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The Australian Society for Microbiology VIC Branch Newsletter

March 2017, Vol 498

Victorian Branch ASM:

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Submission Deadline: 4th of the Month

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



Event Report



Left to right: Jason Stiles (RMIT University), Tiana Arif (RMIT University), Christine Ong (Monash University), Michaela Van Raders (University of Melbourne), Jared Stern (University of Melbourne), Marianne Haines (La Trobe University), Jordan Thompson (Monash University) and Karena Waller (ASM VIC Branch Chair)

The annual ASM BD Student Awards night was recently held at Monash University (Clayton Campus; Tuesday 21st February 2017). The evening was chaired by Drs. Priscilla Johanesen (Monash University and ASM VIC Branch Treasurer) and Karena Waller (The University of Melbourne and ASM VIC Branch Chair). The evening commenced with light refreshments before the presentation of thirteen undergraduate prizes for top achieving microbiology student studying at various Victorian Universities, including Monash University, RMIT University, La Trobe University (Bundoora and Bendigo campuses) and The University of Melbourne. Each of the undergraduate prizes consisted of a certificate, a cheque and a year's student membership to the ASM.

with six The evening then continued presentations from research research students competing in the categories of the: ASM VIC Branch Award (for Honours and Masters by Coursework students) and ASM BD Student Award (for PhD or Masters by Research students). Brittney Phillips (La Trobe University) presented "Exploring *Syntrophic* Interactions between Electrogens" in the category of ASM VIC Branch Award. As the winner of this prize, Brittney (pictured at right) will receive a prize consisting of registration at the Annual Meeting in Hobart (July 2017), plus \$200 towards the costs of attending the meeting.



Left to right: Brittney Phillips and Karena Waller

Five speakers, Mengjie Hu (University of Melbourne), Vahessan Rajabal (La Trobe University), Claire Gorrie (University of Melbourne), Eleanor Latomanski (University of Melbourne) and Sanjida Topa (Swinburne University) competed for a the ASM BD Student Award, and a prize consisting of registration at the ASM Annual Meeting in Perth (Hobart 2017), an airfare and \$300 towards the cost of attending the



Left to right: Claire Gorrie and Karena Waller

meeting. The winner of this prize was Claire Gorrie (pictured at left) who presented "Gastrointestinal carriage is a major reservoir of K. pneumoniae infection in intensive care patients".

The evening concluded with supper and drinks prepared by Cafe Saporo (Monash University). Overall, it was a great night for Microbiology! Over 50 people enjoyed the evening's activities.

Congratulations must be extended to all students who competed for prizes on the night – their research presentations were excellent!

Contributed by: Karena Waller



ASM History SIG – Column

50 years: Changes in Microbiology (Particular areas)

1970: Emerging problem \rightarrow 2017: Existing problem 1970: Same issue \rightarrow Old technique \rightarrow 2017 Modern technology

I recently attended Antimicrobials 2017 in Adelaide - such changes.

In the 70's, much of the antibiotic resistance / transfer research related to the emergence of tetracycline resistance and it's transfer. Plasmid was a new term in scientific texts and discussions. To extract DNA from the study bacterium, 3000 mLs of a broth culture were required. Today DNA extraction requires very little of the study bacterium and is common place in microbiological laboratories. In fact Whole Genome Sequencing (WGS) data was discussed and presented in many of the papers at Antimicrobials 2017.

Now antibiotic resistance is widely discussed and reported both in scientific and hospital communities (hence the involvement of ASM and the increased membership of the Australian Society of Antimicrobials (ASA) - which was originally an ASM SIG).

Similarly the issue of increasing antibiotic resistance in strains of *Staphylococcus aureus*. In the 70's, the main issue was the increasing methicillin resistance in *S. aureus* isolates. Now, multiple antibiotic resistance is a major concern hence the inaugural StaphPath 2017 meeting held directly after Antimicrobials 2017.

Contributed by: Dr Diane Lightfoot, Convener for 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

MICRO NEWS and VIEWS

WHO Release Global Pathogen Priority List

On February 27th, the World Health Organisation released the first 'Global Priority List of Antibiotic-Resistant Bacteria to Guide Research, Discovery and Development of New Antibiotics'. The aim of developing this list was to 'guide the prioritization of incentives and funding, help align R & D priorities with public health needs and support global co-ordination in the fight against antibiotic-resistant bacteria'.

The list consists of:

PRIORITY 1: CRITICAL[#]

Acinetobacter baumannii, carbapenem-resistant Pseudomonas aeruginosa, carbapenem-resistant Enterobacteriaceae*, carbapenem-resistant, 3rd generation cephalosporinresistant

PRIORITY 2: HIGH

Enterococcus faecium, vancomycin-resistant *Staphylococcus aureus*, methicillin-resistant, vancomycin intermediate and resistant *Helicobacter pylori*, clarithromycin-resistant *Campylobacter*, fluoroquinolone-resistant *Salmonella* spp., fluoroquinolone-resistant *Neisseria gonorrhoeae*, 3rd generation cephalosporin-resistant, fluoroquinolone-resistant

PRIORITY 3: MEDIUM

Streptococcus pneumoniae, penicillin-non-susceptible *Haemophilus influenza*, ampicillin-resistant *Shigella* spp., fluoroquinolone-resistant

[#]Mycobacteria was not subjected to review for inclusion in this prioritization exercise as it is already a globally established priority for which innovative new treatments are urgently required. *Enterobacteriaceae include *Klebsiella pneumoniae*, *Escherichia coli*, *Enterobacter* spp., *Serratia* spp., *Proteus* spp., *Providencia* spp., and *Morganella* spp.

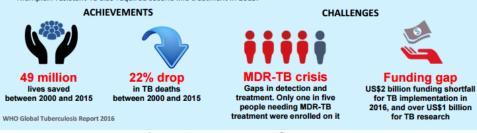
For further information visit the WHO website using this link to the publication: <u>http://www.who.int/medicines/publications/global-priority-list-antibiotic-resistant-bacteria/en/</u>

MICRO NEWS and VIEWS

Unite to End TB: Leave no one behind World TB Day, 24 March 2017

KEY TB FACTS

- 10.4 million people fell ill with TB in 2015, including 1.2 million people living with HIV.
- TB was one of the top 10 causes of death worldwide in 2015, and was responsible for more deaths than HIV and malaria.
- In 2015, 1.8 million people died from TB*, including 0.4 million among people with HIV.
- Globally in 2015, an estimated 480 000 people developed multidrug-resistant TB (MDR-TB). An additional 100 000 people with rifampicin-resistant TB also required second line treatment in 2015.



Reproduced from 'The End TB Strategy' document, http://www.who.int/tb/post2015_TBstrategy.pdf?ua=1

Australian scientists make breakthrough in fight against

SUPErbugs <u>http://www.abc.net.au/news/2017-02-15/antibiotic-resistant-superbug-</u> <u>discovery-at-university-of-wa/8270470</u>

Australians are addicted to antibiotics: a modern fetish without a long-term plan <u>http://www.smh.com.au/comment/australians-are-addicted-to-antibiotics-a-modern-fetish-without-a-longterm-plan-20170228-gun431.html</u>

Dampened immunity during pregnancy promotes evolution of more virulent flu https://www.sciencedaily.com/releases/2017/03/170308145347.html

Aboriginal hair shows 50,000 year connection to Australia https://www.sciencedaily.com/releases/2017/03/170308131131.html

Dental plaque DNA shows Neanderthals used 'aspirin' https://www.sciencedaily.com/releases/2017/03/170308131218.html

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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/visitingspeakers-program/

Alternatively, contact Catherine Satzke (<u>catherine.satzke@mcri.edu.au</u>), who is the VSP Coordinator for the ASM VIC Branch.



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>

- ASM Frank Fenner Award Application due 30th April
- ASM Lyn Gilbert Award Application due 31st March
- ASM David White Excellence in Teaching Award Application due 31st March
- ASM Teachers' Travel Award Application due 31st March
- The bioMerieux Identifying Resistance Award Application due 31st March
- ASM Clinical Microbiology Travel Award Application due 31st March
- ASM Jim Pittard Early Career Award Application due 30th April

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)



The 3rd International Conference on Porphyromonas gingivalis and Related Species in Oral and Systemic Diseases.

Melbourne Convention and Exhibition Centre

A unique opportunity to hear the world's leading periodontal researchers present the latest research on periodontal microbiology and inflammation, and the translation of research into clinical applications.

SPEAKERS INCLUDE

Professor George Hajishengallis – Penn Dental Medicine, USA Professor Mike Curtis – Barts and London, Queen Mary's School of Medicine and Dentistry, UK Professor Koji Nakayama – Nagasaki University, Japan Professor Eric Reynolds – University of Melbourne, Australia Professor Philip Marsh – University of Leeds, UK Professor Richard Darveau – University of Washington, USA A/Professor Patricia Diaz – UConn, USA Professor Richard Lamont – University of Louisville, USA Professor Mark Bartold – University of Adelaide, Australia Professor Jan Potempa – University of Louisville, USA

REGISTRATION

Full:	\$1,100
Student:	\$660
Day rate:	\$550

ABSTRACT SUBMISSION BY 17 MARCH 2017











19TH INTERNATIONAL SYMPOSIUM ON RECENT ADVANCES IN OTITIS MEDIA



Gold Coast Convention and Exhibition Centre, Gold Coast, Australia **4–8 June 2017**

CALL FOR ABSTRACTS NOW OPEN

SUBMISSION DEADLINE 3 FEBRUARY 2017

For further information and to submit an abstract, please visit **www.otitismedia2017.com.au**

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Annual Scientific Meeting and Trade Exhibition



Planetary Health

2-5 July 2017 Hotel Grand Chancellor, HOBART



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Microbial impacts on human health and the natural systems that sustain civilisation

As in previous years, ASM 2017 will be co-run with ASM EduCon 2017: Microbiology Educators' conference



Save the date: ASM EduCon, Sunday 1st July 2017

ASM Educon brings together Microbiology educators from across Australia who share a common goal to advance the teaching and learning of Microbiology.

As part of an initiative to support Victorian based Microbiology educators ASM VIC Branch would like to announce a VIC Branch Educators Award of \$500 to support travel/registration costs of the 2017 meeting. Further information on the application process for this award will appear in the January newsletter.

If you are interested in presenting at ASM Educon or have any other enquires please contact Dr Helen Cain (<u>hmcain@unimelb.edu.au</u>) or A/Prof Priscilla Johanesen (<u>priscilla.johanesen@monash.edu</u>).

SA/NT BRANCH of ASM and DARASTOLOGY & TROPICAL MEDICINE SIG proußy present BACK-TO-BACK DATA TRI-STATE SCIENTIFIC MEETING

PARASITOLOGY MASTERCLASS

Darwin 22-25 September 2017





What you can expect?

Tri-State meetings have been initiated and supported by ASM branches in SA, WA and NT for over 25 years. The aim is to bring delegates together in an intimate and unique environment and provide good food, social and networking opportunities. You can expect a varied and engaging scientific program presented by some of Australia's top microbiologists.

The Parasitology Masterclass began with its inaugural meeting in Tasmania in 2009, In this, the 6th Parasitology Masterclass, it aims to again provide an excellent blend of wet workshops, classroom teaching, and formal presentations.

What you need to know?

Registration

- Places may be strictly limited so we will encourage to book early and to avoid disappointment (when registrations open).
- You can register for one, or both. Registration for both provides great cost savings.
- Register your interest to receive updates and early meeting details.





Don't let resistance Emerge. Get the complete picture.

BD Phoenix[™] Emerge Antibiotics

Be part of the discussion

Regular input from Australian and New Zealand clinicians and microbiologists means that BD Phoenix[™] Emerge panels can be tailored to the most relevant antibiotics to address emerging antimicrobial resistance.

136 wells are available on each panel



Contact your local BD representative for more information on the BD Phoenix M50 Solution for automated susceptibility testing.

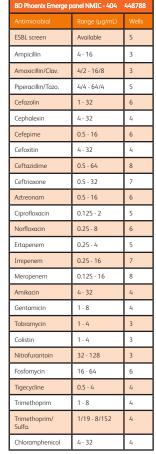
Microbiology Solutions BD Life Sciences - Diagnostic Systems

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Antimicrobial	Range (µg/mL)	Wells
iMLSB	Available	1
Penicillin	0.06 - 8	8
Ampicillin	0.25 - 16	7
Amoxicillin/Clavulanate	2 - 8	3
Oxacillin	0.125 - 4	6
Cefoxitin	2 - 8	3
Erythromycin	0.25 - 4	5
Clindamycin	0.125 - 4	6
Ciprofloxacin	0.5 - 2	3
Norfloxacin	1 - 16	5
Moxifloxacin	0.25 - 2	4
Gentamicin	0.5 - 8	5
Gentamicin synergy	500	1
Streptomycin synergy	1000	1
Vancomycin	0.5 - 16	6
Teicoplanin	1 - 16	5
Daptomycin	0.5 - 4	4
Linezolid	2 - 8	3
Fusidic Acid	0.5 - 8	5
Nitrofurantoin	32 - 128	3
Chloramphenicol	1 - 16	5
Fosfomycin	16 - 64	3
Mupirocin - LL	0.5 - 4	4
Mupirocin - HL	256	1
Pristinamycin	0.25 - 2	4
Quinupristin/dalfopristin	0.5 - 4	4
Rifampin	0.25 - 8	6
Trimethoprim	0.5 - 8	5
Trimethoprim/Sulfa.	0.5/9.5 - 8/152	5

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ESBL included on every gram negative panel ESBL have 5 wells: 1. Cefotaxime/Clav. 2. Ceftazidime/Clav. 3. Cefpodoxime 4. Ceftazidime 5. Ceftriaxone/

IMLSB included on every gram positive panel

Doxycycline

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ASM VIC CALENDAR 2017

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

- PgMelbourne 2017 Conference 14th to 16th May 2017
- 19th International Symposium on Recent Advances in Otitis Media – 4th to 8th June 2017, Gold Coast QLD
- ASM EduCon Undergraduate Educators' Conference 1st July 2017, Hobart TAS
- ASM Annual Scientific Meeting and Exhibition 2nd to 5th July 2017, Hobart TAS
- Tri-State Scientific Meeting & Parasitology Master Class 22nd to 25th September 2017, Darwin NT

Submission Deadline for March ASM Victorian News: April 4th 2017

Email submissions to: jhea@unimelb.edu.au or cbutler@unimelb.edu.au