



# INTERNATIONAL SOCIETY FOR OTITIS MEDIA

JAN2017

## Newsletter

## #7



## Going Down Under

Happy New Year to you all! I'm currently on fellowship in Western Australia and am very excited that in just a few months the next OM conference will be coming to this beautiful country. I know our hosts from Griffith University have been working very hard to make sure this is a great meeting, with a mix of interesting science and good fun. In this newsletter our conference chairs Allan Cripps and Jennelle Kyd outline what we can expect, and they've also asked their local colleagues to highlight the great OM research going on in Australia.

On a personal note, this is my last newsletter as the editor, before I take on the role of secretary of our society. We have appointed a new editor, Deepak Chandrasekharan from London, and I know our newsletter will continue to grow under his steer.

The deadline for abstract submissions for the conference closes very soon. I hope to see you "Down Under".



**Mahmood Bhutta**  
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# A word from your RAOM 2017 Co-Chairs

The 19th International Symposium on Recent Advances in Otitis Media will be held in June 2017 on Australia's beautiful Gold Coast, a location that boasts more than 70 kilometres of pristine coastline, 100,000 hectares of world heritage-listed rainforest, an abundance of natural and cultural attractions, and an almost limitless number of dining and entertainment options.

Australia has a 50-year history of contributing to clinical practice knowledge and research on otitis media. The high incidence of ear-related disease and high prevalence of tympanic membrane perforation among Australian Indigenous children has outraged Australians. The greatest disease burden is among those who are already disadvantaged by isolation and poverty, and Australia's contribution to this field is exemplified by the dominance of research committed to reducing the burden of otitis media and its associated educational and social disadvantages.

We look forward to bringing RAOM to Australia to expose Australian and international clinicians, researchers and healthcare workers to the most up-to-date information on otitis media, and foster the sharing of key knowledge across the disciplines involved in the area.

## The venue

RAOM 2017 will be held at the Gold Coast Convention and Exhibition Centre, which is located in the heart of the Gold Coast just steps away from the sand, surf and cafes of Broadbeach. Here on the Gold Coast we have a wonderfully mild winter and with the start of the whale-watching season also kicking off in June, there is no better time to combine a trip to the Symposium with some sight-seeing.

## The program

The Symposium will bring together international and Australian experts to share knowledge of recent science and clinical practice for otitis media. The program will address diagnosis, prevention strategies, treatment, epidemiology, pathogenesis, microbiology, immunology, complications and sequelae, animal models and otitis media in Indigenous and high-risk populations.

## Program highlights

The program includes keynote and concurrent oral presentations, posters and social events. A few program highlights include sessions on the experiences of healthcare field workers in caring for isolated communities, diagnosis, interventions, pathogenesis and research workshops. To view the working draft of the program, visit [otitismedia2017.com/program](http://otitismedia2017.com/program).

## Social Program

This year's Symposium Dinner will be held on the Pool Deck of the stunning Sofitel Broadbeach - guests will enjoy a buffet BBQ dinner and drinks while immersed in breathtaking views of the Gold Coast. A night not to be missed!

We look forward to seeing you in June.



**Professor Allan Cripps and  
Professor Jennelle Kyd**



## 19<sup>TH</sup> INTERNATIONAL SYMPOSIUM ON RECENT ADVANCES IN OTITIS MEDIA

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



INTERNATIONAL  
SOCIETY FOR  
**OTITIS  
MEDIA**

# CALL FOR ABSTRACTS NOW OPEN

## SUBMISSION DEADLINE 3 FEBRUARY 2017

For further information and to submit an abstract,  
please visit [www.otitismedia2017.com.au](http://www.otitismedia2017.com.au)

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# President's report



June 2017 is rapidly approaching! The Gold Coast in Australia is a pleasant place to get together. Over the last 2 years, the local scientific Committee has put all their efforts into bringing us the latest updates regarding all aspects of Otitis Media.

For some people to reach Australia means many hours of flight, but for sure everybody will be rewarded by the warmth of Australian people plus the nice and sunny surroundings.

We invite you to join us! Be welcome!



**Tania Sih**  
President ISOM

## A word from the Secretary

I was delighted to see this Newsletter highlighting the amazing program upcoming and hosted by our colleagues in Australia. It will be an amazing meeting!

Although it might seem like a long time from now – your ISOM leadership is actively preparing for the 21st International Symposium on Recent Advances in Otitis Media which will take place in the summer of 2021. ISOM leadership would absolutely like to encourage any non-US site to consider preparing a presentation for the ISOM Board in Australia as a potential site for this meeting.

Per the ISOM Bylaws I have copied below what an application should entail.

I would be most happy to work with any member who is considering a submission – so please do not hesitate to contact me if there is an interest.

**PROPOSALS FOR SYMPOSIA.** Any proposal to the Board to hold future Symposia should be submitted to Members of the Executive Committee and the Board at least thirty (30) days prior to the meeting at which any decision is to be taken (4 years prior to the proposed date) and should include:

- a) name of the proposed Symposium Director;
- b) names of the two Members proposed for the Organizing Committee;
- c) the site, venue, and approximate dates;
- d) justification for the proposed geographic location, including the ability to attract attendees and speakers;
- e) proposed theme of the meeting and primary objectives;
- f) transportation information,

- g) name(s) of sponsoring organizations(s), if applicable;
- h) fiscal analysis with estimated expenses and revenues including registration fees, etc;
- i) plans for meeting administration;
- j) plans for publication and dissemination of scientific material; and
- k) plans for purchase of meeting insurance.



**Joseph E. Kerschner**  
Secretary, ISOM  
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## A word from the Treasurer



**Margaretha Casselbrant**  
Treasurer, ISOM  
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Just to let you know that ISOM continues to do well. It is hard to believe that the 19th International Symposium on Recent Advances in Otitis Media is just 5 months away. The 19th International Symposium is hosted by our Australian colleagues on the Gold Coast, Queensland, Australia, June 4-8, 2017. I know they have been working very hard to make this meeting outstanding. I am very much looking forward to participating in the meeting as well as visiting Australia.

I want to remind you that as an ISOM member you will benefit from a reduction in the registration fee for any upcoming ISOM Symposium if you have paid your yearly membership dues which are due by April 30 each year. I would appreciate if you who have

automatic payment of the membership dues please modify so the payment will be done between February 1 through April 30 to avoid any confusion in the future. It is important that all members do their share and pay the yearly dues. Among other things the money from the dues will be used to continue to build the web site so it can serve as a resource and an educational tool in regards to otitis media.

If you have any questions about membership or registration please do not hesitate contact me.

Looking forward to seeing you in Australia.

# Spotlight on otitis media research 'down under'

The 19th International Symposium on Recent Advances in Otitis Media is making its way 'down under' in 2017. There are a number of research groups in Australia that are engaged in a range of vital research into otitis media, much of which will be on display on the Gold Coast next year. Here, we put the spotlight on a few local research groups that provide summaries of their current research activities.



## Telethon Kids Institute in Western Australia

Professor Deborah Lehmann and Dr Ruth Thornton, members of the RAOM 2017 Australian Advisory Committee and the RAOM 2017 program sub-committee, summarise their institute's otitis media research



Dr Ruth Thornton

The Telethon Kids Institute, Perth, Western Australia (WA) has been conducting research on otitis media (OM) for the past 16 years, with a particular emphasis on OM in the Aboriginal population who suffer among the highest rates of OM worldwide. We are members



of a national Centre of Research Excellence in Otitis Media of Aboriginal and Torres Strait Islander Children (CRE\_ICHEAR), which includes a number of key

researchers in the field in Australia. Our research is multidisciplinary and includes epidemiological studies, qualitative research, data linkage, pathogenesis, genetic studies, systematic reviews and clinical trials. We seek to identify and quantify the problem, then design and evaluate interventions to inform policy and reduce the burden of disease. In the 2000s we conducted the only cohort study to date investigating risk factors (including microbiological and immunological factors) in indigenous and non-indigenous children living in the same geographic area. This led to an innovative community-driven ear health promotion program. We have evaluated the impact of introduction of swimming pools into remote Aborigi-

nal communities on ear and skin infections. Through linkage of routinely collected administrative data in WA, we are documenting temporal trends of hospitalisation of children with OM and related surgical procedures. In view of the dearth of data regarding OM in Aboriginal children living in urban areas in Australia, we are embarking on a birth cohort study to determine burden of and risk factors for OM in Aboriginal children living in Perth. An Aboriginal woman is conducting an adjunct qualitative study seeking to understand what people know and do about OM and what barriers they face in seeking treatment. In addition, we are investigating the impact of OM on early language and communication skills in this population. We are working with key stakeholders to develop a WA Ear Health Strategy and seek to establish a state-wide minimum dataset to assist in monitoring impact of ear health programs in WA.



Professor Deborah Lehmann

## Menzies School of Health Research, Darwin

Professor Amanda Leach, RAOM 2017 Australian Advisory Committee and RAOM 2017 program sub-committee member, provides an overview of the OM research program at her institution



Our Otitis Media (OM) Research Program is conducting clinical trials and laboratory research to determine better treatment and prevention strategies (vaccines, topical and oral antibiotics) for managing ear disease in Aboriginal children living in remote communities. Around 15% of young Aboriginal children have ear drum perforation(s) and almost all have either acute OM or middle ear effusions (glue ear). All forms cause hearing loss. For Aboriginal children the consequences of unresolved ear infections and persistent hearing loss are the social isolation and educational disadvantages arising from communication difficulties and delays

in speech and language development. This is further exacerbated when entering school and learning English within a Western-style education system. Our research has identified that standard antibiotic regimens for all forms of OM such as 'glue ear', acute otitis media, and chronic suppurative otitis media, have poorer rates of resolution compared to published studies in non-Indigenous children. Our vaccine trials have also revealed that prevention of some OM episodes is possible using pneumococcal conjugate vaccines, but protection from 3-dose primary courses is too late for many infants whose infections begin at 2 to 4 months of age. This helps

to explain the high prevalence of OM, persistence and progression to tympanic membrane perforation. National OM guidelines specific to these issues of OM in indigenous populations have been written by members of our group and are currently under review. More needs to be done to ensure healthcare providers are informed of the disadvantage associated with OM and hearing loss, are skilled in its diagnosis, and are aware of evidence for best practice prevention and treatment.



## University of Swinburne

Professor Jennelle Kyd, RAOM 2017 Co-Chair, and Dr Ajay Krishnamurthy, RAOM 2017 Australian Advisory Committee member, provide a summary of the OM research occurring in the University of Swinburne



Improving our knowledge and understanding of the interactions between the microbes and host cells that promote disease and modulate innate immune responses is the current focus of our research. We have been investigating bacterial adherence to different respiratory epithelia and the effects on this by different respiratory virus infection, the host's cell responses, different areas of the human respiratory tract, bacterial

biofilm formation, and the effect of solid lipid nanoparticles on microbial biofilm formation. Our investigations have shown that specific viral and bacterial interactions with airway epithelial cells modulate cell-signalling mechanisms. This enhances bacterial adherence and suppresses innate inflammatory responses. We've also found that the use of probiotics during respiratory infections effectively reduced pneumococcal

and non-typeable Haemophilus influenzae adherence to nasopharyngeal mucosa. Certain structural analogs of acylhomoserine lactones inhibit microbial biofilms in both single species and mixed species environment, but are also strain-dependent. Solid lipid nanoparticles containing free fatty acids are being researched and show promising results against Pseudomonas aeruginosa biofilm formation.

## Institute for Glycomics, Griffith University

Professor Michael Jennings and Dr Kate Seib, members of the RAOM 2017 Local Organising Committee provide a summary of their organisation's OM-related research activities



Professor Michael Jennings and Dr Kate Seib, located at the Institute for Glycomics, Griffith University, are currently investigating novel, randomly switching, N6-adenosine DNA methyltransferases (Mod) that act as epigenetic regulators. Their research on non typeable Haemophilus influenzae (NTHi) and Moraxella catarrhalis suggests that Mod-dependent gene regulation aids bacterial adaptation to changing host environments, enabling increased fitness for

transmission and ability to cause disease. Clustering of particular mod alleles with OM disease isolates indicates these mod alleles lead to expression differences in key genes, which gives a key competitive advantage in the middle ear. These systems are currently being investigated in the chinchilla model of OM, in collaboration with Professor Lauren Bakaletz (The Research Institute at Nationwide Children's Hospital, Columbus Ohio).

This research will provide a complete understanding of the role of the Mod epigenetic regulators in the pathobiology of NTHi and M. catarrhalis, and define the stably expressed protein repertoire of both organisms. This will have fundamental translational outcomes for vaccine development, by preventing the use of vaccine targets that are subject to variable expression and are therefore potentially able to evade a vaccine-induced immune response.

# Save the date!



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Gold Coast Convention and Exhibition Centre,  
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Visit the website to register your interest! [www.otitismedia2017.com](http://www.otitismedia2017.com)

**The International Society for Otitis Media** extends a warm invitation to join us at the 19<sup>th</sup> International Symposium on Recent Advances in Otitis Media (RAOM) 2017. RAOM 2017 will be held at the Gold Coast Convention and Exhibition Centre at the Gold Coast, Australia from 4-8 June 2017.

The Symposium will bring together international and Australian experts to share knowledge of recent science and clinical practice for otitis media. The program will address diagnosis, prevention strategies, treatment, epidemiology, pathogenesis, microbiology, immunology, complications and sequelae, animal models and otitis media in Indigenous and high risk populations. The program will include keynote and concurrent oral presentations, poster sessions, a trade exhibition, as well as social events.

**We look forward to welcoming you to the Gold Coast in June 2017!**  
Visit the Symposium website for more information: [www.otitismedia2017.com](http://www.otitismedia2017.com)



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