Sarah Beatty, pictured right, is a member of the neuroaudiology lab and a 3rd year audiology doctoral student at the University of Arizona. She was recently selected as a trainee for the University of Arizona Leadership Education in Neurodevelopmental and Related Disabilities (ArizonaLEND) program. Sarah will complete 300 hours in the areas of research, leadership, and life course theory with a focus in pediatric and maternal demographics.

Way to go Sarah!

AUDIOLOGY TRIVIA!

Test your knowledge (Answers on the last page):

1) Jerger, Shedd, & Harford published one of the most cited articles in our field, which was about the diagnostic use of the short increment sensitivity index (SISI). When was this article first published?
   a) 1959 b) 1963 c) 1965 d) 1969

2) The famous psycho-acoustician S.S. Stevens was affiliated with which of the following universities?
   a) Iowa b) Northwestern c) NYU d) Harvard

2) Maximum contraction of the acoustic reflex results in approximately how many dB of sound attenuation?
   a) 4–6 b) 11–13 c) 20–22 d) 31–35
RESEARCH AWARDS

Members of the Neuroaudiology Lab, Alyssa Everett, AuD, CCC–A and Bryan Wong, BS were selected to receive the Audiology/Hearing Science Research Travel Award (ARTA) to attend the 2019 American Speech–Language and Hearing Association Convention in Orlando, FL taking place on November 21–23.

Dr. Everett will also be presenting a poster at this convention, The Role of Directionality for Aided Speech Understanding in Complex Listening Environments.

Additionally, Bryan Wong also received the Sadanand Singh Memorial Scholarship through the American Academy of Audiology Foundation.

Congratulations!!

DID YOU KNOW???

Recently, speech–in–noise testing has become quite popular in routine hearing and hearing aid evaluations. This is a move in the right direction to better evaluate the possible deficits of function in the auditory system. Interestingly, speech–in–noise was first used in the assessment of central auditory disorders in 1966 (Dayal et al.,) and by Morales–Garcia & Poole, 1972; Noffsinger et al., 1972.

In 1970, Carhart and Tillman urged audiologists to use speech–in–noise testing to evaluate the auditory system. It was nearly 25 years later that these tests were beginning to be used in routine hearing and hearing aid evaluations.
The Brain Recovery Project held their annual symposium in Cleveland on July 18–20, 2019. This symposium, titled, "Functional Outcomes of Resective Pediatric Epilepsy Surgery," brought together neurologists, neurosurgeons, psychologists, occupational and physical therapists, speech pathologists, audiologists, orthopedists and biostatisticians who deal with individuals undergoing hemispherectomy and temporal lobectomy for the treatment of seizure disorder. There appears to be an increasing prevalence of hemispherectomy and temporal lobectomy among those with epilepsy. This presents a significant problem for the rehabilitation of these individuals. Though many advances have been made in recent years, there are still a number of clinical and research problems that need to be addressed. It is only recently that the audiological implications of brain resection have been somewhat elucidated for this population.

As emphasized in this symposium, early reports of major brain surgery having little effect on hearing need to be, are are being, readdressed. Though the research is somewhat scant, several excellent contributions have shown auditory deficits in individuals who undergo hemispherectomy operations. Clearly, there are deficits in dichotic listening, speech in noise tasks, and sound localization. The pure tone audiogram is essentially unaffected, as one would expect, given the site of lesion in these patients. Another clear trend that exists in these patients is that, the earlier the operation, the better the recovery. The research also shows a great variability in the performance of post-hemispherectomy patients on these auditory tasks. While some of these patients do reasonably well, some show rather marked deficits in these kinds of auditory processing tests. The need for more research in the audiological domain for these patients undergoing this kind of surgery is somewhat overwhelming. For reasons unknown, little interest has been shown by the audiological research or clinical community to look at these patients, who are dearly under-served.
NEUROAUDIOLOGY/CAPD TIDBITS

A REA, or right ear advantage, is commonly noted in dichotic listening. However, it is important to understand that not all normal listeners demonstrate a REA. Generally speaking, up to 15–20% of right-handed people do not have a REA (see Bryden, 1988).

Extremely poor performance for one ear on a dichotic listening task may indicate the possibility of auditory neglect. This of course, needs to be supported by history and other diagnostic tests. Reports of auditory neglect have shown to complete or near-complete extinction of responses from one ear (usually the left) for dichotic listening (Gokhale et al., 2013).

Sometimes overlooked in helping children with CAPD is the use of encouragement and positive attitude towards them. This kind of attitude needs to be applied both at home and school. These children often suffer from poor self-esteem, which in turn negatively influences their desire to communicate, attend and put forth good effort. Counseling parents and teachers on building self-esteem in these children is critical. Approaches for confidence building may include: 1) focusing on the children's strengths and interests, 2) creating situations for comfortable socialization, 3) motivating them to try new things, minimizing failures, but not excluding them, 4) creating comfortable communication situations with encouragement or dialogue, and 5) encouraging a realistic complimentary environment for the child.

PALM SPRINGS HEARING SEMINARS

An exciting event is being held this year in Palm Springs, CA on December 6–7, 2019: 40 years of Palm Springs Hearing Seminars. These seminars offer Continuing Educational Units that are aimed towards both clinicians and researchers. The Hearing Seminars offer education on research and technology updates pertaining to the development of the auditory system, causes of otopathologies, potential regenerative therapies for hearing loss, and advancements in hearing aid technologies. An amazing collection of speakers will be present during this 2 day event. Below are just a few examples of the engaging seminars in Palm Springs:

Alan Cheng–Development of the Inner Ear; What can we learn from it?
Allen Ryan–The Life, Death, and Afterlife of the Hair Cell
Frank Musiek–Auditory Hallucinations: An emerging audiological opportunity AND 40-year Perspective: Role of diagnostics in hearing healthcare
Arthur Boothroyd–Self-Fitting Hearing Aids
Rupa Balachandran–Establishing an OTC Model in Your Clinic

For more information or to register, go to: www.palmspringshearingseminars.com
UPCOMING CONFERENCES

<table>
<thead>
<tr>
<th>Conference and Location</th>
<th>Dates</th>
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<tr>
<td>CAPD Boot Camp, Vancouver, Canada</td>
<td>September 13-14</td>
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<tr>
<td>International Guild of Auditory Processing Specialists Conference, Kansas City, MO</td>
<td>September 26-28</td>
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<tr>
<td>American Speech-Language and Hearing Association Convention, Orlandp, FL</td>
<td>November 20-23</td>
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<tr>
<td>Acoustical Society of America, San Diego, CA</td>
<td>December 2-6</td>
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<tr>
<td>Palm Springs Hearing Seminar, Palm Springs, CA</td>
<td>December 6-7</td>
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RECENT PUBLICATIONS OF INTEREST


TRIVIA ANSWERS!

1) The first article was published in (A) 1959.
2) S.S. Stevens was affiliated with (D) Harvard.
3) The maximum contraction of the acoustic reflex (middle ear muscle reflex) results in about (C) 20–22 dB of sound attenuation.

Past Neuroaudiology Newsletters
All past newsletters can be found at: http://musiek.faculty.arizona.edu/