# New Zealand International Science Festival 1–9 July 2006 Dunedin



# Science Futures Courses







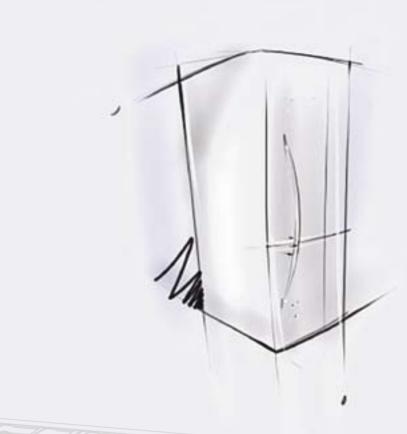
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digging for dinosaurs Sifting for Treasure There are games and games... but how do they work? Virtual Southern Traverse Watching window Where have the animals gone? Where will Science take you? Your body: know it, love it!



www.otago.ac.nz/scifest



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#### About the Front Cover:

In the film 'Contact', Jodie Foster's character is asked what she does for a living, and she responds "I look for little green men." The real-life inspiration behind that character, Dr Jill Tarter, is one of the featured visitors at this year's festival. Festival events this year will look at new horizons in space, global change, and human behavior, so a planet earth seen from space is probably the best representation of the overall theme of the festival.

Festival Guide designed by Diane Whitford at DCC Graphic Design, and printed by Allied Press.

Visit the Otago Daily Times Festival Headquarters, located in the Dunedin Public Art Gallery! Open every day 10am-5pm.

Disclaimer: Every effort has been made to ensure the accuracy of this guide. It is, however, subject to change without notice. Please see our website for latest listings.

Children can not be left without appropriate adult supervision at any Festival events, unless otherwise stated.

Payment for all festival events is by cash or cheque at ODT Festival Headquarters & for door sales. Credit card payments are accepted for pre-bookings only. EFTPOS is not available.

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# WELCOME

Welcome to the 2006 New Zealand International Science Festival—Science Futures: New Horizons!

The New Zealand International Science Festival is about making science, technology & the environment fun, interesting and accessible to everyone. We invite our audiences to engage with scientists from around the world, and discuss issues of science & technology so crucial to daily life. We aim to involve more young people in science, technology and the environment-great areas to work in which will contribute hugely to the economic future of New Zealand.

That's why this year the festival is called Science Futures: New Horizons.

What does this mean? To us, it means showcasing young scientists, the future of New Zealand science. During the festival, you'll find school & university students showing off their work and participating in events as both audience and volunteers. Science futures means discussing issues that will be of future importance to all New Zealanders, including future energy and climate change. New Horizons means exploring ideas at the edge of our current knowledge–from looking for extra–terrestrial life in the universe to deciphering our own human behavior.

We hope you'll take advantage of the wealth of talks, workshops, film screenings, exhibitions and other activities on offer during the nine days of the Festival. We also hope you'll recognise the belief our sponsors, funders & members have shown in Science Futures: New Horizons, and join us in thanking them. Finally, we hope you'll take time to meet festival staff, management and volunteers, who'll be out and about the whole week, and share your thoughts with us.

Thanks for visiting, and enjoy the 2006 New Zealand International Science Festival!



#### Karen Hartshorn

Director, New Zealand International Science Festival

The New Zealand International Science Festival's aim is to encourage an interest in the sciences by bringing together and bridging the gap between academia, business, local government and the public. Welcome, young and old, to this year's festival. We provide for you international keynote speakers who are world renowned. Dunedin offers some of the world's best

science based activities to visit and experience, and this year's festival offers a wide range of science based activities that will entertain and educate. So enjoy, and explore new horizons.



Roy Borgman

Chairman, New Zealand International Science Festival

The New Zealand International Science Festival has become a much-anticipated part of the science calendar of events. And so it should be. It brings science and technology out into the community and brings home to us just how important these are to our daily lives. This year's programme promises some fascinating insights into climate change,

health and psychology—and what promises to be highly entertaining science "theatre". I hope everyone will take advantage of this opportunity and enjoy this 2006 Science Festival to the full.



#### Steve Maharey

Minister of Research, Science & Technology

On behalf of the City of Dunedin I would like to welcome you to the 2006 International Science Festival. With more than 100 events taking place over nine days I know you will have a great time in Dunedin during this festival. The New Zealand International Science festival is truly a unique event. Interactive and entertaining events bring science out of stuffy labs to entertain and captivate. I am reminded of the saying: "When I read – I see. When I hear – I learn. When I do – I understand". The Festival understands this and its events invite us to "do" and, thus "understand".

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In Dunedin we are proud to foster an environment that nourishes research and technological innovation and I am sure this will be evident to you in your time here. So relax, enjoy and prepare to immerse yourself in knowledge.

#### Peter Chin

His Worship the Mayor of Dunedin

### THE FESTIVAL TEAM

Patron: Em Prof George Petersen ONZM, MSc(NZ), MA, DPhil, DSc(Oxon), Hon DSc(Otago), FNZIC, FRSNZ Festival Executive Committee & Management

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Dr Michele Coleman PhD, Research & Development Manager, Division of Health Sciences, University of Otago
Mr Simon McCallum, Lecturer, Department of Computer Sciences, University of Otago
Mr Graham Strong, Business Development Advisor, Economic Development Unit, Dunedin City Council
Festival Staff: Karen Hartshorn, Director, D'Arcy Dalzell, Associate Director, Julie Howard, Parka Limited, Festival Publicist

# **SUPPORTERS & FUNDERS** 2006 INTERNATIONAL SCIENCE FESTIVAL SUPPORTERS & FUNDERS

Thank you also to the gaming trusts who have granted us funds after the programme had already gone to print.



- Department of Chemistry, University of Otago Department of Microbiology, University of Otago Dunedin Astronomical Society Otago Institute Otago School of Medical Sciences Plant Extracts Research Unit Wakatipu Medical Centre Janelle Ashton Mr Roy Borgman Dr Richard Cannon Dr Michele Coleman Dr Anne Corrigall Associate Professor Brian Cox Dr Kim Currie
- Dr Julian Eaton-Rye Professor Mike Eccles Dr Tony Garrett Dr Andrew Gorman Dr M. R. Grimmett Dr Jules Gross Dame Elizabeth Hanan Mr Muray Hanan Mr Mike Harte Ms Karen Hartshorn Mr Doug Holborow Mrs Helen Horner Dr Grant Jacobs Professor David Jones
- Mr Iain Lamont Dr G. E. Laney Dr Albert Lee Dr Jane Mackie Dr Candace Martin Mr Simon McCallum Dr David McMorran Dr Tom Milliken Ms Noeline Munro Ms Fieke Neuman Dr Michael Palin Dr Nigel Perry Emeritus Professor George Petersen Mrs Wai Pigaott
- Dr Keith Probert Professor Stephen Robertson Professor Vernon Squire Professor D. R. Taylor Dr P. M. van Ammers Mr John Watson Dr David Wharton Dr Steve Williams

#### WHY NOT BECOME A MEMBER OF THE FESTIVAL?

For more info on how to support the Festival, visit page 31 for more details, check out our website at www.scifest.org.nz or call 0800 SCIFEST (724 3378). You can benefit from discounts on festival events and merchandise!



# FESTIVAL FEATURES!



# JILL TARTER

# SETI: Looking for Little Green Men

She is the Director of SETI Research at the SETI (Search for Extra Terrestrial Intelligence) Institute in California, the inspiration for Jodi Foster's character in **Contact**, and one of the "100 most powerful and influential people in the world" (Time Magazine). She's also at the International Science Festival!

Dr Jill Tarter has devoted her life to discovering what else is out there in the universe. Come and hear her talk about what the SETI Institute does, how to look out beyond our solar system, and find out if she's found anything yet.

Jill Tarter's visit is supported in part by the American Embassy.

Why not see **Contact** before this talk? See page 23 for details.

#### Saturday July 1, 7.30pm

St David St Lecture Theatre, Otago University \$8 / \$5 Bookings essential (talk only) \$10 / \$8 (talk and Contact screening) Door sales available, All welcome



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# CHRIS KRISHNA-PILLAY

# Pre Coital: The Science of Dating

Three Dunedin performances only of the show described as the "pick of the Australian Science Festival" and "non-stop entertainment"!

**Pre-Coital: The Science of Dating** reveals the truth behind pheromones, physical attractiveness, emotions, condoms and the odds of finding your perfect match. This popular and lively cabaret-style show featuring live music, audience participation, and lots of laughs. So don't miss Pre-Coital at this year's festival!

Chris Krishna–Pillay is partly supported by the Australian Embassy.

#### Saturday July 1, 6pm, Sunday July 2, 8pm



Monday July 3, 6pm Fortune Theatre \$12 / \$10 Bookings essential Door sales available Ages 14+

BUY A FESTIVAL PASS & GET ONE OF THESE EVENTS FREE! SEE PAGE 31 FOR DETAILS.



# FESTIVAL FEATURES!

# RICHARD WISEMAN

Are people born lucky, or can they make themselves lucky? What is luck anyway? Two events at the 2006 international science festival will help you find out...

#### SBS Born Lucky Mass Experiment

First of all, join in the SBS "Born Lucky" Mass-Participation Experiment, running from now and through the week of the Science Festival. It takes less than five minutes to fill out, and you can do it online or with a paper version available at the ODT Festival HQ and at the Dunedin Branch of SBS. Help real science happen, and then find out the results...

www.sbs.net.nz or www.scifest.org.nz and follow the links to the mass-participation experiment!

#### "How to Get Lucky"

Professor Richard Wiseman, from the University of Hertfordshire in the UK, is the man with the answers. He started out as a professional magician, and is now a psychologist studying luck, optimism, humour, deception and other aspects of human behaviour. In this special lecture he'll be revealing the results of the SBS Born Lucky experiment, and talking about how exactly we should go about getting lucky! Richard Wiseman's visit is supported by the British Council and SBS.



#### Saturday July 8, 7.30pm

BRITISH COUNCIL

Glenroy Auditorium, Dunedin Town Hall \$8 / \$5 Bookings essential Door sales available



# Banking - looking for a NZ owned alternative?



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Andrew Kilsby Dunedin Manager



Copies of the current Investment Statement and registered Prospectus are available on request from www.sbs.net.nz and any branch or agency of Southland Building Society. Proud sponsor of the New Zealand International Science Festival



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# FESTIVAL FEATURES!

# PAUL CALLAGHAN Science, Climate and Sustainability



Professor Paul Callaghan is the recipient of the 2005 Rutherford Medal–New Zealand's highest award in Science awarded by the New Zealand Royal Society. In this special presentation, he will talk about the scientific research associated with climate change and sustainability. Come and hear New Zealand's most well-known scientist.

Brought to the Science Festival by the Otago Institute and the Otago Museum www.otagoinstitute.otago.ac.nz

#### Wednesday July 5, 12noon

Hutton Theatre, Otago Museum Free

# TRANSPOWER FUTURE ENERGY DEBATE

Chaired by Veronika Meduna of National Radio's "Our Changing World", this debate will focus on the future of New Zealand in terms of energy issues: what will power our country in the next 100 years, and what should we be doing now to make it happen?

Panel participants will include representatives from Transpower, the University of Otago, national government and local business. Join us for what promises to be an entertaining and thought provoking debate, and make sure you bring your questions for the panel!

# Saturday July 8, 3.30pm

St David St Lecture Theatre, Otago University, Free Sponsored by Transpower

TRANSPOWER



### **The Otago Institute**

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

http://otagoinstitute.otago.ac.nz/

#### PO Box 6373, Dunedin

The Otago Institute, in association with the NZ International Science Festival and the Otago Museum is proud to present

**Professor Paul Callaghan** Recipient of the Royal Society Rutherford Medal 2005

"Science, climate change and human sustainability"

Venue: Hutton Theatre, Otago Museum Date: Wednesday 5th July Time: Noon

Entry: Open to the public - no charge



### WILL STEFFEN

# Global Change: where on Earth are we going?

Will Steffen is an internationally recognised expert on global climate change, and is ex-Director of the International Geosphere Biosphere Programme based in Denmark. He's in Dunedin for one day only to speak about Global Change-where on Earth are we going?

He'll also give us a preview of what's real and what's hype in the film **The Day After Tomorrow**, screening at the end of the science festival. This is a great opportunity to learn about climate change on a global scale, and find out what can be done on a local scale to help. Come and join us for an informal drink before the talk, then bring your questions and concerns

to ask Will Steffen. Supported by NIWA (National Institute for Water & Atmospheric Research)

#### Thursday July 6, 6pm

Southern Cross Hotel

\$5 / \$4 Ticket price includes a free glass of wine. Bookings essential.

> \$8 / \$5 Talk & The Day After Tomorrow screening.



#### ALIENS OF THE DEEP

World-renowned marine-biologist and squid expert, Dr Steve O'Shea, speaking about his first—hand experience of a mythical and mysterious monster of the deep—the Colossal Squid.

Monday July 3, 5.30pm – 6.30pm Hutton Theatre, Otago Museum, 419 Great King St Ph: 479 5826 or 474 7474 Presented by New Zealand Marine Studies Centre & Otago Museum

#### www.marine.ac.nz

#### THE MAKING OF THE LORD OF THE RINGS (THE COLOSSAL SQUID!)

Andrew Waterworth, Executive Producer at Natural History NZ, shares his experiences in making the **Animal Face Off** series for Discovery Channel, featuring the Colossal Squid replica now on display at the New Zealand Marine Studies Centre, Portobello.

#### Tuesday July 4, 5.30pm-6.30pm

Hutton Theatre, Otago Museum Ph: 479 5826 or 474 7474 Presented by New Zealand Marine Studies Centre & Otago Museum www.marine.ac.nz

#### NAKED TRUTH: SCIENTIFIC METHODS IN CONSERVATION

Science can help reveal the most unexpected and amazing facts about the process, structure, materials, age and the authenticity of artworks. The Dunedin Public Art Gallery Conservator takes you on a fascinating trip through varnish, paint layers and pigment.

#### Wednesday July 5, 6pm

Dunedin Public Art Gallery, 30 The Octagon Ph: 477 4000 Presented by Anne Harmssen, Dunedin Public Art Gallery–www.dunedin.art.museum

#### ARE ANGELS OK?-THE POETRY OF PHYSICS

Are Angels OK? has brought some of New Zealand's top creative writers together with our top physicists. For the 2006 International Science Festival, Glen Colquhoun talks about the poetry of physics and reads from his work.

#### Wednesday July 5, 7.30pm

Dunedin Public Art Gallery, 30 The Octagon Ph: 477 4000 Supported by Royal Society of New Zealand–www.rsnz.org/events/angels

#### **BLUE WATER BLACK ABYSS**

A deep sea expert shares experiences and discoveries from our mysterious deep oceans. The evening will include a night tour of the Aquarium. See what our local sea creatures get up to after dark!

**friday July 7, 7pm–9pm** NZ Marine Studies Centre, Portobello Admission: \$10 person / \$25 family Bookings essential. Ph: 479 5826 Presented by NZ Marine Studies Centre–www.marine.ac.nz

#### **RETURN OF THE REPTILES**

Have you heard about Orokonui? Learn about the tuatara and how Orokonui Ecosanctuary will offer a haven for NZ's reptiles—right here in Dunedin! Live animals will possibly be on display. With Dr Alison Cree, Anne Besson & Diane Campbell—Hunt.

#### Saturday July 8, 10.30am–11.30am

St David St Lecture Theatre, University of Otago Presented by Otago Natural History Trust in conjunction with the Division of Sciences, University of Otago Ph: 477 5160–www.orokonui.org.nz

# HUNTER LOVINS: SMART SCIENCE-GROWING A WELL FUTURE FOR OUR GRANDCHILDREN'S GRANDCHILDREN

World-renowned sustainability expert Hunter Lovins reminds us that a world facing climate change, deteriorating eco-systems and peak oil is a challenging place to live. Her non-profit organisation, Natural Capitalism Solutions Inc, insists that solutions to these problems do exist and can be implemented in ways that create greater prosperity and present opportunities to improve local and national security.

In this forum, Hunter will present us with some ideas, and will then be joined by a small panel of young people and local scientists to reflect on what this means for us all.

#### Sunday July 2, 7pm–9pm

Venue TBA Ph: 09 445 4454 See www.natcapsolutions.ora/EventArchive and www.kaitiakitanga.net/hunterlovins.pdf for more details



A future for eur part

# PLANET SEIENCEI

#### JILL TARTER: IS THERE REALLY LIFE IN SPACE?

And if there is life in space, how do we find out about it? What do you need to have life on another planet? Could alien beings really try to contact us? Join us in this one-off special session for kids (and their parents) to have their questions about life in outer space answered by the world expert – Dr Jill Tarter!

#### July 3, 11am-12.30pm

ODT Science Festival Headquarters, ODT Gallery, Dunedin Public Art Gallery \$3, Accompanying adult free. Bookings recommended, door sales available. Suitable for Ages 6+

#### RICHARD WISEMAN: THE PSYCHOLOGY OF MAGIC

Have you ever wondered how magic works? Or how people respond to it? Why are people interested in magic tricks in the first place? Can you be fooled?

Come and join Professor Richard Wiseman, former professional magician and world-renowned psychologist, for a special session just for kids! He'll answer all your questions, and maybe perform a few tricks of his own...

#### July 7, 11am-12.30pm

ODT Science Festival Headquarters, ODT Gallery, Dunedin Public Art Gallery \$3, Accompanying adult free. Bookings recommended, door sales available. Suitable for Ages 6+

BRITISH SBS banking



# New Zealand International Science Festival



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# PLANET SCIENCE at the 2006 International Science Festival

Lift off is from Otago Daily Times Science Festival Headquarters, Dunedin Public Art Gallery

\$3 per child. All workshops suitable for 6–11 years. Bookings essential. Call 0800 SCI FEST or visit www.scifest.org.nz for more details.



# KALEIDOSCOPE MAGIC!

Are you ready to make the world crazy and colourful with science? Come and learn how kaleidoscopes tickle the senses, and make your own to take home.

> Saturday July 1, 1.30pm–3pm

Thursday July 6 & Sunday July 9, 11am–12.30pm



# WEATHER WIZARDRY

Come to the Planet Science School for Weather Wizards. Find out some of the magic behind the weather and learn how to predict your own!

# Sunday July 2, Wednesday July 5, Saturday July 8, 11am–12.30pm





# NANO-ROVE<mark>R-</mark> RIDERS!

From Planet Science you have located life on a distant planet and now need to explore further. How do you get from 'A' to alien? Your very own nano-rover! Build and drive your own to take home.

Saturday July 1 & Tuesday July 4, 11am–12.30pm

Saturday July 8, 1.30pm–3pm

### FREAKY SCIENCE!

www.otago.museum.govt.nz

Thought science was boring? Blow your mind with a week full of shocking, surprising and bewildering science experiments!

> Saturday July 1–Sunday July 9, 2.00pm–2.30pm daily Otago Museum, 419 Great King Street Suitable for 5–12 years. Ph: 474 7474 Presented by Otago Museum

# **GOING TO EXTREMES**



Adapt or die! Follow an orienteering course of discovery and check out some of the most special survival adaptations of plants and birds ever to be found.

> Monday July 3 & Thursday July 6, 1.00pm–3.00pm Botanic Garden Centre, Lovelock Avenue, Opoho Suitable for 9–11 years. Bookings essential. 20 people maximum. Ph: 477 4368 Presented by Dunedin Botanic Gardens

# SHIPWRECKED: MARITIME MISHAPS AND MISADVENTURE

This programme looks at the history of Otago shipwrecks and finishes with making a lighthouse that flashes.

Tuesday July 4 & Thursday July 6, 10.30am – 11.00am Otago Settlers Museum, 31 Queen's Gardens \$4 per child. Bookings essential. Ph: 474 2730 Presented by Sara Sinclair, Otago Settlers Museum

# LEAFLESS NOT LIFELESS

It may be winter in Dunedin, but you can still see life in the gardens! Join us for a winter trail around the Dunedin Botanic Garden identifying deciduous trees by their buds, barks and cones.

> Tuesday July 4 & Friday July 7, 1.00pm–2.30pm Saturday July 8, 1.00pm–2.30pm (General Public)



Botanic Garden Centre, Lovelock Avenue, Opoho Suitable for 9–11 years. Bookings essential. 20 people maximum. Ph: 477 4368, Presented by Dunedin Botanic Gardens

# **MY GENES AND COW GENES**

Meet super cow, design a robot baby...These and other activities are part of Dairy Cooperative Research Centre's GenEd Web resources, which introduce basic biotechnology ideas. What are twins? What are genes? What will scientists be able to offer dairy famers? Come and play with us in our introduction of a fun and interactive web activity! Presented by Dr Susan Cumming, Education Manager, Monash Institute of Medical Research

#### Friday July 7, 1.00pm

Dunedin Public Art Gallery, 30 The Octagon Ph: 0800 SCI FEST





# FREAKY SCIENCE!

Blow your mind with a week full of shocking, surprising and bewildering science experiments. **2pm - 2.30pm, Atrium Level 1, DAILY 1-9 July** 

# THE CONSERVATION STATION -CARING FOR YOUR TREASURES

The Otago Museum shares the secrets of conserving and preserving precious objects. Bring your treasures along for the Otago Museum Conservator to evaluate and advise on their best possible care! **1.30pm - 2.30pm, Search Centre Level 1, 3 - 7 July** 

# NHNZ Science Documentary Screenings

Don't miss the lunchtime screenings of a special selection of NHNZ Science Documentaries including the NZ premier of the 'Mega Disaster' series. **12.00pm , 2 - 9 July** 



Open DAILY 10am - 5pm, 419 Great King Street, Dunedin

# THE MOST EXTREME STINKERS

Oderous animals take stench warfare to The Most Extreme in a one hour film from Natural History New Zealand. Yuck! That's stinky!

#### Tuesday July 4, 10.30am & 5.45pm Sunday July 9, 1.00pm

Various Libraries around Dunedin. Ph: 474 3690 for details and venues. Presented by Dunedin Public Libraries and Natural History New Zealand www.dunedinlibraries.com

# THE STORY OF THE UNDERSTOREY

Explore the bush of the Botanic Garden and get a glimpse of the shady side! Identify plants, locate their habitats and find out how they manage to survive in the dark.

**Wednesday July 5, 1.00pm–2.30pm** Botanic Garden Centre, Lovelock Avenue, Opoho Suitable for 9–11 yrs. Bookings essential. 10 people maximum. Ph: 477 4368

Presented by Dunedin Botanic Gardens

# **GROSS OUT AT THE LIBRARY**

Disgusting stories, nasty projects and other horrible things for school aged children at your local Dunedin Public Library!

Monday July 3, 10.30am – 11.30am Storypit, Dunedin City Library Tuesday July 4, 2pm – 3pm Mosgiel Library, Hartstonge Ave, Mosgiel Wednesday July 5, 11am – 12noon Waikouaiti Library, Main Rd, Waikouaiti Thursday July 6, 11am – 12noon Port Chalmers Library, Beach Rd, Port Chalmers Friday July 7, 10.30am – 11.30am Blueskin Bay Library, Harvey St, Waitati

Suitable for 5–10 years. Bookings essential for limited places. Ph: 474 3690 Presented by Dunedin Public Libraries www.dunedinlibraries.com

# DAILY ACTIVITIES AT THE AQUARIUM

Daily activities and special events every day during the Science Festival week at the Aquarium including: Squid Encounters; Squid art activities; Squid and Diver's Game; Marine films ... and of course you also get to meet all the other sea creatures that live there!

#### Saturday July 1–Sunday July 9, 12noon–4.30pm

Hatchery Road, Portobello General Aquarium admission is \$8 per adult, \$4 per child, or \$16 for a family (2 adults and 3 children). The Guided tour at 10.30 am is \$16 per adult, \$8 per child and \$40 for a family. Ph: 479 5826 Presented by New Zealand Marine Studies Centre and Aquarium, Portobello www.marine.ac.nz

# NATURE DISCOVERIES INVENTORS EXPO

Can you dream up future gadgets for tomorrow's world? Put on your thinking caps and design a model of an item that is unique to this world! There are lots of prizes to be won from Nature Discoveries in this competition. Contest will be drawn July 15.

Saturday July 1–Saturday July 15

Further details from Nature Discoveries. Come into the store in the Meridian Mall or phone 477 1515.

REMEMBER TO ENTER THE MASS PARTICIPATION EXPERIMENT-www.scifest.org.nz

#### UNIVERSITY OF OTAGO PRESENTS

Science-

Doit, live it, Love it M

# Friday 7 July – Saturday 8 July 2006 9:30am – 5:00pm

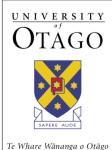
St David Lecture Theatre Complex cnr of St David St and Cumberland St University of Otago

Get on Board the Big Blue Bus from the Octagon for **free** between 10:00am and 3:00pm each day

# **ADMISSION FREE!**

Prizes, games, exploration and excitement...

# Science - Do it, Live it, Love itl



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# www.otago.ac.nz/scifest



#### University of Otago presents:



Explore the exhilarating array of sciences at the University. Be prepared to do it, live and love it!

#### All events are held:

Friday July 7 & Saturday July 8, 9.30am–5pm, St David St Lecture Theatre Complex on the corner of Cumberland and St David Streets

#### Anatomy & structural Biology: Display of Anatomy

Bones, brains, and models—we've got them all. Can you put all the organs back into the body in the right place?

#### Biochemistry: Do Biochemistry! Live Biochemistry! Love Biochemistry!

Your DNA contains around 25,000 genes. Come and find out what they do!

#### Careers Advisory Service: Where will Science take you?

Careers with Science can take you round the globe, with more adventures than you can shake a stick at. Are you up for it?

#### Clothing & Textile Sciences: Clothes for tramping-present and past

What would you have worn tramping 50 years ago? Have our ideas about how the clothes protect us from the elements changed?

#### Computer Science: There are games and games... but how do they work?

Make robots, try out our interactive games and better yet, find out how they work!

#### Computer Science (Graphics): Watching window

Things flying past your head? Maybe you just imagined that... see what the 3-D virtual reality team is up to today...

#### Design Studies: Envision

An interactive engagement with design futures presented by the Design Studies Department.

#### Genetics: The revolution continues...

Have you ever wondered about designer babies, forensic DNA technology, or gene therapy? Come find out this and more!

#### Geology: Rock and bonedigging for dinosaurs

How do you extract a fragment of bone from a slab of rock without losing the

fragment... Directions from St David St Lecture Theatre complex

#### Human Nutrition: lodine and Vitamin D: Are you getting enough?

What foods are a good source of iodine? On a cold winter Dunedin day, how long do you need to be outside to make enough Vitamin D from sunlight?

#### Marine Science: 100 Years of Marine Science

Take a virtual field trip that travels through time and seaspace. Meet some of the denizens of the deep that live on your back doorstep.

#### Maths: Live Maths and Love It

Play mathematical games like Nim, the Tower of Hanoi, the birthday problem and see objects leap out of the computer screen!

#### Microbiology: Bird Flu

How bad would a human pandemic be? Can't we just develop a vaccine? Come along and find out more...

#### Pharmacology: Medicinal or murderous?

Find out more about the mysterious world of pharmacology and toxicology

#### Phys Ed: Virtual southern traverse

Challenge your brain and body to run and recall, paddle and ponder, ride and recite. The science of ultraendurance. Starts from St David Lecture Theatre complex

**Physiology: Your body: know it, love it!** Is your heart the home of love or just a muscular pump? Talk to a Physiologist about how your body works!

#### Physics: Physics you can feel

A top that spins in space, sound you can see and more...

#### Physiotherapy: Captured in Motion

Motion capture is used clinically to measure movement and in movies and computer games to animate characters. Be captured on computer and see yourself move!

#### Poisons Centre: Is it poisonous?

A display about poisonous products, plants, and spiders. Come along and learn about the dangers around your home.

#### **High Tech Treatment**

Lasers, tattoos, face masks, superflab. Come see how these things relate to the radiation treatment of cancer! Starts from St David St Lecture Theatre complex.

#### Science Library: Sifting for Treasure

Finding your way through the Information

Mine at the Science Library.

#### Zoology:

#### Where have the animals gone?

Track soft toys with our bird trackers; work out which dolphin is which; and explore how animals move.

#### Anatomy and Structural Biology: Cells and organelles

Normally cells and organelles are too minute to see with the naked eye, but here you can! Ages 12 + To book e-mail kathryn.mcclea@anatomy.otago.ac.nz Sat 8 July, 9 – 12.30pm

#### Bones, muscles and organs

Study the gross and functional aspects of your bones, muscles and organ systems. Come prepared to dissect a sheep's kidney!

Fri 7 July, 9–12.30pm

#### Visit the W.D. Trotter Anatomy Museum

Don't miss the chance to visit the awesome Anatomy Museum Fri 7 & Sat 8 July, 1–3pm only. Dept of Anatomy and Structural Biology, 2nd floor, Lindo Ferguson Building

#### From grave robbing to body bequests:

Glimpses into the scientific and ethical world of Anatomy

This talk promises to be absorbing, captivating, and just a little bit grisly! St David St Lecture Theatre, Sat 8 July, 1.30pm

#### Chemistry goes Boink

Whizz bang chemsitry show : Magic shows don't usually make this much smoke....or noise....

St David St Lecture Theatre, Fri 7 & Sat 8 July, 12noon

#### **Physical Education:**

#### Human performance – Sports Tech

Visit the Human Performance Centre at the School of Phys Ed and learn how we help to improve our sports stars performance.

Meet on the wide steps of the P€ building, 46 Union Street, Fri 7 & Sat 8 July, 10am, 1pm, 4pm. 30 mins duration. First come first in!

#### Zoology: Return of the Reptiles

See Talking about Science page 9

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#### SCIENCE FUTURES: NEW HORIZONS

It's Kinder–Science! 22 of Dunedin's kindergartens provide an interactive science display showcasing our finest budding scientists. Suitable for children 2 years and older, and their families.

#### Saturday July 1, 11.00am-2.30pm

95 English Ave, Mornington, Suitable for 2–5 years, Ph: 455 8892, Presented by Dunedin Kindergarten Association–www.dka.school.nz

#### **SCIENCE QUEST**

Put on your thinking cap—and your running shoes... This is orienteering PLUS science! Navigate your way round the University Campus, answer science questions and win prizes!

Sunday July 2, 1.00pm (reserve day in case of rain, Tuesday July 4) Outside the Union, Otago University Campus, \$2 per person. Suitable for 8 years + Ph: 479 9668 Presented and sponsored by GNS Science and Dunedin Orienteering Club—www. gns.cri.nz

#### **MATHEMATICIAN AT 5**

What you can do at home to give your young scientist a head start with numbers!

Monday July 3 & Thursday July 6, 7.00pm 90 Crawford St, Dunedin, Bookings essential, 15 people maximum. Ph: 474 1104 Suitable for teachers and parents of new entrants/pre-school children Presented by Jan Savell, Numberworks-www.numberworks.com/dunedin

#### **TERRIFIC TIMES TABLES**

A smorgasboard of ideas for helping children memorize times tables.

#### Monday July 3 & Thursday July 6, 7.30pm

90 Crawford St, Dunedin Bookings essential, 15 people maximum. Ph: 474 1104 Suitable for teachers, grandparents and parents of new entrants/pre-school children Presented by Jan Savell, Numberworks-www.numberworks.com/dunedin

#### CHRIS KRISHNA-PILLAY: 3 PERFORMANCES!

Mystery Jug, Dr Jones' Big Science Challenge & Billy Bernoulli's Bonanza! Science, intrigue and "Raider's of the Lost Ark" all rolled into one! Three performances by the amazing Chris Krishna–Pillay sure to put a bit of colour into your day!

**Monday July 3 & Thursday July 6, Begins 12noon** Meridian Mall, Supported by the Australian High Commission

#### **DISASTERS ON THE HORIZON (OR NEARER)**

It's a treasure hunt at the Civil Defence Operations Centre. But watch out! There are hazards and disasters coming your way! How will you prepare yourself when a disaster strikes?

#### Tuesday July 4 & Wednesday July 5, 11am-3pm

Level 'C', Moray Place Carpark building, behind DPAG, 54 Moray Place, Ph: 477 7997 Presented by Civil Defence–www.civildefence.govt.nz

#### **SQUID DISSECTION!**

Curious? Find out what makes a squid work!

Thursday July 6 & Sunday July 9, 1pm–2pm

New Zealand Marine Studies Centre, Portobello, Bookings essential. Ph: 479 5826 Presented by New Zealand Marine Studies Centre – www.marine.ac.nz



#### **GOING TO EXTREMES**

Adapt or die! Follow an orienteering course for a journey that will amaze you at the Botanic Gardens. Discover some of the special survival adaptations of plants and birds ever to be found! Maximum 20 people.

Sunday July 9, 1pm-3pm

Botanic Garden Centre, Lovelock Avenue, Opoho, Bookings essential. Ph: 477 4368 Presented by Dunedin Botanic Gardens







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\*Source: Nielsen Media Research National Readership Survey Jan-Dec 2004.

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# WELLNESS CHECKS-HOW HEALTHY ARE YOU?

The Otago District Health Board's SKILLS LABORATORY is going to be open to the public for the week of the Science Festival.

Interactive activities daily between 9 am and 3pm (check the notice board 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

Where: the Skills Laboratory in the Fraser building – opposite the car park entrance to Dunedin Hospital on Cumberland St, follow the signs.

When: Open daily, from 9am to 3pm Saturday 1 – Sunday 9

#### SCIENCE ON THE ROAD I...THE FESTIVAL GOES TO SOUTHLAND

Join us as we travel out and take the 2006 International Science Festival to Gore for a day!

for all of you who can't come up to Dunedin, you don't need to worry anymore. We're bringing some of the biggest festival names and events to you! first off, Jill Tarter will speak about the SETI Institute and her work searching for signs of intelligent life in the universe. After lunch, Chris Krishna-Pillay and his team of talented musicians will perform Pre-Coital: The Science of Dating – a lively, funny, and scientifically correct look at the wonderful world of pheromones, attraction and condoms...

Join us for this special day at the Scenic Circle Croydon Hotel in Gore – proud supporters and official hotel chain of the 2006 International Science Festival.

#### Sunday July 2,

Scenic Circle, Gore Presented by Jill Tarter/Chris Krishna—Pillay For ticket information and further details see www.scifest.org.nz

#### SCIENCE ON THE ROAD II... AURORA VIDEOCONFERENCES IN CENTRAL OTAGO

Your chance to talk to two of the festival keynote speakers without coming to Dunedin! Thanks to Aurora and the OtagoNet videoconference system, we can bring the Science Festival to central Otago.

Join Jill Tarter on Monday 3 July and Richard Wiseman on Friday 7 July for an afternoon of questions, answers, and entertainment.

#### Monday July 3 & Friday July 7, 1.00pm

Presented by Jill Tarter & Richard Wiseman Proudly sponsored by Aurora and made possible with the support of OtagoNet



#### **SPONSORSHIP IN SCIENCE WORKSHOP**

What funding is out there for events focusing on science, technology or the environment?

Join Heather Newell of Foresee Communications, a professional sponsorship commentator and fundraising trainer. The day will cover all aspects of sponsorship and fundraising for science, including an introduction to sponsorship and the latest trends, what sponsors expect, how to research and find potential sponsors, and where you can look for help.

This workshop will be useful for anyone involved in science, education, not-for-profit organisations or with an interest in the world of sponsorship and fundraising. Proudly presented by Joule, the Science & Technology Hub.

#### Wednesday July 5, 9.30am - 4.00pm

Conference Room, Dunedin Public Art Gallery, 30 The Octagon Tickets: 1 workshop \$25 / \$22 both workshops \$40 / \$35 Bookings essential. Ph: 0800 SCI FEST Presented by Heather Newell, Foresee Communications Sponsored by Joule

# GETTING THE SCIENCE ACROSS: PRACTICAL SCIENCE COMMUNICATION

Join us for a day of practical science communication learning from professional Australian and New Zealand Science Communicators. In different interactive sessions, you'll learn how to write popular science, what science editors look for, the use of creative theatre in science education, and how to get into the field of science communication.

Useful for students, writers, teachers, and anyone with an interest in presenting good science in an entertaining way.

#### **Presenters include:**

Chris Krishna-Pillay, Education Manager, CSIRO Melbourne Emma Young, Acting Australasian Editor, New Scientist magazine Kim Griggs, Freelance science journalist Associate Professor Lloyd Davis, Natural History Filmmaking Unit, University of Otago Dr Susan Cumming Education Manager, Monash Institute of Medical Research

**Thursday July 6, 9.30am - 4.00pm** Conference Room, Dunedin Public Art Gallery, 30 The Octagon Tickets: 1 workshop \$25 / \$22 both workshops \$40 / \$35 Bookings essential. Ph: 0800 SCI FEST



# CAFÉ SCIENTIFIC I... SUPERHUMAN? OR SOUPED-UP HUMAN?

Is pushing the limits of human performance through improvements in drugs and medicine always a good idea? Should we keep getting stronger, fitter & faster? Should we all be living to be over 100 years old?

Scientists, including some involved in the making of the television series Human Potential, will discuss these issues, including performance enhancing drugs, human genetic programming, improving performance and even slowing down the aging process.

> Monday July 3, 7.00pm – 8.30pm Scenic Circle Southern Cross Hotel

Princes Street

# CAFÉ SCIENTIFIC II... SUSTAINABILITY FOR BEGINNERS

Zero Waste – is it a load of rubbish? Can we do anything practical to lead more sustainable lives? Is all this stuff we hear about climate change involved? What are government, academia and industry doing in New Zealand to promote sustainable living?

If you're interested in what "sustainability" actually means, and what you can do, then come along to Café Scientific – three experts representing academic climate change research, Zero Waste, and practical action can tell you what's going on. Featuring Rutherford Medal winner Paul Callaghan, MacDiarmid Young Scientist of the Year Jessica North, and the DCC's very own Tania McLean!

#### Wednesday July 5, 5.30pm-7.00pm

Scenic Circle Southern Cross Hotel Princes Street

# CAFÉ SCIENTIFIC III... CAFÉ SCI ANYONE?

Selling Science : Do we "do science " as a commercial product? What about the science that doesn't have saleability... Will it get lost? Presented by University of Otago, Alumni Office

> Thursday July 6, 7.00pm – 8.30pm University of Otago Staff Club



Top Hat Limousines is proud to support the 2006 NZ International Science Festival



### CONTACT

**Contact** follows the plight of a woman scientist determined to make contact with extra—terrestrial life in the universe. Sound far—fetched? Welcome to the life of Jill Tarter, our guest at the 2006 International Science Festival.

While the lead character in **Contact**, played by Jodie Foster, is only loosely based on Tarter, she admits that it does touch on what it is like to be female scientist in a male dominated industry.

Come watch the movie, then stay on to hear Jill Tarter speak about the SETI Institute and its role in today's world.

#### Saturday July 1, 4.30pm

St David Street Lecture Theatre, Otago University, corner of St David and Cumberland Sts. Price: \$5 / \$3 (film only).

Tickets for both Contact~& Jill Tarter lecture  $10 \ / \ 8.$  See page 6 for more information.

#### THE DAY AFTER TOMORROW

New York City changes from sweltering metropolis to ice-age wasteland in a mere 96 hours. Other parts of the world fare no better and are tormented with killer hailstones, monstrous tornadoes, earthquakes, and other mega-disasters. What's Hollywood and what could be real?

Cataclysmic climate change is a real possibility, suggests NZ International Science Festival guest and climate change expert Will Steffen. If you spent an evening with Will Steffen on Thursday July 6, come along and watch the movie he spoke about.

#### Sunday July 9, 4.30pm

St David St Lecture Theatre, Otago University, corner of St David and Cumberland Sts. Price: \$5 / \$3 (film only).

Tickets for both The Day After Tomorrow & Will Steffen talk  $10 \ / \$  8. See page 8 for more information.

#### NATURAL HISTORY NEW ZEALAND SCIENCE DOCUMENTARY SERIES

Don't miss the luncthime screenings of a special selection of NHNZ science documentaries, including the NZ premiere of the 'Mega Disaster' series!





Sunday July 2, Mega Disaster: Tornado
Monday July 3, X Force-The Science of Mountaineering
Tuesday July 4, Mega Disaster: Earthquake
Wednesday July 5, X Force-The Science of Mountain Biking
Thursday July 6, Mega Disaster: Tsunami
Friday July 7, X Force-The Science of Free Flight
Saturday July 8, Mega Disaster: Volcano
Sunday July 9, X Force-the Science of Diving
All screenings at 12 noon, Hutton Theatre (or Barclay Theatre), Otago Museum, 419 Great King Street
Entry by gold coin donation. Ph: 474 7474
Presented by Otago Museum & Natural History New Zealand – www.otagomuseum.govt.nz

#### COLOSSAL SQUID VS SPERM WHALE

An opportunity to see the Discovery Channel "Animal Face Off" programme featuring the Colossal Squid model currently on display at the New Zealand Marine Studies Centre in Portobello.

#### Wednesday July 5, 5.30pm

Barclay Theatre, Otago Museum, 419 Great King Street, Ph: 479 5826 Presented by New Zealand Marine Studies Centre & Natural History New Zealand www.marine.ac.nz



Located in the heart of Dunedin with 2 major department stores, nearly 50 specialty stores and an international foodcourt, Meridian Mall has everything to satisfy your shopping needs.

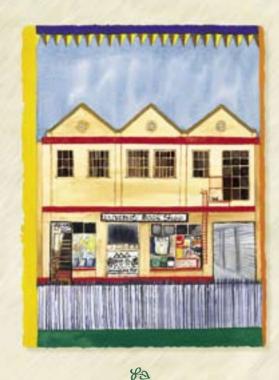
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hose of us lucky enough to live in Dunedin have discovered it already, but visitors to New Zealand's most congenial city have the pleasure of discovering it for the first time all by themselves. No, we're not talking about the Albatross Colony or the Captain Cook (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.

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

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Vital Colour 410





What does it feel like at the top of Mount Cook? Why do we get altitude sickness? This display simulates high altitude and explains altitude training for athletes training for the top!

#### Friday July 7 & Saturday July 8, 9.30am–5.00pm

Meridian Mall, George Street. Presented by Mike Hamlin, Lincoln University – www.lincoln.ac.nz Sponsored by Biomedtech, Victoria, Australia

#### WELLNESS CHECKS

Well, well. How well are you, really? The Otago District Health Board is offering free health checks for everyone and displaying of some of the lastest health technological gadgetry! Fancy finding out more? Come on down!

#### Saturday July 1–Sunday July 9, 9.00am–3.00pm

The Skills Laboratory, Fraser Building, Dunedin Hospital (brick building on the corner of Cumberland and Hanover Sts.) Presented by Otago District Health Board

#### THE CONSERVATION STATION - CARING FOR YOUR TREASURES

The Otago Musem shares the secrets of conserving and preserving precious objects. Bring your treasures along for the Otago Museum Conservator to evaluate and advise their best possible care.

Monday July 3–Friday July 7, 1.30pm–2.30pm

Otago Museum, 419 Great King Street Ph: 474 7474

Presented by Otago Museum – www.otagomuseum.govt.nz

#### TECHNOLOGY WITHOUT SIGHT

How would you send an email, a text or write a letter if you couldn't see? Our sight is important to us, but science and technology are now helping people'see' like never before. Come along and find out for yourself!

#### Thursday July 6 & Friday July 7, 11.00am – 2.00pm Skeggs Gallery, Dunedin Town Hall

Presented by Royal New Zealand Foundation of the Blind – www.rnzfb.org.nz

#### A NIGHT WITH THE STARS

Gaze up at the night sky at the Observatory and use telescopes to see the stars! Enjoy what local astronomers have to say about the sky and have your questions answered. Please note: use of the telescopes is weather permitting.

Sunday July 2, Monday July 3, Wednesday July 5, Friday July 7 & Sunday July 9, 7.30pm – 9.30pm Beverly Begg Observatory, Robin Hood Park, Belleknowes, corner City Road and Ross Streets Entry by gold coin donation Ph: 477 7683 (answer phone) Presented by Dunedin Astronomical Society

#### **OTAGO LIFE EDUCATION TRUST**

Visit the 2nd Generation Mobile classroon featuring NEW technology. Programmes encourage children to live a healthy lifestyle.

Wednesday July 5 & Thursday July 6, 10.30am–12noon & 1.30pm–3.00pm Lower Octagon Friday July 7 & Saturday July 8, 10.30am–12noon & 2.00pm–4.00pm

St David St Lecture Complex Presented by Otago Life Education Trust, Ph: 471 4960 – www.lifeeducation.org.nz

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and step into a world full of surprises! Take part in the

#### Nature Discoveries INVENTORS EXPO

during the July School Holidays Dream up a future gadget for tomorrow's world and be in to win \$100 Nature Discoveries Gift Voucher!

> Also prizes for: smallest invention wackiest invention most useful invention

COME INTO THE STORE FOR MORE DETAILS!

Nature Discoveries Meridian Mall, George St, Dunedin Phone: (03) 477 1515





www.otago.settlers.museum

Ph 03 477 5052. \$4 / \$3 concession, children free A department of the Dunedin City Council

#### SIX SENSES FOR LIVING

Have you ever thought about your senses? Could you live without them? How do they work? Senses, like sight and hearing, are our link with the outside world. They work together to piece together our perceptions of our environment. If one sense is missing, the other senses compensate.

Come and test your senses with this highly interactive exhibition! Three separate spaces explore the senses, their generally unnoticed role in daily life, how they work, and what happens when one is missing. The exhibition also looks at balance – our sixth and little known sense.

Saturday July 1 – Sunday July 9 (excluding Wednesday July 5), 10am–5pm Skeggs Gallery, Dunedin Town Hall, Ph: 0800 SCI FEST Brought to the 2006 International Science Festival by the French Embassy



#### SURF: THE ART & SCIENCE OF SURFING

Surf's up at the Cleveland Living Arts Centre with an exhibition exploring the art and science of surfing. It's the new wave.

June 22–July 15

Open: Monday–Friday, 10am–4pm; Sat 10am–2pm Ph: 477 7291 First Floor, Dunedin Railway Station – www.artcentre.org.nz

#### **GASWORKS MUSEUM : ENGINE HOUSE**

See magnificent steam pumping engines in action and learn how coal gas was made and used in Dunedin

Sunday July 2, 12 noon–4pm; Tuesday July 4, 10am–3pm; Wednesday July 5, 9am – 12 noon. Braemar St, South Dunedin, Entry by gold coin donation, Ph: 455 5063

#### DUNEDIN TSUNAMI: THE WAVE YOU SHOULDN'T TRY TO CATCH

Are we waiting for a big one? Find out what the predicted Tsunami Hazard for Dunedin is at the Civil Defence Centre. We all know not to go to the beach if a Tsunami does come-but what do we do? Come and find out!

Tuesday July 4 & Wednesday July 5, 11am–3pm

Emergency Operations Centre, Level C, Moray Place Carpark Building (behind DPAG), 54 Moray Place, Ph: 474 3111 Event presented and sponsored by GNS Science – www.gns.cri.nz

#### **RECYCLIA-TRASH TO ART**



UNEDIN NEW ZEALAND

Art exhibition and competition

Can we really make trash flash? Recyclia proves we can! Come and visit the exhibition where art objects have been made by local high school students from non-organic materials originally intended for non-artistic use.

**Tuesday July 4 – Sunday July 9, 10am–5pm** Community Art Gallery, Princes Street, Dunedin, Ph: 474 3401 Presented by Keep Dunedin Beautiful

Unrivalled viewing of wildlife in its natural and inaccessible environment. Albatross, Seals, Penguins and up to 20 species of bird and marine life.

FREEPHONE 0800 666 272

wildlife Cruises & Tours of bird and marine life. Visit us at www.wildlife.co.nz monarch@wildlife.co.nz wonarch@wildlife.co.nz Present this AD to receive %10 OFF





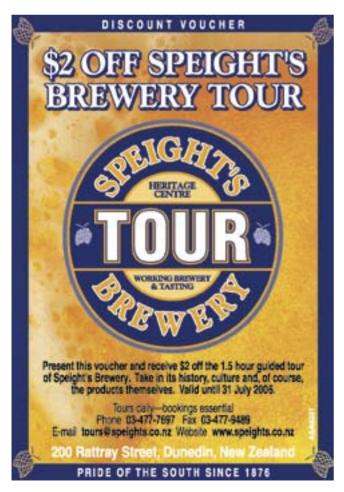
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# **NewScientist**

#### Question everything

When life poses questions, subscribe for answers... As part of the New Zealand International Science Festival you can save 30% when you subscribe to New Scientist magazine.

Visit www. newscientist.com.au/sciencefestival or call +61 2 9422 2666 and quote NS060P08.





Taieri Gorge Railway

Your visit to Dunedin is not complete without a trip on the Taieri Gorge Railway one of the world's great train trips. Marvel at spectacular scenery, wild landscapes and towering viaducts.

With a wealth of history, a live commentary, friendly well informed staff and sightseeing stops this is an all weather experience not to be missed!

Phone 03 477 4449 email: railway@taieri.co.nz www.taieri.co.nz

Get 20% off the full adult fare upon presentation of the bottom portion of this advert. Offer only redeemable at the Taieri Gorge Railway booking office. Offer express 31 July 2006.

#### MATHS MADE FUN

Book your child in for a free Numberworks session

Monday July 3 – Friday July 7, by appointment between 4.30pm and 6.30pm 90 Crawford St, Suitable for 6-15 years Bookings essential. Ph: 474 1104 Presented by Jan Savell, Numberworks – www.numberworks.com/dunedin

#### **MONARCH WILDLIFE CRUISES**

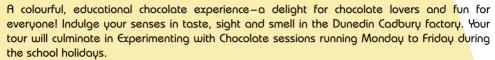
Wildlife Cruises to view albatross, fur seals and other marine mamals-up to 20 species of ocean and pelagic birds

#### Saturday July 1 - Sunday July 9

1 hour trips 2.30pm & 3.30pm, from Wellers Rock Wharf on Otago Peninsula Half day trip 1–6pm, from Corner Wharf & Fryatt Sts, Dunedin 1 hour trips \$12 / Half day trips \$25 Prices are 30% less than normal Bookings essential Ph: 477 4276

Presented by Monarch Wildlife Cruises - www.wildlife.co.nz

#### CADBURY WORLD - EXPERIMENTING WITH CHOCOLATE CADBURY WORLD



Monday July 3 – Friday July 7, Chocolate experiments run Monday – Friday, 9am – 4pm Cadbury World, 280 Cumberland Street, Dunedin

\$15 Adult / \$8 Child / \$38 Family (includes 2 adults & up to 4 children) Bookings essential Ph: 0800 223 287, Presented by Cadbury World – www.cadbury.co.nz/cadburyworld/home

#### **SPEIGHTS HERITAGE CENTRE**

For 130 years, Speight's has been the 'Pride of the South'. Experience the history and culture behind New Zealand's famous beer on tour of the working breweru. Complete with private beer tasting session of six different Speight's beers.

#### 200 Rattrau Street, Dunedin

Please phone for tour times and prices. Bookings essential. Ph 477 7697 or email tours@speights.co.nz

#### TAIERI GORGE RAILWAY

Departs daily from downtown Dunedin into the rugged and spectacular Taieri Gorge. An all weather trip not to be missed!

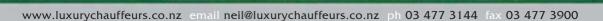
#### Saturday July 1–Sunday July 9, 12.30pm departure, arrives back at 4.30pm

Railway Station, Anzac Ave, Dunedin Ph: 477 4449 \$63.00 per adult (1 child free) Extra child \$18.00 www.tajeri.co.nz

# LUXURY CHAUFFEURS is proud to support the 2006 NZ International Science Festival

- Central Otago Wine/Golf Tours Heritage Tours Mandeville Fly Drive in a 1936 Biplane
- Moeraki Boulders 

  Peninsula Tours





#### **CANTERBURY MUSEUM**

#### Wonderful Whales

Find out the difference between a humpback whale and a blue whale at Canterbury Museum. Learn about the habitats, characteristics and behaviours of different whales and go on a special behind—the—scenes tour of the Museum's enormous blue whale skeleton. The Wonderful Whales holiday programme is part of TV2 KidsFest.



Monday 3 July – Friday 7 July 2006 & Monday 10 July – Friday 14 July 2006 10.00 am – 11.30 am (3 – 6 yrs) 1pm – 3pm (7 – 13yrs) Canterbury Museum, Rolleston Avenue, Christchurch Discovery Club members \$2.50, Non – Discovery Club members \$5.50 Phone Ticketek for bookings on 03 377 8899 www.canterburymuseum.com



#### **TE MANAWA**

#### Te Manawa Science Festival

Te Manawa Science Centre is Palmerston North will kick off its Science Festival on the 8th July. A week full of fun activities for all the family is planned with amazing hands—on demonstrations, science displays, workshops and incredible interactive talk, all based around the them of human body and keeping healthy. The festival is supported by many from the scientific community in Palmerston North including Massey University. As well as the science festival, Te Manawa Science Centre highlights and celebrates science and technology through the creation of science exhibitions, public programmes and events.



#### 8–14 July 2006

Te Manawa, 396 Main St, Palmerston North, Ph: 06 355 5000 Suitable for children 6 years+ – www.temanawa.co.nz



#### How to Make a Monster



Science Alive! proudly presents the blockbuster exhibition "How to Make a Monster; the art and technology of animatronics". A unique exhibition that uncovers the secrets behind movie creatures and how they are made – with interactive exhibits you can really get your claws into!

If you've ever wanted to touch the alien guts from 'Pitch Black', manipulate a Megalania, inspect Inspector Gadget's gadgets, direct a dinosaur, control the crocodile from 'Peter Pan', or do other cool stuff, this is the exhibition for you.

Created by Academy Award winning animatronics expert John Cox, and his team from the John Cox Creature Workshop in Queensland, the How to Make a Monster exhibition showcases some of the stars of Cox's movie career and will take you on a behind—the—scenes look at the creative techniques used in visual effects and movie animatronics.

#### 7 July-22 October 2006

Science Alive! 392 Moorhouse Ave, Christchurch, Ph: (03) 365–5199 See www.sciencealive.co.nz for more info and entry fees

#### **HUNTER LOVINS**

#### Growing a Well Future for our Grandchildren's Grandchildren

World-renowned sustainability expert Hunter Lovins reminds us that a world facing climate change, deteriorating eco-systems and peak oil is a challenging place to live. Her not-profit organisation, Natural Capitalism Solutions Inc, insists that solutions to these problems do exist and can be implemented in ways that create greater prosperity, improve local and national security and present opportunities for each of us to find greater meaning in our lives.

Hunter Lovins tours New Zealand with a national series of seminars, debuting in Dunedin and continuing throughout the country:

Dunedin	Sunday July 2		
Christchurch	Monday July 3		
Auckland	Wednesday July 5		
Hamilton	Thursday July 6		
Te Whaiti	Friday July 7 – Sunday July 9		
Wellington	Monday July 10		
For further information go to www.kaitiakitanga.net/hunterlovins.pdf			

#### **BOOKING INFORMATION**

Make sure you don't miss out on your favourite events. Book tickets from May 24 2006 for the NZ International Science Festival.

There are several ways to buy tickets:

Online Enquiries: www.scifest.org.nz

- **By Phone**: call our office on 0800 SCI FEST Monday – Friday, 10am – 5pm
- **In person**: At the Science Festival Headquarters at the ODT Gallery in the Dunedin Public Art Gallery 10 am 5pm, 1 9 July.
  - **βy post**: Send us your full details of your request, including day time telephone number to: NZ International Science Festival, Booking Office, P O Box 5819, Dunedin
- **By email**: Send the full details of your request, including day time telephone number to: scicrew@scifest.org.nz

#### SCIENCE FESTIVAL PASS

The purchase of the Festival Pass gives great discounts to NZISF events and costs \$40/\$29 (students)

#### The Science Festival pass includes:

2 Keynote lectures (Jill Tarter & Richard Wiseman) 2 film Screenings (Contact & Day After Tomorrow) 1 showing of Pre–Coital: The Science of Dating This is the equivalent of 1 event for free.

Members of the NZISF receive a further 10% discount on the Festival Pass 36/26 (students)

#### **PAYMENT METHODS:**

Please make cheques payable to NZ International Science Festival. We can accept Mastercard & Visa payments by post, email or telephone.

#### CONCESSIONS

Concession prices are available to some ticketed events. See individual details.

# PLANET SCIENCE! AT THE ODT FESTIVAL HEADQUARTERS

Bookings are essential for the Planet Science kid's workshops and activities. Tickets can be purchased by phone, in person, email or by post.

#### **GETTING AROUND**

Most events are located in or around the Octagon & St David St Theatre (University) in Dunedin. Check out the map on the back page of this Guide for more details.

If you still can't locate a venue call the phone number listed in the event description or 0800 SCIFEST (724 3378) for directions. You can walk, bus or drive to most events & most venues have parking facilities close by.

Visiting the Festival from outside Dunedin? We know just the people to make sure your travel and accommodation is of the highest quality and comfort. Call Brooker Travel Group on  $0800\ 633$  & Scenic Circle Hotels on  $0800\ 696\ 963$ .

#### OTAGO DAILY TIMES SCIENCE FESTIVAL HQ

#### Open 10.00am – 5.00pm daily

The Otago Daily Times Festival HQ is the Hub of 2006 Science Festival, situated in the ODT Gallery in of Dunedin Public Art Gallery. Visit the Otaao Dailu Times Festival HQ to find out more about the Science Festival, what's on, who's who and what is where! You can buy your tickets for Science Festival events, make bookings - our Scifest Staff will be pleased to help uou! Otago Daily Times Festival HQ is where Planet Science: Kid's workshops are held, so come on down and see what's aoina on! The Otago Daily Times Festival HQ is very pleased to receive support from the ODT – check out the ODT for a daily listing of all Science Festival events!

#### BECOME A MEMBER OF THE NZ INTERNATIONAL SCIENCE FESTIVAL

By joining the NZ International Science Festival as a member, you will be helping to make science accessible and fun for everyone. You will be the first to know about upcoming events and speakers and get reduced or free admission to those events. You'll get plenty of chances to be actively involved through helping at event and meeting the speakers. Most of all, you will ensure that we continue to bring high-quality, high-profile events to Dunedin and beyond.

Join and receive 10% discount on many Festival events and merchandise! You will be kept up to date with science-related events in Dunedin and receive a quarterly newsletter. Even better, you will show us that you think we are doing a great job!

Please call 0800 SCIFEST for more details or visit our website www.scifest.org.nz

#### **FESTIVAL MERCHANDISE**

Take a piece of the Festival home with you - from badges to beanies, check out the great range of Festival merchandise in the New Zealand Shop located in the Octagon, or call **477 3379** for details.

