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
Editor, ISOM Newsletter
Royal Perth Hospital
Australia
m.bhutta@doctors.org.uk
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 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.

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.

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.
April 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
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.

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 Aboriginal 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.
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.

Our OM research program at her institution 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.

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.

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, random 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.

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.
Save the date!

19th International Symposium on Recent Advances in Otitis Media
Gold Coast Convention and Exhibition Centre, Gold Coast, Australia 4-8 June 2017

Visit the website to register your interest! www.otitismedia2017.com

The International Society for Otitis Media extends a warm invitation to join us at the 19th International Symposium on Recent Advances in Otitis Media (RAOM) 2017. RAOM 2017 will be held at the Gold Coast Convention and Exhibition Centre on 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