



WAISMAN CENTER
UNIVERSITY OF WISCONSIN-MADISON

9th Annual
Virtual

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, April 23, 2022 | 9:00 a.m. - 10:30 a.m. via Zoom

9:00–9:05 a.m.

Welcome

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

9:05–9:25 a.m.

Two Ears, One Brain: Identifying Benefits and Remaining Limitations of Cochlear Implant Use in Children

Karen Gordon, PhD, Senior Scientist and Audiologist, Cochlear Implant Program, Department of Otolaryngology, Sick Kids Hospital, University of Toronto, Canada

Cochlear implantation has resulted in remarkable gains in hearing and spoken language for children with profound deafness. We have learned that early cochlear implantation in children is very important for development of brain pathways. We have also learned that providing hearing to both ears offers benefits over hearing from one ear alone. Bilateral cochlear implantation can be done safely in very young children with excellent outcomes and yet there are still limitations for how the developing auditory system integrates input from the two devices. These challenges reduce spatial hearing abilities in children with bilateral cochlear implants which limits the potential benefits for their social and academic growth. Our research is examining ways to help children's auditory systems better recognize and use input from bilateral cochlear implants in an effort to support development of spatial hearing. We think this is an important step to overcoming remaining hearing challenges in children who are deaf.

9:25–9:45 a.m.

Hearing with One Cochlear Implant and a Contralateral Hearing Aid: How Does the Brain Make it Work?

Sara Misurelli, PhD, AuD, CCC-A, Assistant Professor, Director of Audiology, Division of Otolaryngology-Head & Neck Surgery, Clinical Audiology Supervisor, UW Health

Some adults have hearing loss severe enough to qualify for a cochlear implant. Although many of these individuals have hearing loss in both ears, they will receive a cochlear implant in only one ear, while continuing to use a hearing aid in the contralateral ear. This is known as bimodal hearing, in which individuals receive bilateral auditory input from two different modes of stimulation. This presentation discusses approaches to bimodal hearing.

9:45–10:05 a.m.

The Relationship between Listening in Noise and Listening Effort among Cochlear Implant Users who have Single-Sided Deafness

Lukas Suveg, AuD, Doctoral Student, Department of Communication Sciences & Disorders, UW-Madison

Listeners with Single-Sided Deafness (SSD) have one hearing ear and one deaf ear. Sometimes the hearing ear thresholds are in the normal-hearing range. Even so, SSD listeners report that understanding speech in noise requires a great deal of effort. A growing number of patients with SSD are opting to receive a cochlear implant (CI) in their deaf ear to regain access to sound in both ears. Researchers are studying this group of SSD CI listeners to learn about when the CI improves their speech understanding and when it may interfere. Specifically, this study investigated whether the difference between an SSD CI listener's acoustic and CI ears influences the amount of binaural improvement they demonstrate, and whether it is accompanied by a reduction in listening effort.

10:05–10:30 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,

Please register at waisman.wisc.edu/events/experts-cochlear-implants-2022/

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*

**Waisman Center | 1500 Highland Avenue | Madison, WI
EVERYONE WELCOME**

For additional details, call 608.279.7460 or email palumbo@waisman.wisc.edu