HAPPY SUMMER!

It is a blazing 105 degrees and climbing here at The University of Arizona, perfect weather for getting our mind juices flowing!...in a pool of course. Be careful of barotrauma as we dive into the mid-summer months. In this newsletter, you will be able to test your knowledge, learn about 2018–2019 upcoming conferences, review some facts about audiology, and more! Stay tuned for September’s issue.

COMING VERY SOON

The 2nd edition of “The Auditory System: Its Anatomy, Physiology, and Clinical Correlates” by Musiek and Baran, Plural Publishing, San Diego is due to be released this month!

AUDIOLOGY TRIVIA!

Test your knowledge (Answers on last page):

1) Ernest Glen Wever, the famous auditory physiologist, worked most of his career at which University?

Was it: a) Northwestern, b) Boston University, c) Princeton, d) Dartmouth?

2) In 1959, Ira Hirsh published an article, which was one of the first of its kind. The article had to do with the perception of what?

Was it: a) Speech segments, b) Temporal order, c) Sub-audible sounds, d) Ultra high frequency tones?

3) Which have the most inner hair cells?

Is it: a) humans, b) cats, c) mice, d) dogs?

4) What audiological test uses the symbol, π (pi), for a test condition designation?

Is it: a) MLDs, b) ABR, c) Speech—in—noise, d) Dichotic digits
UPCOMING CONFERENCES

<table>
<thead>
<tr>
<th>Conference</th>
<th>Date and Location</th>
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<tr>
<td>Audiology: Central Auditory Processing Disorders</td>
<td>October 10-22, 2018: ASHA Online</td>
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<td>The ASHA Convention</td>
<td>November 15-17, 2018: Boston, MA</td>
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<tr>
<td>Association for Research in Otolaryngology</td>
<td>February 9-13, 2019: Baltimore, MD</td>
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<td>American Auditory Society</td>
<td>February 28-March 2, 2019: Scottsdale, AZ</td>
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<td>American Academy of Audiology (AAA)</td>
<td>March 27-30, 2019: Columbus, OH</td>
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DID YOU KNOW???

There is evidence that individuals who are tone deaf may be missing a major fiber bundle in the right hemisphere. In a high proportion of individuals suffering from tone deafness, it appears that a bundle of nerve fibers in the superior portion of the arcuate fasciculus may be depleted or absent.

This fiber bundle is known to facilitate connectivity between auditory and speech areas of the brain—at least this is the case in the left hemisphere. It has been somewhat unclear exactly what the right arcuate fasciculus does. Therefore, this finding may also provide some insight regarding the function of the nerve fiber tract. [Loui, P; Alsop, D; Schlaug, S (2009). “Tone Deafness: A New Disconnection Syndrome?” Journal of Neuroscience, 29(33). 10215–10220.]
AWARENESS IS KEY

Recent research by Howard Hoffman and colleagues determined the prevalence of hearing loss for people aged 20 to 69 and found a decrease. Surveys from 2011–2012 were compared to similar surveys from 1999–2004 and showed a prevalence change of adult hearing loss from 16 to 14 percent. One conclusion the authors drew was that the needs for hearing health care will continue to increase as the population ages and grows.


DID YOU KNOW???

The outer hair cells (OHCs) in the human cochlea reach a number of approximately 12,000. At the basal end of the OHC, the length is about 20 micrometers and at the apical end, the length is about 50 micrometers. There are 100–150 stereocilia per 1 OHC. There are about 2,500 inner hair cells (IHCs) in the human cochlea. There are 40–60 stereocilia per 1 IHC and they are longer at the apical end compared to basal end of the cochlea (Yost, 1985).

Past Neuroaudiology Newsletters

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

Recent Article of Interest

Auditory Processing Performance of the Middle-Aged and Elderly: Auditory or Cognitive Decline; Journal of the American Academy of Audiology

C. Murphy, C. Rabelo, L. Marcela, L. Mansur, D. Bamiou, E. Schochat

TRIVIA ANSWERS!

1) Ernest Glen Weaver worked most of his career at (C) Princeton University
2) Ira Hirsh's 1959 article had to do with (B) Temporal Order
3) (A) Humans have the most inner hair cells
4) The audiological test that uses the symbol for pi as a test condition is (A) MLDs