# AMERICAN OTOLOGICAL SOCIETY PRELIMINARY PROGRAM

157<sup>th</sup> Annual Meeting May 17-18, 2024 Chicago, IL

#### FRIDAY, MAY 17, 2024

1:00	BUSINESS MEETING and NEW MEMBER INTRODU	<b>JCTION</b>

(Open to registered Members and Non-members - Badge required for admittance)

#### 1:25 SCIENTIFIC PROGRAM

#### 1:25 WELCOME & OPENING REMARKS BY THE PRESIDENT

Sujana S. Chandrasekhar, MD

#### 1:27 PRESIDENTIAL CITATIONS

Karen Jo Enright, MD, PhD Derald E. Brackmann, MD Lisa Bell, AuD, CCC-A Debara L. Tucci, MD, MS, MBA Aziz Belal, MD

#### 1:37 INTRODUCTION OF GUEST OF HONOR

Sujana S. Chandrasekhar, MD

#### 1:39 GUEST OF HONOR LECTURE

#### Choices, Challenges and Opportunities in Auditory Implantation Surgery

Emma Stapleton, MBChB, FRCS (ORL-HNS), MFSTEd Consultant Otolaryngologist and Auditory Implant Surgeon Manchester Royal Infirmary, UK

### 2:14 Q&A

#### 2:19 SESSION A - Basic and Applied Otologic Science

David R. Friedland, MD, PhD, Moderator - AOS Secretary/Treasurer

#### 2:20 PODIUM PRESENTATIONS - Of Mice and Men

Joni K. Doherty, MD, PhD & Kenneth H. Lee, MD, PhD, Moderators

### 2:21 Deep Phenotyping of a Mouse Model for Hearing Instability Disorders

J. Dixon Johns, MD Samuel Adadey, PhD Rafal Olszewski, PhD Michael Hoa, MD

### 2:27 Inositol trisphosphate (IP3) and Ryanodine receptor (RyR) Signaling Are Essential and Have Distinct Roles in Regulating Neurite Pathfinding in Response to Micropatterned Growth Cues

Joseph T. Vecchi

Madeline Rhomberg

C. Allan Guymon, PhD

Marlan R. Hansen, MD

#### 2:33 Western Blot Characterization of Human Serum Prestin, an Outer Hair Cell Biomarker

Heather M. McClure, MS

Mohsin Mirza, BS

Patrick Adamczyk, BS

Ashley Parker, PhD

Erika Skoe, PhD

Kourosh Parham, MD, PhD

## 2:39 Otoprotection and Effects on Cochlear Synaptopathy by Angiotensin Receptor Blockade in a Murine Model of Noise Induced Hearing Loss

Peter Eckard

Tanner Kempton

Carolina Chu

Rhong Zhuo Hua

Bryce Hunger

Miles J. Klimara, MD

Marlan R. Hansen, MD

Douglas M. Bennion, MD, PhD

#### 2:45 Q&A

#### 2:49 EXPERT PRESENTATION

Introduction by Moderator, Michael J. Ruckenstein, MD, MSc

Fluorescence Imaging of Cochlear and Vestibular Nerves during Surgery

Quyen Nguyen, MD, PhD

#### 3:00 DISCUSSION with MODERATOR and Q&A

#### 3:05 BREAK WITH EXHIBITORS

#### 3:30 SESSION B - Otologic Public Health and Chronic Ear Disease

Nikolas H. Blevins, MD, Moderator - AOS Council Member-At-Large

#### 3:31 ANNOUNCEMENT OF AOS and ANS POSTER PRESENTATION WINNERS

Yuri Agrawal, MD - ANS Education Director Nancy Young, MD - AOS Education Director

#### 3:33 PODIUM PRESENTATIONS - Systemic & Systematic Factors and The Ear

Sharon L. Cushing, MD, MSc & James E. Saunders, MD, Moderators

#### 3:34 Effects of Smoking on Acute Postoperative Outcomes in Otologic Surgery

Pablo Llerena, BS

Bryce Hambach, BS

Kathryn Nunes, BA

Joseph Lu, BS

Praneet Kaki, BS

Jena Patel, MD

Jacob B. Hunter, MD

#### 3:40 Statins and Their Effect on Hearing: An All of Us Database Study

Benjamin J. Homer, ScB

Rishubh Jain, AB

Alexander S. Homer, AB

Viknesh S. Kasthuri, AB

Emily Gall, MD

Kathryn Y. Noonan, MD

### 3:46 Blast Exposure, Tinnitus, Hearing Loss, and Post-Deployment Quality of Life in U.S. Veterans: Longitudinal Analysis

Hoda AO. Mohammed, MPH

Charlotte K. Hughes, MD (presenter)

Kelly M. Reavis, PhD, MPH

Samrita Thapa, MPH

Emily Thielman, MS

Wendy Helt, MA

Kathleen F. Carlson, PhD, MPH

#### 3:52 Analysis of Adherence to AAO-HNSF Clinical Practice Guidelines for Sudden Hearing Loss

Bao Y. Sciscent, BS

F. Jeffrey Lorenz, MD

Hanel W. Eberly, BS

Andrew Rothka, BS

Mark E. Whitaker, MD

Neerav Goyal, MD, MPH

### 3:58 Contemporary, Individual and Community-Level Social Determinant Associations with Acoustic Neuroma Disparities in the US

David J. Fei-Zhang, BA

Rishabh Sethia, MD

Cvrus W. Abrahamson, BA

Daniel C. Chelius, MD

Jill N. D'Souza, MD

Anthony M. Sheyn, MD

Jeffrey C. Rastatter, MD, MS

#### 4:04 Q&A

#### 4:09 EXPERT PRESENTATION

Introduction by Moderator, John Greinwald, MD

### Congenital Cytomegalovirus: Science and Social Policy

Stephanie A. Moody-Antonio, MD

#### 4:20 DISCUSSION with MODERATOR and Q&A

#### **4:25 PANEL**

#### **Chronic Ear Disease: How do we Improve Outcomes?**

Dennis S. Poe, MD, PhD, Moderator - AOS Council Member-At-Large Maura E. Ryan, MD Aaron K. Remenschneider, MD, MPH

Michael Hoa, MD

### 5:10 CLOSING REMARKS/ADJOURNMENT

Sujana S. Chandrasekhar, MD

#### 5:20 AOS MEMBER PHOTOGRAPH

#### 5:30 MEET THE AUTHORS POSTER RECEPTION

AOS, ANS, ABEA, ALA, TRIO, ASPO

#### 6:00 WIN (WOMEN IN NEUROTOLOGY) RECEPTION

#### **SATURDAY, MAY 18, 2024**

7:00 BUSINESS MEETING including Committee Reports and launch of AOS Development Plan (All welcome – Coffee, tea and continental breakfast for all registered AOS attendees)

#### 7:30 SCIENTIFIC PROGRAM

(Open to registered Members and Non-members – Badge required for admittance)

#### 7:30 WELCOME & OPENING REMARKS BY THE PRESIDENT

Sujana S. Chandrasekhar, MD

#### 7:31 SESSION C - Cochlear Implants and Inner Ear Biology

Nancy M. Young, MD, Moderator - AOS Education Director

#### 7:32 PODIUM PRESENTATIONS - COCHLEAR IMPLANTS

Christina L. Runge, PhD & Abraham Jacob, MD, Moderators

#### ADULT COCHLEAR IMPLANTS

### 7:33 Early Use of Computer-based Auditory Training Yields Greater Speech Recognition and Quality-of- life Benefits in New Adult Cochlear Implant Recipients

James R. Dornhoffer, MD

Christian Shannon, BS

Kara C. Schvartz-Leyzac, AuD, PhD

Judy R. Dubno, PhD Theodore R. McRackan, MD, MSCR

### 7:39 Preoperative Factors Predicting Electroacoustic Stimulation Usage in Adults following Cochlear Implantation

Ankita Patro, MD, MS

Connie Ma, MD

Natalie Schauwecker, MD

Nathan R. Lindquist, MD

Michael H. Freeman, MD

David S. Haynes, MD, MMHC

Elizabeth L. Perkins, MD

### 7:45 Impact of Implantable Hearing Devices on Delirium Risk in Patients with Hearing Loss: A National Database Study

Bryce Hambach, BS

Elliott M. Sina, BA

Kathryn Nunez, BS

Jena Patel, MD

Jacob B. Hunter, MD

#### 7:51 Q&A

#### PEDIATRIC COCHLEAR IMPLANTS

### 7:54 Early Auditory Development of Cochlear Implanted Children with Sensorineural Hearing Loss following Congenital CMV Infection

Piotr H. Skarzynski, Prof

Anita Obrycka, PhD

Aleksandra Kolodziejak, MSc

Elzbieta Gos, PhD

Rita Zdanowicz, MSc

Artur Lorens, Prof

Henryk Skarzynski, Prof

## 8:00 Cochlear Implantation (CI) Outcomes in Children Under 5 Years of Age with Single-Sided Deafness (SSD): A Systematic Review and Meta-analysis

Corinne Pittman, MD

Nadia Samaha, BS

Myra Zaheer, BA

Luke Llaurado, BA

Xue Geng, MS

Michael Hoa, MD

### 8:06 A Systematic Review and Meta-Analysis Examining Outcomes of Cochlear Implantation in Children with Bilateral Cochlear Nerve Deficiency

Jay Maturi, BS

Kimberley S. Noij, MD, PhD

Vidya Babu, BS Carolyn M. Jenks, MD

#### 8:12 Q&A

#### 8:15 EXPERT PRESENTATION

Introduction by Moderator, Hung Jeffrey Kim, MD Getting Closer to Serene Silence: Tinnitus Update 2024 Konstantina M. Stankovic, MD, PhD

#### 8:30 DISCUSSION with MODERATOR and Q&A

#### 8:35 INTRODUCTION OF SAUMIL N. MERCHANT MEMORIAL LECTURE

Sujana S. Chandrasekhar, MD

#### 8:36 SAUMIL N. MERCHANT MEMORIAL LECTURE

### **An Omics Path to Otoprotection**

Ronna Hertzano, MD, PhD

Senior Investigator and Neurotology Branch Chief

National Institute on Deafness and Other Communication Disorders

National Institute of Health, Bethesda, MD

Adjunct Clinical Professor, Department of Otolaryngology Head and Neck Surgery

University of Maryland School of Medicine, Baltimore, MD

#### 9:06 O&A

#### 9:11 SESSION D - MIDDLE EAR PATHOLOGY

Lawrence R. Lustig, MD, Moderator - AOS Immediate Past President

#### 9:12 PODIUM PRESENTATIONS - CHRONIC OTITIS MEDIA

Darius Kohan, MD & Huseyn Isildak, MD, Moderators

#### 9:13 Tympanic Membrane Regeneration Therapy for Pediatric Tympanic Membrane Perforation

Shin-ichiro Kita, MD

Shin-ichi Kanemaru, MD, PhD

Rie Kanai, MD

Tomoya Yamaguchi, MD

Akiko Kumazawa, MD

Ryohei Yuki, MD

Toshiki Maetani, MD, PhD

#### 9:19 Unique Cell-Type Specific Signaling Patterns Define Cholesteatoma

Christopher M. Welch, MD, PhD

Shuze Wang, PhD

Joerg Waldhaus, PhD

#### 9:25 The NLRP3 Inflammasome in Macrophages Causes Sensory Hearing Loss in Chronic Suppurative **Otitis Media (CSOM)**

Viktoria Schiel, MD, PhD

Anping Xia, MD, PhD

Ritwija Bhattacharya, PhD

Ankur Gupta, MD

Kourosh Efthekarian, MD

Peter Santa Maria, MD, PhD

#### 9:31 RESIDENT RESEARCH TRAVEL AWARD

#### Outcomes after Exoscopic versus Microscopic Ossicular Chain Reconstruction

Caleb Fan. MD

Jacob C. Lucas, MD

Robert M. Conway, DO

Masanari G. Kato, MD

Seilesh C. Babu, MD

#### 9:37 O&A

#### 9:41 BREAK WITH EXHIBITORS

#### 10:06 SESSION E - Sudden Hearing Loss and Vestibular Disease

Michael E. Seidman, MD, Moderator

#### 10:07 INVITED PRESENTATION

#### **Hearing Science Accelerator – SSNHL**

William H. Slattery III MD - AOS Council President-Elect

Andrea Vambutas, MD - AOS Research Advisory Board, Executive Secretary

Seth Schwartz. MD

Nicholas S. Andresen, MD

#### 10:22 Q&A

#### 10:25 EXPERT PRESENTATION: Dizziness, We Mean Business

Introduction by Moderator, Michael E. Seidman, MD

Seeing the Whole Patient – A Practical Approach to Detecting Functional and Psychiatric **Disorders in Patients with Dizziness** 

Jeffrey P. Staab, MD

PPPD: Persistent Postural-Perceptual Dizziness – It's Not All in Their Head

Maja Svrakic, MD, MSEd

#### 10:52 DISCUSSION with MODERATOR and Q&A

#### SESSION F - ARTIFICIAL INTELLIGENCE, MIGRAINE AND EXTERNAL EAR DISEASE 10:56

Marlan R. Hansen, MD, Moderator - AOS Past President

### 10:57 PODIUM PRESENTATIONS - ARTIFICIAL INTELLIGENCE AND THE BRAIN THE TAMING OF THE SHREW?

Jack Shohet, MD, Moderator

#### 10:58 Temporal Integration of Multisensory Stimuli in Migraine

Timothy E. Hullar, MD

Jwala Rejimon, BS

Michelle E. Hungerford, AuD

Robert J. Peterka, PhD

Angela C. Garinis, PhD

Yonghee Oh, PhD

Richard F. Lewis, MD

#### 11:04 Artificial Intelligence for Diagnostic and Treatment Planning: Is It Ready to Be Your Doctor?

Camryn Marshall, BS

Jessica Forbes, MS

Luis Roldan, MD

Jim Atkins, MD

Michael D. Seidman, MD

#### 11:10 RESIDENT RESEARCH TRAVEL AWARD

#### Artificial Intelligence Tracking of Otologic Instruments in Mastoidectomy Videos

George S. Liu, MD

Sharad Parulekar

Trishia El Chemaly, MS

Melissa C. Lee, BS

Mohamed Diop, MD

Roy Park, MD

Nikolas H. Blevins, MD

#### 11:16 O&A

#### 11:20 **PANEL**

#### EarWise: Spotlight on External Ear Disease

Erika A. Woodson, MD, Moderator

Matthew B. Hanson, MD

Emma Stapleton, MBChB, FRCS (ORL-HNS)

Alan G. Micco, MD

#### 12:00 INTRODUCTION OF INCOMING PRESIDENT

William H. Slattery, III, MD

#### 12:03 CLOSING REMARKS/ADJOURNMENT

Sujana S. Chandrasekhar, MD