

Neuroaudiology Newsletter

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Publication Date:
September 1, 2015

Academy Research Conference @ AAA

The Audiology NOW! Convention of the American Academy of Audiology (AAA) will be held on April 13-16th and take place in Phoenix Arizona. As part of this meeting the Academy Research Conference (ARC) this year will feature translational research in the area of **Central Auditory Processing (CAPD)**. The program is sponsored by the NIH and AAA and will take place on April 13. This is an exciting conference that will cover a variety topics on central auditory processing disorder (CAPD) evaluation and treatment. Chairperson Frank Musiek along with committee members Doris Bamiou, Gail Chermak, David Moore, and Teri Bellis have recruited a highly sought after group of speakers for this program. This one day conference will feature the following speakers: **Kathleen Pichora-Fuller** from the University of Toronto, Mississauga, department of psychology; **Holly Fitch** from the University of Connecticut, department of Psychology; **Stephen Lomber** from the University of Western Ontario, departments of physiology and pharmacology; **Ken Hugdahl** from the University of Bergen, department of biological and medical psychology; **Jos Eggermont** from the University of Calgary, department of psychology; **Harvey Dillon** from the Australian National Acoustics Lab; and **Jeff Weihing**, from the University of Louisville School of Medicine, department of audiology. Students will have



(Pictured above: Kevin Ohlemiller, research associate professor in the Department of Otolaryngology and Alyssa Everett, student at The University of Arizona.)

T 35 Update

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Alyssa Everett and Angela Yung, students of Dr. Musiek at the University of Arizona completed their research training program at Washington University this summer. The NIDCD-funded T-35 research training program allows the students to present their poster work at the **American Auditory Society** in Scottsdale, Arizona. This conference will be from March 3-5 at the Chaparral Suites Hotel. Alyssa (pictured to the left with her mentor, Dr. Kevin Ohlemiller) will present on her findings of the relationship between PTS severity and changes in glucose transport in cochlear lateral wall while Angela will present her findings on how priming effects speech in noise perception in incongruent sentence conditions.

the opportunity to apply for scholarships to showcase their CAPD work. In addition, all basic and clinical investigators are encouraged to submit posters for the extensive poster session. Watch for more information from the American Academy of Audiology and or contact Meggan Olek= Molek@AUDIOLOGY.org.

The impressive lineup of speakers and presentation titles include:

Harvey Dillon, PhD	Deficit Specific Remediation for CAPD: Spatial Processing Disorders and other Specific CAPD Subtypes
Jos Egermont, PhD	Long-term Non-Traumatic Noise Exposure: A Cause of CAPD?
Holly Fitch, PhD	Animal Models of Neurodevelopment Disruption and Associated Acoustic Processing Outcomes
Ken Hugdahl, PhD	Speech Perception and Cognition: Update on Dichotic Listening
Stephen Lomber, PhD	Auditory Cortex Plasticity Following Hearing Loss
Kathleen Pichora-Fuller, PhD	Auditory and Cognition Processing in Older Adults
Jeffery Weihing, PhD	Auditory Training for Central Auditory Processing Disorder

Auditory Processing Disorders

November 20, 2015, the University of Arizona will host a one-day conference. The conference specifically is sponsored by the Speech, Language, and Hearing Sciences department and is titled **APD Diagnosis and Intervention: Practical Perspectives for Clinicians**. **Dr. Frank Musiek**, The University of Arizona, along with **Gail Chermak**, Washington State University, will lead this conference. Speech Language Pathologists, audiologists, those interested in APD, and anyone in the area should attend to learn more information on auditory processing disorders. Contact Cathy Fay at The University of Arizona for more information: cfay@email.arizona.edu

Upcoming Lectures

The California Academy of Audiology Conference will be held on September 10-12 in San Jose, CA. On September 10th, **Dr. Frank Musiek** will be presenting on New Horizons in Audiology: Dyslexia and the Vertebro-Basilar System.

The New Mexico Speech and Hearing Association Convention will take place on October 24-25 in Albuquerque, NM. **Dr. Frank Musiek** will feature presentations on auditory hallucinations, dyslexia, and the vertebro-basilar system.

Ph. D. Defense Summer 2015:



Jennifer E. Gonzales received a Ph.D. in Speech, Language, and Hearing Sciences with a focus in Audiology from the University of Connecticut in 2015. **Dr. Frank Musiek** was her major advisor. Previously, she received her B.A. in Communicative Disorders from California State University, Long Beach in 2010. Her current research and clinical interests include central auditory processing disorders, evoked potentials, tinnitus, auditory anatomy and physiology, diagnostics, and assistive listening devices. Her dissertation titled, "**The Onset-Offset N1-P2 Auditory Evoked Response in Individuals with High-Frequency Sensorineural Hearing Loss**" evaluated the N1-P2 cortical auditory evoked response in individuals with sensorineural hearing loss in comparison to individuals with normal hearing using longer durations of noise presented at dB sensation level (dB SL) intensity. A continuing challenge in audiology has been finding central auditory test procedures that are least affected by sensorineural hearing loss, and a key reason for this is that the effects of peripheral hearing loss on the central auditory nervous system are not well understood. The purpose of this research was to determine whether specific parameters used (i.e., type of noise, bandwidth of noise, intensity level of noise in dB SL) in obtaining the onset-offset N1-P2 auditory evoked response would produce similar results in both groups of individuals. If similar results between the hearing loss and control groups could be found, those parameters could potentially be used in evaluations of individuals with comorbid sensorineural hearing loss and central auditory complaints to determine the presence of true central auditory dysfunction.

This study produced results that are promising in this regard, and this has opened the door for future research evaluating the onset-offset N1-P2 auditory evoked response in individuals with central auditory processing disorder, or CAPD, to be explored.

Recent Publication

Title: Characteristics of Pediatric Performance on a Test Battery Commonly Used in the Diagnosis of Central Auditory Processing Disorder.

Source: *Journal of the American Academy of Audiology*, Volume 26, Number 7. July/August 2015

Authors: Jeffery Weihing, Linda Guenette, Gail Chermak, Mallory Brown, Julianne Ceruti, Krista Fitzgerald, Kristin Geissler, Jennifer Gonzalez, Lauren Brenneman, and Frank Musiek

Past Neuroaudiology Newsletters/Other Important Neuroaudiology Sites

- *March 2015 Newsletter:* <http://slhs.arizona.edu/wp-content/uploads/2015/03/Neuroaudiology-Newsletter.pdf>
- *May 2015 Newsletter:* <http://slhs.arizona.edu/wp-content/uploads/2015/04/MayNewsletter3.pdf>
- *July 2015 Newsletter:* <http://slhs.arizona.edu/wp-content/uploads/2015/07/JulyNewsletter.pdf>
- <http://musiek.faculty.arizona.edu/>
- *For weekly updates on new neuroaudiology articles refer to the Neuroaudiology section of Pathways on HHTM:* <http://hearinghealthmatters.org/pathways/>