WAISMAN CENTER
UNIVERSITY OF WISCONSIN-MADISON

7th Annual

Waisman Center Day with the Experts: Cochlear Implants

Learn about the latest advances in research and clinical services and hear from a panel of experts—cochlear implant users and family members.

Saturday, June 2, 2018 | 9:00 a.m. - 12:15 p.m.

(Complimentary coffee & bagels at 8:30 a.m.)

9:00–9:15 a.m. **Overview and Highlights of Cochlear Implant Research at UW-Madison**
Ruth Litovsky, PhD, Professor, Department of Communication Sciences and Disorders, Department of Surgery and Waisman Center Investigator

9:15–9:40 a.m. **Brain Exercises After Cochlear Implantation**
Inyong Choi, PhD, Assistant Professor, Department of Communication Sciences and Disorders and Department of Otolaryngology, Head and Neck Surgery, University of Iowa Hospitals and Clinics, University of Iowa
Cochlear implants (CIs) have been established as a standard treatment for profound hearing loss. However, speech-understanding in CI users varies over a wide range. Speech perception, especially when it is in a noisy background, requires high-level perceptual and cognitive processes including auditory grouping, attention, and phonemic feature extraction. These "brain" mechanisms may present targets for training; we might be able to exercise our brain to better understand speech sounds. Researchers aim to develop and validate focused training protocols that engage perceptual and cognitive targets for auditory learning in CI users. This presentation will introduce recent advances in such auditory rehabilitation paradigms.

9:40–10:05 a.m. **Eye Gaze Behavior as a Window into Binaural Measures in Cochlear Implant Recipients**
Z. Ellen Peng, PhD, Research Associate, Binaural Hearing and Speech Lab, Waisman Center
Bilateral cochlear implants (CIs) have become more common as a standard of care. Much research has been devoted to understanding the extent to which bilateral CI recipients can integrate information from both ears, and therefore use "binaural" hearing to localize sounds in real-world listening. This talk will describe novel approaches, such as capturing eye gaze movement with an eye-tracking camera, to study how well recipients of bilateral CIs can access binaural hearing. This approach reveals information not only about whether recipients are accurate about source direction but also the time-course the brain takes when processing such auditory cues.

10:05–10:20 a.m. • **BREAK** •

10:20–10:45 a.m. **Preventing Age-Related Hearing Loss and Its Impact on Cognition and Quality of Life**
Karen J. Cruickshanks, PhD, Professor, Department of Population Health Sciences and Department of Ophthalmology and Visual Sciences, University of Wisconsin-Madison
Many older adults experience changes in hearing as they age which may make communicating with loved ones difficult and negatively impact quality of life. In recent years, there has been growing awareness of the barriers people face in getting help with hearing problems and concern about reports suggesting that age-related hearing loss may increase the risk of developing dementia. Research at UW-Madison conducted in partnership with the people of Beaver Dam, Wisconsin, has contributed to identifying ways to slow or prevent age-related hearing changes and to understanding the impact of hearing loss on the lives of older adults.

10:45–11:30 a.m. **Community Panel**—A panel of experts including cochlear implant users and family members
Moderated by Ruth Litovsky, PhD, Professor, Department of Communication Sciences and Disorders, Department of Surgery and Waisman Center Investigator

11:30 a.m.–12:15 p.m. **Clinician Panel**—Question and answer session with a panel of clinicians

Please register at waisman.wisc.edu/events/experts-cochlear-implants-2018/

Sponsored by the **Department of Surgery, Division of Otolaryngology**, *and the* **Friends of the Waisman Center**
Hosted by the **Department of Communication Sciences and Disorders** *and the* **Waisman Center, University of Wisconsin-Madison**

University of Wisconsin Department of Surgery
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