



# 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...



### 2<sup>nd</sup> December: Science Says!

*A Science Panel Show with Dr Joel Gilmore (The Science Nation)*



### 14<sup>th</sup> December: Trevor Lithgow

*"The Bacteria Inside Us: Compadres, Passengers & Pests"*  
RSV Research Medal Lecture, Award & President's Soiree

## February 2018 Advance Notice:



### 8<sup>th</sup> February: Courtney Ennis

*"The Secrets of Titan:  
Recreating the Cyanide Sky"*



### 22<sup>nd</sup> February: Duane Hamacher

*"Indigenous Astronomy"*

# December 2017 Newsletter

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## Upcoming Meetings & Events

# Science Says! - Melbourne

Saturday, 2<sup>nd</sup> December 2017 at 2:30pm

@ The Royal Society of Victoria



### Presented by The Science Nation

*Science Says!* is science as you've never seen it before, filled with laughter! Join us as brilliant scientists, gifted comedians and talented communicators use their wits and wittiness to uncover the top science discoveries of 2017 – and a few of the odder ones, too!

It's an evening in the style of the great panel shows – think mixing *Mock the Week*, *Spicks and Specks*, and just a dash of *QI*. Recent challenges included singing about gravity waves, solving how pandas can be encouraged to mate, and miming how rollercoasters might cure kidney stones.

Hosted by scientist and comedian **Dr Joel Gilmore**, we guarantee you'll be crying by the end, almost certainly of laughter! Oh, and you'll learn about some great science, too! Please book quickly– we're expecting sold out sessions!

#### **The Panellists:**



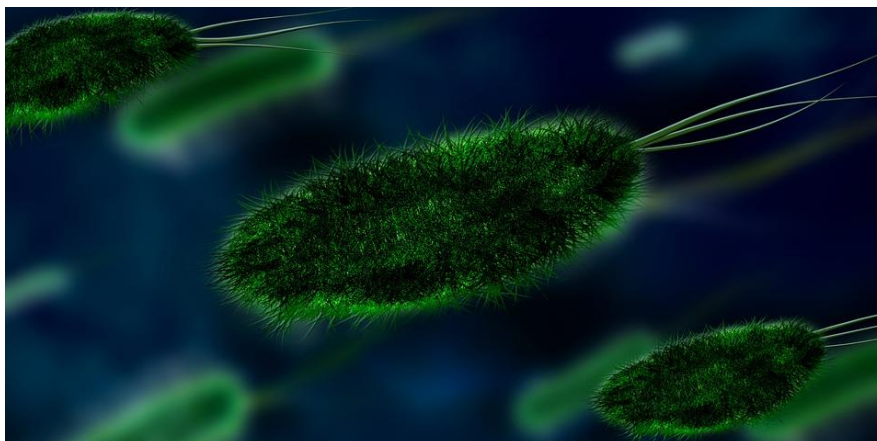
Going for all the comedy and glory science has to offer in Melbourne is:

- Public Health Nerd, comedian and beekeeper, **Alanta Colley**;
- Science advocate, champion of biotech and STEMMinist, **Dr Krystal Evans**;
- Broadcaster, author, science communicator and sustainability researcher, **Tanya Ha**;
- Science educator, boardgame designer and comedian, **Tom Lang**;
- Quantum physicist and brunch connoisseur, **A/Prof Meera Parish**, and;
- Experimental physicist and occasional ocean swimmer, **Prof Chris Vale**.



Tickets \$10 (\$15 at the door), places limited, bookings essential! Register online now at <https://www.trybooking.com/book/event?eid=330430>.

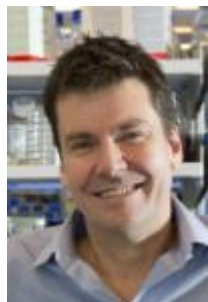
**The Bacteria Inside Us:**  
**Evolutionary Compadres, Commensal Passengers & Occasional Pests**  
**The 2017 Medal for Excellence in Scientific Research Lecture & Presentation**  
**Thursday, 14<sup>th</sup> December 2017 at 6:30pm**



**Speaker: Professor Trevor Lithgow**  
**ARC Laureate Fellow**  
**Biomedicine Discovery Institute, Monash University**

Humans are awash with bacteria. In addition to the commensal passengers we carry on our skins and in our guts as our “microbiome”, and the occasional pathogen that causes disease, our cells are powered by mitochondria, which were themselves once bacteria. All eukaryotes: animals, plants, fungi and a range of other organisms, have mitochondria within their cells for the same life-sustaining purposes. This oration will present aspects of bacterial cell biology that explain the means by which this evolutionary triumph was achieved. In addition, by using new technologies for imaging bacterial cells at nanoscale, we are piecing together the means by which bacteria communicate with each other and their human (and other) hosts in an attempt to maintain harmony, and yet maximize good outcomes for all involved. While once dismissed simply as “germs” and too small to be understood, advances in several technologies are revealing the complex cell biology at play in the bacteria that are on us, in us and part of us.

**About the speaker:**



**Professor Trevor Lithgow** is the 2017 winner of the **Royal Society of Victoria’s Medal for Excellence in Scientific Research**, the Society's highest and most prestigious award.

Trevor is an ARC Laureate Fellow in the Biomedicine Discovery Institute at Monash University. Current work in the Lithgow lab, using *Escherichia coli* as a model system, is focused on understanding how bacterial cells build their surface structures. He is the author of more than 150 research articles, including papers in *Nature* and *Science*.

Professor Lithgow received his PhD from La Trobe University in 1992. As a postdoctoral fellow with Gottfried Schatz at the University of Basel, he helped discover components of the protein translocase in the outer mitochondrial membrane (TOM complex) and characterize the function of receptor domains in discriminating and driving protein transport into mitochondria. He lectured in Biochemistry at La Trobe University for four years and lectured in Molecular Biology at the University of Melbourne for ten years. He moved to Monash University in 2008 as an ARC Federation Fellow to establish a Bacterial cell biology lab, an inter-departmental research program in Host-Pathogen Molecular Biology and an international NHMRC Program in Cellular Microbiology. In recognition of his scientific accomplishments, he was elected Fellow of the Australian Academy of Sciences in 2010.

**President's Soirée**

We are delighted to invite RSV members and their guests to attend the **2017 President's Soirée**, to be hosted by **Mr David Zerman** in the Burke and Wills Room, following the lecture and presentation of the Medal to Professor Lithgow by **Dr Amanda Caples, Victoria’s Lead Scientist**.

Please join us for a convivial evening of celebration for science in Victoria and reflection on the work of our Society. Tickets are inclusive of a three course, seated, plated meal with beverages.



**Places limited, bookings essential! Limited, discounted Soirée places are available for our student members. Register online now at <https://rsv.org.au/events/bacteria-within-us/>, call or email the RSV office to secure your place: 9663 5259, [rsv@rsv.org.au](mailto:rsv@rsv.org.au)**

## Nominations for RSV Membership

Nominations for membership of the Society have been received on behalf of:

Ms Tanya **HA**, Science Communicator  
Miss Livia Gwen Micka **DRY**, Tertiary Student  
Mr Norman **TARALRUD-BAY**, Global Investor  
Ms Helen Marianne **HOOKEY**, Copywriter  
Miss Clare Louise **WILSON**, Secondary Student

Unless Members request a ballot, these will be considered for election by Council and if elected, will be announced at the Ordinary Meeting of the Royal Society of Victoria to be held on 8<sup>th</sup> February 2018.

Recently elected members who have not yet signed the Society's membership book are invited to attend the 14<sup>th</sup> December meeting to be formally welcomed as members. **Please inform the office if you plan to attend, so we can prepare your membership certificate for collection.**

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## From the President

### Oh what a year... and it's not over yet!!

As we approach the end of 2017 we have the RSV Medal of Excellence in Scientific Research award to be presented on Thursday 14<sup>th</sup> December – however, by the time you read this, I regret to say that if you haven't booked for the lecture I probably won't be seeing you at the RSV until 8<sup>th</sup> February, when we start our 2018 program. However, we still do have a few tickets left for the **President's Soiree**, our Society's annual dinner, which includes a place at the lecture beforehand. Please book quickly to join us; details are provided earlier in the newsletter.

Our 2017 events have regularly been booked out and 2018 is starting to look the same. Program details are provided in the next column.

In April 2018, we will be welcoming 5 newly elected Councillors to the RSV. I encourage all Members who wish to stand for our Council to contact our CEO, Mike Flattley, to obtain the nominations forms and send them in. A download is available online from <https://rsv.org.au/wp-content/uploads/2017-Council-Election-Nomination-Form.pdf>. We look forward to Members participating in the RSV election process, which started 163 years ago with our founding in 1854.

I enjoyed meeting many of our Members throughout the year at our various events and I look forward to this continuing in 2018. Shortly you'll be receiving your Membership renewal

forms and I hope you will return them by mid-December to ensure the continuity of your association with the Society.

The RSV Councillors are “the management trustees” for our Society... but the day to day work is superbly handled by our management staff – Mike, James and Malourie – and our dedicated team of casual employees. I thank them all for their exceptional work over the past year and look forward to it continuing in 2018.

December and January are months when many religions celebrate specific holy-days whilst many people also celebrate the summer holidays. I wish everyone a healthy, happy and safe time and look forward to catching up with you early in 2018.

Please feel free to contact me via [president@rsv.org.au](mailto:president@rsv.org.au) or phone me on 0418 346 999 to discuss any RSV issues.

- David Zerman

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## 2018 Program

Here are our confirmed speakers and topics through to May 2018; further details are being confirmed with partners, or are otherwise subject to the outcomes of our various awards and prizes.

### February

8<sup>th</sup> – “**The Secrets of Titan: Recreating the Cyanide Sky**” with Dr Courtney Ennis.

22<sup>nd</sup> – “**Indigenous Astronomy**” with Dr Duane Hamacher.

### March

8<sup>th</sup> – “**Our Mesozoic Menagerie: Australia's Dinosaurs**” with Dr Stephen Poropat.

22<sup>nd</sup> – “**Citizen Science: the New Force in Biodiversity Data**” with Dr Ken Walker.

### April

26<sup>th</sup> – **Annual General Meeting** and 2018 Fellows' Presentations

### May

10<sup>th</sup> – “**Food Allergies in Children**” with Professor Katie Allen.

24<sup>th</sup> – “**The Science of Sex**” with Professor Cordelia Fine.

As always, you can book our lectures as they become available online at <https://rsv.org.au/events/>. In 2018 we are transitioning to a new booking system, moving from Eventbrite to **TryBooking** to help streamline our costs; please let us know if you encounter any difficulties, as there are always a few teething issues with a new system!