Sunday, June 9th

7:30 am – 8:00 am  Morning Coffee (Committee Members)
8:00 am – 10:30 am  ISOM Committee Meetings
10:30 am – 12:00 pm  ISOM Board of Directors Meeting
12:00 pm – 12:30 pm  Lunch
12:30 pm – 3:30 pm  ISOM Research Conference
5:30 pm – 8:00 pm  Welcome Reception

Monday, June 10th

7:30 am – 8:00 am  Morning Coffee with Exhibitors

Welcome & Special Remarks
8:00 am – 8:30 am  Joseph E. Kerschner, MD  President’s Welcome
Lauren O. Bakaletz, PhD  David Lim Tribute
Kevin M. Mason, PhD  Research Conference Overview

Opening Keynote
Keynote Introduction: Joseph E. Kerschner, MD
8:30 am – 9:30 am  Ear and Hearing Care – a Global Health Priority: Really??
Shelly Chadha, MBBS, MS, PhD

9:30 am – 10:00 am  Coffee Break with Exhibitors

Session I: Polymicrobial OM
Moderator: TBD
10:00 am – 10:25 am  Respiratory Viruses – Paving the Way for Otopathogens
Johanna Nokso-Koivisto, MD, PhD

10:25 am – 10:40 am  NTHI and M. catarrhalis Released from a Polymicrobial Biofilm by Antibodies against NTHI Type IV Pili are Hypersensitive to Antibiotic Mediated Killing
Elaine Mokrzan

10:40 am – 11:05 am  The Polymicrobial Environment: How Relevant is What We Know?
Jennelle Kyd, PhD

11:05 am – 11:20 am  Nasal microbiota profiles and chronic otitis media with effusion
Rebecca Walker
Characteristics of Nasopharyngeal and Oral Microbiome Protecting from Acute Otitis Media  
Terhi Tapiainen, MD, PhD

The yield of respiratory viruses detection testing is age-dependent in children with uncomplicated acute otitis media  
Tal Marom, MD

Session II: AOM Clinical Management  
Moderator: TBD

10:00 am – 10:25 am  
Topical Analgesics for Acute Otitis Media – Yes or No?  
Roderick P. Venekamp, MD, PhD

10:25 am – 10:40 am  
The impact of pneumococcal vaccine schedules on nasopharyngeal microbiology of Indigenous infants aged 12 months  
Jemima Beissbarth

10:40 am – 11:05 am  
Treating the Disease When You Have the Disease  
Joseph Kerschner, MD

11:05 am – 11:20 am  
Effectiveness of a Multifaceted Intervention to Educate General Practitioners about Pain Management in Children with Acute Otitis Media: a Cluster Randomized Controlled Trial  
Rick T Van Uum

11:20 am – 11:45 am  
2018 Update of Japanese Guidelines for Diagnosis and Management of Pediatric Acute Otitis Media: The Reason Why We Need Our Own Version  
Tatsuya Hayashi, MD, PhD

11:45 am – 12:00 pm  
Parental Perceptions and Management Strategies for Otitis Media In Greenland  
Malene Demant

12:00 pm – 1:15 pm  
Lunch and/or NIH Workshop  
Moderator: TBD

12:15 pm – 1:15 pm  
Bracie Watson, PhD  
Alberto Rivera-Rentas, PhD

Panel I: Comparing OM Management and Outcomes  
Moderator: Linda Miller Calandra, MSN, CRNP, CORLN

1:15 pm – 2:45 pm  
Kandice Bowman, MS, CPNP  
Teresa Giordano, DNP, CORLN  
Theresa O'Leary, Director/Ear Nurse Consultant New Zealand

Panel II: OM Post-PCV  
Moderator: TBD

1:15 pm – 2:45 pm  
Janak A. Patel, MD  
Stephen Pelton, MD  
Ron Dagan, MD

2:45 pm – 3:00 pm  
Coffee Break with Exhibitors
Session III: Vaccines/Immunology
Moderator: TBD

3:00 pm – 3:25 pm
Pediatric Immune Responses to Otopathogen Antigens to Inform Vaccine Development
Lea-Ann Kirkham, PhD

3:25 pm – 3:40 pm
Immunization with a Bandaid Protects Against Experimental Otitis Media Due to nontypeable Haemophilus influenzae
Laura Novotny

3:40 pm – 4:05 pm
Can Maternal Immunisation Strategies Prevent Infant Otitis Media?
Michael Binks, PhD

4:05 pm – 4:20 pm
Acute otitis media in infants younger than two months of age: epidemiologic and microbiologic characteristics in the era of pneumococcal conjugate vaccines
Oren Ziv

4:20 pm – 4:45 pm
Immune dysfunction in the otitis prone child
Michael Pichichero, MD

4:45 pm – 5:00 pm
Aboriginal Australian Otitis Prone children have reduced natural antibody titers to NTHi vaccine candidate antigens associated with attachment and biofilm formation
Sharon Clark

5:00 pm – 5:15 pm
Disparity in Allergy Testing Results Among Patients with Allergic Rhinitis And Eustachian Tube Dysfunction
David Hurst, MD PhD

Session IV: CSOM and Sequelae
Moderator: TBD

3:00 pm – 3:25 pm
CSOM, the Burden of Disease
Ramon Gordon Jensen, PhD

3:25 pm – 3:40 pm
Baseline and end of therapy hearing in Aboriginal children with chronic suppurative otitis media receiving standard topical treatment plus adjunct therapies: a factorial randomised control trial
Debbie Taylor-Thomson

3:40 pm – 4:05 pm
Nasopharyngeal Microbiome Analysis in Healthy and Otitis-Prone Children: Focus on History of Spontaneous Tympanic Membrane Perforation
Paola Marchisio, MD

4:05 pm – 4:20 pm
Chuan-Ming Li

4:20 pm – 4:45 pm
Innate Immune Interaction in Otitis Media Epitympanalis
Anke Leichtle, MD

4:45 pm – 5:00 pm
Hearing Outcomes at 1 to 3 Years of Age for Aboriginal Children Living in Remote Communities Allocated to Combination Schedules of Pneumococcal Conjugate Vaccines
Amanda Leach, PhD
5:00 pm  Adjourn

Dinner on your own

5:15 – 6:15pm  ISOM All Members Meeting

---

Tuesday, June 11th

7:30 am – 8:00 am  Morning Coffee with Exhibitors

**Plenary I: Vaccines**

*Moderator: TBD*

8:00 am – 8:25 am  How does *Moraxella catarrhalis* Fly Under the Radar? Vaccine for an Enigmatic Pathogen

Timothy F. Murphy, MD

8:25 am – 8:50 am  PCV and Otitis Media: New Light in the Dark

Ron Dagan, MD

8:50 am – 9:15 am  Hollywood Casting Call – Looking for: a surface exposed, highly conserved & broadly protective NTHI vaccine antigen

Lauren Bakaletz, PhD

9:15 am – 9:40 am  Prevention of Early OM in Children: Rationale and Strategies

Steven Pelton, MD

9:40 am – 10:00 am  Coffee Break with Exhibitors

**Session V: Pathogenesis I**

*Moderator: TBD*

10:00 am – 10:25 am  Tight Regulation of Innate Immunity and Inflammation in the Pathogenesis of Otitis Media

Jian-Dong Li, MD, PhD

10:25 am – 10:40 am  Prevention of non-typeable *Haemophilus influenzae* colonisation and otitis media in mice by microbial interference with a closely-related commensal species

Caitlyn Granland

10:40 am – 11:05 am  A Bacterial Epigenetic Switch Modifies Host Immune Response During Otitis Media and Increases Nontypeable *Haemophilus influenzae* Persistence

Kenneth Brockman, PhD

11:05 am – 11:20 am  Sequential Episodes of Experimental Otitis Media Promote Pathogenic Lifestyles Through Microevolution of Nontypeable *Haemophilus influenzae*

Alistair Harrison

11:20 am – 11:45 am  Biofilms in Otitis Media

W. Edward Swords, PhD

11:45 am – 12:00 pm  Rapid Gene Regulation by nontypeable *Haemophilus influenzae* Impacted Sensitivity to First-Line Antibiotics Used to Treat OM

Sean Stacey
Session VI: What is Otitis Media?
Moderator: Diego Preciado, MD, PhD
10:00 am – 10:25 am Differences Between “Otitis Medias”: Clinical Picture, Epithelium and Microbiology
Ann Hermansson, Professor, Senior Consultant

10:25 am – 10:40 am Bacterial Reservoirs in Otitis-prone Children are Associated with Repeat Surgery Outcomes: A Cohort Study
Elke Seppanen

10:40 am – 11:05 am Host Defense in the Middle Ear Epithelium
Colin D. Bingle, PhD

11:05 am – 11:20 am Epidemiological Data on Hearing Impairment among Greenlandic Adolescents: Item Development and Findings from the Health Behaviour in School-aged Children Study 2018
Christina Schnohr

11:20 am – 11:45 am Title TBA (Topic: OM Pathogens)
Peter Richmond

11:45 am – 12:00 pm Biological Networks Underlying Genetic Susceptibility to Upper and Lower Airway Conditions
Erin Baschal

Lunch and Poster Lightning Talks
12:00 pm – 1:00 pm

Poster Session
1:00 pm – 3:00 pm Judged Posters and Coffee Break

Session VII: Pathogenesis II
Moderator: TBD
3:00 pm – 3:25 pm The Role of Innate Immunity in the Pathogenesis and Resolution of Otitis Media: From Single Cells to Animal Models
Allen F. Ryan, PhD

3:25 pm – 3:40 pm In vitro Biofilm Formation Distinguishes Strains of Streptococcus pneumoniae that Persist in the Nasopharynx from Non-persistent Strains in Children with Acute Otitis Media
Paula Tahtinen

3:40 pm – 4:05 pm Measuring Biomarkers at the Time of Initial VTI to Predict Children that will Require Repeat Surgery
Ruth Thornton, PhD

4:05 pm – 4:20 pm Diverse Paths to Serum Resistance in Nontypeable Haemophilus influenzae Isolated from Children with Otitis Media
Kevin Raible

4:20 pm – 4:45 pm Non-typeable Haemophilus influenzae adhesins HMW and Hia differentially bind human airway sialic acid glycan
Michael Jennings, PhD

4:45 pm – 5:00 pm Development of a Primary Pediatric Middle Ear Epithelial Cell Model for the Study of MUC5B Regulation in Otitis Media
Yajun Chen
5:00 pm – 5:15 pm Global Gene Expression Profile of Middle Ear Mucosa in a Chinchilla Model of Pneumococcal-induced Otitis Media
Wenzhou Hong

Session VIII: Novel Treatments
Moderator: TBD

3:00 pm – 3:25 pm Transtympanic Delivery of Antibiotics for Acute Otitis Media: All the Benefits with Less Patient and Environmental Impact
Vishakha Sabharwal, MD

3:25 pm – 3:40 pm Topical and Systemic Interventions for Chronic Suppurative Otitis Media: A Suite of Cochrane Reviews
Chris Brennan-Jones

3:40 pm – 4:05 pm Targeting the Tympanic Membrane for Antibiotic Delivery Using Phage Display
Arwa Kurabi, PhD

4:05 pm – 4:20 pm Office Insertion of Tympanostomy Tubes in Young Children: Lessons Learned over 10 Years
Richard Rosenfeld, MD

4:20 pm – 4:45 pm Development of Functionally Designed Nano-Scaffolds for Regeneration of Chronic Tympanic Membrane Perforations
Yun-Hoon Choung, DDS, MD, PhD

4:45 pm – 5:00 pm Micro RNAs Implication in the Progression of Middle Ear Infection
Diego Preciado, MD PhD

5:00 pm – 5:15 pm Trans-Tympanic Delivery of Local Anesthetics for Pain in Acute Otitis Media
Dan Kohane, MD PhD

5:15 pm Adjourn

7:00 pm – 10:00 pm ISOM Banquet at Madera Kitchen

---

Wednesday, June 12th

7:30 am – 8:00 am Morning Coffee with Exhibitors

Plenary II: Biomedical Advances in OM Research
Moderator: TBD

8:00 am – 8:25 am Implantable Devices for Rehabilitation in Chronic Otitis Media
Herman A. Jenkins, MD

8:25 am – 8:50 am Behind the Curtain: Using Optical Coherence Tomography to Noninvasively Assess Ear Infections and Other Ear Pathologies
Ryan Shelton, PhD

8:50 am – 9:15 am Crossing the TM Barrier with Nanocarriers
Amit Joshi, PhD
9:15 am – 9:40 am  
**Telemedicine in the Last Frontier**  
*James D. Andrews, MD*

9:40 am – 10:00 am  
Coffee Break with Exhibitors

**Session IX: Genetics/Bioinformatics**

*Moderator: TBD*

10:00 am – 10:25 am  
**Multi-informatic Approaches to Identifying OM-specific Virulence Genes from within the Bacterial Genomic Dark Matter**  
*Garth Ehrlich, PhD*

10:25 am – 10:40 am  
**Identification of Rare, Missense PLG Variants in Families with Otitis Media**  
*Tori Bootpetch Roberts*

10:40 am – 11:05 am  
**Sensitizing the Middle Ear: Role of FUT2 Variants**  
*Zubair Ahmed, PhD*

11:05 am – 11:20 am  
**The Transcriptional Landscape of the *In Vitro* Murine Middle Ear Epithelium**  
*Apoorva Mulay*

11:20 am – 11:45 am  
**Supragenome-wide Association Studies of *Haemophilus influenzae* Reveal Roles for Bacterial Nitrogen Metabolism and pH Homeostasis in Middle Ear Disease**  
*Joshua Mell, PhD*

11:45 am – 12:00 pm  
**SPINK5 Variants Confer Susceptibility to Autosomal Dominant Non-syndromic Otitis Media**  
*Lena Hafrén*

**Session X: Diagnosis**

*Moderator: TBD*

10:00 am – 10:25 am  
**E-Health Related to Otitis Media Diagnosis**  
*Tania Sih, MD, PhD, Hon FACS*

10:25 am – 10:40 am  
**Creating an Otitis Media Research Network in Aboriginal Medical Services in Australia**  
*Letitia Campbell*

10:40 am – 11:05 am  
**Next Generation Middle Ear Evaluation**  
*Oded Kraus, MD*

11:05 am – 11:20 am  
**Non-Invasive, Cross-Sectional Optical Middle Ear Imaging Compared with Acoustic Measurements during Otitis Media**  
*Jungeun Won*

11:20 am – 11:45 am  
**Ramen Spectroscopy for the Identification of Bacteria Causing Otitis Media**  
*Andrea Locke, PhD*

11:45 am – 12:00 pm  
*Sumon Das*
Lunch and Panel III - How Societal and Cultural Context Affect Treatment Decisions
Moderator: Joseph E. Kerschner, MD
12:15 pm – 1:15 pm
Kelvin Kong, MD
Anne Schilder, MD
Oak-Sung Choo, MD

Panel IV: Clinical Guidelines – Do We Need an Update?
Moderator: Ann Hermansson, MD
1:15 pm – 2:45 pm
Preben Homoe, MD, DMSc, PhD
Paola Marchisio, MD
Peter Morris, MD, PhD
Marie Gisselsson-Sølen, MD, PhD
Diego Preciado, I MD, PhD
Richard Rosenfeld, MD

Panel V: Microbiota: What do we know? Where do we want to go? What is holding us back?
Moderator: Robyn Marsh, PhD
1:15 pm – 2:45 pm
Robyn Marsh, PhD
Katherine Lemon, MD, PhD
Josh Earl, PhD
Seweryn Bialasiewicz, PhD
Michel Neeff, MB, ChB, FRACS

2:45 pm – 3:00 pm
Coffee Break with Exhibitors

Integrated Research Conference Reports
Moderator: TBD
3:00 pm – 3:15 pm
Biomedical Engineering/Biotechnology & New Models
Tal Marom (Chair)
Marie Gisselsson-Sølen (Co-Chair)

3:15 pm – 3:30 pm
Bioinformatics
Diego Preciado (Co-Chair)
Ann Hermansson (Co-Chair)

3:30 pm – 3:45 pm
Epigenetics/Genomics/Precision Medicine & Targeted Therapies
Garth Ehrlich (Chair)
Regie Lyn P. Santos-Cortez (Co-Chair)

3:45 pm – 4:00 pm
Microbiome/Polymicrobial Nature of OM/Microbial Shifts with Use of Antibiotics and/or Broad Licensure and Use of Vaccines
Robyn Marsh (Chair)
Heidi Smith-Vaughan (Co-Chair)

4:00 pm – 4:15 pm
Impact of OM on Quality of Life and Development
Preben Homoe (Chair)
Christian Heidemann (Co-Chair)

4:15 pm – 4:30 pm
Global Burden of Disease/Disadvantaged Populations
Amanda Leach (Chair)
Preben Homoe (Co-Chair)

4:30 pm – 4:45 pm
Pathogenesis
Ruth B. Thornton (Chair)
Ken Brockman (Co-Chair)
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| 4:45 pm – 5:00 pm | Vaccine/Immunology  
Mark Alderson (Chair)  
Lea-Ann Kirkham (Co-Chair) |
| 5:00 pm      | Adjourn  
Dinner on your own |

**Thursday, June 13th**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am – 8:30 am</td>
<td>Check Out/Morning Coffee with Exhibitors</td>
</tr>
</tbody>
</table>

**Plenary III: Microbiome and Respiratory Health**

*Moderator: TBD*

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| 8:30 am – 8:55 am | When is a Microbiomic Perspective Essential to Understanding OM  
Pathogenesis? When is it Overkill?  
Robyn Marsh, PhD |
| 8:55 am – 9:20 am | TBA  
Katherine Lemon MD, PhD |
| 9:20 am – 9:45 am | Down the Diversity Rabbit Hole  
Seweryn Bialasiewicz, PhD |
| 9:45 am – 10:00 am | Coffee Break with Exhibitors |

**Closing Keynote**

*Keynote Introduction: Lauren O. Bakaletz, PhD*

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| 10:00 am – 11:00 am | The Molecular Microbiological Profile of Chronic Suppurative Otitis Media:  
To Treat or Not to Treat?  
Michel Neeff, MB, ChB, FRACS |

**Awards & Closing Remarks**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| 11:00 am – 11:30 am | 2021 Meeting  
Tal Maron, MD  
Sharon Tamir, MD  
Meeting Review  
Kevin Mason, PhD  
Awards Ceremony  
Kevin Mason, PhD |
| 11:30 am     | Adjourn  
Joseph E. Kerschner, MD  
Lauren O. Bakaletz, PhD |