# S Victorian News

The Australian Society for Microbiology VIC Branch Newsletter

October 2018, Vol 516

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Submission Deadline: 4<sup>th</sup> of the Month

Find us on Facebook: https://www.facebook.com/groups/250340155042466/

## **Contact Details**

#### Victorian Branch ASM:

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#### Victorian Branch Committee:

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All notices should be emailed to: jhea@unimelb.edu.au



#### **ASM VIC Branch**

#### is very pleased to announce

#### Applications for the Summer Student Research Awards are now OPEN

The Summer Student Research Awards are designed to enable undergraduate students taking subjects in Microbiology (and Masters by Coursework students taking subjects in Microbiology) to complete a research experience in the laboratory of an ASM member, on a specific research project.

These awards will operate in the Summer of 2019, and will comprise a 4-week research experience. Successful (student) applicants will receive \$1500 (upon completion of the project and submission of an adequate post-experience report), plus a free 1 yr student membership to the ASM. A maximum of 4 awards may be awarded each application round, subject to the quality of the applications.

For additional information about the Awards, including the Eligibility Criteria, Application Information, Assessment of Applications and Conditions of the Award, please email Karena Waller (<u>klwaller@unimelb.edu.au</u>)

Applications close at 5pm on Friday 16 November 2018.



#### Early bird registration has been extended for the

#### 2018 Tasmania & Victoria Bi-State Conference

The conference will be held in Hobart City at the University of Tasmania's Menzies Institute for Medical Research on **Friday the 16<sup>th</sup> & Saturday the 17<sup>th</sup> of November**. Please join us for what is always, an engaging event featuring exciting cutting edge microbiology and excellent networking opportunities.

Please register now through the TryBooking website at:

#### https://www.trybooking.com/XSDU

#### Early-bird pricing now ends on the 28<sup>th</sup> of October

Current ASM members attending both days	Student Members: \$150 Non-Student Members: \$200
Non members attending both days	Students: \$175 Non-Student: \$240
Current ASM members attending one day only	Student Members: \$125 Non-Student Members: \$155
Non members attending one day only	Students: \$150 Non-Student: \$180

Please note that the conference dinner will be **sponsored by the ASM** and held on the Friday evening at **Frank Restaurant and Bar** on the Hobart waterfront (<u>http://frankrestaurant.com.au/</u>).

Please see overleaf for program details.

Contact Lou Roddam (Ifroddam@utas.edu.au) for further details.



#### Friday the 16th of November

			Filday the Toth of November	
9:50			Welcome	
10:00	Roger Stanley	Probiotics & Prebiotics in Processed Foods for Gut Health and Resilience		
10:30	Jeremy Carson	Vaccines for farmed Atlantic salmon in Tasmania: The road paved with good intentions can lead to nirvana		
			Morning Tea	
11:30	Jeff Errington	L-form bacteria: From basic science to recurrent infection		
12:30	Jennifer Elliman	Finding	the ghost in the shell (NextGen viral sequencing in crayfish)	
			Lunch & Poster Session	
2:30	Students	ТВА		
3:00	Craig Shadbolt Joining the dots. Current systems and approach to foodborne disease surveillance and outbreak resolution in Australia			
			Afternoon Tea	
4:00	Kate Seib	Vaccine	development for antibiotic resistant gonorrhoea	
4:30	Maurizio Labbate	Antibioti environn	ic resistance gene reservoirs in a sewage-impacted coastal nent	
7:00			Dinner (included with ticket)	
			Saturday the 17th of November	
9:00	Shane Powell	The role	of the soil microbiome in increasing agricultural productivity	
9:30	0 Anu Ruusunen Brain, Mind and Biome. The potential for nutritional psychiatry.			
10:00	Janet Fyfe	<i>Mycobacterium ulcerans</i> in Victoria: where is it coming from & where is it going?		
			Morning Tea	
11:00	Katharina Richter		ng a topical treatment for chronic respiratory tract infections from bedside	
11:30	Guna Karapiah	Induction of protective, long-lived antibody responses with inactivated vaccines		
			Lunch & Poster Session	
1:30	Zoe Bartlett	-	g <i>Bacillus cereus</i> sensu lato in Tasmanian dairy environments and oducts to inform food safety risk assessments	
2:00	ТВА	TBA		
2:30			Close & Farewell	



#### The 2018 Tasmania & Victoria Bi-State Conference

is proudly supported by:











abacus dX









Join us and celebrate the year that has been at the ASM Vic Branch Christmas Party, with great food and fantastic company. This year we have an extra special treat, with Professor Liz Harry (University of Technology Sydney) giving a fascinating presentation on the antimicrobial properties of Australian honey.

> Venue: Hot Honey Café 40/42 Armstrong St Middle Park VIC 3206

When: Thursday 29th November 2018, 6:30pm to 9:30pm

Cost: \$15 ASM Members / \$20 Non-Members Your ticket will include a 2 course sit-down meal and non-alcoholic beverages (limited). \*Vegetarian and GF options available

> For catering purposes, please RSVP for this event by 5pm Sunday 18th November 2018 via: <u>https://www.trybooking.com/YYSO</u>

For further details, contact Jacqueline Heath (<u>jhea@unimelb.edu.au</u>) or Catherine Satzke (<u>catherine.satzke@mcri.edu.au</u>)



# ASM Vic Branch Food Microbiology

#### - Event Report -

ASM Vic Branch together with the ASM food Microbiology SIG presented "From environment to hosts – the diverse niches of bacteria" on the 21<sup>st</sup> of August 2018 at Swinburne University's Advanced Technologies Centre Lecture Theatre. The program comprised of four outstanding speakers with a main focus in food microbiology and was chaired by Professor Enzo Palombo.

Dr Nuwan Vithanage commenced the session with a fascinating talk on milk spoilage bacteria. Nuwan described the biodiversity of culturable microbiota in raw milk and examples of bacteria that can survive the ultra-high temperature heating regime for up to 10 seconds resulting in milk spoilage. Nuwan's research has demonstrated that some methods of milk treatment are more effective at removing recalcitrant organisms.

Dr Snehal Jadhav presented some of her work on the application of omics in food safety. She demonstrated the importance of food safety and the use of omics types approaches to detect pathogens in a rapid way. Her study has demonstrated that these techniques are complex and not well developed in the food industry however are can be very powerful.

Dr Caitlin Cooper from CSIRO presented her research on the development of a Salmonella enterica subsp. salamae serovar Sofia colonisation in layer line chickens. This serovar has been shown to be prevalent and almost exclusive found in Australian chickens however is non-pathogenic to both humans and chickens. Caitlin's successfully developed an infection model with of *S*. Sofia in chickens and was able to show that as little at 10<sup>3</sup> CFU was enough to colonies the chickens.

The night concluded with a presentation from Dr Prue Bramwell who gave an overview of teaching undergraduates with technology. Prue has developed her undergraduate teaching with online training videos for students to watch prior to attending laboratory class. She described the implementation of the online material and the positive impact it has had on student learning.

Event report contributed by: Steve Petrovski

# 2018 Trivia Night- Event Report –

On Tuesday 11th September 2018, the Victorian ASM Branch held its 7th annual Trivia Night at the City of Melbourne Bowls Club (located in Flagstaff Gardens, West Melbourne). Eight teams (48 participants) representing the Peter Doherty Institute (PDI), Melbourne Diagnostic Unit (MDU), Melbourne Dental School (MDS), The University of Melbourne, Monash University, The Royal Children's Hospital (Melbourne), MicroGenetix and several other groups across Melbourne competed in 10 rounds of Trivia. The Trivia was interspersed with table games including Name that Flag (always a bit tricky) and Guess Who's Eyes. At the end of the night the final results were exceptionally close, but team 'Opportunistic Knocks' triumphed.

Special thanks for the evening must go to:

• Members of SPASIM (the Special Postgraduate Association for Students of Immunology and Microbiology at The University of Melbourne) led by Natalia Salazar-Quiroz, for organising such a great night of trivia for us all to enjoy with some really interesting and challenging questions.

• MicroGenetix for their generous financial support and Crux Biolab, Promega, Sartorius, Thermo Fisher Scientific and Qiagen for providing merchandise for the prizes; prizes were awarded for 1st, 2<sup>nd</sup> and 3rd placed teams.

• City of Melbourne Bowls Club for the use of their fantastic venue and generously providing a bowls session as the main 1st prize.

With another successful Trivia Night this year, we look forward to continuing the tradition next year with much anticipation!



Report contributed by: Jacqueline Heath



First Place - 'Opportunistic Knocks'. From left: Eileen Dunne (MCRI), Sarah Baines (PDI), Jack Daniels (friend), Danielle Ingle (ANU and MDU PHL PDI), Catherine Satzke (MCRI), Poshmaal Dhar (Deakin University), Criselle D'Souza (Peter MacCallum Cancer Centre).



Second Place – 'Dental Demons'. From left: Lin Xin Kin (Melbourne Dental School), Yong Kai (friend), Jacqueline Heath (MDS), Greg Seers (friend), Steve Cleal (MDS), Christine Seers (MDS), William Singleton (MDS).

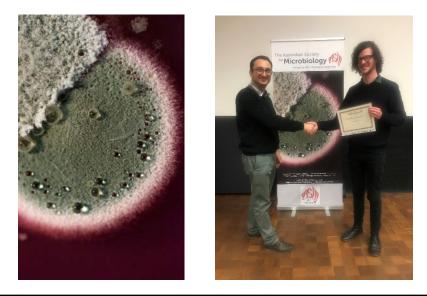


Third Place - 'You're a Quizzard Harry'. From left: Jeff Hochesand-Sunarjo (MicroGenetix) and George Athanasakis (MicroGenetix). Other team members: Jaelyne Birrell (MCRI), Ellie Kerlin (MCRI) and Matthew Brown (friend).



#### 2018 ASM Victorian Branch Microbial Art Prize Winner Gene Drendel, La Trobe University

For his image of the growth of fungal colonies isolated from soil and grown on Rose Bengal Agar. Image shows differing colony morphology and droplets of fungal exudates. Gene (right) received his award from Steve Petrovski at the Food and Environmental Microbiology event, titled "From Environment to Hosts – the Diverse Niches of Bacteria", held at Swinburne University in August.





## **ASM History SIG**

#### ASM Memorabilia

If any ASM members have significant ASM memorabilia that they would like to the donate to the ASM archives or would like to suggest topics suitable for possible symposia at future ASM Annual Scientific Meetings, please send details of the memorabilia or suggested symposia topics to:

History SIG convener c/o Australian Society for Microbiology Office 9/397 Smith Street Fitzroy VIC 3068



### How to join the Australian Society for Microbiology at a reduced rate!

Did you know that non-members can join the Australian Society for Microbiology at a reduced rate? Well, you can!

As a non-member, by paying the fee to attend an event hosted by ASM VIC Branch, you can use this amount to put towards an annual membership of the Australian Society for Microbiology. To do so, please follow these instructions:

- 1. Register to attend the event hosted by ASM VIC Branch via the advertised trybooking link, and pay the attendance fee.
- 2. Attend the event, and then within 2 weeks after the event, go to the ASM membership area at <a href="http://www.theasm.org.au/membership/">http://www.theasm.org.au/membership/</a>
- 3. Choose the appropriate membership for you and then click on: <u>Click here to join or update your details</u>
- 4. Click 'Begin here' and create a Currinda membership profile for yourself. Then, pay the membership full fee.
- Following payment, download the paid receipt (showing your payment) and email it along with your postal address to: Priscilla Johanesen, Treasurer VIC Branch <u>priscilla.johanesen@monash.edu</u>
- 6. A cheque refunding the event fee will be posted to you.

<u>Please note:</u> you must complete the above process within 2 weeks following an event to take advantage of this offer. After this time, the event fee cannot be used to pay membership fees.



## ASM Member Awards Apply Now

The ASM offers a variety of awards to its members. Take full advantage of your membership by applying now for one of the awards listed below with deadlines approaching. For more details and additional awards please refer to the National webpage <u>http://www.theasm.org.au/awards/</u>

The deadlines for all award applications are now March 31<sup>st</sup> of each year.

## **Visiting Speakers Program**

Do you know of an outstanding speaker coming to Australia?

If so, consider them for the Visiting Speakers Program (VSP).

Further information about the VSP and the speaker recommendation form can be found at:

http://www.theasm.org.au/events/visiting-speakers-program/

Alternatively, contact Catherine Satzke (catherine.satzke@mcri.edu.au),

who is the VSP Coordinator for the ASM VIC Branch.

## **MICRO NEWS and VIEWS**

- How beetle larvae thrive on carrion
   <u>https://www.sciencedaily.com/releases/2018/10/181015150646.htm</u>
- How plant microbes could feed the world and save endangered species
   <u>https://www.sciencenews.org/article/plant-microbes-crops-food-endangered-species</u>
- European badgers' gut bacteria may be a powerful ally in the fight against tuberculosis https://www.sciencedaily.com/releases/2018/10/181004100040.htm
- Periodontal disease bacteria may kick-start Alzheimer's https://www.sciencedaily.com/releases/2018/10/181004100009.htm
- Bobtail squid coat their eggs in antifungal goo
   <u>https://www.sciencenews.org/article/hawaiian-bobtail-squid-eggs-antifungal</u>
- Commandeering microbes pave way for synthetic biology in military environments
   <u>https://www.sciencedaily.com/releases/2018/10/181002102803.htm</u>
- How some algae may survive climate change
   <u>https://www.sciencedaily.com/releases/2018/09/180928081626.htm</u>
- Newly discovered bacterium rids problematic pair of toxic groundwater contaminants <u>https://www.sciencedaily.com/releases/2018/10/181009115019.htm</u>
- Photoactive bacteria bait may help in fight against MRSA infections
   <u>https://www.sciencedaily.com/releases/2018/10/181011173114.htm</u>
- Cheese found in an Egyptian tomb is at least 3,200 years old
   <u>https://www.sciencenews.org/article/cheese-ancient-egyptian-tomb-3200-years-old</u>
- Text messages quickly track health care use during Ebola outbreak <u>https://www.sciencedaily.com/releases/2018/10/181002082446.htm</u>
- In clinical trials, new antibody therapy controls HIV for months after treatment <u>https://www.sciencedaily.com/releases/2018/09/180926140834.htm</u>
- Zika vaccine shows promise for treating deadly brain cancer https://www.sciencedaily.com/releases/2018/09/180918082105.htm
- A new antibiotic uses sneaky tactics to kill drug-resistant superbugs
   <u>https://www.sciencenews.org/article/new-antibiotic-uses-sneaky-tactics-kill-drug-resistant-superbugs</u>
- The Peter Doherty Institute for Infection and Immunity (Doherty Institute) Public Health Laboratory News

http://thedohertyinstitute.cmail19.com/t/ViewEmail/i/98C3A653EBB4BAFD2540EF23F30FEDE D/A867505F53365DDEF039C523302FD418

## MELBOURNE

#### Workshops: 1 November, 12.30-6 pm

Sepsis Genomics Drug Discovery Veterinary Nursing General Practice (17 November)

Symposium: 2 November, 8.30 am-6 pm

UNIVERSITY OF MELBOURNE

REGISTER NOW AT WWW.NCAS-AUSTRALIA.ORG/FORUM2018

Cost: workshops (free); symposium (\$50); students (free)



#### **KEYNOTE SPEAKERS**



PROF. MARC MENDELSON ID Physician, South Africa



PROF. BRENDAN MURPHY Chief Medical Officer, Australia



PROF. JOHN PRESCOTT Veterinary Scientist, Canada

National Antimicrobial Resistance and The Stewardship Forum will offer a dynamic program all facets of the response coverina to antimicrobial resistance. includina clinical infectious diseases and antimicrobial stewardship, translational science, new drug development, veterinarv agricultural and medicine, and government and policy responses. The 2018 forum is being hosted by the National Centre for Antimicrobial Stewardship (Department of Medicine and Doherty Institute, University of Melbourne) and Safer Care Victoria (Department of Health and Human Services, Victoria).

The ogranising partners include: the Doherty Institute (University of Melbourne), the National **Center for Infections in Cancer (Peter MacCallum** Cancer Centre), the Guidance Group (Royal Melbourne Hospital), Queensland Statewide Antimicrobial Stewardship Program (Queensland Department of Health), Centre of Research Excellence in Redefining Antimicrobial Use to Reduce Resistance (CRE REDUCE) (University of Institute Queensland), for Molecular the **Biosciences Centre for Superbug** Solutions (University of Queensland), the Community for Open Antimicrobial Drug Discovery (University of Queensland).



## Advertise in the ASM VIC Branch Newsletter!

Would you like to advertise your event, job vacancy or other news item in our newsletter?

Advertising rates are:

Not-for-profit adverts: free of charge

For-profit adverts: \$50 per advert

If so, please contact Karena Waller (klwaller@unimelb.edu.au)

## ASM VIC CALENDAR 2018

When planning meetings, please book dates with Karena Waller (Phone: (03) 8344 0045, Email: <u>klwaller@unimelb.edu.au</u>)

- ASM Vic Branch Northern News 23<sup>rd</sup> October 2018, Austin Hospital, Heidelberg VIC
- National Antimicrobial Resistance and Stewardship Forum 1<sup>st</sup> & 2<sup>nd</sup> November 2018, Melbourne, VIC
- Bi-State Conference 2018 (VIC / TAS) 16<sup>th</sup> & 17<sup>th</sup> November 2018, Hobart TAS
- ASM Vic Branch Christmas Party 29<sup>th</sup> November 2018, Melbourne, VIC



Submission Deadline for November ASM Victorian News: November 4<sup>th</sup> 2018

Email submissions to: jhea@unimelb.edu.au