



Sunday 2nd July 2017

Public Lecture - Anthony Capon

4:00PM - 5:00PM

Chairs: John Bowman & Tom Ross

Concert Hall

Welcome and Awards Ceremony

5:00PM - 5:30PM

Concert Hall

Bazeley Oration - Prof Mariagrazia Pizza

5:30PM - 6:30PM

Chair: Kate Seib

Concert Hall

Mariagrazia Pizza

New frontiers in vaccinology

abs# 1

Welcome Function - Tastes of Tasmania/Poster Session I

6:30PM - 8:30PM

Federation Ballroom

Monday 3rd July 2017

Nancy Millis Student Mentoring Breakfast

7:30AM - 8:30AM

Harbour View 1

Plenary 1

8:30AM - 9:15AM

Chair: Thomas Riley

Concert Hall

Robin Patel

Prosthetic Joint Infection

abs# 2

Plenary 2

9:15AM - 10:00AM

Chair: Nick West

Concert Hall

Chris Sassetti

Exploitation of the inflammatory response by Mycobacterium tuberculosis *abs# 3*

Morning Tea

10:00AM - 10:30AM

Federation Ballroom



Laboratory Processes and Automation

10:30AM - 12:00PM

Concert Hall

Chair: Belinda McEwan

- 10:30 AM **Maryza Graham**
Automation in Microbiology – quality and clinical impact *abs# 4*
- 10:50 AM **Michael Maley**
Not available at time of printing *abs# 5*
- 11:10 AM **Mitchell Brown**
Not available at time of printing
- 11:30 AM **Kerrie Stevens**
Implementation of a reference laboratory service for carbapenemase-producing Enterobacteriaceae (CPE) surveillance – a Victorian perspective *abs# 7*
- 11:40 AM **Rohan T Baker**
Clinical evaluation of the EasyScreen™ enteric viral detection kit EV002 *abs# 8*
- 11:50 AM **Marion Easton**
The impact of culture independent diagnostic testing (CIDT) on Shigella surveillance in Victoria *abs# 9*

Arboviruses and Host Pathogen Interactions A

10:30AM - 12:00PM

Grand Ballroom 1

Chair: Francesca Frentiu

- 10:30 AM **Philip Weinstein**
Arboviral disease emergence and the conservation of biodiversity *abs# 10*
- 10:50 AM **Emily J. Flies**
Ross River virus transmission, emergence and multiscale ecoepidemiology *abs# 11*
- 11:10 AM **Prasad N Paradkar**
Arbovirus transmission | Mosquito-virus interaction *abs# 12*
- 11:30 AM **Adam Taylor**
Mutation of the N-Terminal Region of Chikungunya Virus Capsid Protein: Implications for Vaccine Design *abs# 13*
- 11:40 AM **Laurence Luu**
Proteomic adaptation of Australian epidemic *Bordetella pertussis* *abs# 14*
- 11:50 AM **Mahmoud Saleh**
CD4+ T Cells Exacerbate *Clostridium difficile* Disease Severity in Hosts with Prior Inflammatory Colitis *abs# 15*

Marine and Antarctic Microbiology

10:30AM - 12:00PM

Grand Ballroom 2

Chair: Linda Blackall

- 10:30 AM **Christian Voolstra**
Diversity and function of prevalent symbiotic marine bacteria in the genus *Endozoicomonas* *abs# 16*
- 10:50 AM **Shauna Murray**
The molecular ecology of marine biotoxin-producing microbial eukaryotes *abs# 17*
- 11:10 AM **Jean-Baptiste Raina**
An in situ microfluidic approach for investigating the chemical interactions between marine microbes *abs# 18*
- 11:30 AM **Megan Huggett**
A space for time approach to help understand future impacts of temperature on marine microbiomes *abs# 19*



- 11:40 AM **Swan Li San Sow**
Microbes of the Southern Ocean water masses abs# 20
- 11:50 AM **Sarita Pudasaini**
Bioremediation of residual fuels in Antarctic soils abs# 21

Surface Structures and Complex Machines

10:30AM - 12:00PM Grand Ballroom 3
Chair: Charlene Kahler

- 10:30 AM **Trevor Lithgow**
The assembly of integral membrane proteins into bacterial outer membranes abs# 22
- 10:50 AM **TBA** abs# 23
- 11:10 AM **Nichollas E Scott**
Finding the sweet spots: Identifying the *in vitro* Arg-GlcNAcylation targets of the NleB/SseK family of effectors abs# 24
- 11:30 AM **Derek S. Sarovich**
Raising the stakes: Loss of efflux pump regulation leads to decreased meropenem susceptibility in *Burkholderia pseudomallei* abs# 25
- 11:40 AM **Laura F Fielden**
The *Coxiella burnetii* effector protein MceA targets the mitochondria during infection abs# 26
- 11:50 AM **Melanie Duncan**
Evolving Resistance to Imatinib in Vaccinia Virus: From Molecules to Mice abs# 27

Lunch

12:00PM - 1:30PM Federation Ballroom

CDS Meeting

12:00PM - 1:15PM Grand Ballroom 1

Nancy Millis Student/ECR Mentoring Lunch

12:15PM - 1:30PM Harbour View 1

SIG Meeting: Clinical Serology and Molecular SIG

12:30PM - 1:00PM Grand Ballroom 2

SIG Meeting: Food Microbiology SIG

12:30PM - 1:00PM Grand Ballroom 3

SIG Meeting: Molecular Microbiology SIG

1:00PM - 1:30PM Grand Ballroom 3

ASM/BD Awards Symposium

1:30PM - 3:00PM Concert Hall
Chair: Cheryl Power

- 1:30 PM **Claire Gorrie**
Gastrointestinal carriage is a major reservoir of *Klebsiella pneumoniae* infection in intensive care patients abs# 28
- 1:40 PM **Riti Mann**
We Are What We Eat: Identifying a Regulatory Crosstalk between Central Carbon Metabolism and Cell Division in Bacteria abs# 29
- 1:50 PM **Shakeel Mowlaboccus**
Whole-genome sequencing reveals a new cluster of penicillin-resistant serogroup W *Neisseria meningitidis* in Western Australia abs# 30



- 2:00 PM **Matthew Macowan**
Are adverse pregnancy outcomes linked to periodontitis influenced by changes in the gut microbiome? *abs# 31*
- 2:10 PM **Melinda M Ashcroft**
Genomic characterisation of carbapenem resistance conferred by the plasmid-encoded *bla_{NDM-1}* gene in the extraintestinal pathogenic lineage *Escherichia coli* ST101 *abs# 32*
- 2:20 PM **Roger D Latham**
Haemophilus haemolyticus secretes a novel bacteriocin-like substance that inhibits nontypeable *haemophilus influenzae* *abs# 33*

Afternoon Tea

3:00PM - 3:30PM

Federation Ballroom

WGS in Clinical Laboratories

3:30PM - 5:00PM

Concert Hall

Chair: Monica Lahra

- 3:30 PM **Benjamin Howden**
Not available at time of printing *abs# 34*
- 3:50 PM **Christiane Honisch**
Next-generation Sequencing Up and Coming Microbiology Applications *abs# 35*
- 4:10 PM **Dieter Bulach**
Not available at time of printing *abs# 36*
- 4:30 PM **Cameron Buckley**
Use of molecular methods to identify changes in *Neisseria gonorrhoeae* epidemiology: New South Wales, 2012-2014 *abs# 37*
- 4:40 PM **Mai Q Trinh**
Genomics of tuberculosis transmission in TB/HIV co-infected patients in Vietnam *abs# 38*
- 4:50 PM **Ammar Aziz**
Suspected cases of intracontinental *Burkholderia pseudomallei* sequence type homoplasmy resolved using whole-genome sequencing *abs# 39*

Virus-Host Interactions

3:30PM - 5:00PM

Grand Ballroom 1

Chair: Philip Weinstein

- 3:30 PM **Sonja Best**
Induction and evasion of host type I interferon responses by Ebola virus *abs# 40*
- 3:50 PM **Francesca Frentiu**
Experimental evolution indicates absence of rapid adaptation in dengue virus to *Wolbachia* *abs# 41*
- 4:10 PM **Peter Speck**
Phage therapy: clinical trial results and future potential *abs# 42*
- 4:30 PM **Thi My Hanh Vu**
BK virus infection and risk factors in Vietnamese renal transplant recipients *abs# 43*
- 4:40 PM **Doug Millar**
A novel 3base assay for the rapid detection of flavivirus/alphavirus in clinical samples *abs# 44*
- 4:50 PM **Anna Shishova**
Picornavirus modulation of Ire1-Xbp1s pathway of unfolded protein response *abs# 45*

Innovations from Genomics

3:30PM - 5:00PM

Grand Ballroom 2



Chair: John Bowman

- 3:30 PM **Stuart J. Cordwell**
Determining the targets and function of N-linked glycosylation in *Campylobacter jejuni* abs# 46
- 3:50 PM **Ian Paulsen**
Yeast 2.0: Building the world's first synthetic eukaryote abs# 47
- 4:10 PM **Brian Forde**
The genomic deluge: making sense of genome sequencing data abs# 48
- 4:30 PM **Wan Liu**
T cell immunity induced by rhesus PD1-based DNA vaccine controls SHIV infection in rhesus macaques abs# 49
- 4:40 PM **Francisco Garcia del Portillo**
A novel pathogen-specific penicillin binding protein promoting *Salmonella* cell division abs# 50
- 4:50 PM **Tegan M Harris**
Comparative genomic analysis identifies X factor-independent *Haemophilus haemolyticus*: a formal identification of "*Haemophilus intermedius*"? abs# 51

Bacterial Virulence Mechanisms

3:30PM - 5:00PM

Grand Ballroom 3

Chair: Kate Seib

- 3:30 PM **Chris Sassetti**
Metabolic regulation of antibiotic susceptibility in *Mycobacterium tuberculosis* abs# 52
- 3:50 PM **Martina Sanderson-Smith**
Glycan recognition contributes to group A streptococcal infection abs# 53
- 4:10 PM **Charlene Kahler**
Multi-drug resistant *Neisseria gonorrhoeae*: "disarming virulence" as a future therapeutic option abs# 54
- 4:30 PM **John M Attack**
Phasevarions in bacterial pathogens: epigenetic regulators evolving from restriction-modification systems abs# 55
- 4:50 PM **Sam Manna**
A novel serogroup 11 genetic variant of *Streptococcus pneumoniae* discovered in nasopharyngeal swabs from Fijian children abs# 56
- 5:00 PM **Julian Rood**
Clostridium perfringens-mediated myonecrosis: it is not all about toxins abs# 57

Break

5:00PM - 5:30PM

Jim Pittard Award Lectures

5:30PM - 6:15PM

Concert Hall

Chair: Dena Lyras

- Si Ming Man**
Pathogens, pattern-recognition receptors and innate immunity abs# 58
- Johanna Kenyon**
Genetics and structures of the capsular polysaccharides produced by the hospital superbug, *Acinetobacter baumannii* abs# 59



Frank Fenner Award Lectures

6:15PM - 7:00PM

Chair: Dena Lyras

Concert Hall

Catherine Satzke

Pneumococcal vaccines - impact of current vaccines in the Asia Pacific region and efficacy of a new whole-cell vaccine using a murine model of colonisation

abs# 60

Hayley Newton

Getting to know *Coxiella burnetii*, 80 years after we first met

abs# 61

Poster Session II

7:00PM - 9:00PM

Federation Ballroom



Tuesday 4th July 2017

Plenary 3

8:30AM - 9:15AM

Chair: Philip Weinstein

Concert Hall

Sonja Best

Move over retroviruses: restriction of flavivirus replication by TRIM5a

abs# 62

Plenary 4

9:15AM - 10:00AM

Chair: Dena Lyras

Concert Hall

Bill Petri

Investigating novel TLR2 dependent host inflammatory responses to hypervirulent *Clostridium difficile*

abs# 63

Morning Tea

10:00AM - 10:30AM

Federation Ballroom

New Clinical Microbiology Diagnostics

10:30AM - 12:00PM

Chair: Thomas Riley

Concert Hall

- 10:30 AM **Robin Patel**
New Clinical Microbiology Diagnostics abs# 64
- 10:50 AM **Jon Iredell**
Not available at time of printing abs# 65
- 11:10 AM **Enzo Palombo**
Detection of foodborne pathogens using whole-cell proteomics and metabolomics approaches abs# 66
- 11:30 AM **Lisa F Stinson**
Mining meconium for microbial DNA: Comparison of DNA extraction methods to increase yield and overcome PCR inhibitors in first pass meconium samples abs# 67
- 11:40 AM **Dilshan M Abeysekera**
A Real-Time Multiplex-PCR for the detection of Extended-Spectrum β -Lactamases (ESBL) and Carbapenemase-Producing Organisms (CPO) using 3base™ technology abs# 68
- 11:50 AM **Deane L Byers**
Archoo, archoo, archoo... Is that the Flu? abs# 69



Bacteriophage and Mobile Elements

10:30AM - 12:00PM

Grand Ballroom 1

Chair: Johanna Kenyon

- 10:30 AM **Jeremy J Barr**
Bacteriophage penetrate the body via epithelial transcytosis abs# 70
- 10:50 AM **Joshua P Ramsay**
Assembly and transfer of tripartite integrative and conjugative genetic elements abs# 71
- 11:10 AM **Michael McDonald**
Sex, adaptation and diversification in experimental microbial populations abs# 72
- 11:30 AM **Lucy L Furfaro**
Isolation of Group B Streptococcus bacteriophages with broad clinical host range abs# 73
- 11:40 AM **Thomas D Watts**
Conjugative toxin and antimicrobial resistance plasmids that encode identical *parMRC*-like partitioning systems are incompatible in *Clostridium perfringens* abs# 74
- 11:50 AM **Callum Vidor**
The plasmid encoding the *Clostridium sordellii* toxin TcsL undergoes conjugative transfer, mediated by a novel clostridial conjugation locus abs# 75

Environmental and Food Microbiology

10:30AM - 12:00PM

Grand Ballroom 2

Chair: John Bowman

- 10:30 AM **Jizheng (Jim) He**
Contribution of ammonia-oxidising archaea to ammonia oxidation in acidic soils abs# 76
- 10:50 AM **Paul Stoodley**
Biophysical properties of bacterial biofilms facilitates survival on surfaces from high velocity sprays and jets. abs# 77
- 11:10 AM **Danielle J Ingle**
Use of genomics in tracking infectious disease outbreaks abs# 78
- 11:30 AM **Tom Ross**
Risk Assessment in Food Safety Management abs# 79
- 11:41 AM **Karen Vickery**
Biofilms on dry hospital surfaces incorporating multidrug resistant organisms (MRO): is this worldwide? abs# 80
- 11:51 AM **Poyin Chen**
Molecular effects of prebiotic oligosaccharides on *L. monocytogenes* infection abs# 81

Host-Gut Pathogen Interactions

10:30AM - 12:00PM

Grand Ballroom 3

Chair: Stuart Cordwell

- 10:30 AM **Phil Sutton**
Exploiting a host-pathogen interaction to design a vaccine that protects against *Helicobacter pylori* pathogenesis abs# 82
- 10:50 AM **Richard L Ferrero**
NOD1 mediates processing of interleukin-18 in epithelial cells to maintain tissue homeostasis in *Helicobacter pylori* infection abs# 83
- 11:10 AM **Dena Lyras**
Clostridium difficile infection compromises colonic stem-cell function and epithelial regeneration. abs# 84



- 11:30 AM **Andrew Greenhill**
Interactions between the gut microbiota of sheep and infection with the gastrointestinal parasite *Haemonchus contortus* abs# 85
- 11:40 AM **Kate L Ormerod**
Emerging clinical significance of the *Bacteroidales* family S24-7 in homeothermic animals abs# 86
- 11:50 AM **Aleksandra W Debowski**
Helicobacter pylori gene silencing *in vivo* demonstrates urease is essential for chronic infection. abs# 87

Lunch

12:00PM - 1:30PM

Federation Ballroom

Annual General Meeting

12:00PM - 1:30PM

Grand Ballroom 1

Serology

1:30PM - 3:00PM

Concert Hall

Chair: Linda Hueston

- 1:30 PM **Mark Douglas**
Not available at time of printing
- 2:00 PM **Stephen Graves**
Not available at time of printing
- 2:30 PM **Janet Towns**
Not available at time of printing

Education Symposium

1:30PM - 3:00PM

Grand Ballroom 1

Chair: Priscilla Johanesen

- 1:30 PM **Sue Merkel**
Active in-class strategies to support student learning abs# 88
- 2:00 PM **Jack Wang**
Video Assessment and Feedback – upscaling student feedback in Science Education abs# 89
- 2:30 PM **Danielle Rhodes**
The Impact of Interactivity – engaging students with online interactive pre-class activities abs# 90

ASM History Symposium

1:30PM - 3:00PM

Grand Ballroom 2

Chair: Cheryl Power

- 1:30 PM **Heather Haines**
The ten commandments for a safe food supply. abs# 91
- 2:00 PM **Diane Lightfoot**
Forty days and forty nights: the role of Quarantine abs# 92
- 2:30 PM **Cheryl J Power**
Hospitals: Hotels dieu or Pathogens' paradise abs# 93

Publishing in Nature Journals

1:30PM - 3:00PM

Grand Ballroom 3

Chair: Dena Lyras

Michael Chao

Publishing in Nature journals and Editorial Careers

abs# 94

Afternoon Tea

3:00PM - 5:00PM

Federation Ballroom



STIs and Diagnostics

3:30PM - 5:00PM

Concert Hall

Chair: Wilhelmina Huston

- 3:30 PM **Monica Lahra**
Not available at time of printing *abs# 95*
- 3:50 PM **Peter Timms**
Development of a chlamydial vaccine for koalas *abs# 96*
- 4:10 PM **David Whiley**
Molecular Detection of Antimicrobial Resistance in STI Pathogens. *abs# 97*
- 4:30 PM **Wilhelmina Huston**
Genomic and phenotypic characterisation of chlamydial isolates from women that failed to respond to azithromycin treatment. *abs# 98*
- 4:40 PM **Wendy Y. Chen**
Rapid, Sensitive and Automated Detection of 12 Bacterial and Viral Causes of Sexually Transmitted Infections with EasyScreen™ STI Assay *abs# 99*
- 4:50 PM **Barakat Alsuwayyid**
Genomic epidemiology and population structure of *Neisseria gonorrhoeae* from highly endemic heterosexual Western Australian populations *abs# 100*

Human and Animal Pathogens

3:30PM - 5:00PM

Grand Ballroom 1

Chair: John Boyce

- 3:30 PM **Glen Ulett**
Pathogenesis of *Streptococcus* urinary tract infection *abs# 101*
- 3:50 PM **Adam Polkinghorne**
New insights into *Chlamydia* spill-over, a threat to human and animal health *abs# 102*
- 4:10 PM **Jai Tree**
Shining a (UV) light on the regulatory dark matter of bacteria *abs# 103*
- 4:30 PM **Lea-Ann Kirkham**
Development of molecular tools to quantify closely related *Haemophilus* species reveals evidence of synergism in the nasopharynx. *abs# 104*
- 4:40 PM **Nural Cokcetin**
Honey: a topical solution for drug-resistant infections *abs# 105*
- 4:50 PM **TBA**

Ecological and Applied Microbiology: A

3:30PM - 5:00PM

Grand Ballroom 2

Chair: Tom Ross

- 3:30 PM **Sasha Tetu**
Examining the impact of anthropogenic pollutants on key marine photosynthetic bacteria *abs# 107*
- 3:50 PM **Philip Bond**
Manipulating microbial constituents for optimizing bioprocesses in engineered environments *abs# 108*
- 4:10 PM **Perran Cook**
Novel microbial metabolisms and their impact on sediment biogeochemical processes *abs# 109*
- 4:30 PM **Katharina Richter**
Silver nanoparticles as a topical treatment for biofilm-related infections *abs# 110*
- 4:40 PM **Mei C Ooi**
Temperature-induced changes to the microbiome of the haemolymph in the cultured spiny lobster *Panulirus ornatus* *abs# 111*



4:50 PM **Radestya Triwibowo**
The application of enzymatic pre-treatment to improve PCR assay: a quantification method for NoV surrogate abs# 112

Host-Pathogen Interactions

3:30PM - 5:00PM Grand Ballroom 3
Chair: Richard Ferrero

3:30 PM **Bill Petri**
Role of CREM/ICER in Innate Immunity to Amebic Colitis abs# 113

3:50 PM **James A Fraser**
Epigenetic regulation of virulence in *Cryptococcus neoformans* abs# 114

4:10 PM **Andreas Kupz**
Combating the re-emergence of tuberculosis with new vaccine strategies abs# 115

4:30 PM **Jhieh-Hang Jiang**
Antibiotic resistance and host immune evasion in *Staphylococcus aureus* mediated by a novel metabolic adaptation abs# 116

4:50 PM **Antje Blumenthal**
WNT signalling shapes the host response to acute bacterial infection abs# 117

5:00 PM **Luanne Hall-Stoodley**
Primary Ciliary Dyskinesia Ciliated Airway Cells Are Susceptible to *Haemophilus influenzae* Biofilm Formation abs# 118

Break

5:00PM - 5:30PM

ASM/bioMerieux Award Lecture

5:30PM - 5:55PM Concert Hall
Chair: Jon Iredell

John Merlino
Is there Light at the end of the Tunnel abs# 119

Lyn Gilbert Award Lecture

5:55PM - 6:20PM Concert Hall
Chair: Jon Iredell

David Whiley
Silencing the clap: enhancing detection and characterisation of an emerging superbug abs# 120

Break

6:20PM - 6:30PM

Rubbo Oration

6:30PM - 7:30PM Concert Hall
Chair: Roy Robins-Browne

Pascale Cossart
The bacterial pathogen *Listeria monocytogenes*, a unique model in biology abs# 121

Rubbo Celebration

7:30PM - 9:30PM Grand Ballroom



Wednesday 5th July 2017

Plenary 5: Dr Christian Voolstra

9:00AM - 9:45AM

Concert Hall

Chair: Linda Blackall

Christian Voolstra

The metaorganism imperative - we are not alone

abs# 122

Snowdon Oration

9:45AM - 10:30AM

Concert Hall

Chair: Enzo Palombo

Bart Weimer

Multi-omics at the intersection of food and health

abs# 123

Morning Tea

10:30AM - 11:00AM

Federation Ballroom

Human and Veterinary Infections

11:00AM - 12:30PM

Concert Hall

Chair: Timothy Stinear

11:00 AM Steven Djordjevic

Genomic surveillance of multi-drug resistant, extraintestinal pathogenic and commensal *Escherichia coli* from humans and food animals

abs# 124

11:20 AM Mark Davies

Not available at time of printing

abs# 125

11:40 AM David McMillan

The role of group G streptococcus in human disease

abs# 126

12:00 PM Tamiaka Fraser

Novel insights to *Sarcoptes scabiei* mitochondrial genomes within Australian native animals

abs# 127

12:10 PM Marina Harper

Identification of unique lipopolysaccharide phosphoethanolamine transferases in *Pasteurella multocida*

abs# 128

12:20 PM Ken Lee

isolation of *paecilomyces variotii* from vertebral bodies of german shepherd dog

abs# 129

Virulence Mechanisms

11:00AM - 12:30PM

Grand Ballroom 1

Chair: TBA

11:00 AM John D Boyce

Bacterial weapons of mass destruction: defining the type VI secretion system toxin arsenal of *Acinetobacter baumannii*

abs# 130

11:20 AM Nick West

Latent Tuberculosis Infection: the Sleeping Giant- and When the Giant Doesn't Sleep

abs# 131

11:40 AM Hayley Newton

Coxiella-containing vacuoles and Clathrin-mediated traffic.

abs# 132

12:00 PM Anjali Gowripalan

Non-canonical Smad signalling promotes spread during vaccinia virus infection

abs# 133



- 12:10 PM **Zuleeza Ahmad**
A low molecular weight protein tyrosine phosphatase in *Streptococcus pneumoniae* may be essential for the bacterial survival and spread via human saliva abs# 134
- 12:20 PM **Kevin M Downard**
A novel phylogenetic approach to identify and chart protein mutations associated with the evolution of microorganisms abs# 135

Food Microbiology

11:00AM - 12:30PM

Grand Ballroom 2

Chair: Valeria Torok

- 11:00 AM **Kate Howell**
The incidence of *Saccharomyces cerevisiae* in vineyards reveals a role for dispersal based on vectoring by *Drosophilid* flies abs# 136
- 11:20 AM **Van Ho**
Characterisation of *Listeria monocytogenes* inhibiting *Lactococcus lactis* isolates from fruits and vegetables for use as biopreservatives in cheese abs# 137
- 11:40 AM **Thea King**
Transcriptomic response of *Escherichia coli* O157 isolates on meat: comparison between a typical Australian isolate from cattle and a pathogenic clinical isolate abs# 138
- 12:00 PM **Niloufar Roshan Hesari**
Effect of natural products on endospore life cycle of *Clostridium difficile* *in vitro* abs# 139
- 12:10 PM **Su Chen Lim**
Antimicrobial susceptibility of *Clostridium difficile* from diverse environmental sources abs# 140
- 12:20 PM **Ed M Fox**
Analysis of the *Listeria monocytogenes* population structure isolated in Australia abs# 141

Microbial Evolution and Pathogenesis

11:00AM - 12:30PM

Grand Ballroom 3

Chair: Glen Ulett

- 11:00 AM **Alex Andrianopoulos**
Morphological and metabolic adaptation by the intracellular pathogen *Talaromyces marneffei* to the host environment abs# 142
- 11:20 AM **Diane McDougald**
Vibrio cholerae survives intracellularly in protist hosts and are egested in vacuoles that represent a new mechanism for transmission of cholera abs# 143
- 11:40 AM **Kate L. Seib**
Investigating the meningococcal glycointeractome abs# 144
- 12:00 PM **TBA**
- 12:10 PM **David Gordon**
Pandemic or epidemic? Fine-scale structure in a cosmopolitan *Escherichia coli* lineage, CC95, responsible for extra-intestinal infection. abs# 146
- 12:20 PM **Erin P. Price**
Within-host evolution of *Burkholderia pseudomallei* in the longest known human melioidosis case abs# 147

Lunch

12:30PM - 1:30PM

Federation Ballroom

SIG Meeting: Public Health Microbiology SIG

12:40PM - 1:10PM

Concert Hall

SIG Meeting: Education SIG

12:40PM - 1:10PM

Grand Ballroom 1

**SIG Meeting: History SIG**

12:30PM - 1:15PM

Grand Ballroom 2

SIG Meeting: Microbial Ecology SIG

12:30PM - 1:15PM

Grand Ballroom 3

Planetary and One Health

1:30PM - 3:00PM

Concert Hall

Chair: TBA

- 1:30 PM **Anthony Capon**
Not available at time of printing *abs# 148*
- 1:50 PM **Philip W Boyd**
The role of microbes in modulating biogeochemical responses to ocean global change *abs# 149*
- 2:10 PM **Thomas Riley**
The "One Health" paradigm and *Clostridium difficile* *abs# 150*
- 2:30 PM **Patrice Newton**
Using and abusing the host: genome-wide siRNA screen reveals host factors important for effector translocation in *Coxiella burnetii* *abs# 151*
- 2:40 PM **Sarah Hanieh**
Prevalence and predictors of intestinal parasitic infection among women and young children in rural Vietnam: a prospective cohort study *abs# 152*
- 2:50 PM **Theerapong Krajaejun**
Single Nucleotide Polymorphism-Based Multiplex PCR for Identification and Genotyping of the Oomycete *Pythium insidiosum* from Humans, Animals and the Environment *abs# 153*

Gut Microbiome

1:30PM - 3:00PM

Grand Ballroom 1

Chair: Claire O'Brien

- 1:30 PM **Claire O'Brien**
Host-microbe interactions in Crohn's disease *abs# 154*
- 1:50 PM **Shakuntla Gondalia**
Gut microbiome in chronic diseases: Microbiome and metabolic interaction in autism and IBD condition *abs# 155*
- 2:10 PM **Rajaraman Eri**
Tales from the crypt: The role of microbiota in colitis and colorectal cancer *abs# 156*
- 2:30 PM **Tanvi Shinde**
Survival, adhesion and immunomodulatory efficacy of spore-forming probiotic *Bacillus coagulans* *abs# 157*
- 2:40 PM **Nida Murtaza**
Isolation and characterization of *Akkermansia muciniphila* strain NM-1 *abs# 158*
- 2:50 PM **Erin Shanahan**
Microbial colonisation of the oesophageal, gastric and duodenal mucosa *abs# 159*



Ecological and Applied Microbiology: B

1:30PM - 3:00PM

Grand Ballroom 2

Chair: Ed Fox

- 1:30 PM **Pauline M Mele**
Regional soil microbiomes of vineyards in south eastern australia insights & implications abs# 160
- 1:50 PM **Chris Greening**
Molecular hydrogen: an unexpected lifeline for aerobic soil bacteria abs# 161
- 2:10 PM **Mathew P Watts**
Harnessing microorganisms to clean up mining impacted environments abs# 162
- 2:30 PM **Yiren Yang**
The diversity of proteins encoded in bacterial *ars* operons abs# 163
- 2:40 PM **Charles Warren**
New insights into soil microbial ecology provided by metabolomics and lipidomics abs# 164
- 2:50 PM **Karen Vickery**
Transmission of pathogens from dry surface biofilms: effect of glove type abs# 165

Human Microbiome Pathogens

1:30PM - 3:00PM

Grand Ballroom 3

Chair: Hayley Newton

- 1:30 PM **Tim Stinear**
Not available at time of printing abs# 166
- 1:50 PM **Ruiting Lan**
Pertussis resurgence: acellular vaccine immunity and pathogen adaptation abs# 167
- 2:10 PM **Ulrike Kappler**
A novel, molybdenum-containing methionine sulfoxide reductase supports survival of *Haemophilus influenzae* in an *in vivo* model of infection abs# 168
- 2:30 PM **Janessa L Pickering**
Presence of *Bacillus licheniformis* in geogenic dust may enhance the susceptibility of respiratory epithelium to NTHi infection abs# 169
- 2:40 PM **Lucy L Furfaro**
Group B Streptococcus colonisation in Western Australian pregnant women abs# 170
- 2:50 PM **Ronan F O'Toole**
Mapping the origin and spread of *Mycobacterium tuberculosis* complex in the Tasmanian population using whole-genome sequence and epidemiological data analyses abs# 171

Delegates to move to Concert Hall

3:00PM - 3:05PM

Closing Address

3:05PM - 3:20PM

Concert Hall