

The Australian Society for Microbiology VIC Branch Newsletter

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Submission Deadline: 4th of the Month

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

# **Contact Details**

#### **Victorian Branch ASM:**

The Australian Society for Microbiology

Victorian Branch

c/o: 9/397 Smith Street, Fitzroy VIC 3065 Weblink: <a href="http://victoria.theasm.org.au/">http://victoria.theasm.org.au/</a> Email: <a href="mailto:catherine.satzke@mcri.edu.au">catherine.satzke@mcri.edu.au</a> or

asmvicbranch@gmail.com

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Email: <a href="mailto:admin@theasm.com.au">admin@theasm.com.au</a>
Weblink: <a href="mailto:www.theasm.org.au">www.theasm.org.au</a>

ABN 24 065 463 274

#### **Victorian Branch Committee:**

Chair: Catherine Satzke

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All notices should be emailed to: <a href="mailto:jhea@unimelb.edu.au">jhea@unimelb.edu.au</a>



# **Microbiologist Memoirs**

#### A/Prof Catherine Satzke, PhD (Chair, ASM Victorian Branch Committee)



I discovered the hidden world of microbes at high school, and have loved microbiology ever since. I have been a member of ASM for nearly 20 years (!), having joined as an Honours student in the Robins-Browne laboratory. ASM has supported my professional development as a student, ECR and now leader of my own laboratory. I am delighted to be the Chair of ASM Vic Branch, and look forward to serving you and the other members of our Branch.

My lab is based at the Murdoch Children's Research Institute in Melbourne, and I also hold honorary appointments with The University of Melbourne. Our research focuses on pneumococcal microbiology; examining the impact of pneumococcal vaccines in low-income settings to support global vaccination strategies. We are fortunate to partner with microbiologists, clinicians, epidemiologists and immunologists from both high and low-income settings; collaboration is one of the most enjoyable parts of my job! I recently co-chaired the

International Symposium on Pneumococci and Pneumococcal Diseases, attracting over 1100 delegates from 85 countries. Our research is supported by national and international funders, including the Bill and Melinda Gates Foundation, and by fellowships from the NHMRC and veski.

#### Mary Valcanis, MPH (Deputy Chair, ASM Victorian Branch Committee)



I am the Section Leader for Enteric Reference Laboratory at the Microbiological Diagnostic Unit Public Health Laboratory, Doherty Institute. I am responsible for the provision of scientific supervision and delivery of scientific services for the characterisation of bacteria typically of enteric origin.

If you would like to be featured in "Microbiologist Memoirs", or know a microbiologist who would or should be, please contact Jacqueline Heath (jhea @unimelb.edu.au) to get involved.



# **Microbiologist Memoirs**

#### Sarah Baines (Secretary, ASM Victorian Branch Committee)



I am a PhD student with the Dept. of Microbiology & Immunology at the University of Melbourne, based at the Doherty Institute for Infection & Immunity. My primary research interests are in microbial genomics, specifically its application to understanding the emergence and development of antibiotic resistant lineages of *Staphylococcus aureus* in Australia and New Zealand. In conjunction with this, I am also involved with the Doherty Applied Microbial Genomics group, working on multiple projects centered around investigating mechanisms of antimicrobial resistance in staphylococcal and enterococcal species, as well as exploring recent outbreaks of gastrointestinal yersiniosis in New Zealand.

#### **Dr Christine Seers (Treasurer, ASM Victorian Branch Committee)**



I graduated from Monash University in 1987 with a BSc (Hons) degree with a 4<sup>th</sup> year major in microbiology. My honours research involved analysing the acquisition of antimicrobial resistance genes by *Staphylococcus aureus* isolates from the Royal Children's Hospital. The most remarkable thing about this is that I had planned to major in chemistry – until I had attended a lecture about of all things, sewerage. Rather than thinking ee-eeww, I found I was incredibly impressed that such teeny, weeny things as bacteria could perform all those amazing chemical reactions, in such organised communities, to give a nice clean product at the end. I was hooked.

I began, and still pursue my academic career at the Melbourne Dental School, The University of Melbourne, where I have been involved in projects improving our understanding of the oral microbiota and approaches to understand and

prevent associated oral diseases such as caries and periodontitis.

I have been a member of the ASM Vic Branch Committee since 2011, Secretary of Vic Branch 2015-2019 and from March 2019 I take on the role of Treasurer.

# Monday 18th February 2019



present

## Professor Alex Van Belkum

## "Evolution in Clinical Microbiology?"

Alex is a major key opinion leader in MALDI-TOF, Antimicrobial Resistance and Whole Genome Sequencing. He will be visiting Australia to speak at the ASA'S Antimicrobials 2019 in Sydney, and we are fortunate to have him present in Melbourne for ASM on rapid diagnostics and the way forward to combat AMR.

Professor Alex van Belkum, PhD PhD, fellow of the American Academy of Microbiology, has been primarily involved in research on molecular epidemiology, molecular and culture-based diagnostics and antimicrobial resistance testing in the domain of clinical microbiology. A scientific director of microbiology research at bioMérieux, a diagnostics company based in the South of France, he is also the editor-in-chief of European Journal of Clinical Microbiology and Infectious Diseases, which 2016 impact factor is 2.7. He is the author of more than 540 PubMed-cited papers, with an H index of about 90. He has worked at the Universities of Leiden and Rotterdam, both in The Netherlands, and at the latter institute he still holds a honorary professorship in molecular microbiology. He moved to industry 7 years ago where he is a microbiologist in the Data Analytics Unit with a prime interest in next generation sequencing and the use of other data-rich technologies in clinical microbiology. He published five books and is one of the editors of "Molecular Microbiology: diagnostic principles and practice" published by ASM Press, American Society of Microbiology, Washington.



**Where:** Michael Chamberlain Lecture Theatre, Building E – Aikenhead Wing, St Vincent's Hospital, cnr Nicholson Street and Victoria Parade, Fitzroy

**Time:** From 6pm onwards – food and drinks provided followed by presentation

**Cost:** Free event for ASM Members (Student or Full Members)

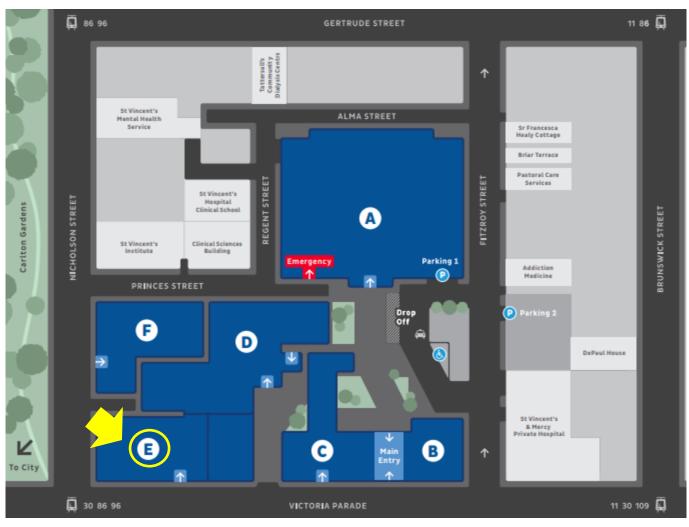
\$20 - Non-ASM Member

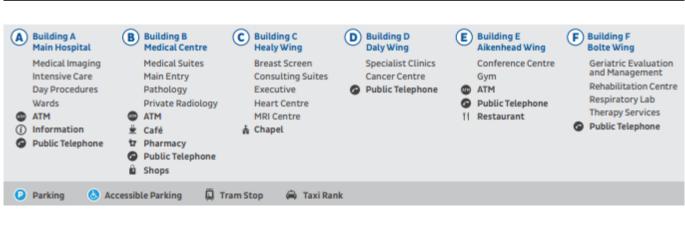
Registration details & location map next page

#### Register via Trybooking: <a href="https://www.trybooking.com/BAECI">https://www.trybooking.com/BAECI</a>

For further event details and enquiries please contact Seema Kanade (<a href="mailto:seema.kanade@dorevitch.com.au">seema.kanade@dorevitch.com.au</a>), Jaelyne Birrell (<a href="mailto:jaelyne.birrell@gmail.com">jaelyne.birrell@gmail.com</a>) or Sangeeta Singh (<a href="mailto:vu2bhy@hotmail.com">vu2bhy@hotmail.com</a>)

#### Map of St Vincent's Hospital (Building E highlighted below in yellow)







#### **Call for Audience Members**

Come along to the

# ASM Nancy Millis Student Awards 2019

Where: LIMS 101 Hoogenraad Lecture Theatre

La Trobe University, Bundoora VIC 3086\*

See attached map; Car parks #1 and #8 will have free parking after 5pm

**When:** Tuesday 26 February 2019, commencing at 6.00pm

Supper and drinks will be served on conclusion of the presentations

**Presentations:** Competing post-graduate students from Microbiology research

laboratories from several tertiary institutes will deliver 10 minute presentations and answer questions for a further 5 minutes

about their area of study.

Presentations will cover a broad range of topics and are sure to interest and inform you. Cutting edge technologies and new concepts will be discussed. This is an exciting and enjoyable way to update your knowledge and a very positive way of supporting and meeting the next generation of microbiologists.

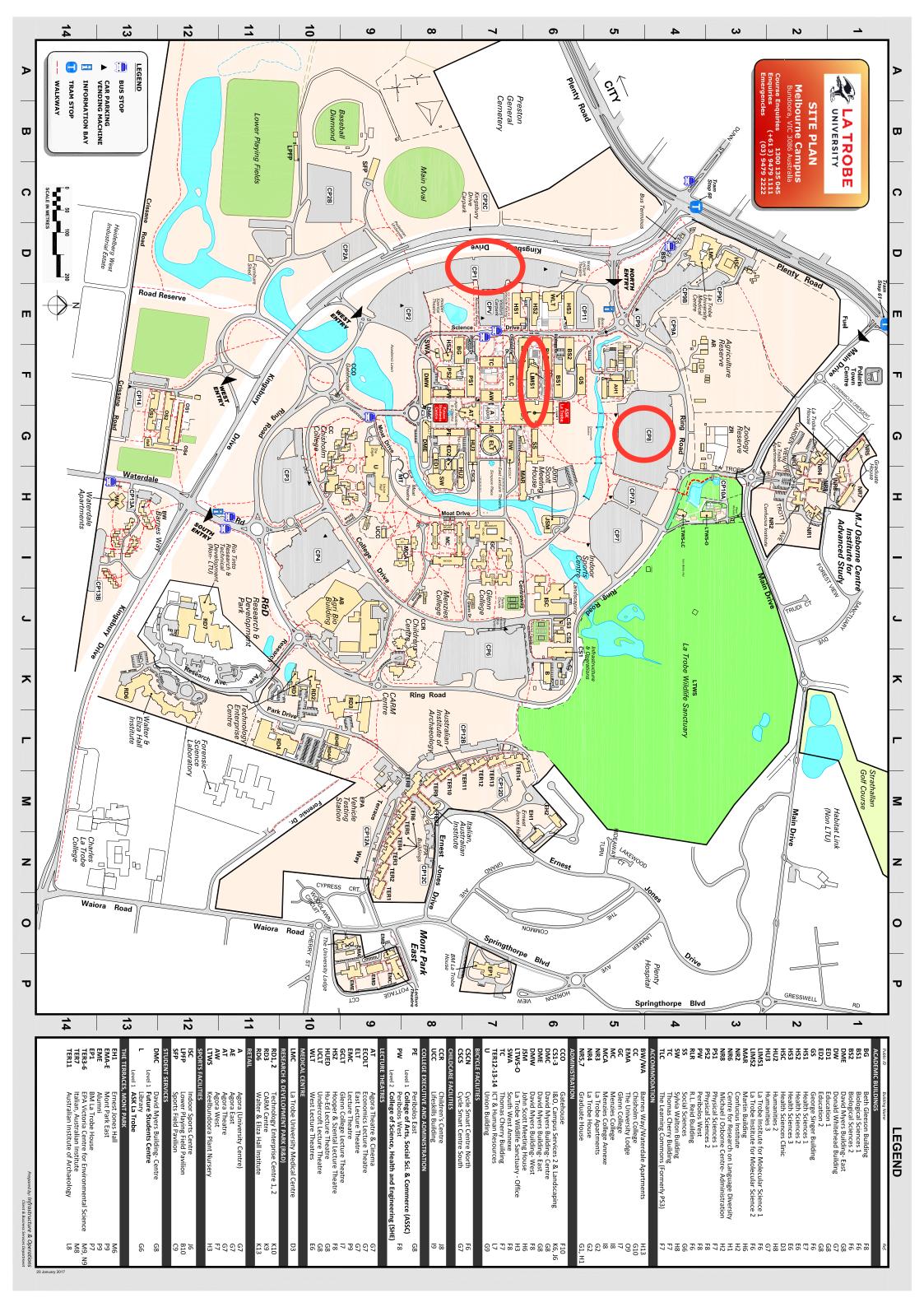
The ASM VIC Branch undergraduate academic prizes will also be presented.

#### All welcome

Email enquiries to: Karena Waller (klwaller@unimelb.edu.au)

This is a free event but booking is needed for catering purposes, so please register your attendance by 5pm Thursday 21 February 2019 using the link below:

https://www.trybooking.com/BALNI



#### **NEW!** REGIONAL EVENT FUNDING

To further enhance the benefits of ASM membership to all members

ASM Vic Branch will provide funding towards microbiology focussed events to be held in REGIONAL (non-Melbourne metropolitan) areas

#### A broad range of events will be considered, such as

Day symposia
Invited speakers
News from the Hospitals
Continuing education
Social events (eg trivia night)
Student nights
Industry engagement
Public lectures
Community engagement, etc.

To be eligible for funding, preferably **prior** to organising an event, please complete the EOI form. In the EOI please briefly outline the planned event, the purpose/benefit to members and an approximate budget. Full details are not expected at the initial EOI stage.

If your EOI is successful we will then invite you to complete a full Regional Event Application Funding of up to \$2500 per event will be available, dependent on the event.

The ASM Victorian Branch Committee is available to provide event organization guidance and will require events to be run in accordance with branch processes.

#### FURTHER INFORMATION AND/OR AN EOI FORM CAN BE OBTAINED BY CONTACTING:

Dr Christine Seers <u>caseers@unimelb.edu.au</u> Ph: 93411565

Dr Steve Petrovski steve.petrovski@latrobe.edu.au

Ph: 9479 2397

A/Prof Catherine Satzke catherine.satzke@mcri.edu.au

Ph: 83416438





## **START PLANNING NOW!**

#### **ASM Victorian Branch**

# **Microbial Art Prize**

Calling all artistic individuals! The 2019 Microbial Art Prize will be up for grabs mid-year. Start planning now if you want to be in to win and have your eye-catching scientific image displayed at ASM events.

#### **Image Details:**

All types of scientific images are welcome

- Images must have a microbiological theme
- Images should be high resolution and suitable for printing on a 1x2m banner
- Images must be accompanied with a description of what the image illustrates and how it was generated

#### Prize:

- The 2019 Microbial Art Prize winner will have their image printed on ASM banners to be displayed at events and used in ASM promotional material.
- Plus more!

#### **Competition Entry Conditions:**

- Maximum 2 entries per person
- Submitter must be the owner of the image
- Submitter must be a member of ASM
- A complete entry consists of:
  - (1) image, (2) a description of the image (<100 words), and (3) the submitter's details (name, position, institution)

Winners will be selected by the ASM Vic Branch committee Competition date will be released closer to the time



# ASM Annual Scientific Meeting 2019





# **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 http://www.theasm.org.au/membership/
- 3. Choose the appropriate membership for you and then click on: Click here to join or update your details
- 4. Click 'Begin here' and create a Currinda membership profile for yourself. Then, pay the membership full fee.
- 5. Following payment, download the paid receipt (showing your payment) and email it along with your postal address to:

  Priscilla Johanesen. Treasurer VIC Branch priscilla.johanesen@monash.edu
- 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 <a href="http://www.theasm.org.au/awards/">http://www.theasm.org.au/awards/</a>

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 (<a href="mailto:catherine.satzke@mcri.edu.au">catherine.satzke@mcri.edu.au</a>), who is the Chair for the ASM VIC Branch.

## MICRO NEWS and VIEWS

- Newly isolated human gut bacterium reveals possible connection to depression
  - https://www.sciencedaily.com/releases/2019/02/190213124350.htm
- Technique identifies electricity-producing bacteria
   <a href="https://www.sciencedaily.com/releases/2019/01/190111143740.htm">https://www.sciencedaily.com/releases/2019/01/190111143740.htm</a>
- In some cases, getting dengue may protect against Zika https://www.sciencenews.org/article/dengue-virus-antibodies-zika-infection
- Effect of breastfeeding versus pumping on human milk microbiome <a href="https://www.sciencedaily.com/releases/2019/02/190213124445.htm">https://www.sciencedaily.com/releases/2019/02/190213124445.htm</a>
- Marine scientists find toxic bacteria on microplastics retrieved from tropical waters
  - https://www.sciencedaily.com/releases/2019/02/190211110348.htm
- Diagnostic tool for detecting cryptosporidium
   <a href="https://www.sciencedaily.com/releases/2019/02/190214093349.htm">https://www.sciencedaily.com/releases/2019/02/190214093349.htm</a>
- Scientists discover genes that help harmful bacteria thwart treatment <a href="https://www.sciencedaily.com/releases/2019/02/190208082205.htm">https://www.sciencedaily.com/releases/2019/02/190208082205.htm</a>
- Genome structure of malaria parasites linked to virulence <a href="https://www.sciencedaily.com/releases/2019/02/190204154019.htm">https://www.sciencedaily.com/releases/2019/02/190204154019.htm</a>
- This honeybee parasite may be more of a fat stealer than a bloodsucker
   <a href="https://www.sciencenews.org/article/honeybee-parasite-may-be-more-fat-stealer-bloodsucker">https://www.sciencenews.org/article/honeybee-parasite-may-be-more-fat-stealer-bloodsucker</a>
- Bacterial compounds may be as good as DEET at repelling mosquitoes
   <a href="https://www.sciencenews.org/article/bacteria-compounds-may-be-good-deet-repelling-mosquitoes">https://www.sciencenews.org/article/bacteria-compounds-may-be-good-deet-repelling-mosquitoes</a>
- Congo's Ebola outbreak is a testing ground for new treatments
   <a href="https://www.sciencenews.org/article/congo-ebola-outbreak-testing-new-treatments">https://www.sciencenews.org/article/congo-ebola-outbreak-testing-new-treatments</a>

# 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 Catherine Satzke (catherine.satzke@mcri.edu.au)









A joint venture between The University of Melbourne and The Royal Melbourne Hospital

# Department of Microbiology and Immunology Special Research Seminar as part of the ASI Visiting Speaker Program

Intravenous Vaccination as a Paradigm for Inducing Tissue Resident T Cells and Protection Against Malaria and TB



Robert Seder, M.D.

Chief, Cellular Immunology Section Vaccine Research Center, NIH (USA)

Host: Dr Daniel Fernandez Ruiz

Dr. Seder is an internationally recognized expert in vaccine biology and cellular immunology. He currently serves as Chief of the Cellular Immunology Section in the Vaccine Research Center (VRC) at the U.S. National Institutes of Health (NIH). After a B.A. in Natural Science at Johns Hopkins University in 1981, M.D. at Tufts University in 1986, and residency in internal medicine at New York Hospital-Cornell Medical Center, Dr. Seder did his postdoctoral training in the NIAID with Dr. William Paul, defining how cytokines influence CD4+ T helper cell differentiation. He then became the Chief of the Clinical Immunology Section in the Laboratory of Clinical Investigation, NIAID, in 1994, before being appointed to a tenured position in the VRC in 2000. During his work at the VRC, Dr. Seder has focused on understanding the innate and adaptive mechanisms by which various vaccine and deliver approaches mediate protective immunity in experimental models of HIV, Malaria and Tuberculosis infection and tumors. His major findings include the demonstration that vaccineinduced multi-functional cytokine T cell responses are critical for mediating protective immunity against intracellular infections, and the demonstration that intravenous vaccination with live-attenuated malaria and TB vaccines induces tissue resident T cells and confers high levels of protection in animal models or in human clinical trials. Recent work has also used polymer chemistry and bio-engineering approaches with toll-like receptor ligands (TLR) to optimize HIV, RSV or Influenza antibody responses and improve delivery of tumor specific neo-antigens to enhance T cell immunity. His work establishes a paradigm for the importance of vaccine formulation and delivery for complex pathogens and tumour immunity.

#### Friday, 22<sup>nd</sup> of February 2019, 1pm Auditorium

The Peter Doherty Institute for Infection and Immunity
792 Elizabeth St, Melbourne

Everyone welcome. For seminar attendees wishing to have further discussions with the speaker after the seminar, light refreshments will be provided in the back of the Auditorium.





# ASM VIC CALENDAR 2018

When planning meetings, please book dates with Catherine Satzke Email: catherine.satzke@mcri.edu.au

- ASM Vic Branch Event Prof Alex Van Belkum "Evolution in Clinical Microbiology?" – 18th February 2018, St Vincent's Hospital, Melbourne
- ASM Vic Branch Event ASM Nancy Millis Student Award 2019 26<sup>th</sup> February 2019, La Trobe University, Bundoora
- Australasian Society for Immunology VSP Event Robert Seder, M.D.
   22<sup>nd</sup> February 2019, Doherty Institute, Parkville
- ASM 2019 30<sup>th</sup> June 3<sup>rd</sup> July 2019, Adelaide SA



Submission Deadline for March ASM Victorian News:

March 4<sup>th</sup> 2019

Email submissions to: jhea@unimelb.edu.au