



**WAISMAN CENTER**  
UNIVERSITY OF WISCONSIN-MADISON

Fourth 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, May 30, 2015 | 9:00 a.m. - 1:00 p.m.**  
*(Complimentary coffee & bagels at 8:30 a.m.)*

**9:00–9:30 a.m.**

**Welcome and Introduction to the Waisman Center**

*Albee Messing, VMD, PhD, Professor of Neuropathology, Waisman Center Interim Director*

**9:30–10:00 a.m.**

**Recent Advances in Cochlear Implants**

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

Nearly 350,000 people world-wide have cochlear implants. Many patients perform very well, with excellent speech recognition and knowledge about everyday sounds. Many young children attain language at rates that are near-normal. Numerous changes in clinical care emerged recently which change the type of patient eligible for cochlear implantation and the type of auditory implants available. The approaches include bilateral cochlear implants, implantation in patients with single-sided deafness, “hybrid hearing” which integrates cochlear implants with hearing aids, and auditory brainstem implants. In addition, this talk introduces exciting, new ways for neural imaging of the brain in cochlear implant users using laser technology.

**10:00–10:30 a.m.**

**Improving Signal Processing for Cochlear Implants**

*Ray Goldsworthy, PhD, Associate Professor, Department of Otolaryngology, University of Southern California*

A cochlear implant is a biomedical device that restores a degree of hearing to profoundly deafened individuals. Cochlear implant technology has evolved to the point that the majority of recipients readily understand speech in quiet environments; consequently, scientific emphasis is increasingly placed on the more challenging problems of speech reception in noise and music performance. This presentation discusses approaches with demonstrated potential for improving hearing for cochlear implant users.

..... **BREAK** .....

**10:45–11:15 a.m.**

**Hearing Impairment and Listening Effort: How Do We Measure It and Why Does It Matter?**

*Matthew Winn, AuD, PhD, Postdoctoral Researcher, Waisman Center*

Hearing impairment is not simply a matter of hearing at a low volume nor a matter of getting fewer words correct when listening in the sound booth. Understanding speech requires more effort for a person with hearing loss, and that effort has considerable impact on a person’s daily life, including work, socialization, family life and health. Unfortunately, it is rare to find measures of effort in audiology clinics. This presentation discusses research that identifies some important consequences of elevated listening effort in people with hearing impairment.

**11:15 a.m.–12:15 p.m.**

**Lunch**—Optional, \$5 box lunches (Cousins Subs) available for purchase. Gluten free options available.  
**Optional question and answer session with a panel of clinicians.**

**12:15–1:00 p.m.**

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

*Moderated by Sam Gubbels, MD, FACS, Assistant Professor, Division of Otolaryngology-Head and Neck Surgery, Section of Otology and Neurotology and Waisman Center Investigator*

**Please pre-register at**  
**[waisman.wisc.edu/events-experts-CI2015.htm](http://waisman.wisc.edu/events-experts-CI2015.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*



University of Wisconsin Department of Surgery  
**DIVISION OF OTOLARYNGOLOGY-  
HEAD & NECK SURGERY**  
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For additional details, call 608.263.5837 or email [palumbo@waisman.wisc.edu](mailto:palumbo@waisman.wisc.edu)