



# GET CURIOUS THIS AUGUST

*National Science Week Tasmania*  
**EVENT GUIDE 2021**



MERCURY

The Advocate

EXAMINER

# Welcome to NATIONAL SCIENCE WEEK TASMANIA

Most events are free unless otherwise stated.  
Please check event websites for up to date information.

The Tasmanian National Science Week committee acknowledges the Traditional Custodians of lutruwita, Tasmania and respects the palawa/pakana people for their culture and knowledge systems. We pay our respects to Elders past and present and thank all the community members who are assisting in the delivery of the state-wide program in 2021.

## FROM PROFESSOR EMERITA ELIZABETH BLACKBURN

### Nobel Laureate and Patron of Science Week Tasmania

From the beaches of Snug, Tasmania, to the world stage, our Patron of National Science Week Tasmania, Professor Blackburn has never lost her tendency to be curious.

Now based at the University of California, San Francisco, Professor Blackburn is a leader in the area of telomere and telomerase research. She discovered the molecular nature of telomeres – the ends of chromosomes that serve as protective caps essential for preserving the genetic information and what makes us, us! Professor Blackburn and her research team at the University of California, San Francisco are working with various cells including human cells, with the goal of understanding more about this key part of our biology.

The Tasmanian National Science Week Coordinating Committee would like to extend a sincere thank you to Professor Emerita Elizabeth Blackburn for her patronage of Science Week in Tasmania over the past three years. Professor Blackburn epitomises the joy that a life-long curious mind can bring, and the impact that Tasmanians can have across the world.

Dr Ben Arthur

Chair, Tasmanian National Science Week Coordinating Committee  
[scienceweek.net.au/tas-meet-elizabeth-blackburn](http://scienceweek.net.au/tas-meet-elizabeth-blackburn)

## FROM THE MINISTER

### Hon Michael Ferguson MP, Minister for Science & Technology

Science Week is our opportunity to recognise the crucial role that science plays in our world, and equally, to celebrate the small wonders that inspire the journey. From our youngest citizens to our most distinguished scientists and researchers - engaging all Tasmanians in Science, Technology, Engineering and Mathematics (STEM) has always been a key priority for the Tasmanian Liberal Government.

Advances in science and technology unlock major competitiveness gains and growth, as well as create new industries and markets for the Tasmanian economy. One exciting example of this is our emerging space industry. Space exploration represents a pinnacle of scientific and technological endeavour and Tasmania has a proud history of engagement in the global space industry activity through communication, tracking, space human research and support.

Our Government is continuing to contribute to the nation's ambitions in space through the signing of a Memorandum of Understanding with the Australian Space Agency. A new partnership has also been forged between the state, the University of Tasmania and HENSOLDT, a global leader in space radar technology. Both will position Tasmania as the prime location for space tracking and as a leader of Australia's sovereign Space Domain Awareness capability.

Science Week in Tasmania is your ticket to meet the scientists, participate in the experiments, discuss the hot topics and celebrate the discoveries.

Why not head along to the Festival of Bright Ideas at the Princes Wharf 1, or watch Secret Lab build an AI live on stage using video game technology in Launceston? Dr Karl is returning to Tasmania for a state-wide tour, or if you'd prefer to participate online you could stream the ExBEERimental Science live tasting panel event from home. Keep an eye out for the Young Tassie Scientists who will be touring the state in August visiting schools with entertaining presentations and hands-on activities spanning all the different streams of STEM.

There is something for everyone during Science Week, with events taking place online and in person right across the state. My sincere thanks go to the wonderful people who are hosting events, engaging with new audiences and showcasing science to their communities.

Together with our distinguished Patron, Dr Elizabeth Blackburn, I welcome you to Science Week 2021, and encourage you to seek out the many wondrous opportunities open to you in this year's program. Let curiosity be your guide.



Every effort has been made to ensure these events are COVID safe. However, please check the Tasmanian Government website for the latest guidelines: [coronavirus.tas.gov.au](http://coronavirus.tas.gov.au)

### Key to Events:

- |  |                       |  |                |
|--|-----------------------|--|----------------|
|  | Children's University |  | Film Screening |
|  | Community Expo        |  | Online         |
|  | Competition           |  | Outdoor        |
|  | Food/Drink            |  | Performance    |
|  | Exhibition            |  | Talk           |
|  | Family                |  | Tour           |
|  | Festival              |  | Workshop       |

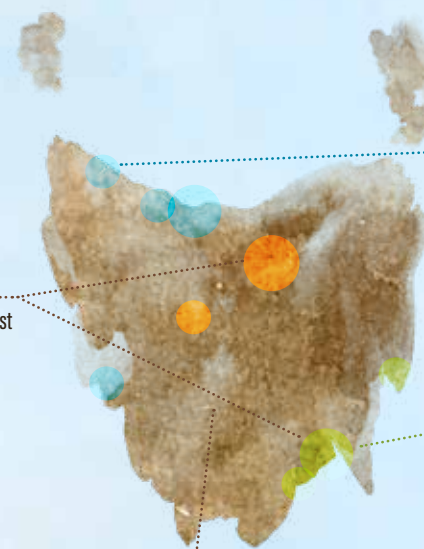
## EVENTS NEAR YOU

Southern Events .....	4-11
Northern Events .....	12
Northwest Events .....	13-15
State-wide Events .....	15-21
Event Quick Guide .....	22



## ABOUT OUR COVER ARTIST

Rubie Gallagher is a Hobart based Illustrator and watercolour artist. A nature enthusiast, she is inspired by plant and animal ecology and the unique diversity of the Tasmanian environment.



## DR KARL'S GREAT MOMENTS IN SCIENCE

Launceston: Thursday 12 August  
Hobart: Saturday 14 August

Dr Karl is returning to Tassie.  
See page 15 for more details

## CIRCULAR HEAD SCIENCE GIG

Monday 16 August

Discover how and why we produce different types of food, how production has changed and also ask how will it continue to change.

## FESTIVAL OF BRIGHT IDEAS

Saturday 21 August

FOBI is exploding with science for all your senses. See, hear and feel what's happening in science in Tasmania.

## BEAKER STREET FESTIVAL

Friday 6 - Saturday 14 August

Life on Mars, Science Photography Prize, Dark Sky Party, Tassie Science Road Trip, Sci Art Crawl, and 150 scientists



[natsciwktas](https://www.facebook.com/natsciwktas)  
 [sciencetasmania](https://twitter.com/sciencetasmania)  
[#scienceweek](https://www.instagram.com/scienceweek)

In Tasmania, National Science Week is supported by Inspiring Australia, the University of Tasmania and the Tasmanian Government, and is coordinated by the Tasmanian National Science Week Coordinating Committee that works with event holders to develop, produce and promote a state-wide program of events.



# NATIONAL SCIENCE WEEK 2022 BEERABLE



WEDNESDAY 18TH AUGUST, 7-9. SHAMBLES BREWERY, HOBART.



## MORE SCIENCE!

After Science Week, and all year, there are events, activities, and things you can do every day to celebrate science, technology, engineering, and maths - a.k.a. STEM! From your bin to your backyard and all the way to our sparkly island shores, there's something to discover. Get curious!

### SUSTAINABILITY... IT'S NOT OVER

When Science Week is over don't forget there's always a bit more science left! Sustainability, focusing on meeting the needs of the present without compromising the ability of future generations to meet their needs, is an increasingly important area of science and our society. What better way to be sustainable than to reuse, repurpose, and then recycle this very guide! (Yep, the one you're holding in your hands right now!)

This program is compostable (please remove staples first) and can either go in your home composting or in your food organics and garden organics (FOGO) bin, if available in your council area.

If you would like to know more about the benefits and types of composting, how to build your own, tips to reduce food waste, or what will happen to your program over time, check out this resource from Good Life Permaculture and the Hobart City Council: [bit.ly/composthobart](http://bit.ly/composthobart)

### LEARN BEYOND THE CLASSROOM

University of Tasmania  
Study STEM at UTAS

Are you driven to discover, meet new challenges, and create something new? Studying science can help you turn your curiosity into a rewarding career.

A science degree is one of the most sought-after qualifications. It offers an amazing world of career opportunities.

In Tasmania, you'll study in a living laboratory. You'll get hands-on experience that will really put your new skills to work.

Visit [utas.edu.au/study-science](http://utas.edu.au/study-science)

## CONNECTING SCIENCE AND COMMUNITY

Inspiring Tasmania features year-round science events and resources designed to connect science and community across Tasmania. And there is truly something for everyone!

Are you looking for fun, free events all year? Are you curious about what's happening around you? Do you have a bit of free time and want to participate in a real science research project? Would you like to discover science experiences like museums, parks, and wildlife sanctuaries? Do you want to add to your social calendar with science clubs for the curious of all ages?

And don't let the word 'science' put you off - we're talking flying drones, eagle spotting, night sky exploration, photography, seeing Tassie's oldest trees, sketching wildlife and plants, meeting real scientists from all types of backgrounds talking about all kinds of topics! Sometimes even from the comfort of your own home.

FIND OUT MORE AND GET INSPIRED AT [INSPIRINGTAS.ORG.AU!](http://INSPIRINGTAS.ORG.AU)

## INSPIRING TASMANIA

CONNECTING SCIENCE AND COMMUNITY



Details correct at time of printing but are subject to change. For up-to-date information please visit [scienceweek.net.au/events](http://scienceweek.net.au/events) or contact event organisers.

# 8 SOUTHERN EVENTS

Southern Events 9

# FESTIVAL OF BRIGHT IDEAS



*Science for the Curious and Creative*

21 AUGUST 2021  
PRINCES WHARF NO.1  
FESTIVALOFBRIGHTIDEAS.COM.AU  
#FOBI

Tickets online [www.festivalofbrightideas.com.au](http://www.festivalofbrightideas.com.au) \$10 per adult, or \$15 for two adults. Everyone under 18 years free of charge.

*Showcasing the Brightest Innovation, Research and Technology Happening in Tasmania*

It's not a trade expo, it's not a museum, it's not a classroom, it is a one-off, yearly gathering of our diverse, expert science community under the one roof at Princes Wharf 1 with activities designed to immerse and engage you in their science. Explore, create, experiment and learn from the folks harnessing the power of science in their day-to-day work. FOBI includes exhibitions, activities, workshops and (sometimes explosive!) stage performances by some of the country's most engaging science communicators.

Due to COVID-19 this is a ticketed event with strictly limited numbers - book early to ensure you can attend in your preferred timeslot(s). FOBI is a COVID-Safe event.

Major Sponsor:



Host Organisations:



Sponsors:



Media Sponsor:



Produced by:



## HIGHLIGHTS

### PIRATECHNIQUES 101

*Pirate Captain ScungeBucket*  
*The Science of Piracy, Lish Frejer*

Learn how to be a pirate scientifically using the very latest pirate-patented iPatch and bluetooth technology. You'll go away with an understanding of what's orange and sounds like a parrot, why pirates never learn the alphabet, ship safety updates, why pirates wear patches and take home your very own Pirate Ship\*.

\*Pirate Captain Scunge-Bucket may go back on this promise.

### BETTER LIVING THROUGH CHEMISTRY

*Dr Nathan Kilah*

Our lives depend on Chemistry even if we don't know it. Find out how you can improve your life through reactions you can try at home (and reactions you definitely shouldn't try at home!).



### DR GRAHAM WALKER

*Extraordinary Science with Ordinary Stuff*

Can you really make an air cannon with a garbage bin, create green hydrogen using a lunchbox and old laptop bits, launch marshmallows via a vacuum cleaner, or DIY a leaf-blower hoverboard that would rival the antics of Marty McFly (but with more sound effects!)? Really? Surely not! But also maybe....

### DINOSAURS DOWN UNDER

*Professor Flint, Michael Mills*

Starring award winning singing palaeontologist Professor Flint, Dinosaurs Down Under will take you on a delightful musical adventure to discover the dinosaurs, and other prehistoric creatures, that once walked on this ancient land!

From the mighty flesh-eating Australovenator, to remarkable long-necks like Savannasaurus and Rhoetosaurus, the story of prehistoric Australia is a story unique to us.

Dinosaurs Down Under will leave your toes tapping, your dino-feet stomping, and your voices roaring for more.



Details correct at time of printing but are subject to change. For up-to-date information please visit [scienceweek.net.au/events](http://scienceweek.net.au/events) or contact event organisers.

*FOBI 2021 is fizzing with exciting science to blow your curious and creative mind. Over 45 immersive science experiences presented by Tasmania's science superstars...*

**EXPLORE**

- ANTARTICA! The icy continent.
- The layers of the forest: From the soil beneath our feet to an eagle's nest high in the canopy.
- Marine parks - a unique ship reveals what lives beneath.
- What lives underground? Nature's recyclers.
- What makes Earth unique and sometimes dangerous! Earthquakes, volcanoes, tsunamis and landslides.
- The earth's biodiversity and become part of a global citizen scientist project.

**CREATE**

- Ideas to use old and new technology in different ways.
- Use the power of code to build structures, create cities and design worlds!
- Build a Solar Buddy and help illuminate the lives of children living in energy poverty.
- Electronic circuits and explore the science behind common objects.
- Discover how drugs work and design your own model drug delivery system.

**DISCOVER**

- Robots, electronic gadgets and miniature solar powered vehicles.
- The evolution of edible plants in lutruwita.
- What is Tiny Science?
- How are our lakes kept healthy for trout species?
- Maths and Science games to improve the welfare of cats and wildlife.
- How to juggle, and learn the science behind your new skills.

**EXPERIENCE**

- The immersive world of a giant inflatable planetarium.
- Real life farm animals and edible bugs!
- An interactive touchtank, live plankton and marine pests.
- Flying a mini-drone, and learn about complex environmental challenges.
- A Solar Car Challenge.
- The world's smallest flying helicopter.

FOBI by Night

**IMAGINATION RULES THE WORLD**

*The Space Cowboy - back by popular demand!*

A science stunt show of hilarity and daring, for children and adults alike. Warning - Sparks and arrows will fly and your heart will pound during this jaw-dropping performance.  
 FOBI by Night, Friday 20 August, Princess Wharf 1. Two shows only 5pm and 6:30pm  
 Adult \$20, Child \$10, Family \$50. Food and beverages available for purchase.  
 Tickets online [festivalofbrightideas.com.au](http://festivalofbrightideas.com.au). Limited tickets.

**PARTICIPATING ORGANISATIONS:**

- ABC Radio Hobart
- Australian Antarctic Division
- Bitlink
- City of Hobart
- Coder College Pty Ltd
- CSIRO Marine National Facility & Australian Marine Parks
- Devil Robotics
- Dominic College
- EKIDAZ
- Elizabeth College
- Fishcare, DPIPWE
- Forest Education Foundation and The Forest Practices Authority
- Hobart College
- Hydro Tasmania
- Make Science Fun Pty Ltd
- Nature. Be in it.
- Peter Manchester Toys
- Science Teachers Association of Tasmania (STAT)
- Sheree Martin, ARTsolutely Science
- Sustainability Learning Centre and Environmental Protection Authority Tasmania
- Tasmanian Model Solar Challenge
- Tasmanian Museum and Art Gallery (TMAG)
- TasNetworks
- TasWater
- Ten Lives Cat Centre
- The Space Cowboy and Professor Chaos
- Woodbridge Marine Discovery Centre
- University of Tasmania**  
 From the College of Sciences and Engineering, and the College of Health and Medicine:  
 Biological Sciences  
 Earth Sciences and CODES  
 Engineering  
 Geography, Planning, and Spatial Science  
 Inspiring Tasmania presents the Young Tassie Scientists  
 Pharmacy and Pharmacology

Details correct at time of printing but are subject to change. For up-to-date information please visit [scienceweek.net.au/events](http://scienceweek.net.au/events) or contact event organisers.

## QVMAG PRESENTS

*An Aboriginal fibre workshop, videos about medicinal plants and bush tucker, and a schools program catering to hundreds of Tasmanian young people – QVMAG has it going on!*

The museum is also a great space to visit during August. Learn about the natural history of Tasmania from geology to dinosaurs, investigate the history of the thylacine and find out what you can see in the Tassie sky at night or kick back in the planetarium.

Do your own self-guided tour and share what you find using #scienceweek on socials.

All the info at [qvmag.tas.gov.au](http://qvmag.tas.gov.au)

SCHOOLS: [bit.ly/qvmag-schools](http://bit.ly/qvmag-schools)

## THAT'S WHAT I CALL SCIENCE

That's What I Call Science is a three-time national-award winning radio show and podcast that brings a fresh perspective to the discussion on science.

Our team of women lead the conversation on local, national and global issues that matter to you with expert guests each week.

Listen wherever you get your podcast, on community radio or on our website: [thatsscience.org](http://thatsscience.org)

Keep an eye on our social media channels for some special Science Week giveaways - just search 'That's What I Call Science' on Facebook, Instagram or Twitter.

### SPICE CLUB



*George Town Community Hub*

Spice up your life with the Hub's Spice Club. Collect a range of unusual spices and recipe cards, tune into our Facebook page to see cooking demonstrations for the spices, and find out fun facts about where spices came from and their unusual uses throughout history.

Monday 16 August  
9:30 - 5pm

George Town Library, 12 Elizabeth St  
George Town 7253

Bookings essential: [bit.ly/spiceclub](http://bit.ly/spiceclub)

### SWEET TREAT LABORATORY



*George Town Community Hub*

Have you ever wondered how some of our favourite sweet treats are made? Join us at the Hub's Sweet Treat Laboratory and discover the weird and wonderful science behind home made ice cream, honeycomb, sherbet and more.

George Town Library, 12 Elizabeth St  
George Town 7253

Tuesday 17 August, 10am - 12pm  
Session for children aged 0 - 5 and their carers.

Books essential: [bit.ly/3zy09PE](http://bit.ly/3zy09PE)

Tuesday 17 August, 3:30 - 5pm  
Session for children aged 6-12.

Bookings essential: [bit.ly/3gtlPX7](http://bit.ly/3gtlPX7)

Wednesday 18 August, 3:30 - 5pm  
Session for children aged 6 - 12

Bookings essential: [bit.ly/3gtlPX7](http://bit.ly/3gtlPX7)

### BREAKING NEW GROUND



*The Royal Society of Tasmania*

University of Tasmania PhD candidates- Priyadarshini Bindal, Eric Gubesch and Kate Edwards will be presenting their research projects, ranging from renewable energy to health research. Join this talk in person or online.

Sunday 22 August, 1:30pm

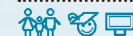
Meeting Room, QVMAG  
Inveresk, Launceston

Bookings essential: [rst.org.au](http://rst.org.au)

Free for RST members/ \$6 non-members/ \$4 concession non-members

**TASTROFEST  
WILL BE BACK  
NEXT YEAR!**

### UTAS DERBY: READY... SET... RACE!



*University of Tasmania*

Learn to build a model car using easy to find materials. This short video series draws on expertise from local STEAM gurus - straight to your lounge room (or classroom). Check out our MakerX Burnie Facebook page or the UTAS Derby website ([www.utas.edu.au/derby](http://www.utas.edu.au/derby)) for model car kit collection points.

Saturday 14 - Sunday 22 August

[facebook.com/makerxburnie](http://facebook.com/makerxburnie)  
or [utas.edu.au/derby](http://utas.edu.au/derby)

### SPACE UPDATE



Astronomer Martin George will take you on a journey through the latest advances and innovations in space exploration. This fun and family friendly event includes a 40 minute audio visual presentation and Q&A.

Sunday 15 August, 3:30 - 4:30pm

Gnomon Pavillion - Wharf Precinct,  
Wharf Road, Ulverstone, 7315

Bookings appreciated: [bit.ly/SpaceUpdate](http://bit.ly/SpaceUpdate)

### JUNIOR KEEPER EXPERIENCE



*Wings Wildlife Park*

The Junior Keeper experiences will give children the opportunity to become a keeper for a day and learn about the animals and all the work that goes into looking after them. The day will be jam packed full of activities, stopping for a provided bandicoot brunch pack. At the end of the day every child will get a take home souvenir pack and have the chance to have a look around the park at their own leisure.

Saturday 14 - Sunday 15 August  
10:30 - 2:30pm

Wing's Wildlife Park  
137 Winduss Rd, Gunns Plains 7315

Bookings open for ages 6 - 14yrs.  
\$85/child

Bookings essential: Call 03 6429 1151  
between 10am - 4pm

### CIRCULAR HEAD SCIENCE GIG



*Circular Head Science Gig*

Come along to the 2021 Circular Head Science Gig and help us discover how and why we produce all of these different types of food, how has production changed and also ask how will it continue to change. Let's explore and maybe even eat our way through.

Monday 16 August, 4:30 - 7:30pm

Circular Head Community and  
Recreation Centre, 72 Nelson St  
Smithton TAS 7330

Bookings appreciated:  
[apower@circularhead.tas.gov.au](mailto:apower@circularhead.tas.gov.au)



### CAFE LAB - OCEAN OF OPPORTUNITIES



*University of Tasmania*

Australia is a maritime nation. The Australian Maritime College is a national leader in marine and maritime research and is delighted to provide the Tasmanian community with the opportunity to meet some of their pioneering researchers and emerging young PhD students at this Cafe Lab series.

Monday 16 - Friday 20 August, 5:30 - 7pm

Bookings essential:  
[regional.partnerships@utas.edu.au](mailto:regional.partnerships@utas.edu.au)

More information at [scienceweek.net.au](http://scienceweek.net.au)

### FOOD SUSTAINABILITY AND SCIENCE SHOWCASE



*Ridgley Primary School*

Ridgley Primary will present two sessions showing the science learning from all classes K-6 with the emphasis on Food Sustainability. Community and family members most welcome.

Tuesday 17 August, 1:30 - 3:30pm

Ridgley Primary Gymnasium  
904 Ridgley Highway, Ridgley 7321

Bookings appreciated by 12 August:  
[sheryl.belbin@education.tas.gov.au](mailto:sheryl.belbin@education.tas.gov.au)



# NORTHWEST EVENTS

Details correct at time of printing but are subject to change. For up-to-date information please visit [scienceweek.net.au/events](http://scienceweek.net.au/events) or contact event organisers.

## BLUNDERS AND BAD LUCK IN SPACE



You've heard about the brilliant successes - now this is your chance to hear about some of the embarrassing blunders and bad luck that has happened along humankind's journey into outer space. This fun and family friendly event will be presented by Astronomer Martin George and includes a 40 minute audio visual presentation and Q&A.

Thursday 19 August, 6 - 7pm

Gnomon Pavillion - Wharf Precinct,  
Wharf Road, Ulverstone, 7315

Bookings appreciated:  
[bit.ly/spaceblunders](http://bit.ly/spaceblunders)

## THE SCIENCE OF PAPERMAKING



*University of Tasmania*

Based at the Papermakers' Garden at the Makers' Workshop in Burnie, this free, outdoor, community presentation will provide insight into the creative, cultural, and historic processes of papermaking, alongside the scientific principles of this ancient craft. e.g., fibre types and plant morphology.

Friday 20 August, 11am - 12pm

Papermakers' Garden  
Makers' Workshop (northern side of the  
building / waterfront - outside)

2-4 Bass Highway, Burnie 7320

Bookings essential:  
[eventbrite.com.au/e/the-science-of-paper-tickets-157431731547](http://eventbrite.com.au/e/the-science-of-paper-tickets-157431731547)

## CREATING A FROG-FRIENDLY GARDEN



An educational event to explain the eco systems required for frogs and what our community can do to provide backyard habitats for our native fauna. The open days and workshops will show you how to create welcoming environments for our native frogs in your own backyard. Live frog displays.

Friday 20 - Saturday 21 August  
10am - 4pm

23 King Edward, Ulverstone 7315

Booking essential for school-groups:  
Craig Broadfield, 0419 509 730  
[craig@tassie.net.au](mailto:craig@tassie.net.au)

Search FrogWatch Tas and Tasmanian  
Frogs on Facebook!

## SCIVR VIRTUAL UNIVERSE



The Universe is waiting to be discovered. SciVR will take you on a hunt out to Mars and then into the universe, tracking explosive events as they occur. With Alan Duffy and Rebecca Allen and live Q&A. Pick up your free mini VR headset at the library. Download the free app and explore the universe.

Saturday 21 August, 11am -12pm

Burnie Library, 30 Alexander Street 7320  
Kingston Library, 11 Hutchins Street, 7050

Bookings appreciated:  
For Burnie: [burnie.library@education.tas.gov.au](mailto:burnie.library@education.tas.gov.au)  
or 03 6477 7400

For Kingston: [kingston.library@education.tas.gov.au](mailto:kingston.library@education.tas.gov.au)

[www.scivr.com.au](http://www.scivr.com.au)

# STATEWIDE EVENTS

## DR KARL'S GREAT MOMENTS IN SCIENCE

TICKETS  
\$12

*Dr Karl returns to Tassie!*

The search for truth has always been hard. But it is true that a whale and a fish can keep on swimming after they have died (the reason is physics, not biology), and that we are running out of sand (yup, they had to build the world's tallest building in Dubai with Australian sand). Pterodactyls were flying, two-legged, dinosaurs? Only one-third correct. And the good news is that we can both stop and reverse climate change with today's technology, and bring CO<sub>2</sub> and the climate back to what it was in the 20th century. Don't forget to bring your questions for the Q&A!

There will also be an opportunity to meet Dr Karl for book signing.

Thursday 12 August, 7pm, Albert Hall, Launceston

Saturday 14 August, 7pm, Stanley Burbury Theatre, University of Tasmania, Sandy Bay

Bookings essential. For tickets, visit [inspiringtas.org.au](http://inspiringtas.org.au). Doors open at 6pm.

## LET'S TRAIN AN A.I.

*Secret Lab*

How does AI really work? Is AI going to take over the world and destroy us all? What's an "AI" really?

This interactive session for the young, and the young-at-heart will answer these questions, and more. Bring your family and friends, and learn how we build an AI, step by step.

On our journey we'll find out what it means to be intelligent, how an AI perceives the world, what actions it can take, and how it decides what to do. Is it intelligent? Or a simulation?

Using video game technology, we'll build an AI live on stage, together with the audience, and find out just how intelligent computers can be. (Did we mention it'll be live, on stage?)

This event will help solidify the possibilities of a career in STEM, and help to illuminate how the future of AI requires a clever combination of ethics, maths, computer science, video games, and engineering.

Hobart: Friday 13 August, 5 - 6:30pm

Launceston: Saturday 14 August, 5 - 6:30pm

Bookings essential: [secretlab.games/scienceweek2021](http://secretlab.games/scienceweek2021)

### About Secret Lab

Secret Lab is an independent games and creative technology studio located in Hobart, Australia.

We've been enthusiastically building video games, apps, and technology to showcase culture, history, arts, and narrative experiences since 2008.

### The Team

Dr Paris Butfield-Addison  
Game Developer at Secret Lab

Mars Butfield-Addison  
Researcher at CSIRO/Data61 and UTAS

Dr Jon Manning  
Game Developer at Secret Lab

Dr Tim Nugent  
Game Developer at [lonely.coffee](http://lonely.coffee)

## FIELDWORK FILM FESTIVAL

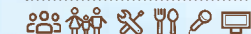


*Australian Marine  
Sciences Association*

Are you a Tasmanian based scientist or school student with an interest in science? Join our Fieldwork Film Festival to see the fascinating fieldwork that local scientists are doing in our backyard. You can enter your own video too!

Bookings essential:  
[climatescienceinaction.com](http://climatescienceinaction.com)

## JUMP INTO OPEN DAY



*University of Tasmania*

Open Day is your chance to experience uni life, talk to staff and students, and find your dream course.

This year, we're offering an exciting virtual experience. You can jump in anytime to explore our courses, scholarships, and more. Plus, you can talk directly to our friendly team.

Later in the year, you'll have the chance to join us in person and explore our labs, libraries, lecture theatres, and more. There'll also be a range of exciting activities, informative presentations and demonstrations, food, entertainment, and giveaways.

Burnie: 11 September  
Hobart: 21 November

To learn more, visit: [utas.edu.au/openday](http://utas.edu.au/openday)





Details correct at time of printing but are subject to change. For up-to-date information please visit [scienceweek.net.au/events](http://scienceweek.net.au/events) or contact event organisers.



Chat with scientists and peer down microscopes in the Roving Scientist Bar at the Festival Hub at TMAG.

Learn about the zinc works and the Derwent, and catch Yyan and Emily's eel-inspired performance at Nyrstar.



Chat about the science of distilling with Bill McHenry and let him pour you a G&T straight from the still.



# BEAKER STREET FESTIVAL



6-14 AUGUST 2021, LUTRUWITA/TASMANIA

## WHERE SCIENCE, ART AND CURIOSITY COLLIDE

PROGRAM + TICKETS: [BEAKERSTREET.COM.AU](http://BEAKERSTREET.COM.AU)

Beaker Street Festival is presented by:



Major Partners:



Festival Supporters:



Media Partner:



Photo: Amy Brown

# BEAKER STREET FESTIVAL

Festival Hub @TMAG

Life on Mars?

First Dog + Kudelka on Science + Cartoons

Winterreise - Live Opera @TOMB

Science Photography Prize

Tassie Science Road Trip

Eco-Grief - Documenting Decline

Aboriginal Fire

Talks + Ideas + Music + Bars

150+ Scientists

PLUS...

FESTIVAL FINALE 14 AUGUST - EAST COAST

## NOCTURNA

*A Dark Sky Party at Spring Bay Mill*

Featuring Nobel Laureate Brian Schmidt  
+ (much) more

PROGRAM + TICKETS: [BEAKERSTREET.COM.AU](http://BEAKERSTREET.COM.AU)

## BEAKER STREET FESTIVAL PRESENTS SCI ART CRAWL

SATURDAY 7 AUGUST, DAYTIME

**COOL WINE**

**HADLEY'S ART PRIZE**

**FEDERATION CHOCOLATE**

**BEAUTY AND THE BEES**

**SALAMANCA ARTS CENTRE**

**COLVILLE GALLERY**

**COMA AT NARRYNA**

**HOPS, BINES AND BEERS**  
*A boozy workshop with Moo Brew @ Tom McHugo's*

**URCHINS BEWARE!**  
*@ Institute for Marine and Antarctic Studies*  
Immerse yourself in the story of invasive sea urchins to discover the problem, the science, and the solution.

**PILLS, POTIONS, AND PANDEMICS**  
*@ Narryna*  
An insider's look at the gruesomely fascinating exhibition from the Collection of Medical Artefacts.

DISCOVER HOBART AS NEVER BEFORE, THROUGH THE LENS OF SCIENCE.  
PLAN YOUR CRAWL AT [BEAKERSTREET.COM.AU](http://BEAKERSTREET.COM.AU)  
OR PICK UP A MAP FROM SALAMANCA MARKET ON THE DAY.

# 20 STATEWIDE EVENTS



*"My kids were very responsive to these young scientists, they are so passionate about what they do! As an adult they opened my mind to these incredible opportunities out there... and the importance of science in our everyday lives."*

## YOUNG TASSIE SCIENTISTS



Young Tassie Scientists are early career researchers and scientists who are passionate about science and love sharing their work! They present talks and activities based on their research to communities around Tasmania. Come meet some of this year's 42 Young Tassie Scientists at Science Week Events near you!



## MEET SOME OF THE 2021 TEAM

### GEORGIA STEWART

*'Shedding light on black holes'*

Astrophysics, University of Tasmania  
Georgia studies black holes, massive objects that sit at the centre of a galaxy, and is figuring out just how important they are and all the different ways they impact a galaxy.

### BETH MUIR

*'Behind the face of crime'*

Cognitive Psychology, Australian National University  
Beth is a psychological researcher looking at how people's snap judgments leads to unfair assumptions in the court system, and what we can do to prevent this.

### BEATRICE HARRISON DAY

*'Flower scientist, plant killer'*

Plant Physiology, University of Tasmania  
Bea kills plants to understand how to keep them alive. She uses cameras to make time-lapse movies of flowers and leaves as they dry out to understand how heat and drought affect plant reproduction.

### KAWINWIT (INK) KITTIPALAWATTANAPOL

*'Totally rat-ical scientist'*

Wildlife Ecology, University of Tasmania  
Kawinwit, also known as Ink, researches the impacts of black rats on the native rat species and how predators, such as Tasmanian devils, quolls, and cats, can help keep populations of black rats under control.

### ANUK KRUAWAN

*'Devil whisperer'*

Immunology, Menzies Institute for Medical Research  
Anuk is studying the cancer that plagues the Tasmanian Devil. He looks at how the cancer spreads and how to stop it.

MEET THE WHOLE TEAM (PAST AND PRESENT) AT [YOUNGTASSIESCIENTISTS.COM](http://YOUNGTASSIESCIENTISTS.COM)

YTS received funding from the Australian Government as part of National Science Week and is run by the University of Tasmania.

# QUICK EVENT GUIDE

Details correct at time of printing but are subject to change. For up-to-date information please visit [scienceweek.net.au/events](http://scienceweek.net.au/events) or contact event organisers.

## Key to Events:

- Children's University
- Community Expo
- Competition
- Food/Drink
- Exhibition
- Family
- Festival
- Film Screening
- Online
- Outdoor
- Performance
- Talk
- Tour
- Workshop

### SOUTHERN EVENTS

Date	Event		Page
1 August	RST Doctoral Award Webinar		4
5 August	#Scipubmemes: Science Meme Poetry		4
6-8 August	Diversity in STEM Gallery		4
10 August	Radiation Protection of Astronauts in Human Missions to Mars: Simulation and Reality		4
13 August	Public Stargazing Night		4
14 August	Noticing Nature Walk		4
14 August	Renewable Energy Innovators of the Huon Valley		4
15 - 25 August	Marine Predators: From Islands to the Deep - An Immersive Underground Marine Science Experience		4
16 - 20 August	Cool & Tasty Science at the Library		4
16 August	Dream Big: Engineering Our World		4
16 August	From Antarctica to Outer Space		5
16 August	The Poetry of Science		5
18 August	The Farne Islands - Seabird Nesting and Grey Seals off NE Coast of England		5
18 August	ExBEERimental Science		5 & 7
19 August	Huon Valley STEM Expo		5
19 August	Ferment-Home-Station 2021		5
21 August	Rescue to Release Workshop		5
21 August	Imagining Iutriwita's Deep Time: A Journey Through Science, Art and Song		5
21 August	Plastic Inspection via Teddy Bear Dissection		5
21 August	Festival of Bright Ideas		8
21 August	SCIVR Virtual Universe, Burnie		14

### NORTHERN EVENTS

14 - 22 August	QVMAG Presents		12
16 - 20 August	Spice Club		12
17 - 18 August	Sweet Treat Laboratory		12
22 August	Breaking New Ground		12

### NORTHWEST EVENTS

14 - 22 August	Utas Derby: Ready... Set... Race!		13
14 - 15 August	Junior Keeper Experience		13
15 August	Space Update		13
16 August	Circular Head Science Gig		13
16 - 20 August	Cafe Lab - Ocean of Opportunities		13
17 August	Food Sustainability and Science Showcase		13
19 August	Blunders and Bad Luck in Space		14
20 August	The Science of Papermaking		14
21 - 22 August	Creating a Frog-Friendly Garden		14
21 August	SCIVR Virtual Universe, Burnie		14

### STATEWIDE EVENTS

6 - 14 August	Beaker Street Festival		16
13 & 14 August	Let's Train an AI.		15
12 & 14 August	Dr Karl's Great Moments in Science		15
11 Sept & 12 Nov	Jump Into Open Day		15
Until 17 August	Fieldwork Film Festival		15
10 - 27 August	Young Tassie Scientists		20

## WITH THANKS TO ALL THE 2021 MEMBERS

The Tasmanian National Science Week program is coordinated by the Tasmanian National Science Week Coordinating Committee which is primarily made up of volunteers.

- Dr Adele Wilson, University of Tasmania/ Young Tassie Scientists
- Amanda Hughes, Science Teachers Association of Tasmania
- Andy Baird, Tasmanian Museum & Art Gallery
- Dr Bianca Deans, Tourism Tasmania
- Dr Ben Arthur, CSIRO
- Brittany Trubody, TastroFest
- Dipon Sarkar, University of Tasmania
- Glenda Routley, State Growth
- Jason Hoare, Elizabeth College
- Jeannie Marie LeRoi, University of Tasmania
- Jenni Klaus, University of Tasmania
- Jenny Dudgeon, Sustainability Learning Centre
- Lyndal Bond, University of Tasmania\*
- Dr Margo Adler, BeakerStreet@TMAG
- Maria Dalla-Fontana, State Growth & Art Gallery
- Dr Martin George, The Hive Science Centre Planetarium
- Meredith Castles, University of Tasmania
- Peter Wright, Department of Education
- Rob Armstrong, City of Hobart
- Susie Haley, University of Tasmania
- Trish Hodge, mina-nina
- Wayne Goninon, University of Tasmania

\*Lyndal Bond was a part of the 2020 committee but did not appear in the 2020 printed program by mistake.

## JOIN NATIONAL SCIENCE WEEK 2022

The Tasmanian National Science Week Coordinating Committee invites Tasmanian businesses, community groups, researchers, and members of the public to create events for the 2022 program.

Funding of up to \$20,000 is available through the national grant round, which opens again in October and is a wonderful opportunity to bring larger projects to life. Local seed funding is available each year, supporting community and school events throughout Tasmania.

More information at [linktr.ee/scienceweektas](http://linktr.ee/scienceweektas)

## TASMANIAN STEM EXCELLENCE AWARDS 2021

Applications Open Friday 13 August 2021

Tasmanians who have excelled in science, technology, engineering and mathematics (STEM), STEM teaching or STEM communication are invited to apply for:

The Premier's Tasmanian STEM Researcher of the Year Award (\$10,000)

The Minister's Tasmanian STEM Innovation of the Year Award (\$5,000)

The Tasmanian STEM Teacher of the Year Awards 2021 for Primary and Secondary Teachers (\$5,000)

The Tasmanian STEM Communicator of the Year Award (\$5,000)

The Tasmanian STEM Young Researcher of the Year Award (\$5,000)

APPLICATIONS CLOSE MONDAY 27 SEPTEMBER 2021

APPLY ONLINE [STATEGROWTH.TAS.GOV.AU](http://STATEGROWTH.TAS.GOV.AU)

Contact: [jenni.klaus@utas.edu.au](mailto:jenni.klaus@utas.edu.au)





Details correct at time of printing but are subject to change.  
For up-to-date information please visit [scienceweek.net.au/events](http://scienceweek.net.au/events)  
or contact event organisers.