



national SCIENCE WEEK 2020

15-23 August 2020

A collation of events and
activities developed by the
South Australian community



If you are attending a National Science Week event, please complete this pre-event survey before the event, and a post-event survey after the event, to help us improve the festival in South Australia.



**INSPIRING
SOUTH
AUSTRALIA**

making science visible



@inspiringSthAus



@InspiringSA

www.inspiringsa.org.au

The goal of Inspiring South Australia is to contribute to a society that values science, engages with scientific issues, encourages young people to pursue STEM careers and attracts national and international interest in science.

WELCOME MESSAGE

Welcome everyone to our first ever virtual science week festival.

National Science Week has been celebrating science in diverse ways in August each year for 22 years, but this is the first time the vast majority of events and activities are taking place online.

While it has been and remains a challenging learning experience, we are also excited about the innovative and creative ways in which science can be communicated and enjoyed from a distance.

This year in South Australia we have collated a wonderful array of events and activities for you, your family and friends to enjoy. You'll find discussions and debates, virtual tours and workshops, podcasts and films, videos and animations, at-home activity packs and citizen science training. We'll take journeys deep in the ocean through to the shallows, explore ancient and contemporary ecosystems, and examine the challenges of some of our most loved animals. We'll delve into the extraordinary human brain and look into some perplexing issues of health and wellbeing. Wherever and whoever you are, we are certain there is something here for you!

We are always working to attract new audiences to the countless wonderful stories to be told and to the world of science in general, and this year may yet prove to be a great way to achieve this.

Thank you so very much to everyone contributing to this year's science festival – for your extraordinary creative efforts, your willingness to learn new technologies and ways of communicating science, and for the great expertise and passion you bring to our community.

We are very keen to find out who our audiences are this year and what your thoughts are about the events you attend. Please assist us by taking part in the simple pre-event and post-event surveys attached to each offering.

We hope you enjoy!

Rona Sakko and Sheryn Pitman

On behalf of the SA National Science Week Coordinating Committee and Inspiring South Australia

A Potted History of Koalas:

hard questions about a soft animal

Dropbears, drowsiness and diminishing species. Join us as we explore the ups and downs of our own Aussie icon, the koala.

Let's face it, koalas are cute. However, the science around koalas is complex and fascinating, and there are many myths that need to be busted. Are koalas in South Australia the same as koalas from New South Wales? Is disease a problem for koalas? Are dropbears real? We delve deeply into the science of koalas, conservation and cuddliness, and explore some of the myths we still hold tightly to. Join Professor Chris Daniels from the International Koala Centre of Excellence and Dr Debbie Devis as we ask hard questions about a soft animal.

A livestreamed interactive event

This event is recommended for adults and families with children aged 10 and over. It may not be suitable for young children due to discussing topics such as koala population control and disease, and will include some science content pitched at an older audience.

Professor Chris Daniels is Chair of the Green Adelaide Landscape Board and is Chief Executive Officer of the International Koala Centre of Excellence. He is Adjunct Professor of Biology in the School of Pharmacy & Medical Sciences at UniSA and Adjunct Professor of Zoology at University of Adelaide. He is also involved in many other environmental leadership activities focused on conserving wildlife and connecting people with nature. Chris has published 9 books, 1 DVD and over 250 scientific and community publications. Books include Adelaide Nature of a City (2005) and Adelaide Water of a City (2010). Chris won the South Australian Premier's Science Award for Community Science Educator of the Year (2007) and the Nature Conservation Award from the Field Naturalists Society of SA (2010). He received a Doctor of Science (DSc) from University of Adelaide in 2019.

Dr Debbie Devis is a science communicator and co-founder of Sciren (Science translation and mentoring), with a particular interest in communicating genetics and plant science to teachers and young people. She explores new ways to spread a joy of science through mediums such as story telling, minecraft and at-home experimentation.

EVENT DETAILS:

When: Thurs, 6 Aug, 7pm-8pm

Where: Online | **Cost:** Free

More Info: www.inspiringsa.org.au

Bookings: www.eventbrite.com/e/a-potted-history-of-koalas-hard-questions-about-a-soft-animal-tickets-112280389668

www.scienceweek.net.au/event/a-potted-history-of-koalas-hard-questions-about-a-soft-animal/





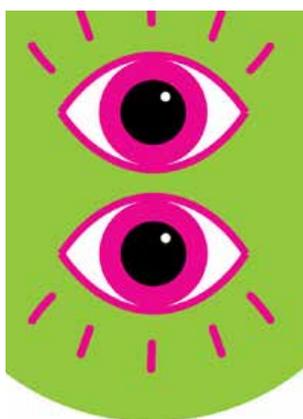
Paradoxical Objects: online project at MOD.

When: Tues 21 July–Fri 4 Sept, 12pm to 12pm | **Where:** Online | **Cost:** Free
More Info: www.mod.org.au

Have you ever stopped to contemplate the objects around you – from the clothes you wear, the cutlery you eat with, to the device you're reading this on? Our everyday objects slice through time to the origins of our universe, emerge from all continents across our globe, and are extracted, manufactured and transported by many human hands before they reach ours.

Join artist and futurist Ana Tiquia during her online residency with MOD to contemplate our material everyday. As we stay home during this pandemic-induced pause, Ana will ask how we might space and time travel with our material things, and what our material everyday might look like in the future. We invite you to submit an object you can't live without to our space-time travel agency. Over August, Ana will trace the space-time journeys of select objects and offer personalised planetary travel guidance to those whose objects are chosen.

www.scienceweek.net.au/event/paradoxical-objects-online-project-at-mod/



SCINEMA International Science Film Festival Community Screening

When: Sat 1 Aug–Mon 31 Aug | **Where:** Online | **Cost:** Free, but registration required
More Info: scinema@riaus.org.au or 08 7120 8609
Bookings: www.scinema.australiascience.tv/

SCINEMA is the largest science film festival in the southern hemisphere, showcasing the best in science cinema from around the world. Sign up to watch this year's selection of SCINEMA films for FREE during August in support of National Science Week. Whether you're watching at home, in schools, or at a local venue, all you need is a screen, computer and access to the internet – with more films than ever before, you can turn every night into movie night!

Supported by a National Science Week Grant.

www.scienceweek.net.au/event/scinema-international-science-film-festival/



Swim with the Giant Australian Cuttlefish – Virtual Tour

When: Sat 1 Aug, 12pm | **Where:** Online | **Cost:** Free
More Info: www.roundme.com/tour/576169/view/18694

An internationally unique marine phenomena – the aggregation of the Giant Australian Cuttlefish who come to breed – occurs from May to August each year, in the cold water of Upper Spencer Gulf Marine Park near Whyalla. Over 100,000 cuttlefish can be found along an 8km stretch of coastline and an aggregation on this scale doesn't happen anywhere else in the world. Whilst visiting this site may not be possible for people for many reasons, this virtual tour will allow you to experience the next best thing and virtually swim with the Giant Australian Cuttlefish. Nature like nowhere else!

Proudly brought to you by the National Parks and Wildlife Service South Australia.

www.scienceweek.net.au/event/swim-with-the-giant-australian-cuttlefish-virtual-tour/



Deep Blue Treasure Hunt App

When: App will be available for National Science Week | **Cost:** Free
More Info: www.deepbluetreasurehunt.com.au/

In a joint project between the Marine Discovery Centre and the Science Collective, a fun and educational App is being developed. Love your local coastline and want to learn how to protect it? Sign up for our treasure hunt! It's packed full of beachside fun and activities, designed for the whole family. Plus, complete all the activities and go into the draw for some really cool prizes. Follow the map along the Henley Beach Marine Trail as you go exploring, treasure hunting and creating while you help make your beach a better place. Activities include: recycled art challenge; beachcombing; coastal walks; Aboriginal culture; beach life; performances; local history; kite making; marine environment care and ocean-based fun and education.

Supported by a National Science Week Grant.

www.scienceweek.net.au/event/deep-blue-treasure-hunt/



The Scientific Bubble Show - Live & Interactive

When: Sat 1 Aug-Sun 9 Aug, various times | **Where:** Online | **Cost:** Free, but reg required
More Info: marty@scientificbubbleshow.com or 0407 816 059 or www.scientificbubbleshow.com
Bookings: www.scientificbubbleshow.com/scienceweekregistration

Enjoy Marty McBubble's live Scientific Bubble Show from the comfort of your own home via Zoom. Each session is limited to 15 families, so the shows are truly interactive. As Marty demonstrates his amazing bubble creations, he will interact with audiences and pose scientific questions to participants. And there are plenty of laughs along the way!

With Bubble Rockets, Bubble Tornadoes, Bubble Cubes, Bubble Merry-Go-Rounds, Bubble ice-cream, Bouncing Bubbles and - of course - Giant Bubbles, this show will explore the wonder of soap bubbles and the incredible science that makes bubbles so amazing. Concepts such as bubble geometry, iridescence, flexibility, surface tension, gravity, density, evaporation and the properties of liquids and gases will be discussed in a way that is suitable for all ages. So get ready for bubbles. Get ready for science. Get ready for FUN!

Sessions: 1-2 & 8-9 August 11am, 2pm or 4pm, 3-6 August 7pm

Event supported by a National Science Week SA Community Grant

www.scienceweek.net.au/event/the-scientific-bubble-show-live-interactive-3/



A Potted History of Koalas: hard questions about a soft animal

When: Thurs, 6 Aug, 7pm-8pm | **Where:** Online | **Cost:** Free
More Info: www.inspiringsa.org.au
Bookings: www.eventbrite.com/e/a-potted-history-of-koalas-hard-questions-about-a-soft-animal-tickets-112280389668

Let's face it, Koalas are cute. However, the science around koalas is complex and fascinating, and there are many myths that need to be busted. Are koalas in South Australia the same as koalas from New South Wales? Is disease a problem for koalas? Are dropbears real? We delve deeply into the science of koalas, conservation and cuddliness, and explore some of the myths we still hold tightly to. Join Professor Chris Daniels from the International Koala Centre of Excellence and Dr Debbie Devis as we ask hard questions about a soft animal. Recommended for adults and families with children aged 10 and over.

www.scienceweek.net.au/event/a-potted-history-of-koalas-hard-questions-about-a-soft-animal/



Virtual Tours of Great Southern Reef Marine Life

When: 10 Aug-7 Sept | **Where:** Online | **Cost:** Free but registration required

More Info: alicia@emsau.org or 0466 278 187 or www.emsau.org

Bookings: <https://emsau.rezdy.com/399624/virtual-tour-of-the-weird-and-wonderful-marine-life-of-the-great-southern-reef>

We have all heard of the Great Barrier Reef but who has heard of the Great Southern Reef? Experiencing Marine Sanctuaries is collaborating with universities, Indigenous communities, the Department for Environment and Water, Marine Parks, the dive industry and science communicators to tell the story of the Great Southern Reef and its inhabitants. Events will be via streamed video with commentary and Q&A by leading South Australian marine biologists, ecologists, Kurna elders, underwater photographers, researchers and citizen scientists.

Sessions:

1. Weird & Wonderful Creatures of the Great Southern Reef

Monday 3 August, 7pm-8pm: Presenter is Stefan Andrews who is working on marine education materials funded by National Geographic for the project "Connecting coastal communities: Sharing the diverse social-ecological importance of Australia's Great Southern Reef".

www.scienceweek.net.au/event/virtual-tour-of-great-southern-reef-marine-life-weird-and-wonderful-creatures/

2. Seadragons

Mon 10 August, 7pm-8pm: Presented by Janine Baker, Marine Ecologist and Educator

www.scienceweek.net.au/event/virtual-tour-of-great-southern-reef-marine-life-seadragons/

3. Rays and Sharks

Mon 17 August, 7pm-8pm: This session covers their importance in the health of the Great Southern Reef.

www.scienceweek.net.au/event/virtual-tour-of-great-southern-reef-marine-life-rays-and-sharks/

4. Site Attached Reef Fish

Mon 24 August, 7pm-8pm: Presented by Dr Simon Bryars, Marine Biologist

www.scienceweek.net.au/event/virtual-tour-of-great-southern-reef-marine-life-site-attached-reef-fish/

5. Dolphins

Mon 31st August 7pm-8pm: Presented by Dr Mike Bossley, Dolphin expert and co-founder of Experiencing Marine Sanctuaries.

www.scienceweek.net.au/event/virtual-tour-of-great-southern-reef-marine-life-dolphins/

6. Aboriginal connection to coast and marine

Mon 7th September, 7pm-8pm: Kurna Elder Aunty Georgina Williams speaking about the connection of Aboriginal people to coast and marine through stories such as Tjilbruke.

www.scienceweek.net.au/event/virtual-tour-of-great-southern-reef-marine-life-aboriginal-connections/

Event supported by a National Science Week SA Community Grant.



Call of the Blobfish - a Pod Play for Kids Story Room

When: Sat 8 Aug-Sat 12 Sept, 9am | **Where:** Online | **Cost:** Free, but registration required

More Info: anna.s.steen@gmail.com or www.kidsstoryroom.com

Bookings: www.kidsstoryroom.com/2020/06/20/call-of-the-blobfish/

Call of the Blobfish is an audio drama (presented as a Pod Play) for 4-10 year olds, that tells a wondrous, scientific and at times magical underwater adventure story. This podcast aims to ignite the curious scientist in children by engaging them in a story of oceans and marine life and of their importance to human existence. There will be an additional podcast discussion with a South Australian marine scientist at the close of the Pod Play. Audiences, including parents and teachers, engaging with Call of the Blobfish will also have downloadable access to a support pack of resource material to engage listeners further with the themes of the play.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/call-of-the-blobfish-a-pod-play-by-kids-story-room/



Frogs and Fungi of the Adelaide Hills

When: Sat 8 Aug, 2.30pm–4.30pm

Where: Arbury Park Outdoor School, Arbury Park Rd, Bridgewater | **Cost:** Free

Bookings: www.trybooking.com/book/event?eid=638534&

Join the Adelaide Hills Science Hub for a National Science Week event. Find out about the fabulous worlds of frogs and fungi as you join experts Steve Walker, FrogWatch SA Coordinator, and Jasmin Packer, FungiMap, for informative sessions. Includes a fungi foray and frogspotter as you wander around a beautiful hills location. Learn about how you can become a citizen scientist in your own backyard and help to conserve our local hills biodiversity.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/frogs-fungi-of-the-adelaide-hills/bridgewater/



Celebrating our Marine Environments - Underwater with Arduino

When: 17 Aug-27 Aug | **Where:** Online | **Cost:** Free

More Info: 8384 0050 or www.onkaparingacity.com/Around-me/Libraries/Library-events-and-programs

Bookings: www.eventbrite.com.au/e/celebrating-our-marine-environments-underwater-with-arduino-tickets-111253434016

Join Techspace Learning online and investigate our local water environments whilst also learning about Arduino and basic programming skills. There are some basic mathematics and science principles used in this session. All participants need to have access to a computer. There is a limit of one Arduino kit per family and the kit will need to be picked up from an Onkaparinga Library. Suitable for ages 10+.

Session 1: Mon 17 Aug, 7pm–8.30pm

<https://www.scienceweek.net.au/event/celebrating-our-marine-environments-underwater-with-arduino/>

Session 2: Wed 19 Aug, 4pm–5.30pm

<https://www.scienceweek.net.au/event/celebrating-our-marine-environments-underwater-with-arduino-2/>

Session 3: Fri 21 Aug, 2pm–3.30pm

<https://www.scienceweek.net.au/event/celebrating-our-marine-environments-underwater-with-arduino-3/>

Session 4: Sat 22 Aug, 1pm–2.30pm

<https://www.scienceweek.net.au/event/celebrating-our-marine-environments-underwater-with-arduino-4/>

Session 5: Sun 23 Aug, 11am–12.30pm

<https://www.scienceweek.net.au/event/celebrating-our-marine-environments-underwater-with-arduino-5/>

Event supported by a National Science Week SA Community Grant.



Roxby's Virtual Science Week

When: Mon 17 Aug–Fri 21 Aug, 3pm–5pm | **Where:** Online | **Cost:** Free

More Info: Sasha.Yantewo@roxbycouncil.com.au or 08 8671 0010

Roxby's Virtual Mad Science Week is a free, virtual, hands-on event designed to inspire the children and youth of the Roxby Downs community. The week will feature instructional content for experiments to do at home with activity packs, as well as local knowledge scientists from the Roxby Downs and surrounding areas including from BHP, Arid Recovery, Woomera Observatory and more. To be delivered on the Roxby Youth social media pages throughout National Science Week. Themes will cover geology, chemistry, biology, botany and more. There's loads on offer to participate in at home and online.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/roxbys-virtual-science-week/



A Dive Down Under with George the Farmer

When: Mon 17–Mon 31 Aug, 10am–3pm | **Where:** Online | **Cost:** Free

More Info: george@georgethefarmer.com.au or 0419 832 026 or www.georgethefarmer.com.au

Join us for a dive down under with Australia's favourite farmer, George the Farmer, as we investigate the Deep Blue. In a fun and exciting 25 minute pre-filmed interactive show, George the Farmer and his mates, Simone and Ben, will uncover exciting facts about the Southern Rock Lobsters which live off the South Australian coast, including a chat with a real live scientist from the South Australian Research and Development Institute (SARDI).

The gang will also be making some of the exciting craft activities that can be found in the 2020 National Science Week resource book and launching their brand new song, 'Fish and Ships'. The pre-filmed interactive show will be available from George the Farmer's [YouTube channel](#) and Facebook page from Monday 17 August 9.30am AEST.

George the Farmer is an educational brand which teaches children about farming (on land and in water) and where food comes from. Our vision is a world where children connect to the earth, food and farm.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/a-dive-down-under-with-george-the-farmer/



Deadly Slime: A choose-your-own-adventure animated experience

When: Mon 17 Aug–Wed 26 Aug, 9am–12pm | **Where:** Online | **Cost:** Free

More Info and Bookings: https://ays.wishpondpages.com/deady_slime/

Have you ever heard of a biofilm? Our bodies have powerful immune systems. But when bacteria cover themselves in a protective coating of slime called a biofilm, they can quickly evolve into dangerous superbugs. Even with antibiotics, our most powerful weapons, it is difficult to destroy these fortified slime castles. Dive deep into the fascinating and slimy world of biofilms in a choose-your-own-adventure animation experience. Navigate your way through a dramatic story inspired by real-life events. Will you make the right decisions and defeat the infection? Scientists around the world are working hard to defeat biofilms, and South Australian researchers are at the forefront of this raging battle. As the second component of this activity, you'll have the opportunity to learn more directly from the experts in an online Q&A session on 26 August with Adelaide-based researcher, Dr Katharina Richter, and surgeon, Dr Markus Trochsler. Register now and dive into the fascinating world of super-villain superbugs.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/deadly-slime-a-choose-your-own-adventure-animated-experience/



SEVEN SIBLINGS FROM THE FUTURE: Exhibition at MOD.

When: Tues 18 Aug–Sat 12 Dec, 10am–6pm | **Where:** MOD, UniSA, North Tce, Adelaide | **Cost:** Free

More Info: mod@unisa.edu.au or www.mod.org.au/exhibitions/seven-siblings-from-the-future/

The time is 2050. In southern Australia there is a plot of land known as Eucalara which is already feeling the impact of climate change. Climate refugees started arriving decades ago, invasive species are on the move, and water is an increasingly precious resource. Amongst all this are seven siblings. The siblings have inherited this land from their great-grandmother, but can't agree on what should be done with the land. They each have a different idea for what qualifies as a good life and a good future. Meet the siblings and help to shape the future of Eucalara through the choices that you make.

www.scienceweek.net.au/event/seven-siblings-from-the-future-exhibition-at-mod/adelaide/



French Science in the High Seas: Voyages of exploration and discovery

When: Tues 18 Aug, 5.30pm | **Where:** Online | **Cost:** Free

More Info: maritime@history.sa.gov.au or www.maritime.history.sa.gov.au/

Bookings: www.history.sa.gov.au/where-to-learn-more/talking-history/

Could Australia ever have been French? The English certainly thought so. Through revolution, empire and restoration, late 18th and early 19th century France maintained an unwavering commitment to research and discovery in the Pacific region and in Australia. More interested in science than in new colonies, these early French voyages, led by commanders like Bougainville, Lapérouse, D'Entrecasteaux, Baudin, Freycinet, Duperrey and Dumont d'Urville, were the first to name, describe and beautifully illustrate many Australian species. They took specimens back to French museums where they provided an important foundation for Australian biology and conservation, particularly in botany and marine biology. England may have colonised Australia, but for many years it was France that understood it best.

This richly illustrated 45min documentary brings to life the early French scientific voyages of discovery that provided the foundation for much Australian biology and conservation. Narrated by author and biologist, Danielle Clode, and French lecturer, Christèle Maizonniaux, this film will be followed by a live online Q&A.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/french-science-on-the-high-seas-voyages-of-exploration-and-discovery/



iBandi Citizen Science Workshops

When: Wed 19 Aug and Sat 22 Aug

Where: Online & at Hills Environment Centre, 4 Crescent Drive, Norton Summit | **Cost:** Free

More Info: wendy.warren@adelaide.edu.au or 0449 757 399

Bookings: Via the links below

We aim to better protect endangered southern brown bandicoots by discovering more habitat they could use. During these free workshops you'll be able to join our iBandi citizen science team. You'll be trained in basic field safety, iBandi iNaturalist platform, fundamentals for data collection, and the opportunity to engage with other passionate citizen scientists. You'll also gain insight into the importance of bandicoots within ecosystems and discover how you can help to protect them.

Together we're training citizen scientists, sending them out with support to collect their own iBandi data, and then investigating these records. Scientists can then discover new bandicoot habitat, giving them the information needed to rescue, rehabilitate and release individuals, and track the future viability of our bandicoot populations.

There are 2 workshops:

Online workshop: Wed 19 Aug, 6.30pm-8pm

www.scienceweek.net.au/event/ibandi-citizen-science-workshop/

Face-to-face workshop: Sat 22 Aug, 2pm-3.30pm at Hills Environment Centre

www.scienceweek.net.au/event/ibandi-citizen-science-face-to-face-workshop/norton-summit/

Event supported by a National Science Week SA Community Grant.



Herding Caterpillars

When: Thurs 20 Aug, 6pm–8pm | **Where:** Online | **Cost:** Free

More Info: info@butterflyconservationsa.net.au, 0407 972 149

or www.butterflyconservationsa.net.au/events/list

Bookings: https://us02web.zoom.us/join/register/tZ0qdumsqjtGdL__9RHTMrOUVfAXsYIT-IS

Entomological experts and enthusiasts from across Australia will deliver short talks about the amazing world of butterflies and their survival in our environment. The webinar will inform the listeners of the long-established relationship between Lycaenid larvae, which have a specialized secretory gland that attracts, appeases and rewards ants. The event will detail the relationship of the Chequered Copper (*Lucia limbaria*) and its obligate ants, in which the larvae are frequently attended by ants (myrmecophilous).

Speakers include: Emeritus Professor Roger Kitching AM; Mike Moore; Jan Forrest OAM; and Gerry Butler.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/herding-caterpillars/



What Makes Science Good?

When: Thurs 20 Aug, 6.30pm–8.30pm | **Where:** Online, bookings essential | **Cost:** Free

More Info: www.adelaide.edu.au/stem/pesta/

Bookings: pesta@adelaide.edu.au

What makes science good? How do we know who to trust? How can the public contribute to scientific research? With the rise in science denial and public mistrust of science, it is increasingly important to find answers to these questions and develop effective ways of communicating scientific findings to the public. Join us to discuss these questions and more during our online Q&A event hosted by Professor Rachel Ankeny who convenes the Public Engagement in Science and Technology Adelaide (PESTA) research cluster at the University of Adelaide. Presenters include: Professor Frank Grützner, Professor Veronica Soebarto, Dr Helen Barrie, Dr Kim Barbour, Professor Sean Connell and Dr Ian Musgrave.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/what-makes-science-good/



South Australian Museum Podcast: Collection Stories

When: Fri 21 Aug, 12pm–1pm (followed by weekly episodes) | **Where:** Online | **Cost:** Free

More Info: programs@samuseum.sa.gov.au or 0466 853 991 or www.samuseum.sa.gov.au/visit/content-for-connection

Collection Stories will be the South Australian Museum's first ever podcast series featuring stories about our collections. Over the course of four episodes listeners will hear firsthand from museum professionals about why museums keep things, what types of things we collect, what do we learn from them, how do we care for them, and how we share them with the wider public. Each free 30 minute episode will feature Museum researchers and collection managers in conversation sharing stories about objects drawn from the Museum's vast collections.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/south-australian-museum-podcast-collection-stories/



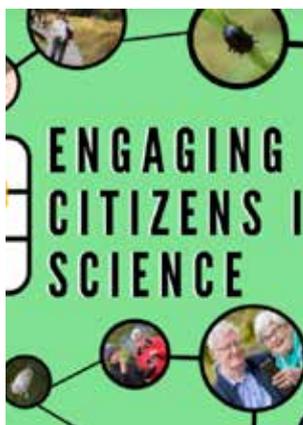
Exploring Gravitational Wave Observatories in Minecraft

When: Fri 21 Aug & Sat 22 Aug, 2pm-3pm | **Where:** Online | **Cost:** Free
More Info: daniel.d.brown@adelaide.edu.au

The University of Adelaide OzGrav node will be hosting an online virtual tour of one of the most sensitive instruments humanity has made, the LIGO detector. LIGO is an experiment based in the USA designed to detect gravitational waves emanating from colliding black holes and neutron stars throughout the universe. We have assembled a scale replica of LIGO in Minecraft for you to explore throughout National Science Week. On 22 and 23 August we will host free live tours given by scientists working on the detectors to walk you through this fascinating experiment and answer any of your questions. Do you have Minecraft already? Log in to our world and join us during the tour. If you do not have Minecraft you can still join in for the tour and watch via our YouTube stream.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/exploring-gravitational-wave-observatories-in-minecraft/



Beyond Instagram - Engaging citizens in science

When: Fri 21 Aug, 5pm-6pm | **Where:** Online | **Cost:** Free

More Info: neuroscience@adelaide.edu.au

Bookings: www.eventbrite.com.au/e/beyond-instagram-engaging-citizens-in-science-tickets-113731640398

Learn how to share your beautiful wildlife photos beyond Instagram and help citizen science programs around the world. From conservation to public health, from local to global importance, you can make scientific contributions by getting involved in citizen science.

We will explore how some citizen scientists in Australia are making a revolution in the way we monitor mosquitoes, to prevent mosquito-borne diseases, through Mozzie Monitors. We will also stream our short movie which is part of the Community Screenings in SCINEMA 2020. Further, we will explore the promise of using citizen science to engage the community and improve knowledge of biodiversity while improving public health outcomes through the University of South Australia's upcoming "Activating Citizen Science".

www.scienceweek.net.au/event/beyond-instagram-engaging-citizens-in-science/



Fight for the Great Australian Bight

When: Sat 22 Aug, 2pm-3pm | **Where:** Online | **Cost:** Free

More Info: 08 8405 6584

Bookings: <https://www.eventbrite.com.au/e/science-week-fight-for-the-great-australian-bight-webinar-tickets-112395550116>

The Great Australian Bight is one of the most pristine ocean environments left in the world. It supports vibrant coastal communities, jobs and recreational activities. Flanked by the longest continuous sea cliffs in the world, the Bight is a haven for whales, fish, birds, marine mammals, plant life and an array of invertebrate ecosystems. Peter Owen, Director of Wilderness Society South Australia, will teach us about this environment, the risks posed by deep sea oil mining, and what the Great Australian Bight Alliance is doing to protect the Bight. Once you have registered you will receive a link to join this live online event.

www.scienceweek.net.au/event/fight-for-the-great-australian-bight/



Australian Animal Tracks and Aboriginal Handprinting

When: Sat 22 Aug, 2pm-4.30pm

Where: Arbury Park Outdoor School, Arbury Park Rd, Bridgewater | **Cost:** Free

Bookings: www.trybooking.com/book/event?eid=638543&

Join the Adelaide Hills Science Hub and Hub patron Rob Morrison OAM, zoological researcher, who will talk to us about Australian animals and their identification by the tracks they leave. We will then be learning how to make Aboriginal representations of tracks with our own hands in sand with Uncle Ivan Tiwi-Copley OAM. We will also be casting a real thylacine print for you to take home.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/australian-animal-track-identification/bridgewater/



The Great South Australian Fossil Debate

When: Sun 23 Aug, 4pm-5.30pm | **Where:** Online | **Cost:** Free, but registration required

More Info: professorflint@hotmail.com or www.heapsgood.com.au

<https://www.eventbrite.com/e/the-great-south-australian-fossil-debate-tickets-113619621346>

South Australia is home to a rich fossil heritage, but what time period in the history of life represented in the SA fossil record is the most important? And why? Four of South Australia's leading palaeontologists will argue in favour of a particular position. Each palaeontologist will be given seven minutes to make their points, which will then be followed by a panel discussion amongst all four, moderated by world-renowned palaeontologist, and Dinosaur University Dean of Science, Professor Flint. Following the panel discussion, Prof Flint will take to the stage with several performers from Adelaide Youth Theatre, to sing and tell a story about each of the four time periods.

The four speakers are:

- **Ediacaran:** Dr Felicity Coultts, School of Biological Sciences, University of Adelaide
- **Early Cambrian:** Associate Professor Diego Garcia-Bellido, University of Adelaide, SA Museum
- **Cretaceous:** Professor Mike Lee, Flinders University, SA Museum
- **Pleistocene:** Diana Fusco, Flinders University

Members of the public will be encouraged to participate in the conversation, through Dinosaur University, and through various other social media forums, in the lead up to the debate, and in its aftermath. They will also have the opportunity to have their comments included in the live broadcast.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/the-great-south-australian-fossil-debate/



Career Sessions Podcast

When: Mon 24 Aug, 9am | **Where:** Online | **Cost:** Free

More Info: careersessionspodcast@gmail.com

Bookings: www.careersessions.com

The Career Sessions podcast showcases the unique and inside stories of people working in their careers. Hosts, Dr Stephanie Champion and Dr Tamara Agnew, hold PhDs in public health and health science. In the first series, Steph and Tamara meet 12 extraordinary people, including: Professor of Global Food, Culture and Health at Flinders University, John Coveney; Deputy Leader of the South Australian Labour Party, Dr Susan Close; Managing Director of the Australian Wine Research Institute, Dr Mark Krstic; and Young Tall Poppy of the Year recipient, Dr Cameron Shearer. The podcast is a unique careers resource for schoolteachers, university lecturers and student support services. By inviting speakers from a wide field of academia, industry and science communication, we are showcasing the wide variety of opportunities for researchers once they have completed their PhD.

The first series of Career Sessions is supported by Inspiring South Australia, and will launch 24 August 2020 anywhere you get your podcasts.

<https://www.scienceweek.net.au/event/career-sessions-podcast/>



Celebrating Our Marine Environments with Onkaparinga Libraries

When: Various programs, dates & times | **Where:** Online | **Cost:** Free

More Info: www.onkaparingacity.com/Around-me/Libraries/Library-events-and-programs

Sessions:

1. Virtual Reality Adventures

17 Aug-22 Aug, 9am-5pm: Explore the many wonders of our marine environments through the power of virtual reality. Pick up your free Google Cardboard Virtual Reality Headset (limit one per family) from one of our library branches, and follow our guide for some amazing marine adventures. Suitable for all ages. Note: a smart phone or iPod is required for this activity.

www.scienceweek.net.au/event/celebrating-marine-environments-virtual-reality-adventures-with-onkaparinga-libraries/

2. Plastic NOT Fantastic

Thurs 20 Aug, 10am-10.30am: *There will be 2 activities:*

a) Understand water density - make saltwater jars

Children will learn about water density by making saltwater jars. Density differences in water and flotation will be discussed, leading children to an understanding of flotation. Links will be made to the flotation of materials in and on water, and specifically plastic. The outcome will be that children will understand that density affects whether a liquid will "float" and will determine what materials float within that liquid, knowing that plastic will float or sink depending on the material.

b) Plastic pollution - make a mini ocean

By making their own mini ocean, children will learn what happens when plastic pollution occurs. Children will use the salt water jars made in the previous activity to make a mini ocean that will become "polluted" and then "filtered". A discussion will follow around how plastic and rubbish impact sea creature habitats, leading children towards an understanding of how plastic pollution in the ocean can be improved, reduced and/or eliminated.

www.scienceweek.net.au/event/celebrating-marine-environments-plastic-not-fantastic-onkaparinga-libraries/

3. Beach Detectives

Wed 26 Aug, 4pm-4.30pm: Join Beach Detectives, Sarah and Matt, as they search for clues that can tell us how our shoreline might have looked millions of years ago. Watch to find out how you can be a beach detective too.

www.eventbrite.com.au/e/celebrating-our-marine-environments-beach-detectives-tickets-111252495208?aff

4. Oil Spill ... we need your help!

Thurs 27 Aug, 3.30pm-4.30pm: One of the biggest man-made environmental disasters ever to impact our environment and wildlife are Oil Spills. The effect these have can be devastating, with the clean-up and after-effects lasting sometimes decades. In this activity, we are going to simulate an oil spill at home and we need your help as budding scientists, environmentalists, and engineers to help clean it up. Suitable for ages 8+.

www.eventbrite.com.au/e/celebrating-our-marine-environments-oil-spillwe-need-your-help-tickets-111269604382

5. Float a Boat

Fri 28 Aug, 4pm-4.30pm: What makes a boat float or sink? What materials can we use to build a boat? Explore along with us as we build boats and see if they float. Suitable for ages 5-8.

Click on this link to join the webinar:

www.zoom.us/j/95379842444?pwd=OHdINihPT0dsQldvU0dWdjhMWmIcQT09

www.eventbrite.com.au/e/celebrating-our-marine-environments-float-a-boat-tickets-111569025960

Event supported by a National Science Week SA Community Grant.



The Science and Citizens of the Coorong

When: Tues 25 Aug, 7pm–8pm | **Where:** Online | **Cost:** Free

More Info: sylvia.clarke@sa.gov.au or www.environment.sa.gov.au/topics/coorong/healthy-coorong-healthy-basin

Bookings: www.eventbrite.com.au/e/the-science-and-citizens-of-the-coorong-tickets-112550991044

Join us for a short film about the Coorong and the scientists and citizens helping to return it to a healthy system for all to enjoy. The Coorong is a unique environment that forms part of the Coorong and Lakes Alexandrina and Albert Wetland, a Ramsar Wetland of international importance. Work to restore a healthy Coorong needs to be based on the latest science, as well as the experience and knowledge of Traditional Owners and the local community. For National Science Week 2020 the Murraylands and Riverland Landscape Board and the South Australian Government's Healthy Coorong, Healthy Basin Program are pleased to present:

- a short film: The Science and Citizens of the Coorong, and
- an online Question & Answer (Q&A) session with scientific researchers and other interesting people of the Coorong.

By registering your details we will be able to send you a link to view the video as soon as it is released and a link and information on how to join us for the on-line meet the scientists and citizens of the Coorong Q & A session.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/the-science-and-citizens-of-the-coorong/



More than just delicious: creating healthy and nutritious diets for the animals of Adelaide Zoo

When: Tues 25 Aug, 5.30pm–6.30pm | **Where:** Online | **Cost:** Free

More Info: www.adelaidezoo.com.au

Bookings: www.adelaidezoo.com.au/event/more-than-just-delicious/

Formulating diets for all of the different species at Adelaide Zoo is a complex, tricky and fascinating business. During this exclusive online event, the nutritionists and keepers at Adelaide Zoo will take you through the science and processes involved in formulating the diets of a wide variety of animals, from the largest carnivores to the tiniest insects. Join us as we explore all the different factors that go into making up a delicious and nutritious animal diet, including:

- What, how and where different species would usually eat in the wild and how we can replicate this in a zoo setting
- How an animal's physiology, and whether they are a herbivore, omnivore or carnivore, affects their diet
- Any important species-specific nutritional recommendations or closely-related physiological models that can be used to help shape their nutrition plan
- How our teams use analysis software to help formulate our animals' diets

Participants will also see unique, behind-the-scenes footage of how we sustainably grow, source and store non-toxic food for our animals, even growing some of it right here onsite. Have any questions for our knowledgeable staff? An exclusive Q&A session at the end of the presentation will provide you with the opportunity to learn more about this fascinating scientific field. See you online soon, and remember to bring your appetites!

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/more-than-just-delicious-creating-healthy-and-nutritious-diets-for-the-animals-of-adelaide-zoo/



Dinner, animal style: how zookeepers prepare and present food for animals, based on nutritional science

When: Thurs 27 Aug, 5.30pm | **Where:** Online | **Cost:** Free

More Info: www.adelaidezoo.com.au

Bookings: www.adelaidezoo.com.au/event/dinner-animal-style/

Have you ever wondered how zookeepers prepare and present food to the diverse animals in their care? This exclusive online event will explain how our dedicated keepers support our veterinary and nutrition teams by carefully preparing and presenting food to our animals.

Through behind-the-scenes video footage and commentary by our amazing keepers, you'll learn all about the daily food preparation processes, based specifically on what is required for the health of each particular animal.

We'll also explain the concept of enrichment, and how different techniques of food preparation and presentation give our animals a rich feeding experience that enhances their welfare. Enrichment using food includes everything from encouraging natural foraging behaviors to training animals to eat in a way that helps us keep them healthy. We'll also let you know how you can apply these techniques at home when providing food and enrichment for your pets.

Finally, our vets will showcase how we make sure our animals are getting all the nutrients they need from their diets by looking at things like at morphometrics (that's 'measuring size and shape' to you and me), blood chemistry and urine analysis.

Have questions for our knowledgeable staff? An exclusive Q&A session at the end of the presentation will provide you with the opportunity to learn more about this fascinating scientific process.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/dinner-animal-style-how-zookeepers-prepare-and-present-food-for-animals-based-on-nutritional-science/



Our Deep Blue Future: reflections from early career scientists

When: Fri 28 Aug, 7pm-8pm | **Where:** Online | **Cost:** Free

More Info: rona.sakko@gmail.com or www.inspiringsa.org.au

Bookings: www.eventbrite.com/e/our-deep-blue-future-reflections-from-early-career-scientists-tickets-113576450220

Australian waters boast wondrous and abundant marine life, with stories from the depths of our oceans and seas being shared around the world. South Australia is an important part of this marine environment, with 85 – 90% of all marine animals and plants found only here. The Southern Ocean of our coast provides sanctuary for the Weedy Sea Dragon, Little Penguins, Southern Right Whales and Giant Cuttlefish and thousands more species. For an environment so unique and special, it comes up against many threats and uncertainties, including habitat loss, overfishing, pollution and resource exploration. So what can we do? This panel will bring together a generation of young scientists and students, who are looking at these challenges with fresh eyes and see hope. This panel will discuss: protecting SA's unique marine environment; making a difference with citizen advocacy for changes and protection; and SA as part of the STEM solutions looking after Australian waters.

www.scienceweek.net.au/event/our-deep-blue-future-reflections-from-early-career-scientists/



Observing with Galileo: How the first telescopic views of the celestial sphere changed the world

When: Wed 2 Sept, 8pm-9.30pm | **Where:** Online | **Cost:** Free
More Info: www.assa.org.au/

From 1609 to 1613 Galileo used his own astronomical telescope of unprecedented precision and power to make an avalanche of astounding new discoveries. This triggered a revolution in the way humanity sees its place in the cosmos. Some of these discoveries are well known, like the discovery of the moons of Jupiter, the phases of Venus and the lunar landscape. But there is a surprise drawn from the pages of Galileo's logbooks. He notes the position of a "fixed star" that does not exist in any star chart. This is because it is really the planet Neptune which Galileo observed 234 years before its official discovery. Remarkably, the notes from Galileo's observations reveal he observed Neptune move on two successive nights of January 1613. Did he know this "fixed star" was a planet? If so, this would be the first discovery of a new planet by humanity since deep antiquity.

Presenter: Professor David N. Jamieson, Professor of Physics, The University of Melbourne. He will report on his examination of Galileo's notebooks and tell us what he found and what still might be undiscovered.

This free, online public event is hosted by the Astronomical Society of South Australia.

www.scienceweek.net.au/event/observing-with-galileo-how-the-first-telescopic-views-of-the-celestial-sphere-changed-the-world/



KIDS NAVIGATE
NEUROSCIENCE

Kids Navigate Neuroscience: At Home

When: Sat 12 Sept, 90 minute sessions at 9am & 11am | **Where:** Online | **Cost:** Free
More Info: neuroscience@adelaide.edu.au
Bookings: www.eventbrite.com.au/e/kids-navigate-neuroscience-at-home-tickets-113763644122

Why does food not taste good when we have a cold? How do brain cells communicate? What does the brain look like up close? In this interactive virtual children's event, hosted by the Adelaide Medical School at the University of Adelaide, we'll explore the answers to these questions and many more. Children (aged 4-10) will explore how the brain and nervous system work in the Kids Navigate Neuroscience: At Home magazine, where they'll journey into the neuron with Brian the Brain, meet South Australian neuroscientists doing game-changing research about the human brain, discover fun brain facts and find a series of activities that they can try at home with their families.

Parents can pick up "Kids Navigate Neuroscience: At Home" packs at participating regional libraries, where they will find the magazine, many of the materials needed to complete the activities at home, and information for the virtual session. Then, on Saturday 12 September, families will have the opportunity to join us live on Zoom to be guided through the activities and to ask your questions about the human brain from our panel of neuroscientists. Bookings essential and are open to those at participating regional libraries.

Event supported by a National Science Week SA Community Grant.

www.scienceweek.net.au/event/kids-navigate-neuroscience-at-home/

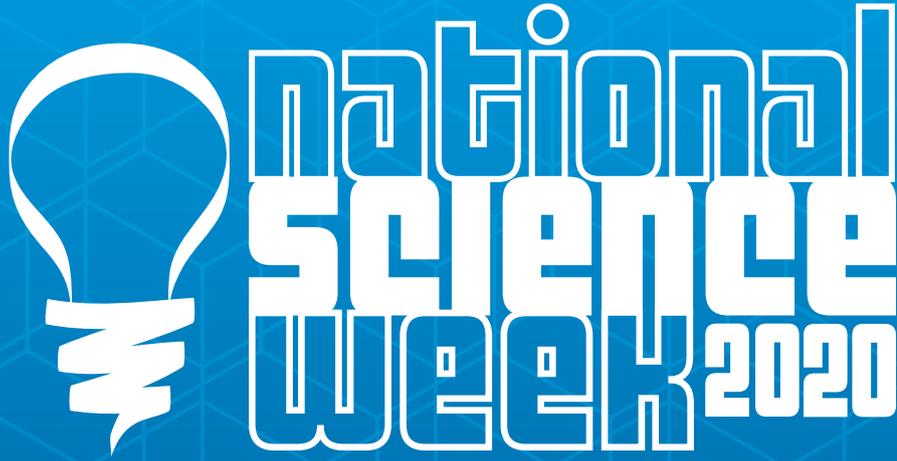


Silly Science with Simon

When: All Science Week | **Where:** Online | **Cost:** Free
More Info: www.sillysciencewithsimon.com/
Bookings: www.bit.ly/schoolholidayscience

If you're looking for something fun to try at home, then check this out. You only need to buy 15 items to do all 10 of these super cool science activities! These are perfect for kids of all ages, with a little bit of adult supervision. Jump over to <http://bit.ly/schoolholidayscience> to find the shopping list and watch fun YouTube videos that teach you how to do each activity. Then you're all set to try them at home (and maybe learn a bit about science along the way). Silly Science with Simon is a Youtube channel for kids run by Simon, a science graduate based in South Australia.

www.bit.ly/schoolholidayscience



15-23 August 2020

www.scienceweek.net.au

[@SAScienceWeek](https://www.facebook.com/SAScienceWeek)

[@SAScienceWeek](https://www.instagram.com/SAScienceWeek)

School theme:

DEEP BLUE:

Innovations for the future of our oceans

National Science Week is back for another year. Celebrate Australian science and technology by coming along to one of the many events across South Australia. Whether you're a science newcomer or mega enthusiast, you'll find an event that intrigues, challenges and entertains.

**INSPIRING
SOUTH
AUSTRALIA**

making science visible



inspiringsa.org.au

The Inspiring South Australia program is supported by the Australian Government, the Government of South Australia, the University of Adelaide, the University of South Australia, Flinders University and the South Australian Museum.