergan for \$334 million
- 2018 Order of Australia
- 2018 NSW Premier's Prize for Science & Engineering (Leadership in Innovation)
- 2018 Eureka Prize for Innovation in Medical Research
- 2018 Vice-Chancellor's Award for Excellence, University of Sydney
- 2018 Innovator of Influence Award, Australian Science and Innovation Forum
- 2018 Fellow, Tissue Engineering and Regenerative Medicine International Society
- 2017 Fellow, Royal Society of New South Wales
- 2016 Fellow, Biomaterials Science and Engineering, The International Union of Societies for Biomaterials Science and Engineering
- 2015 Fellow, Royal Australian Chemical Institute and Chartered Chemist
- 2015 Applied Research Medal, Royal Australian Chemical Institute
- 2014 Fellow, Australian Academy of Technology and Engineering
- 2014 Entrepreneurship Award, Federation of Asian and Oceanian Biochemists and Molecular Biologists
- 2014 Research Excellence Award, Australasian Society for Biomaterials and Tissue Engineering
- 2014 McCaughey Chair in Biochemistry, University of Sydney
- 2013 Fellow, Royal Society of Chemistry UK
- 2013 Fellow, American Institute for Medical and Biological Engineering USA
- 2013 Barry Preston Award, Matrix Biology Society of Australia and New Zealand
- 2011 The Australian Innovation Challenge Award
- 2008 Founder, Elastagen
- 2006 NSW Commercialisation Expo Prize
- 2005 Fellow, Australian Institute of Company Directors
- 2001 David Syme Research Medal
- 1999 AMRAD Pharmacia-Biotech Medal



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## THE PRIME MINISTER'S PRIZES FOR SCIENCE

# Professor Sherene Loi MMBS (Hons) FRACP PhD FAHMS

Peter MacCallum Cancer Centre, Victoria

### 2021 FRANK FENNER PRIZE FOR LIFE SCIENTIST OF THE YEAR

- Professor Sherene Loi is a medical oncologist renowned for translating scientific findings into innovative treatments that can improve the survival of breast cancer patients in Australia and around the world. Her research into breast cancer has had a significant impact on clinical practice.
- She was the first person to show that immune cell infiltration of breast tumour tissue strongly predicts improved survival. This research led to the development of a standardised test of a unique immune biomarker: Tumour Infiltrating Lymphocytes (TILs).
- This biomarker is now part of routine pathology reporting for breast cancer in many countries, and was included in the 2019 World Health Organisation Classification of Tumours: Breast Tumours (also known as WHO Blue Book on Breast Tumours). It is also recognised by the European Society of Medical Oncology's early breast cancer guidelines and the St. Gallen (Switzerland) early breast cancer consensus guidelines.
- Professor Loi has also made a significant contribution to the first worldwide approval of immunotherapy for patients with triple negative breast cancer, which is the most aggressive type of breast cancer. She helped prove that immunotherapy – a type of cancer treatment that helps the immune system fight cancer – can prolong survival in patients with this advanced disease.
- She led the first global clinical trial of the immune checkpoint blockade in HER2-positive breast cancer, the first study to prove that boosting the immune response can be beneficial for patients.
- Professor Loi now leads a lab at Peter MacCallum Cancer Centre, which focuses on developing new therapeutic approaches for breast cancer patients using both genomics and immunology.
- She also has a busy breast cancer clinical practice where she specialises in the management and treatment of patients, in particular patients with HER2-positive breast cancer.
- Professor Loi's research is highly influential. Since 2018, she has ranked in the top one per cent of highly cited researchers globally by the Web of Science, publishing more than 240 peer-reviewed research articles in the field of clinical medicine.
- In 2020, she was also recognised with the Outstanding Investigator Award for Breast Cancer Research by the American Association of Cancer Research and the European Society of Clinical Oncology Award for Breast Cancer Research.
- Professor Loi is co-chair of the International Breast Cancer Study Group (IBCSG) Scientific Committee based in Switzerland, a non-Executive Board Member and Scientific Advisory Committee Member of the Breast Cancer Trials Group (BCT) of Australia/New Zealand, and a Board Member of Breast International Group, Belgium.





## THE PRIME MINISTER'S PRIZES FOR SCIENCE

### CAREER HIGHLIGHTS

- 2021 Jian Zhou Medal recipient, Australian Academy of Health and Medical Sciences
- 2020 Outstanding Investigator Award for Breast Cancer Research, American Association of Cancer Research (AACR)
- 2020 Breast Cancer Research Award, European Society of Medical Oncology (ESMO)
- 2019 Bruce Cain Award for Clinical Research, New Zealand Society for Oncology
- 2019 Robert Sutherland Award for Excellence in Translational Research, Breast Cancer Trials Group of Australia/NZ
- 2018-2020 Clarivate Analytics – Highly Cited Researcher (Top one per cent) in the field of Clinical Medicine
- 2018-2022 Inaugural Endowed Chair, National Breast Cancer Research Foundation of Australia
- 2017 Fellow, Australian Academy of Health and Medical Sciences (AAHMS)
- 2016 'Accelerate Discovery' Individual Category Award, Peter MacCallum Cancer Centre
- 2015-2022 Research Fellow, Breast Cancer Research Foundation (New York)
- 2013 Highly Commended, L'Oréal Women in Science Award Australia and New Zealand
- 2012 Career Development Award, American Society of Clinical Oncology (ASCO)
- 2008 Neil Hamilton Fairley – Overseas Clinical Fellowship, National Health and Medical Research Council (NHRMC)





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## THE PRIME MINISTER'S PRIZES FOR SCIENCE

### Dr Keith Bannister

CSIRO, New South Wales

#### 2021 MALCOLM MCINTOSH PRIZE FOR PHYSICAL SCIENTIST OF THE YEAR

- Dr Keith Bannister is a world-leading astronomer and engineer who helped solve the mystery of fast radio bursts (FRB) – short, sharp pulses of radio waves that last a few milliseconds and are extremely hard to detect.
- In 2017, Dr Bannister modified CSIRO's Australian Square Kilometre Array Pathfinder (ASKAP) radio telescope in Western Australia with a new 'fly's eye' mode to search large areas of sky simultaneously for FRBs. As a result, the number of known FRBs increased by 20 bursts by 2018.
- By contrast, in the decade following the discovery of the first FRB (in 2007), only 30 more bursts had been found by astronomers worldwide – proving the significance of Dr Bannister's work.
- In 2019, he designed a world-first system for ASKAP to firstly detect a single FRB, then narrow in on its location within a galaxy. By pinpointing the precise location of where a burst came from in that galaxy – and measuring the distance from Earth to the host galaxy through other observations – Dr Bannister's discoveries confirmed that these FRBs actually came from galaxies that were billions of light years away.
- By studying the origins of FRBs, astronomers are now closer to determining what causes them, and are using them as tools to understand the content of the entire Universe. These discoveries are solving several of the big astronomical mysteries of our generation.
- For example, these discoveries resolved the decades-old scientific question of the missing 'normal matter' in the vast space between stars and galaxies in the Universe. Dr Bannister and his team used FRBs to show that the missing 'normal' matter was a tenuous gas residing between galaxies.
- This is different from 'dark' matter, which remains elusive and accounts for about 85 per cent of the total matter in the Universe.
- Australian and international researchers used FRBs and their distances from Earth to directly detect the missing 'normal' matter and determine the density of the Universe.
- Dr Bannister has also developed new ways of handling large amounts of data in real time, which are now influencing the design of future SKA radio telescopes. His work also inspired CSIRO engineers to design and prototype new wide-field receiver systems for tracking multiple satellites in Earth's orbit simultaneously.
- His work is an outstanding example of bringing together innovative researchers, great collaborative partnerships in astronomy, and world-class Australian research infrastructure.
- Dr Bannister's discoveries have captured the public's imagination, generating national pride in Australian science and technology, placing the country at the centre of an important new field of astrophysics research.





## THE PRIME MINISTER'S PRIZES FOR SCIENCE

### CAREER HIGHLIGHTS

- 2021 Newcomb Cleveland Award, American Association for the Advancement of Science
- 2021 Australian Research Council LIEF Project – next generation FRB detector for Australia
- 2021 Australian Research Council Discovery Project – Solving the mystery of ultra-luminous FRB emission
- 2019 CSIRO Science Excellence Award
- 2018 Australian Research Council Discovery Project – Weighing the Universe with Fast Radio Bursts
- 2017 Louise Webster Prize, Astronomical Society of Australia
- 2016 CSIRO Chairman's Medal
- 2016 Principal Research Engineer, CSIRO Astronomy and Space Science
- 2013 Charlene Heisler Prize (commendation), Astronomical Society of Australia
- 2008 Australian Postgraduate Award
- 2011 CSIRO Bolton Fellow
- 2009 Australian Telescope National Facility – Student Symposium
- 2001 Automation control and instrumentation thesis competition (commendation)



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## THE PRIME MINISTER'S PRIZES FOR SCIENCE

# Associate Professor Michael Bowen

University of Sydney, New South Wales

### 2021 PRIZE FOR NEW INNOVATORS

- Associate Professor Michael Bowen has been instrumental in driving scientific discoveries relating to serious brain disorders that lack effective treatments.
- His research has been critical in the discovery and development of KNX100, a novel molecule that has considerable potential to treat addiction and other disorders of the brain and mind.
- KNX100 is now being developed to treat opioid-use disorder, which kills more people in Australia each year than car accidents. Previously, there were no novel compounds in clinical development for opioid-use disorder.
- KNX100 is being commercialised by Kinosis Therapeutics, a company he co-founded in 2018. Associate Professor Bowen leads the company's scientific program as the Chief Scientific Officer.
- Through a partnership between Associate Professor Bowen's team at the University of Sydney's Brain and Mind Centre, the US National Institutes of Health (NIH) and Kinosis Therapeutics, he discovered KNX100's enormous potential to help tackle the opioid epidemic.
- Associate Professor Bowen discovered that KNX100 has the potential to provide a breakthrough in the treatment for opioid-use disorder. The molecule reduces the severity of extreme emotional disturbances during withdrawal.
- The first-in-human clinical trial for KNX100 (funded by the US NIH) is scheduled to commence in early 2022, and will be run in Australia.
- Kinosis Therapeutics has attracted more than \$10 million in funding from some of Australia's most notable investors. Under Associate Professor Bowen's scientific leadership, Kinosis Therapeutics' valuation has increased by more than 20-fold since 2018.
- Associate Professor Bowen's work on KNX100 is supported by funding from Australia's longest running venture fund, Uniseed, and was awarded a highly competitive USD \$4.6 million grant from the US NIH under the Helping to End Addiction Long-term (HEAL) Initiative.
- His world-class research and commercialisation model has survived rigorous due diligence by Uniseed and several notable sophisticated investors.
- He is also a co-inventor on seven different patent families with the company.
- Associate Professor Bowen's work is a demonstration of the innovation and all-round impact that can be achieved through research partnerships between universities, industry and government.





## THE PRIME MINISTER'S PRIZES FOR SCIENCE

### CAREER HIGHLIGHTS

- 2020 Chair of the Executive of the Early- and Mid-Career Researcher Forum, Australian Academy of Science
- 2018 Co-founded Kinaxis Therapeutics Pty Ltd
- 2018 Editor's Choice, Best Review from 2017, Trends in Neurosciences
- 2018 Featured in exhibition 'Leadership for good starts here', University of Sydney
- 2017 Keynote Address, Challis Bequest Lunch, University of Sydney
- 2017 Sydney Science Forum Public Lecture, University of Sydney
- 2016 Eureka Prize for Outstanding Early Career Researcher, Australian Museum
- 2016 Inducted into World Economic Forum Young Scientists Community
- 2016 Occasional Address at Graduation Ceremony, University of Sydney
- 2016 Runner-up, Lawrence Creative Prize, Centenary Institute
- 2016 Day of Biosciences Public Lecture, University of Regensburg
- 2016 Early Career Award, International Behavioural Neuroscience Society
- 2015 Early Career Researcher of the Year, NSW Premier's Prizes for Science & Engineering
- 2015 Editor's Choice paper for Science Signalling, Proceedings of the National Academy of Sciences (USA)
- 2015 Australian Psychological Society Award for Excellent PhD Thesis
- 2015 Runner-up, Science Leadership Award, Young Achiever Awards, Awards Australia
- 2015 Rita and John Cornforth Medal for PhD Achievement, University of Sydney Alumni Awards
- 2014 Postdoctoral Travel Award, International Behavioural Neuroscience Society
- 2014 H. Tasman Lovell Medal for best PhD Thesis, School of Psychology, University of Sydney
- 2014 Postgraduate Publication Prize, University of Sydney
- 2013 Glenn I. Hatton Memorial Award, International Neuroendocrine Federation
- 2012 Postgraduate Publication Prize, University of Sydney
- 2012 Graduate Student Travel Award, International Behavioural Neuroscience Society
- 2011 Campbell Perry International Research Award, University of Sydney
- 2011 Young Investigator Award, 9th World Congress on Neurohypophysial Hormones



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## THE PRIME MINISTER'S PRIZES FOR SCIENCE

### Mrs Megan Hayes Mudgeeraba Creek State School, Queenslandy

#### 2021 PRIME MINISTER'S PRIZE FOR EXCELLENCE IN SCIENCE TEACHING IN PRIMARY SCHOOLS

- Mrs Megan Hayes is a science, technology, engineering and mathematics (STEM) specialist and primary teacher at Mudgeeraba Creek State School. She is recognised for her outstanding work in championing STEM education at a national level.
- With more than 30 years' primary teaching experience, Mrs Hayes is a highly experienced and innovative educator, who has the ability to easily engage her students in STEM.
- She is passionate about building the connection between science and the real world for her students and inspires students to think critically, take risks and become 'agents of change' for the future.
- Mrs Hayes built and now leads a Professional Learning Team for Science at Mudgeeraba Creek State School, which has positively impacted student learning outcomes and is now a high-profile program at the school.
- Anecdotal evidence suggests that many families seek enrolment at Mudgeeraba Creek State School because of the outstanding reputation of the STEM program at the school.
- Mrs Hayes has significantly raised the profile of STEM education beyond the boundaries of her school, and often features in national STEM publications. She is a genuine ambassador for STEM teachers in Australia.
- Mrs Hayes has won several national prizes and scholarships related to STEM, partnered with high-profile STEM professionals to enhance her lessons and organised events with inspiring speakers.
- She works with high-profile 'real world' scientists to expand on current curriculum content, to maximise student learning and engagement. Her aim is to extend young children's minds and the natural curiosity and understanding about topics such as atoms, molecules and the periodic table.
- Mrs Hayes also integrates contemporary digital tools and practices to deliver high quality teaching and learning in science. Her forethought to establish digital resources became pivotal during the COVID-19 pandemic. She became an indispensable lead teacher as she digitised science resources and created engaging virtual lessons and experiments for home learning.
- Mrs Hayes has a goal of developing strong 21st century STEM skills for students, and she has a keen interest in promoting the role of girls in the field. In 2021, she planned the 'Sistas in STEM' conference, which hosted 36 girls aged 11-13 years old from seven local Gold Coast schools, along with their teachers.
- Her ambition is to grow the conference into an annual event that can cater to even more students, inspiring them to think about taking up careers in science in the future.





## THE PRIME MINISTER'S PRIZES FOR SCIENCE

### CAREER HIGHLIGHTS

- 2021 Planned 'Sistas in STEM' event with highly respected STEM professionals and academics
- 2019 Highly Commended, Prime Minister's Prize for Science Teaching in Primary Schools
- 2018-2019 Presented at Science Teacher Association of Queensland Conference
- 2018-2019 Presented at Griffith University Cutting Edge Conference
- 2018 Ruth Dircks Scholarship, Australian Science Teachers Association
- 2018 Hosted the Australian Science Teachers Association and Sony Japanese Science Teachers' Association 'Australian Tour'
- 2016-2020 Developed and implemented a specialised STEM and Science program for students at Mudgeeraba Creek State School
- 2017 Finalist, BHP Foundation Science and Engineering Awards Teacher Awards
- 2016 Outstanding Teacher in STEM, Peter Doherty Awards for Excellence in STEM
- 2016 Promotion to Specialist STEM Teacher / Science Coordinator, Mudgeeraba Creek State School



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## THE PRIME MINISTER'S PRIZES FOR SCIENCE

### Mr Scott Graham

Barker College, New South Wales

#### 2021 PRIME MINISTER'S PRIZE FOR EXCELLENCE IN SCIENCE TEACHING IN SECONDARY SCHOOLS

- Mr Scott Graham is changing the way agricultural science is taught at secondary schools. His aim is to highlight how it can lead to diverse and unique careers across a range of both urban and rural industries.
- At a national level, the subject of agriculture has suffered a decline in student numbers, leading to a significant shortage of university agriculture graduates. This contrasts starkly with the high availability of modern agricultural jobs, which require knowledge-based, post-school qualifications.
- Mr Graham draws on 12 years of teaching experience to educate students about the importance of agriculture in Australia, and the employment opportunities in this scientific and business-driven field.
- He is driven by his passion for agricultural science, and has helped develop a range of unique programs to engage students by emphasising the positive difference agriculture makes to society. This also includes promoting the increased opportunities of having a post-school education in agriculture.
- Under his leadership as Head of Agriculture at Barker College in New South Wales, student enrolments in agriculture have tripled over the past seven years.
- The school has more than double the number of Year 12 agriculture students than any other school in Australia. Around 30 per cent of these students have gone on to pursue agriculture-related degrees at university level.
- Mr Graham's commitment to this change stems from his belief that children in urban communities are disconnected from the 'paddock-to-plate' journey of their food. His ambition is to reconnect students with the role that agriculture plays in many aspects of our lives, such as food and fibre.
- He also reinforces to students the role that agriculture plays in some of the world's most important issues, such as food security, sustainability and climate change.
- Mr Graham is currently undertaking a PhD with the intent of improving the reputation, enrolment numbers and academic standing of the study of agriculture amongst urban secondary students throughout Australia.
- He is also a committee member of the NSW Association of Agriculture Teachers. His role involves managing the social media sites for the association, sharing curriculum-related material and assisting with managing the teacher resource database.
- While Mr Graham has been in this role, the association membership has increased by 150 members. His influence has seen the association's professionalism and depth of teacher support increase significantly.





## THE PRIME MINISTER'S PRIZES FOR SCIENCE

### CAREER HIGHLIGHTS

- 2021 Conducted Higher School Certificate revision days (online) for students across NSW
- 2021 Contributed to Western Australia senior secondary agriculture syllabus review
- 2020 PhD candidate, Charles Sturt University
- 2020-2021 Senior Marker for Agriculture, Higher School Certificate (NSW)
- 2019 Speech at 2nd AgEd Symposium for Agricultural Educators, University of New England
- 2019 Conducted Higher School Certificate revision days (in-person) for students across NSW
- 2018-2019 Judge for Agriculture, Higher School Certificate (NSW)
- 2018 Ran inaugural Barker College Agriculture + Earth & Environment New Zealand Tour (70 students)
- 2016 Created the Barker Agriculture YouTube channel
- 2017-present Executive Member, NSW Association of Agriculture Teachers
- 2016-present Marker for Agriculture, Higher School Certificate



# PRIZE RECIPIENTS (2000 – 2021)

Year	Prize Recipient
<b>Prime Minister's Prize for Science</b>	
2021	Professor Edward C. Holmes
2020	Emeritus Professor David Blair, Professor David McClelland, Professor Susan Scott & Professor Peter Veitch
2019	Emeritus Professor Cheryl Praeger AM
2018	Emeritus Professor Kurt Lambeck AO
2017	Distinguished Professor Jennifer Graves AO
2016	Professor Richard Shine AM
2015	Professor Graham Farquhar AO
2014	Laureate Professor Samuel Berkovic AC & Laureate Professor Ingrid Scheffer AO PresAAHMS
2013	Dr Terry Speed
2012	Distinguished Professor Kenneth Freeman AC
2011	Professor Dr Ezio Rizzardo AC & Professor David Solomon AC
2010	Professor John Shine AC PresAA
2009	Dr John O'Sullivan
2008	Professor Ian Frazer AC
2007	Laureate Professor Peter Waterhouse & Dr Ming-Bo Wang
2006	Professor Mandyam Srinivasan AM
2005	Emeritus Laureate Professor David Boger AC
2004	Laureate Professor Graeme Clark AC
2003	Professor Jacques Miller AC
2002	The late Emeritus Professor Frank Fenner AC
2001	The late Emeritus Professor Donald Metcalf AC
2000	Dr Jim Peacock AC & Dr Elizabeth Dennis AC
<b>Prime Minister's Prize for Innovation</b>	
2021	Professor Anthony Steven Weiss AM
2020	Professor Thomas Maschmeyer
2019	Professor David Huang, Associate Professor Peter Czabotar, Professor Guillaume Lessene & Professor Andrew Roberts AM
2018	Dr Simon Poole AO, Dr Glenn Baxter, Dr Steven Frisken & Mr Andrew Bartos
2017	Laureate Professor Eric Reynolds AO
2016	Dr Michael Aitken AM
2015	Laureate Professor Graeme Jameson AO

### **Frank Fenner Prize for Life Scientist of the Year**

2021	Professor Sherene Loi
2020	Professor Mark Dawson
2019	Associate Professor Laura Mackay
2018	Associate Professor Lee Berger
2017	Professor Jian Yang
2016	Professor Kerrie Wilson
2015	Professor Jane Elith
2014	Professor Ryan Lister
2013	Professor Angela Moles
2012	Professor Mark Shackleton
2011	Professor Min Chen
2010	Professor Benjamin Kile
2009	Professor Michael Cowley
2008	Professor Carola Vinuesa
2007	Dr Elizabeth Fulton PSM
2006	Professor James Whisstock
2005	Professor Harvey Millar
2004	Professor Jamie Rossjohn
2003	Dr Christopher Helliwell
2002	Professor Joel MacKay
2001	Professor Bostjan Kobe
2000	Professor Una Ryan

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### **Malcolm McIntosh Prize for Physical Scientist of the Year**

2021	Dr Keith Bannister
2020	Scientia Associate Professor Xiaojing Hao
2019	Associate Professor Elizabeth New
2018	Associate Professor Jack Clegg
2017	Distinguished Professor Dayong Jin
2016	Professor Richard Payne
2015	Professor Cyrille Boyer
2014	Professor Matthew Hill
2013	Professor Andrea Morello
2012	Professor Eric May
2011	Professor Stuart Wyithe
2010	Associate Professor Katherine Trinajstić
2009	Dr Amanda Barnard

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Year	Prize Recipient
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### **Malcolm McIntosh Prize for Physical Scientist of the Year cont'd**

2008	Professor Tanya Monro
2007	Professor Mark Cassidy
2006	Professor Naomi McClure-Griffiths
2005	Professor Cameron Kepert
2004	Professor Benjamin Eggleton
2003	Professor Howard Wiseman
2002	Professor Marcela Bilek
2001	Professor Peter Bartlett
2000	Professor Brian Schmidt AC

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### **Prize for New Innovators**

2021	Associate Professor Michael Bowen
2020	Associate Professor Justin Chalker
2019	Dr Luke Campbell
2018	Dr Geoff Rogers
2017	No award
2016	Industry Associate Professor Colin Hall

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### **Prime Minister's Prize for Excellence in Science Teaching in Primary Schools**

2021	Mrs Megan Hayes
2020	Mrs Sarah Fletcher
2019	Mrs Sarah Finney
2018	Mr Brett Crawford
2017	Mr Neil Bramsen
2016	Mr Gary Tilley
2015	Mrs Rebecca Johnson
2014	Mr Brian Schiller
2013	Mr Richard Johnson
2012	Mr Michael van der Ploeg
2011	Mrs Brooke Topelberg
2010	Dr Matthew McCloskey
2009	The late Mr Allan Whittome
2008	Ms Bronwyn Mart
2007	Mrs Cheryl Capra
2006	Dr Marj Colvill
2005	Mr Mark Merritt
2004	Mr Alwyn Powell
2003	Ms Sarah Tennant
2002	Mrs Marianne Nicholas

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Year	Prize Recipient
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### Prime Minister's Prize for Excellence in Science Teaching in Secondary Schools

2021	Mr Scott Graham
2020	Mr Darren Hamley
2019	Dr Samantha Moyle
2018	Dr Scott Sleaf
2017	Mr Brett McKay
2016	Ms Suzy Urbaniak
2015	Dr Ken Silburn
2014	Mr Geoff McNamara AM
2013	Ms Sarah Chapman
2012	Mrs Anita Trenwith
2011	Dr Jane Wright
2010	Ms Debra Smith
2009	Mr Len Altman
2008	Mr Clay Reid
2007	Mrs Francesca Calati
2006	Ms Anna Davis
2005	Mr Mike Roach
2004	Dr Mark Butler
2003	Dr Pamela Garnett PSM
2002	Mrs Ruth Dircks OAM

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For detailed information about the Prizes, prize recipients and their awards, visit: [industry.gov.au/pmprizes](http://industry.gov.au/pmprizes).



## CELEBRATING AUSTRALIAN ACHIEVEMENTS AND EXCELLENCE

The Prime Minister's Prizes for Science are Australia's most prestigious awards for outstanding achievements in scientific research and research-based innovation, and excellence in science, mathematics and technology teaching.

The Prizes are awarded annually to Australian citizens or permanent residents in recognition of their contributions to Australia's current and future scientific and commercialisation capabilities, and to Australia's social and economic well-being.

They are a tribute to Australia's world-class science community, and the critical role teachers play in inspiring and encouraging the next generation of Australian scientists and innovators.

Australia takes great pride in its high achievers. In 2021, we mark the 22nd year of the Prizes, and we again celebrate the people who are making significant contributions to Australia's future.

For further information on the Prizes and previous recipients:



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#pmprizes

[industry.gov.au/pmprizes](https://industry.gov.au/pmprizes)

For more information about the Prizes contact:

[pmprizes@industry.gov.au](mailto:pmprizes@industry.gov.au).