

American Auditory Society  
PROGRAM FOR THE 2010 AAS MEETING  
March 4-6, 2010, Scottsdale, AZ

**Wednesday, March 3<sup>rd</sup>, 2010**

- 8:00 am – 12:00 pm Ear & Hearing Editorial Board Meeting
- 1:00 pm – 5:00 pm AAS Executive Board Meeting
- 1:00 pm – 7:00 pm Early Registration Pre-Meeting Activities (Golf, Tennis, etc.)

**Thursday, March 4<sup>th</sup>, 2010**

- 7:00 am – 5:00 pm Registration
- 8:00 am – 12:00 pm **Technology Updates** - Audiology Incorporated, Widex, Phonak, Advanced Bionics, Frye Electronics, GN ReSound, Knowles Electronics LLC, Mimosa Acoustics, Oticon, Siemens, Sonic Innovations, Starkey, Intelligent Hearing Systems Corp., Insound Medical, Cochlear, Sonion, IntriCon Corp., Inter Acoustics, Bernafon AG
- 12:00 pm – 1:00 pm Outdoor Box Lunch
- 1:10 pm – 1:30 pm Opening Comments  
*Jay Rubinstein, MD, PhD, AAS President*  
*Karen Doyle, President-Elect and Program Chair*
- 1:30 pm – 2:30 pm **Translational Research I**  
*Jay Rubinstein, MD, PhD, Moderator*  
**Auditory Steady - State Responses**  
*Terry Picton, PhD,*  
University of Toronto, Toronto, Ontario

**Session I**

**Speech Perception**

*Karen Iler Kirk, PhD, Moderator*

- 2:45 pm – 3:00 pm The Recognition of Consonants and Consonant Features at Connected-Speech Rates  
*Ken Grant, PhD; Sandeep A. Phatak, PhD; Jennie K. Canan, AuD*  
Walter Reed Army Medical Center, Washington, DC
- 3:00 pm – 3:15 pm Some Effects of Disturbing the Temporal Fine Structure on Speech Recognition in Noise  
*Frederic Apoux, PhD; Eric Healy, PhD*  
The Ohio State University, Columbus, OH
- 3:15 pm – 3:30 pm Perception of Spanish-Accented English in Adult Cochlear Implant Users  
*Stephanie Adamovich, PhD*  
Eastern Kentucky University, Richmond, KY  
*Charles Limb, MD*  
Johns Hopkins University School of Medicine, Baltimore, MD
- 3:30 pm – 3:45 pm Development of the Multimodal Sentence Test for Adults  
*Karen Iler Kirk, PhD*  
The University of Iowa, Iowa City, IA  
*Laurie Eisenberg, PhD*  
House Ear Institute, Los Angeles, CA

*Brian F. French, PhD*  
Washington State University, Pullman, WA

- 3:45 pm – 4:00 pm      Improving Speechreading Ability in Noise  
*Harry Levitt, PhD; Chris Oden, MA*  
Advanced Hearing Concepts, Bodega Bay, CA  
*Helen Simon, PhD; Al Lotze, MS*  
Smith-Kettlewell Eye Research Institute, San Francisco, CA
- 4:00 pm – 4:15 pm      Hearing Loss Affects Detection of Spectral Changes in Speech-like Stimuli  
*Peggy Nelson, PhD; Magdalena Wojtczak, PhD; Yingjiu Nie, MA*  
University of Minnesota, Minneapolis, MN

## **Session II**

### **Psychoacoustics**

*Ted Meyer, MD, PhD, Moderator*

- 2:45 pm – 3:00 pm      Forward and Backward Masking with Reproducible Noise Samples  
*Ted Meyer, MD, PhD; Andrew Ahn, MD; Andrea Dawkes, AuD*  
Medical University of South Carolina, Charleston, SC
- 3:00 pm – 3:15 pm      The Effects of Temporal Uncertainty on Masked Tone Detection  
*Angie Garinis, PhD; Lynne Werner, PhD*  
University of Washington, Seattle, WA
- 3:15 pm – 3:30 pm      Laterality of Auditory Processing  
*Yvonne Sininger, PhD; Angali Bhatara, PhD*  
UCLA David Geffen School of Medicine, Los Angeles, CA
- 3:30 pm – 3:45 pm      Monaural Echo Fusion in Cochlear Implant Simulations  
*Nathaniel Whitmal, PhD; Sarah Poissant, PhD*  
University of Massachusetts Amherst, Amherst, MA
- 3:45 pm – 4:00 pm      Validation of the NIH Toolbox Audition Measures  
*Steven Zecker, PhD; James Griffith, PhD; Richard Gershon, PhD*  
Northwestern University, Evanston, IL

## **Session III**

### **Hearing Loss and Tinnitus**

*Robert Dobie, MD, Moderator*

- 2:45 pm – 3:00 pm      Some Observations on Using Transcranial Magnetic Stimulation for Tinnitus Suppression  
*Anthony Cacace, PhD*  
Wayne State University, Detroit, MI  
*Virginia Ramachandran, AuD*  
Henry Ford Hospital, Detroit, MI  
*Robert Burkard, PhD*  
University at Buffalo, Buffalo, NY  
*Richard Tyler, PhD*  
University of Iowa, Iowa City, IA
- 3:00 pm – 3:15 pm      Psychometric Properties of Eight Subscales of the Tinnitus Functional Index  
*Mary B. Meikle, PhD*  
Oregon Health & Science University, Portland, OR
- 3:15 pm – 3:30 pm      Americans Hear as Well or Better Today Compared to 1960  
*Howard Hoffman, Chia-Wen Ko, PhD*

NIDCD, Bethesda, MD  
*Robert Dobie, MD*  
University of Texas Health Science Center, San Antonio, TX  
*Christa Themann, William Murphy, PhD*

NIOSH, Cincinnati, OH

3:30 pm – 3:45 pm      Analgesic Use and the Risk of Hearing Loss in Women  
*Sharon Curhan, MD; Josef Shargorodsky, MD; Gary Curhan, MD*  
Brigham and Women's Hospital, Boston, MA  
*Roland Eavey, MD*  
Vanderbilt University, Nashville, TN

5:00 pm – 6:15 pm      **Carhart Memorial Lecture**  
*Jay Rubinstein, MD, PhD, Moderator*  
**Hearing Aids and the Loudness Problem**  
*Robyn Cox, PhD*  
University of Memphis, Memphis, TN

6:30 pm – 7:30 pm      Reception

**Friday, March 5<sup>th</sup>, 2010**

7:00 am – 5:00 pm      Registration

8:00 am – 8:30 am      **Young Investigator Research Presentation**  
*Jay Rubinstein, MD, PhD, Moderator*  
**Research: A team sport**  
*Dawn Konrad-Martin, PhD*  
Veterans Affairs Rehabilitation Research and Development, National Center  
for Rehabilitative Auditory Research, Portland, OR

8:30 am – 10:30 am      **Mentored Graduate & Resident Research Posters & General Posters & T35 Posters**

10:30 am – 11:30 am      **Translational Research II**  
*Jay Rubinstein, MD, PhD, Moderator*  
**Research in Pediatric Audiology: From the Clinic to the Lab and Back**  
*Pat Stelmachowicz, PhD*  
Boys Town National Research Hospital, Omaha, NE

12:00 pm – 1:15 pm      **Awards Luncheon**  
Membership Update, *Jay Rubinstein, MD, PhD, AAS President*  
Life Achievement Award, *Mead Killion, PhD*  
Ear & Hearing Editor's Award, *to be determined*

1:30 pm – 3:00 pm      NIH Discussions with Student Award Recipients and other Interested  
Researchers

2:00 pm – 5:00 pm      **Mentored Graduate & Resident Research Posters & General Posters & T35 Posters**

Afternoon/Evening      Open

**Saturday, March 6<sup>th</sup>, 2010**

7:00 am – 5:00 pm      Registration

8:00 am – 9:00 am      **Translational Research III**  
*Jay Rubinstein, MD, PhD, Moderator*  
**Role of Temporal Envelope and Temporal Fine Structure Cues in  
Speech Perception for Normal-hearing and Hearing-impaired Listeners**  
*Christian Lorenzi, MD*  
Université Paris Descartes, Paris, France

**Session 1a**

**After Amplification**

*Ruth Bentler, PhD, Moderator*

9:15 am – 9:30 am      Do Aided Psychoacoustic Thresholds Predict Aided Speech Recognition?  
*Marc Brennan, PhD*  
University of Washington, Seattle, WA  
*Pamela Souza, PhD*  
Northwestern University, Evanston, IL  
*Frederick Gallun, PhD*  
National Center for Rehabilitative Auditory Research, Portland, OR

9:30 am – 9:45 am      The Effect of Hearing Aid Microphone Location on Spatial Perception  
*Brent Edwards, PhD; Sridhar Kalluri, PhD; Susie Valentine, PhD*  
Starkey Laboratories, Berkeley, CA  
*Simon Carlile, PhD; Virginia Best, PhD*  
University of Sydney, Sydney, Australia  
*Jonathon Wolfe*  
VAST Audio

9:45 am – 10:00 am      Interaction of Maximum Power Output and the Degree of Hearing Loss  
*Petri Korhonen, MSc; Heidi Peeters, MA*  
Widex, Lisle, IL

10:00 am – 10:15 am      A Paradoxical Reverberation Effect on Directional Microphone Hearing Aids  
*Yu-Hsiang Wu, PhD; Ruth Bentler, PhD*  
The University of Iowa, Iowa City, IA

10:15 am – 10:30 am      Phoneme Identification in Spectro-temporally Modulated Maskers: Effect of  
Supra-threshold Hearing Impairment  
*Sandeep Phatak, PhD; Ken Grant, PhD*  
Walter Reed Army Medical Center, Washington, DC

10:30 am – 10:45 am      Effect of Noise Location and Stimulus Type on Directional Preference  
*Shilpi Banerjee, PhD*  
Starkey Laboratories, Inc., Eden Prairie, MN

**Session 2a**

**Cochlear Implants**

*Laurie Eisenberg, PhD, Moderator*

9:15 am – 9:30 am      Longitudinal Infant Speech Perception in Young Cochlear Implant Users  
*Kristin Uhler, PhD; Christie Yoshinaga Itano, PhD; Sandra Gabbard, PhD;*  
*Herman Jenkins, MD*  
University of Colorado, Denver, CO  
*Ann Rothpletz, PhD*  
University of Louisville, Louisville, KY

9:30 am – 9:45 am      Three-Year Speech Recognition Outcomes in the CDaCI Multicenter Study  
*Laurie Eisenberg, PhD; Karen Johnson, PhD; Leslie Visser-Dumont, MA*  
House Ear Institute, Los Angeles, CA

- 9:45 am – 10:00 am Benefits of Contralateral Amplification in Unilaterally Implanted Children with ANSD  
*Christina Runge-Samuelson, PhD; Jamie Jensen, AuD; David Friedland, MD, PhD*  
Medical College of Wisconsin, Milwaukee, WI
- 10:00 am – 10:15 am Auditory Training in Noise with Cochlear Implant Users  
*Sandy Oba, MS; Qian-Jie Fu, PhD; John Galvin*  
House Ear Institute, Los Angeles, CA
- 10:15 am – 10:30 am Loudness-based Perceptual Weights for Tonal Complexes in Cochlear-implant Listeners  
*Jessica Messersmith, PhD*  
University of South Dakota University of South Dakota, Vermillion, SD  
*Donna Neff, PhD*  
Boys Town National Research Hospital, Omaha, NE
- 10:30 am – 10:45 am Stochastic FM Discrimination by Elderly Listeners and Cochlear-Implant Users  
*Stanley Sheft, PhD; Min-Yu Cheng, AuD; Rachel McMullen, AuD; Caitlin Farrell, AuD; Valeriy Shafiro, PhD*  
Rush University Medical Center, Chicago, IL  
*Christian Lorenzi, MD*  
Université Paris Descartes, Paris, France

### **Session 3a**

#### **Electrophysiology**

*Yvonne Sininger, PhD, Moderator*

- 9:15 am – 9:30 am Electrophysiology of Categorical Perception for Formant Transition Duration  
*Barbara Cone, PhD; Darlyne Kim, BS*  
University of Arizona, Tucson, AZ
- 9:30 am – 9:45 am Auditory Cortical Activity Patterns to Spectrally Degraded Stop-Consonants  
*Pritesh Pandya, PhD*  
University of Illinois at Urbana-Champaign  
*Crystal T. Engineer, PhD*  
University of Texas at Dallas, Richardson, TX
- 9:45 am – 10:00 am Auditory Evoked Responses Reflect Rapid Task-Specific Learning Components  
*Kelly Tremblay, PhD*  
University of Washington, Seattle, WA  
*Claude Alain, PhD; Ben-David Boaz, PhD; Sandra Campeanu, MS*  
Rotman Research Institute, Toronto, Ontario
- 10:00 am – 10:15 am Multiple 80Hz AM-ASSRs and Transient Responses: Two-tone Interaction Explored by Deconvolution  
*Jorge Bohorquez, Ozcan Ozdamar, PhD*  
University of Miami, Coral Gables, FL
- 10:15 am – 10:30 am Chinchilla ASSR to Paired Stimuli: Same versus Different Carrier Frequencies  
*Robert Burkard, PhD; Kathleen McNerney, PhD*  
University at Buffalo, Buffalo, NY

10:30 am – 10:45 am Electrically Evoked Compound Action Potentials for Advanced Bionics Users  
*Eunkyung Jeon, AuD; Carolyn Brown, PhD; Christine Etlar, MA; Sara O'Brien, MA; Li-Kuei Chiou, AuD; Paul Abbas, PhD*  
University of Iowa, Iowa City, IA

10:45 am – 11:00 am Break

**Session 1b**

**Ear to Cortex**

*Frank E. Musiek, PhD, Moderator*

11:00 am – 11:15 am Amblyaudia: Evidence of Indistinct Processing of Auditory Information in Children  
*Deborah W. Moncrieff, PhD*  
University of Pittsburgh, Pittsburgh, PA

11:15 am – 11:30 am Cognitive Resource Allocation in Children with Hearing Loss  
*Andrea Pittman, PhD; Kristi Petersen, BS; Chelsea Choat, BS*  
Arizona State University, Tempe, AZ

11:30 am – 11:45 am Central Auditory Processing in Blast Exposed Soldiers: A Preliminary Analysis  
*Anna Diedesch, AuD; Daniel McDermott, MA; Marjorie Leek, PhD*  
National Center for Rehabilitative Auditory Research, Portland, OR  
*Lina Kubli, MA; Therese Walden, AuD*  
Walter Reed Army Medical Center, Washington, DC

11:45 am – 12:00 pm Neuroanatomical Changes Due to Hearing Loss and Chronic Tinnitus  
*Fatima Husain, PhD; Caroline Davis; Roberto Medina,*  
University of Illinois at Urbana-Champaign, Champaign, IL  
*Nathan Pajor; Barry Horwitz, PhD*  
Brain Imaging and Modeling Section, NIDCD, NIH, Bethesda, MD

12:00 pm – 12:15 pm Neuroanatomical Features of Heschl's Gyrus in Humans  
*Frank E. Musiek, PhD; Jeffery Weihing, PhD*  
University of Connecticut, Storrs, CT

**Session 2b**

**Otoacoustic Emissions**

*Linda J. Hood, PhD, Moderator*

11:00 am – 11:15 am Click and Tone Burst Evoked Otoacoustic Emissions in Subjects with Hearing Loss above 0.5 and 1 kHz  
*W. Wiktor Jedrzejczak, PhD; Edyta Pilka, Artur Lorens, PhD; Anna Piotrowska, MD; Krzysztof Kochanek, PhD; Henryk Skarzynski, MD*  
Institute of Physiology and Pathology of Hearing, Warsaw, Poland

11:15 am – 11:30 am Latest Findings and Future Directions: DPOAE Fine Structure in Infants  
*Carolina Abdala, PhD*  
House Ear Institute, Los Angeles, CA  
*Sumitrajit Dhar, PhD*  
Northwestern University, Evanston, IL

11:30 am – 11:45 am Swept-Tone TEOAEs: Acquisition and Response Characteristics  
*Ozcan Ozdamar, PhD; Christopher Bennett, MS*  
University of Miami, Coral Gables, FL

11:45 am – 12:00 pm Complexities in Efferent Modulation of Otoacoustic Emissions Explained

*Sumitrajit Dhar, PhD*  
Northwestern University, Evanston, IL

**Session 3b**

**Conduction System and VEMP**

*Herman Jenkins, MD, Moderator*

- 11:00 am – 11:15 am      Wideband Tympanometric Assessment of Ear-canal Volume and Eardrum Admittance  
*Douglas Keefe PhD; Denis Fitzpatrick, PhD; John Ellison, MS*  
Boys Town National Research Hospital, Omaha, NE
- 11:15 am – 11:30 am      Quantification of the Motion of the Entire Surface of the Tympanic Membrane through Stroboscopic Holography  
*Jeffrey Tao Cheng, Michael Ravicz, Saumil Merchant, John Rosowski*  
Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, MA  
*Ellery Harrington, Cosme Furlong,*  
Worcester Polytechnic Institute, Worcester, MA
- 11:30 am – 11:45 am      Intracochlear Differential Pressure Measurements for the Study of Round-window Stimulation  
*Hideko Nakajima, MD, PhD; Saumil Merchant, MD; John Rosowski, PhD*  
Massachusetts Eye and Ear Infirmary, Harvard Medical School, Boston, MA
- 11:45 am – 12:00 pm      Signal Levels at the Eardrum for Pure Tone Audiometry  
*Robert Withnell, PhD*  
Indiana University, Bloomington, IN  
*Patricia Jeng, PhD; Pierre Parent, MS*  
Mimosa Acoustics, Champaign, IL  
*Jont Allen, PhD*  
University of Illinois, Urbana, IL
- 12:00 pm – 12:15 pm      The VEMP in Response to Air-Conducted vs. Bone-Conducted Stimuli  
*Kathleen Mc Nerney, PhD; Robert Burkard, PhD*  
University at Buffalo, Buffalo, NY
- 12:30 pm – 1:30 pm      Outdoor Box Lunch
- 1:30 pm – 2:30 pm      **Translational Research IV**  
*Jay Rubinstein, MD, PhD, Moderator*  
**Making Hair Cells**  
*Stefan Heller, PhD*  
Stanford University School of Medicine, Stanford, CA
- 2:30 pm – 4:45 pm      **Special Session – Biological Therapies for Hearing Loss**  
*Jay Rubinstein, MD, PhD, Moderator*  
*John Brigande, PhD*  
Oregon Health & Science University, Portland, OR  
*Jennifer Susan Stone, PhD*  
University of Washington, Seattle, WA  
*Hinrich Staecker, MD, PhD*  
University of Kansas Medical Center, Kansas City, KS
- 4:45 pm – 5:00 pm      Summary & Adjourn
- 6:30 pm – 10:30 pm      Off-Site Event