

Dark matter, light science, wine science and NASA's search for new planets



Launch tonight 7pm at the Adelaide Convention Centre. Plus 280+ Science Week events around SA:

- Who will win tonight's South Australia's Science Excellence Awards?
- Are there habitable planets outside our solar system? Meet NASA scientists and planet hunters
- Why does food taste different when you have a cold? And how do your neurons communicate? Meet your brain and find out
- What can maths and science tell you about politics and voting?
- Grape expectations: what's the future of wine? And what causes white wine haze?
- Revisit Coober Pedy when it was under sea: paleontology meets musical theatre
- A mobile observatory on wheels tours regional SA
- GM-food aside, should humanity edit our own genes? Ask the experts
- Help build a better picture of the Great Barrier Reef's health, without getting your feet wet.



More on these highlights below, and others at www.scienceinpublic.com.au/science-week, and on Twitter at @SciWKMedia.

Scientists and event organisers are available for interview throughout Science Week. Read on for contact details for each event, or call:

Tanya Ha: tanya@scienceinpublic.com.au or 0404 083 863

Niall Byrne: niall@scienceinpublic.com.au or 0417 131 977

SA's National Science Week launch at the Science Excellence Awards – 7pm, Friday 10 August, Adelaide Convention Centre

Thirty one finalists are in the running for nine awards, recognising the state's top scientists, PhD students, educators, collaborations, industry professionals, and unsung science communication heroes. With Minister for Industry and Skills, the Hon. David Pisoni.

Keynote speaker Swinburne University astrophysicist Alan Duffy will share his knowledge of dark matter, cosmology and his passion to create universes on supercomputers to understand how galaxies form. Alan is also the Royal Institution of Australia's Lead Scientist.

Where: Adelaide Convention Centre, North Terrace, Adelaide. [Event details](#)

Media enquiries: Sarah Thomas, sarah.thomas@sa.gov.au, 08 8429 2995 or 0408 806 652.

About National Science Week

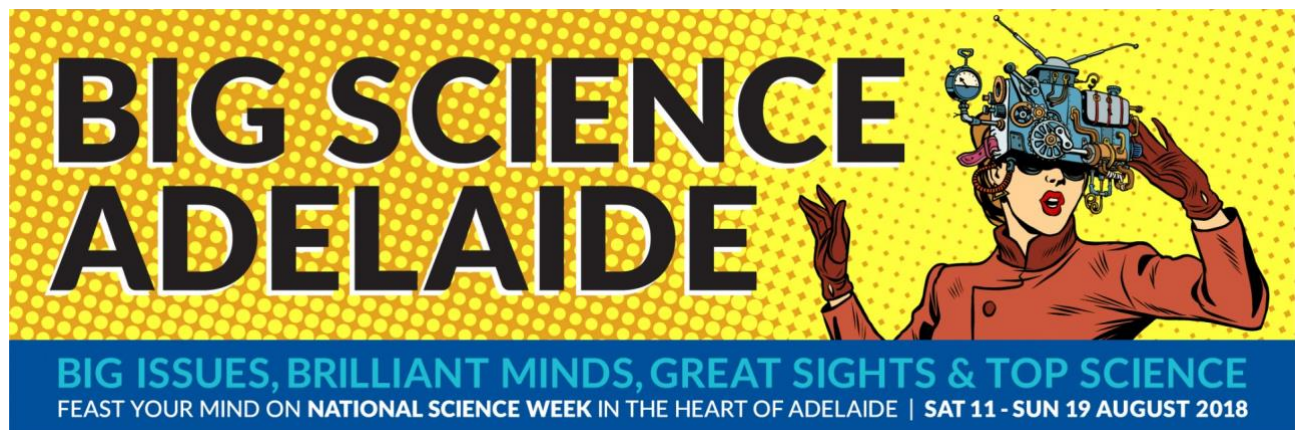
National Science Week has become one of Australia's largest festivals. Last year saw 1.2 million people participate in more than 2,100 events and activities.

In 2018, National Science Week celebrates its 21st birthday, with events held throughout Australia—from Corals in the Outback in western Queensland to TASTroFest astronomy in the Apple Isle, and from STEM meets dance in Perth to The Innovation Games at Sydney Olympic Park—with everything from science festivals, music and comedy shows, expert panel discussions, interactive hands-on displays, open days and online activities.

National Science Week 2018 will run from 11 to 19 August. Media kit at www.scienceinpublic.com.au, public event listings at www.scienceweek.net.au.

National Science Week in South Australia: event highlights

The science of politics, the future of wine and what's going on in your brain— Big Science Adelaide



Big Science Adelaide returns with a host of events showcasing big issues, brilliant minds, great sights and top science, right in the heart of Adelaide.

Events include:

- [The science of politics](#)—what's behind political behaviour and your vote
- [Giant Australian Cuttlefish](#): why did we see a dramatic decline, then a rapid recovery near Whyalla?
- [Grape expectations](#): what's in-store for the future of wine
- [Porkies in the pub](#): six Superstars of STEM share science stories, including some that aren't true. Can you pick fact from fiction?
- [Neuroscience at night](#): how does the brain perceive the flavour of wine, and can you salsa dance your way to a healthier brain? Ask the experts from Adelaide Medical School and The Australian Wine Research Institute (yes, this place is real!)
- [The future of cancer research](#)
- Explore [light](#): from the nano-scale to the vast distances of exploring the Universe
- Asexual seeds, what causes white wine haze, the genetics of wheat and barley, agropolitics and more—hear the science of [the Women of Waite](#)
- Behind the scenes at the South Australian Museum's Science Centre [Open Day](#), and more.

Saturday 11 – Sunday 19 August [Event details](#)

Media enquiries: Rona Sakko, ronadel@dodo.com.au or 0419 827 723

Meet the NASA scientists and planet hunters—Hindmarsh

NASA scientists are headed to Australia, bringing Saturn to Sydney, new planets to Perth, and more.

Meet NASA scientist Andrew Rushby, an astrobiologist, exoplaneteer and [Exocast](#) podcaster at The Gov at a special event hosted by Australian National University Mt Stromlo Observatory astrophysicist Brad Tucker.

What have we learnt from the hundreds of planets discovered by the Kepler Space Telescope? How will the information beamed back to Earth continue to advance science once Kepler runs out of fuel this year? Will we find more worlds outside our solar system? Are we alone in the Universe?



The planets found by NASA's Kepler Space Telescope, around stars other than our sun, aren't anything like the planets in our solar system. With a closer look at the variety of planets from the Kepler mission, we are beginning to put the solar system into context and to start to zoom in on the best opportunities for the future exploration of life in the Universe.

NASA's recently launched Terrestrial Exoplanet Survey Satellite (TESS) will discover planets around the nearest and brightest stars, providing new opportunities for discovery.

Monday 13 August. [Event details](#)

Media enquiries: Brad Tucker, brad@mso.anu.edu.au, 02 6125 6711 or 0433 905 777

As simple as cut and paste? The gene editing generation—Adelaide

How much can we do with gene editing? And is it as easy as it sounds?

Developmental genetics researcher Paul Thomas knows all about the genes (and their variations) that can cause intellectual disability, epilepsy and disorders of sexual development. Heather Bray is researching genetically-modified crops and food, and farm animal welfare.

Meet the panel of genomic editing experts, as they speak about gene editing trials in cancer therapies and potential uses in the agriculture industry, facilitated by SAHMRI Chief Science Storyteller Hannah Brown.



By understanding the genetic blueprint that makes every human unique, mixed with the discovery of new tools that can 'cut and paste' DNA, the gene editing generation has begun.

Thursday 16 August [Event details](#)

Media enquiries: Hannah Brown, hannah.brown@sahmri.com or 0402 113 462

Kids Navigate Neuroscience—Adelaide

Why does food not taste good when we have a cold? How do neurons communicate? What does the brain look like up close? Come meet your brain and find out.

In this fun and interactive children's event, held in the Adelaide Medical School at the University of Adelaide, kids (aged 6 to 11) will explore how the brain and nervous system work in a fun and hands-on way by participating in a series of interactive neuroscience exhibits created by faculty and students at the University of Adelaide.

Examine how information moves between neurons by playing a game of Synaptic Ping Pong, build layers (meninges) around an egg to see what types of protection are best for the brain, explore how optical illusions work, look at human brains up close, and more. At each station, children can collect a stamp in their 'Passport to the Brain', and work towards earning an official 'Brain in Training' certificate.



**KIDS NAVIGATE
NEUROSCIENCE**

This year, in addition to the main event, there will be the 'Neuroscience Nexus', where people of all ages can come and discover fun and interactive neuroscience booths.

Sunday 19 August [Event details](#)

Media enquiries: Lyndsey Collins-Praino, lyndsey.collins-praino@adelaide.edu.au or 08 8313 5488

Either Lyndsey Collins-Praino and Renée Turner are available for media interviews.

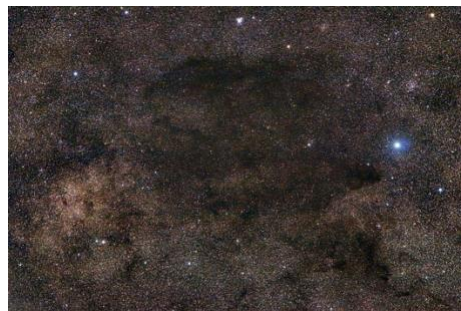
An observatory on wheels—Port Augusta, Andamooka & Broken Hill

An observatory on wheels will head to regional South Australia, and Northern Territory in August 2018.

Southern Cross Outreach Observatory Project is a mobile astronomical observatory taking science engagement to regional communities. This mobile observatory is designed to travel far and wide, and is equipped with computerised telescopes for solar viewing and night time astronomy.

Multiple dates and locations [Event details](#)

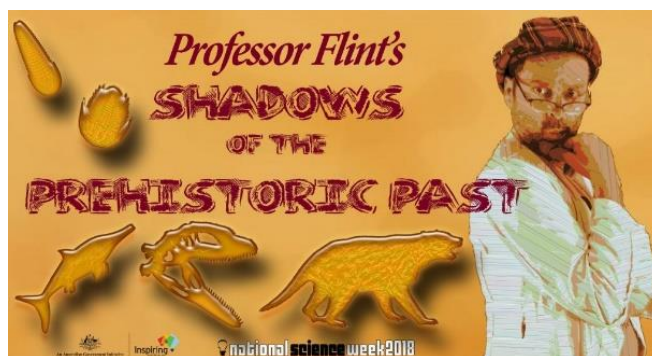
Media enquiries: Muhammad Akbar Hussain, akbar.astronomer@gmail.com or 0478 144 483



In the shadows of our prehistoric past—Naracoorte, Coober Pedy, Leigh Creek, Parachilna & Adelaide

Palaeontology meets music and theatre in a series of performances in key locations in regional and metro Australia, exploring their history through the arts and sciences.

The people of Winton walk in the shadows of the dinosaurs that lived there millions of years ago. Those in Parachilna, the Flinders Ranges, step amongst the slime-prints of the first large animals found on Earth, the Ediacarans. And what we now know as Coober Pedy was once the prehistoric Eromanga Sea.



In the shadows of our prehistoric past is a storytelling experience that travels to the locations where the prehistoric stories have been revealed to unveil the science behind it all.

From Sunday 19 August, multiple date and locations [Event details](#)

Media enquiries: Michael Mills, michael@heapsgood.com.au or 0411 287 381

Virtual Reef Diver: dive into your computer screen to help scientists—national

Dive online to help the Great Barrier Reef this Science Week—and you could win a GoPro camera!

The ABC's citizen science project Virtual Reef Diver is celebrating the International Year of the Reef, inviting people to dive through their computer screens into the Great Barrier Reef.

They will review and classify underwater images of the Reef to help scientists identify areas of sand, coral and algae to help build a better picture of coral cover. This work will allow scientists and reef managers to make critical decisions to ensure that the Reef has a future.



The project has been developed by the Queensland University of Technology, in collaboration with a host of scientific and community organisations.

Monday 6 to Friday 31 August. www.virtualreef.org.au

Several researchers, divers and science communicators are available for interviews.

Media enquiries: Suzannah Lyons suzannah@scienceinpublic.com.au, 03 9398 1416, 0409 689 543