



6<sup>th</sup> 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 3, 2017 | 9:00 a.m. - 12:15 p.m.**  
(Complimentary coffee & bagels at 8:30 a.m.)

9:00–9:30 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*

9:30–10:00 a.m.

**Beyond Speech Perception: Human Ecology and How It Might Influence Cochlear Implant Outcomes**

*Camille Dunn, PhD, Director, Cochlear Implant Program, and Assistant Professor, Department of Otolaryngology Head and Neck Surgery, University of Iowa*

The past 35 years of cochlear implant (CI) research have focused on outcomes primarily related to speech perception. Candidacy recently has extended into the less severely impaired population, including hybrid (acoustic-plus-electric) and unilateral hearing loss. The potential for improvement/change in domains other than speech perception can inform both policy and rehabilitative decision-making. In hearing health care, success with intervention is as much related to the anatomy/physiology of the individual as it is to the environmental and personal (i.e., ecological) factors that make each individual unique. To date, most cochlear implant (CI) research has focused on determining the effect of anatomical and physiological factors on laboratory outcomes, such as speech perception. We recognize, however, that the real-world outcomes exhibit great heterogeneity, which is likely due, in part, to the broader range of environmental and personal, contextual (i.e., ecological) underpinnings in the hearing impaired population. As has been the case with hearing aids (HA), much variance can be accounted for by examining individual ecological factors. Very little is understood about (1) the characteristics of ecological factors of the CI population, (2) the influence that ecological factors have on the heterogeneity of real-world outcomes of this population, and (3) how this influences changes over time. With the expanded indications for CI, quantifying the ecological factors that parlay into real-world outcomes in CI is critical because real-world outcomes ultimately determine societal burden and policy. This presentation will describe how ecology relates to hearing impaired individuals and how a better understanding on its influences can help researchers understand its ramifications in outcomes.

10:00–10:15 a.m.

••••• **BREAK** •••••

10:15–10:45 a.m.

**State-of-the-Art in Implantable Auditory Devices**

*Joseph Roche, MD, Assistant Professor, Division of Otolaryngology-Head and Neck Surgery*

In recent years there have been tremendous advances in how cochlear implant devices function, in order to enable people with hearing impairment to communicate, hear and understand speech. For example, there has been innovation in the surgically implanted electrode as it enters the cochlea and stimulates the hearing nerve (auditory nerve). In addition, the program that are used to process speech and music sounds, and present those sounds to the listener, are undergoing important change, especially with regard to mobile technology. In addition, there are new and innovative implantable devices that do not enter the cochlea, but rather provide stimulation through bone conduction, known as the bone anchored hearing aids (BAHA). This is an exciting time with clinical options that are more inclusive of a growing number of patients who experience various amounts of hearing loss.

10:45–11:30 a.m.

**Clinician Panel**—Question and answer session with a panel of clinicians

11:30 a.m.–12:15 p.m.

**Community Panel**—A panel of experts including cochlear implant users and family members

*Ruth Litovsky, PhD, Professor, Department of Communication Sciences and Disorders, Department of Surgery and Waisman Center Investigator*

**Please pre-register at [waisman.wisc.edu/events-experts-ci2017.htm](http://waisman.wisc.edu/events-experts-ci2017.htm)**

*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*



Wiley Conference Center, T216, Second Floor, North Tower | 1500 Highland Avenue | Madison, WI  
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For additional details, call 608.263.5837 or email [palumbo@waisman.wisc.edu](mailto:palumbo@waisman.wisc.edu)