

NEW ZEALAND INTERNATIONAL SCIENCE FESTIVAL

6 - 15 JULY 2018, DUNEDIN

www.scifest.org.nz

GO BEYOND

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THANKS TO:





“KIA ORA KOUTOU KATOA”

Welcome to Dunedin – one of the world’s great small cities and proud host of the New Zealand International Science Festival.

The genesis of this festival was in 1996, when a group of passionate people had a vision to inspire the next generation of science leaders by holding a unique event that would bring the whole community together to promote science and learning, and position Dunedin as a city of science and a city of education. They saw the value in a community-based festival of science that would bring together the city’s schools, businesses, tertiary institutions and individuals in a week of hands-on science activities for all ages.

Over two decades and soon to be 11 festivals on, and the New Zealand International Science Festival has grown into one of the city’s premier events. Local, national and international scientists work with Dunedin groups to promote and celebrate science and innovation.

Science is important because it influences nearly all aspects of everyday life – food, energy, climate, medicine, transport and more. Science also helps to improve human life at every level – from individual comfort to global issues.

Dunedin, New Zealand and the world are currently experiencing an unprecedented rate of change, so this year’s festival theme of ‘Go Beyond, navigating new horizons’ provides a timely opportunity to examine how science will help us respond to change and influence the future.

I encourage you all to participate in some of the many events on offer and learn more about the world around you. There is something for everyone, from science demonstrations through to discussions on some of the major issues facing our society. So take some time to go through the programme, and challenge yourself to “go beyond” this July.

Dave Cull
Mayor of Dunedin



WELCOME FROM FESTIVAL PRESIDENT BRIDGET IRVING & DIRECTOR DAN HENDRA

This year’s New Zealand International Science Festival is once again set to take over Dunedin with a celebration of science, technology and innovation. The programme is packed with 220 events to pique your curiosity and take you beyond your everyday.

The Festival Executive believe that the advancement and communication of science is critically important for our global community. We face some extraordinary challenges and we firmly believe science will help us conquer them. This festival is about helping the community engage with these challenges and arm itself with the knowledge and the skills to face them. We hope to do this in a way that is fun, inspiring and, above all, accessible.

None of this would be possible without our cornerstone supporters—University of Otago, Dunedin City Council, and the Otago Community Trust. We are extremely grateful for these ongoing and long-term partnerships. We are also enormously grateful for support from the many businesses, organisations and service-providers whose contributions allow us to do what we do. The full list of our festival supporters is highlighted below. Please show your support for them, as they have for us. Huge appreciation also goes to our international partners—the British and Australian High Commissions and the US Embassy. Their continued support is instrumental in allowing us to attract a world-class programme peppered with thought-provoking international guests.

Lastly, but certainly not least, a massive thank-you to our presenters, event hosts and volunteers who enable us to deliver such an exciting and high-quality programme. We simply cannot do it without them.

On behalf of Dan Hendra, myself and all of the Festival Executive, we invite you to join us on this journey of intellectual challenge and inspiration. Be set to expand your mind, think differently, and Go Beyond!

Bridget Irving
Festival President

Dan Hendra
Festival Director

THE BIGGEST THANKS TO:

MAJOR PARTNERS:



MAJOR FUNDER:



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HOW TO USE THIS GUIDE

Celebrate the wondrous world of science as we transform the city of Dunedin into science hubs, with a mammoth 220 events encompassing discussions, experiments, inspiration and discovery.

TICKETING

Tickets are now on sale! Book now, as most events sell out well in advance. For all ticket information, head to www.scifest.org.nz.

FAMILY EVENTS

Join us in an exciting, engaging and educational event calendar this July school holidays the whole family can enjoy. Events are listed by date, with a number of events repeated throughout the week.

It's important that you check if you require tickets or registration to attend. If you don't have a ticket then you might miss out!

Please check the minimum age requirement for events, as most family events carry recommendations to ensure the best possible experience for our visitors. Parents, please keep this in mind when purchasing for your children.

ADULT EVENTS

Our programme has an incredibly rich selection of events for adults, including debates, discussions, workshops and film screenings. We have our largest-ever cohort of international guests ready to engage our city. Look for the red highlighted adult events throughout the programme.

FOLLOW US ONLINE

Find out the latest about the festival, including photos, behind-the-scenes information and festival insights on Facebook, Instagram and Twitter.

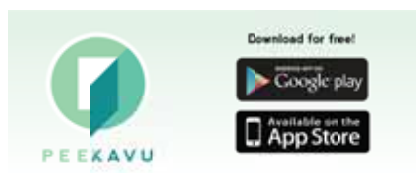
@nzscifest.

FILMING AND PHOTOGRAPHY

Filming and photography will take place at Science Festival events and may be used for future promotional purposes. If you have any concerns, please speak to a member of staff at the event or contact us via Facebook.

3D INTERACTIVE GAME!

Download the free Peekavu app to your mobile device to make our cover image come alive in 3D! You can use this anywhere you see our brand image – on the street, online and even at events!



NEED HELP?

Need help? Contact us via our Facebook page! Please note: events are subject to change, check our website www.scifest.org.nz for latest event listings.

#nzscifest
#gobeyond

DIRECTOR'S TOP 10



1 Opening Night & Science Awards at the University of Otago, 6 July.



2 Future Energy show starring Graham Walker at the University of Otago, Sat 7 & Sun 8 July.



3 NAO the robot (v6) Australasian launch, at 123 Vogel Street, Mon 9 July.



4 Hāhakaranga and the Creative Process at Toitū Otago Settlers Museum, Sun 15 July.



5 Our Environment: Meet the scientists at South Dunedin Community Pop-up, 9 July.



6 Women in Tech at 123 Vogel Street, 10 July.



7 The Sweet Science of Chocolate, talk and taste at OCHO, 13 July.



8 Going Beyond Our World, photography panel at Otago Museum, Sat 14 July.



9 Charlie, Estelle and the Poppazoid show for children at Toitū OSM, various days.



10 The Virtual Reality Lunchtime talk series at Vogel Street, Mon–Thurs.



THE 11TH NEW ZEALAND INTERNATIONAL SCIENCE FESTIVAL OPENING!

DON'T MISS IT!

Friday 6th July, 6pm



Join us and celebrate the weird, wacky and wonderful world of science!

Enjoy a sneak peek at the University of Otago's Science Expo, hear the latest findings from Richie Poulton, Director of the Dunedin Longitudinal Study, and celebrate our region's science heroes as we announce the winners of the 2018 ODT Community Science Awards. Hosted by Helen Anderson at St David Lecture Theatre Complex, University of Otago.

BOOK NOW!
scifest.org.nz

NEW ZEALAND INTERNATIONAL SCIENCE FESTIVAL

6 - 15 JULY 2018, DUNEDIN



MITRE 10 MEGA

Mitre 10 MEGA Dunedin is proud to be a locally owned and operated one-stop Home Improvement Shop.

www.mitre10.co.nz/local/MegaDunedin
350 Andersons Bay Road, South Dunedin



DUNEDIN BOTANIC GARDEN

Dunedin Botanic Garden is internationally recognised for its extensive plant collections, native bush, city vistas and beautiful walks.

www.dunedinbotanicgarden.co.nz
12 Opoho Road, North Dunedin



TOITŪ OTAGO SETTLERS MUSEUM

Encounter history at the Toitū Otago Settlers Museum. Learn about the people whose character, culture, technology, art, fashion, and transport shaped New Zealand.

www.toituosm.com
31 Queens Gardens



DUNEDIN CITY LIBRARY

Dunedin's first Free Public Library opened in 1908.

www.dunedinlibraries.govt.nz/locationhours/dunedin-city-library
230 Moray Place



OTAGO UNIVERSITY

University of Otago, celebrating 149 years as New Zealand's first university.

www.otago.ac.nz
362 Leith Street, North Dunedin



OTAGO POLYTECHNIC

Innovative hands-on learning that will prepare you for an exciting career.

www.op.ac.nz
Forth Street, North Dunedin



ROYAL ALBATROSS CENTRE

www.albatross.org.nz



MOANA POOL

www.dunedin.govt.nz/facilities/swimming-pools/moana-pool



OCHO CHOCOLATE

ocho.co.nz



PRECINCT FOOD

precinctfood.nz



OMBRELLOS KITCHEN & BAR

www.ombrellos.co.nz



DUNEDIN COMMUNITY GALLERY

www.dunedin.govt.nz/facilities/community-art-gallery

Otago Daily Times | Getting you closer to the community is in our DNA

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OTAGO MUSEUM

For 150 years the Otago Museum has been sharing its world-class collection of over 1.5 million objects, telling stories of nature, culture and science from Otago, Aotearoa New Zealand and the world.

otagomuseum.nz
419 Great King Street



WALL STREET MALL

Wall Street Mall brings you boutique shopping where international brands and local fashion meet in an elegant and enclosed shopping space.

www.wallstreetmall.nz
211 George Street



SOUTH DUNEDIN COMMUNITY HUB

Providing a range of DCC services to the South Dunedin community.

www.facebook.com/nzscifestsouthdunedin
199 Hillside Road



123 VOGEL STREET

Built in 1889, 123 Vogel Street is now home to some of Dunedin's brightest businesses and a hub for innovation and tech training.

innov8hq.com
signal.ac.nz
gallowaycookallan.co.nz



BEVERLY-BEGG OBSERVATORY

The Beverly-Begg Observatory was established in 1922 and is home to the Dunedin Astronomical Society.

www.facebook.com/dunedin.astronomy/
1a City Road, Robin Hood Park



DUNEDIN PUBLIC ART GALLERY

The gallery was founded in 1884 and was the first public art gallery in New Zealand. It is home to the main public art collection in Dunedin.

dunedin.art.museum
30 The Octagon



OROKONUI ECOSANCTUARY

orokonui.nz



ROBERT PIGGOTT ART GALLERY

www.robpiggott.com



OLVESTON HISTORIC HOME

www.olveston.co.nz



NEW ATHENAEUM THEATRE

www.facebook.com/NewAthenaeumTheatre



OTAGO PIONEER WOMEN'S MEMORIAL HALL

www.facebook.com/OtagoPioneerWomensMemorialBuilding/



NZ MARINE STUDIES CENTRE

www.otago.ac.nz/marine-studies

FAKE NEWS REAL FOOD

Enjoy a 'Precinct Food three-course feast' while hearing from award-winning filmmaker Kristin Pichaske.

Conspiracy theories and "fake news" are a rising epidemic, with serious consequences for democracy around the globe. Kristin will discuss her forthcoming documentary series *Pulling the Thread*, which unravels some of America's most popular conspiracy theories to reveal the emotional, cognitive and social forces that lead rational people to believe irrational things.

6-8PM, FRIDAY JULY 13
\$75 PER PERSON
125 VOGEL ST

Bookings essential.
Book today at
www.scifest.org.nz





NAME: Simon McCallum
COUNTRY: Norway/NZ

Simon McCallum has worked in both New Zealand and Norway, lecturing in Computer Science, Game Development and Virtual Reality. He has a PhD on the functional purpose of REM sleep and has worked commercially as a Game Developer. Simon's research interests include:

- Serious Games
- Virtual and Augmented Reality
- Neural Networks
- Asking better questions
- Medieval Siege Weapons



NAME: Ally Watson
COUNTRY: Australia/Scotland

The *Sydney Morning Herald* named Ally Watson one of Australia's nine most influential female entrepreneurs of 2017. After spending seven years working as a .NET developer across the UK and Australia, her insights into the life of a female in a male-dominated industry led her to co-found the highly acclaimed 'Code Like a Girl' in 2015. Code Like a Girl is an Australian organisation that sets out to inspire a new generation of girls to acquire coding as a skill through workshops and events. With her charming Scottish accent, disarming wit and colourfully tattooed skin, no-one defies the computer programmer stereotype quite like Ally Watson.



NAME: Dr Graham Walker
COUNTRY: Australia

Dr Graham Walker has been performing science shows for the past 16 years and is one of two people in the world with a PhD in science show performance. His unique brand of high-energy delivery and amazing science regularly thrills audiences around the world, from Africa to Asia to the Middle East. From solar-powered drag-racers to rockets made with kitchen chemicals, his shows are jammed with intriguing and interactive science aimed to inspire audiences to laugh, learn, wonder, and see how science is part of our everyday lives.



NAME: Prof. Karen Willcox
COUNTRY: USA/NZ

As Professor of Aeronautics and Astronautics and Co-Director of the Center for Computational Engineering, MIT, Karen is a leader in the development of computational methods for designing engineering systems. At MIT, Karen leads two large research projects for the U.S. Air Force to develop methods for the design of future aircraft and drones. She also works closely with Boeing on the design of the Blended Wing Body, a concept for a future passenger aircraft.



NAME: Prof. Malcolm A. MacIver
COUNTRY: USA

Malcolm is a director of the Neuroscience and Robotics Laboratory at Northwestern University, where he is a Professor with joint appointments between Mechanical Engineering and Biomedical Engineering, and an additional appointment in the Department of Neurobiology. His work focuses on ways that complex animal behaviour can be applied to making advanced biorobotic systems.



DON'T MISS ...
17:30
11 July
Games for Health
InnoV8 HQ

DON'T MISS ...
14:00
10 July
Coding
Fundamentals
University of Otago

DON'T MISS ...
16:00 | 14:00
7 July | 8 July
Future Energy Show
University of Otago

DON'T MISS ...
11:00 | 11:00
9 July | 10 July
Water Rocket
Workshops
Mitre 10 MEGA

DON'T MISS ...
18:00
12 July
Robots: the new
generation
Mitre 10 MEGA



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NAME:
Dr Ken Silburn
COUNTRY:
Australia

Ken is passionate about teaching 21st-century skills and increasing the educational opportunities of students on a global scale. He is internationally renowned in science education, especially in the area of Environmental and Space Science. He is a recognised Global Teacher Ambassador, having been acknowledged as one of the top ten teachers in the world (from over 23,000 nominations) through the Varkey Global Teacher Prize. He is also the recipient of the prestigious Dr Paul Brock Medal from the Australian College of Educators.



NAME:
Siân Cleaver
COUNTRY:
UK

Siân's childhood ambitions of becoming an astronaut led her to pursue a degree in Physics and Astronomy at Durham University in the UK, and then a career in the space industry. Six years later, Siân is a Principal Mission Systems Engineer at Airbus at Stevenage in the UK. She works predominantly on the design and development of future European Space Agency exploration missions, such as Solar Orbiter, a spacecraft that will fly close to the Sun to carry out observations and take measurements relating to solar and Heliospheric physics.



NAME:
Kristin Pichaske
COUNTRY:
USA

Kristin Pichaske is an Emmy Award-winning filmmaker with more than 25 years of professional experience shooting, producing and directing documentaries in a broad range of styles and formats – from working as a one-man-band in rural Africa, to shooting VR video for the New York Times, and producing large-scale documentaries for Lucasfilm, Ltd. and Paramount Pictures.



NAME:
Chadd Paishon
COUNTRY:
USA (Hawaii)

Chadd serves as Captain of Makali'i on Hawai'i Island. Chadd joined the Polynesian Voyaging Society (PVS) in the apprentice navigator program in 1990, as PVS was preparing to voyage to Rarotonga in 1992 to train a new generation of crew members and navigators. After many years of voyaging and learning navigation, Chadd was one of 5 PVS navigators inducted into Pwo, the degree of the Weriying School of Navigation of Micronesia, by Mau Piailug in 2007.



NAME:
Dr Oleg Abramov
COUNTRY:
New Zealand/USA

Dr. Oleg Abramov is a Senior Scientist at the Planetary Science Institute. His projects include modeling of environmental effects of comet and asteroid impacts, assessment of resources on Mars, and instrument development for Europa Clipper, a robotic spacecraft mission to an icy satellite of Jupiter. In 2013, he served as a crew member on a NASA-funded simulated Mars mission. Dr. Abramov is also an FAA-licensed commercial pilot and flight instructor.

DON'T MISS ...
18:00
10 July
The Teacher Who Saved Science
Otago Polytechnic

DON'T MISS ...
18:00
9 July
Space Adventures: To Infinity and Beyond
Signal ICT Grad School,
123 Vogel Street

DON'T MISS ...
18:00
13 July
Fake News, Real Food
Precinct Food

DON'T MISS ...
17:30
13 July
Futures Past: Navigating Through History
Otago Museum

DON'T MISS ...
18:00
9 July
Space Adventures To Infinity and Beyond
Signal ICT Grad School,
123 Vogel Street

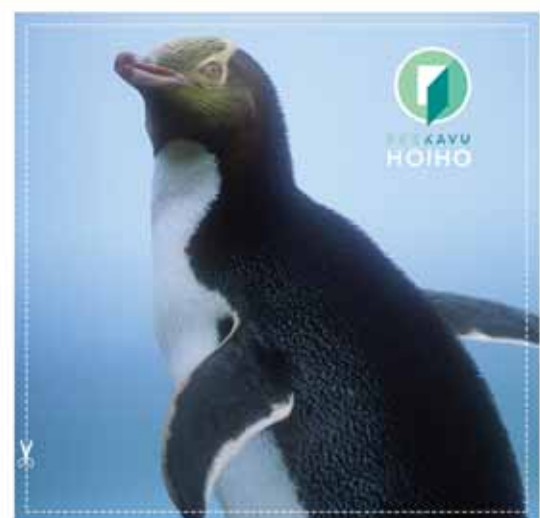


What does Peekavu do?

Peekavu is the latest and greatest augmented reality app. It will help you educate, demonstrate, and entertain in a way that's fresh, fun and easy. All you need to do is download the app, point your device at an image tagged with the Peekavu logo, and watch the image come to life. We offer a mix of experiences from simple videos like the one here, to interactive 3D animations like the New Zealand International Science Festival poster. What's more, many of our Peekavu targets offer links so you can learn more about a subject at the click of a button.

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Get in touch and we'll talk you through the process. Whether you're a school, a university, a museum, a corporate client, or even a political party we can help get your information across in a way that's quick, memorable and affordable. Peekavu target images can be used as postcards, books, posters, science journals, business cards, flyers, magazines, and billboards.



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NAME:
Nigel Latta

Nigel has had a varied and colourful career which spans all the way from a brief episode as a busker in the eighties, to over two decades working as a clinical psychologist, and more recently as an author and documentary-maker. Nigel has written books about parenting and his work as a forensic psychologist, and has worked on television documentaries about inequality, sugar, alcohol, Antarctic science, and lots more. In 2012 he was appointed as an Officer of the New Zealand Order of Merit.



DON'T MISS ...
12:00
11 July
Going Beyond with Nigel Latta
Otago Museum



NAME:
Dr Rangi Matamua

Dr Rangi Matamua (Tūhoe) is an associate professor at the University of Waikato, and his research fields are Māori astronomy and star lore, Māori culture, and Māori language development, research and revitalisation. He travels extensively throughout the country giving public lectures about Matariki and Māori Astronomy. In his MA thesis Doctor Matamua focused on traditional Tūhoe weaponry, and his PhD examined the role of Māori radio in Māori language revitalisation.

DON'T MISS ...
11:00
14 July
Matariki Beliefs and Customs Explained
Otago Museum



NAME:
Louise Potiki Bryant

Louise Potiki Bryant is a choreographer, dancer, and video artist of Māori (Ngāi Tahu, Kāti Mamoe, and Waitaha) descent who has choreographed for companies such as Atamira Dance Company, Black Grace Dance Company and The New Zealand Dance Company. Louise has a strong body of solo and collaborative works, which draw upon her interdisciplinary and whakaahua practice. Louise has a Bachelor of Performing and Screen Arts with a major in contemporary dance and a Bachelor of Arts with a major in Māori Studies.

DON'T MISS ...
10:00
7 July
A Whare Tapere Wānanga
Toitū Otago Settlers Museum



NAME:
Hoturoa Kerr

Hoturoa Barclay-Kerr (Tainui) is the captain of the oceangoing waka Haunui and has been sailing around the Pacific for more than 35 years. He paddles waka, sails waka, teaches waka. He has a BA from the University of Auckland, and a Masters from Waikato University. His Master's thesis investigated how the waka is a symbol of mana in the twenty-first century. He was a lecturer at Waikato University for over nineteen years and more recently he has specialised in education and leadership programmes that use the waka as a platform for learning and development.



DON'T MISS ...
17:30
13 July
Futures Past: Navigating Through History
Otago Museum



NAME:
Ian Taylor

Ian holds a Bachelor of Laws from the University of Otago and is a businessman and former television presenter, based in Dunedin. Ian's many accolades include induction into the New Zealand Hi-Tech Hall of Fame 2009, *North & South* magazine's New Zealander of the Year 2010, Companion of the NZ Order of Merit 2012 and Outstanding Maori Business Leader of the Year 2013. It may come as a surprise that Ian claims to have no skills whatsoever and credits living at the bottom of the world and working with clever people as the secrets to his success.

DON'T MISS ...
17:30
13 July
Futures Past: Navigating Through History
Otago Museum



For bookings and enquiries, contact
OLVESTON HISTORIC HOME
42 Royal Terrace, Dunedin
t: 03-477-3320
e: reception@olveston.co.nz
w: www.olveston.co.nz



The Edwardian Era was a time of great innovation and scientific discovery. Join our Edwardian Innovation Tour and experience the technological marvels the Theomin family experienced at their family home. Afterwards, create some sweet treats using Edwardian methods in the 'Drying Room'



NAME:
Simon Kaan

Simon Kaan describes his work as 'biological landscapes', animated vistas that piece together a sense of belonging and explore a multi-dimensional sense of self. Born in Dunedin in 1971 to a Chinese father and Ngāi Tahu mother, it is not surprising that his whakapapa and strong sense of his Ngāi Tahu heritage have grounded him in the cultural and physical local landscape, the subject of many of his paintings. His Chinese heritage has had equal influence and is as interwoven within his work as it is within him as an individual.



NAME:
Kylie Robinson

Kylie completed a BSc (Computer Science), and a DipSci (Computer Graphics) from Otago University. Her career started as a Computer Animator at Animation Research Limited. Kylie is the co-founder of Igtimi Limited. Igtimi designs and creates bespoke hardware and software under the YachtBot brand to help coaches and analysts boost their athletes' performance and keeps spectators involved when watching live sporting events.



NAME:
James Renwick

James Renwick is a professor in the School of Geography, Environment and Earth Sciences, Victoria University of Wellington. His background is in atmospheric science, with plenty of maths and statistics on the side. James specialises in the large-scale circulation of the atmosphere and how climate variability and change affects New Zealand and the Antarctic.



NAME:
Prof. Richie Poulton

Professor Richie Poulton is Director of the Dunedin Multidisciplinary Health and Development Research Unit, which conducts the Dunedin longitudinal study, one of the most detailed studies of human health and development ever undertaken. He has published 250+ peer-reviewed scientific papers, with many appearing in leading international journals. His research interests include: mental health, nature-nurture interplay, and psychosocial determinants of chronic physical disease. In 2014, he was named as a Highly Cited Researcher by Thomson-Reuters.



NAME:
Dr Helen Anderson

Helen chairs the BRANZ and Fulbright NZ boards and is an independent director of DairyNZ and WREDA. She also serves on the Massey University Council and the National Council of the Institute of Directors. She was Chief Executive of the Ministry of Research, Science and Technology for six years, preceded by six years as Chief Science Adviser. Helen chairs or is a member of advisory boards for LINZ, DIA, and the NZ Police. She has a PhD in geophysics from Cambridge University and enjoys keeping up-to-date with the latest science developments. We are proud to have Helen as a Festival Patron.

DON'T MISS ...
9:00 & 13:00
9 July
Matariki Flag Workshops
Toitū Otago Settlers Museum

DON'T MISS ...
18:00
10 July
Women in Tech Signal ICT Grad School,
123 Vogel Street

DON'T MISS ...
10:30
14 July
Climate Change: Why, when and how do we respond?
University of Otago

DON'T MISS ...
18:00
6 July
Opening Night: A celebration of the sciences
University of Otago

DON'T MISS ...
18:00
6 July
Opening Night: A celebration of the sciences
University of Otago



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www.facebook.com/nhnmmedia





FAMILY

OTAGO UNIVERSITY EXPO

The Science Festival grabs the best, quirkiest, coolest, weirdest and most helpful science from around the University and packs it all into the ground floor of the St David Complex.

10:00-16:00
No booking required
FREE
St David Lecture Theatre
University of Otago



FAMILY

19:30-21:30
No booking required

EXPLORE DUNEDIN'S NIGHT SKY
Dunedin Astronomical Society
Explore the universe, go inside the observatory dome, take a laser tour of the sky, and explore stars, planets, and galaxies with our telescopes! Open to space adventurers of all ages!

\$5 (free for small children)
Beverly-Begg Observatory, 1a City Road,
Robin Hood Park, Dunedin



FAMILY

10:00-16:30

HUGGING TREES COLOURING AND POSTER COMPETITIONS
Dunedin Public Art Gallery
Using the materials provided in Playspace enter one of our creative tree competitions.

FREE
30 The Octagon



FAMILY

10:00, 11:00, 12:00
Booking advised

DIY MARSHMALLOW BAZOOKA WORKSHOP
Mitre 10 MEGA
Learn how to make a vacuum cleaner-powered bazooka that will send marshmallows flying sky high!

\$5
350 Andersons Bay Road



FAMILY

17:30-18:45
Booking required

BLUE PENGUINS PUKEKURA FAMILY SPECIAL
Royal Albatross Centre
Have you met the smallest penguin in the world? Take advantage of this Science Festival half price offer to come and see them for yourself.

\$40 (2 adults, up to 3 children)
1260 Harington Point Road, Otago Peninsula



FAMILY

10:00-15:00
Bookings essential

ALBATROSS EXPRESS TOURS
Royal Albatross Centre
Discover huge Royal Albatross chicks at the world's only mainland Royal Albatross breeding colony.

Adults \$15, Children \$3
1260 Harington Point Road, Otago Peninsula



FAMILY

10:00-16:00
No booking required

SCIENCE FILM SCREENINGS
Dunedin City Library, Cube
Daily screenings of short films from Dunedin science communication students and the Scinema International Science Film Festival.

FREE
Dunedin City Library



FAMILY

10:00-15:00
Booking required

SIGNAL VIRTUAL REALITY & MIXED REALITY ARENA
Signal ICT Grad School
Come be amazed by the latest in VR and Mixed Reality technology from around the world! This is an immersive experience like no other with the latest headsets on offer to play, engage and discover new worlds! Book early to avoid disappointment as we have very limited spaces.

FREE
123 Vogel Street

SPOTLIGHT ON

FUTURE ENERGY SHOW

Find out about the science behind future energy technologies like fuel cells, hydrogen, carbon capture and biofuels as we burn and explode our way through a series of awe-inspiring experiments. Volunteers will race solar-powered cars, test wind turbine helmets and discover how we can store clean energy.

16:00-17:00
Booking advised
\$7, \$20 family (2 adults and 2 kids)
St David Lecture Theatre,
University of Otago



FAMILY

10:00-12:00

DANCE AS SCIENCE COMMUNICATION WORKSHOP - A WHARE TAPERE WĀNANGA
Toitū Otago Settlers Museum
Join internationally renowned Ngai Tahu dancer Lou Potiki-Bryant for this dynamic workshop in dance and Māori astronomy. A part of the Hāhakaranga Arts and Science Project.

FREE
31 Queens Gardens



FAMILY

13:30
No booking required

A GLIMPSE OF WAIRUA
Toitū Otago Settlers Museum
Join Ngai Tahu dancer and choreographer Louise Potiki-Bryant and Ngai Tahu theatre practitioner Rua McCallum to hear about the creation of Wairua, a performance planned for 2019, along with other innovative performance pieces they have created.

FREE
31 Queens Gardens



FAMILY

11:00 and 13:30 daily
No booking required

FIRST FLIGHT
Otago Museum
Be there for that special moment and help our newly-emerged butterflies take flight in the Tropical Forest.

Included with entry to Tuhura Science Centre
419 Great King Street



University of Otago Science Expo

St David Complex | Corner of St David St & Cumberland St
7 July 10am – 4pm : 8 July 10am – 2pm | All welcome



Free entry

Anatomy

Going beyond what you might think

Come along to our interactive display and discover just how fascinating anatomy is! Watch dissections of a deer heart and a lamb brain, paint your “insides” onto a T-shirt, and see how your bones, muscles and organs all fit together.

Heart dissections: Saturday at 11am and Sunday at 11am

Brain dissections: Saturday at 2pm and Sunday at 12noon

Biochemistry and Genetics Otago

Solving the molecular mysteries of our cells

Biochemistry and Genetics are types of biology that explore the origins and mechanics of life. They discover causes of disease and their cures. They also solve the problems facing our agriculture and natural heritage. Come along and explore some of the hands-on child-friendly techniques that are used by scientists to investigate the molecular details of life.

Brain Health Research Centre

Introduce yourself to your brain

Your brain is the boss of your body. It runs the show and controls just about everything you do, even when you're asleep. Not bad for something that looks like a big, wrinkly, pink sponge!

Come along and look at our giant Inflatable Brain, learn some brain facts, and make your own neuron.

Brilliant Botany

Connecting plants and people for a sustainable future

Plants give health to our planet and feed our growing population. Supermarket surprise! Have you ever wondered where all the different vegetables came from? Come and see how one plant species was cultivated to produce more than 10 foods. Do you know what veggies New Zealand natives are related to? We eat plants but did you know plants can eat animals too? Learn more at feeding time at the carnivorous plants enclosure. Want to take a bit of Botany away? Plant a New Zealand native seed and take it home with you.

Chemistry

Crystal-growing competition

Winning crystals from a national schools' crystal growing competition will be displayed, along with a $3m^3$ NaCl crystal lattice. Information about crystals and crystal-growing will be displayed on a TV screen.

Computer Science

The sandbox

Make your own landscape in sand and watch the computer colour it in. This is an example of a “tangible interface” for augmented reality. The computer works out the shape of the sand in 3D and paints contours onto the landscape.

Photomosaic

See your photo made from a mosaic of others.

Each captured image is added to the palette. So your picture is used to create others later.

3D Printer

Design and print your own objects.

We provide the printer and design programs. During the Expo we will print as many as time permits.

Interactive sculpture

Work with others to create a colourful virtual sculpture. Four computers work on one piece.

This shows a highly intuitive interface. You need almost no instruction to make 3D shapes in virtual space.

Are you in tune?

Come play your own instrument or borrow one of ours. Our software will help you to play better.

Mind-controlled drone

Launch our drone with the power of your mind.

Science fiction becomes fact. You can control a machine just by thinking.

Dentistry

Faculty of Dentistry reaches out

An overview of some of the research activities at the Faculty, with displays of dental models and equipment, and some hands-on activities for the general public.

Food Science

Challenge your senses

Come along to test your ability to discriminate flavours and to gain an understanding of why your likes and dislikes are unique. You will also have the chance to “gel out” with our gummy treats and learn the science behind making tough meat-cuts succulent and delicious.

Geology

Dunedin's rocky foundation

Have you ever wondered about the history of Dunedin's geology? Find out about what lies beneath your feet, the story of Dunedin's ancient past.

Human Nutrition

Feed your mind

Sugar and fat have received a lot of recent media attention in relation to obesity and heart disease. At Human Nutrition you'll have the opportunity to guess the fat and sugar contents of some common foods and drinks. For the interested – and the brave – we'll have an analyser which will calculate your percentage of body fat. Calculate your body mass index (BMI) and compare this to current All Blacks.

Information Science

Human-computer interaction

We will showcase a number of interactive demonstrations:

- 3D Telepresence with Voxel Avatars
- Interactive Human Brain Visualization
- Computational Glasses for the Colour-Blind
- Experience 4-Dimensionality: Virtual Reality Hypercube
- Mobile Telepresence

Marine Science

A changing ocean

Learn more about the ocean and the unique life that lives above and below the surface. Find out how scientists are trying to understand more about human impacts on this environment.

Mathematics and Statistics

Einstein, earthquakes and epidemics

What would the world look like if you travelled close to the speed of light? What pattern can be seen in the magnitudes of earthquakes and how often they occur? Can we predict if an epidemic will start or stop? Explore how mathematics and statistics are used every day and try your hand at some maths puzzles in our chill-out zone.

Microbiology and Immunology

Augmented reality - the gut microbiome

A professionally produced interactive feature aimed at children 8-12 years old.

Pharmacology and Toxicology

The good and bad of drugs and chemicals

Discover pharmacology and toxicology; from developing and testing drugs or human and animal diseases, to understanding the harmful effects of drugs and toxins.

Pharmacy

How the drugs get in!

Medicines are most commonly taken by mouth and they come in many different forms. The science behind medications and their formulation along with the delivery in the human body will be featured. Come and find out about the science behind medicines.

Physical Education, Sport and Exercise Sciences

An exploration of the four proposed majors (subject to approval) at the PE School

- Sport and Exercise Sciences
- Sport Technology
- Sport Development and Management
- Physical Education, Activity and Health

And

Te Koronga Indigenous Science Research Theme

- Wai Ora, Mauri Ora Exhibition
- Healthy People, Healthy Environment Exhibition.

Physics

Seeing is believing

Hands-on activities and demonstrations for you to investigate light. Talk to physicists about how we use light in research and why is it important in technology. See quantum effects in action. How optical fibre works, ghost bulb, make your hand invisible, superconducting track.

Physiology

Understanding how the human body works

Have you ever wondered what the difference is between sensation and perception? How you sense flavour, temperature or colour? The Physiology Department will host a booth at the International Science Festival that will allow you to test your perceptions and discover some mind-bending sensory tricks.

Physiotherapy

A balancing act

Balance is integral to everything we do – from simple tasks, to walking to performing sports and athletics. Come and learn about the body systems that control balance and test your own balance.

Psychology

Psychology: Then, now, and beyond!

From its humble beginnings in 1879 in Germany, Psychology has grown to be a huge field of study with a wide range of topics. Come along to participate in some classic psychology experiments, and to find out more about Psychology – where we've been, where we're at now, and some exciting new directions for research in the future!

Zoology

Buzzy biology

Hands-on activities for families, centred around a (real) bumble bee nest. See what animals live around Dunedin and what used to live here long ago. What questions do scientists in the Zoology Department ask about animals, why do they ask these questions, and how do they answer them?



SPOTLIGHT ON

TŪHURA THRILLS SCIENCE AT THE MALL

Tūhura science wonder and excitement is coming to the mall for hands on activities and demonstrations!

11:00-14:00
No booking required
FREE
Wall Street Mall
211 George Street



KIDS

18:00-19:00
No booking required

FUN SCIENCE

Moana Pool

Moana Pool is bringing science fun to every day of the Festival with lots of wacky water experiments for pool visitors to try out.

FREE
60 Littlebourne Road



ADULTS

10:00-16:00
No booking required

CHROMATONE

Robert Piggott Art Gallery

"What is colour?"

A painter and a photographer respond to the nature of colour and the colour of nature.

FREE
8 Jetty Street



FAMILY

10:00-17:00
No booking required

THE DUNEDIN MUSEUM OF NATURAL MYSTERY

Dunedin's newest museum is based in the home of mural artist and sculptor, Bruce Mahalski.

The museum contains a collection of skulls, bones, biological curiosities, ethnological art and unusual cultural artefacts.

\$5, children under-10 free
61 Royal Terrace



ADULTS

14:30
Booking suggested

GOING BEYOND TO THE HIDDEN WONDERS OF BRAZIL

Dunedin City Library

Photographer Leonardo Ramos shows how two isolated and financially struggling Brazilian National Parks have been deemed the largest concentration of archaeological sites of the Americas, and hold scientific findings that may change the history of humanity as we know it.

FREE
230 Moray Place



KIDS

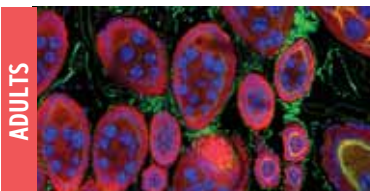
13:00-15:00
Booking essential

LIGHT WORKSHOP

Dunedin Public Art Gallery

Investigate reflection, refraction and colour vision with Esther Haines, University of Otago.

\$5 children 5-years and over
30 The Octagon



ADULTS

10:00-16:00
No booking required

SCHOOL OF BIOMEDICAL SCIENCES PHOTO EXHIBITION

The ISB Link

The exhibition has images that encompass areas of anatomy, biochemistry, genetics, microbiology & immunology, infectious diseases, neuroscience, pharmacology & toxicology, physiology and more!

FREE
University of Otago



FAMILY

DIY MARSHMALLOW BAZOOKA WORKSHOP

Learn how to make a vacuum cleaner-powered bazooka that will send marshmallows flying sky-high!

10:00, 11:00, 12:00
Booking advised

\$5
Mitre 10 MEGA
350 Andersons Bay Road



FAMILY

10:00-15:00
No booking required

THE POWER OF MIND IN CONTROLLING YOUR PAIN

Wall Street Mall

Take part in a circuit of simple and fun experiments that are used by Otago University researchers to understand the role of the brain in pain experience.

FREE
211 George Street



FAMILY

10:00-17:00
No booking required

AROUND THE MUSEUM IN 80 OBJECTS

Toitū Otago Settlers Museum

Travel the museum in search of a world of objects. Identify 80 artefacts and discover the countries they came from.

FREE
31 Queens Gardens



FAMILY

11:00-12.30
Bookings essential

WILD STREET ART WALKING TOUR

i-SITE, Octagon

Find out the real life stories of the creatures portrayed on our city's walls from the Octagon to Vogel Street. Join Small City Big Walls tour guide Victoria Gilliland and nature writer/presenter Quinn Berentson for a one-hour-plus walking tour. Guest appearance by a street artist.

\$10
The Octagon



FAMILY

14:00-16:00
No booking required

OROKONUI WILDLIFE WORKSHOP

Mitre 10 MEGA

Make wildlife-friendly garden accessories to nurture native species and make your backyard even better!

350 Andersons Bay Road
Gold coin donation encouraged



FAMILY

14:00-15:00
Booking advised

FUTURE ENERGY SHOW

Otago University

Find out about the science behind future energy technologies like fuel cells, hydrogen, carbon capture and biofuels as we burn and explode our way through a series of awe-inspiring experiments. Volunteers will race solar-powered cars, test wind turbine helmets and discover how we can store clean energy.

\$7, \$20 family (2 adults and 2 kids)
St David Lecture Theatre, University



FAMILY

WILDLIFE HOSPITAL

Specialists from the Dunedin Wildlife Hospital share stories about their fascinating experiences looking after local animals and birds.

FREE

Dunedin Public Art Gallery
30 The Octagon

15:00-16:00



FAMILY

BLUE PENGUINS PUKEKURA FAMILY SPECIAL *Royal Albatross Centre*

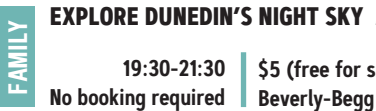
17:30-18:45 | \$40 (2 adults, up to 3 children) | SEE PAGE 10
Booking required | 1260 Harington Point Rd, Otago Peninsula



FAMILY

HUGGING TREES COLOURING AND POSTER COMPETITIONS *Dunedin Public Art Gallery*

10:00-16:30 | FREE | SEE PAGE 10
30 The Octagon



FAMILY

EXPLORE DUNEDIN'S NIGHT SKY *Dunedin Astronomical Society*

19:30-21:30 | \$5 (free for small children) | SEE PAGE 10
No booking required | Beverly-Begg Observatory, 1a City Rd, Dunedin



FAMILY

OTAGO UNIVERSITY EXPO

10:00-14:00 | FREE | SEE PAGE 10
No booking required | St David Lecture Theatre, University



FAMILY

ALBATROSS EXPRESS TOURS *Royal Albatross Centre*

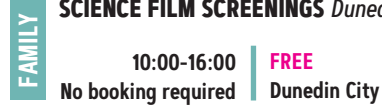
10:00-15:00 | Adults \$15 Children \$3 | SEE PAGE 10
Booking required | 1260 Harington Point Rd, Otago Peninsula



FAMILY

SIGNAL VIRTUAL REALITY & MIXED REALITY ARENA *Signal ICT Grad School*

10:00-15:00 | FREE | SEE PAGE 10
Booking required | 123 Vogel St



FAMILY

SCIENCE FILM SCREENINGS *Dunedin City Library, Cube*

10:00-16:00 | FREE | SEE PAGE 10
No booking required | Dunedin City Library



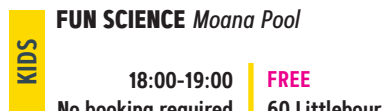
KIDS

BUG WORKSHOP

Dunedin City Library

Get to know local invertebrates with bug-lover and science student Sam Purdie. This workshop is aimed at science-loving children 8-12 years.

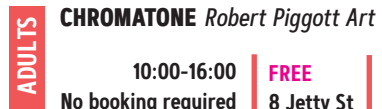
11:00-12:00 | 7-12 years
Booking required | \$5



KIDS

FUN SCIENCE *Moana Pool*

18:00-19:00 | FREE | SEE PAGE 10
No booking required | 60 Littlebourne Rd



ADULTS

CHROMATONE *Robert Piggott Art Gallery*

10:00-16:00 | FREE | SEE PAGE 12
No booking required | 8 Jetty St



ADULTS

SCHOOL OF BIOMEDICAL SCIENCES PHOTO EXHIBITION *University of Otago*

10:00-16:00 | FREE | SEE PAGE 12
No booking required | The ISB Link



FAMILY

SPACE ADVENTURES: TO INFINITY & BEYOND!

Join leading scientists Karen Willcox, Sian Cleaver and Dr Oleg Abramov for an insight into the world of space exploration.

18:00-19:30 | \$10 | SEE PAGE 10
Booking required | Signal ICT Grad School
123 Vogel Street



FAMILY

LICHENS UP CLOSE

Dunedin Botanic Garden

This guided walk will reveal some of New Zealand's exceptionally rich lichen flora.

14:30-15:30 | FREE | SEE PAGE 10
Booking suggested

Dunedin Botanic Garden *Sorry, no wheelchair access



FAMILY

SOMETHING FISHY IN THE GARDENS

Dunedin Botanic Garden

Through electro-fishing, fyke netting and fish IDs learn about the importance of healthy rivers to healthy communities.

10:30-12:00 | FREE | SEE PAGE 10
Booking suggested | Dunedin Botanic Garden



FAMILY

ŌKU MOANA STORYTIME

Dunedin Community Art Gallery

Storytime with Su Ikin from Dunedin Public Library - suitable for young children (ages 4-10).

13:00-14:00 | FREE | SEE PAGE 10
No booking required | 20 Princes Street



FAMILY

ŌKU MOANA

Dunedin Community Art Gallery

Working in collaboration with artists, musicians, weavers, film makers and scientists, Rabbit-Hole Collective will merge climate change data with art in interactive displays, hands on art activities, workshops and storytelling.

10:00-16:00 | FREE | SEE PAGE 10
No booking required | 20 Princes Street



FAMILY

NAO ROBOT OFFICIAL AUSTRALASIA LAUNCH BY SOFTBANK ROBOTICS

InnoV8 HQ

Meet NAO, the interactive robot from China that is winning the hearts of people around the world.

17:00-18:00 | FREE | SEE PAGE 10
No booking required | 123 Vogel Street



SPOTLIGHT ON

MATARIKI FLAG WORKSHOP

Join celebrated Ngai Tahu artist Simon Kaan in researching Māori astronomical understanding of the Matariki cluster (Pleiades). Create your very own printed Matariki Star Flag to take home.

9:00-12:00, 13:00-16:00
Booking required

FREE
Toitū Otago Settlers Museum
31 Queens Gardens



FAMILY

13:30-14:30
Booking suggested

NATURE DETECTIVE GREAT WEED MYSTERY

Dunedin Botanic Garden

Help solve the puzzle – where's the old man's beard? Was it a crime of passion fruit? Kiwi Guardians earn your 'Weed Warriors' medal.

FREE
Dunedin Botanic Garden



FAMILY

17:30-19:00
Booking suggested

ANATOMY: GOING BEYOND WHAT YOU MIGHT THINK

Wall Street Mall

Hear from a fascinating group of experts talking about the best bits of their research including bioarcheology, native bird sperm, building bone from wool, stimulating the brain and the Loch Ness monster.

FREE
211 George Street



FAMILY

11:00-13:00
No booking required

COCCOLITHOPHORES IMPRESSED

Dunedin Community Art Gallery

Coccolithophores impressed – make your own embossed artwork with Lynn Taylor and Jenny Rock.

FREE
20 Princes Street



FAMILY

9:00-12:30
No booking required

DUNEDIN KINDERGARTEN OPEN DAY

Helen Deem Kindergarten

Come and experience a range of hands on science experiences for young hands and minds to meddle with.

FREE
81 Forbury Road



FAMILY

10:00-11:00
Bookings required

TAKAHE TALES!

Orokonui Ecosanctuary

Once thought extinct and then miraculously rediscovered hear the thrilling tales of the Takahe from the scientists who work with them! Includes dress up and specimen display!

\$5
600 Blueskin Road



FAMILY

13:15-14:15
No booking required

MESMERISING METAMORPHOSIS: FROM CATERPILLAR TO BUTTERFLY

Otago Museum

Listen to a reading of The Very Hungry Caterpillar, create your own caterpillar craft and help newly-emerged butterflies take flight for the first time in the Tropical Forest. Aimed at 2-6 year olds and their parents.

\$15/\$10
419 Great King Street *Sorry, no wheelchair access



FAMILY

12:00-13:00
Bookings required

PEST FEST!

Orokonui Ecosanctuary

Meet passionate conservationists and interpret prints in tracker tunnels. How does our perception of these animal's behaviour affect how we chose to eradicate them? Learn how each trap is designed with specific pest psychology in mind.

\$5
600 Blueskin Road



FAMILY

19:30-21:30
No booking required

SEARCHING FOR SATURN

Beverly-Begg Observatory

Look for Saturn through high powered telescopes under the guidance of experts from Skyline Queenstown.

FREE
1a City Road, Robin Hood Park, Dunedin



FAMILY

13:00-15:00
Bookings required

MIGHTY MOA

Orokonui Ecosanctuary

Meet Quinn Berentson, author of the award winning Moa book and hear about our local Moa. Examine real Moa specimens from Otago Museum and explore the native forest looking for Moa munchies!

\$5
600 Blueskin Road



FAMILY

10:00-12:00
Bookings required

MAKING THEATRE: THE ART AND SCIENCE OF LIGHTING

New Athenaeum Theatre

Join scientists, performers and creatives at the New Athenaeum Theatre for an interactive workshop, including performance of a scene from 'Macbeth' under various lighting states.

FREE
23 The Octagon



FAMILY

16:00-18:00
Bookings required

NATURE O'CLOCK

Orokonui Ecosanctuary

Breakfast at midnight? Dinner at dawn? Why does that seem wrong to most human brains? Learn all about how we evolved our circadian rhythms and how modern technology keeps us up at night. Make your own animal clock to take home!

\$5
600 Blueskin Road

SPOTLIGHT ON

EDWARDIAN DOMESTIC SCIENCE

Learn how domestic history and food science has changed between Edwardian times and now.

10:30-12:00
Booking required
\$5
Olveston
42 Royal Terrace



FAMILY

10:00-11:00; 11:30-12:30
Booking required

DENTAL DETECTIVES

Dunedin City Library

Put on your dental detective hats and try out the four interactive dental activities from Otago University's Dental School. Suitable for kids aged 7 years and over, parents welcome.

FREE
Dunedin City Library

SCIENCE FILM SCREENINGS *Dunedin City Library, Cube*

10:00-16:00
No booking required

FREE

Dunedin City Library

SEE
PAGE 10

EXPLORE DUNEDIN'S NIGHT SKY *Dunedin Astronomical Society*

19:30-21:30
No booking required

\$5 (free for small children)

Beverly-Begg Observatory, 1a City Rd, Dunedin

SEE
PAGE 10



SHOOT FOR THE STARS
Signal ICT Grad School
This event is a special opportunity to have a pizza Q&A dinner with space experts Karen Willcox, Sian Cleaver and Dr Oleg Abramov. Aimed at high schoolers.

17:00
Booking required \$5
123 Vogel Street

SIGNAL VIRTUAL REALITY & MIXED REALITY ARENA *Signal ICT Grad School*
10:00-15:00 | **FREE** | **SEE PAGE 10**
Booking required | 123 Vogel St

HUGGING TREES COLOURING AND POSTER COMPETITIONS *Dunedin Public Art Gallery*
10:00-16:30 | **FREE** | **SEE PAGE 10**
30 The Octagon

ALBATROSS EXPRESS TOURS *Royal Albatross Centre*
10:00-15:00 | Adults \$15 Children \$3 | **SEE PAGE 10**
Booking required | 1260 Harington Point Rd, Otago Peninsula

AROUND THE MUSEUM IN 80 OBJECTS *Toitū Otago Settlers Museum*
10:00-17:00 | **FREE** | **SEE PAGE 12**
No booking required | 31 Queens Gardens

TŪHURA THRILLS SCIENCE AT THE MALL *Wall Street Mall*
11:00-14:00 | **FREE** | **SEE PAGE 12**
No booking required | 211 George St

BLUE PENGUINS PUKEKURA FAMILY SPECIAL *Royal Albatross Centre*
17:30-18:45 | \$40 (2 adults, up to 3 children) | **SEE PAGE 10**
Booking required | 1260 Harington Point Rd, Otago Peninsula



SCIENCE OF COLOUR: KIDS WORKSHOP
Robert Piggott Art Gallery
Art and science do belong together as kids will discover at this fun, hands-on workshop. Suitable for 8-12 year olds.

14:00-15.30
Booking required \$5
Jetty Street



WATER ROCKET WORKSHOP
Mitre 10 MEGA
This is a rocket-making workshop with a difference, your teacher is Professor of Aeronautics & Astronautics Karen Willcox! For children 8+ years.

11:00-14:00
Bookings essential \$15
350 Andersons Bay Road



FUN SCIENCE
Moana Pool
Moana Pool is bringing science fun to every day of the Festival with lots of wacky water experiments for pool visitors to try out.

18:00-19:00
No booking required **FREE**
60 Littlebourne Road



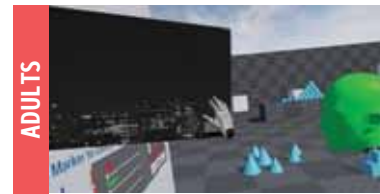
UNDERSTANDING THE SUSTAINABILITY OF PEER-LED COMMUNITY GROUPS
Associate Professor and lecturer in occupational therapy Dr Linda Robertson will consider the secrets to success when it comes to peer-led exercise groups.

17:30-18:30
Booking suggested **FREE**
Hub Atrium, Otago Polytechnic
Forth Street



OUR ENVIRONMENT: MEET THE SCIENTISTS
South Dunedin Community Pop-up
Grab a cuppa and a biscuit and get chatting to a range of scientists and experts working in environmental science in Dunedin.

18:00-19:30
Bookings suggested **FREE**
199 Hillside Road



THE VR SERIES: VR - WHICH WAY TO THE OASIS?
InnoV8 HQ
Dr Simon McCallum discusses the use of Virtual Reality in collaboration, teamwork and teaching.

12:00-13:00
No booking required **FREE**
123 Vogel Street



7 PEOPLE TALK 7 MINUTES OF PLASTICS
Otago Pioneer Women's Memorial Hall
Seven professionals from a range of disciplines talk 7 minutes of plastics, with time for questions afterwards.

19:00-20:30
Booking suggested **Donation welcome**
362 Moray Place

CHROMATONE *Robert Piggott Art Gallery*
12:00-14:00 | **FREE** | **SEE PAGE 12**
No booking required | 8 Jetty St

SCHOOL OF BIOMEDICAL SCIENCES PHOTO EXHIBITION *University of Otago*
10:00-16:00 | **FREE** | **SEE PAGE 12**
No booking required | The ISB Link

FUND YOUR COMMUNITY EVENT!

Get FREE or SUBSIDISED venue rental at Forsyth Barr Stadium or the Dunedin Centre with our Community Access Grant.

Find out more online at DUNEDINVENUES.CO.NZ



Forsyth Barr Stadium

Glenroy Auditorium

Dunedin Town Hall

Dunedin Centre





WATER ROCKET WORKSHOP

Mitre 10 MEGA

This is a rocket-making workshop with a difference, your teacher is Professor of Aeronautics & Astronautics Karen Willcox!

9 & 10 July
11:00-14:00

For children 8+ years
\$15, bookings essential



FIGHT LIKE A PHYSICIST

Dunedin City Library

In this practical and interactive workshop, you will learn how a working understanding of Classical Mechanics is key to a successful career as a ninja.

Wednesday 11 July
10:00, 11:30, 13:30

Suitable for kids aged 8 years and older families

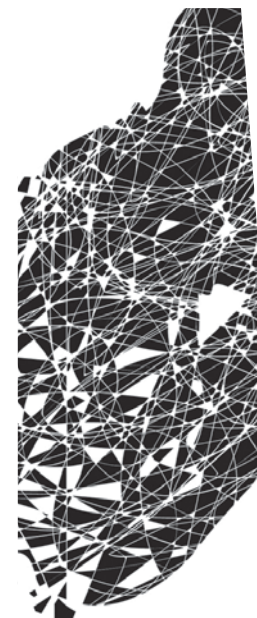


FLOROKONUI: WALL STREET GETS GREENER WITH OROKONUI

Wall Street Mall

Join the team from Orokonui for some forest exploration, inside the mall! The Wall Street atrium will be transformed into a native forest ecosystem for one special weekend.

Saturday 14 & Sunday 15 July
10:00-16:00



PAIN IN CHILDREN AND YOUNG PEOPLE: WHAT DO WE KNOW?

Otago University

Persistent pain in children and adolescents is common, affecting their participation in schooling, and sport/leisure activities. Join leading scientist Dr Steven Kamper and a panel of specialists as they share their insights and research into pain in children and young people.

Wednesday 11 July
18:00-19:30

Free, booking suggested
St David Lecture Theatre Complex



ANATOMY: GOING BEYOND WHAT YOU MIGHT THINK

Wall Street Mall

Hear from a fascinating group of experts talking about the best bits of their research, including bioarchaeology, native bird sperm, building bone from wool, stimulating the brain and the Loch Ness monster.

Monday 9 July
17:30-19:00

Free, booking suggested
Light refreshments provided



THE VR LUNCHTIME SERIES: WALKING IN A VIRTUAL WORLD

InnoV8 HQ

This presentation will discuss how we move around in Virtual Worlds, and the places we can go, with a focus on 'Redirected Walking'.

Tuesday 10 July
12:00-13:00

123 Vogel Street
Free, no booking required



FUN SCIENCE AT MOANA POOL

Moana Pool is bringing science fun to every day of the Festival with lots of wacky water experiments for pool visitors to try out.

Daily
18:00-19:00

60 Littlebourne Road
Free, no booking required



DANCE AS SCIENCE COMMUNICATION WORKSHOP

A Whare Tapere Wānanga
Toitū Otago Settlers Museum

Join internationally renowned Ngai Tahu dancer Lou Potiki Bryant for this dynamic workshop in dance and Māori astronomy.

Saturday 7 July

10:00-12:00

Free, no booking required



WILD STREET ART WALKING TOUR

Join Small City Big Walls tour guide Victoria Gilliland and nature writer/presenter Quinn Berentson for a 1-hour-plus walking tour.

Sunday 8 July

11:00-12:30

i-SITE, Octagon

\$10, bookings essential



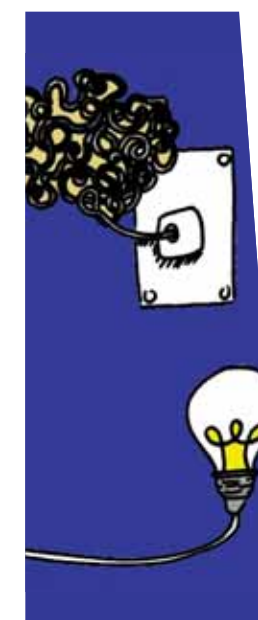
THE FUTURE OF FOOD

South Dunedin Community Pop-up

Share a cup of tea and a chat with food experts from a range of disciplines, including nutrition, urban gardening and cooking. Food security and better eating are just some of the future challenges that science is seeking to solve.

Wednesday 11
18:00-19:30

199 Hillside Road
Free, booking suggested



GO BEYOND THE RESULTS: THIRST FOR KNOWLEDGE

Ombrellos Bar and Restaurant

Hear stories from the front line of science. PhD students reveal what really goes on behind the lab doors and out in the field to make science happen!

Tuesday 10 July

17:30-20:00

Ombrellos Kitchen & Bar
Free, booking suggested



FUTURES PAST: NAVIGATING THROUGH HISTORY

Otago Museum

Experts in the study of astronomy, technology and marine navigation share stories and knowledge.

Friday 13 July
17:30-18:30

\$12/\$6

Booking required



DIY MARSHMALLOW BAZOOKA WORKSHOP

Mitre 10 MEGA

Make your own bazooka then watch it shoot marshmallows sky-high.

Saturday 7 & Sunday 8 July
10:00, 11:00, 12:00

350 Andersons Bay Road



TŪHURA THRILLS SCIENCE AT THE MALL

Wall Street Mall

Tūhura science wonder and excitement is coming to the mall for hands on activities and demonstrations!

Saturday 7, Monday 9 & Tuesday 10 July
11:00-14:00

Free, no booking required
211 George Street



SOMETHING FISHY IN THE GARDENS

Dunedin Botanic Garden

Through electro-fishing, fyke netting and fish IDs learn about the importance of healthy rivers to healthy communities. See freshwater fish and stream invertebrate displays, with a focus on stream health.

Monday 9 & Wednesday 11 July
10:30-12:00

Free, booking suggested



JAPANESE QUAIL AND PLASTIC BOTTLES, THE SCIENCE OF URBAN AGRICULTURE

Multiple venues and dates

Tim Ashdown, head of science at Otago Boys' talks about using science to grow food in small spaces and talks about school garden projects past and present.

Tuesday 10 to Friday 13 July
13:00-14:00

Free, booking suggested



THE TEACHER WHO SAVED SCIENCE

Otago Polytechnic

Be inspired by award-winning science educator, communicator, Certified Google Trainer, and Global Teacher Ambassador Ken Silburn. Find out why he has been acknowledged as one of the top ten teachers in the world.

Tuesday 10 July
18:00-19:30

Otago Polytechnic, Union Street
G Block, Room G106

Free, no booking required



THE DUNEDIN MUSEUM OF NATURAL MYSTERY

61 Royal Terrace

The museum contains a collection of skulls, bones, biological curiosities, ethnological art and unusual cultural artefacts.

Friday to Sunday, 13-15 July
10:00-17:00

\$5

No booking required



PROJECT X

Dunedin City Library

Jump into the world of engineering and electronics by making and programming an electronic gadget to take home.

Tuesday 10 July
9:30-16:00

Intermediate School ages
(11 to 13 approx).
\$15, bookings essential



ROBOTS: A NEW GENERATION

Mitre 10 MEGA

Hear about the surprising new robots that could one day be cleaning your house. Refreshments provided. Every child will take home a DIY robot kit!

Thursday 12 July
18:00-19:30

350 Andersons Bay Road

\$5 or \$10 p/family, booking suggested.



CHARLIE, ESTELLE AND THE POPPAZOID

Toitū Otago Settlers Museum

Charlie sees science and magic everywhere. Estelle dreams of outer-space and calculates the physics of parkour. Come with them as they GO BEYOND and a friendship emerges through invention, science, music and Hip-Hop dance!

Multiple dates

31 Queens Gardens

\$5

Go Beyond

School of Biomedical Sciences Photo Exhibition

The ISB Link, University of Otago | Saturday 7 July – Sunday 15 July
10am – 4pm | Admission: Free





ADULTS

WOMEN IN TECH

Learn from Code Like A Girl's Ally Watson and Igtimi CEO Kylie Robinson about why we need more women in the tech sector.

18:00-19:30
Booking required

\$10
Signal ICT Grad School
123 Vogel Street



FAMILY

CODING FUNDAMENTALS

University of Otago
A workshop for 8-16-year-olds led by Ally Watson from Code Like A Girl. Learn about the inspiring women who played a crucial role in the evolution of computer science and try your hand at some coding basics. Sponsored by AD Instruments.

14:00-15:30
Booking required

\$5
Ground Floor, Arts Building, University of Otago



FAMILY

THE TEACHER WHO SAVED SCIENCE

Otago Polytechnic
Be inspired by award-winning science educator, communicator, Certified Google Trainer, and Global Teacher Ambassador Ken Silburn. Find out why he has been acknowledged as one of the top ten teachers in the world.

18:00-19:30
No booking required

FREE
Otago Polytechnic, Union Street, G Block, Room G106



FAMILY

OTAGO POLYTECHNIC SCIENCE IN ACTION DAY

This fun and interactive day is the perfect opportunity for students aged 13-16 years to explore the exciting science behind careers we offer in a range of our renowned programmes.

9:00-16:00
Booking required

\$10 (13-16 years)
The Hub, Forth Street



FAMILY

ŌKU MOANA: MEET A SCIENTIST

The air we breathe – Meet the evil twin of global warming with scientist Anna Kluibenschedl and introducing our critter of the week: coccolithophores with Ro Allen, both scientists are from CARIM (Coastal acidification - rate, impacts and management of Aotearoa).

13:00-14:00
No booking required

FREE
Dunedin Community Art Gallery
20 Princes Street



FAMILY

WHAT DO PEOPLE THINK?

Dunedin Botanic Garden
Ever wondered what's inside people's heads? Ask them questions to find out more. Using a treasure map, you'll go on a hunt around the Botanic Garden and meet all sorts of characters on your way.

13:30-14:30
Booking suggested

FREE
Dunedin Botanic Garden



FAMILY

THE POWER OF POO!

South Dunedin Community Pop-up
POO - The grossest with the mostest! How does poo support life on earth and how can we use it better? Discover how poo helps to save endangered species and how you can become a poo detective. Learn how poo makes things grow and make your own pretend poo bomb full of native seeds to take home.

14:30-15:30
Booking suggested

FREE
199 Hillside Road



FAMILY

AQUAVAN: SEA SQUIRTS

South Dunedin Community Pop-up
Through story-telling and puppets, young children will learn about the animals that live in tide pools – from the New Zealand Marine Studies Centre (3-7 years plus parents).

11:00-12:30
Booking required

FREE
199 Hillside Road



FAMILY

BIRD BRAINS!

South Dunedin Community Pop-up
Examine both human and bird brain structure and learn what we have inherited from our feathered friends! Join avian experts to discover what it is really like to be a birdbrain. Make your own bird's-eye view goggles to take home!

13:00-14:00
Booking suggested

FREE
199 Hillside Road



FAMILY

AUGMENTED REALITY SANDBOX

South Dunedin Community Pop-up
Use your hands or a shovel to play with sand to make virtual mountains, valleys, and lakes. An interactive experience for the whole family.

11:00-16:00
Booking required

FREE
199 Hillside Road



FAMILY

SEVEN CLIMATES UNDER ONE ROOF

Dunedin Botanic Garden
Plants from around the world live in a range of climates, from steamy to dry, hot to cold. Go behind the scenes to see the amazing plants, feel the diverse climates and learn how staff keep plants growing so well.

10:30-11:30
Booking suggested

FREE
Dunedin Botanic Garden



FAMILY

CHARLIE, ESTELLE AND THE POPPAZOID SHOW

Toitū Otago Settlers Museum
Charlie sees science and magic everywhere. Estelle dreams of outer-space and calculates the physics of parkour. Come with them as they GO BEYOND and a friendship emerges through invention, science, music and Hip-Hop dance!

14:00
Booking required

\$5
31 Queens Gardens



FAMILY

NZ-VR

South Dunedin Community Pop-up
The Sir Peter Blake Trust, in partnership with NZ Geographic and Pew Charitable Trusts and supported by Foundation North, have produced a series of virtual reality experiences filmed underwater, showing off the marine environments around the Hauraki Gulf.

11:00-13:00, 14:00-16:00
No booking required

FREE
199 Hillside Road



FAMILY

JAPANESE QUAIL AND PLASTIC BOTTLES, THE SCIENCE OF URBAN AGRICULTURE.

Otago Boys' High School
Tim Ashdown, head of science at Otago Boys', talks about using science to grow food in small spaces and talks about school garden projects past and present.

13:00-14:00
Booking suggested

FREE
199 Hillside Road



FAMILY **EXPLORE DUNEDIN'S NIGHT SKY** *Dunedin Astronomical Society*
19:30-21:30 | \$5 (free for small children) | **SEE PAGE 10**
No booking required | Beverly-Begg Observatory, 1a City Rd, Dunedin

FAMILY **SEARCHING FOR SATURN** *Beverly-Begg Observatory*
19:30-21:30 | **FREE** | **SEE PAGE 14**
No booking required | 1a City Road, Robin Hood Park, Dunedin

FAMILY **MESMERISING METAMORPHOSIS: FROM CATERPILLAR TO BUTTERFLY** *Otago Museum*
13:15-14:15 | \$15/\$10 | **SEE PAGE 14** *Sorry, no wheelchair access
No booking required | 419 Great King St

FAMILY **ŌKU MOANA** *Dunedin Community Art Gallery*
10:00-16:00 | **FREE** | **SEE PAGE 13**
No booking required | 20 Princes St

FAMILY **SCIENCE FILM SCREENINGS** *Dunedin City Library, Cube*
10:00-16:00 | **FREE** | **SEE PAGE 10**
No booking required | Dunedin City Library

FAMILY **SIGNAL VIRTUAL REALITY & MIXED REALITY ARENA** *Signal ICT Grad School*
10:00-15:00 | **FREE** | **SEE PAGE 10**
Booking required | 123 Vogel St

FAMILY **HUGGING TREES COLOURING AND POSTER COMPETITIONS** *Dunedin Public Art Gallery*
10:00-16:30 | **FREE** | **SEE PAGE 10**
30 The Octagon

FAMILY **ALBATROSS EXPRESS TOURS** *Royal Albatross Centre*
10:00-15:00 | Adults \$15 Children \$3 | **SEE PAGE 10**
Booking required | 1260 Harington Point Rd, Otago Peninsula

FAMILY **TŪHURA THRILLS SCIENCE AT THE MALL** *Wall Street Mall*
11:00-14:00 | **FREE** | **SEE PAGE 12**
No booking required | 211 George St

FAMILY **BLUE PENGUINS PUKEKURA FAMILY SPECIAL** *Royal Albatross Centre*
17:30-18:45 | \$40 (2 adults, up to 3 children) | **SEE PAGE 10**
Booking required | 1260 Harington Point Rd, Otago Peninsula

FAMILY **EDWARDIAN DOMESTIC SCIENCE** *Olveston*
10:30-12:00 | \$5 | **SEE PAGE 14**
Booking required | 42 Royal Tce

FAMILY **COCCOLITHOPHORES IMPRESSED** *Dunedin Community Art Gallery*
11:00-13:00 | **FREE** | **SEE PAGE 14**
No booking required | 20 Princes St

FAMILY **AROUND THE MUSEUM IN 80 OBJECTS** *Toitū Otago Settlers Museum*
10:00-17:00 | **FREE** | **SEE PAGE 12**
No booking required | 31 Queens Gardens

KIDS **SCIENCE OF COLOUR: KIDS WORKSHOP** *Robert Piggott Art Gallery*
Art and science do belong together as kids will discover at this fun, hands-on workshop. Suitable for 8-12 year olds.
14:00-15:30 | \$5 | **SEE PAGE 12**
Booking required | Jetty Street

KIDS **PROJECT X** *Dunedin City Library*
Jump into the world of engineering and electronics by making and programming an electronic gadget to take home. Intermediate School ages (11 to 13 approx).
9:30-16:00 | \$15 | **SEE PAGE 12**
Bookings essential | Dunedin City Library

KIDS **WATER ROCKET WORKSHOP** *Mitre 10 MEGA*
11:00-14:00 | \$15 | **SEE PAGE 15**
Bookings essential | 350 Andersons Bay Rd

KIDS **FUN SCIENCE** *Moana Pool*
18:00-19:00 | **FREE** | **SEE PAGE 10**
No booking required | 60 Littlebourne Rd

ADULTS **THE VR LUNCHTIME SERIES: WALKING IN A VIRTUAL WORLD** *InnoV8 HQ*
This presentation will discuss how we move around in Virtual Worlds, and the places we can go, with a focus on 'Redirected Walking'.
12:00-13:00 | **FREE** | **SEE PAGE 12**
No booking required | 123 Vogel Street

ADULTS **GO BEYOND THE RESULTS** *Thirst For Knowledge*
Hear stories from the front line of science. PhD students reveal what really goes on behind the lab doors and out in the field to make science happen!
17:30-20:00 | **FREE** | **SEE PAGE 12**
Booking suggested | Ombrellos Bar and Restaurant

ADULTS **CHROMATONE** *Robert Piggott Art Gallery*
10:00-16:00 | **FREE** | **SEE PAGE 12**
No booking required | 8 Jetty St

ADULTS **SCHOOL OF BIOMEDICAL SCIENCES PHOTO EXHIBITION** *University of Otago*
10:00-16:00 | **FREE** | **SEE PAGE 12**
No booking required | The ISB Link



#Go Beyond
...the city these holidays and check out the magical 'space' of Orokonui

Open Daily
9.30am-4.30pm
Ph 03 482 1755
www.oroikonui.org.nz





FAMILY

12:00-13:00
Booking required

GOING BEYOND WITH NIGEL LATTA

Otago Museum

There are huge changes taking place in the world right now, and Nigel Latta knows a thing or two about them. In this session, Nigel will explore what's next, looking into the future and the roles that science and technology might play in all of our lives.

\$5
419 Great King Street



FAMILY

18:30-19:00
Booking required

YOUNG WOMEN IN SCIENCE 2-MINUTE TALKS

Wall Street Mall

Women from all walks of life and backgrounds will inspire you with their science stories and achievements. Two slides, two props, two minutes. Catering provided. Thankyou to NZFUW and AWIS for sponsoring this event.

FREE
211 George Street



FAMILY

10:00-15:00
No booking required

POLLEN-IN-A-BOX

Be amazed by the hidden world of pollen, flowers and pollinators - with family fun activities and science in a converted shipping container. Learn about corpse plant pollination, moths and more.

FREE
Dunedin Botanic Garden



FAMILY

17:30-18:30
Booking suggested

GAMES FOR HEALTH

InnoV8 HQ

Games are great motivators. In this presentation, Dr McCallum will discuss how gaming technology has become a powerful tool in healthcare.

FREE
123 Vogel Street



FAMILY

18:00-19:30
Booking suggested

THE FUTURE OF FOOD

South Dunedin Community Pop-up

Share a cup of tea and a chat with food experts from a range of disciplines, including nutrition, urban gardening and cooking. Food security and better eating are just some of the future challenges that science is seeking to solve.

FREE
199 Hillside Road



FAMILY

10:00-11:00, 11:30-12:30, 13:30-14:30
Booking required

FIGHT LIKE A PHYSICIST

University of Otago

In this practical and interactive workshop, you will learn how a working understanding of Classical Mechanics is key to a successful career as a ninja. Suitable for kids aged 8 years and older.

FREE
Dunedin City Library



FAMILY

11:00-13:00
No booking required

SMOOTHIES FOR SCIENCE

Wall Street Mall

Otago University nutritionists will show shoppers how eating better can be easy and fun. See a smoothie being made and get involved in some taste-testing.

FREE
211 George Street



FAMILY

18:00-19:30
Booking suggested

PAIN IN CHILDREN AND YOUNG PEOPLE: WHAT DO WE KNOW?

Otago University

Persistent pain in children and adolescents is common, affecting their participation in schooling, and sport/leisure activities. Join leading scientist Dr Steven Kamper and a panel of specialists as they share their insights and research into pain in children and young people.

FREE
St David Lecture Theatre Complex



FAMILY

11:00-12:30
Booking required

AQUAVAN: CRUSTY CRITTERS

South Dunedin Community Pop-up

The New Zealand Marine Studies Centre are here to show you 'what makes a crab a crab'. What do they eat and how do they grow? They come in all shapes and sizes. you will be amazed! Recommended for children aged 8-10 years.

FREE
199 Hillside Road



FAMILY

13:00-14:00
No booking required

ŌKU MOANA: MEET A SCIENTIST IT'S TOO HOT IN THE NEST

Dunedin Community Art Gallery

Male tuatara can look forward to a lonely future because of global warming - find out why with Allison Cree, Professor of Zoology.

FREE
20 Princes Street

TAKAHE TALES! *Orokonui Ecosanctuary*

10:00-11:00 | \$5 | **SEE PAGE 14**
Bookings required | 600 Blueskin Rd

NATURE O'CLOCK *Orokonui Ecosanctuary*

16:00-18:00 | \$5 | **SEE PAGE 14**
Bookings | 600 Blueskin Rd

PEST FEST! *Orokonui Ecosanctuary*

12:00-13:00 | \$5 | **SEE PAGE 14**
Bookings required | 600 Blueskin Rd

MAKING THEATRE: THE ART AND SCIENCE OF LIGHTING *New Athenaeum Theatre*

10:00-12:00 | **FREE** | **SEE PAGE 14**
Booking required | 23 The Octagon

AUGMENTED REALITY SANDBOX *South Dunedin Community Pop-up*

11:00-16:00 | **FREE** | **SEE PAGE 14**
No booking required | 199 Hillside Rd

SOMETHING FISHY IN THE GARDENS *Dunedin Botanic Garden*

10:30-12:00 | **FREE** | **SEE PAGE 13**
Booking suggested | Dunedin Botanic Garden

EXPLORE DUNEDIN'S NIGHT SKY *Dunedin Astronomical Society*

19:30-21:30 | \$5 (free for small children) | **SEE PAGE 10**
No booking required | Beverly-Begg Observatory, 1a City Rd, Dunedin

SEARCHING FOR SATURN *Beverly-Begg Observatory*

19:30-21:30 | **FREE** | **SEE PAGE 14**
No booking required | 1a City Road, Robin Hood Park, Dunedin

AROUND THE MUSEUM IN 80 OBJECTS *Toitū Otago Settlers Museum*

10:00-17:00 | **FREE** | **SEE PAGE 12**
No booking required | 31 Queens Gardens

NATURE DETECTIVE GREAT WEED MYSTERY *Dunedin Botanic Garden*

13:30-14:30 | **FREE** | **SEE PAGE 14**
Booking suggested | Dunedin Botanic Garden

NZ-VR *South Dunedin Community Pop-up*

11:00-13:00 14:00-16:00 | **FREE** | **SEE PAGE 18**
No booking required | 199 Hillside Rd

ŌKU MOANA *Dunedin Community Art Gallery*

10:00-16:00 | **FREE** | **SEE PAGE 13**
No booking required | 20 Princes St



FAMILY **BLUE PENGUINS PUKEKURA FAMILY SPECIAL** *Royal Albatross Centre*
17:30-18:45 | \$40 (2 adults, up to 3 children) | SEE
Booking required | 1260 Harington Point Rd, Otago Peninsula | PAGE 10

FAMILY **ALBATROSS EXPRESS TOURS** *Royal Albatross Centre*
10:00-15:00 | Adults \$15 Children \$3 | SEE
Booking required | 1260 Harington Point Rd, Otago Peninsula | PAGE 10

FAMILY **COCCOLITHOPHORES IMPRESSED** *Dunedin Community Art Gallery*
11:00-13:00 | FREE | SEE
No booking required | 20 Princes St | PAGE 14

FAMILY **EDWARDIAN DOMESTIC SCIENCE** *Olveston*
10:30-12:00 | \$5 | SEE
Booking required | 42 Royal Tce | PAGE 14

FAMILY **CHARLIE, ESTELLE AND THE POPPAZOID SHOW** *Toitū Otago Settlers Museum*
11:00 & 14:00 | \$5 | SEE
Booking required | 31 Queens Gardens | PAGE 14

FAMILY **JAPANESE QUAIL AND PLASTIC BOTTLES, THE SCIENCE OF URBAN AGRICULTURE** *South Dunedin Community Pop-up*
13:00-14:00 | FREE | SEE
No booking required | 199 Hillside Rd | PAGE 15

FAMILY **HUGGING TREES COLOURING AND POSTER COMPETITIONS** *Dunedin Public Art Gallery*
10:00-16:30 | FREE | SEE
30 The Octagon | PAGE 10

FAMILY **SIGNAL VIRTUAL REALITY & MIXED REALITY ARENA** *Signal ICT Grad School*
10:00-15:00 | FREE | SEE
Booking required | 123 Vogel St | PAGE 10



KIDS

FUN SCIENCE

Moana Pool

Moana Pool is bringing science fun to every day of the Festival with lots of wacky water experiments for pool visitors to try out.

18:00-19:00
No booking required

FREE
60 Littlebourne Road



ADULTS

THE VR LUNCHTIME SERIES: AUGMENTED REALITY - EYETOY TO MAGIC LEAP

InnoV8 HQ

In this presentation, we will discuss the developments in Augmented Reality, discussing both the technology and social impact of Augmentation on the way we live our lives. We will discuss the AR Sandbox, which will be demonstrated within the Arena, mobile AR apps, such as Pokemon Go, and the future of AR and VR combining.

12:00-13:00
No booking required

FREE
123 Vogel Street



ADULTS

ACHIEVING EQUILIBRIUM: A CONVERSATION ABOUT GENDER BALANCE IN STEM SECTORS

Otago Museum

The British High Commission, Otago Museum and Chiasma Dunedin invites tertiary students and the wider public to join in a conversation with Siân Cleaver, Principal Mission Systems Engineer at Airbus UK. Hear about Siân's work on the design and development of future European Space Agency exploration missions, her experiences as a woman working in a STEM sector and her advice for graduates in STEM subjects. Food will be provided.

16:45-18:00
Booking suggested

FREE
Hutton Theatre

ADULTS **SCHOOL OF BIOMEDICAL SCIENCES PHOTO EXHIBITION** *University of Otago*

10:00-16:00 | FREE | SEE
No booking required | The ISB Link | PAGE 12

Be passionately curious at one of New Zealand's most innovative museums.

PUAKA MATARIKI FESTIVAL 2018

Nau mai, tautimai!

Join us in celebrating Puaka Matariki, the Māori New Year - our midwinter season of wānaka (learning) and whanaukataka (community spirit).

Everyone is welcome!

Visit our website and Facebook page for event details.

6-22 JULY • ŌTEPOTI / DUNEDIN

f PUAKA MATARIKI FESTIVAL | MATARIKIDUNEDIN.CO.NZ

Explore the full programme of events as part of the New Zealand International Science Festival at www.toituosm.com.

OPEN 7 DAYS | FREE ENTRY | FREE WIFI
10am-5pm

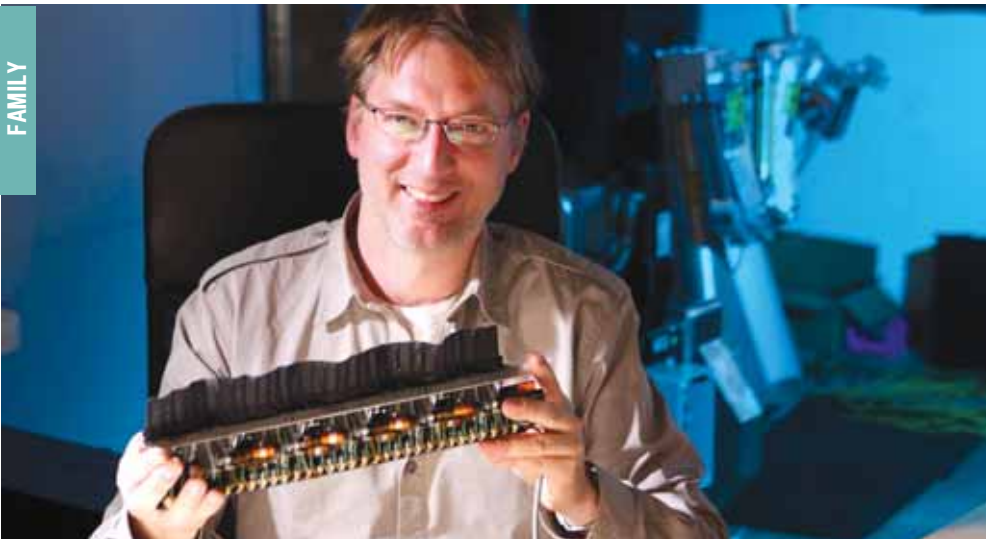
31 Queens Gardens, Dunedin
P (03) 477 5052

www.toituosm.com



PROUDLY SUPPORTED BY





FAMILY

ROBOTS: A NEW GENERATION

A new generation of robots is currently being developed in labs around the world, based on new discoveries in animal ecology and neuroscience. Our homes, farms and factories might soon be inhabited by families of small robots moving quietly among us. Hear from experts in this field and see what these robots might look like. Refreshments provided. Every child will take home a DIY robot kit!

18:00-19:30
Booking suggested

\$5 or \$10 per family
(2 adults, 2 kids)
Mitre 10 MEGA
350 Andersons Bay Road



FAMILY

17:30-19:00
Booking suggested

PIONEERING PLASTICS - EXHIBITION & TALK

Otago Pioneer Women's Memorial Hall

Join us for a conversation with Janet De Wagt about the Pioneering Plastics Exhibition and the stories connected to her collection of plastic. Come along and hear Janet talk about her collection and how a selection of items came to be in the Hall.

FREE
362 Moray Place



FAMILY

10:30-11:30
Booking suggested

BACKSTAGE AT THE AVIARY

Dunedin Botanic Garden

Meet the birds living in the aviary and see what they get up to. Learn about the needs and conservation issues for birds from New Zealand and around the world.

FREE
Dunedin Botanic Garden



FAMILY

13:00-14:00
Bookings essential via Eventbrite

PESTS AND PREDATORS!

Orokonui Ecosanctuary

Meet passionate conservationists, look over pest stomach content specimens and interpret prints in tracker tunnels. How does our perception of these animal's behaviour affect how we chose to eradicate them? Learn how each trap is designed with specific pest psychology in mind.

\$5 per person per workshop
600 Blueskin Rd



FAMILY

11:00-12:30
Booking required

AQUAVAN: LIFE ON THE EDGE

South Dunedin Community Pop-up

The New Zealand Marine Studies Centre invites children to take a marine challenge and find out how animals are specially formed to survive in the ocean. Contribute to an art installation to show human effects on marine life. Recommended for 8-12 years.

FREE
199 Hillside Road



FAMILY

12:00-12:30
Bookings essential

OROKONUI AND BEYOND!

Dunedin City Library

Learn how Orokonui has worked with many different community organisations in order to protect our native wildlife. Discover how you can protect and nurture natives in your backyard.

\$5 per person per workshop
Dunedin City Library



FAMILY

9.30-10.30
Bookings essential

FROGS FOREVER!

Dunedin City Library

What do you know about frogs? Do hiccups link us to our frog ancestors? Why do we need frogs to survive? Hear from experts and learn how to create a frog habitat. Suitable for all ages. Children under 6 yrs need to be accompanied by an adult.

\$5 per person per workshop
Dunedin City Library



FAMILY

13:00-14:00
Booking suggested

ŌKU MOANA: SERVING UP SNAILS

Dunedin Community Art Gallery

Staff and students from the Portobello Aquarium will hold demonstrations in portable marine tanks. With Sally Carson, Director, New Zealand Marine Studies Centre.

FREE
20 Princes Street



FAMILY

10:00-11:15
Booking suggested

THE OIL GAME

South Dunedin Community Pop-up

The Oil Game is a fun activity that illustrates the dependence of modern society on cheap oil and provides an opportunity for older children (10+ years) to consider a world where oil is rationed.

FREE
199 Hillside Road



FAMILY

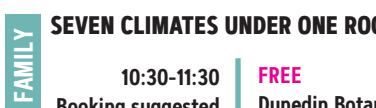
POLLEN-IN- A-BOX

Dunedin Botanic Garden

10:00-15:00
Booking suggested

FREE
Dunedin Botanic Garden

SEE
PAGE 18



FAMILY

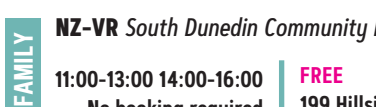
SEVEN CLIMATES UNDER ONE ROOF

Dunedin Botanic Garden

10:30-11:30
Booking suggested

FREE
Dunedin Botanic Garden

SEE
PAGE 14



FAMILY

NZ-VR

South Dunedin Community Pop-up

11:00-13:00 14:00-16:00
No booking required

FREE
199 Hillside Rd

SEE
PAGE 14



FAMILY

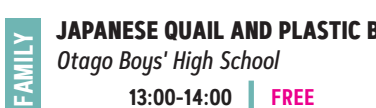
THE POWER OF POO!

Dunedin City Library

14.30-15.30pm
Booking required

\$5
Dunedin City Library

SEE
PAGE 14



FAMILY

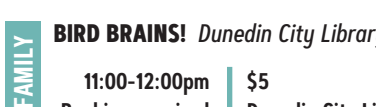
JAPANESE QUAIL AND PLASTIC BOTTLES, THE SCIENCE OF URBAN AGRICULTURE

Otago Boys' High School

13:00-14:00
No booking required

FREE
199 Hillside Rd

SEE
PAGE 14



FAMILY

BIRD BRAINS!

Dunedin City Library

11:00-12:00pm
Booking required

\$5
Dunedin City Library

SEE
PAGE 14



FAMILY

ALBATROSS EXPRESS TOURS

Royal Albatross Centre

10:00-15:00
Booking required

Adults \$15, Children \$3
1260 Harington Point Rd, Otago Peninsula

SEE
PAGE 10



FAMILY

BLUE PENGUINS PUKEKURA FAMILY SPECIAL

Royal Albatross Centre

17:30-18:45
Booking required

\$40 (2 adults, up to 3 children)
1260 Harington Point Rd, Otago Peninsula

SEE
PAGE 10



FAMILY **COCCOLITHOPHORES IMPRESSED** *Dunedin Community Art Gallery*
11:00-13:00 | **FREE** | **SEE**
No booking required | 20 Princes St | **PAGE 14**

FAMILY **ŌKU MOANA** *Dunedin Community Art Gallery*
10:00-16:00 | **FREE** | **SEE**
No booking required | 20 Princes St | **PAGE 13**

FAMILY **CHARLIE, ESTELLE AND THE POPPAZOID SHOW** *Toitū Otago Settlers Museum*
11:00 & 14:00 | **FREE** | **SEE**
Booking required | 31 Queens Gardens | **PAGE 18**

FAMILY **AROUND THE MUSEUM IN 80 OBJECTS** *Toitū Otago Settlers Museum*
10:00-17:00 | **FREE** | **SEE**
No booking required | 31 Queens Gardens | **PAGE 12**

FAMILY **SMOOTHIES FOR SCIENCE** *Wall Street Mall*
11:00-13:00 | **FREE** | **SEE**
No booking required | 211 George St | **PAGE 20**

FAMILY **SCIENCE FILM SCREENINGS** *Dunedin City Library, Cube*
10:00-16:00 | **FREE** | **SEE**
No booking required | Dunedin City Library | **PAGE 10**

FAMILY **HUGGING TREES COLOURING AND POSTER COMPETITIONS** *Dunedin Public Art Gallery*
10:00-16:30 | **FREE** | **SEE**
30 The Octagon | **PAGE 10**

FAMILY **EXPLORE DUNEDIN'S NIGHT SKY** *Dunedin Astronomical Society*
19:30-21:30 | \$5 (free for small children) | **SEE**
No booking required | Beverly-Begg Observatory, 1a City Rd, Dunedin | **PAGE 10**

FAMILY **EDWARDIAN DOMESTIC SCIENCE** *Olveston*
10:30-12:00 | \$5 | **SEE**
Booking required | 42 Royal Tce | **PAGE 14**

FAMILY **SIGNAL VIRTUAL REALITY & MIXED REALITY ARENA** *Signal ICT Grad School*
10:00-15:00 | **FREE** | **SEE**
No booking required | 123 Vogel St | **PAGE 10**

KIDS **FUN SCIENCE** *Moana Pool*
18:00-19:00 | **FREE** | **SEE**
No booking required | 60 Littlebourne Rd | **PAGE 10**



ADULTS

THE SWEET SCIENCE OF CHOCOLATE

Ocho
You might be an expert chocolate eater, but how much do you know about chocolate chemistry? Join us at OCHO headquarters to find out why we love chocolate, why not all chocolate is created equal, and do some tasting! An event for over 12's.

11:00-12:30
Booking required

\$15
22 Vogel Street *Sorry, no wheelchair access



ADULTS

THE VR LUNCHTIME SERIES: NARRATIVE IN INTERACTIVE VIRTUAL REALITY

InnoV8 HQ
This presentation will discuss the collaboration with the Norwegian Film School on research into storytelling in Interactive Virtual Environments. This will include discussion of the VR environment for NASA's Buzz Aldrin: Cycling Pathways to Mars to the narratives of holocaust survivors.

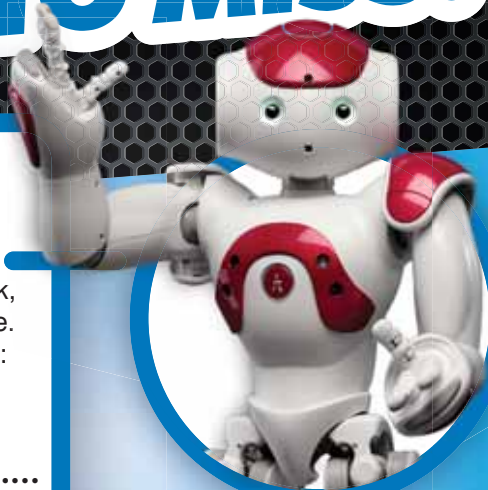
12:00-13:00
No booking required

FREE
123 Vogel Street

ADULTS **SCHOOL OF BIOMEDICAL SCIENCES PHOTO EXHIBITION** *University of Otago*
10:00-16:00 | **FREE** | **SEE**
No booking required | The ISB Link | **PAGE 12**

TWO ROBOTASTIC EVENTS NOT TO MISS!

Meet Softbank Robotics' humanoid robot NAO V6 at his southern hemisphere debut. He can see, talk, walk, dance and recognise people. You can see him in action at: **InnoV8 HQ at 5pm on Monday 9 July**



Make a bristlebot robot to take home at Robots: the new generation, **Mitre 10 MEGA at 6pm on Thursday 12 July.**



Local and international robot experts will talk about the amazing new robots that could soon be living in your home.

CALLUM & P

SWITCH IT UP

WEEKDAYS FROM 6AM



89.4
THE HITS



ADULTS

FAKE NEWS, REAL FOOD

18:00-20:00
Booking required

Award-winning filmmaker Kristin Pichaske will discuss her forthcoming documentary series *Pulling the Thread*, which unravels some of America's most popular conspiracy theories. Join her for a journey inside your own brain to learn why you're probably not as rational as you think you are, all while enjoying Precinct Food's delicious dinner offerings.

\$75 per person
Precinct Food
125 Vogel Street



FAMILY

13:30-14:30
Booking suggested

WHAT DO PEOPLE THINK?

Dunedin Botanic Garden
Ever wondered what's inside people's heads? Ask them questions to find out more. Using a treasure map, you'll go on a hunt around the Botanic Garden and meet all sorts of characters on your way.

FREE
Dunedin Botanic Garden



FAMILY

10:30-11:30
Booking suggested

BACKSTAGE AT THE AVIARY

Dunedin Botanic Garden
Meet the birds living in the aviary and see what they get up to. Learn about the needs and conservation issues for birds from New Zealand and around the world.

FREE
Dunedin Botanic Garden



FAMILY

13:00-14:00
Booking required

JAPANESE QUAIL AND PLASTIC BOTTLES, THE SCIENCE OF URBAN AGRICULTURE.

South Dunedin Community Pop-up
Tim Ashdown, head of science at Otago Boys, talks about using science to grow food in small spaces and talks about school garden projects past and present.

FREE
199 Hillside Road



FAMILY

11:00-13:00
No booking required

SMOOTHIES FOR SCIENCE

Wall Street Mall
Otago University nutritionists will show shoppers how eating better can be easy and fun. See a smoothie being made and get involved in some taste-testing.

FREE
211 George Street



FAMILY

11:00-14:00
Booking suggested

TRY THIS AT HOME - TOP 10 SCIENCE DEMOS

Mitre 10 MEGA
From launching rockets to making goo, Mitre 10 MEGA has all the ingredients for some amazing science activities. Join the Otago Museum team and take part in this fascinating science extravaganza featuring heaps of cool science activities to take home!

FREE
350 Andersons Bay Road



FAMILY

10:00-17:00
No booking required

THE DUNEDIN MUSEUM OF NATURAL MYSTERY

Dunedin's newest museum is based in the home of mural artist and sculptor Bruce Mahalski. The museum contains a collection of skulls, bones, biological curiosities, ethnological art and unusual cultural artefacts.

\$5, children under-10 free
61 Royal Terrace



FAMILY

19:00, 21:00
Booking required

ANTHONIE TONNON - A SYNTHESIZED UNIVERSE

Otago Museum
Anthonie Tonnon has collaborated with the digital creative team at Otago Museum's Perpetual Guardian Planetarium, to create a 360° immersive musical and digital performance. Fully licensed bar open in the Beautiful Science gallery.

\$25 for adults, \$20 for students and concessions, \$15 for children
419 Great King Street



FAMILY

15:30-17:30
No booking required

SCIENCE ON STAGE

Venue TBC
A selection of science shows, talks, films and writings by students from Otago University Advanced School Sciences Academy (OUASSA). These passionate Year 13 Science students from around New Zealand are sure to deliver an inspiring show.

FREE
419 Great King Street

SPOTLIGHT ON

FUTURES PAST - NAVIGATING THROUGH HISTORY

Join our four guest speakers as they share stories and knowledge and consider how we might approach the future through the study of history, technology, astronomy and marine navigation. Our guest speakers:

- New Zealand businessman and chief executive of animation Research Ltd, Ian Taylor
 - Māori astronomy and star lore researcher, Dr Rangī Matamua
 - Hawaiian navigator and captain Chadd Paishon
 - Hoturoa Barclay-Kerr, captain of the oceangoing waka Haunui
- A special thankyou to Puaka Matariki Festival for co-funding this event.

17:30-18:30
Booking required
\$12/\$6
Otago Museum
419 Great King Street



EXPLORE DUNEDIN'S NIGHT SKY *Dunedin Astronomical Society*

19:30-21:30 | \$5 (free for small children) | SEE PAGE 10
No booking required | Beverly-Begg Observatory, 1a City Rd, Dunedin

ALBATROSS EXPRESS TOURS *Royal Albatross Centre*

10:00-15:00 | Adults \$15, Children \$3 | SEE PAGE 10
Booking required | 1260 Harington Point Rd, Otago Peninsula

BLUE PENGUINS PUKEKURA FAMILY SPECIAL *Royal Albatross Centre*

17:30-18:45 | \$40 (2 adults, up to 3 children) | SEE PAGE 10
Booking required | 1260 Harington Point Rd, Otago Peninsula



FAMILY **SCIENCE FILM SCREENINGS** *Dunedin City Library, Cube*
10:00-16:00 | **FREE** | **SEE**
No booking required | Dunedin City Library | **PAGE 10**

FAMILY **ŌKU MOANA: SERVING UP SNAILS** *Dunedin Community Art Gallery*
13:00-14:00 | **FREE** | **SEE**
No booking required | 20 Princes St | **PAGE 22**

FAMILY **AROUND THE MUSEUM IN 80 OBJECTS** *Toitū Otago Settlers Museum*
10:00-17:00 | **FREE** | **SEE**
No booking required | 31 Queens Gardens | **PAGE 12**

FAMILY **ŌKU MOANA** *Dunedin Community Art Gallery*
10:00-16:00 | **FREE** | **SEE**
No booking required | 20 Princes St | **PAGE 13**

FAMILY **AUGMENTED REALITY SANDBOX** *South Dunedin Community Pop-up*
11:00-16:00 | **FREE** | **SEE**
No booking required | 199 Hillside Rd | **PAGE 14**

FAMILY **NZ-VR** *South Dunedin Community Pop-up*
11:00-13:00 14:00-16:00 | **FREE** | **SEE**
No booking required | 199 Hillside Rd | **PAGE 18**

FAMILY **COCCOLITHOPHORES IMPRESSED** *Dunedin Community Art Gallery*
11.00-13.00 | **FREE** | **SEE**
No booking required | 20 Princes St | **PAGE 14**

FAMILY **EDWARDIAN DOMESTIC SCIENCE** *Olveston*
10:30-12:00 | \$5 | **SEE**
Booking required | 42 Royal Tce | **PAGE 14**

FAMILY **HUGGING TREES COLOURING AND POSTER COMPETITIONS** *Dunedin Public Art Gallery*
10:00-16:30 | **FREE** | **SEE**
30 The Octagon | **PAGE 10**



KIDS **FUN SCIENCE**
Moana Pool
18:00-19:00 | **FREE**
No booking required | 60 Littlebourne Road

FUN SCIENCE
Moana Pool
Moana Pool is bringing science fun to every day of the Festival with lots of wacky water experiments for pool visitors to try out.

SPOTLIGHT ON

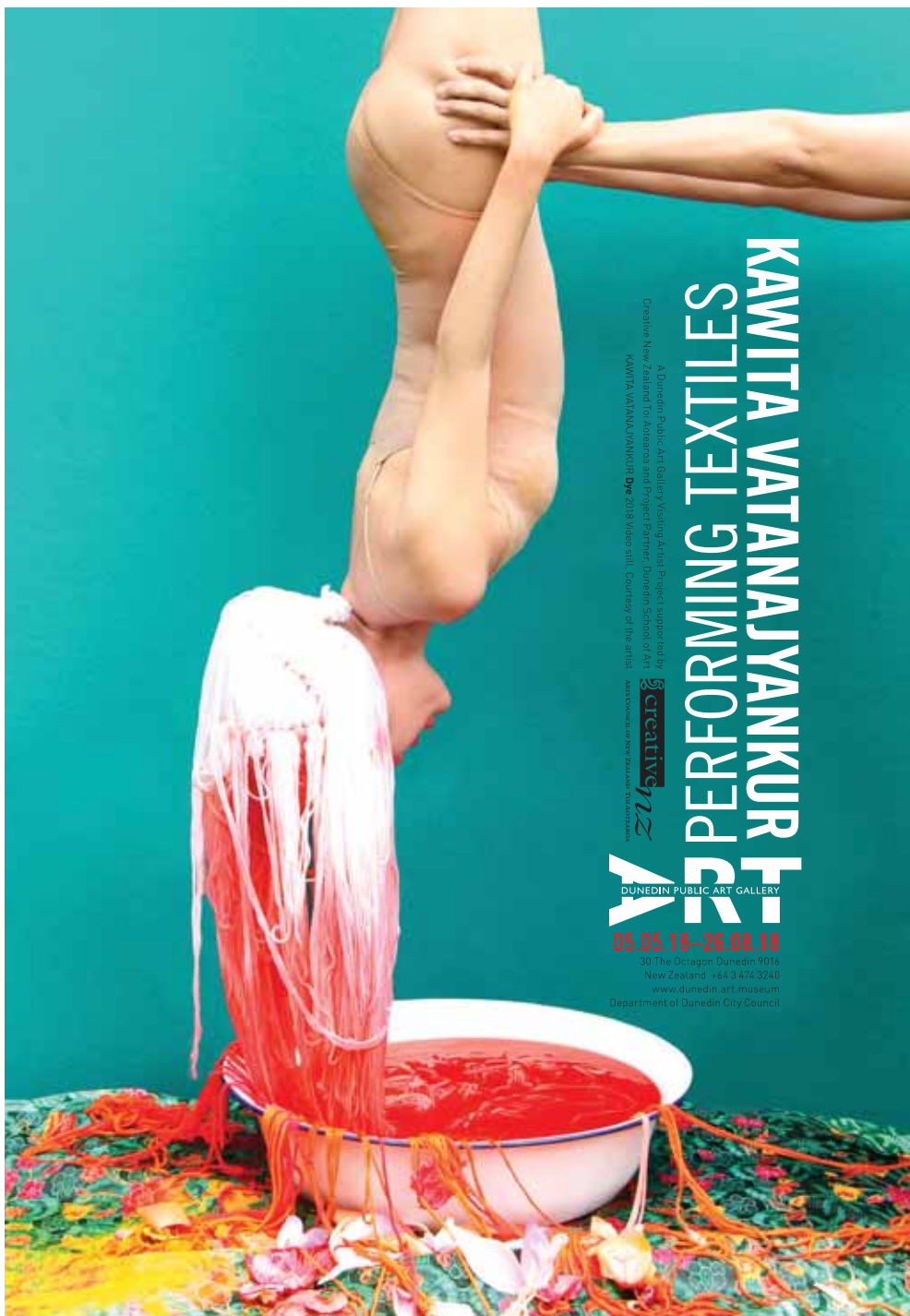
THE SWEET SCIENCE OF CHOCOLATE

You might be an expert chocolate-eater, but how much do you know about chocolate chemistry? Join us at OCHO headquarters to find out why we love chocolate, why not all chocolate is created equal, and do some tasting! An event for over12s.

14:00-15:30
Booking required
\$15
Ocho
22 Vogel Street *Sorry, no wheelchair access



ADULTS **SCHOOL OF BIOMEDICAL SCIENCES PHOTO EXHIBITION** *University of Otago*
10:00-16:00 | **FREE** | **SEE**
No booking required | The ISB Link | **PAGE 10**



The **Hāhakaranga Project**

Arts and Science



Exploring Māori Astronomy

- Sat 7 July: Dance workshop
- Mon 9 July: Matariki flag-making workshop

Sunday 15 July 2-3pm Performance

Toitū Otago Settlers Museum

Directed by
Ake Ake Theatre Co.



Division of Humanities
Performing Arts Fund



FAMILY

GOING BEYOND OUR WORLD

SCIENCE THROUGH THE LENS

Intrepid photographers Mark Gee, Clive Copeman and Trevor Cokley share images, stories and tips from their successful careers capturing science and nature with cameras.

14:00-15:00
Booking required

\$5
Otago Museum
419 Great King Street



FAMILY

MATARIKI BELIEFS AND CUSTOMS IN MODERN SOCIETY

Otago Museum
In the past 30 years there has been a massive surge of interest around Matariki. In Aotearoa today, numerous events and celebrations take place across the country during midwinter to pay homage to this star cluster. Dr Rangi Matamua will highlight some of the central Māori beliefs and customs associated with Matariki to support our growing understanding of its role in our modern society.

11:00-12:00
Booking required

FREE
419 Great King Street



FAMILY

SPLENDID TEAPOT RACING

Toitū Otago Settlers Museum
A world famous sport, Splendid Teapot Racing comes to Toitū OSM. Join us and the Gadgeteers for funky frivolous family fun racing teapots in our foyer.

10:00
No booking required

FREE
31 Queens Gardens



FAMILY

JULES VERNE STEAMPUNK DAY

Toitū Otago Settlers Museum
Colour a train, take a photo with *Josephine* and join the model engineers. Identify some cool trains on our train chart. Hang out with the Gadgeteers for some of the special events on today.

10:00-17:00
No booking required

FREE
31 Queens Gardens



FAMILY

STEAMPUNK 101

Toitū Otago Settlers Museum
How to turn Victorian or second-hand attire into steampunk costumes and accessories.

13:30
No booking required

FREE
31 Queens Gardens



FAMILY

STEAMPUNK COSTUME COMPETITION

Toitū Otago Settlers Museum
Come dressed in your steampunk designer wear ready to parade your fashion in front of a small panel of Toitū OSM staff and Gadgeteer judges. Prizes will be steampunk accessories.

15:00
Register at Toitū OSM reception

FREE
31 Queens Gardens



FAMILY

INTERVIEW JULES VERNE AND NELLIE BLY

Toitū Otago Settlers Museum
A futuristic Steampunk interview with Nellie Bly, an American investigative reporter, and Jules Verne. Bly turned the fictional *Around the World in Eighty Days* into fact by completing the journey in 72 days. In this interview they meet and time travel in a dirigible where Verne discusses his life, the influences that affected his works, and the foresight he glimpsed of the future.

11:30
No booking required

FREE
31 Queens Gardens



FAMILY

FLOROKONU: WALL STREET GETS GREENER WITH OROKONU

Wall Street Mall
Join the team from Orokonui for some forest exploration, inside the mall! The Wall Street atrium will be transformed into a native forest ecosystem for one special weekend. Hands-on activities, live animal encounters, face painting, games, competitions and prizes will run all day, all surrounded by beautiful native plants.

10:00-16:00
No booking required

FREE
211 George Street



FAMILY

ANTHONIE TONNON - A SYNTHESIZED UNIVERSE

Otago Museum
Anthonie Tonnon has collaborated with the digital creative team at Otago Museum's Perpetual Guardian Planetarium, to create a 360° immersive musical and digital performance. Fully licensed bar open in the Beautiful Science gallery.

19:00, 21:00
Bookings required

\$25 for adults, \$20 for students and concessions, \$15 for children
419 Great King Street



FAMILY

MEET AND GREET BUGS

Mitre 10 MEGA
Sam Purdie loves all creatures, great and small. Meet science student Sam and his collection of live local bugs.

11:00-13:00
No booking required

FREE
350 Andersons Bay Road



FAMILY

PERIPATUS POWER!

Wall Street
Meet Dave Randle, the saviour of the precious native Peripatus or Velvet Worm in Dunedin, learn how to increase urban biodiversity and watch a live performance of the peripatus song!

14:00-15:00
No booking required

FREE
211 George Street



FAMILY

TRAFFIC LIGHTS SHOULDN'T MAKE YOU SEE RED!

Mitre 10 MEGA
Downer manages the traffic signals on behalf of Dunedin City Council and NZTA in Dunedin, Mosgiel and Oamaru. We are bringing down some of the equipment we use to show how traffic lights work and their contribution to Smart Cities and road safety. Come along, have a look at the display, see how things work and talk to our people.

10:00-15:00
No booking required

FREE
350 Andersons Bay Road



FAMILY

THE ART OF NIGHT IN THEORY

Otago Museum

Astrophotography is one of the fastest growing forms of photography and this workshop covers the basics of equipment, camera settings, techniques and post-processing. The workshop is theory-based, but you're welcome to bring your DSLR camera along.

17:30-19:00
Booking required

FREE
419 Great King Street



ADULTS

CLIMATE CHANGE: WHY, WHEN AND HOW DO WE RESPOND?

University of Otago

How prepared is Dunedin and Otago for Climate Change? University of Otago and Victoria University experts including James Renwick discuss the environmental, human health and social impacts of climate change and the ways we can prepare and respond.

10:30-12:00

FREE
St David Street Lecture Theatre

SPOTLIGHT ON

THE ART OF NIGHT - UNDER THE STARS

This workshop, run by award-winning photographer Mark Gee, will give you hands-on experience of astrophotography at a dark sky location. If you have no previous astrophotography experience, it's recommended you first attend The Art of Night in Theory workshop.

19:30-20:30
Booking required

FREE
Smalls Beach *Sorry, no wheelchair access



ADULTS

SEASHORE SCRAMBLE

Anderson's Bay Inlet

Join a marine expert to explore Anderson's Bay inlet at low tide and find out what lives there. Be a citizen scientist yourself by collecting data about the animals and plants you find. Meet in the carpark by Bayfield Park. 10+ years.

9:30-11:30
Booking required

FREE
Carpark by Andersons Bay Inlet *Sorry, no wheelchair access



ADULTS

CHROMATONE

Robert Piggott Art Gallery

"What is colour?"

A painter and a photographer respond to the nature of colour and the colour of nature.

10:00-16:00
No booking required

FREE
8 Jetty Street



ADULTS

SCHOOL OF BIOMEDICAL SCIENCES PHOTO EXHIBITION

The ISB Link

The exhibition has images that encompass areas of anatomy, biochemistry, genetics, microbiology & immunology, infectious diseases, neuroscience, pharmacology & toxicology, physiology and more!

10:00-16:00
No booking required

FREE
University of Otago

FAMILY **BLUE PENGUINS PUKEKURA FAMILY SPECIAL** Royal Albatross Centre
17:30-18:45 \$40 (2 adults, up to 3 children) SEE PAGE 10
Booking required 1260 Harington Point Rd, Otago Peninsula

FAMILY **ALBATROSS EXPRESS TOURS** Royal Albatross Centre
10:00-15:00 Adults \$15, Children \$3 SEE PAGE 10
Booking required 1260 Harington Point Rd, Otago Peninsula

FAMILY **SCIENCE FILM SCREENINGS** Dunedin City Library, Cube
10:00-16:00 FREE SEE PAGE 10
No booking required Dunedin City Library

FAMILY **SMOOTHIES FOR SCIENCE** Wall Street Mall
11:00-13:00 FREE SEE PAGE 20
No booking required 211 George St

FAMILY **HUGGING TREES COLOURING AND POSTER COMPETITIONS** Dunedin Public Art Gallery
10:00-16:30 FREE SEE PAGE 10
30 The Octagon

FAMILY **EXPLORE DUNEDIN'S NIGHT SKY** Dunedin Astronomical Society
19:30-21:30 \$5 (free for small children) SEE PAGE 10
No booking required Beverly-Begg Observatory, 1a City Road, Dunedin

FAMILY **AROUND THE MUSEUM IN 80 OBJECTS** Toitū Otago Settlers Museum
10:00-17:00 FREE SEE PAGE 12
No booking required 31 Queens Gardens



KIDS

FUN SCIENCE

Moana Pool

Moana Pool is bringing science fun to every day of the Festival with lots of wacky water experiments for pool visitors to try out.

18:00-19:00
No booking required

FREE
60 Littlebourne Road



Dunedin's own fashionable mix of friendly retailers, International brands and delectable flavours.

Proud to support the New Zealand International Science Festival





BEYOND THE ICE AGE

Henrik Moller, Emeritus Professor for Sustainability, discusses citizen Science, electric vehicles and driving into the future.

FREE
Dunningham Suite,
230 Moray Place,
Dunedin City Library
13:00-13:30
Booking suggested



FAMILY
14:00-15:00
No booking required

HĀHAKARANGA AND THE CREATIVE PROCESS
Toitū Otago Settlers Museum
This community dance-theatre performance is a Science and Arts collaboration between Māori art practitioners and local dancers inspired by the work of Dr Rangi Matamua. This will be followed by a panel discussion focusing on how this piece was created. Get involved! Participate in our dance workshop or print-making workshop.

FREE
31 Queens Gardens



FAMILY
11:30-12:30
No booking required

BEYOND BIG BANG
Toitū Otago Settlers Museum
Rua McCallum will give a talk that gives an interpretation of a Kāi Tahu creation narrative, looking at how we could have known about these events, especially when science is only making these discoveries now.

FREE
31 Queens Gardens



FAMILY
10:00-11:30; 12:30-14:00; 15:00-16:30
Bookings required

GO BEYOND THE SEASHORE
NZ Marine Studies Centre
Find out about the animals and plants that live in the intertidal zone and waters just off our coast. See the sea animals in our marine tanks and touch pools and take a virtual dive in a yellow submarine!

\$15/\$10
85 Hatchery Road, Portobello



FAMILY
10:00-16:00
No booking required

FLOROKONUI: WALL STREET GETS GREENER WITH OROKONUI
Wall Street Mall
Join the team from Orokonui for some forest exploration, inside the mall! The Wall Street atrium will be transformed into a native forest ecosystem for one special weekend. Hands-on activities, live animal encounters, face painting, games, competitions and prizes will run all day, all surrounded by beautiful native plants.

FREE
211 George Street



FAMILY
11:00-13:00
No booking required

MEET AND GREET BUGS
Wall Street Mall
Sam Purdie loves all creatures, great and small. Meet science student Sam and his collection of live local bugs.

FREE
211 George Street



FAMILY
19:30-21:30
No booking required

EXPLORE DUNEDIN'S NIGHT SKY
Dunedin Astronomical Society
Explore the universe, go inside the observatory dome, take a laser tour of the sky, and explore stars, planets, and galaxies with our telescopes! Open to space adventurers of all ages!

\$5 (free for small children)
Beverly-Begg Observatory, 1a City Road,
Robin Hood Park, Dunedin



FAMILY
17:30-18:45
Booking required

BLUE PENGUINS PUKEKURA FAMILY SPECIAL
Royal Albatross Centre
Have you met the smallest penguin in the world? Take advantage of this Science Festival half price offer to come and see them for yourself.

\$40 (2 adults, up to 3 children)
1260 Harington Point Rd, Otago Peninsula



FAMILY
10:00-15:00
Booking essential

ALBATROSS EXPRESS TOURS
Royal Albatross Centre
Discover huge Royal Albatross chicks at the world's only mainland Royal Albatross breeding colony.

Adults \$15, Children \$3
1260 Harington Point Rd, Otago Peninsula



FAMILY
10:00-16:00
No booking required

SCIENCE FILM SCREENINGS
Dunedin City Library, Cube
Daily screenings of short films from Dunedin science communication students and the Scinema International Science Film Festival.

FREE
Dunedin City Library



FAMILY
10:00-16:30

HUGGING TREES COLOURING AND POSTER COMPETITIONS
Dunedin Public Art Gallery
Using the materials provided in Playspace enter one of our creative tree competitions.

FREE
30 The Octagon



FAMILY
10:00-17:00
No booking required

AROUND THE MUSEUM IN 80 OBJECTS
Toitū Otago Settlers Museum
Travel the museum in search of a world of objects. Identify 80 artefacts and discover the countries they came from.

FREE
31 Queens Gardens



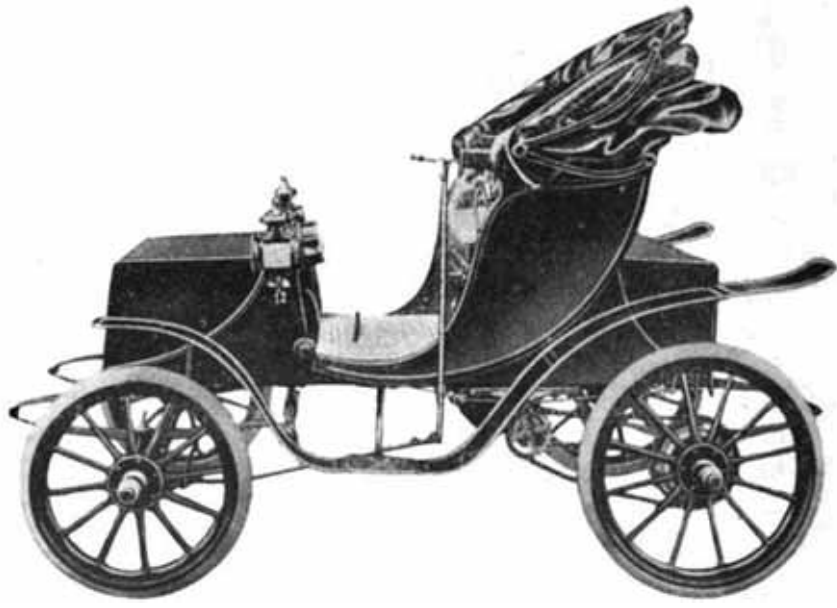
FAMILY
10:00-17:00
No booking required

THE DUNEDIN MUSEUM OF NATURAL MYSTERY
Dunedin's newest museum is based in the home of mural artist and sculptor, Bruce Mahalski. The museum contains a collection of skulls, bones, biological curiosities, ethnological art and unusual cultural artefacts.

\$5, children under 10 free.
61 Royal Terrace



ADULTS



FROM CARRIAGE TO CAR AND BEYOND (PETROL)

A light-hearted look at the history of electric vehicles from 1880 to 2018. Followed by Q&A and refreshments at 2pm.

13:30-14:00
Booking suggested

FREE
Dunningham Suite,
230 Moray Place,
Dunedin City Library

FAMILY



14:00-15:00
No booking required

PERIPATUS POWER!

Wall Street

Meet Dave Randle, the saviour of the precious native Peripatus or Velvet Worm in Dunedin, learn how to increase urban biodiversity and watch a live performance of the peripatus song!

FREE
211 George Street

FAMILY



12:00-13:00
Book on arrival at Info Desk

SCIENCE MATTERS

Otago Museum

In this free lunchtime show, see air turn to liquid, tantalise your taste buds with delicious clouds of tropical juice, and sink your fingers into piles of goo.

FREE
419 Great King Street

FAMILY



11:00 and 13:30 daily
No booking required

FIRST FLIGHT

Otago Museum

Be there for that special moment and help our newly-emerged butterflies take flight in the Tropical Forest.

Included with entry to
Tuhura Science Centre
419 Great King Street

KIDS



18:00-19:00
No booking required

FUN SCIENCE

Moana Pool

Moana Pool is bringing science fun to every day of the Festival with lots of wacky water experiments for pool visitors to try out.

FREE
60 Littlebourne Road

ADULTS



12:30-13:00
Booking suggested

ELECTRIC CARS

Otago Electric Vehicle Society Inc

Hamish Miller, Senior Lecturer of Automotive Engineering Trades, explains what's under the bonnet and how to charge them.

FREE
Dunningham Suite, 230 Moray Place
Dunedin City Library

ADULTS



10:00-16:00
No booking required

CHROMATONE

Robert Piggott Art Gallery

"What is colour?"

A painter and a photographer respond to the nature of colour and the colour of nature.

FREE
8 Jetty Street

ADULTS



10:00-16:00
No booking required

SCHOOL OF BIOMEDICAL SCIENCES PHOTO EXHIBITION

The ISB Link

The exhibition has images that encompass areas of anatomy, biochemistry, genetics, microbiology & immunology, infectious diseases, neuroscience, pharmacology & toxicology, physiology and more!

FREE
University of Otago

ADULTS



16:00-17:30
No booking required

CHROMATONE: ARTIST TALKS

Robert Piggott Gallery

Meet artist Robert Piggott and photographer Leonardo Ramos for a glass of wine, and to hear the stories and creative process behind their work.

FREE
8 Jetty Street



is proud to host a heap of exciting science experiences as part of the New Zealand International Science Festival.

Activities on offer include:

- Robots: the new generation, evening event
- DIY marshmallow bazooka workshop
- Live bug display
- Wildlife garden creations with Orokonui Ecosanctuary
- Water rocket workshop with a NASA scientist
- Traffic-light engineering display



Visit scifest.org.nz to book your favourites now!

DUNEDIN | Andersons Bay Road.
Ph 455-3344 • mitre10.co.nz



This year's Festival has lots on offer for both budding and experienced photographers.

The Art of Night in Theory at 5:30pm on 14th July at the Otago Museum is a theory -based workshop where award-winning photographer Mark Gee will cover the basics of astrophotography.

An outdoor practical workshop, The Art of Night—Under the Stars, will also take place at 7.30pm on 14th July. Rug up and get hands-on under the dark skies of Smaills Beach.

The Going Beyond Our World panel discussion at 2pm on 14th July at the Otago Museum will be rare treat for anyone interested in science and nature photography. Mark Gee, Clive Copeman and Trevor Cokley will share stories, images and tips from their varied and highly successful careers.



NAME: Clive Copeman

Clive Copeman studied Zoology at the University of Otago. After a career writing and directing television in a wide variety of genres, he is currently a commercial and portrait photographer and teacher based in Dunedin, NZ.



NAME: Mark Gee

Mark Gee is an award-winning photographer, time-lapse filmmaker & visual effects supervisor based in Wellington, New Zealand. He has worked on many high-profile and Oscar-winning feature films, and his love of the New Zealand landscape is a big part of the inspiration for his photography.



NAME: Trevor Cokley

Trevor Cokley is an American storm chaser living in Dunedin while he finishes a degree in Film and Media Studies at the University of Otago. From extreme weather to auroras he found his calling as a photographer chasing whatever the sky had to offer even surviving a close call with the widest tornado in recorded history.



Proud To Support The New Zealand International Science Festival

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kayd@travelmanagers.co.nz or stephend@travelmanagers.co.nz



Dunedin Kindergartens

Mana Manaaki Puawai O Otepoti



Our 24 kindergartens provide stimulating environments that naturally encourage a curious disposition towards the discoveries of everyday Science.

Come and experience a range of hands-on science experiences for young hands and minds to meddle with.

Guest appearance and inspirational talk by International Space Expert Sian Cleaver at 11am!



Come to our FREE event for children under 5 at Helen Deem Kindergarten 9th July, 9am – 12.30pm

Visit www.dunedin Kindergartens.org.nz for details on enrolling your 2 - 5-year-old or phone (03) 455-8892



The festival happens due to the support of many people, and we are grateful for the many hours that go into developing, planning and bringing together the events.

From staff through to supporters and volunteers, we would like to say a huge 'thank you' for your contribution to making this festival happen.

In particular, we would like to acknowledge the fantastic contribution of the following people:

FESTIVAL TEAM:

- Dan Hendra, *Director*
- Vanessa Barratt, *Associate Director*
- Jule Barth, *South Dunedin Programme Coordinator*

TREASURER:

- Wai Piggott, *Dunedin City Council*

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SPECIAL THANKS TO:

- Tammy Jackman: *DCC Events Coordinator*
- Kerry Buchan: *University of Otago 150th Anniversary Coordinator*
- Cara Duffy: *University of Otago Science Division Communications Manager*
- Maggie McGarry
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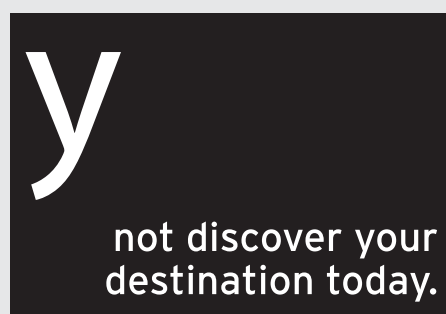
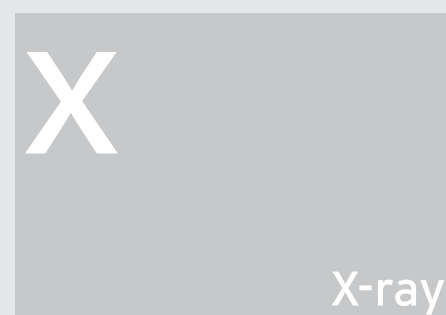
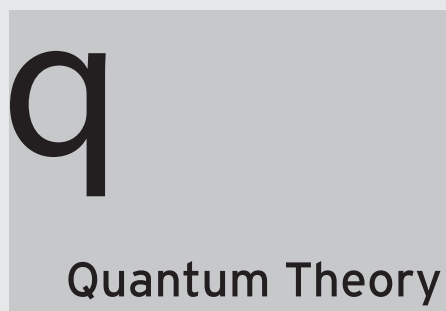
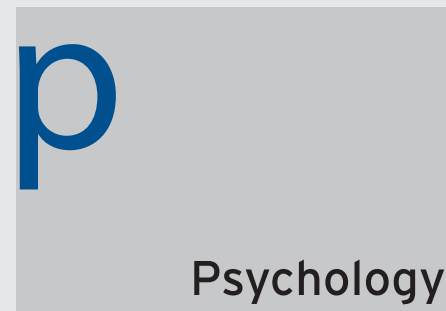
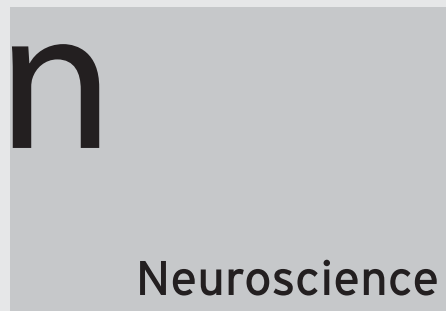
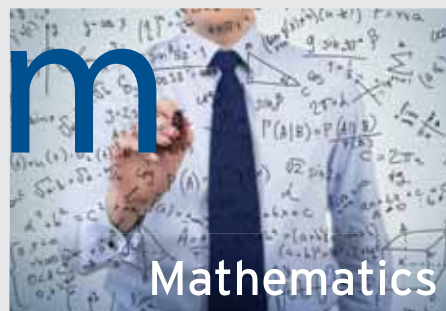
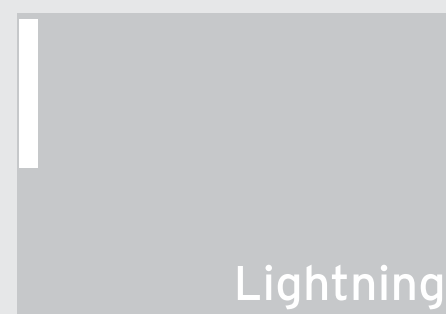
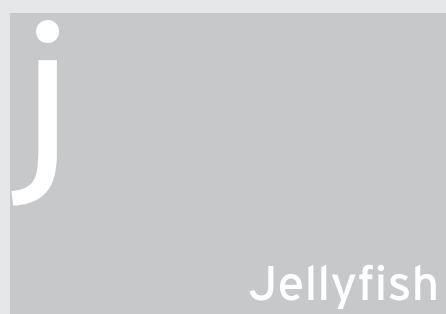
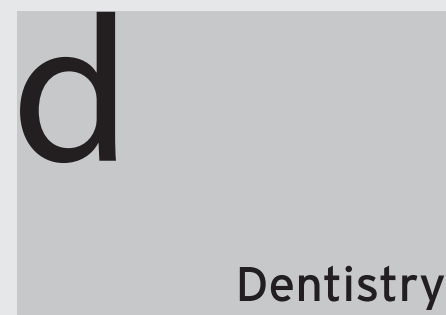
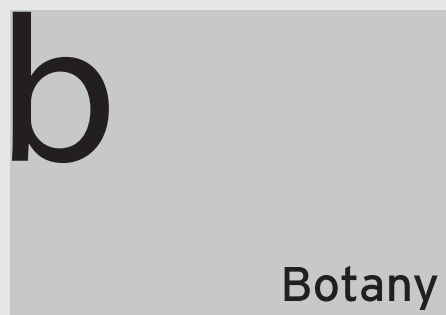
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