

Neuroaudiology Newsletter

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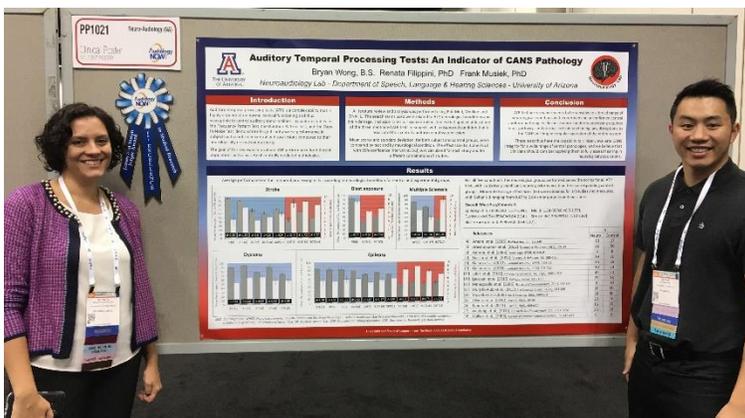
Lectures in Auditory Disorders and Sciences (LADS)-recap

Dr. Lomber discussed how deafness and blindness influenced plasticity of the brain's auditory cortex. In animal studies, it appears



that when the animal is rendered blind, there is the capacity of the auditory cortex to expand into the visual cortex. This most efficiently happens when the visual neural substrate's fundamental functions are similar to that of the auditory cortex substrate. This in turn

allows more, and perhaps better processing, making the auditory system more capable in the blind. In deafness, just the opposite is true. This work added substantive data to the strong notion that the blind have exceptional auditory abilities and the deaf have expanded visual skills. This intriguing presentation was very much appreciated by the audience as many questions followed! Pictured above from left (**Nicole Denny, Alyssa Everett, Frank Musiek, Lori Sommerfeld, Stephen Lomber, Aaron Whiteley**). Thank you Dr. Lomber for joining us at the University of Arizona on April 12, 2017.



Award Winning!

Bryan Wong and Renata Filippini won the **James and Susan Jerger Award for Excellence in Student Research!**

The research they are presenting is titled, Auditory Temporal Tests: An Indicator of CANS Pathology. This award was received at The American Academy of Audiology's annual AudiologyNOW! conference. See picture to the left (Renata on the left, Bryan on the right).

TEST YOUR AUDIOLOGY TRIVIA KNOWLEDGE

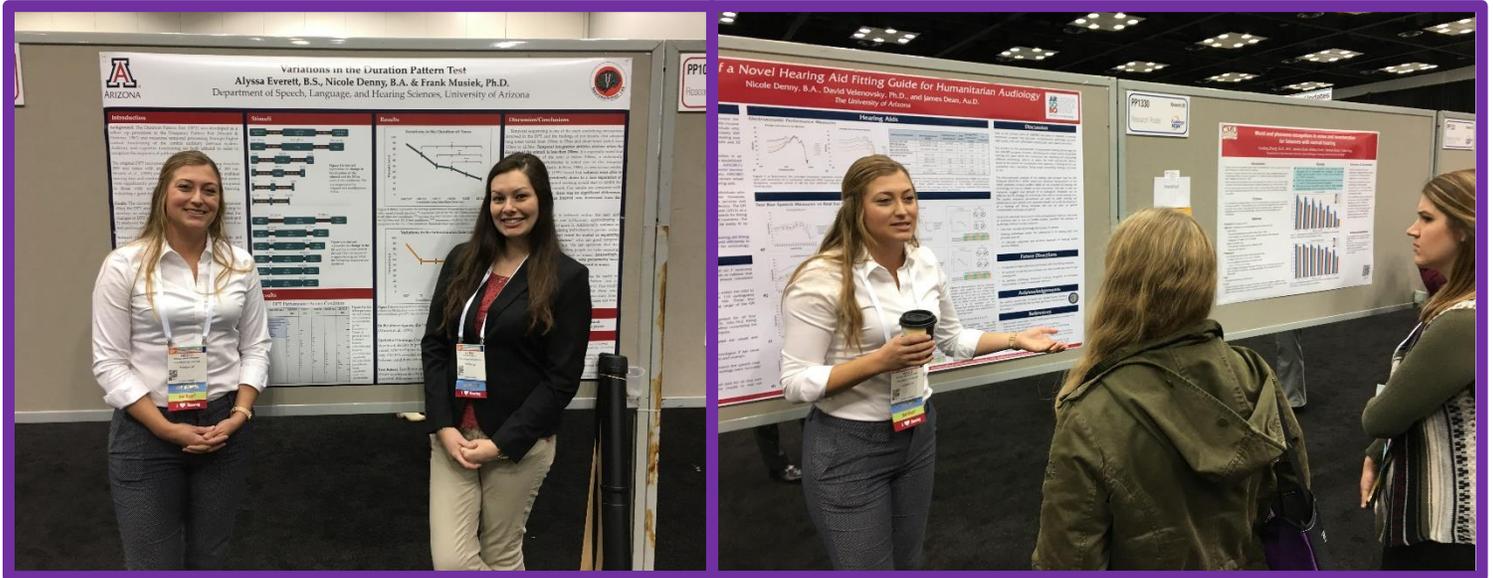
1) This classic book Edited by Jim Jerger has 2 editions, the first was published in 1963. What was the name of the book and when was the 2nd edition published?

2) Dan Geisler was the first to publish on this auditory evoked potential in 1958, what was it?

Find out how you did! Answers on the final page of this newsletter.

AudiologyNOW! Poster Sessions

The 2017 American Academy of Audiology had great representation from the University of Arizona. See below for some of our Neuroaudiology lab members! Top left: **Nicole Denny** and **Alyssa Everett**. Top right: **Nicole Denny**. Bottom: **Nicole Denny, Renata Filippini, Alyssa Everett, and Bryan Wong**.



Did you know?....

Vestibular migraine is one of the most common forms of migraine. Approximately 40% of migraine sufferers have vestibular problems associated with their headaches. These individuals, depending on their symptoms, may require partial to full vestibular work ups. The etiology of migraines is not known but many cases can be controlled.

Historical Vignette-Josef J. Zwislocki



Josef Zwislocki (pictured left) was born in Lwow, Poland in 1922 and is an extremely influential figure in the field of **research Audiology**. His extensive background is primarily focused in electrical engineering and **psychoacoustics**, with a Doctor of Science from the Federal Institute of Technology in 1948. From 1945 to 1951, Zwislocki was the Head of the **Electroacoustic Lab** in the Department of Otorhinolaryngology at the University of Basel, Switzerland. Then, Zwislocki moved to the United States where he became a fellow in the **Psychoacoustic Lab** at Harvard University. A few years later, Zwislocki became a Research Associate Professor of Audiology at Syracuse University.

Zwislocki became a critical figure in research and education at Syracuse University by establishing the Department of Bioengineering, Bioacoustics Lab in the School of Education, and doctoral program of neuroscience. Currently, Zwislocki holds 12 patents in his name, including several for **ear protection** against excessive noise.

A decorated researcher, Zwislocki is the recipient of numerous prestigious academic awards and honors. Among these are: First **Békésy Medal**, awarded by the Acoustical Society of America in 1985 and the **Carhart Memorial Lecture**, awarded by the American Auditory Society in 1992.

One of his many contributions to the field of Audiology was the **Zwislocki Coupler**, which was invented in 1970. Ideally, it reproduces the impedances of a typical adult human ear at the ear drum and is accepted by the American National Standards Institute (ANSI). He is also the inventor of the **Zwislocki acoustic bridge** – an objective measure of middle ear function and impedance.

Pathways Meeting at AAA

The annual Pathways meeting for CAPD was held at AAA, AudiologyNOW! 2017 conference with approximately 70 people in attendance. After the business meeting which included discussions about test batteries and reporting results as well as information regarding insurance coverage and related activities, the new educational program was initiated. Dr. Elaine Schochat of Sao Paulo University (Brazil) presented two intriguing case studies of central auditory dysfunction.

Pathways needs volunteers for the educational and test battery committees. If you are interested, contact Cydney Fox at cydneyfox@gmail.com

Did you know?....

In two major studies, the (auditory) middle latency response (MLR) was shown to be significantly larger in patients with tinnitus compared to those who did not have tinnitus.

Up-Coming Major Conferences

Conference	Date and Location	Dr. Musiek's Presentation
International Evoked Response Study Group	May 21-25: Warsaw, Poland	The Middle latency response (MLR) and disorders of the central nervous system
Poland Otolaryngology Society	May 26-28: Warsaw, Poland	Clinical application of the Gaps in Noise (GIN) test
International Conference on Auditory Cortex	September 10-15: Banff, Alberta, Canada	Is hidden hearing loss really hidden?

Past Neuroaudiology Newsletters

All past newsletters can be found at:
<http://musiek.faculty.arizona.edu/>

Recent Article of Interest

Abnormalities in Cortical Auditory Responses in Children with Central Auditory Processing Disorder; *Neuroscience*

A. Koravand, B. Jultras, & M. Lassonde

Recent Article of Interest

Auditory Processing in Children with Migraine: A Controlled Study; *Neuropediatrics*

L. M. Agessi, T. R. Villa, D. S. Carvalho, & L. D. Pereira

Audiology Trivia Answers

1) This classic book Edited by Jim Jerger has 2 editions, the first was published in 1963. What was the name of the book and when was the 2nd edition published?

Modern Developments in Audiology, 1973!

2) Dan Geisler was the first to publish on this auditory evoked potential in 1958, what was it?

THE MLR!!

Check out the next newsletter for more audiology trivia!