

# New Zealand International Science Festival presents

# EVERYDAY SCIENCE

It's all in your head!

5-13 July 2008 Dunedin, NZ



www.scifest.org.nz



# Welcome to the 2008 Festival



#### Sue Clarke - Festival Director

Welcome to the 2008 New Zealand International Science Festival with this year's theme being Everyday Science - It's all in your head

The New Zealand International Science Festival is about making science, technology and the environment fun, interesting and accessible to everyone. We will attempt to demystify some of the real science and invite you to engage and question our scientists from around and world.

Science is crucial to our everyday lives and that is why this year's Festival is called Everyday Science - It's all in your head. With underlying topics of the human brain and sustainability, there is a wide variety of events that will discuss, teach and provide practical solutions to our everyday lives.

We hope you'll take advantage of the wealth of talks, workshops, film screenings, exhibitions and other activities on offer over the nine days. Check out the newlook website www.scifest.org.nz, where bookings can be made online.

During the Festival there is a team of volunteers that keep the events flowing, and as in in daily life these people are crucial and I hope you will join us in thanking them.

The other crucial part of any Festival are the funders and sponsors and I applaud the continuing support of our unique New Zealand Festival held in the "City of Science".

Finally, we hope you will take the time to meet festival staff, management and volunteers, who will be out and about over the nine days of the Festival and share your thoughts with us.

Thanks for visiting and we hope you enjoy the 2008 New Zealand International Science Festival.



Sue Clarke

Director, NZ International Science Festival



#### Mike Harte - President

It is my very great pleasure to welcome you to this year's festival in Dunedin, the City of Science. A key aim of the New Zealand International Science Festival is to promote public awareness and interest in the environment, science and technology by bringing together and bridging the gap between academia, business, local and central government and the public. I would like to take this opportunity to thank the Festival Team for their outstanding efforts in putting together such a diverse and interesting programme of events that will both entertain and educate. There is something for everyone - both young and not so young. So enjoy and take advantage of the wonderful opportunities that the Festival offers.



Mike Harte

President, NZ International Science Festival





On behalf of the City of Dunedin, I welcome you to the 2008 New Zealand International Science Festival. My contact with the world of science is grounded somewhere between Darwin's identification of the origins of life on Earth and the splitting of the atom in a dungeon at Canterbury University (you see how good I was at science - and history!) at one end, and the world of space exploration and the remarkable revelations about the human condition brought about by DNA at the other.

I was and, by today's standards probably still am, scientifically challenged. But the explosion in communicating scientific ideas, wrought by television and the Internet, together with the increasing concerns about the future viability of our very existence, have forced me and thousands of other New Zealanders into something more than a passing interest in the topic.

Forensic science, improved food and animal production to feed an

ever-increasing population, human reproduction itself and medicine and the search for cures for those illnesses which tear families and whole communities apart, the search for new means of energy - the list is almost endless and invades every aspect of our lives - are all examples of how science is shaping our lives and those of our children and their children.

The wonderful Dunedin-based International Science Festival reminds us that many of these problems and their solutions are closer to home than we probably realise. A new generation of scientists will visit the Festival, although they may not know that is where their future lies when they first walk through the doors - and that is what makes this event so exciting!

Good luck to all those who helped put this Festival together, and to all those who visit - someday our lives may depend upon them!



Peter Chin Mayor of Dunedin



Hon Pete Hodgson

Ministers are supposed to studiously avoid parochialism. But I'm the member of Parliament for Dunedin North too. So I unashamedly declare the New Zealand International Science Festival, based from Dunedin, to be a jewel in the New Zealand science calendar. Not that anyone should be surprised. Science has always been at the heart of Dunedin, and Dunedin is at the heart of so much of New Zealand science. So let's celebrate, enjoy and learn.



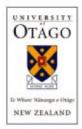
Hon Pete Hodgson

Minister of Research, Science and Technology

### **Core Funders**

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# **NZ Lottery Grants Board**

## www.scifest.org.nz

# UNIVERSITY OF OTAGO PRESENTS Everyday Science - 24/7, 366

## SATURDAY 5 JULY 2008 SUNDAY 6 JULY 2008

#### Alumni Office

Café Sci: Orokonui Ecosanctuary – progress report

Café Sci: Energy at a low ebb? Imagine how the planet feels!

#### Anatomy & Structural Biology

CSI mystery forensic workshop The engine of the body workshop

Visit the W.D. Trotter Anatomy Museum

A ramble through time - the Anatomy Department

Male pheromones make females better mothers, less anxious and brainier

DNA and me: New ways to sequence DNA Is there more to sex than testosterone?

New regulators of brain function

Display of anatomy

Simulating the activity of individual neurons

#### Biochemistry

Biochemistry in and around you - how biological molecules affect your everyday

#### **Bioethics Centre**

Consciousness and the brain

#### Careers Advisory Service

The future's yours to make ...

#### Chemistry

Chemistry is not for the faint-hearted!

### Clothing & Textile Sciences

Everyday textiles everywhere - spot the fabric

#### Computer Science

DIY guitar hero

Watching window

#### **Design Studies** Exhibition of student work - Designer Saturday and Sunday

Warm as toast? It's the best idea since sliced bread ...

Tour of the Geology Museum

What's in this rock? Find out what's locked inside your pet rock ...

#### Human Nutrition

Food myths

#### **Marine Science**

How weird is THAT? Every day in the deep blue ocean

#### Maths

Gear up for maths

### Microbiology & Immunology

Humans as homes to microbes **National Poisons Centre** 

#### Isaac the poisonous fire-bellied newt

Pharmacology & Toxicology

Exciting the cell and saving the patient

#### Pharmacy

Watching molecules at work

### Physical Education

What's up with up? Altitude sickness in the Himalayas Behind the scenes of the Motorsport Academy

Under pressure: The brain's role in processing internal and external information

UNIVERSITY

OTAGO

NEW ZEALAND

#### Physiotherapy

Captured in motion

#### Polar Environments

Polar experience - polar environment

#### Psychology

What's up with faces? Coping with Rheumatoid Arthritis in NZ ...

The workings of the human brain

Kneedeep in science

## Prizes, games, exploration, excitement ...

# For more information check out





# WIN with **pacificblue**) and NZISF



### Dr Cordelia Fine

### Saturday 7.30pm & Sunday 12noon

Dr Cordelia Fine is an academic psychologist, freelance writer and the author of 'A mind of its own: How your brain distorts and deceives'.

Described as "that rare academic who's also an excellent writer" (Library Journals) and a "cognitive neuroscientist with a sharp sense of humour" (The Times); she has received much review praise for showcasing the deception of the brain in a way that is clear, accessible and entertaining.

Cordelia studied Experimental Psychology at Oxford University, followed by an MPhil in Criminology at Cambridge University. She was awarded a PhD in Psychology from University College London. She is currently a Research Associate at the Centre for Applied Philosophy and Public Ethics (CAPPE) at the University of Melbourne, Australia. Cordelia writes the "Modern Mind" column for The Australian newspaper. Proudly supported by the Otago Branch, New Zealand Federation of Graduate Women.



#### Dr Jilly Evans

#### Monday 7.30pm

Dr Jilly Evans is a New Zealander educated in rural New Zealand schools and then at Auckland University in Cell Biology and Biochemistry. She received her PhD in Biochemistry from the University of British Columbia in 1978 working with Michael Smith who won the Nobel Prize in 1993 for the development of site-specific mutagenesis.

Jilly carried out her postdoctoral research in the department of Biochemistry at McGill University before joining Merck Frosst Canada in 1983 to work on antiasthmatic drugs. Dr Evans was a lead biochemist in the Merck team that worked on COX-2 inhibitors, inflamation and pain relieving drugs for arthritis sufferers. She led the Merck orphan G-Protein Coupled Receptors (GPCR) ligand identification group for 5 years.

Jilly left Merck after 21 years to become a founding member and lead biologist of Amira Pharmaceuticals, a new biopharmaceutical company in San Diego. Amira Pharmaceuticals has rapidly developed small molecule compounds for clinical assessment in inflammatory diseases. Proudly supported by the Health Research Council of New Zealand.



#### Professor Fiona Stanley

#### Thursday 7.30pm

Professor Fiona Stanley is the Founding Director of the Telethon Institute for Child Health Research; Executive Director of the Australian Research Alliance for Children and Youth; and Professor, School of Paediatrics and Child Health at the University of Western Australia.

Trained in maternal and child health epidemiology and public health, Fiona has spent her career researching the causes of major childhood illnesses such as birth defects. Her major contribution has been to establish the Telethon Institute for Child Health Research, a unique multidisciplinary independent research institute focusing on the causes and prevention of major problems affecting children and youth. She sits on the (Australian) Prime Minister's Science, Engineering and Innovation Council as well as the Australian Statistics Advisory Council. For her research on behalf of Australia's children, she was named Australian of the Year in 2003 and in 2006 she was made a Unicef Australia Ambassador for Early Childhood Development. Proudly supported by the Australian High Commission.



#### Geoff Henderson Friday 7.30pm

Geoff Henderson is CEO and Director of Windflow Technology Ltd. The company was established in 2001 and secured funding to build the first Windflow turbine. This innovative wind turbine is breaking new ground in terms of design for fundamental fatigue load reduction. The first 500 kW Windflow turbine was completed near Christchurch in 2003. The Company is producing at least 5 turbines a month for a 97-turbine wind farm near Palmerston North.

Geoff is a graduate of Canterbury University with an honours degree in Mechanical Engineering and has been involved in wind-power engineering for 20 years, including seven years in California and England working at the forefront of wind-power technology. During this time he invented a system of power control, the Torque Limiting Gearbox system that has patents in New Zealand and other countries. He returned to NZ in 1991 to set up his own company to provide consultancy services. He is a registered professional engineer in California and was recently made a Fellow of IPENZ. He was a founding director of the NZ Wind Energy Association.

In 1994, he received the Communications Award from the Institution of Professional Engineers NZ (IPENZ) and the EECA Energywise E3 Product Innovation Award in 2007.



WIN 2 RETURN FLIGHTS TO AUCKLAND OR WELLINGTON\*

the draw to win, Flying Pacific Blue, New Zealand's low-fare domestic airline. \*Conditions apply. See www.scifest.org.nz for full details.





Dunedin, 5-13 July 2008

# Saturday, July 5

### adults

Williand Science Fest



Dr Cordelia Fine 7.30pm - 8.30pm SEX IN THE BRAIN? The popular new genre of neurosexism. Do 'hard-wired' differences in male and female neurology offer insight and solutions to many social and personal difficulties - from stress and exhaustion of working mothers, to who should clean the toilet? Dr Fine asks why neurosexism has such popular appeal? Is the attitude towards pseudoscientific sexism too casual? Supported by the Otago Branch, New Zealand Federation of Graduate Women. Book online at www.scifest.org.nz. See page 3 to WIN with pacificblue) \$15 Adult, \$13 Concession\* St David Lecture Theatre, University of Otago, Cnr St David & Castle Streets, Dunedin



Somnium - The Science of Sleep Sleep - we all do it and yet so much of it remains a mystery. How long should we sleep for, what do dreams mean, do babies dream, why do people sleep walk, why do we sleep at all? Brought to you by Chris KP (Pre-Coital, Great Big Science Gig) Somnium is a hilarious new science cabaret show exploring the science of sleep. With songs, comedy, and multimedia this is the truth as we know it, in its most entertaining form. Laugh, think and wonder, and go home with something to really dream about. Book at Fortune Theatre 03 477 8232. Supported by NZ Lottery Grants Board.

\$25 Adult, \$20 Group 6+, \$18 Concession\* Fortune Theatre, Cnr Stuart St & Moray PI, Dunedin



A Night With The Stars 7.30pm - 9.30pm Stargazing - Gaze up at the night sky with telescopes. Enjoy what local astronomers have to say about the night sky and have your questions answered. The use of telescopes is weather permitting. Presented by Dunedin Astronomical Society. Enquiries to 027 437 4161 \$10 Family, \$4 Adult, \$2 Child

Beverley Begg Observatory, Cnr City Rd & Ross St, Roslyn, Dunedin



Deep Ocean Experience 12noon - 4.30pm Visit the newly-launched submersible display at the Aquarium and discover what it is like to dive beneath the waves to discover the mysteries of the deep oceans. Enquiries to the NZ Marine Studies Centre on 03 479 5826.

Aquarium entry fee applies

NZ Marine Studies Centre & Aquarium, Portobello



Free Health Checks

We offer Free Health Checks: Blood Pressure, Pulse, Blood Sugar Levels, Simple Eye Test, Height, Weight, Waist Measurement, Peak Flow Measurement. See displays of instruments and models used to teach Health Professionals Clinical Skills. Suitable for all ages 12+.

Otago District Health Board, 2nd Floor, Fraser Building, Dunedin Hospital, Cnr Cumberland & Hanover Streets, Dunedin



Everyday Science Art Exhibition 10am - 4pm Cranial Hallucinations - Jennifer Fretwell's exhibition of Ceramic Heads and other skeletally inspired creations. Made from recycled paper clay, they embody the artist's attempt toward spontaneity and the unplanned mind.



InterfaCE - is a collaborative installation depicting aspects of an ongoing investigative conversation between Dunedin artist Claire Beynon and New York- based polar scientist, Samuel Bowser. It combines original research material with SEM photographs and interpretative charcoal drawings.



Interiors - The paintings of Nicola Gibbons explore & visualise worlds that are normally hidden from view; alluring textural paintings investigate interior scapes of the human body, the inner mechanics at work.

Hope Gallery, Otago Art Society, 1st Floor, Dunedin Railway Station



Future Food Roadshow 10am - 4pm

The Future Food Roadshow is a high-tech future kitchen where visitors are encouraged to engage with digital touch-screens to question their attitudes towards food, science and the environment; to explore the wider issues around the food we eat now and the food we might eat in times to come.

Lower Octagon, Dunedin



Monarch Half-day Cruise 1pm & 2.30pm The best of Otago Peninsula and its wildlife. Cruise the 22km length of the beautiful Otago Harbour with unrivalled wildlife viewing around Taiaroa Head. Enjoy a Scenic Bus tour of the Spectacular Otago Peninsula on your return to Dunedin. Call Monarch 03 477 4276.

Tour normally costs \$80 per adult. Quote NZISF when booking to pay \$25 fare (per person) Departs 1pm & 2.30pm, Cnr Wharf and Fryatt Streets, Dunedin



Monarch 1-Hour Cruise 2.30pm & 3.30pm Unrivalled viewing of albatross, seals, bird and marine life (up to 20 species) around Taiaroa Head by boat. All in their natural environment. See what cannot be seen from land. This cruise departs Wellers Rock Wharf, situated on the Otago Peninsula, 45 minutes from Dunedin City. Call Monarch 03 477 4276.

Tour normally costs \$40 per adult. Quote NZISF when booking to pay \$15 fare (per person) Departs 2.30pm & 3.30pm, Wellers Rock Wharf, Otago Peninsula



9am - 3pm

Otago Life Education Trust

This is your opportunity to see what is normally only accessible to school children! The Otago Life Education Mobile classroom is equipped with exceptional electronic aids which make learning a totally new and exciting experience. See the sophisticated sight and sound techniques, a transparent anatomical manikin, a talking brain and electronic modules showing the circulatory, nervous and digestive systems. Meet Harold the Giraffe and see what kids are raving about!

Everyday Science Expo, St David Complex, University of Otago, Cnr St David & Castle Streets, Dunedin



SciFest Midday Mania 12.15pm - 12.45pm What do YOU know about Everyday Science? You don't have to be a scientist to answer the questions, just bring your family along and give it a go. Daily prizes up for grabs

Meridian Mall, Ground Level, 285 George St, Dunedin



Ultimate SciFest Treasure Hunt 9.30am - 5pm Do you know your way around? Pick up a treasure map at our Festival HQ, follow the hints to Science Festival venues throughout the city, and learn fascinating facts about science on the way. Mastered the challenge? Bring your map back to our ODT Science Festival HQ and you'll be in the draw to win great prizes!

ODT Science Festival HQ, 20 Princes St, Dunedin



University of Otago Expo 11am - 7pm EVERYDAY SCIENCE - 24/7 - 366 Ever wondered what the University of Otago was about? Here's your chance to see the A-Z of Otago Uni. From Anatomy to Zoology and everything in between. Over 47 fun-filled activities for the whole family. See back cover for details.

St David Lecture Theatre Complex, University of Otago, Cnr St David & Castle Streets, Dunedin

#### KIDS



Fascinating Facts for Under-5's 10.30am - 1pm

Come along to Helen Deem Kindergarten with your preschoolers and discover the "S" word. Participate in the many and varied science activities created by Dunedin's' Kindergarten Teachers. Suitable for 2 – 5-year olds. Enquiries to 03 455 7093.

Helen Deem Kindy, 81 Forbury Road, St Clair, Dunedin



SciCity Workshop

1pm - 2pm Explore SciCity, the popular virtual online game! Dress your avatar, earn rewards and make movies of your discoveries! Learn how to get the most out of this website, or come along to get started in this FREE workshop.

Suitable for 8-14 year olds. Bookings necessary as space is limited. Call Otago Museum 03 474 7474 to book.

Otago Museum, 419 Great King St, Dunedin



## Dunedin Community Gallery, 20 Princes St, Dunedin Open every day of the Festival 9.30am-5pm

This is the hub of 2008 NZ International Science Festival. Everything you need to know about the 2008 Festival can be found here, from what's on, to who's who and what's where. Make bookings, purchase tickets or have a look at the many displays on offer.

Looking for something to entertain the kids during the holidays? We have heaps of giveaways, interactive displays and cool hands-on stuff for kids. Try out our kids' activities and workshops. All kids' events in the ODT Science Festival HQ are FREE. Book online today so you don't miss out! www.scifest.org.nz

We also have 200 copies of the ODT to give away each day, so come in, grab your copy and have a look at what 2008 New Zealand International Science Festival is all about.

festival. KIDS - Check out our SCIKIDS page - heaps of fun experiments to try at home, loads of quizzes and cool links to other kid-friendly science type sites.



\*CONCESSIONS: Concession Price is for Students, Beneficiaries and Seniors 65+, ID to be presented on admission.

# What's on Sunday, July 6

#### **ADULTS**



Dr Cordelia Fine

12noon - 1pm
WHO'S MESSING WITH MY MIND? Dr Fine debates the
ethics of advertising to children generally centres on the
age at which children understand persuasive intent. But
research is beginning to show that older, more media-sawy
children are no less influenced by advertising than their
younger, more naive counterparts. Does this need reevaluation? Supported by the Otago Branch, New Zealand
Federation of Graduate Women. Book online
www.scifest.org.nz. See page 3 to WIN pacificblue)
\$15 Adult, \$13 Concession

St David Lecture Theatre, University of Otago, Cnr St David & Castle Streets, Dunedin



NIGEL Latta 3pm - 4pm NATURE vs NURTURE: Are we born bad or raised bad?

As seen on TV, Clinical Psychologist, Nigel Latta asks the question and delves into the human psyche. Don't miss this controversial and entertaining take on the bad asses in our society. Book online www.scifest.org.nz. \$10 per person

St David Lecture Theatre, University of Otago, Cnr St David & Castle Streets, Dunedin



Somnium – The Science of Sleep 8pm A cabaret show exploring the science of sleep. See page 4 for full details. Book at Fortune Theatre 03 477 8323 \$25 Adult, \$20 Group 6+, \$18 Concession Fortune Theatre, Cnr Stuart St & Moray Pl, Dunedin

#### **EVERYONE**



A Night With The Stars 7.30pm - 9.30pm Stargazing – Gaze up at the night sky. See page 4 for full details. Enquiries to 027 437 4161. \$10 Family, \$4 Adult, \$2 Child

Beverley-Begg Observatory Cnr City Rd and Ross St, Roslyn, Dunedin



Campus Challenge 2pm - 3pm

Test your map-reading ability with a short Orienteering event on Campus. You have 30 minutes to visit as many controls as possible! Fun for the whole family! Presented by Dunedin Orienteering Club. Enquiries to 03 479 4119 \$10 Family, \$5 Adult/Seniors, \$2 Child/Student Meet at the Clock Tower, University of Otago, Dunedin



Deep Ocean Experience 12noon - 4.30pm See page 4 for full details.

Aquarium entry fee applies NZ Marine Studies Centre & Aquarium, Portobello



Everyday Science Art Exhibition 10am - 4pm InterfaCE - Claire Beynon. Interiors - Nicola Gibbons. Cranial Hallucinations - Jennifer Fretwell. See page 4 for full details. FREE

Hope Gallery, Otago Art Society 1st Floor, Dn Railway Station



Free Health Checks 9am - 3pm
See page 4 for full details.
FREE
2nd Floor, Fraser Building, Dunedin Hospital, Cnr

Cumberland and Hanover St, Dunedin



Future Food Roadshow See page 4 for full details. FREE

Lower Octagon, Dunedin



Monarch Wildlife Cruises

HALF-DAY CRUISE: Departs 1pm & 2.30pm See page 4 for full details. Phone 03 477 4276 to book Quote NZISF when booking to pay \$25 fare Cnr Wharf & Fryatt Sts, Dunedin

www.scifest.org.nz

<sup>1</sup> 1 HOUR CRUISE: Departs 2.30pm & 3.30pm See page 4 for full details. Phone 03 477 4276 to book Quote NZISF when booking to pay \$15 fare Wellers Rock Wharf, Otago Peninsula



Otago Life Education Trust 11am - 3pm
See page 4 for full details.

Everyday Science Expo, St David Complex, University of Otago, Cnr St David and Castle Streets, Dunedin



SciFest Midday Mania 12.15pm - 12.45pm See page 4 for full details. Daily prizes up for grabs. FREE

Meridian Mall, Ground Level, 285 George St, Dunedin



Ultimate SciFest Treasure Hunt 9.30am - 5pm See page 4 for full details. Win great prizes! FREE

ODT Science Festival HQ, 20 Princes St, Dunedin



University of Otago Expo 9am - 5pm EVERYDAY SCIENCE - 24/7 - 366 FREE

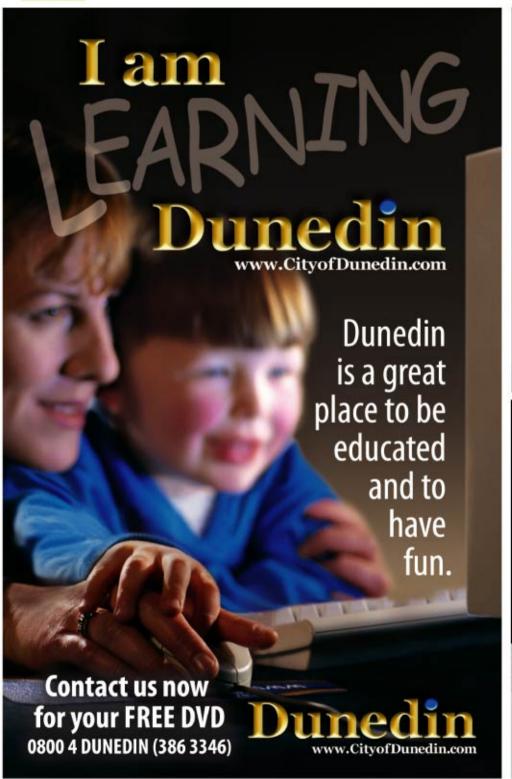
St David Lecture Theatre Complex, University of Otago, Cnr St David & Castle Streets, Dunedin





Freaky Science 2.15pm - 2.45pm BRAINOLOGY: Think Science is boring? Think again! Shocking & surprising experiments investigating our bewildering brain. Call 03 474 7474 to book.

Otago Museum, 419 Great King St, Dunedin





10am - 4pm



## **EXECUTIVE CARS**

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## **New Zealand International Science Festival**

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Dunedin, 5-13 July 2008

#### www.scifest.org.nz

What's on Monday, July 7

#### **ADULTS**

ational Science Feel



Dr Jilly Evans 7.30pm - 8.30pm AGEING WELL: Genes, Lifestyles & Medicines. Living to 90 & beyond is no longer exceptional. Dr Jilly Evans discusses key medicines that have assisted in this change & how this intertwines with genetics & our environment. What will the future hold in our fast-changing society - how will we combat chronic diseases or is there a wonder drug for eternal life? Not to be missed!. Book online www.scifest.org.nz. See page 3 to WIN with pacificblue) \$15 Adult, \$13 Concession

College of Education Auditorium, Ground Floor, 145 Union Street East, Dunedin



Somnium - The Science of Sleep 5.30pm & 8pm LAST CHANCE TO SEE THIS SHOW!

Somnium is a hilarious new science cabaret show exploring the science of sleep. See page 4 for full details. Book at Fortune Theatre 03 477 8323. \$25 Adult, \$20 Group 6+, \$18 Concession Fortune Theatre, Cnr Stuart St & Moray PI, Dunedin.



Barbara Snook DANCING INTO MATHS: A workshop where the participants will solve a few mathematical problems, and in doing so, create a dance & enjoy themselves Barbara Snook is the Caroline Plummer Fellow in

Community Dance at Otago University 2008 and Plummer Fellow in Community Dance at Otago University 2008 and has recently worked as a freelance dance education consultant, doing workshops with Primary school teachers. This session is for Student Teachers only. A public session is available on Thursday 10 July. Bookings Essential. Go online www.scifest.org.nz.

College of Education Auditorium, Ground Floor, 145 Union Street East, Dunedin



Maths In The Head 7pm - 8pm The Numeracy Project has changed the way maths is taught in Primary schools. This presentation covers why it changed, how it changed and what parents can do to help. A must see for parents of 5-12 year olds. Bookings essential as spaces are limited. Call Numberworks on 03 474 1104.

NumberWorks, 90 Crawford Street, Dunedin



Sustainable Living Series - 1 11am - 1pm ENERGY - POWERING DOWN: Join this workshop for a lively discussion on how to reduce your power bill. Find out the relative merits of heating sources, solar hot water, energy efficient appliances and more! Bookings Essential, Go online www.scifest.org.nz. \$5 per person

Seminar Room, Centre for Innovation, University of Otago, 87 St David St, Dunedin

#### **EVERYONE**



A Night With The Stars 7.30pm - 9.30pm Gaze up at the night sky. See page 4 for full details. Presented by Dunedin Astronomical Society. Enquiries to 027 437 4161. \$10 Family, \$4 Adult, \$2 Child Beverley Begg Observatory Cnr City Rd & Ross St, Roslyn, Dunedin



Deep Ocean Experience 12noon - 4.30pm Visit the newly-launched submersible display at the Aquarium. See page 4 for full details. Aguarium entry fee applies NZ Marine Studies Centre & Aquarium, Portobello



Everyday Science Art Exhibition 10am - 4pm

Interiors - Nicola Gibbons, Cranial Hallucinations - Jennifer Fretwell, InterfacE - Claire Beynon. See page 4 for full details. FREE

Hope Gallery, Otago Art Society, 1st Floor, Dunedin Railway Station



Free Health Checks

9am - 3pm

10am - 4pm

1pm - 3pm

See page 4 for full details.

Otago District Health Board, 2nd Floor, Fraser Building, Dunedin Hospital, Cnr Cumberland & Hanover St, Dunedin



Future Food Roadshow

See Page 4 for full details. FREE

Lower Octagon, Dunedin



Gasworks Museum

The Gasworks Museum contains a variety of operational steam-powered pumping engines. Other displays include the domestic use of gas & its production in Dunedin from 1863 until 1987. Enquiries to 03 454 5673.

Entry by donation 20 Braemar St, South Dunedin



# MEET MERIDIAN

# for SCIFEST MIDDAY MANIA

12.15pm to 12.45pm, Saturday 5 July to Friday 11 July

What do YOU know about Everyday Science? You don't have to be a scientist to answer the questions, just bring your family along and give it a go!

Daily prizes up for grabs. Admission is FREE.

Meridian Shopping Centre, Ground Level, 285 George Street, Dunedin.

Interactive science at its best, presented by the NZISF team – with a mad scientist in tow!



# **New Zealand International Science Festival**

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www.scifest.org.nz

Dunedin, 5-13 July 2008



Monarch Wildlife Cruises

HALF-DAY CRUISE: Departs 1pm & 2.30pm See page 4 for full details. Phone 03 477 4276 to book Quote NZISF when booking to pay \$25 fare Cnr Wharf & Fryatt Sts, Dunedin

1-HOUR CRUISE: Departs 2.30pm & 3.30pm See page 4 for full details. Phone 03 477 4276 to book Quote NZISF when booking to pay \$15 fare Wellers Rock Wharf, Otago Peninsula



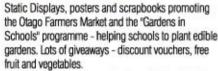
NHNZ X-Force Film Series 3pm - 3.50pm
Join us at the Science Festival for the NHNZ
X-Force Science Series! From the science of
Surfing to the science of Mountain Biking . . . Not
to be missed! No bookings necessary.
Enquiries to Otago Museum 03 474 7474.
Gold Coin Donation

Hutton Theatre, Otago Museum, 419 Great King St,



ODT Science Festival HQ 9.30am - 5pm
This is the hub of the 2008 NZ International
Science Festival. We have heaps of competitions,
interactive displays and cool hands-on stuff for
kids. Everything you need to know about the 2008
Science Festival can be found here. Just come on
in and see for yourself!

TAGO FARMERS MARKET



Go to www.scifest.org.nz for times OFM stall will be attended. Also check out Otago Organics Group, SEA, Sustainable Dunedin City, WindPower Maungatua and more.

FREE

ODT Science Festival HQ, 20 Princes St, Dunedin



Science As Art Photo Exhibition 10am -5pm Otago School of Medical Sciences (OSMS) present their Inaugural 2008 Photography Competition named "Science As Art". View photographs of scientific projects from OSMS students and staff and see for yourself that science IS Art FREE

Sir Clifford Skeggs Gallery, Dunedin Municipal Chambers, The Octagon (up the stairs by the i-Site)



SciFest Midday Mania 12.15pm - 12.45pm See page 4 for full details. Daily prizes up for grabs. FREE

Meridian Mall, Ground Level, 285 George St, Dunedin



Ultimate SciFest Treasure Hunt 9.30am - 5pm See page 4 for full details. Win great prizes! FREE

ODT Science Festival HQ, 20 Princes St, Dunedin

**KIDS** 



A Hand with Everyday Maths 3.30pm & 4.30pm A chance to try out NumberWorks! Book in for your FREE One-hour Mathematics tuition and find out how much fun maths can be. For Year 1-11. Bookings essential. Call NumberWorks on 03 474 1104.

NumberWorks, 90 Crawford St, Dunedin



Brain Box 10am - 10.30 am SECRET COMMUNICATION: HEAD TO TOES - What happens in your brain when you are eating or playing a game? Find out how our brain controls our body & its movements. This activity is suitable for 4-8 year olds. FREE

ODT Science Festival HQ, 20 Princes St, Dunedin



Funky Edible Gardens 10.30am - 11.30am

Leam how to create an edible garden and pot your very
own plant to take home. Bookings essential
www.scifest.org.nz. Daily workshops with Organic
by Design.

Proudly supported by Mitre 10 Mega and The Otago Farmers Market.

ODT Science Festival HQ, 20 Princes St, Dunedin



Robots Rock 10am - 12noon BEGINNERS WORKSHOP - Try your hand at programming robots to complete cool challenges. Suitable for 8-15yr olds. Bookings necessary. Otago Museum 03 474 7474 \$10 per person

Otago Museum, 419 Great King St, Dunedin



Robots Rock 1pm - 3pm

ADVANCED WORKSHOP - Try your hand at programming robots to complete cool challenges. Your imagination's the limit. Suitable for 8-15 year olds. Bookings necessary, call Otago Museum 03 474 7474 \$10 per person

Otago Museum, 419 Great King St, Dunedin



Science Rocks! 11.30am & 2.30pm
Join our keynote, Jilly Evans, a "hip" scientist in a 60minute hands-on interactive workshop for 5-13 year
old. There's an "Elements of Surprise" Scavenger hunt
and an exciting blow-up puzzle to solve. Everyone will
get a Periodic Table of Elements with heaps of
chemistry trivia to amaze your friends & family. Book at
www.scifest.org.nz

ODT

ODT Science Festival HQ, 20 Princes St, Dunedin



The Cadbury World Mad Scientist 11am & 2pm

KIDS ONLY! The Cadbury World Mad Scientist is here to perform some amazing chocolatey tricks & experiments! Spend an hour with our scientist, taste delicious Cadbury Chocolates & try some experiments for yourself! This is a 'Kids Only' event. Book online www.scifest.org.nz.

\$6 per child

Cadbury World, 280 Cumberland St, Dunedin









Dunedin, 5-13 July 2008



### ADULTS



Big Picture Learning 7pm - 8pm THE LEARNING BRAIN: How your brain learns best and what you can do about it! Amazing and practical applications of the newest brain research. Presented by Rakesh Pandey BSc Hons, Advanced Learning Master Level Trainer. Book online at www.scifest.org.nz.

College of Education Auditorium, Ground Floor, 145 Union St East, Dunedin



Distinguished Communicator Series 5.30pm - 6.30pm

MIKE COLOMBO: Frontal Lobotomy - What lies beneath? It's hard to imagine that only 80 years ago a radical procedure was introduced as a viable cure for severe anxiety. This lecture will trace the history of frontal lobotomy, from the early studies in the 1930s through the 1950s when the introduction of antipsychotic medication spelled the demise of the lobotomy procedure. Book online at www.scifest.org.nz.

College of Education Auditorium, Ground Floor, 145 Union St East, Dunedin



Maths In The Head Before 5 6.15pm - 7pm Give your child a head start before they start school. For parents, grandparents and teachers of 3-5 year olds. Bookings essential. Call Numberworks on 03 474 1104.

NumberWorks, 90 Crawford St, Dunedin



Terrific Times Tables 5.15pm - 6pm A smogasbord of ideas for helping children memorise times tables. If you have or teach 7-12 year olds, you won't want to miss this. Bookings essential. Call NumberWorks on 03 474 1104.

NumberWorks, 90 Crawford St, Dunedin



Seaweed Nibbles 5.30pm - 6.30pm SEAWEED. It is tasty, it is good for you & it grows on your doorstep! Hear about the health giving properties of seaweed & how to gather & prepare it. Taste some delicious starters. If you are tempted, stay for dinner, Table Se7en has other Seafood treats on the menu. Call the NZ Marine Studies Centre on 03 479 5826 to book. \$20 per person

Table Se7en, Level 1, Cnr George & Hanover Streets, Dunedin



Sustainable Living Series – 2 11am - 1pm REDUCING YOUR WASTE: This workshop looks at the options for reducing, reusing and recycling your waste in Dunedin. Plus - find out how to avoid 'smelly' bin bags through easy composting. Bookings essential. Go online www.scifest.org.nz. \$5 per person

Seminar Room, Centre for Innovation, University of Otago, 87 St David Street, Dunedin



A Night With The Stars 7.30pm - 9.30pm See page 4 for full details. \$10 Family, \$4 Adult, \$2 Child

Beverley Begg Observatory Cnr City Rd and Ross St. Roslyn, Dunedin



Bird Talk 11am - 11.45am Noisy! - The aviary and surrounding trees are full of bird call - what does it all mean? Come to the aviary in the gardens and listen in.

Children under 10yrs need to be accompanied by an adult. Call 03 474 3868 for bookings.

The Aviary, Upper Botanic Garden, Lovelock Ave, Dunedin



2.45pm - 3.30pm

The Botanic Garden glasshouses are home to jungle predators as ferocious as lions with the appetite of whales and the sting of a bee. Learn about the predators and parasites hiding in the gardens. Children under 10 years need to be accompanied by an adult. Call 03 474 3868 for bookings.

Information Centre, Dunedin Botanic Garden



Deep Ocean Experience 12noon - 4.30pm See page 4 for full details. Aquarium entry fee applies

NZ Marine Studies Centre & Aquarium, Portobello



Everyday Science Art Exhibition 10am - 4pm See page 4 for full details.

3pm - 4pm

Hope Gallery, Otago Art Society, 1st Floor, Dunedin Railway Station

What is it like to be a fish? Do they think? Do they feel

pain? See a shark brain being dissected, and find out



how similar your brain is to that of a fish. Enquiries to the NZ Marine Studies Centre on 03 479 5826. Book online www.scifest.org.rrz. FREE Room 203, 2nd Floor, Zoology Building, University of

Otago, 340 Great King St, Dunedin Free Health Checks 9am - 3pm



See page 4 for full details.

Find Your Inner Fish

2nd Floor, Fraser Building, Dunedin Hospital, Cnr Cumberland & Hanover St, Dunedin

# Wellness checks ... how healthy are you?

The Otago District Health Board's Skills Laboratory will be open to the public for the week of the Science Festival.

Interactive activities daily between 9am and 3pm, (check the noticeboard outside the Fraser Building for session times).

- · take the stairs get your pulse rate checked
- get your blood-glucose level checked
- get your vision checked
- get a breathing (respiratory) check

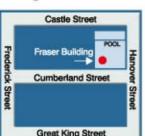
Come and see a model of how the eye works! See how modern technology saves lives.

- see how resuscitation equipment works
- see how CPR (cardiac) equipment works
- see other life-saving scenarios on PC-based simulators

When: Open daily from 9am to 3pm, Saturday 5th July - Sunday 13th July

Where: The Skills Laboratory in the Fraser Building, opposite the car-park entrance to Dunedin Hospital on

Cumberland St, follow the signs.







# **OTAGO** museum CHECK US OUT!

## SciCity® Workshop

Explore the virtual worlds of SciCity in this guided workshop at the Otago Museum. In this popular FREE online game, you can create your own avatar, make movies and earn virtual rewards for your SciCity home! Venture into space, explore underground or travel back in time, and produce films of your discoveries for others to watch. If you want to get the most out of this amazing website, or if you have yet to discover SciCity, this FREE workshop is for you.

Saturday 5, Tuesday 8, Thursday 10 and Saturday 12 July 1pm - 2pm, Otago Museum

Bookings advised as numbers are limited Please contact the Information Desk, ph 03 474 7474

SciCity is a safe, educational, interactive website aimed at 8 -14 year olds Supported by IBM New Zealand, ZeDDD Technology and the New Zealand Government Digital Strategy Fund



## Freaky Science: Brainology

Think science is boring? Think again. Join us for some shocking and surprising experiments as we investigate the bewildering human brain.

Sunday 6, Tuesday 8, Thursday 10 and Sunday 13 July 2.15pm, Atrium Level 1, FREE! No booking required

## Robotech Holiday Programme

Ever wanted to programme robots to do whatever you choose? Join us and make it happen! Programme robots to act like caged animals, toy poodles or sumo wrestlers. Let your imagination run wild!

Beginners Workshop: 10am - 12pm Advanced Workshop: 1pm - 3pm

Mondays, Wednesdays and Fridays during the school holidays Discovery World Computer Lab

Bookings advised as numbers are limited - please contact the Information Desk, ph 03 474 7474, \$10 per child per session, ages 8 – 15

www.scifest.org.nz

Page 9



Future Food Roadshow See page 4 for full details. FREE



10am - 4pm

See page 6 for full details. Entry by donation 20 Braemar St, South Dunedin 1pm - 3pm



Monarch Wildlife Cruises

HALF DAY CRUISE: Departs 1pm & 2.30pm See page 4 for full details. Phone 03 477 4276 to book Quote NZISF when booking to pay \$25 fare Cnr Wharf & Fryatt Sts, Dunedin

1 HOUR CRUISE: Departs 2.30pm & 3.30pm See page 4 for full details. Phone 03 477 4276 to book Quote NZISF when booking to pay \$15 fare Wellers Rock Wharf, Otago Peninsula



NHNZ X-Force Film Series 3pm - 3.50pm See page 7 for full details. Gold Coin Donation

Hutton Theatre, Otago Museum, 419 Great King St, Dunedin



9.30am - 5pm ODT Science Festival HQ This is the hub of the 2008 NZ International Science Festival. We have heaps of competitions, interactive displays and cool hands-on stuff for kids. Everything you need to know about the 2008 Science Festival can be found here. Just come on in and see for yourself! SUSTAINABLE DUNEDIN CITY - A wardrobe of ideas for a sustainable future. A visual display of activities that Sustainable Dunedin City is involved in. Add your own creations and become a member. Come see if our vision for Dunedin matches yours. Also check out Otago Farmers Market, Otago Organics Group, SEA, WindPower Maungatua and more. ODT Science Festival HQ, 20 Princes St, Dunedin



Science As Art Photo Exhibition 10am - 5pm See page 7 for full details.

FREE

Sir Clifford Skeggs Gallery, Dunedin Municipal Chambers, The Octagon (up the stairs by the I-Site)



SciFest Midday Mania 12.15pm - 12.45pm See page 4 for full details. Daily prizes up for grabs. FREE

Meridian Mall, Ground Floor, 285 George St, Dunedin



Ultimate SciFest Treasure Hunt 9.30am - 5pm See page 4 for full details. Be into win great prizes! FREE

ODT Science Festival HQ, 20 Princes St, Dunedin



What Do You People Think? 1.30pm - 2.30pm Ever wondered what's inside people's heads? Using a treasure map, go on a hunt around the Botanic Garden & meet all sorts of characters on your way. Kids under 10 must be accompanied by an adult. Call 03 474 3868 to book.

Information Centre, Dunedin Botanic Garden





A Hand with Everyday Maths 3.30pm & 4.30pm See page 7 for full details. Call NumberWorks on 03 474 1104.

NumberWorks, 90 Crawford St, Dunedin



10am - 10.30am SECRET COMMUNICATION: Suitable for 4-8 year olds. See page 7 for full details.

ODT Science Festival HQ, 20 Princes St, Dunedin



2.15pm - 2.45pm Freaky Science See page 5 for full details. Book at Otago Museum 03 474 7474

Otago Museum, 419 Great King St, Dunedin



10.30am - 11.30am Funky Edible Gardens See page 7 for full details. Book online www.scifest.org.nz.

ODT Science Festival HQ, 20 Princes St, Dunedin



Nothing Is As It Seems

Join us for a hands-on craft programme that features amazing pictures, visual magic tricks, colour effects & optical illusions. Suitable for school children. Bookings essential. Call Dunedin Public Libraries 03 474 3690

DUNEDIN: 10.30am

Dunedin City Library, 230 Moray Place, Dunedin

MOSGIEL: 2pm

Mosgiel Library, Hartstonge Ave, Mosgiel



Ready To Be Challenged? 12.30pm - 1pm Mass Science Challenge. Help Chris KP with a series of intriguing demonstrations. Metric Challenge. How precise are you? A fun hands-on challenge timed to perfection! For ages 8-13. Book online www.scifest.org.nz

ODT Science Festival HQ, 20 Princes St, Dunedin



SciCity Workshops 1pm - 2pm See page 4 for full details. Call Otago Museum 03 474 7474 for bookings.

Otago Museum, 419 Great King St, Dunedin



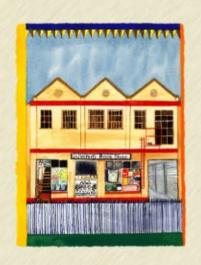
Spaceship Earth 3pm - 4pm Imagine we have to leave Planet Earth and live in a spaceship. What do we need to survive? Food, toys, friends, teachers? Join this interactive workshop. Suitable for 7-12 year olds. Book online www.scifest.org.nz

ODT Science Festival HQ, 20 Princes St, Dunedin



The Cadbury World Mad Scientist 11am & 2pm See page 7 for full details. Book online www.scifest.org.nz.

Cadbury World, 280 Cumberland St, Dunedin



Sa

hose of us lucky enough to live in Dunedin have discovered it already, but visitors to New Zealand's most congenial city have the pleasure of discovering it for the first time all by themselves. No, we're not talking about the Albatross Colony or the Otago Museum (although both are worth a visit).

We are talking about an award-winning book shop - a book shop big enough to lose yourself in and not mind a bit. It's one of Dunedin's best surprises and an absolute must on any visitor's itinerary.

## It's the University Book Shop

378 Great King Street Telephone 477-6976 Fax 477-6571 www.unibooks.co.nz

Open Monday-Friday 8.30 to 5.30 Saturday 9.30 to 3.00 and Sunday 11.00 to 3.00



# NewScientist For people who ask why

On sale every Wednesday where all good magazines are sold.

Dunedin, 5-13 July 2008

# What's on Wednesday, July 9

### **ADULTS**

Supplieral Science Feel



Big Picture Learning 7pm - 8pm
BRAIN POWER: Understanding multiple Intelligences and
Accelerated Learning. What are the techniques used by 'Super
Teachers' and why do they work? Strategies for Families,
Students, Teachers and Managers. Presented by Rakesh Pandey
BSc Hons, Advanced Learning Master Level Trainer. Book
online at www.scifest.org.nz.

College of Education Auditorium, Ground Floor, 145 Union St East, Dunedin



Judith Cullen 5pm
Winter Produce With A TWIST: Wondering what to do
with seasonal Winter Vegetables and Fruits? Join local cooking
guru Judith Cullen as she creates interesting & uncomplicated
recipes using fresh, flavoursome, local ingredients. To book,
phone 03 455 8381 or email cooking@judith-cullen.com
\$55 per person. Price is all-inclusive.

18 Citts Road, St Clair, Dunedin



Professor George Lees
THE ELDERLY EPIDEMIC. This talk will encompass the challenge of biomedical scientists confronting brain diseases." Prof Lees is Head of the Pharmacology Department at Otago University. Presented by The Otago Institute, the Otago Branch of the Royal Society of New Zealand. Book online www.scifest.org.nz.

FREE

Burns 1 Lecture Theatre, University of Otago, off Albany St, Dunerlin



Sustainable Living Series – 3 10.45am - 12.45pm

GO SHOPPING TO SAVE THE PLANET: This workshop discusses the impacts of the products we buy on our environment & health. Become a more conscious (&less stressed!) consumer. Make your own household cleaners. Bookings essential. Go online www.scifest.org.nz.

\$5 per person

Seminar Room, Centre for Innovation, University of Otago, 87 St David Street, Dunedin



The Curious Case of... 12.15pm - 1pm ADHD, AUTISM, DYSPRAXIA & NORMAL SOCIAL DEVELOPMENT. Come to this Café Sci & ask three experts from the University of Otago about the latest research developments. Dione Healey & Ted Ruffman from the Department of Psychology together with Motohide Miyahara from the School of Physical Education will give an overview and answer your questions.

St Lees Restaurant & Coffee Lounge, 50 Dundas St, Dunedin

#### EVERYONE



A Night With The Stars 7.30pm - 9.30pm See page 4 for full details. \$10 Family, \$4 Adult, \$2 Child

Beverley Begg Observatory, Cnr City Rd & Ross St, Roslyn, Dunedin



Bird Talk 11am - 11.45am See page 8 for full details. Call 03 474 3868 for bookings. FREE

The Aviary, Upper Botanic Garden, Lovelock Ave, Dunedin



Bug Wars 2.45pm - 3.30pm See page 8 for full details. Call 03 474 3868 for bookings. FREE

Information Centre, Dunedin Botanic Garden



Deep Ocean Experience 12noon - 4.30pm See page 4 for full details. Aquarium entry fee applies

NZ Marine Studies Centre & Aquarium, Portobello



Everyday Science Art Exhibition 10am - 4pm See page 4 for full details. FREE

Hope Gallery, Otago Art Society, 1st Floor, Dunedin Railway Station



Free Health Checks 9am - 3pm

See page 4 for full details. FREE

2nd Floor, Fraser Building, Dunedin Hospital, Cnr Cumberland and Hanover St, Dunedin



Future Food Roadshow See Page 4 for full details. 10am - 4pm

1pm - 3pm

Lower Octagon, Dunedin

Gasworks Museum See page 6 for full details.

Entry by donation 20 Braemar St, South Dunedin



Here Be Monsters 7.30pm - 8.30pm
DARK JOURNEYS TO THE OCEAN UNDERWORLD:
Peter Batson has travelled from the Equator to the
North Pole in search of deep-sea creatures. In this
lavishly illustrated talk he describes encounters with
the bizarre animals that lurk in perpetual darkness.
Enquiries to the NZ Marine Studies Centre on
03 479 5826. Book online at www.scifest.org.nz
FREE

Heritage Room, Scenic Circle Southern Cross Hotel, Cnr Princes & High Streets, Dunedin



# The Otago Institute

Otago Branch of the Royal Society of New Zealand Supporting science in Otago

#### Speakers Programme for 2008

12 noon Wednesday June 11th Professor Barry Taylor (Dunedin School of Medicine) Burns Lecture Theatre, University

Topic of talk: to be announced.

Science Festival Talk

12 noon Wednesday July 9th Professor George Lees

Department of Pharmacology and Toxicology Burns Lecture Theatre, University

"The elderly epidemic: The challenge for biomedical scientists of confronting brain diseases"

12 noon Wednesday August 13th

Professor Jean Fleming (Centre for Science Communication) Hutton Theatre, Otago Museum

August 13th | Topic of talk: to be announced

12 noon Wednesday September 10th

Professor Robin Taylor (Dunedin School of Medicine) Hutton Theatre, Otago Museum

"Obesity and Asthma"

12 noon Wednesday October 8th

Peter Jaquiery (Dunedin Astronomical Society) Hutton Theatre, Otago Museum

"About Time: a history of how we have measured time"

#### Speakers Programme for 2008 cont ...

12 noon Wednesday November 12th lan McGee (Centre for Science Communication)
Hutton Theatre, Otago Museum

"A Beginners' Guide to Making Cheap and Cheerful Natural History Documentaries"

This talk is followed by the AGM.

The Otago Institute, established in 1869, has a long history of promoting research and, in particular, the public awareness and understanding of science in Otago.

Activities include support of postgraduate conference attendance through the Vincent George House of Travel Award; our monthly public lecture programme, which is freely open to all; and our communicators' programme, which facilitates the engagement between Otago's researchers and community groups. The Institute also acts as the Otago and Southland Branch of the Royal Society of New Zealand. As such, as a member of the Otago Institute, you can join the RSNZ for half-price!

For information on our programmes or how to get involved, contact our Honorary Secretary:

David Hutchinson Phone: 479 5102

Email: hutch@physics.otago.ac.nz

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10am - 10.30am

Dunedin, 5-13 July 2008

www.scifest.org.nz



Monarch Wildlife Cruises

HALF-DAY CRUISE: Departs 1pm & 2.30pm See page 4 for full details. Phone 03 477 4276 to book Quote NZISF when booking to pay \$25 fare Cnr Wharf & Fryatt Sts, Dunedin

1 HOUR CRUISE: Departs 2.30pm & 3.30pm See page 4 for full details. Phone 03 477 4276 to book Quote NZISF when booking to pay \$15 fare Wellers Rock Whart, Otago Peninsula

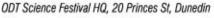


NHNZ X-Force Film Series 3pm - 3.50pm Join us at the Science Festival for the NHNZ X-Force Science Series! See page 7 for full details. Gold Coin Donation

Hutton Theatre, Otago Museum, 419 Great King St. Dunedin



9.30am - 5pm ODT Science Festival HQ This is the hub of the 2008 NZ International Science Festival. We have heaps of competitions, interactive displays and cool hands-on stuff for kids. Everything you need to know about the 2008 Science Festival can be found here. Just come on in and see for yourself! OTAGO ORGANICS GROUP - See our interactive displays - soil samples, worm farm and 'Pot' experiment. Static Display highlighting critical factors, especially soil management, affecting sustainable and organic food production, for both the home and commercial grower. Also check out Otago Farmers Market, SEA, Sustainable Dunedin City, WindPower Maungatua and more.





Science As Art Photo Exhibition 10am - 5pm See page 7 for full details. FREE

Sir Clifford Skeggs Gallery, Dunedin Municipal Chambers, The Octagon (up the stairs by the i-Site)



SciFest Midday Mania 12.15pm - 12.45pm See page 4 for full details. Daily prizes up for grabs.

Meridian Mall, Ground Level, 285 George St, Dunedin



Ultimate SciFest Treasure Hunt 9.30am - 5pm

See page 4 for full details. Be in to win great prizes!

ODT Science Festival HQ, 20 Princes St, Dunedin



What Do You People Think? 1.30pm - 2.30pm See page 9 for full details. Call 03 474 3868 for bookings.

Information Centre, Dunedin Botanic Garden





A Hand with Everyday Maths 3.30pm & 4.30pm

See page 7 for full details. Call NumberWorks on 03 474 1104. Book in for your free 1-hour mathematics tuition.

NumberWorks, 90 Crawford St, Dunedin



A Waste Of A Workshop 10.30am - 11.15 am

Would you like to be a real Resource Recoverer? Do you know how to make the most of the materials you no longer need or want? Find out how you can recycle even more of your waste. Rock on in to our festival HQ, no bookings

ODT Science Festival HQ, 20 Princes St, Dunedin



Brain Box See page 7 for full details.

ODT Science Festival HQ, 20 Princes St, Dunedin



Funky Edible Gardens 10.30am - 11.30am See page 7 for full details. Book online www.scifest.org.nz.

ODT Science Festival HQ, 20 Princes St, Dunedin



Nothing Is As It Seems 11am See page 9 for full details. Call Dunedin Public Libraries 03 474 3690. This event is at Waikouaiti Library.

Waikouaiti Library, Main Road, Waikouaiti



Otago Life Education Trust 11am - 3pm See page 4 for full details. This event is in the Lower Octagon FREE

Lower Octagon, Dunedin



10am - 12noon Robots Rock BEGINNERS WORKSHOP: See page 7 for full details. Call Otago Museum 03 474 7474 for bookings.

Otago Museum, 419 Great King St, Dunedin



Robots Rock 1pm - 3pm ADVANCED WORKSHOP: See page 7 for full details. Call Otago Museum 03 474 7474 for bookings. \$10 per person

Otago Museum, 419 Great King St, Dunedin



The Cadbury World Mad Scientist 11am & 2pm KIDS ONLY! See page 7 for full details. Book online www.scifest.org.nz. \$6 per child

Cadbury World, 280 Cumberland St, Dunedin





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10am - 4pm

1pm - 3pm

www.scifest.org.nz

Dunedin, 5-13 July 2008

# What's on Thursday, July 10

### **ADULTS**

auditoral Science Festing



Professor Fiona Stanley 7.30pm - 8.30pm IMPROVING HEALTH: Whose responsibility? Despite rapid advances in medical treatments and increased standards of living, most countries are battling spiralling health costs. There is an increasing complexity of the problems affecting children and young people in this millennium. Chronic diseases such as obesity and diabetes are on the rise, along with mental health issues and behavioural problems. Professor Stanley will argue narrow interventions that focus on the individual and address single risk factors are destined to fail. Worse, they often result in blame being levelled at the victim or the system. The health system alone cannot improve a population's health. Find out what is needed. Supported by the Australian High Commission. Book online www.scifest.org.nz. See page 3 to WIN with pacificblue) \$15 Adult, \$13 Concession

College of Education Auditorium, Ground Floor, 145 Union St East, Dunedin



Barbara Snook 10.30am

DANCING INTO MATHS - A workshop where the participants will solve a few mathematical problems, and in doing so, create a dance and enjoy themselves. Barbara Snook is the Caroline Plummer Fellow in Community Dance at Otago University 2008 and has recently worked as a freelance dance education consultant, doing workshops with Primary school teachers. This public session is open to everyone. Bookings essential. Go online www.scifest.org.nz.

College of Education Auditorium, Ground Floor, 145 Union St East, Dunedin



Breakfast with Bernard Beckett 7.30am - 8.30am

Join us as we interview Bernard Beckett on how to inspire young people to get involved in science and why he finds science so fascinating! As a novelist and storyteller by nature, Bernard is fascinated by the delicate balance between scientific discovery and personal storytelling. Recipient of the Royal Society 2005 Teacher Fellowship and proudly supported by the Royal Society of New Zealand. Go online for bookings and menu www.scifest.org.nz.

\$20 per person

Scotia Restaurant & Whisky Bar, Dunedin Railway



Sustainable Living Series – 4 11am - 1pm GARDENING SUSTAINABILITY: A stimulating workshop for budding and seasoned vege gardeners alike! Learn how to make your backyard more environmentally sustainable. Share tips on getting your vegetables to flourish in Dunedin!

Bookings essential www.scifest.org.nz. \$5 per person

Seminar Room, Centre for Innovation, University of Otago, 87 St David St, Dunedin



Orokonui Ecosanctuary 5.30pm – 6pm THE JEWELLED GECKO - A 30min presentation on the Orokonui Ecosanctuary Restoration Project, using the translocation of threatened Jewelled Gecko as an example of the science involved. Proudly supported by Alumni Office, University of Otago. Book at www.scifest.org.nz

Heritage Room, Scenic Circle Southern Cross Hotel, Cnr Princes & High Streets, Dunedin

### **EVERYONE**



A Night With The Stars 7.30pm - 9.30pm See page 4 for full details. Presented by Dunedin Astronomical Society.

\$10 Family, \$4 Adult, \$2 Child

Beverley Begg Observatory, Cnr City Rd & Ross St, Roslyn, Dunedin



11am - 11.45am See page 8 for full details. Call 03 474 3868 for bookings.

The Aviary, Upper Botanic Garden, Lovelock Ave, Dunedin



2.45pm - 3.30pm See page 8 for full details. Call 03 474 3868 for bookings.

FREE Information Centre, Dunedin Botanic Garden



12noon - 4.30pm Deep Ocean Experience See page 4 for full details.

Aguarium entry fee applies

NZ Marine Studies Centre & Aquarium, Portobello



Do Fish Sleep? 7.30pm - 9pm Visit the Aquarium after darkl. Find out what fish do at

night and in the depths of the oceans where it is dark all the time. Phone NZ Marine Studies Centre on 03 479 5826 for enquiries and bookings. Bookings essential.

Aguarium Guided Tour fee applies NZ Marine Studies Centre & Aquarium, Portobello



Everyday Science Art Exhibition 10am - 4pm See Page 4 for full details. FREE

Hope Gallery, Otago Art Society, 1st Floor, Dunedin Railway Station



Free Health Checks

See page 4 for full details.

Otago District Health Board, 2nd Floor, Fraser Building, Dunedin Hospital, Cnr Cumberland and Hanover St, Dunedin



Future Food Roadshow See page 4 for full details. FREE

Lower Octagon, Dunedin



Gasworks Museum See page 6 for full details. Entry by donation



Monarch Wildlife Cruises

20 Braemar St, South Dunedin

HALF-DAY CRUISE: Departs 1pm & 2.30pm See page 4 for full details. Come and ask PhD student Amélie Augé questions about the research project: Satellite tracking of Sea Lions. Its results confirm the marine environment of the Otago Peninsula is special. Phone 03 477 4276 to book

Quote NZISF when booking to pay \$25 fare Cnr Wharf & Fryatt Sts, Dunedin

1-HOUR CRUISE: Departs 2.30pm & 3.30pm See page 4 for full details. Phone 03 477 4276 to book Quote NZISF when booking to pay \$15 fare Wellers Rock Wharf, Otago Peninsula



NHNZ X-Force Film Series 3pm - 3.50pm

For page 7 for full details. **Gold Coin Donation** 

Hutton Theatre, Otago Museum, 419 Great King St, Dunedin



ODT Science Festival HQ 9.30am - 5pm This is the hub of the 2008 NZ International Science

displays and cool hands-on stuff for kids. Everything you need to know about the 2008 Science Festival can be found here. Just come on in and see for yourself! YOUR PERSONAL UPSHOT - Test yourself! Join 4th year students from the School of Physical Education. Try a vertical jump, check your reaction time hitting a virtual ball with a cricket bat or confuse your brain with a stroop test. Also check out Otago Farmers Market, Otago Organics Group, SEA, Sustainable Dunedin City,

WindPower Maungatua and more.

ODT Science Festival HQ, 20 Princes St, Dunedin



Otago Life Education Trust 11am - 2.30pm See page 4 for full details. This event is in the Lower Octagon

Lower Octagon, Dunedin



Science As Art Photo Exhibition 10am - 5pm See page 7 for full details.

FREE

Sir Clifford Skeggs Gallery, Dunedin Municipal Chambers, The Octagon (up the stairs by the i-Site)



9am - 3pm

SciFest Midday Mania 12.15pm - 12.45pm See page 4 for full details. Daily prizes up for grabs.

Meridian Mall, Ground Level, 285 George St, Dunedin



Looking for a fun weekend?

Ultimate SciFest Treasure Hunt See page 4 for full details. Be in to win great prizes!

ODT Science Festival HQ, 20 Princes St, Dunedin





Southern Cross Hotel & Casino or the modern contemporary Scenic Circle Dunedin City Hotel on a Friday, Saturday or Sunday night and get two adult tickets to either the famous Speights Brewery Tour or the brand new Otago Museum Tropical Forest

Stay at our classic Scenic Circle

and live Butterfly Experience.\*

To book phone the 0800 number or email and quote the booking number DNDWRO: dunedin.city@scenic-circle.co.nz southern.cross@scenic-circle.co.nz

www.scenic-circle.co.nz 0800 NZ OWNED (0800 69 69 63)



Valid for the period I May - 30 September 2008.

\* Conditions apply. Accommodation offer includes up to two adults and two children 14 years or under per night. Subject to availability.





Thursday 10th ... cont

## **NZISF**

Page 13

Dunedin, 5-13 July 2008

www.scifest.org.nz



#### What Do You People Think?

1.30pm - 2.30pm

Ever wondered what's inside people's heads? Using a treasure map, go on a hunt around the Botanic Garden & meet all sorts of characters on your way. Kids under 10 must be accompanied by an adult. Call 03 474 3868 to book.

FREE

Information Centre, Dunedin Botanic Gardens

### KIDS



A Hand with Everyday Maths 3.30pm & 4.30pm

A chance to try out NumberWorks! Book in for your FREE One-hour Mathematics tuition and find out how much fun maths can be. For Year 1-11. Bookings essential. Call NumberWorks on 03 474 1104.

FREE

NumberWorks, 90 Crawford St, Dunedin



ain Box 10am - 10.30am

SECRET COMMUNICATION: HEAD TO TOES - What happens in your brain when you are eating or playing a game? Find out how our brain controls our body & its movements. This activity is suitable for 4-8 year olds.

FREE

ODT Science Festival HQ, 20 Princes St, Dunedin



Freaky Science

2.15pm – 2.45pm

BRAINOLOGY: Think Science is boring? Think again! Shocking & surprising experiments investigating our bewildering brain. Call 03 474 7474 to book.

Otago Museum, 419 Great King St, Dunedin



#### Funky Edible Gardens

10.30am - 11.30am

Learn how to create an edible garden and pot your very own plant to take home. Bookings essential www.scifest.org.nz. Daily workshops with Organic by Design. Proudly supported by Mitre 10 Mega and The Otago Farmers Market.

ODT Science Festival HQ, 20 Princes St, Dunedin



#### Nothing Is As It Seems

11am

Join us for a hands-on craft programme that features amazing pictures, visual magic tricks, colour effects & optical illusions. Suitable for school children. Bookings essential. Call Dunedin Public Libraries 03 474 3690. This event is at Port Chalmers Library. FREE

Port Chalmers Library, 20 Beach St, Port Chalmers



SciCity Workshop

1pm - 2p

Explore SciCity, the popular virtual online game! Dress your avatar, earn rewards and make movies of your discoveries! Learn how to get the most out of this website, or come along to get started in this FREE workshop. Suitable for 8-14 year olds. Bookings necessary as space is limited. Call Otago Museum 03 474 7474 to book.

FREE

Otago Museum, 419 Great King St, Dunedin



Spaceship Earth

3pm - 4pm

Imagine we have to leave Planet Earth and live in a spaceship. What do we need to survive? Food, toys, friends, teachers? Join this interactive workshop. Suitable for 7-12 year olds. Book online www.scifest.org.nz

FREE

ODT Science Festival HQ, 20 Princes St, Dunedin



The Cadbury World Mad Scientist

11am & 2pm

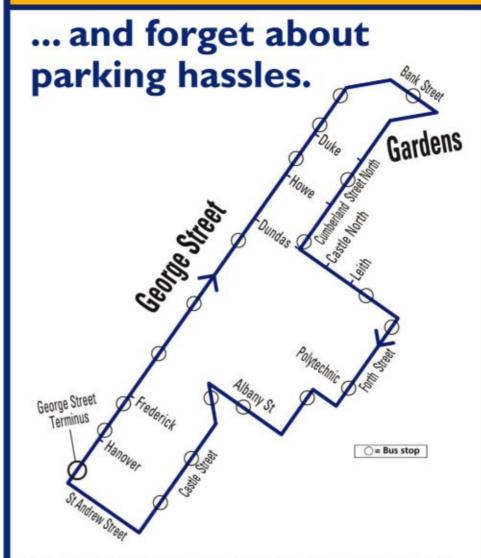
KIDS ONLY! The Cadbury World Mad Scientist is here to perform some amazing chocolatey tricks & experiments! Spend an hour with our scientist, taste delicious Cadbury Chocolates & try some experiments for yourself! This is a 'Kids Only' event. Book online www.scifest.org.nz.

\$6 per child

Cadbury World, 280 Cumberland St, Dunedin



# Take a bus around Dunedin and the NZ International Science Festival...



The campus circuit runs every 15 minutes and can take you to many of Dunedin's facilities and the main festival events.



GoCard is the easy way to pay fares. There's no need for cash - just load it up, board your bus, card's read, and you're on your way. And GoCard gives you 10% discount on the cash fare.

Get a GoCard from any GoBus or the ORC and DCC offices.

For more information phone 474 0287 or see www.orc.govt.nz





www.scifest.org.nz

# Friday, July 11

### **ADULTS**



Geoff Henderson 7.30pm - 8.30pm WINDPOWER: The New Oil? Geoff Henderson, CEO of Windflow Technology Ltd, will address the big-picture issues of the future of wind power in NZ; the environmental issues around wind power, in particular landscape issues; and consider the two "visions" of wind power currently being promoted in NZ. Book online www.scifest.org.nz. See page 3 to WIN with pacificblue)

\$15 Adult, \$13 Concession College of Education Auditorium, Ground Floor, 145 Union St East, Dunedin



Energy At A Low Ebb 5.30pm - 6.30pm IMAGINE HOW THE PLANET FEELS. Join our guest speakers at this Café Sci and hear about issues surrounding our planet - Peak Oil, Government Initiatives & the effect it has on our everyday wellbeing. Speakers include: Assoc. Prof. Bob Lloyd, Hon. David Parker, Prof. Philippa Howden-Chapman & Prof. Gerry Carrington. Proudly supported by the Alumni Office, University of Otago.

St David Lecture Theatre, University of Otago, Cnr St David and Castle St, Dunedin



Professor Philippa Howden-Chapman 12.15pm - 1pm

WHAT'S THE REAL COST OF MOULD IN YOUR HOME? An action-packed presentation by Professor Philippa Howden-Chapman on the research & statistics associated with our poorly insulated homes. What is the health, environmental, cultural and social cost to our society and are solutions readily available? Bookings online www.scifest.org.nz.

The Academy Cinema, 50 Dundas St, Dunedin



Sustainable Living Series - 5 11am - 1pm WATER: Collecting, conserving and keeping clean. This workshop reveals how precious Dunedin's tap water really is. Find out how households pollute and waste this water, and what we can do to protect this resource. Bookings essential www.scifest.org.nz. \$5 per person

Seminar Room, Centre for Innovation, University of Otago, 87 St David St, Dunedin

#### **EVERYONE**



A Night With The Stars 7.30pm - 9.30pm Gaze up at the night sky. See page 4 for full details. Presented by Dunedin Astronomical Society. Enquiries to 027 437 4161.

\$10 Family, \$4 Adult, \$2 Child

Beverley Begg Observatory, Cnr City Rd & Ross St, Roslyn, Dunedin



Deep Ocean Experience 12noon - 4.30pm Visit the newly-launched submersible display at the Aquarium. See page 4 for full details. Aquarium entry fee applies NZ Marine Studies Centre & Aquarium, Portobello



Everyday Science Art Exhibition 10am - 4pm See page 4 for full details.

Hope Gallery, Otago Art Society, 1st Floor, Dunedin Railway Station



Free Health Checks See page 4 for full details.

Presented by Otago District Health Board, 2nd Floor, Fraser Building, Dunedin Hospital, Cnr Cumberland and Hanover St, Dunedin



Future Food Roadshow See page 4 for full details.

Lower Octagon, Dunedin



Gasworks Museum See page 6 for full details. Entry by donation 20 Braemar St, South Dunedin

1pm - 3pm

10am - 4pm

9am - 3pm



Monarch Wildlife Cruises

HALF-DAY CRUISE: Departs 1pm & 2.30pm See page 4 for full details. Come and ask PhD student, Amélie Augé questions about the research project: Satellite tracking of Sea Lions. Its results confirm the marine environment of the Otago Peninsula is special. Phone 03 477 4276 to book

Quote NZISF when booking to pay \$25 fare Cnr Wharf & Fryatt Sts, Dunedin

1 HOUR CRUISE: Departs 2.30pm & 3.30pm See page 4 for full details. Phone 03 477 4276 to book Quote NZISF when booking to pay \$15 fare Wellers Rock Wharf, Otago Peninsula



Are you new to Dunedin and looking to make more business contacts?

#### Not sure what to do with your new degree?

bioSouth is Otago's biotechnology and technology network. Members discuss and collaborate on links between research and industry, facilitating business development and growing existing businesses.

bioSouth

Come to a bioSouth event and make the contacts you need! To be added to the mailing list for open events such as the biannual Technology Business in Action showcase, or to join bioSouth, email sbooth@abacusbio.co.nz or call (03) 477 6375 www.nzbio.org.nz/bioSouth

## EXECUTIVE CARS

are proud to support the New Zealand International Science Festival



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email: info@executivecars.co.nz, www.executivecars.co.nz Freephone 0800 567 000, tel 03 477 3144, fax 03 477 3145



The Cadbury World Mad Scientist is here to perform some amazing chocolaty tricks and experiments!



Visit Cadbury World, taste delicious Cadbury Chocolates and try some experiments for yourself...

Shows at 11am and 2pm 7 - 11th July \$6 per person

> **Bookings essential through** www.scifest.org.nz enquiries call o800 CADBURY



NHNZ X-Force Film Series 3pm - 3.50pm See page 7 for full details.

**Gold Coin Donation** 

Hutton Theatre, Otago Museum, 419 Great King St, Dunedin



ODT Science Festival HQ 9.30am - 5pm
This is the hub of the 2008 NZ International Science
Festival. We have heaps of competitions, interactive
displays and cool hands-on stuff for kids. Everything
you need to know about the 2008 Science Festival can
be found here. Just come on in and see for yourself!
WINDPOWER MAUNGATUA - A display showing the
proposed development of a wind farm to provide
electricity for Dunedin, located on the western slopes
of the Maungatua block - a renewable energy option
for our city? Come see our wind turbine model and
video display. Also check out Otago Farmers Market,
Otago Organics Group, SEA, Sustainable Dunedin City,
& more.



Science As Art Photo Exhibition 10am - 5pm Otago School of Medical Sciences (OSMS) present their Inaugural 2008 Photography Competition named "Science As Art". View photographs of scientific projects from OSMS students and staff and see for yourself that science IS art! FREE

ODT Science Festival HQ, 20 Princes St, Dunedin

Sir Clifford Skeggs Gallery, Dunedin Municipal Chambers, The Octagon (up the stairs by the i-Site)



SciFest Midday Mania 12.15pm - 12.45pm See page 4 for full details. Daily prizes up for grabs. FREE

Meridian Mall, Ground Level, 285 George St, Dunedin



Ultimate SciFest Treasure Hunt 9.30am - 5pm

Do you know your way around? Pick up a treasure map at our Festival HQ, follow the hints to Science Festival venues throughout the city, and learn fascinating facts about science on the way.

Mastered the challenge? Bring your map back to our ODT Science Festival HQ and you'll be in the draw to win great prizes!

ODT Science Festival HQ, 20 Princes St, Dunedin

### KIDS



A Hand with Everyday Maths 3.30pm & 4.30pm

A chance to try out NumberWorks! Book in for your FREE 1-hour mathematics tuition and find out how much fun maths can be. For Year 1 -11. Bookings essential. Call NumberWorks on 03 474 1104.

NumberWorks, 90 Crawford St, Dunedin



Brain Box 10am - 10.30am SECRET COMMUNICATION: HEAD TO TOES - What happens in your brain when you are eating or playing a game? Find out how our brain controls our body & its movements. This activity is suitable for 4-8 year olds.

ODT Science Festival HQ, 20 Princes St, Dunedin



Funky Edible Gardens 10.30am - 11.30am
Leam how to create an edible garden and pot your very
own plant to take horne. Bookings essential
www.scifest.org.nz. Daily workshops with Organic by
Design. Proudly supported by Mitre 10 Mega and The
Otago Farmers Market.

ODT Science Festival HQ, 20 Princes St, Dunedin



Nothing Is As It Seems

Join us for a hands-on craft programme that features amazing pictures, visual magic tricks, colour effects, & optical illusions. Suitable for school children. Bookings essential. Call Dunedin Public Libraries 03 474 3690. This event is at Blueskin Bay Library.

FREE

Blueskin Bay Library, Harvey St, Waitati



Robots Rock 10am -12noon

BEGINNERS WORKSHOP - Try your hand at programming robots to complete cool challenges. Your imagination's the limit. Suitable for 8-15yr olds. Bookings necessary. Phone Otago Museum 03 474 7474

\$10 per person

Otago Museum, 419 Great King St, Dunedin



Robots Rock 1pm - 3pm
ADVANCED WORKSHOP - Try your hand at
programming robots to complete cool challenges. Your
imagination's the limit. Suitable for 8-15 year olds.
Bookings necessary, phone Otago Museum 03 474 7474

Otago Museum, 419 Great King St, Dunedin



The Cadbury World Mad Scientist 11am & 2pm

KIDS ONLY! The Cadbury World Mad Scientist is here to perform some amazing chocolatey tricks & experiments! Spend an hour with our scientist, taste delicious Cadbury Chocolates & try some experiments for yourself! This is a 'Kids Only' event. Book online www.scifest.org.nz.

\$6 per child

Cadbury World, 280 Cumberland St, Dunedin







GEOGRAPHIC

In the next issue we'll travel to prehistoric New Zealand to look at dinosaurs and the other beasts that roamed our lands. We'll also take to the wing with albatross, the majestic seabird. We'll explore viticulture, kingitanga, the clash of sport with politics, and include regular features: Science Scan, Mind, Weather and more...

DON'T MISS YOUR COPY!
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Freephone: 0800 782 436 online: www.nzgeographic.co.nz email: subs@nzgeographic.co.nz

# What's on Saturday, July 12

#### **ADULTS**

al National Science Fest



Sustainable Living Series – 6 11am - 1pm TRANSPORT: Travelling more sustainably. This workshop explores the pros and cons of private car use. We investigate transport alternatives as well as ways to run our cars efficiently, reduce use and share trips. Bookings essential. Go online www.scifest.org.nz \$5 per person

Seminar Room, Centre for Innovation, University of Otago, 87 St David St, Dunedin



The Secret Life Of Seaweeds 5.30pm What do sushi, chocolate milk, bandages and toothpaste have in common? Dr Wendy Nelson explains how you encounter seaweeds in your everyday life! Supported by the New Zealand Marine Sciences Society.

Hutton Theatre, Otago Museum, 419 Great King St, Dunedin

### **EVERYONE**



A Night With The Stars 7.30pm - 9.30pm Stargazing – Gaze up at the night sky with telescopes. Enjoy what local astronomers have to say about the night sky and have your questions answered. The use of telescopes is weather permitting. Presented by Dunedin Astronomical Society. Enquiries to 027 437 4161. \$10 Family, \$4 Adult, \$2 Child

Beverley Begg Observatory, Cnr City Rd and Ross St, Roslyn, Dunedin



Deep Ocean Experience 12noon - 4.30pm
Visit the newly-launched submersible display at the
Aquarium and discover what it is like to dive beneath
the waves to discover the mysteries of the deep oceans.
Enquiries to the NZ Marine Studies Centre on 03 479
5826.

Aquarium entry fee applies NZ Marine Studies Centre & Aquarium, Portobello



Everyday Science Art Exhibition 10am - 4pm Cranial Hallucinations - Jennifer Fretwell's exhibition of Ceramic Heads and other skeletally inspired creations. Made from recycled paper clay, they embody the artist's attempt toward spontaneity and the unplanned mind.



InterfaCE - is a collaborative installation depicting aspects of an ongoing investigative conversation between Dunedin artist Claire Beynon and New York based polar scientist Samuel Bowser. It combines original research material with SEM photographs and interpretative charcoal drawings.



Interiors - The paintings of Nicola Gibbons explore & visualise worlds that are normally hidden from view; alluring textural paintings investigate interior scapes of the human body, the inner mechanics at work.

FREE

Hope Gallery, Otago Art Society, 1st Floor, Dunedin Railway Station



Free Health Checks 9am - 3pm

We offer Free Health Checks: Blood Pressure, Pulse, Blood Sugar Levels, Simple Eye Test, Height, Weight, Waist Measurement, Peak Flow Measurement. See displays of instruments and models used to teach Health Professionals Clinical Skills. Suitable for all ages 12+.

FREE Otago Distri

Otago District Health Board, 2nd Floor, Fraser Building, Dunedin Hospital, Cnr Cumberland and Hanover Streets



Future Food Roadshow
See page 4 for full details.
FREE

Lower Octagon, Dunedin



Monarch Half-Day Cruise 1pm & 2.30pm
The best of Otago Peninsula and its wildlife. Cruise the
22km length of the beautiful Otago Harbour with
unrivalled wildlife viewing around Taiaroa Head. Enjoy
a Scenic Bus tour of the Spectacular Otago Peninsula
on your return to Dunedin. Call Monarch 03 477 4276.
Tour normally costs \$80 per adult. Quote NZISF when
booking to receive \$25 fare (per person)
Departs 1pm & 2.30pm. Cor What and Fryatt Streets.

Departs 1pm & 2.30pm, Cnr Wharf and Fryatt Streets, Dunedin



Monarch 1-Hour Cruise 2.30pm & 3.30pm Unrivalled viewing of albatross, seals, bird and marine life (up to 20 species) around Taiaroa Head by boat, all in their natural environment. See what cannot be seen from land. This cruise departs Wellers Rock Wharf, situated on the Otago Peninsula, 45 minutes from Dunedin City. Call Monarch 03 477 4276. Tour normally costs \$40 per adult. Quote NZISF when booking to receive \$15 fare (per person)

Departs 2.30pm & 3.30pm, Wellers Rock Wharf, Otago Peninsula



Science As Art Photo Exhibition 10am - 5pm
Otago School of Medical Sciences (OSMS) present their
Inaugural 2008 Photography Competition named "Science As
Art". View photographs of scientific projects from OSMS
students and staff and see for yourself that science IS Art!
FREE

Sir Clifford Skeggs Gallery, Dunedin Municipal Chambers, The Octagon (up the stairs by the i-Site)



ODT Science Festival HQ 9.30am - 5pm

This is the hub of the 2008 NZ International Science Festival. We have heaps of competitions, interactive displays and cool hands-on stuff for kids. Everything you need to know about the 2008 Science Festival can be found here. Just come on in and see for yourself! FREE

ODT Science Festival HQ, 20 Princes St, Dunedin



Ultimate SciFest Treasure Hunt 9.30am - 5pm

Do you know your way around? Pick up a treasure map at our Festival HQ, follow the hints to Science Festival venues throughout the city, and learn fascinating facts about science on the way. Bring your map back to our ODT Science Festival HQ. Be in to win great prizes! FREE

ODT Science Festival HQ, 20 Princes St, Dunedin



Undersea Antarctica 3pm - 4pm WHAT LIVES IN THE WORLD'S COLDEST WATERS? Find out about the daily life of a marine scientist in the Antarctic! Dr David Bowden, was on board the RV Tangaroa when it made a seven-week voyage to study the marine biodiversity of the Ross Sea. He will talk about life on board, the remarkable specimens they discovered and why Antarctica is important. Enquiries to the NZ Marine Studies Centre on 03 479 5826 or Otago Museum on 03 474 7474.

Hutton Theatre, Otago Museum, 419 Great King St, Dunedin



What's Best Expo 9.30am - 4pm
Check out sustainable products, learn about
environmentally friendly services and find out What's
Best for you! Exhibitors are invited based on a rating
system to assess how businesses operate and
manufacture in an environmentally restorative, socially
responsible and financially viable way.

Otago Polytechnic Student Centre, Harbour Terrace, Dunedin

### KIDS



Brain Box 10am - 10.30am SECRET COMMUNICATION: HEAD TO TOES - What happens in your brain when you are eating or playing a game? Find out how our brain controls our body and its movements. This activity is suitable for 4-8 year olds. FREE

ODT Science Festival HQ, 20 Princes St, Dunedin



SciCity Workshop 1pm - 2pm
Explore SciCity, the popular virtual online game!
Dress your avatar, earn rewards and make movies of
your discoveries! Learn how to get the most out of
this website, or come along to get started in this
FREE workshop. Suitable for 8-14 year olds.
Bookings necessary as space is limited. Call Otago
Museum 03 474 7474 to book.

Otago Museum, 419 Great King St, Dunedin



Spaceship Earth 3pm - 4pm Imagine we have to leave Planet Earth and live in a spaceship, travelling through the universe — what do we need on the spaceship? Food, toys, friends, teachers? Come and join this creative and interactive hour long workshop. Suitable for 7-12 year olds.

ODT Science Festival HQ, 20 Princes St, Dunedin



is open every Saturday morning through the year 8am-12.30pm.



FARMERS MARKET OT A G O FARMERS MARKET



The world is constantly changing - You only have to look back 100 years to see how far things have come: war and peace, politics, science, industry, arts, and all the in-between things that have touched our lives for better or worse. We've been keeping you informed and letting you know what's going on in your backyard and beyond for more than 140 years. What will tomorrow bring? For full coverage of the Science Festival pick up a copy of the Otago Daily Times and start reading, or for more information visit . . .

www.odt.co.nz/campus

## **Otago Daily Times**

Proud supporters of the Science Festival 2008

# Making a hard choice easier

# showcasing sustainable products and services



## best =



Cyclic creating no waste



Safe ensuring t's harmless



Efficient running with less



Social good for people



**DUNEDIN** 

12 July, 9.30am to 4.00pm Student Centre, Otago Polytechnic Dunedin Campus In conjunction with the NZ International Science Festival

**CROMWELL** 

25 October, 9.30am to 4.00pm Otago Polytechnic Cromwell Campus In conjunction with the Otago Polytechnic Giant Plant Sale













www.scifest.org.nz

# What's on Sunday, July 13

#### **EVERYONE**



A Night With The Stars 7.30pm - 9.30pm Stargazing - Gaze up at the night sky. See page 4 for full details. Presented by Dunedin Astronomical Society. \$10 Family, \$4 Adult, \$2 Child Beverley Begg Observatory, Cnr City Rd and Ross St, Roslyn, Dunedin



Deep Ocean Experience 12noon - 4.30pm Visit the newly-launched submersible display at the Aquarium. See page 4 for full details. Aquarium entry fee applies NZ Marine Studies Centre & Aquarium, Portobello



Everyday Science Art Exhibition

10am - 4pm

Interface - Claire Beynon. Interiors - Nicola Gibbons. Cranial Hallucinations - Jennifer Fretwell. See Page 4 for full details.

Hope Gallery, Otago Art Society, 1st Floor, Dunedin Railway Station



Free Health Checks See page 4 for full details.

9am - 3pm

Otago District Health Board, 2nd Floor, Fraser Building. Dunedin Hospital, Cnr Cumberland & Hanover St, Dunedin



**Future Food Roadshow** See page 4 for full details.

Lower Octagon, Dunedin



#### ODT Science Festival HQ 9.30am - 4pm

This is the hub of the 2008 NZ International Science Festival. We have heaps of competitions, interactive displays and cool hands-on stuff for kids. Everything you need to know about the 2008 Science Festival can be found here. Just come on in and see for yourself!



SEA - Brought to you by the Students For Environmental Action (SEA) of the University of Otago. This is an exhibition that YOU will complete. What do you love about the 'sea'. Bring a picture of your favourite beach, marine wildlife or water sport and add your personal thoughts and ideas. Also check out Otago Farmers

Market, Otago Organics Group, Sustainable Dunedin City, WindPower Maungatua and more.

ODT Science Festival HQ, 20 Princes St, Dunedin



Monarch Wildlife Cruises HALF-DAY CRUISE: Departs 1pm & 2.30pm

See page 4 for full details. Phone 03 477 4276 to book Quote NZISF when booking to pay \$25 fare Cnr Wharf & Fryatt Sts, Dunedin

1-HOUR CRUISE: Departs 2.30pm & 3.30pm See page 4 for full details. Phone 03 477 4276 to book Quote NZISF when booking to pay \$15 fare Wellers Rock Wharf, Otago Peninsula



10am - 4pm

Reducing Our Carbon Footprint 1pm - 4pm Join us on our last day of the Festival. Travel by bus from ODT Science Festival HQ to Smaill's Beach, Otago Peninsula. Help us plant 800 trees. Enjoy a barbecue and refreshments provided by the Tomahawk Smaills Beach Trust, All proceeds will be donated to the WWF-Malaysia's Orangutan Appeal. Seats are limited. Bookings essential. Book online www.scifest.org.nz.

\$10 per person or \$25 family Bus departs ODT Science Festival HQ, 20 Princes St at



Science As Art Photo Exhibition 10am - 4pm Otago School of Medical Sciences (OSMS) present their Inaugural 2008 Photography Competition named "Science As Art". View photographs of scientific projects from OSMS students and staff and see for yourself that science IS Art!

Sir Clifford Skeggs Gallery, Dunedin Municipal Chambers, The Octagon (up the stairs by the i-Site)



#### Ultimate SciFest Treasure Hunt 9.30am - 4pm

So you think you've seen all there is to see at the 2008 Science Festival? Get your treasure map back to the ODT Science Festival HQ today.

ODT Science Festival HQ, 20 Princes St, Dunedin





SciCity Workshop 1pm - 2pm Explore SciCity! See page 4 for full details. Call Otago Museum 03 474 7474 for bookings.

Otago Museum, 419 Great King St, Dunedin



www.scifest.org.nz

# a wra

#### SCIENCE FESTIVAL RECYCLING PROJECT

The NZ International Science Festival is part of an Events recycling pilot project carried out by the Dunedin City Council. We will have recycling stations at the following locations:



national Science Fes

Saturday 5 July - Sunday 13 July ODT Science Festival HQ, 20 Princes St, Dunedin

Saturday 5 July & Sunday 7 July Everyday Science - 24/7 - 366 Expo University of Otago, St David Lecture Theatre Complex, St David St, Dunedin

During the "Everyday Science - 24/7 - 366" Expo, our Radical Resource Recoverers will make sure you dispose of your waste correctly.

To find out how to become a Radical Resource Recoverer or to learn more about the Science Festival's environmental contribution, visit www.scifest.org.nz

#### 9 DAYS 300+ EVENTS ONE AMAZING EXPERIENCE

A huge thankyou to you in advance. Without the continued support and participation of the community, the New Zealand International Science Festival would not exist. We hope you have a great time exploring what the 2008 New Zealand International Science Festival has to offer.

> DOWLING ST P

26

Queens

RATTRAY ST

13,14,15

Gardens

THANK YOU to the many individuals and organisations that were integral in bringing the 2008 New Zealand International Science Festival to fruition.

Director - Sue Clarke

Associate Director - Roslyn Saunders

Projects Director - Rieke Stackmann

#### Festival Publicity

Clare Curran - Inzight Communications

#### Festival Guide Design

Otago Daily Times Advertising Creative

#### Festival Web Design & Branding

Phillip Rasmussen - Webolution Internet Development Matthew Trbuhovic - Third Eye Design & Graphics

#### Festival Executive

Patron: Emeritus Professor George Petersen ONZM, MSc(NZ), MA, DPhil, DSc(Oxon), Hon DSc(Otago), FNZIC, FRSNZ

President: Mr Mike Harte, Director of Information Technology Services, University of Otago

Vice-President: Dr Michele Coleman PhD, Research & Development Manager, Division of Health Sciences, University of Otago

Treasurer: Mrs Wai Piggott BCom, CA, Financial Analyst, Dunedin City Council

Secretary: Sue Clarke, Director, NZISF

Executive Committee: Dame Elizabeth Hanan DNZM, BSc, CRSNZ

Prof Vernon Squire DSc, PhD, FRSNZ, FIMA, CMath, FNZMS, Pro-Vice Chancellor, Division of Sciences, University of Otago

Prof Helen Nicholson, BSc (Hons), MBChB, MD

Dr Karen Hartshorn, BA, MPhil

Prof Jean Fleming, ONZM, BSc (Hons), MSc, PhD Cr Chris Staynes, Dunedin City Council

See page 3 to WIN with pacificblue)



### Design an Eco-bag Competition 2008







#### Sea creatures, sandy beaches, waves... get inspired by the ocean & design an Eco-bag to be in to

The winning design will be printed onto Eco-bags to be sold at New World\*.

#### What to do:

Get ONE A4 piece of paper.

Draw a picture and write up to 10 words on what you like about the ocean. Start with the words "I

WIN!! All entrants go in the draw to win prizes, including a full year family pass to the NZ Marine Studies Centre and Aquarium.

Why? Using Eco-bags instead of plastic bags reduces rubbish and helps to keep the ocean clean. We can all do our part to look after the rich diversity of marine life in the waters around Otago. Thank you for caring!

#### Entry form – please attach to your design

Name:	Age: 5 - 8 yrs 🖵
Telephone:	9 - 12 yrs 🖵
Address:	School:
	Email:

#### Entries due 5pm, Friday 27 June. Hand-deliver to:

NZ International Science Festival Office 138 Lower Stuart St, Dunedin

#### Or post to:

I like... Competition NZISF, PO Box 5819, Dunedin

Conditions of entry: All entries become the property of the I like... Competition. Finalists' designs will be displayed at the New Zealand International Science Festival HQ in Dunedin from 5-13 July 2008. After the Festival, entries will be displayed at the NZ Marine Studies Centre, Portobello. Winners will be notified and prizes presented at 12.30pm on 13 July at the Science Festival HQ, 20 Princes St, Dunedin. The judges' decision is final.

1 like... Eco-bags will be sold at Centre City New World, Dunedin

23

56

# HOP GUIDE TO THE INTERNATIONAL EFISTIVA



FRYATT ST

8 Clocktower Building, University of Otago College of Education Auditorium Dunedin City Library

Burns Lecture Theatre, University of Otago

Centre for Innovation, University of Otago

**ODT Science Festival Headquarters** 1 Dunedin Community Gallery, 20 Princes Street OTHER FESTIVAL VENUES:

Beverley-Begg Observatory Blueskin Bay Library

**Dunedin Botanic Garden** 

Fortune Theatre

Fraser Building, Dunedin Hospital

Gasworks Museum, South Dunedin 13

Helen Deem Kindergarten, St Clair

15 Judith Cullen, St Clair

Lower Octagon 16

17 Monarch Wildlife Cruises

Mosgiel Library 18

**New Zealand Shop** 20

NumberWorks, Crawford Street

21 NZ Marine Studies Centre & Aquarium, Portobello

Otago Art Society/Scotia Restaurant & Whisky Bar

23 Otago Museum

24 Otago Polytechnic Student Centre

25 Port Chalmers Library

26 Scenic Circle Southern Cross Hotel

27 Sir Clifford Skeggs Gallery

28 St David Lecture Theatre, University of Otago

30 Table Se7en

31 The Meridian Shopping Mall

32 Waikouaiti Library

33 Zoology Building, University of Otago

All Science Festival enquiries, phone:

0800-SCI-FEST 0800-724-3378 www.scifest.org.nz



NEW ZEALAND GIFTS

THE OCTAGON



# Everyday Science – 24/7, 366

#### Department of Anatomy and Structural Biology, second floor, **Lindo Ferguson Building**

#### **ANATOMY & STRUCTURAL BIOLOGY**

CSI Mystery Forensic Workshop

The body of Elroy van Dam has been found under a sheep pen in stock yards. Who did it, with what, when and why? A tale of mystery, fibres, uranium mining cats and some very odd suspects.
Using Transmission and Scanning Electron microscopy, Confocal microscopy, and X-ray analysis, you will become the Crime Scene Investigator. By examining all the evidence, you may be able to

Saturday 5 July, 9.30 - 12.00 noon (morning tea supplied)

Age limit: Open to 12 years and over. Maximum of 12 people.

The Engine of the Body Workshop

This workshop focuses on the function of the heart and involves an introductory mini lecture, tour of the anatomy museum and hands on dissection of an animal heart! Saturday 5 July, 12.30 - 4.00pm (afternoon tea supplied)

Age limit: Open to 12 years and over. Maximum of 12 people.

Visit the W.D. Trotter Anatomy Museum

Don't miss the chance to visit the awesome Anatomy Museum. Saturday 5 July, 10:00am - 12:00 noon and 2:00 - 4:00pm and Sunday 6 July 2:00 - 4:00pm only

A Ramble Through Time - The Anatomy Department Some of its personalities. Find out how we developed from a Department of only one staff member and one medical student to become a Department of over 120 staff, 60 postgraduate students and over 1500 undergraduate students! Learn about the history of the Department, its pioneers, and it's personalities Saturday 5 July, 10.30am

### Male pheromones make females better mothers, less anxious

Why study pheromones? Women are much more likely to get very anxious during pregnancy and after giving birth than at other times of their life. Anxious mothers can find it difficult to bond with their baby, and have an increased risk of divorce or child abuse occurring. We have found that male pheromones make females less anxious before and after giving birth, make them better mothers, and also increase the number of new brain

Saturday 5 July, 2.30pm

DNA and Me: New ways to sequence DNA

Is it all in our Genes? How many species are there really on Earth? How closely related are elephants and the extinct woolly mammoth? Or Neanderthals and us? New high throughput DNA sequencing technologies are allowing us to explore such questions in a way not previously possible. The Department of Anatomy & Structural Biology is one of only two institutions in New Zealand with this technology. This talk will explain high throughput sequencing and how it is leading to new discoveries. Saturday 5 July, 3.15pm

#### Is there more to sex than testosterone?

Many behavioural traits are more evident in one sex than the other, but they do not define the biological sex of an individual: Empathy has a female bias, but some of the greatest men are empathetic. Likewise girls engage in less rough and tumble play, but a boy who shuns rough and tumble play is still a boy. The role of novel and old testicular hormones in generating genderspecific behaviour will be discussed. Sunday 6 July, 2.30pm

New regulators of brain function

The brain is a complex and dynamic organ. Stability is needed to remember whereas plasticity is required to undergo new experience. This short talk will highlight some of the research being undertaken at Otago into the mechanisms that control the functions of the brain.

Sunday 6 July, 3.15pm

#### St David Complex cnr Cumberland and St David Street

Saturday 5 July 11.00am - 7.00pm Sunday 6 July 9.00am - 5.00pm

#### **ANATOMY & STRUCTURAL BIOLOGY**

Biochemistry in and around you - how biological molecules

#### CAREERS ADVISORY SERVICE

Chemistry is not for the faint-hearted!

Chemistry magic, flashing lights, roses that crumble like sand, imoke and loud bangs! So much excitement, so little time... Saturday 5 July 12noon - 1,00pm Sunday 6 July 12noon - 1.00 pm

#### **CLOTHING & TEXTILE SCIENCES**

#### **DESIGN STUDIES**

Exhibition of student work - Designer Saturday and Sunday Display of student work from Design studies : future-proofing

What's in this rock? Find out what's locked inside your pet

ologists and paleontologists will identify and explain your rock ples and fossils finds ... can you bring something they can't ain?

#### **HUMAN NUTRITION**

#### MARINE SCIENCE

How Weird is THAT? Every Day in the Deep Blue Ocean

here and when do microbes set up home in our bodies?

#### PHYS ED

Saturday 5 July Tours at 9am, 10am, and 11am. Limited to 30 per tour. School of Physical Education, 55 Union Street.

#### **PHYSIOTHERAPY**

Captured in Motion
Video technology allows body movements to be captured on computer. Motion capture is used clinically and in sports to measure movement and in movies and computer games to animate characters. Be captured on computer and see yourself

Kneedeep in Science A walk-in frog full of trained rats? You're kidding me right?

#### Mezzanine level, St Davids complex cnr St David and Cumberland Streets

#### **ANATOMY & STRUCTURAL BIOLOGY**

Simulating the activity of individual neurons Computer simulation of a model of a striatal spiny neuron.

**BIOETHICS CENTRE** 

Consciousness and the brain

#### **PHYSIOLOGY**

Under pressure: The brain's role in processing internal and external information

Our brains are constantly being bombarded with information from our surroundings via our senses (smell, touch, sight, hearing). In addition, they receive information from the body about how organs and tissues are functioning. Does the information change when you are under pressure? Is how the brain processes information always reliable?

Watching Molecules at Work

Interactive display to demonstrate how molecules (including medicines) work in the human body.

#### **PSYCHOLOGY**

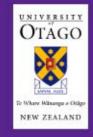
What's up with faces?

Faces share the same parts in a common arrangement, and it is this attribute of faces that makes the question of how we accomplish face recognition both intriguing and challenging. We are experts in processing faces, but you may be surprised to find that you are not as good as you might think in some cases!

Coping with Rheumatoid Arthritis in NZ ... Coping with Rheumatoid Arthritis in the UK ... .What's the difference? This study investigates the well-being of people with rheumatoid arthritis. We found that people in Aotearoa / New Zealand with this type of arthritis reported much better mood and fewer problems with everyday activities than similar people from the UK. Further understanding of this difference will help doctors advise patients whose mood and daily life are seriously affected

The Workings of the Human Brain

Functional Magnetic Resonance Imaging (fMRI) and electroencephalographics(EEG) explore how the brain works, why it sometimes doesn't work, and which bits work when. Want to see the brain in action? Think about it ....



For more information check out

