



The Royal Society OF VICTORIA

Promoting science since 1854

PATRON: The Hon Linda Dessau AC
Governor of Victoria

PRESIDENT: Mr David Zerman

This Month's Events...



17th August: Young Scientist Research Prizes
Competition and Prize Ceremony



24th August: Professor Kate Smith-Miles
"Maximising Impact through Mathematics"
(Lunchtime Lecture)

September Advance Notice:



14th September: A/Professor David Dunkerley
"Drylands and Water Management"



21st September:
Professor Mark S. Boyce
"Predator-Prey Systems: Wolves in Yellowstone"



28th September: Phillip Law Postdoctoral Award Lecture
Winner to be announced in August

August 2017 Newsletter

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August Meetings
The Young Scientist Research Prizes
2017 Competition and Awards Ceremony
Thursday, 17th August 2017 at 6:30pm.



To foster and recognise excellence in Victoria's early career scientists, the Royal Society of Victoria has established four prestigious competitive prizes open to Victorian students in their third or fourth year of doctoral candidature, in all areas of the Biomedical & Health Sciences, Biological Sciences (Non-human), Earth Sciences and Physical Sciences.

Following submissions and assessment across the four categories, eight finalists have been selected to present to our audience on the evening of 17 August, 2017. Of these eight finalists, only four will win the prize of \$1000 for their respective

categories. The award is based on demonstration of the applicant's excellence in scientific research, ability to communicate scientific information clearly and succinctly to an audience of scientists and members of the general public on their particular research field and to answer questions from the audience.

2017 Finalists

Physical Sciences:

Justine Corso, The University of Melbourne – “Damage and orientation in single molecule imaging using x-ray free-electron lasers”

Guoping Hu, The University of Melbourne – “Novel promoters for carbon dioxide absorption in potassium carbonate solutions”

Earth Sciences:

Nicolas Molnar, Monash University – “The unzipping of continents”

Alexander Norton, The University of Melbourne – “Observing photosynthesis from space: a novel technique using plant chlorophyll fluorescence measurements and a carbon cycle model”

Biological Sciences (Non-Human):

Bryant Gagliardi, The University of Melbourne – “Differentiating pollutant-induced effects from non-contaminant stress responses in aquatic midges (Diptera: Chironomidae)”

Perran Ross, The University of Melbourne – “Environmental impacts on the use of Wolbachia for arbovirus control”

Biomedical & Health Sciences:

Sarah Larcombe, The University of Melbourne – “New Insights into the pathogenesis of diverse bacterial species in non-*C. difficile* antibiotic-associated diarrhoea”

Joshua Newson, Monash University – “Salmonella effector proteins interrupt host cell death signalling”

Each of these short-listed candidates will be required to give a 15 minute oral presentation (10 minutes presentation, 5 minutes discussion) before a general audience at the Society. In addition to the merits of the methodology and significance of their scientific work, finalists will be judged on their ability to make their work accessible and interesting to an audience uninitiated in their field of endeavour. Winners will be announced at a special function following the presentations at the Royal Society of Victoria's Hall.

The Biological Sciences (Non-human) prize and Earth Sciences prize are generously supported by donations from the families of previous Royal Society Presidents: Edmund D Gill and Neil Archbold respectively. We also gratefully acknowledge the generous support of **Dr S Max Richards AM** and **Mrs Margaret R Richards**, commencing from 2017.

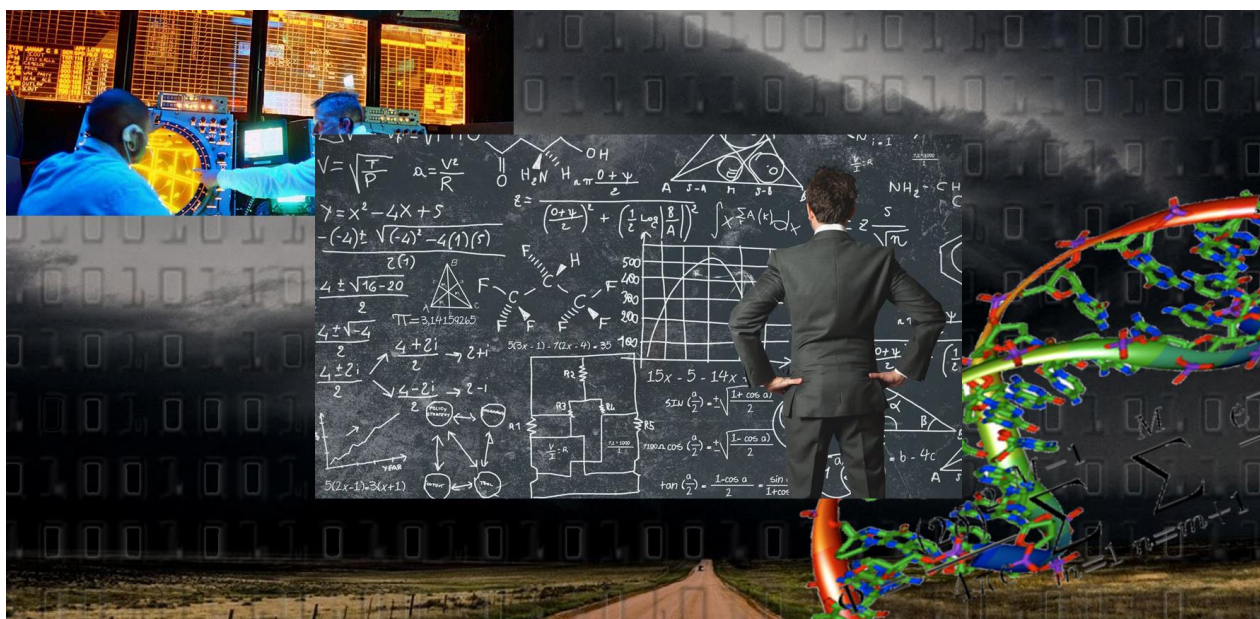
national science week 2017



A free event, places limited, bookings essential! Register online now at <https://rsv.org.au/events/ysrp-2017/> , call or email the RSV office to secure your place: 9663 5259, rsv@rsv.org.au.

Maximising Impact through Mathematics – and Having Fun Too!

Lunchtime Lecture



Thursday, 24th August 2017 at 12:00pm.

Speaker: **Professor Kate Smith-Miles**
Director, Monash Academy for Cross & Interdisciplinary Mathematical Applications

Mathematics holds the key to unlock many of the greatest challenges of our time. From improving food security, to reducing traffic congestion, and discovering hidden connections in gene networks, mathematical techniques are enabling solutions that will lead advances in the 21st century. In this talk, we will explore the breadth of mathematics that gives rise to these applications. We'll discuss why mathematicians often consider their work to be as much of an art as a science, admired for its beauty and elegance as well as its important applications. Finally, we will look in detail at how mathematics can be used to accurately guess how old someone is based on a photo of their face. No more lying about your age!

About the Speaker:



Kate Smith-Miles is Professor of Applied Mathematics at Monash University, and inaugural Director of the Monash Academy for Cross & Interdisciplinary Mathematical Applications (MAXIMA). She was Head of the School of Mathematical Sciences at Monash from 2009-2014. She is an Australian Laureate Fellow, a member of the Australian Research Council's College of Experts, and is a member of the Federal Government's Knowledge Nation 100 group. She is Chair of the Advisory Board for the AMSI Choose Maths program, aiming to encourage more female participation in mathematics. Kate is a Fellow of the Australian Mathematical Society, and Fellow of

Engineers Australia. She was awarded the Australian Mathematical Society Medal in 2010 and the EO Tuck Medal from ANZIAM in 2017.

Her research outputs include over 240 publications on topics including optimisation, machine learning, time series analysis, and mathematical modelling of diverse processes ranging from neuroscience to manufacturing. Other interests include playing the cello in a community orchestra, and listening to her two musically talented children practise.

Eventbrite

Register online now at <https://rsv.org.au/events/maximising-impact-mathematics/>, call or email the RSV office to secure your place: 9663 5259, rsv@rsv.org.au.

RSV Fundraiser: the Ellery Theatre Project



As a community-based, not-for-profit organisation, the Royal Society of Victoria has been promoting science since its beginnings in 1854.

Since those days, methods and styles of communication have changed beyond the imagination of our earliest members and presenters. To enable the wider Victorian community (and potentially, those interstate and overseas) to engage with our fascinating talks, forums and discussions with Victorian scientists and science communicators about their exciting work, the Society is planning a major audio visual upgrade of our heritage listed Ellery Theatre so we can broadcast our events, forums and presentations in an engaging, interactive format to the broader Victorian community, further providing content via a dedicated online channel and media partners for access after delivery.

This accords with our strategic goal to engage Victorians in the excitement of scientific discovery and celebration of our high achieving scientists at all stages of their career development.

How the Funds Will Be Used

The costs of the project are largely comprised of audio visual equipment including: cabling, lighting, cameras, microphones, amplifiers, and lecture capture technology. The project includes the installation of an internal Ethernet network and connection to a broadband internet network to facilitate a reliable connection to audiences interacting with our events from regional Victoria. Much of this infrastructure will be installed in what is currently our archive room, which will be transformed into a "bio box" for audio-visual operators to work in remotely without undue disruption to event proceedings or occupying the limited seating space available to members and guests in our small theatre.

While specialised technical labour is a substantial line item in the project, the project is also constrained by the need to preserve and enhance the beautiful heritage decor of our 1859 Joseph Reed-designed building and its gorgeous Victorian-era interiors. This means a lot of "work-arounds" during installation and extensive project management to secure the requisite heritage permits for this transformative work to proceed.

The Challenge

We aim to raise \$50,000 from our community of members and friends, with the additional \$180,000 support from philanthropic trusts and foundations, corporate supporters and government partners. This fundraiser is a vital first step, demonstrating the commitment of the Society and its members to the project to our prospective funding partners and supporters. It is a large undertaking for the Society, which has not seen a substantial technical investment in its facilities for some decades, in which time information and communication technology has undergone radical change.

To keep pace with the march of technology, it will be important for the installation to anticipate and accommodate upgrades to equipment, cabling and resident expertise at suitable future intervals. This will inform our annual budgets for recurrent operating expenditure.



Can you help? Please make your tax deductible donation now at <https://rsv.org.au/ellery-theatre-project/>, or call or email the RSV office to discuss your contribution: 9663 5259, rsv@rsv.org.au.

National Science Week is here again from **August 12 – 20** and there's a huge range of fun and fascinating science engagement events popping up all across Victoria. All 86 registered events and 20 competitions are available to browse online at <http://bit.ly/2tAJdr1> - meanwhile, signature events in the Melbourne CBD are detailed below.

MARKET OF THE MIND

Friday, 11th August at Queensbridge Square in Southbank, Melbourne

Where the cerebral, scientific and social collide!

With live ice-sculpture, inside-out people and virtual reality science, Market of the Mind has it all. There's live music, charlatans, magicians, performers, and the chance to speed-meet a scientist! Prizes to be won at our science sideshow, see the funny side of science and trial some tantalising technology!



LIVING SCIENCE AT THE QUEEN VICTORIA MARKET

Sunday, 13th August at the Queen Victoria Market

Join us at the Queen Vic Market to explore the relationships between food, science, innovation, technology and the environment.

Interactive presentations, hands-on activities for adults and children, shows and demonstration run throughout the day. Hope to see you there!

FREE event!

Cooking demonstrations with tastings, sample the science of Chocolate, extracting DNA from a strawberry and much more.



VOICES FROM THE DEEP

Thursday, 3 August, from 6:00pm at Melbourne Museum,
11 Nicholson Street, Carlton



Imagine going on a month-long voyage of deep sea discovery, where scientists explore 4000m below the surface and yield a cargo of weird and wonderful deep sea species discovered in the abyss.

Live vicariously through Museums Victoria scientists who recently did just that and are now sharing the discoveries from their deep sea voyage in a special event at Melbourne Museum.

Voices from the Deep will provide a unique insight into the voyage, led by Museums Victoria and supported by CSIRO and NESP Marine Biodiversity Hub in May and June this year, with

a closer look at some of the astonishing deep sea critters. Scientists will share their discoveries and tales from the voyage, and footage from on board the Investigator will give a glimpse into their journey from northern Tasmania to southern Queensland.

Dr Tim O'Hara, Senior Curator, Marine Invertebrates at Museums Victoria and the Chief Scientist on the Sampling the Abyss voyage will be joined by **Dianne Bray, Museums Victoria's Senior Collection Manager, Vertebrate Zoology**, to share their experience exploring the dark, hostile and crushing environment that is the abyss, considered one of the most inaccessible and unexplored environments on the planet.

Finds from the voyage will feature in this special presentation, including a mysterious deep sea coffinfish with bluish eyes and red feet. The deepest one collected in Australia, it belongs to the anglerfish group and is potentially a new species. It attracts unsuspecting prey using a fishing rod tipped with a fluffy bait on top of its head. When threatened, coffinfish often inflate themselves with water to make themselves look more menacing.

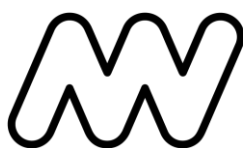


Voices from the Deep is a rare opportunity to see fascinating specimens up close and discover the importance of conducting scientific fieldwork in documenting, understanding and conserving the biodiversity of the natural world. Specimens from the voyage will on display until 31 August, before they head back behind-the-scenes to be studied.

As we approach National Science Week (12-20 August 2017), Museums Victoria encourages you to join us in answering the BIG questions: How do scientists explore the ecology of the deep ocean – more than 4km down? What can we learn from studying strange and beautiful creatures? What is it like to live

on a \$120 million dollar ship for a month?

Further details and tickets: <https://museumvictoria.com.au/melbournemuseum/whats-on/voices-from-the-deep/>



**MUSEUMS
VICTORIA**





A one-day conference for new and established authors of science fiction.

Learn valuable writing techniques and draw inspiration from real science to hone your craft!

Science and Science Fiction: a Symbiosis?



How do we balance the frontiers of knowledge and the imagination?

Science fiction in all its forms is one of the best science engagement avenues at our disposal, yet to accommodate a readership frustrated with "pseudoscience," it's important for writers to draw inspiration for science fiction from science fact, particularly to satisfy the tastes of science-literate individuals who represent a large (and vocal!) proportion of the sci-fi audience.

Our writer-focused conference program is designed to provide the insights that all science fiction writers need to take their work to the next level. Featuring some of Melbourne's finest authors, scientists, publishers, communicators and educators, we will provide current and aspiring authors with expert insights on the finer points of the fiction writer's craft. Spend a day learning techniques for honing your manuscript and take the opportunity to learn to pitch your story to literary agents and publishers with some one-on-one coaching.*

We will also get your imagination firing from a foundation of solid science. The day will feature insights from working scientists (all with a taste for science fiction) to help dispel some common misunderstandings of scientific principles in classic mechanics, genetics and cloning, the mind-blowing nature of time, space, electromagnetism, quantum mechanics and the universe itself.

Come draw some inspiration from working writers and real science, with confidence in your sources!

All participants will receive:

- Insights and guidance on genres within science fiction; writing dystopias, climate-based scifi, 'hard' scifi, junior fiction
- Technical guidance on story creation; world building, "dos and don'ts"
- Industry insights to getting published, including digital storytelling and alternative platforms
- An opportunity to pitch your story idea to a publisher for coaching and feedback
- The ability to network with fellow science and speculative fiction writers. Share ideas, and even your work if you choose
- Insights and hot tips from Victorian scientists who share your enthusiasm for science fiction
- A limited edition, print copy of Aurealis Magazine's historic 100th edition



Fully catered for morning tea, lunch and afternoon tea. Register now for a great day of science for your science fiction, at Victoria's oldest learned society! The full program will be posted shortly: meanwhile, with only 110 places available, and limited discounted earlybird rates, be sure to secure your ticket fast.

**please note signing up for a pitch session or being asked to send your full manuscript is not a guarantee of finding representation or publication.*

Speakers, program and registrations are available online now at <https://rsv.org.au/events/science-for-science-fiction/> call or email the RSV office to secure your place: 9663 5259, rsv@rsv.org.au.

From the President



Despite Melbourne's cold winter weather - except for those who have been lucky enough to travel up north or to warm international locations – we have had several functions that proved informative and enjoyable to our members and guests. Thanks to Professors Gordon Wallace, Lynne

Selwood and James Warren for contributing to our July program.

We also welcome many visitors to our Open House Melbourne on Saturday 29th July which continues a very successful city wide program. I'd like to especially like to thank our volunteers who help to meet, greet and explain the RSV, our building and our programs to those who visit us during the day.

If you weren't able to attend any of these lectures, unfortunately we can't yet show them to you via a special RSV YouTube channel. Currently, we don't have the financial resources to record our speakers' presentations to a suitable standard. That's why we are conducting a special fundraising appeal to upgrade the audio-visual equipment in the Ellery Theatre to enable members and other interested people - especially students in regional and rural Victoria - to have the same opportunities as people in Melbourne to see and hear our most interesting presentations.

If you'd like to make a donation please follow the link to our website at <https://rsv.org.au/ellery-theatre-project/>.

The support of all donors to date is greatly appreciated as we contact Trusts and Foundations and other organisations to partner with us on this project which will open up the RSV and our speakers to many more people.

I have a request of you – and I hope you'll respond. As we plan for our 2018 speakers program and other events I'd like you - as an RSV member - to send in themes, topics and speakers you'd like to hear about next year. Our 2017 program designed by Professor Sandra Rees has been enthusiastically received. Dr Kevin Orrman-Rossiter and his committee seek to continue this standard and would like your suggestions. Please send me your ideas and I'll pass them on to Kevin and our CEO Mike Flattley. My email address is president@rsv.org.au.

I look forward to seeing you at some of our August events.

Catch David on 3MBS, 103.5 FM



David Zerman describes himself as a Fundraising Epidemiologist. He's used these skills in a wide range of not-for-profit organisations, including the National Stem Cell Foundation, The Royal Melbourne Hospital Foundation and the Royal Flying Doctor Service where he was the CEO for 9 years. Now President of the Royal Society of Victoria, he was the guest of Susan Porter in *Reflections* on Sunday 30 July – if you missed it, the show will be repeated at 11am on Sunday 6 August.

The Finkel Review into the Future National Electricity Market



The Executive Committee of the Royal Society of Victoria recognises the significance of the [Independent Review](#) prepared for the Federal Government by Chief Scientist **Dr Alan Finkel** and his expert panel on the future security of Australia's electricity market. The Review's report recommendations provide a blueprint for introducing security, reliability and emission abatement into a policy area that has been recognised Australia-wide as lacking national direction. The urgency of dealing with energy supply issues in the face of human-induced climate change has now been recognised by virtually all other countries.

The Executive acknowledges that there will be legitimate public debate over the relative merits of a Clean Energy Target, as distinct from other approaches, and over the role of coal in the

energy mix. Nevertheless, the Finkel Review provides a means of breaking an entrenched political deadlock which has reduced investment and stifled development in this country, even though it possesses significant sources of renewable energy.

The Executive commends the leadership displayed by Dr Finkel, who is also one of the Royal Society of Victoria's Trustees, in the development, execution and dissemination of this review.

Vale

The Council of the Royal Society of Victoria records with sadness the passing of RSV member:

Mr Graham Douglas Miller

Of Heathmont, passed away on 18 July 2017
aged 91.



Graham's long career as a science teacher and school principal followed in his parents' footsteps as school teachers - a long education pedigree! He joined the Royal Society of Victoria in 1991 and has been an enthusiastic participant in our events and excursions right up to these last few months of his long life. A bright feature in the life of the Society, sadly missed.

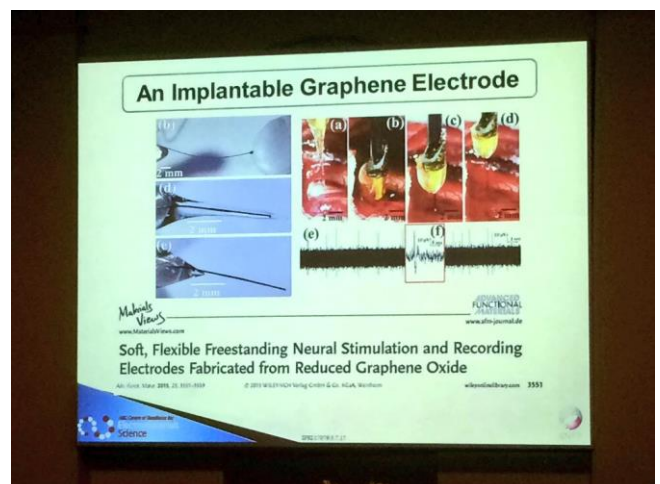
July Meetings in Review

Midwinter is a quiet time of the year with Melbourne's short days and cold nights; the universities are in mid-semester hiatus, many students, teachers and researchers are on leave or taking the opportunity to catch up on work neglected over the teaching period and many Victorians taking time out to cover the school holiday period. So it was marvellous to have a bright, warm turnout for our July meetings, two very different events in format and content.

3D Bioprinting – Printing Parts for Bodies 13th July



Professor Gordon Wallace AO (pictured above) was a brave man indeed to venture down from sunny Wollongong for a few days in Melbourne's mid-winter! Joined by colleagues from the Victorian chapter of ATSE for this joint lecture, a nice, full house made for a warm, cosy Ellery Theatre to learn more about the work of Gordon and his colleagues on the use of 3D printing applications in medical technologies, prostheses and implants.



Gordon explored a range of active concerns in his field of bioengineering, including: the biocompatibility of conductive materials like graphene, which are crucial to the quality and fidelity of signalling between electrodes and the body's cells; experimental structures for stem cell development pathways that stimulate nerve and muscle regeneration; and printing structures with

stems cells to create functional, 3-dimensional, neural mini-tissues for network connections. Gordon provided amazing demonstrations of the capacities of printing technology, and the application of bypassing the body's defunct neural pathways to send commands to prosthetic limbs.

As ever, these advances in materials science, manufacturing and medical technologies face barriers with the regulatory, bureaucratic and social obstacles to adoption; awareness raising and education remains a vital piece of work in speeding these advances to widespread healthcare application.



From left: Professor Gordon Wallace AO with Professor Sandra Rees, ATSE Victoria Chair Professor Alexander Gosling (vote of thanks) and RSV Science Program Chair Dr Kevin Orrman-Rossiter (Chair).

Ripping Yarns – Two Lives in Zoology 28th July



RSV President David Zerman getting proceedings underway in the Burke and Wills Room

It was such a treat to hear Professor Lynne Selwood AO and Emeritus Professor James Warren recount the highlights of their careers in the biological sciences! A mixed group of

members and friends gathered around tables in the Burke & Wills Room to eat lunch, hear two wonderful presentations and seek further insights to their science, their adventures in the field and reflections on the trajectory of a career scientist.

An understanding of Jim's foundational contribution to the study of vertebrate palaeontology in Australia was complemented by tales of his origins in the United States, growing up in a very religious family conducting a pharmaceutical practice, where he naturally picked up a fascination for chemistry. Jim's bedroom walls were adorned with charts demonstrating the evolution of species, much to his father's chagrin, but was given his head and made for university with a passion for chemistry, thanks to his time working in the family's pharmacy business, only to find the syllabus pitched too low. A restless mind soon found its way to the biological sciences, and the rest is a blur of bear-menaced Alaskan zoological surveys, studies of stunning US palaeontology collections and a curious evening in a Mexican prison. "Ripping Yarns" indeed, Jim!



From left: RSV Vice-President Nicola Williams, CEO Mike Flattley, Professor James Warren, and Professor Lynne Selwood.

Lynne's tales of research and discovery were of a different flavour, contrasting Jim's passage into academic program administration and senior management at Monash with her lifelong dedication to research and teaching. Unsure of whether to begin as an artist or a scientist, Lynne traced her early years from Proserpine in Queensland, down to Ballina in NSW and a wonderful teacher in Nancy Wilkie, who fostered her love of the biological sciences. Lynne memorably used a lead crystal, egg-shaped bowl and lid ("which women of my generation might remember sitting on their mother's dressing table") to demonstrate the properties of embryo construction and formation in different species of

mammal, and how she used that information to devise a vaccine against the proteins that form the placenta in brush tailed possums; thus creating a non-lethal fertility control measure to curb numbers in New Zealand. Remarkable work.

No exploration of the zoology field is complete without an account of the alarming peril to biodiversity our times have ushered in, and Lynne was good enough to explain what the “Anthropocene” is, and what it means for life on Earth. Notwithstanding this important yet sombre reminder, this was a really fun session. I've spent a fair bit of time with both Lynne and Jim over the past couple of years, either at our functions, on Council business or in conducting our annual elections, but in all that time we rarely have the opportunity to really understand the scope and significance of their life's work. I look forward to hearing from our next duo of senior members for another chapter of “Ripping Yarns!”

- Mike Flattley

Kids' Conference – Science Workshop



This year we're partnering with the Australian Catholic University (ACU) to include a Science stream in their annual **Kids' Conference** proceedings. If the primary or secondary-aged students in your life love science, their teachers can register to bring them along to both the conference and this pre-conference workshop at the Royal Society of Victoria, dedicated especially to building skills and confidence for budding science presenters! Interested participants should register for the workshop **before 7 August**. Conference registrations open on **9 October**.

Further information and registrations are online at http://www.acu.edu.au/about_acu/faculties_instit

[utes and centres/education and arts/kids conference](#) .

Proceedings – Latest Issue



Aphneulepis australis. Photo: Lynne Bean

Volume 129, number 1 is out! Featuring: a reappraisal of **Mesozoic fishes** and associate invertebrates and flora from Talbragar and Koonwarra (Lynne Bean); a study of **gnammas** (rock pools) and their invertebrate communities in granitic outcrops in central Victoria (Brian Timms); observations on the range extension of the Victorian nudibranch **Tenellia catachroma** into Western Australia (Matt Nimbs), and; the mineralogy of the **Silver King deposit** in Omeo (William Birch).

Editions of the Proceedings from 2009 are online and freely accessible from CSIRO Publishing: <http://www.publish.csiro.au/rs/content/allissues> . This now also includes Volume 125, which features papers and abstracts from the 2013 Symposium titled “Climate Change Science: Impacts and Adaptation for Victoria.”

Call for Papers

We're bringing together the next edition of our open access, peer reviewed *Proceedings of the Royal Society of Victoria*, one of Australia's oldest scientific journals published online with CSIRO Publishing.

While all interest is welcome, we're particularly keen to provide a publication platform for some of Victoria's early career scientists in this edition. If you're in the final run of your PhD, or getting underway with your postdoctoral work, please contact us at editor@rsv.org.au to discuss your work and proposal. Guidelines for authors are available in the link.

Our journal maintains a focus on science conducted in Victoria, with a particular interest in the earth, biological (non-human) and physical sciences concerned with south-eastern Australia. The history and philosophy of science is also within scope if you have a relevant, regional focus.

The Migrant Science Communication Project: Meet the scientist behind “Hero Ladybirds of the Galapagos Islands”

The ten participants in our Migrant Science Communication project have really done themselves proud, completing their training and development at the Royal Society of Victoria with colleagues from Cultural Infusion and the Australian Science Communicators in early July. They're now gearing up to roll their presentations out to Victorian schools! This month we feature the work of Colombian-born ecology graduate **Carolina Zuluaga**.



Carolina Zuluaga presents “Hero Ladybirds of the Galapagos Islands” at Collingwood College

Ecological scientist **Carolina Zuluaga** has always been fascinated by nature. She grew up in the Colombian countryside and commuted to a city school, boarding with her aunt during school semesters so she could focus on her studies. Before starting a family, her fierce love of science also took her on a very special journey to a region that only a lucky few will ever visit, the Galapagos Islands. Soon, she will share her love of ecology with Australian students through Cultural Infusions' school incursion program.



“In Galapagos, 98% of the islands are protected national parks. The remaining 2% is populated, which includes the Charles Darwin Research Station. In 1982 an introduced Australian pest called the Cottony Cushion Scale (pictured) was reported, and it had caused a lot of trouble to the native plants. But it has a natural enemy, the Australian Ladybug.”

“It's a big deal to get the approval for biological control. There is a risk analysis involved, approval is needed from the national parks and the government while the whole world looks on. It was

the first experience of biological control within the conservation area [and it was a tremendous success]. My thesis was to evaluate the release of the ladybug. It was a fantastic job, and it meant I was able to spend a year and a half in the Galapagos Islands.”

Carolina immigrated to Australia with her husband Juan, who completed a Masters of Engineering in Advanced Manufacturing Technologies at Swinburne while Carolina supported the family with her cleaning business, “Cleaning Path.” Eager to return to her great love of science, she was welcomed as a new member of the Royal Society of Victoria in April this year.

You can read all about Carolina online at <http://culturalinfusion.org.au/meet-scientist-behind-hero-ladybirds-galapagos-islands/>.

Meanwhile, schools can book Carolina's wonderful new science show for early Primary classes online at <http://culturalinfusion.org.au/programs/hero-ladybirds-galapagos-islands/>.

Media & Communication Training 12 September @ RSV



Our friends at **Science in Public** provide outstanding media training workshops for scientists and researchers. Learn how to distil your work into the key messages journalists, government, industry and other stakeholders need to be able to tell your story in an accurate and compelling way, with working journalists and experienced science communicators providing you with direct insights, coaching, and an opportunity to put your new skills into practice with a taped interview. Lunch and snacks included throughout!

The next Melbourne session makes good use of our beautiful and historic Cudmore Library. Join us!

Further information and bookings:

<https://www.eventbrite.com.au/e/media-and-communication-training-melbourne-12-september-2017-tickets-34713194098>