

SCHEDULE - DETAILED VIEW

46th Annual ARO MidWinter Meeting

FRIDAY, FEBRUARY 10

ARO Council Meeting

Fri 9 AM - 3 PM • Mako

ARO Council Lunch

Fri 12 PM - 1 PM • Labrid

Registration Desk

Fri 3 PM - 6 PM • Atrium A&B

ARO Council Dinner

Fri 6:30 PM - 8:30 PM

SATURDAY, FEBRUARY 11

Poster Session 1 & Exhibit Hall

Daily Poster Session Hours are Noon to Noon. Saturday Poster Presenters are to hang their physical poster on their assigned poster board no later than 11:59 AM; then remove their poster the following day, no later than 11:59 AM due to the next poster session beginning at 12 PM. The poster session room doors open at 6:00 AM daily.

ALL DAY •

Morning Break

Coffee and Tea available throughout the day.

Sat 7 AM - 8 AM • Oceans Foyer

Speaker Ready Room

Sat 7 AM - 5 PM • Longboat

Registration

Sat 7 AM - 8 PM • Crystal Registration

Presidential Symposium

Sat 8 AM - 12 PM • Ocean's Ballroom 5-12

Presidential Symposium:

Sat 8 AM - 12 PM • Presidential Symposium • Ocean's Ballroom 5-12

Elizabeth Olson, Ph.D. *Chair*

Columbia University

8 AM - 8:10 AM

Christopher Shera, Ph.D. *Presenter*

University of Southern California

The Ear, the Eye, and the ARO: Cochlear Function Through the Ages

8:10 AM - 8:45 AM

Karl Grosh, Ph.D. *Presenter*

University of Michigan

Review of Cochlear Mechanics

8:45 AM - 9:20 AM

Laurel H. Carney, Ph.D. *Presenter*

Departments of Biomedical Engineering, Neuroscience, and Electrical & Computer Engineering, University of Rochester, Rochester, NY

From the Ear to the Brain: A Neural Code That Leverages Inner-Ear Nonlinearities

9:20 AM - 9:55 AM

Raymond Goldsworthy, Ph.D. *Presenter*

USC

Back to the Future: How the History of Cochlear Implants Illuminates Future Directions

10:15 AM - 10:50 AM

Richard Einhorn, B.A. *Presenter*

Hearing Technology Consultant

Current and Near-Future Trends in Hearing Technologies

10:50 AM - 11:25 AM

Debara Tucci, M.D., M.S., M.B.A. *Presenter*

National Institute on Deafness and Other Communication Disorders/NIH

Global Impact of Hearing Loss, and Efforts to Improve Accessibility Worldwide

11:25 AM - 12 PM

Help Desk

Sat 8 AM - 8 PM • Oceans Foyer

Break

Sat 9:55 AM - 10:15 AM

LUNCH BREAK (On Own)

Sat 12 PM - 2 PM

Travel Awards Lunch

This luncheon is to celebrate the 2023 MidWinter Meeting Travel Awardees. This luncheon is invitation only. The speaker is Dr. Paul Fuchs.

Sat 12:15 PM - 1:30 PM • Crystal C

spARO Mentoring Session

Sat 12:45 PM - 1:45 PM • Canaveral 1-2

Inner Ear Course Open House

Sat 1:30 PM - 2 PM

Podium #1 - Gene Therapy

Sat 2 PM - 4 PM • Ocean's Ballroom 5-12

Delivery of Gene Therapy Through a Cerebrospinal Fluid Conduit to Rescue Hearing

Sat 2 PM - 2:15 PM • Podium Presentation • Ocean's Ballroom 5-12

Barbara Canlon, Ph.D. *Presenter*

Karolinska Institute

Gene Replacement Rescues Transduction and Synaptic Functions of the Clarin-2 Deafness Gene

Sat 2:15 PM - 2:30 PM • Podium Presentation • Ocean's Ballroom 5-12

Clara Mendia, Lic *Presenter*

Institut Pasteur, Institut de l'Audition

Adult Gene Therapy Restores Auditory and Vestibular Function in P2rx2 V60L Mouse Model for DFNA41

Sat 2:30 PM - 2:45 PM • Podium Presentation • Ocean's Ballroom 5-12

Wei Wei, M.D., Ph.D. *Presenter*

Mass. Eye and Ear

AAV Delivery of Tmc1 Rescues Vestibular Function in Tmc1 KO Mice

Sat 2:45 PM - 3 PM • Podium Presentation • Ocean's Ballroom 5-12

Evan Ratzan, B.A. *Presenter*

Boston Children's Hospital/Harvard Medical School

Congenital Deafness, Vestibular Dysfunction, and Progressive Visual Impairment in a Rhesus Macaque Model of Usher Syndrome Type 1B

Sat 3 PM - 3:15 PM • Podium Presentation • Ocean's Ballroom 5-12

John Brigande, Ph.D. *Presenter*

Oregon Hearing Research Center

Rescue of Autosomal Dominant Hearing Loss by in Vivo Delivery of Mini dCas13X-Derived RNA Base Editor

Sat 3:15 PM - 3:30 PM • Podium Presentation • Ocean's Ballroom 5-12

Yilai Shu, M.D. *Presenter*

Eye & ENT Hospital, Shanghai Medical College, Fudan University

In Vivo Outer Hair Cell Gene Editing With Cas9 Nuclease Partially Improves Progressive Hearing Loss in Dominant-Negative Kcnq4 Mouse Model

Sat 3:30 PM - 3:45 PM • Podium Presentation • Ocean's Ballroom 5-12

Byunghwa Noh, M.S. *Presenter*

Department of Otorhinolaryngology, Graduate School of Medical Science, Brain Korea 21 Project for Medical Science, Yonsei University College of Medicine

Precise Targeting of GJB2 Cells Results in Safe and Efficacious Gene Therapy for Hearing Loss Due to GJB2 Deficiency (DFNB1)

Sat 3:45 PM - 4 PM • Podium Presentation • Ocean's Ballroom 5-12

Kathryn Ellis, Ph.D. *Presenter*

Decibel Therapeutics

Podium #2 - Tinnitus

Sat 2 PM - 4 PM • Oceans Ballroom 1-4

Gating Mechanism in Tinnitus: Explored in Surgery-Induced Unilateral Deafness in Adult Humans

Sat 2 PM - 2:15 PM • Podium Presentation • Oceans Ballroom 1-4

MinChul Park, Other, B.Sc. *Presenter*

University of Canterbury

Tinnitus Heterogeneity and Subtyping - Results From the Swedish Tinnitus Outreach Project

Sat 2:15 PM - 2:30 PM • Podium Presentation • Oceans Ballroom 1-4

Christopher Cederroth, Ph.D. *Presenter*

Karolinska Institute, Dept of Physiology & Pharmacology, Sweden

Sound Elicits Rapid and Involuntary Fluctuations in the Eyes, Skin, and Face that Provide a Sensitive Biomarker for Tinnitus and Hyperacusis-Related Burden

Sat 2:30 PM - 2:45 PM • Podium Presentation • Oceans Ballroom 1-4

Samuel Smith, Ph.D. *Presenter*

Eaton-Peabody Laboratories, Massachusetts Eye and Ear

Psychophysics of Patient Decisions Applied to the Tinnitus Patient Journey

Sat 2:45 PM - 3 PM • Podium Presentation • Oceans Ballroom 1-4

Alexander Hoetink, Ph.D. *Presenter*

Department of Otorhinolaryngology – Head and Neck Surgery, University Medical Center Utrecht

Developing a Generalized Risk Model for Tinnitus

Sat 3 PM - 3:15 PM • Podium Presentation • Oceans Ballroom 1-4

Valerie Ingalls, B.A. *Presenter*

University of Iowa

A Population-Based Study of Plasma Metabolomic Profiles and Risk of Developing Persistent Tinnitus

Sat 3:15 PM - 3:30 PM • Podium Presentation • Oceans Ballroom 1-4

Oana Zeleznik, Ph.D. *Presenter*

Brigham & Women's Hospital, Harvard Medical School

Visual Evoked Potentials in Cochlear Implant Users With and Without Tinnitus Suppression.

Sat 3:30 PM - 3:45 PM • Podium Presentation • Oceans Ballroom 1-4

Andrew Dimitrijevic, Ph.D. *Presenter*

Sunnybrook Hospital ENT University of Toronto

A Combined Image- And Coordinate-Based Meta-Analysis of Whole-Brain Voxel-Based Morphometry Studies Investigating Subjective Tinnitus

Sat 3:45 PM - 4 PM • Podium Presentation • Oceans Ballroom 1-4

Punitkumar Makani, M.Sc. *Presenter*

Department of Otorhinolaryngology, Head and Neck Surgery, University Medical Center Groningen, Groningen, the Netherlands

Symposium #3 - Brain Plasticity in Deafness

Sat 2 PM - 4 PM • Crystal Ballroom D-E

Brain Plasticity in Deafness

Sat 2 PM - 4 PM • Symposia • Crystal Ballroom D-E

Pascal Barone, Ph.D. *Chair*

CNRS UMR5549

Steve Lomber, Ph.D. *Presenter*

McGill University Faculty of Medicine

Perinatal Deafness Alters the Structure and Function of Auditory Cortex

2 PM - 2:30 PM

Andrej Kral, M.D., Ph.D. *Presenter*

Dept. of Experimental Otolology, Medical University Hannover

Deaf Ear Inhibits Hearing Ear Following Single-Sided Congenital Deafness

2:30 PM - 3 PM

Karen Gordon, Ph.D. *Presenter*

The Hospital for Sick Children

Unilateral Deprivation in Children is Not a "Minimal" Hearing Loss: Evidence From Measures of Brain Plasticity

3 PM - 3:15 PM

Pascal Barone, Ph.D. *Presenter*

CNRS UMR5549

Restoring Cortical Processing for Spatial Hearing Following Cochlear Implantation for Asymmetric Hearing Loss

3:15 PM - 3:30 PM

Pascale Sandmann, Ph.D. *Presenter*

University of Cologne

Enhanced Audio-Visual Interactions in Cochlear-Implant Users

3:30 PM - 3:45 PM

Anu Sharma, Ph.D. *Presenter*

The University of Colorado Boulder

Cross-Modal Neuroplasticity in Deafness and Cochlear Implantation

3:45 PM - 4 PM

gEAR Workshop

Sat 4 PM - 6 PM

Poster Blitz

Sat 4:15 PM - 6:15 PM • Biscayne

Charles Steele Symposium

Sat 4:15 PM - 6:15 PM • Crystal C

Honoring Charles Steele

Sat 4:15 PM - 6:15 PM • Symposia • Crystal C

Sunil Puria, Ph.D. *Chair*

Harvard Medical School, Mass. Eye & Ear Infirmary

Elizabeth Olson, Ph.D. *Co-chair*

Columbia University

Kelly Steele, B.A. *Presenter*

Widow of Charles Steele

Charles Steele – The "Mad" Scientist

Elizabeth Olson, Ph.D. *Presenter*

Columbia University

Charles Steele's Entrance Into Cochlear Mechanics: JASA Papers From the 1970s Through 1980

Karl Grosh, Ph.D. *Presenter*

University of Michigan

From Rockets to Plant Growth, Charles Steele Leaves His Positive Impact

Renata Sisto, D.Ms. *Presenter*

INAIL Research

How the Analytical WKB Approach to 3d Cochlear Models by Charles Steele is Still the Basis for Our Understanding of Cochlear Mechanics

Sunil Puria, Ph.D. *Presenter*

Harvard Medical School, Mass. Eye & Ear Infirmary

Charles Steele's Contributions to Numerical Solutions for Shells of Revolution

Anthony Ricci, Ph.D. *Presenter*

Stanford University

Emeritus Professor Charles Steele

Yanli Wang, Ph.D. *Presenter*

Harvard Medical School, Massachusetts General Hospital

Mentoring the Love of Life Beyond WKB and Finite Element Modeling of the Cochlea

ARO Diversity and Minority Affairs Workshop: Microaggressions, Allyship and Equitable Mentoring

Sat 4:15 PM - 6:15 PM • Crystal Ballroom D-E

Microaggressions, Allyship and Equitable Mentoring

Sat 4:15 PM - 6:15 PM • Workshop • Crystal Ballroom D-E

Tejbeer Kaur, Ph.D. *Chair*

Creighton University

Radha Kalluri, Ph.D. *Co-chair*

University of Southern California

Melanie Barzik, Ph.D. *Co-chair*

National Institutes of Health

Melanie Barzik, Ph.D. *Participant*

National Institutes of Health

Microaggressions, Allyship and Equitable Mentoring

Matheus Macedo-Lima, Ph.D. *Participant*

University of Maryland - College Park

Microaggressions, Allyship and Equitable Mentoring

Diana Peterson, Ph.D. *Participant*

Philadelphia College of Osteopathic Medicine

Microaggressions, Allyship and Equitable Mentoring

Radha Kalluri, Ph.D. *Participant*

University of Southern California

Microaggressions, Allyship and Equitable Mentoring

Tejbeer Kaur, Ph.D. *Participant*

Creighton University

Microaggressions, Allyship and Equitable Mentoring

Welcome Reception

Sat 5:30 PM - 6:30 PM • Peninsula Ballroom

NIDCD Workshop 1

Sat 6 PM - 7:30 PM • Merritt 1

NIDCD Workshop 2

Sat 6 PM - 7:30 PM • Merritt 2

NIDCD Workshop 3

Sat 6 PM - 7:30 PM • Crystal B

SUNDAY, FEBRUARY 12

Poster Session 2 & Exhibit Hall

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Registration

Sun 7 AM - 8 PM • Crystal Registration

Speaker Ready Room

Sun 7:30 AM - 5 PM • Longboat

Podium #4 - Hearing Loss: Consequences and Adaptation

Sun 8 AM - 10 AM • Ocean's Ballroom 5-12

Frequency-Following Responses in Subjects With Sensorineural Hearing Loss: A Systematic Review

Sun 8 AM - 8:15 AM • Podium Presentation • Ocean's Ballroom 5-12

Laura Jacxsens, M.D. *Presenter*

Antwerp University Hospital

Relationships Between Cognitive Abilities and Benefit From Visual and Contextual Cues in a Speech-In-Noise Recognition Task in Individuals With Normal Hearing and Hearing Loss

Sun 8:15 AM - 8:30 AM • Podium Presentation • Ocean's Ballroom 5-12

Andreea Micula, Ph.D. *Presenter*

Linköping University

Societal Costs & Long-Term Outcomes of Severe to Profound Hearing Loss

Sun 8:30 AM - 8:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Ivette Cejas, Ph.D. *Presenter*

University of Miami Miller School of Medicine

The Role of Central Gain in Auditory Processing Deficits of Older Adults

Sun 8:45 AM - 9 AM • Podium Presentation • Ocean's Ballroom 5-12

Kelly Harris, Ph.D. *Presenter*

Medical University of South Carolina

Association of Hearing Aids and Cochlear Implants With Cognitive Decline and Dementia: A Meta-Analysis of Longitudinal Studies

Sun 9 AM - 9:15 AM • Podium Presentation • Ocean's Ballroom 5-12

Brian Sheng Yep Yeo, M.B.B.S *Presenter*

Yong Loo Lin School of Medicine, National University of Singapore, Singapore

Challenges of Auditory Model-Based Diagnostics

Sun 9:15 AM - 9:30 AM • Podium Presentation • Ocean's Ballroom 5-12

Mathias Dietz, Prof. Dr. *Presenter*

University of Oldenburg

Stress Affects Central Compensation of Neural Responses to Cochlear Synaptopathy in a cGMP-Dependent Way

Sun 9:30 AM - 9:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Morgan Hess, M.Sc. *Presenter*

Molecular Physiology of Hearing, University of Tuebingen

Neural Entrainment of a Naturalistic Conversation in Varying Working Memory Loads

Sun 9:45 AM - 10 AM • Podium Presentation • Ocean's Ballroom 5-12

Priyanka Prince, B.Sc., M.Sc. *Presenter*

Sunnybrook Health Sciences Center

Podium #5 - Auditory Cortex and Thalamus: Human Studies

Sun 8 AM - 10 AM • Oceans Ballroom 1-4

Decoding Auditory Working Memory Content From Intracranial Broadband High Frequency Activity

Sun 8 AM - 8:15 AM • Podium Presentation • Oceans Ballroom 1-4

Isil Uluc, Ph.D. *Presenter*

Athinoula A. Martinos Center for Biomedical Imaging, Department of Radiology, Harvard Medical School/Massachusetts General Hospital

Subject-Specific Adaptation for a Causal, Real-Time, Auditory-Attention Decoding System

Sun 8:15 AM - 8:30 AM • Podium Presentation • Oceans Ballroom 1-4

Christopher Smalt, Ph.D. *Presenter*

MIT Lincoln Laboratory

Laminar Specificity of the Auditory Awareness Negativity Under Multitone Masking: A Biophysical Modeling Study

Sun 8:30 AM - 8:45 AM • Podium Presentation • Oceans Ballroom 1-4

Carolina Fernandez Pujol, B.S., Ph.D. *Presenter*

University of Miami

Using Frequency Selectivity to Examine Category-Informative Dimension-Selective Attention

Sun 8:45 AM - 9 AM • Podium Presentation • Oceans Ballroom 1-4

Lori Holt, Ph.D. *Presenter*

Carnegie Mellon University

Functional Geometry of Human Auditory Cortical Resting State Networks Derived from Intracranial Electrophysiology

Sun 9 AM - 9:15 AM • Podium Presentation • Oceans Ballroom 1-4

Matthew Banks, B.Sc., M.Sc., Ph.D., Prof. *Presenter*

University of Wisconsin

Human Metabolomics in Blast-Induced Hearing Loss and Tinnitus: Correlation With Perceptual and Neuropsychological Measures Using In-Vivo Proton Magnetic Resonance Spectroscopy (1H-MRS)

Sun 9:15 AM - 9:30 AM • Podium Presentation • Oceans Ballroom 1-4

Anthony Cacace *Presenter*

Wayne State University

Enhanced Interaural Level Cues Affect Hemodynamic Responses in Superior Temporal Gyrus

Sun 9:30 AM - 9:45 AM • Podium Presentation • Oceans Ballroom 1-4

Benjamin Richardson, B.Sc. *Presenter*

Carnegie Mellon University

Emergence of the Cortical Encoding of Phonetic Features in the First Year of Life

Sun 9:45 AM - 10 AM • Podium Presentation • Oceans Ballroom 1-4

Giovanni Di Liberto, Ph.D. *Presenter*

Trinity College Dublin

Podium #6 - Inner Ear: Drug Delivery

Sun 8 AM - 10 AM • Crystal Ballroom D-E

Development of a Dual Porous Nanocomposite Coating as an Implant-Associated Local Drug Delivery System for Cochlear Implants

Sun 8 AM - 8:15 AM • Podium Presentation • Crystal Ballroom D-E

Mosaieb Habib, M.Sc. *Presenter*

Institute of Inorganic Chemistry, Leibniz University Hannover

Drugs Delivered by Semicircular Canal Injection Enter the Perilymphatic Space

Sun 8:15 AM - 8:30 AM • Podium Presentation • Crystal Ballroom D-E

Jinkyung Kim, Ph.D. *Presenter*

Stanford University

Investigation of Inner Ear Drug Delivery With a Cochlear Catheter in Piglets as a Representative Model for Human Cochlear Pharmacokinetics

Sun 8:30 AM - 8:45 AM • Podium Presentation • Crystal Ballroom D-E

Erdem Yildiz, M.D. *Presenter*

Department of Otorhinolaryngology - Head and Neck Surgery, Vienna General Hospital, Medical University of Vienna

Evaluating Protective Effects of Non-Invasive Hypothermia and a Pan-Caspase Inhibitor as Combination Therapy in an NIHL Rodent Model

Sun 8:45 AM - 9 AM • Podium Presentation • Crystal Ballroom D-E

Maria Fernanda Yepes, M.D. *Presenter*

University of Miami

Demonstration of Durable Anti-Vegf Protein Expression and Otic Tolerability following Intracochlear Delivery of AK-AntiVEGF (AAVAnc80-AntiVEGF Vector) Across Multiple Doses in Non-Human Primates

Sun 9 AM - 9:15 AM • Podium Presentation • Crystal Ballroom D-E

Shimon Francis, Ph.D. *Presenter*

Akouos, Inc., Boston, MA

Individual Healing Attempt to Treat Idiopathic Sudden Sensorineural Hearing Loss Using an Additively Manufactured, Individualized, Dexamethasone Releasing Round Window Niche Implant

Sun 9:15 AM - 9:30 AM • Podium Presentation • Crystal Ballroom D-E

Verena Scheper, Ph.D., D.V.M. *Presenter*

Hannover Medical School

Preclinical Development of a Genetic Medicine for Otoferlin Gene-Mediated Hearing Loss: AK-OTOF

Sun 9:30 AM - 9:45 AM • Podium Presentation • Crystal Ballroom D-E

Yuan Gao, Ph.D. *Presenter*

Akouos, Inc., Boston, MA

Restoration of Vestibular Function by Regeneration of Type I and Type II Hair Cells in Mature Mouse Utricle

Sun 9:45 AM - 10 AM • Podium Presentation • Crystal Ballroom D-E

Hanae Lahlou, D.Phil. *Presenter*

mass eye and ear infirmary - Harvard medical school

Help Desk

Sun 8 AM - 8 PM • Oceans Foyer

Break

Sun 10 AM - 10:30 AM • Oceans Foyer

Podium #7 - Development: Cellular/Systems

Sun 10:30 AM - 12:30 PM • Ocean's Ballroom 5-12

The Transcription Factor Myt1, an Atoh1 target, is Necessary for Patterning the Organ of Corti

Sun 10:30 AM - 10:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Elizabeth Driver, Ph.D. *Presenter*

NIDCD/NIH

Genetic Lineage Tracing Reveals the Shared Origins of the Line of Polarity Reversal in Mouse Vestibular Maculae

Sun 10:45 AM - 11 AM • Podium Presentation • Ocean's Ballroom 5-12

Michael Deans, Ph.D. *Presenter*

University of Utah

TRIM71 Regulates Auditory Progenitor Cell Behavior and is Essential for Hearing

Sun 11 AM - 11:15 AM • Podium Presentation • Ocean's Ballroom 5-12

Angelika Doetzlhofer, Ph.D. *Presenter*

Johns Hopkins University School of Medicine

Tbx2 is a Master Regulator of Inner Vs Outer Hair Cell Differentiation

Sun 11:15 AM - 11:30 AM • Podium Presentation • Ocean's Ballroom 5-12

Jaime Garcia-Anoveros, Prof. *Presenter*

Northwestern University Institute for Neurosciences

The Role of Tcf/Lef Transcription Factors in the Formation of Inner Ear Sensory Organs

Sun 11:30 AM - 11:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Magdalena Zak, D.Sc. *Presenter*

UCL Ear Institute, London, England

Prdm1 Drives a Sensory Hair Cell Fate Switch in Zebrafish

Sun 11:45 AM - 12 PM • Podium Presentation • Ocean's Ballroom 5-12

Jeremy Sandler, Ph.D. *Presenter*

Stowers Institute for Medical Research

CHD7 and SOX2 Cooperate to Regulate Development of the Inner Ear

Sun 12 PM - 12:15 PM • Podium Presentation • Ocean's Ballroom 5-12

Jingxia Gao, Ph.D. *Presenter*

Department of Pediatrics, University of Michigan

Conditional Expression of Constitutively Active Bmp Signaling in the Developing Cochlea Causes Duplication of the Organ of Corti

Sun 12:15 PM - 12:30 PM • Podium Presentation • Ocean's Ballroom 5-12

Ishwar Hosamani, M.Sc. *Presenter*

Baylor College of Medicine

Podium #8 - Inner Ear: Membranes & Fluids

Sun 10:30 AM - 12:30 PM • Oceans Ballroom 1-4

Atomistically Detailed Simulations of the Voltage-Response of Prestin

Sun 10:30 AM - 10:45 AM • Podium Presentation • Oceans Ballroom 1-4

Oliver Beckstein, D.Phil. *Presenter*

Arizona State University

Highly Efficient Transduction of the Human Cochlea and Vestibule From the Cerebrospinal Fluid Space Using MRI Gadolinium Contrast

Sun 10:45 AM - 11 AM • Podium Presentation • Oceans Ballroom 1-4

Douglas Totten, M.D. *Presenter*

Indiana University School of Medicine

A Biomechanical Model of the Stapes to Simulate Preloads on the Stapedial Annular Ligament

Sun 11 AM - 11:15 AM • Podium Presentation • Oceans Ballroom 1-4

Jae Hoon Sim, Ph.D. *Presenter*

University Hospital Zurich

Development of Individualized, Additively Manufactured Drug Releasing External Ear Canal Implants for Prevention of Postoperative External Ear Canal Restenosis

Sun 11:15 AM - 11:30 AM • Podium Presentation • Oceans Ballroom 1-4

Farnaz Matin-Mann, M.D. *Presenter*

Department of Otorhinolaryngology, Head and Neck Surgery, Hannover Medical School/ Lower Saxony Center for Biomedical Engineering, Implant Research and Development (NIFE), Cluster of Excellence Hearing4all

Simulating Tympanometry With a Nonlinear Viscoelastic Finite Element Model of the Human Middle Ear

Sun 11:30 AM - 11:45 AM • Podium Presentation • Oceans Ballroom 1-4

Ignacio Kahnlein, B.S. *Presenter*

University of Utah

Effects of Unilateral Eye Closure on Middle Ear Muscle Contractions

Sun 11:45 AM - 12 PM • Podium Presentation • Oceans Ballroom 1-4

Heath Jones, Ph.D. *Presenter*

U.S. Army Aeromedical Research Laboratory

Single-Cell RNA-Seq Defines the Cell Types of the Normal Human Middle Ear Mucosa

Sun 12 PM - 12:15 PM • Podium Presentation • Oceans Ballroom 1-4

Allen F. Ryan, Ph.D. *Presenter*

University of California, San Diego

The Evolving Description and Scientific Understanding of an Otological Disease Entity: Otitis Media

Sun 12:15 PM - 12:30 PM • Podium Presentation • Oceans Ballroom 1-4

Robert Ruben, M.D. *Presenter*

Albert Einstein College of Medicine

Symposium #9 - Auditory Expectations, Learning and Plasticity

Sun 10:30 AM - 12:30 PM • Crystal Ballroom D-E

Auditory Expectations, Learning and Plasticity

Sun 10:30 AM - 12:30 PM • Symposia • Crystal Ballroom D-E

Christopher Petkov, Prof., Ph.D. *Chair*

University of Iowa and Newcastle University

Maria Geffen, Ph.D. *Co-chair*

University of Pennsylvania

Kerry Walker, D.Phil. *Co-chair*

University of Oxford

Maria Geffen, Ph.D. *Presenter*

University of Pennsylvania

Corticofugal Regulation of Predictive Coding

10:30 AM - 10:45 AM

Manuel Malmierca, Prof. Dr. *Presenter*

Institute of Neuroscience Castilla y Leon, INCYL

Precision in Predictive Coding: The Role of Neuromodulation in Deviance Detection

10:45 AM - 11 AM

Ryszard Auksztulewicz, dr. rer. nat. *Presenter*

Free University Berlin

Prediction and Memory in the Auditory Cortex

11 AM - 11:15 AM

Christopher Petkov, Prof., Ph.D. *Presenter*

University of Iowa and Newcastle University

Sequence Learning and Prediction Within the Primate Central Auditory System

11:15 AM - 11:30 AM

Zsuzsanna Kocsis, Ph.D. *Presenter*

University of Iowa

Immediate Neural Network Impact and Compensation After the Loss of a Semantic Hub

11:30 AM - 11:45 AM

Maria Chait, B.Sc., Ph.D., Prof., Prof. Dr. *Presenter*

UCL Ear Institute

Neural Mechanisms for Tracking Uncertainty in Rapidly Unfolding Sound Sequences

11:45 AM - 12 PM

Federico De Martino, Ph.D. *Presenter*

Maastricht University

Laminar and High Spatial Resolution fMRI of Human Auditory Predictive Processing.

12 PM - 12:15 PM

Lori Holt, Ph.D. *Presenter*

Carnegie Mellon University

Category Learning and Dimension-Selective Attention in Auditory Cortex

12:15 PM - 12:30 PM

Lunch Break (On Own)

Sun 12:30 PM - 2 PM

spARO Mentoring Session

Sun 12:45 PM - 1:45 PM • Canaveral 1-2

JARO Editorial Board Meeting

Sun 12:45 PM - 2:45 PM •

Podium #10 - Hair Cells: Anatomy & Physiology

Sun 2 PM - 4 PM • Ocean's Ballroom 5-12

The Neuronal t-Snare SNAP-25 is Required for Exocytosis at Auditory Hair Cell Ribbon Synapses

Sun 2 PM - 2:15 PM • Podium Presentation • Ocean's Ballroom 5-12

Saaid Safieddine, Ph.D. *Presenter*

CNRS/Institut de l'Audition

Piccolino Regulates Ribbon Architecture at Cochlear Inner Hair Cell Ribbon Synapses

Sun 2:15 PM - 2:30 PM • Podium Presentation • Ocean's Ballroom 5-12

Rohan Kapoor, M.Sc. *Presenter*

Institute for Auditory Neuroscience, University Medical Center Goettingen, Germany

Probing the Function of Membrane-Proximal C2 Domains of Otoferlin, a Synaptic Protein of Sensory Hair Cells

Sun 2:30 PM - 2:45 PM • Podium Presentation • Ocean's Ballroom 5-12

Han Chen, M.Sc. *Presenter*

Institute for Auditory Neuroscience and InnerEarLab, University Medical Center Göttingen, Göttingen, Germany

Does Acetylcholine (ACh) as an Efferent Neurotransmitter Directly Inhibit Outer Hair Cell Electromotility?

Sun 2:45 PM - 3 PM • Podium Presentation • Ocean's Ballroom 5-12

Hong-Bo Zhao, M.D., Ph.D. *Presenter*

Yale University Medical School

Cholesterol's Role in Synaptic Heterogeneity and Active Zone Confinement in Inner Hair Cells

Sun 3 PM - 3:15 PM • Podium Presentation • Ocean's Ballroom 5-12

Amelie J. Ochs *Presenter*

Max Planck Institute for Multidisciplinary Sciences

Nrxn3 is Required for Hair Cell Synapse Formation in the Zebrafish Lateral Line

Sun 3:15 PM - 3:30 PM • Podium Presentation • Ocean's Ballroom 5-12

Zhengchang Lei, Dr. Med. Sc. *Presenter*

Section on Sensory Cell Development, National Institute on Deafness and Other Communication Disorders, National Institutes of Health,

Characterizing Hair Cell and Afferent Neuron Properties in Human Vestibular Organs

Sun 3:30 PM - 3:45 PM • Podium Presentation • Ocean's Ballroom 5-12

Olivia Kalmanson, M.D., M.S. *Presenter*

University of Colorado School of Medicine

Homeostatic Roles of P2X4 Ionotropic Receptors in Outer and Inner Hair Cells of the Cochlea

Sun 3:45 PM - 4 PM • Podium Presentation • Ocean's Ballroom 5-12

Haruna Suzuki-Kerr, Ph.D. *Presenter*

Department of Physiology, the University of Auckland

Podium #11 - Regeneration

Sun 2 PM - 4 PM • Oceans Ballroom 1-4

Identifying the Gene Regulatory Network Required for Hearing Regeneration in Zebrafish

Sun 2 PM - 2:15 PM • Podium Presentation • Oceans Ballroom 1-4

Shawn Burgess, Ph.D. *Presenter*

National Human Genome Research Institute

A Cascade of Proteolytic Activities is Essential for Proliferative Hair Cell Regeneration in the Chicken Hearing Organ

Sun 2:15 PM - 2:30 PM • Podium Presentation • Oceans Ballroom 1-4

Nesrine Benkafadar, Pharm.D., Ph.D. *Presenter*

Department of Otolaryngology-Head and Neck Surgery, Stanford University School of Medicine, Stanford

Coordination Between Lateral Inhibition and Cell Mechanics During Hair Cell Development and Regeneration

in the Mammalian Vestibule

Sun 2:30 PM - 2:45 PM • Podium Presentation • Oceans Ballroom 1-4

Shahar Kasirer, Ph.D. *Presenter*

Tel Aviv University

Reprogramming of Non-Sensory Cells in the Mature Mouse Cochlea via ATOH1, GF11, and POU4F3 Expression

Sun 2:45 PM - 3 PM • Podium Presentation • Oceans Ballroom 1-4

Melissa McGovern, Ph.D. *Presenter*

Baylor College of Medicine

The Function of TRIM71 in Cochlear Supporting Cell Reprogramming and Hair Cell Regeneration

Sun 3 PM - 3:15 PM • Podium Presentation • Oceans Ballroom 1-4

Charles Morgan, B.A. *Presenter*

Johns Hopkins University School of Medicine

Sox2 is Required in Supporting Cells for Normal Levels of Vestibular Hair Cell Regeneration
in Adult Mice

Sun 3:15 PM - 3:30 PM • Podium Presentation • Oceans Ballroom 1-4

Amanda Ciani, B.A. *Presenter*

The University of Washington

Single-Cell Transcriptomic Analysis Reveals Increased Regeneration in Diseased Human Inner Ears

Sun 3:30 PM - 3:45 PM • Podium Presentation • Oceans Ballroom 1-4

Tian Wang, M.D., Ph.D. *Presenter*

Stanford University

Knockdown of Claudin 9 Levels Induces Extra Functional Inner Hair Cells

Sun 3:45 PM - 4 PM • Podium Presentation • Oceans Ballroom 1-4

Yingying Chen, Ph.D. *Presenter*

Physiology and Cell Biology, School of Medicine, University of Nevada, Reno

Symposium #12 - Novel Approaches to Ototoxicity Management across the Life Course

Sun 2 PM - 4 PM • Crystal D-E

Novel Approaches to Ototoxicity Management Across the Life Course

Sun 2 PM - 4 PM • Symposia • Crystal D-E

Katharine Fernandez, Ph.D. *Chair*

NIDCD

Gayla Poling, Ph.D. *Co-chair*

Mayo Clinic

Laura Dreisbach, Ph.D. *Co-chair*

School of Speech, Language, and Hearing Sciences, San Diego State University

Carmen Brewer, Ph.D. *Presenter*

National Institute on Deafness & Other Communication Disorders/NIH

Complexities of Ototoxicity Management in Clinical Practice

2 PM - 2:15 PM

Lauren Dillard, Ph.D., Au.D. *Presenter*

Medical University of South Carolina, College of Medicine

Global Estimates of Ototoxic Hearing Loss Associated With Exposure to Multidrug-Resistant Tuberculosis, Malaria, and Cancer Treatments

2:15 PM - 2:30 PM

Johnnie Bass, Ph.D. *Presenter*

St. Jude Children's Research Hospital

Clinical Manifestations of Cisplatin Ototoxicity and Its Effect on Neurocognition in Survivors of Childhood Cancer

2:30 PM - 2:45 PM

Angela Garinis, Ph.D. *Presenter*

Oregon Health & Science University, Department of Otolaryngology

Clinical Presentation and Management of Ototoxicity Due to Aminoglycoside Treatments

2:45 PM - 3 PM

John Lee, Au.D., Ph.D. *Presenter*

National Institute on Deafness and Other Communication Disorders, National Institutes of Health

Evaluating the Vestibulotoxic Potential of Aminoglycosides in Patients Treated With Amikacin

3 PM - 3:15 PM

Lisa Hunter, Ph.D. *Presenter*

Cincinnati Children's Hospital Medical Center

Importance of Monitoring Tools and Pharmacodynamic Modeling for Aminoglycoside Ototoxicity

3:15 PM - 3:30 PM

Shawn Goodman, Ph.D. *Presenter*

Department of Communication Sciences and Disorders, The University of Iowa

Navigating Complexities of Ear Canal Acoustics in Ototoxicity Monitoring

3:30 PM - 3:45 PM

Laura Dreisbach, Ph.D. *Presenter*

School of Speech, Language, and Hearing Sciences, San Diego State University

Maximizing Measurements to Identify Significant Change in Ototoxicity Monitoring

3:45 PM - 4 PM

spARO Special Initiative Workshop: Networking as a Tool for Resilience

Sun 4:15 PM - 6:15 PM • Canaveral 1-2

Networking as a Tool for Resilience

Sun 4:15 PM - 6:15 PM • Workshop • Canaveral 1-2

Sean R. Anderson, M.S., Ph.D. *Chair*

University of Wisconsin-Madison

Tanvi Thakkar, Ph.D. *Participant*

University of Wisconsin-La Crosse

Networking as a Tool for Resilience

Ellen Peng, Ph.D. *Participant*

Boys Town National Research Hospital

Networking as a Tool for Resilience

Ruth Litovsky, Ph.D. *Participant*

University of Wisconsin

Networking as a Tool for Resilience

Lina Reiss, Ph.D. *Participant*

Oregon Health & Science University

Networking as a Tool for Resilience

Kristina DeRoy Milvae, Ph.D., Au.D. *Participant*

University at Buffalo

Networking as a Tool for Resilience

Bobby Gibbs *Participant*

University of Maryland

Networking as a Tool for Resilience

Neil Segil Memorial Symposium

Sun 4:15 PM - 6:15 PM • Oceans Ballroom 1-4

ARO Business Meeting

Sun 6 PM - 6:30 PM • Crystal Ballroom D-E

MONDAY, FEBRUARY 13

Poster Session 3 & Exhibit Hall

Daily Poster Session Hours are Noon to Noon. Monday Poster Presenters are to hang their physical poster on their

assigned poster board no later than 11:59 AM; then remove their poster the following day, no later than 11:59 AM due to the next poster session beginning at 12 PM. The poster session room doors open at 6:00 AM daily.

ALL DAY •

Morning Break

Coffee and Tea available throughout the day.

Mon 7 AM - 8 AM • Oceans Foyer

Registration

Mon 7 AM - 8 PM • Crystal Registration

Speaker Ready Room

Mon 7:30 AM - 5 PM • Longboat

Podium #13 - Auditory Nerve

Mon 8 AM - 10 AM • Ocean's Ballroom 5-12

Spectral Approach to Electrocochleographic Analyses: Implication for Hidden Hearing Loss

Mon 8 AM - 8:15 AM • Podium Presentation • Ocean's Ballroom 5-12

Viacheslav Vasilkov, Ph.D. *Presenter*

Harvard Medical School / Mass Eye and Ear

Transtympanic Delivery of Soluble Fractalkine Peptide Repairs Cochlear Synapses and Function After Acoustic Trauma

Mon 8:15 AM - 8:30 AM • Podium Presentation • Ocean's Ballroom 5-12

Vijayprakash Manickam, Ph.D. *Presenter*

Creighton University

Compound Action Potentials of the Gerbil Auditory Nerve Recover After Round Window Infusion of Kainate Despite Persistent Synapse Loss

Mon 8:30 AM - 8:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Artem Diuba, Ph.D. *Presenter*

INM - Inserm U1298

Does Auditory Nerve Loss Cause Hidden Hearing Deficits for Short Tones in Noise?

Mon 8:45 AM - 9 AM • Podium Presentation • Ocean's Ballroom 5-12

Catherine Loftus, M.D. *Presenter*

University of Rochester Medical Center

Peripheral Myelin Disorders and the Mechanisms of Hidden Hearing Loss

Mon 9 AM - 9:15 AM • Podium Presentation • Ocean's Ballroom 5-12

Luis Cassinotti, Ph.D. *Presenter*

Kresge Hearing Research Institute University of Michigan Medical School

Hybrid Optogenetic and Electrical Stimulation Elicits Responses With High Temporal Precision in the Auditory Nerve

Mon 9:15 AM - 9:30 AM • Podium Presentation • Ocean's Ballroom 5-12

Elise Ajay, BEng/BBiomedSc *Presenter*

Bionics Institute

Detecting Cochlear Synaptopathy Using Envelope Following Responses in the Budgerigar

Mon 9:30 AM - 9:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Leslie Gonzales, B.A. *Presenter*

University of Rochester Medical Center

Differential Expression of miRNAs and Their Predicted Target Pathways in Cochlear Nucleus Following Chronic Noise Exposure in Rats

Mon 9:45 AM - 10 AM • Podium Presentation • Ocean's Ballroom 5-12

So Young Kim, M.D. *Presenter*

CHA University, Bundang CHA Medical Center

Podium #14 - Speech Perception

Mon 8 AM - 10 AM • Oceans Ballroom 1-4

Processing Speech in Noise, Verbal Working Memory, and Cognitive Inhibition Converge in Bilateral Insula

Mon 8 AM - 8:15 AM • Podium Presentation • Oceans Ballroom 1-4

Jaimy Hannah, M.Sc. *Presenter*

University of Western Ontario

Measuring Neural Responses to Audiovisual Speech Processing During Movie Viewing Using Optical Neuroimaging

Mon 8:15 AM - 8:30 AM • Podium Presentation • Oceans Ballroom 1-4

Jonathan Peelle, Ph.D. *Presenter*

Northeastern University

Cortical Encoding of Phonetic Features of Both Attended and Ignored Speech in Hearing Impaired Individuals

Mon 8:30 AM - 8:45 AM • Podium Presentation • Oceans Ballroom 1-4

Sara Carta, M.S. *Presenter*

Trinity College Dublin

Perceptual Warping Exposes Categorical Representations For Speech In Human Brainstem Responses

Mon 8:45 AM - 9 AM • Podium Presentation • Oceans Ballroom 1-4

GAVIN BIDELMAN, Ph.D. *Presenter*

Indiana University

Hierarchical Neural Organization in the Auditory Brain Revealed During Naturalistic Speech Listening by a Dynamic, Spatial Attention Task

Mon 9 AM - 9:15 AM • Podium Presentation • Oceans Ballroom 1-4

Kelsey Mankel, B.S. *Presenter*

University of California, Davis

Progression of Acoustic, Phonemic, Lexical and Sentential Neural Features Emerge for Different Speech Listening

Mon 9:15 AM - 9:30 AM • Podium Presentation • Oceans Ballroom 1-4

I.M Dushyanthi Karunathilake, B.Sc. *Presenter*

University of Maryland - College Park

Perception of Artificial-Intelligence (AI) Based Synthesized Speech Under Different Listening Conditions in Younger and Older Adults

Mon 9:30 AM - 9:45 AM • Podium Presentation • Oceans Ballroom 1-4

Björn Herrmann, Ph.D. *Presenter*

Rotman Research Institute

Self-Supervised Redundancy Reduction Results in De-Noised Representations of Target Speech

Mon 9:45 AM - 10 AM • Podium Presentation • Oceans Ballroom 1-4

Sonia Yasmin, M.Sc. *Presenter*

The Brain and Mind Institute, Western University

Symposium #15 - Multiomics Approaches to Further the Understanding of Hearing Loss and Tinnitus: Integrating different omics data types to identify biomarkers, unravel causal pathways, and reveal treatment targets

Mon 8 AM - 10 AM • Crystal D-E

Multiomics Approaches to Further the Understanding of Hearing Loss and Tinnitus: Integrating Different Omics Data Types to Identify Biomarkers, Unravel Causal Pathways, and Reveal Treatment Targets

Mon 8 AM - 10 AM • Symposia • Crystal D-E

Sharon Curhan, M.D., M.Sc. *Chair*

Brigham and Women's Hospital/Harvard Medical School

Oana Zeleznik, Ph.D. *Presenter*

Brigham & Women's Hospital, Harvard Medical School

Metabolomics of Hearing Loss and Tinnitus

8 AM - 8:30 AM

Renato Polimanti, Ph.D. *Presenter*

Yale University School of Medicine Department of Psychiatry

Genomics of Hearing Loss and Tinnitus

8:30 AM - 9 AM

Jacqueline Starr, Ph.D. *Presenter*

Brigham & Women's Hospital, Harvard Medical School

Investigating the Microbiome to Study Hearing Loss and Tinnitus

9 AM - 9:30 AM

Konstantina Stankovic, M.D., Ph.D. *Presenter*

Department of Otolaryngology Head and Neck Surgery, Stanford School of Medicine

Using Omics to Uncover Mechanisms at the Bench: A Comparative Transcriptomic Analysis of Human Vestibular Schwannomas From Archival FFPE Tissue Reveals Inflammatory Pathways Involved in Tinnitus

9:30 AM - 10 AM

Help Desk

Mon 8 AM - 8 PM • Oceans Foyer

Break

Mon 10 AM - 10:30 AM • Oceans Foyer

Podium #16 - Brainstem: Structure & Function

Mon 10:30 AM - 12:30 PM • Ocean's Ballroom 5-12

Circuitry of Unipolar Brush Cells in the Dorsal Cochlear Nucleus

Mon 10:30 AM - 10:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Tim Balmer, Ph.D. *Presenter*

Arizona State University, School of Life Sciences

Identification of Three Different Subtypes of Auditory Nerve Synapses in the Cochlear Nucleus Using Pou4f1-TdTomato Mouse

Mon 10:45 AM - 11 AM • Podium Presentation • Ocean's Ballroom 5-12

Ruili Xie, Ph.D. *Presenter*

Ohio State University

In Vivo Single-Cell Recordings From Octopus Cells in Mouse Cochlear Nucleus

Mon 11 AM - 11:15 AM • Podium Presentation • Ocean's Ballroom 5-12

Hsin-Wei Lu, D.Phil. *Presenter*

KU Leuven

Microstructural Changes in the Brainstem Regions of the Auditory Pathway Among Children With Hearing Loss

Mon 11:15 AM - 11:30 AM • Podium Presentation • Ocean's Ballroom 5-12

Peter Moon, M.S. *Presenter*

Stanford University School of Medicine

Modulation of Voltage-Gated Calcium Channels Following Noise Exposure: Impact of Synaptic Activity in the Auditory Pathway

Mon 11:30 AM - 11:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Selin Yalcinoglu, B.S. *Presenter*

Wayne State University School of Medicine

NR2D-Containing NMDA Receptors Enhance Temporal Summation in VIP Neurons in the Inferior Colliculus

Mon 11:45 AM - 12 PM • Podium Presentation • Ocean's Ballroom 5-12

Audrey Drotos, B.S. *Presenter*

University of Michigan

The Influence of Inhibition on Coincidence Detection in Octopus Cells of the Mouse Cochlear Nucleus

Mon 12 PM - 12:15 PM • Podium Presentation • Ocean's Ballroom 5-12

Lauren Kreeger, Ph.D. *Presenter*

Harvard Medical School

The Projections of the Medial Superior Olive of the Rat

Mon 12:15 PM - 12:30 PM • Podium Presentation • Ocean's Ballroom 5-12

Héctor Rincón, M.Sc. *Presenter*

University of Salamanca

Podium #17 - Aging

Mon 10:30 AM - 12:30 PM • Oceans Ballroom 1-4

ACOU082: A Unique, Systemically Administered Kv7.4 Activator Drug Candidate for the Treatment and Prevention of Age-Related Hearing Loss

Mon 10:30 AM - 10:45 AM • Podium Presentation • Oceans Ballroom 1-4

Jonas Dyhrfjeld-Johnsen, Ph.D. *Presenter*

Acousia Therapeutics

Age-Related Auditory Brainstem Slowing Does Not Affect the Stability of Complex Sound Representations in the Aged Auditory Midbrain

Mon 10:45 AM - 11 AM • Podium Presentation • Oceans Ballroom 1-4

Rüdiger Land, Ph.D. *Presenter*

Institute of Audioneurotechnology and Department of Experimental Otology, Hannover Medical School, Germany

Age-Related Loss of Olivocochlear Efferent Innervation in Gerbils

Mon 11 AM - 11:15 AM • Podium Presentation • Oceans Ballroom 1-4

Christine Koepl, Ph.D. *Presenter*

Carl Von Ossietzky University

Auditory Temporal Processing in Aging Male and Female C57BL/6N Mice

Mon 11:15 AM - 11:30 AM • Podium Presentation • Oceans Ballroom 1-4

Neil Ingham, Ph.D. *Presenter*

Wolfson Centre for Age-Related Diseases, King's College London

Characterization and Phenotypic Analysis of Age-Related Hearing Loss in Outbred CFW Mice

Mon 11:30 AM - 11:45 AM • Podium Presentation • Oceans Ballroom 1-4

Olivia La Monte, B.S. *Presenter*

University of California, San Diego School of Medicine

Differential Outcomes of High Fat Diet on Age-Related Rescaling of Cochlear Frequency Place Coding Revealed the Role of TRPV1 and Lipid Homeostasis in Stabilization of Pitch Perception

Mon 11:45 AM - 12 PM • Podium Presentation • Oceans Ballroom 1-4

Yu Zhang, M.D. *Presenter*

Shanghai Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine

Interrogating Epigenetic Mechanisms in Hearing Loss Using a Genome-Wide Methylation Analysis

Mon 12 PM - 12:15 PM • Podium Presentation • Oceans Ballroom 1-4

Marie Roche, M.S. *Presenter*

University of Miami School of Medicine

Long-Term NAD⁺ Supplementation Prevents the Progression of Age-Related Hearing Loss in Mice

Mon 12:15 PM - 12:30 PM • Podium Presentation • Oceans Ballroom 1-4

Mustafa Okur, Ph.D. *Presenter*

University of California Irvine

Symposium #18 - Putting Tinnitus Theories to the Test

Mon 10:30 AM - 12:30 PM • Crystal Ballroom D-E

Putting Tinnitus Theories to the Test

Mon 10:30 AM - 12:30 PM • Young Investigator Symposia • Crystal Ballroom D-E

Calvin Wu, Ph.D. *Chair*

University of Michigan, Otolaryngology - HNS

Alice Burghard, Ph.D. *Co-chair*

University of Connecticut Health Center

Amarins Heeringa, Ph.D. *Co-chair*

Carl Von Ossietzky University

Alice Burghard, Ph.D. *Presenter*

University of Connecticut Health Center

Long-Duration Sound Induced Plasticity is Altered in Mice With Tinnitus

10:30 AM - 10:45 AM

Emily Fabrizio-Stover, B.A. *Presenter*

Uconn Health

Sound Evoked Changes After Long Duration Sound as a Test for Tinnitus

10:45 AM - 11 AM

William Sedley, Ph.D. *Presenter*

Newcastle University

Emergence of Tinnitus in a Bayesian System of Signal and Noise

11 AM - 11:15 AM

Achim Schilling, M.Sc. *Presenter*

Neuroscience Lab, University Hospital Erlangen

Towards a Unified Theory of Auditory (Phantom) Perception

11:15 AM - 11:30 AM

Madan Ghimire, M.Sc. *Presenter*

SIU School of Medicine

Attentional Deficit in Tinnitus—Symptom or Cause?

11:30 AM - 11:45 AM

Adam Hockley, Ph.D. *Presenter*

Universidad de Salamanca

Nitric Oxide as a Mechanism of Central Gain in the Ventral Cochlear Nucleus

11:45 AM - 12 PM

Joel Berger, Ph.D. *Presenter*

Dept. Neurosurgery, University of Iowa Hospitals and Clinics

The Elusivity of an Objective Test for Tinnitus in Humans

12 PM - 12:15 PM

Elouise Koops, Ph.D. *Presenter*

Department of Radiology, Massachusetts General Hospital/Harvard Medical School, Boston, USA

Central Gain: A Closer Fit to Hyperacusis Than to Tinnitus?

12:15 PM - 12:30 PM

LUNCH BREAK (On Own)

Mon 12:30 PM - 2 PM

Funding Your Scientific Genius!

Mon 12:45 PM - 2 PM • Crystal B

Short Course: Single cell “omics”; a practical introduction to molecular analysis at the single cell level

Mon 12:45 PM - 2 PM • Palani

Podium #19 - Binaural Hearing & Sound Localization

Mon 2 PM - 4 PM • Ocean's Ballroom 5-12

Limits on Coincidence Detection in MSO Neurons

Mon 2 PM - 2:15 PM • Podium Presentation • Ocean's Ballroom 5-12

Philip Joris, M.B.A. *Presenter*

KU Leuven

Cortical Patch and Map of Auditory Space

Mon 2:15 PM - 2:30 PM • Podium Presentation • Ocean's Ballroom 5-12

Chenggang Chen, Ph.D. *Presenter*

Johns Hopkins Univeristy

Early-Life Development Shaped by Cue Reliability in the Barn Owl's Auditory Midbrain

Mon 2:30 PM - 2:45 PM • Podium Presentation • Ocean's Ballroom 5-12

Keanu Shadron, M.S. *Presenter*

Albert Einstein College of Medicine

Neural Coding of Sound Localization Cues in Rabbits With Mild, Permanent Noise-Induced Hearing Loss

Mon 2:45 PM - 3 PM • Podium Presentation • Ocean's Ballroom 5-12

Mitchell Day, Ph.D. *Presenter*

Ohio University

On the Neuronal Encoding of Stimuli With Reduced Interaural Coherence

Mon 3 PM - 3:15 PM • Podium Presentation • Ocean's Ballroom 5-12

Jörg Encke, Ph.D. *Presenter*

Macquarie University

Parallel Pathways for Interaural Time Difference Processing in the Inferior Colliculus is Partially Maintained After Early Auditory Deprivation in Rats

Mon 3:15 PM - 3:30 PM • Podium Presentation • Ocean's Ballroom 5-12

Woongsang Sunwoo, M.D. *Presenter*

Gachon University Gil Medical Center

Pupil-Linked Arousal System Reflects Bayesian Surprise in Spatially Volatile Environment

Mon 3:30 PM - 3:45 PM • Podium Presentation • Ocean's Ballroom 5-12

Robert Baumgartner, Ph.D. *Presenter*

Acoustics Research Institute, Austrian Academy of Sciences

Representation of Auditory Space in the Shell of the Inferior Colliculus

Mon 3:45 PM - 4 PM • Podium Presentation • Ocean's Ballroom 5-12

Meike Rogalla, Ph.D. *Presenter*

University of Michigan

Podium #20 - Inner Ear: Anatomy & Physiology

Mon 2 PM - 4 PM • Oceans Ballroom 1-4

Cholesterol Metabolism and Trafficking in the Organ of Corti

Mon 2 PM - 2:15 PM • Podium Presentation • Oceans Ballroom 1-4

Yuna Werchner *Presenter*

Max Planck Institute for Multidisciplinary Sciences

Intrinsic Mechanical Sensitivity of Mammalian Auditory Neurons Contributes to Sound-Driven Neural Activity

Mon 2:15 PM - 2:30 PM • Podium Presentation • Oceans Ballroom 1-4

Maria C Perez-Flores, Ph.D. *Presenter*

Physiology and Cell Biology, University of Nevada, Reno

Knockout of the Kv1.8 Channel Subunit Affects Vestibular Type I and II Hair Cell Receptor Potentials and Vestibulomotor Functions

Mon 2:30 PM - 2:45 PM • Podium Presentation • Oceans Ballroom 1-4

Hannah Martin, B.S. *Presenter*

University of Chicago

Novel Pathophysiological Mechanisms in Age-Related Hearing Loss

Mon 2:45 PM - 3 PM • Podium Presentation • Oceans Ballroom 1-4

Sonal Prasad, Ph.D. *Presenter*

Linköping University

The Role of MYO7A Isoforms in Tuning Hair Cell Function

Mon 3 PM - 3:15 PM • Podium Presentation • Oceans Ballroom 1-4

Sihan Li, Ph.D. *Presenter*

University of Virginia

The Time Course of Monocytes Infiltration After Acoustic Overstimulation

Mon 3:15 PM - 3:30 PM • Podium Presentation • Oceans Ballroom 1-4

Seong Hoon Bae, M.D. *Presenter*

Yonsei university college of medicine

Tonotopic Differences in Stereocilia Remodeling Confirm Its Role in Maintaining Resting Tension in the Mechanotransducer of Mammalian Auditory Hair Cells

Mon 3:30 PM - 3:45 PM • Podium Presentation • Oceans Ballroom 1-4

Abigail Dragich, B.S. *Presenter*

University of Kentucky

Live Imaging of Pre-Synaptic Ribbons in the Neonatal Mouse Cochlea

Mon 3:45 PM - 4 PM • Podium Presentation • Oceans Ballroom 1-4

Noura Ismail *Presenter*

University of California, San Francisco

Symposium #21 - Music to Our ears: Does Musical Training Improve Auditory and Speech Processing and Perception?

Mon 2 PM - 4 PM • Crystal Ballroom D-E

Music to Our Ears: Does Musical Training Improve Auditory and Speech Processing and Perception?

Mon 2 PM - 4 PM • Symposia • Crystal Ballroom D-E

Deniz Başkent, Ph.D. *Chair*

University of Groningen, University Medical Center Groningen, Department of Otorhinolaryngology/Head and Neck Surgery, The Netherlands

Andrew Oxenham, Ph.D. *Co-chair*

University of Minnesota

Emily Coffey, Prof. *Presenter*

Concordia University

Musical Training and Hearing-In-Noise Perception

2 PM - 2:30 PM

E. Glenn Schellenberg, Ph.D. *Presenter*

ISCTE-IUL

Music Training and Nonmusical Abilities: The Role of Natural Musical Ability

2:30 PM - 2:45 PM

Assal Habibi, Ph.D. *Presenter*

Univeristy of Southern California

Neural Correlates of Auditory Processing in Individuals Engaged in Music Training – A Perspective Across the Lifespan

2:45 PM - 3 PM

Kelly Whiteford, Ph.D. *Presenter*

University of Minnesota, Department of Psychology

Association of Musical Training With Auditory and Speech Neural Coding and Perception

3 PM - 3:15 PM

Eleanor Harding, Ph.D. *Presenter*

University of Groningen, University Medical Center Groningen, Department of Otorhinolaryngology/Head and Neck Surgery

What Benefits Can We Derive From Music Training for Cochlear-Implanted individuals?

3:15 PM - 3:30 PM

Ritva Torppa, Ph.D., *Other Presenter*

Psychology and Logopedics, Cognitive Brain Unit (CBRU), Faculty of Medicine, University of Helsinki, Finland
Effects of Singing and Musical Training to Speech Perception and Language Skills of Children With Hearing Impairments

3:30 PM - 3:45 PM

Frank Russo, Ph.D. *Presenter*

Toronto Metropolitan University

To Understand the Benefits of Musical Training on Speech Perception We Need to Focus on the Assessment of Musical Skills and the Initiation of Adequately Powered Intervention Studies

3:45 PM - 4 PM

Women, Gender, Minorities and Allies in Science Symposium

Mon 4 PM - 6 PM • Crystal B

Women, Gender Minorities, and Allies in Science

Mon 2 PM - 4 PM • Symposia • Crystal B

Tanvi Thakkar, Ph.D. *Chair*

University of Wisconsin-La Crosse

Kelly N. Jahn, Au.D., Ph.D. *Co-chair*

University of Texas at Dallas

Grace Deason, Ph.D. *Presenter*

Psychology Department, University of Wisconsin – La Crosse

From Barriers to Opportunities: How Stereotypes Shape Women's Experiences in Science

Kirupa Suthakar, Ph.D. *Presenter*

NIH/NIDCD

Fine Tuning Auditory Processing at the Periphery: What Do We Gain From Feedback Circuitry?

Mishaela DiNino, Ph.D. *Presenter*

University at Buffalo

Auditory Processing and Perception Across the Lifespan

Melissa Polonenko, Ph.D. *Presenter*

University of Minnesota

Assessing Auditory Neurodevelopment in Children With Normal Hearing and Hearing Loss

Maureen Shader, Au.D., Ph.D. *Presenter*

Purdue University

Naturalistic Speech Processing in the Adult Auditory Cortex Immediately After Cochlear Implantation

Erica Srinivasan, Ph.D. *Presenter*

University of Wisconsin – La Crosse

Gender Discrimination and Gender Stereotypes: Exploring the Impact on Women in Academia

gEAR Workshop

Mon 4 PM - 6 PM

Award of Merit Lecture

Mon 6 PM - 7:30 PM • Ocean's Ballroom 5-12

Award of Merit Reception

Mon 7:30 PM - 8:30 PM • Oceans Foyer

spARO Student/Postdoc/Medical Resident Reception

This reception is open to all Student, Postdoc, Resident, Fellow attendees at the MidWinter Meeting!

Mon 8 PM - 11 PM • Event Hub/Canaveral Prefunction

TUESDAY, FEBRUARY 14

Poster Session 4 & Exhibit Hall

Daily Poster Session Hours are Noon to Noon. Tuesday Poster Presenters are to hang their physical poster on their assigned poster board no later than 11:59 AM; then remove their poster the following day, no later than 11:59 AM due to the next poster session beginning at 12 PM. The poster session room doors open at 6:00 AM daily.

ALL DAY •

Morning Break

Coffee and Tea available throughout the day.

Tue 7 AM - 8 AM • Oceans Foyer

Speaker Ready Room

Tue 7:30 AM - 4 PM • Longboat

Registration

Tue 7:30 AM - 8 PM • Crystal Registration

Podium #22 - Genetics A: Genomics and Gene Regulation

Tue 8 AM - 10 AM • Ocean's Ballroom 5-12

3'UTR Mutations in SSBP1 gene, Encoding a Single-Stranded Dna-Binding protein, Cause the Autosomal Recessive Non-Syndromic Hearing Impairment DFNB13

Tue 8 AM - 8:15 AM • Podium Presentation • Ocean's Ballroom 5-12

Saber Masmoudi, Prof. *Presenter*

Molecular and Cellular Screening Process at the Center of Biotechnology of Sfax, University of Sfax

A Novel Missense Variant in the GJB6 Gene Causes Autosomal Dominant Hearing Loss in Both Human and Mouse

Tue 8:15 AM - 8:30 AM • Podium Presentation • Ocean's Ballroom 5-12

Wenxue TANG, Prof. *Presenter*

Precision Medicine Center, The Academy of Medical Sciences, Zhengzhou University

A Novel Candidate ARHL Gene Detected in a UK Biobank Cohort GWAS Causes Progressive Hearing Loss in the Orthologous Mouse Knockout

Tue 8:30 AM - 8:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Benjamin Silver, MRCS *Presenter*

UCL Ear Institute

Elucidation of Semidominant Inheritance of the Auditory Phenotype Related to p.R1939Q of OTOF

Tue 8:45 AM - 9 AM • Podium Presentation • Ocean's Ballroom 5-12

Yehree Kim, M.D., Ph.D. *Presenter*

Seoul National University Bundang Hospital

Early-Onset Hearing Loss and Increased Embryonic Lethality Due to Genetic Interaction With the Strain-Specific Cdh23ahl Allele

Tue 9 AM - 9:15 AM • Podium Presentation • Ocean's Ballroom 5-12

Michael Bowl, D.Phil. *Presenter*

UCL Ear Institute, University College London

A New Mouse Model for Wolfram Syndrome Illuminates the Fundamental Role of WFS1 in Endocochlear Potential Production

Tue 9:15 AM - 9:30 AM • Podium Presentation • Ocean's Ballroom 5-12

Elodie Richard, Ph.D. *Presenter*

INSERM U1198, Univ Montpellier, France

Protocadherin-Gamma 10 in Otoconia Formation/Maintenance and Balance Function

Tue 9:30 AM - 9:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Yunxia (Yesha) Lundberg, Ph.D. *Presenter*

Boys Town National Research Hospital

The Pathogenesis of Common Gjb2 Mutation Associated With Human Hereditary Deafness in Mice

Tue 9:45 AM - 10 AM • Podium Presentation • Ocean's Ballroom 5-12

Chong Cui, B.S. *Presenter*

Eye&ENT Hospital, Fudan University

Podium #23 - Psychoacoustics

Tue 8 AM - 10 AM • Oceans Ballroom 1-4

A Musicians' Advantage for Interaural-Level-Difference Discrimination Only Among Highly Trained Musicians who Started Training Early and Continued to Play

Tue 8 AM - 8:15 AM • Podium Presentation • Oceans Ballroom 1-4

Beverly A. Wright, Ph.D. *Presenter*

Northwestern University

Perceptual Benefits From Long-Term Exposure to Naturalistic Sound Patterns

Tue 8:15 AM - 8:30 AM • Podium Presentation • Oceans Ballroom 1-4

Bruno Mesquita, B.Sc. *Presenter*

University of Western Ontario

Probing Sensitivity to Statistical Structure of Rapid Sound Sequences Using Deviant Detection Tasks

Tue 8:30 AM - 8:45 AM • Podium Presentation • Oceans Ballroom 1-4

Alice Milne, Ph.D. *Presenter*

University College London

Statistical Regularities Across Task-Irrelevant Dimensions Impact Auditory Decisions

Tue 8:45 AM - 9 AM • Podium Presentation • Oceans Ballroom 1-4

Lori Holt, Ph.D. *Presenter*

Carnegie Mellon University

Cooling Visual Cortex Differentially Impacts Multisensory Responses Across Regions of Ferret Auditory Cortex

Tue 9 AM - 9:15 AM • Podium Presentation • Oceans Ballroom 1-4

Rebecca Norris, Ph.D. *Presenter*

UCL

Cortical Neural Processing Under Auditory-Cognitive Load Exceeds Response Time

Tue 9:15 AM - 9:30 AM • Podium Presentation • Oceans Ballroom 1-4

Brilliant Brilliant, M.Sc. *Presenter*

Institute of AudioNeuroTechnology and Department of Experiment Otology, ENT Clinics, Hannover Medical School, Hannover, Germany

Auditory Processing Alterations in Parkinson's Disease

Tue 9:30 AM - 9:45 AM • Podium Presentation • Oceans Ballroom 1-4

Esteban Lelo de Larrea-Mancera, Ph.D. *Presenter*

University of California Riverside

Studying the Effect of the Efferent System on Auditory Overshoot Using a Computational Subcortical Auditory Model

Tue 9:45 AM - 10 AM • Podium Presentation • Oceans Ballroom 1-4

Afagh Farhadi, M.S. *Presenter*

Department of Electrical and Computer Engineering, University of Rochester

Symposium #24 - New Frontiers in Genetic Testing for Hearing Loss

Tue 8 AM - 10 AM • Crystal Ballroom D-E

New Frontiers in Genetic Testing for Hearing Loss

Tue 8 AM - 10 AM • Young Investigator Symposia • Crystal Ballroom D-E

Eliot Shearer, M.D., Ph.D. *Chair*

Harvard Medical School

Eliot Shearer, M.D., Ph.D. *Presenter*

Harvard Medical School

Genetic Testing for Hearing Loss: Early Diagnosis Critical for Best Outcomes

8 AM - 8:30 AM

Dylan Chan, M.D., Ph.D. *Presenter*

University of California, San Francisco

Racial and Ethnic Disparities in Genetic Testing for Hearing Loss

8:30 AM - 9 AM

Shelby Redfield, M.S. *Presenter*

Boston Children's Hospital

Non-Syndromic Hearing Loss Mimics: Beyond Usher and Pendred Syndrome

9 AM - 9:30 AM

Kevin Booth, Ph.D. *Presenter*

Indiana School of Medicine, Dept. Medical and Molecular Genetics

In or Out: The Role of RNA-Splicing in Hereditary Hearing Loss

9:30 AM - 9:45 AM

Matthew Hoi Kin Chau, Ph.D. *Presenter*

Baylor College of Medicine

Implications of Structural Variations for Hearing Loss Detected in Newborn Genome Sequencing Data

9:45 AM - 10 AM

Help Desk

Tue 8 AM - 8 PM • Oceans Foyer

Break

Tue 10 AM - 10:30 AM • Oceans Foyer

Podium #25 - Vestibular: Basic Research & Clinical

Tue 10:30 AM - 12:30 PM • Ocean's Ballroom 5-12

Sound-Evoked Vestibular Myogenic Potentials in *Rattus Norvegicus*

Tue 10:30 AM - 10:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Federica M. Raciti, M.S. *Presenter*

University of Miami

Temporal Modulation Transfer Functions of Amplitude-Modulated Ocular Vestibular Evoked Myogenic Potentials

Tue 10:45 AM - 11 AM • Podium Presentation • Ocean's Ballroom 5-12

Christopher Clinard, Ph.D. *Presenter*

James Madison University

Vestibular Functional and Histological Changes in a Blast-Induced mTBI Rat Model

Tue 11 AM - 11:15 AM • Podium Presentation • Ocean's Ballroom 5-12

Melissa Ghulam-Smith, M.D., Ph.D. *Presenter*

University of Miami/Miami VAMC

The Impact of Blast Overpressure on Vestibular Pathway Function

Tue 11:15 AM - 11:30 AM • Podium Presentation • Ocean's Ballroom 5-12

Syed Naqvi, B.S. *Presenter*

Wayne State University School of Medicine

The Automated Vestibular System

Tue 11:30 AM - 11:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Eshita Singh, M.D. *Presenter*

University of Miami/Jackson Memorial Hospital

Comparison of v-HIT Test Results of Two Models in Patients With Vestibular Dysfunction

Tue 11:45 AM - 12 PM • Podium Presentation • Ocean's Ballroom 5-12

Fumihito Mochizuki, Ph.D. *Presenter*

University of Miami School of Medicine Otolaryngology

Improving the Diagnostic Differentiation of Meniere's Disease and Vestibular Migraine Using Vestibular Perceptual Thresholds and Imaging

Tue 12 PM - 12:15 PM • Podium Presentation • Ocean's Ballroom 5-12

Cameron Fattahi, B.S. *Presenter*

Massachusetts Eye and Ear Infirmary, Harvard Medical School

Biomarkers of Postural Control in Vestibulopathy

Tue 12:15 PM - 12:30 PM • Podium Presentation • Ocean's Ballroom 5-12

Julie Corre, Ph.D. *Presenter*

Geneva University Hospitals

Podium #26 - Inner Ear: Damage & Protection

Tue 10:30 AM - 12:30 PM • Oceans Ballroom 1-4

The Ototoxic Drug Cisplatin Localises to Stress Granules Altering Their Dynamics and Composition

Tue 10:30 AM - 10:45 AM • Podium Presentation • Oceans Ballroom 1-4

Jack Martin, M.Sc. *Presenter*

UCL Ear Institute

Tamiflu (Oseltamivir Phosphate) Protects from Cisplatin-Induced Hearing Loss in an in Vivo Translational

Model

Tue 10:45 AM - 11 AM • Podium Presentation • Oceans Ballroom 1-4

Richard Lutze, B.S. *Presenter*

Department of Pharmacology and Neuroscience, Creighton University School of Medicine

Cisplatin Drives Mitochondrial Dysregulation in Zebrafish Lateral-Line Hair Cells

Tue 11 AM - 11:15 AM • Podium Presentation • Oceans Ballroom 1-4

David Lee, M.D. *Presenter*

Washington University in St. Louis

CSF1R Inhibition Induces Macrophage Ablation and Protects Against Cisplatin-Induced Hearing Loss in Mice

Tue 11:15 AM - 11:30 AM • Podium Presentation • Oceans Ballroom 1-4

Cathy Yea Won Sung, Ph.D. *Presenter*

National Institute of Health

Dabrafenib Protects against Cisplatin Ototoxicity in a Clinically Relevant Mouse Model

Tue 11:30 AM - 11:45 AM • Podium Presentation • Oceans Ballroom 1-4

Matthew Ingersoll, Ph.D. *Presenter*

Department of Pharmacology and Neuroscience, Creighton University School of Medicine

Development of DB-020, a Locally Administered Product for Protection Against Cisplatin-Induced Ototoxicity

Tue 11:45 AM - 12 PM • Podium Presentation • Oceans Ballroom 1-4

John Lee, B.S. *Presenter*

Decibel Therapeutics

Sequestration of Ototoxins in Cisplatin-Induced Ototoxicity by Chelate-Functionalized Magnetic Micelles

Tue 12 PM - 12:15 PM • Podium Presentation • Oceans Ballroom 1-4

Pan Liao, Ph.D. *Presenter*

Perelman School of Medicine University of Pennsylvania

Targeting CXCL1 Chemokine Signaling for Treating Cisplatin Ototoxicity

Tue 12:15 PM - 12:30 PM • Podium Presentation • Oceans Ballroom 1-4

Raheem Al Aameri, Ph.D. *Presenter*

SIU School of Medicine

Symposium #27 - Online Experimentation in Audition: Recent Advances and Future Directions

Tue 10:30 AM - 12:30 PM • Crystal Ballroom D-E

Online Experimentation in Audition: Recent Advances and Future Directions

Tue 10:30 AM - 12:30 PM • Symposia • Crystal Ballroom D-E

Nori Jacoby, Ph.D. *Chair*

Max Planck Institut for Empirical Aesthetics

Malinda McPherson, Ph.D. *Co-chair*

University of California, San Diego

Lori Holt, Ph.D. *Presenter*

Carnegie Mellon University

Breaking Auditory Psychophysics Out of the Laboratory

10:30 AM - 11 AM

Roberta Bianco, Ph.D. *Presenter*

Istituto Italiano di Tecnologia

An Online, Reaction-Time Based, Longitudinal Study on Long-Term Auditory Memory

11 AM - 11:15 AM

Malinda McPherson, Ph.D. *Presenter*

University of California, San Diego

Online Auditory Psychophysics Enables New Psychoacoustic Paradigms

11:15 AM - 11:30 AM

Julie Fiez, Ph.D. *Presenter*

University of Pittsburgh

Comparing the Reliability of Virtual and In-Person Post-Stroke Neuropsychological Assessment With Speech and Language Tasks

11:30 AM - 11:45 AM

Meher Lad, M.D. *Presenter*

Newcastle University

Online Auditory Experimentation in Ageing and Clinical Disorders

11:45 AM - 12 PM

Manuel Anglada-Tort, D.Phil. *Presenter*

Max Planck Institute for Empirical Aesthetics

Running Online Auditory Experiments in Complex Production Modalities

12 PM - 12:15 PM

Nori Jacoby, Ph.D. *Presenter*

Max Planck Institut for Empirical Aesthetics

Extending the Possibilities of Auditory Psychophysics With Massive Online Experiments

12:15 PM - 12:30 PM

LUNCH BREAK (On Own)

Tue 12:30 PM - 2 PM

Young Investigators Lunch

Join us for a panel discussion with the current and past Young Investigator awardees!

Tue 12:30 PM - 2 PM • Crystal C

Behind the Scenes with Publication!

Tue 12:45 PM - 1:45 PM • Merritt

spARO Mentoring Session

Tue 12:45 PM - 1:45 PM • Canaveral 1-2

Podium #28 - Hair Cells: Anatomy & Physiology

Tue 2 PM - 4 PM • Ocean's Ballroom 5-12

The Mechanotransduction Channel Complex of Hair cells: A Sophisticated Molecular Machine

Tue 2 PM - 2:15 PM • Podium Presentation • Ocean's Ballroom 5-12

Ulrich Mueller, Ph.D. *Presenter*

Johns Hopkins University

The Calcium and Integrin Binding Protein 2 (CIB2) Transmits the Force to the Mechanotransducer of Mammalian Auditory Hair Cells

Tue 2:15 PM - 2:30 PM • Podium Presentation • Ocean's Ballroom 5-12

Isabel Aristizabal, B.S. *Presenter*

University of Kentucky

LOXHD1 is Required for TMC1 Localization at the Lower Tip-Link Insertion Area

Tue 2:30 PM - 2:45 PM • Podium Presentation • Ocean's Ballroom 5-12

Nicolas Grillet, Ph.D. *Presenter*

Stanford University

The Tetraspan LHFPL5 Establishes Force Sensitivity of the Mechanotransduction Channel of Cochlear Hair Cells

Tue 2:45 PM - 3 PM • Podium Presentation • Ocean's Ballroom 5-12

Xufeng Qiu, Ph.D. *Presenter*

Johns Hopkins University

TMEM63B Functions as a Monomeric High-Threshold Mechanosensitive Ion Channel in Outer Hair Cells

Tue 3 PM - 3:15 PM • Podium Presentation • Ocean's Ballroom 5-12

Wang Zheng, Ph.D. *Presenter*

Boston Children's Hospital/Harvard Medical School

ESPNL Responds to Mechanotransduction and is Required to Maintain Mechanotransducing Stereocilia

Tue 3:15 PM - 3:30 PM • Podium Presentation • Ocean's Ballroom 5-12

Katelin Hawbaker, B.A. *Presenter*

Indiana University Purdue University Indianapolis

LHX3 is Required for the Maintenance and Maturation of the Inner Ear Hair Cell

Tue 3:30 PM - 3:45 PM • Podium Presentation • Ocean's Ballroom 5-12

Mei Xu, Ph.D. *Presenter*

Augusta University

A Novel Gene Associated With Hearing Loss in Adult Humans is Necessary for Hearing in Mice

Tue 3:45 PM - 4 PM • Podium Presentation • Ocean's Ballroom 5-12

Alexandra Kaufman, Ph.D. *Presenter*

Regeneron Pharmaceuticals

Podium #29 - Auditory Prostheses

Tue 2 PM - 4 PM • Oceans Ballroom 1-4

The Effects of Binaural Integration for Consonant and Vowel Identification in Bilateral Cochlear Implant Users

Tue 2 PM - 2:15 PM • Podium Presentation • Oceans Ballroom 1-4

Matthew Ardis, B.A., Au.D. *Presenter*

California State University, Los Angeles

Effects of Peripheral Neural Health on Perception of Temporal Speech Cues in Cochlear Implant Recipients

Tue 2:15 PM - 2:30 PM • Podium Presentation • Oceans Ballroom 1-4

Kara Leyzac, Ph.D. *Presenter*

Medical University of South Carolina

Perception of Speech in Competing Speech in Children With Hearing Aids or Cochlear Implants

Tue 2:30 PM - 2:45 PM • Podium Presentation • Oceans Ballroom 1-4

Deniz Başkent, Ph.D. *Presenter*

University of Groningen, University Medical Center Groningen, Department of Otorhinolaryngology/Head and Neck Surgery, The Netherlands

The Relationship Between Electrophysiological Measures of the Electrically Evoked Compound Action Potential and Speech Perception in Adult Cochlear Implant Users

Tue 2:45 PM - 3 PM • Podium Presentation • Oceans Ballroom 1-4

Jeffrey Skidmore, Ph.D. *Presenter*

The Ohio State University Wexner Medical Center

Effects of Manipulating Channel Interaction on Speech Perception in Adults With Cochlear Implants

Tue 3 PM - 3:15 PM • Podium Presentation • Oceans Ballroom 1-4

Katelyn Berg, Au.D. *Presenter*

Vanderbilt University

Comparison of Performance for Cochlear-Implant Listeners Using Audio Processing Strategies Based on Short-Term FFT or Feature Extraction

Tue 3:15 PM - 3:30 PM • Podium Presentation • Oceans Ballroom 1-4

Enrique Lopez-Poveda, Ph.D. *Presenter*

University of Salamanca

Neuroplasticity in Cochlear Implant Users: From Synapse to Speech Perception

Tue 3:30 PM - 3:45 PM • Podium Presentation • Oceans Ballroom 1-4

Ariel Hight, Ph.D. *Presenter*

New York University Grossman School of Medicine

What is the Best Frequency Allocation Table for Experienced Cochlear Implant Users With Single-Sided Deafness?

Tue 3:45 PM - 4 PM • Podium Presentation • Oceans Ballroom 1-4

Emily Spitzer, Au.D. *Presenter*

New York University Grossman School of Medicine

Podium #30 - Speech Perception

Tue 2 PM - 4 PM • Crystal Ballroom D-E

Selective Attention and Familiarity at the Musical Cocktail Party

Tue 2 PM - 2:15 PM • Podium Presentation • Crystal Ballroom D-E

Jane Brown, B.A. *Presenter*

University of Memphis

Attention Increases the Odds of Expectation-Induced Misperception: Behavioural and Pupillometric Evidence

Tue 2:15 PM - 2:30 PM • Podium Presentation • Crystal Ballroom D-E

Alina Kuimova, M.A. *Presenter*

University of Western Ontario

Lexical Bias in Phonemic Categorization: Effects of Spectral Degradation, Cognitive Load, and Aging

Tue 2:30 PM - 2:45 PM • Podium Presentation • Crystal Ballroom D-E

Zilong Xie, Ph.D. *Presenter*

Florida State University, School of Communication Science and Disorders

Effect of Feedback Reliability for Neurofeedback Training of Auditory Selective Attention

Tue 2:45 PM - 3 PM • Podium Presentation • Crystal Ballroom D-E

Jusung Ham, M.S., B.S. *Presenter*

Dept. Communication Sciences and Disorders, University of Iowa

Listening Effort: Separating the Subjective From the Objective

Tue 3 PM - 3:15 PM • Podium Presentation • Crystal Ballroom D-E

Joseph Rovetti, B.A. *Presenter*

Western University

Listening Effort and Disengagement During Story Listening

Tue 3:15 PM - 3:30 PM • Podium Presentation • Crystal Ballroom D-E

Madison Tutton, M.Sc. *Presenter*

University of Western Ontario

Listening Effort Reduces Eye-Movement Behaviors in Younger Adults

Tue 3:30 PM - 3:45 PM • Podium Presentation • Crystal Ballroom D-E

Mo Cui, M.A. *Presenter*

U of Toronto & Rotman Research Institute

Deficits in Sensory Decision-Making Underlie Self-Perceived Hearing Difficulties

Tue 3:45 PM - 4 PM • Podium Presentation • Crystal Ballroom D-E

Jacie R. McHaney, B.S. *Presenter*

University of Pittsburgh

Short Course Part 2: Single cell “omics”; a practical introduction to molecular analysis at the single cell level

Tue 4 PM - 5 PM

gEAR Workshop

Tue 4 PM - 6 PM

Symposium Honoring the Contributions of Steve Colburn

Tue 4:15 PM - 6:15 PM • Oceans Ballroom 1-4

Committee Reception

To thank our committee members for their service to ARO, there will be a reception hosted as a thank you from ARO!

This is for active ARO committee members only.

Tue 5 PM - 6:30 PM

spARO Town Hall

Tue 6:15 PM - 6:45 PM • Canaveral 3

spARO Steering Committee Dinner

This is for active spARO Steering committee members only.

Tue 6:45 PM - 8 PM

Reception - Hair Ball

Tue 7 PM - 11 PM • Ocean's Ballroom 5-12

WEDNESDAY, FEBRUARY 15

Poster Session & Exhibit Hall

Presenters will remove their poster by 12:00 PM. Any poster not removed by the presenter will be discarded after 12:00 PM.

Wed 6 AM - 12 PM •

Morning Break

Coffee and Tea available throughout the day.

Wed 7 AM - 11 AM • Oceans Foyer

Speaker Ready Room

Wed 7:30 AM - 10:30 AM • Longboat

Registration

Wed 7:30 AM - 12 PM • Crystal Registration

Podium #31 - Inner Ear: Cochlear Mechanics

Wed 8 AM - 10 AM • Ocean's Ballroom 5-12

The Nonlinear Mechanics and Dynamics of a Three-Row Hair Bundle Model

Wed 8 AM - 8:15 AM • Podium Presentation • Ocean's Ballroom 5-12

Varun Goyal, Ph.D. *Presenter*

University of Michigan

The Effects of BAHA Force Directions on BC Hearing

Wed 8:15 AM - 8:30 AM • Podium Presentation • Ocean's Ballroom 5-12

Jongwoo Lim, M.S. *Presenter*

Korea Advanced Institute of Science and Technology

The Effect of Nonlinearity in a Tapered, Viscous Cochlear Model

Wed 8:30 AM - 8:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Vipin Agarwal, Ph.D. *Presenter*

University of Michigan

Determining the Mechanical Properties of Hair-Bundle Components From Physiological Measurements in Outer Hair Cells

Wed 8:45 AM - 9 AM • Podium Presentation • Ocean's Ballroom 5-12

Rayan Chatterjee, Ph.D. *Presenter*

Stanford University School of Medicine

Otoacoustic Constraints on Anisotropic Wave Amplification in the Cochlea

Wed 9 AM - 9:15 AM • Podium Presentation • Ocean's Ballroom 5-12

Christopher Shera, Ph.D. *Presenter*

University of Southern California

A Graph Signal Processing Model of the Cochlea

Wed 9:15 AM - 9:30 AM • Podium Presentation • Ocean's Ballroom 5-12

Melia Bonomo, Ph.D. *Presenter*

Rice University

Two-Tone Suppression in the Reticular Lamina in the Basal Turn of the Gerbil Cochlea Challenges Conventional Views of Otoacoustic Emissions Evoked by Single Tones

Wed 9:30 AM - 9:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Jonathan Siegel, Ph.D. *Presenter*

Northwestern University

Triobp Promotes Unbalanced Bidirectional Radial Stiffness Gradients Within the Mammalian Organ of Corti

Wed 9:45 AM - 10 AM • Podium Presentation • Ocean's Ballroom 5-12

Alexander X. Cartagena-Rivera, Ph.D. *Presenter*

NIBIB/NIH

Podium #32 - Aging

Wed 8 AM - 10 AM • Oceans Ballroom 1-4

Auditory Biomarkers for Cognitive Decline

Wed 8 AM - 8:15 AM • Podium Presentation • Oceans Ballroom 1-4

Yasmeen Hamza, Ph.D., M.D. *Presenter*

Florida State University

Baseline Hearing Characteristics of Participants Enrolled in the Aging and Cognitive Health Evaluation in Elders (ACHIEVE) Randomized Controlled Trial: Evaluation of Site and Recruitment Route Differences

Wed 8:15 AM - 8:30 AM • Podium Presentation • Oceans Ballroom 1-4

Victoria Sanchez, Ph.D., Au.D. *Presenter*

University of South Florida

Oxidative Stress is Exacerbated in the Aging Cochlea of Alzheimer's Disease Mouse Models

Wed 8:30 AM - 8:45 AM • Podium Presentation • Oceans Ballroom 1-4

Jose Juiz, Prof. Dr. *Presenter*

IDINE/Med School in Albacete, UCLM, Campus in Albacete, Albacete, SPAIN//HNO, NIFE-VIANNA, MHH, Hannover, GERMANY

Investigating the Link Between Hearing Loss and Dementia Utilising Brain Imaging and Genetic Analyses in ADNI and UK Biobank Cohorts

Wed 8:45 AM - 9 AM • Podium Presentation • Oceans Ballroom 1-4

Fatin Zainul Abidin, Ph.D. *Presenter*

University College London

Synchronization of the Brain Wave of Young and Elderly People When Listening to 40-Hz Amplitude-Modulated Sound

Wed 9 AM - 9:15 AM • Podium Presentation • Oceans Ballroom 1-4

Rara Shimauchi, B.A. *Presenter*

University of Electro-Communication

The Effect of ATP Purinergic P2x Receptor Deficiency on Alzheimer's Disease Development and Progression

Wed 9:15 AM - 9:30 AM • Podium Presentation • Oceans Ballroom 1-4

Hong-Bo Zhao, M.D., Ph.D. *Presenter*

Yale University Medical School

The Prevalence and Recognition of Cognitive Impairment in Older Individuals Visiting a Hearing Instrument Specialist in the Netherlands

Wed 9:30 AM - 9:45 AM • Podium Presentation • Oceans Ballroom 1-4

Sander Ubbink, M.Sc. *Presenter*

University of Groningen, University Medical Center Groningen, Dept. of Otorhinolaryngology / Head and Neck Surgery,
The Netherlands

Sensorimotor Deficits as Contributors to Early Cognitive Impairment

Wed 9:45 AM - 10 AM • Podium Presentation • Oceans Ballroom 1-4

Zahra Sayyid, M.D., Ph.D. *Presenter*

Johns Hopkins University School of Medicine

Symposium #33 - Hyperacusis: Diversity in Cause, Expression, and Advocacy

Wed 8 AM - 10 AM • Crystal Ballroom D-E

Hyperacusis: Diversity in Cause, Expression, and Advocacy

Wed 8 AM - 10 AM • Symposia • Crystal Ballroom D-E

Benjamin Auerbach, Ph.D. *Chair*

University of Illinois at Urbana-Champaign

Fatima Husain, Ph.D. *Co-chair*

University of Illinois at Urbana-Champaign

Michael Maholchic, M.B.A. *Presenter*

Hyperacusis Research, Ltd

Connecting Researchers to Clinicians and Patients: Bryan Pollard's Roadmap to a Cure for Hyperacusis With Pain

8 AM - 8:15 AM

Sylvie Hebert, Ph.D. *Presenter*

Universite de Montreal

A Need to Better Define and Characterize Loudness and Hyperacusis

8:15 AM - 8:30 AM

Richard Salvi, Ph.D. *Presenter*

Center for Hearing & Deafness, SUNY at Buffalo

Stressful Hearing: Hyperacusis Can Be Induced by Chronic Stressful Noise Exposure or Chronic Pharmacological
Stress That Disrupts the HPA Axis

8:30 AM - 8:45 AM

Sarah Theodoroff, Ph.D. *Presenter*

Department of Veterans Affairs, NCRAR

Behavioral and Physiological Measures of Sound Intolerance

8:45 AM - 9 AM

Megan Wood, Ph.D. *Presenter*

Johns Hopkins University School of Medicine

A Rodent Model of Acoustic Trauma to Study Neural and Inflammatory Mechanisms of Hyperacusis

9 AM - 9:15 AM

Fatima Husain, Ph.D. *Presenter*

University of Illinois at Urbana-Champaign

Imaging Hyperacusis: Past and Present

9:15 AM - 9:30 AM

Benjamin Auerbach, Ph.D. *Presenter*

University of Illinois at Urbana-Champaign

Investigating Hyperacusis in Rodent Models of Autism

9:30 AM - 10 AM

Help Desk

Wed 8 AM - 12 PM • Oceans Foyer

Break

Wed 10 AM - 10:30 AM • Oceans Foyer

Podium #34 - Other

Wed 10:30 AM - 12:30 PM • Ocean's Ballroom 5-12

Music Emotion Categorization in Typically Hearing and Cochlear Implant Users

Wed 10:30 AM - 10:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Eleanor Harding, Ph.D. *Presenter*

University of Groningen, University Medical Center Groningen, Department of Otorhinolaryngology/Head and Neck Surgery

Longitudinal Follow-Up of Children With Moderate Hearing Loss

Wed 10:45 AM - 11 AM • Podium Presentation • Ocean's Ballroom 5-12

Anna Persson, Ph.D. *Presenter*

Karolinska Institutet, CLINTEC

Environmental Analysis in Early Intervention Groups for Young Children With Moderate Hearing Loss

Wed 11 AM - 11:15 AM • Podium Presentation • Ocean's Ballroom 5-12

Aline Hoeve, M.Sc. *Presenter*

University Medical Center Groningen

Hyperacusis: Results of a Novel Treatment Approach

Wed 11:15 AM - 11:30 AM • Podium Presentation • Ocean's Ballroom 5-12

David Eddins, Ph.D. *Presenter*

University of South Florida

A Comparison Between Stimulus-Reconstruction Algorithms for Decoding EEG Responses to the Speech Envelope

Wed 11:30 AM - 11:45 AM • Podium Presentation • Ocean's Ballroom 5-12

Michael Thornton, MPhys *Presenter*

Imperial College London

Auditory Electrophysiology Reveals HIV-Related Central Nervous System Dysfunction in Children

Wed 11:45 AM - 12 PM • Podium Presentation • Ocean's Ballroom 5-12

Christin Ealer, B.A. *Presenter*

Geisel School of Medicine at Dartmouth

Priorities in Hearing: Towards a Common Goal

Wed 12 PM - 12:15 PM • Podium Presentation • Ocean's Ballroom 5-12

Christian Sumner, Ph.D. *Presenter*

Nottingham Trent University

Rapid Perceptual Learning in Adult Cochlear Implant Recipients: What Does It Mean for Speech Recognition

Wed 12:15 PM - 12:30 PM • Podium Presentation • Ocean's Ballroom 5-12

Ranin Khayr, Ph.D. *Presenter*

University of Haifa and Bnai-Zion Medical Center

Podium #35 - Vestibular: Basic Research & Clinical

Wed 10:30 AM - 12:30 PM • Oceans Ballroom 1-4

Six2 Regulates Morphogenesis and Planar Cell Polarity (PCP) of the Vestibular Epithelia

Wed 10:30 AM - 10:45 AM • Podium Presentation • Oceans Ballroom 1-4

Sumana Ghosh, Ph.D. *Presenter*

University of Mississippi Medical Center

Developmental Transcriptomic Profiling of Non-Sensory Vestibular Epithelium Reveals Ionic Contribution to Endolymph Formation

Wed 10:45 AM - 11 AM • Podium Presentation • Oceans Ballroom 1-4

Sanghyun Kwak, M.D. *Presenter*

St. Vincents Hospital, The Catholic University of Korea

The C-Terminus of Met Component Tmie Contributes to High Frequency Sensitivity of the Vestibular System

Wed 11 AM - 11:15 AM • Podium Presentation • Oceans Ballroom 1-4

Peng Sun, Ph.D. *Presenter*

Stanford University School of Medicine

Understanding How Efferent Signaling Impacts Spike-Timing Patterns of Vestibular Neurons by Modulating Multiple Types of Ion Channels

Wed 11:15 AM - 11:30 AM • Podium Presentation • Oceans Ballroom 1-4

Daniel Bronson, Ph.D. *Presenter*

University of Southern California, Department of Otolaryngology

Stimulus-Response Coherence Represents a Measure of Response Fidelity Among Vestibular Afferent Neurons

Wed 11:30 AM - 11:45 AM • Podium Presentation • Oceans Ballroom 1-4

Larry Hoffman, Ph.D. *Presenter*

Geffen School of Medicine at UCLA

Loss of Pou4f3 From Adult Vestibular Hair Cells Leads to Reduced Vestibular Function and Hair Cell Death

Wed 11:45 AM - 12 PM • Podium Presentation • Oceans Ballroom 1-4

Kendra Stansak, B.S. *Presenter*

University of Mississippi Medical Center

Bulk and Single-Cell Transcriptome Reveal the Cellular Heterogeneity and Damage Response of the Adult Human Utricle

Wed 12 PM - 12:15 PM • Podium Presentation • Oceans Ballroom 1-4

Emilia Luca, Ph.D. *Presenter*

Biological Sciences, Sunnybrook Research Institute

Single Cell RNA-Seq of Labyrinthine Tissue Identifies Innate and Adaptive Immune Mechanisms in Meniere's Disease

Wed 12:15 PM - 12:30 PM • Podium Presentation • Oceans Ballroom 1-4

Dhasakumar Navaratnam, M.D., Ph.D. *Presenter*

Yale University School of Medicine

Symposium #36 - The Eyes as a Window to Auditory Processing and Perception

Wed 10:30 AM - 12:30 PM • Crystal Ballroom D-E

The Eyes as a Window to Auditory Processing and Perception

Wed 10:30 AM - 12:30 PM • Symposia • Crystal Ballroom D-E

Maria Chait, B.Sc., Ph.D., Prof., Prof. Dr. *Chair*

UCL Ear Institute

Thomas Koelewijn, Ph.D. *Presenter*

University of Groningen, University Medical Center Groningen, Department of Otorhinolaryngology/Head and Neck

Surgery

What Can Pupillometry Tell Us About Voice Perception

10:30 AM - 10:45 AM

Ronan McGarrigle, Ph.D. *Presenter*

University of Bradford

Pupil Dynamics Underlying the Subjective Experiences of Effort and Tiredness From Listening

10:45 AM - 11 AM

Stefanie Kuchinsky, Ph.D. *Presenter*

Walter Reed National Military Medical Center

Interactions Between Pre-Stimulus and Stimulus-Evoked Pupil Dilation Indices of Listening Engagement

11 AM - 11:15 AM

Francois Vachon, Ph.D. *Presenter*

Université Laval

Eyes Have Ears: Using Pupillometry to Index Attentional Capture by Irrelevant Sound

11:15 AM - 11:30 AM

Dorothea Wendt, Ph.D. *Presenter*

Eriksholm Research Centre

Evoked Pupil Response to Investigate the Effect of Salient Distractors on Attentional Effort Allocation

11:30 AM - 11:45 AM

Srivatsun Sadagopan, Ph.D. *Presenter*

University of Pittsburgh

Pupillometry as a Reliable Metric of Auditory Detection and Discrimination in Animal Models

11:45 AM - 12 PM

Stephen David, Ph.D. *Presenter*

Oregon Health & Science University

Impact of Pupil-Indexed Arousal on Correlated Variability and Sound Representation in Neural Populations

12 PM - 12:15 PM

Maria Chait, B.Sc., Ph.D., Prof., Prof. Dr. *Presenter*

UCL Ear Institute

Sustained Pupil Responses Track the Statistics of Rapidly Unfolding Sounds

12:15 PM - 12:30 PM