PRESENTERS & MODERATOR

Camille Dunn, PhD, joined the Department of Otolaryngology – Head and Neck Surgery at the University of Iowa in 2003 where she is an assistant professor and the director of the Cochlear Implant Program. She received her Masters of Science in audiology from the University of Nebraska-Lincoln in 1998 and her Doctor of Philosophy from University of Nebraska-Lincoln in 2003. Dunn holds her audiology license from the state of Iowa and maintains her Certificate of Clinical Competence in Audiology (CCC-A). She is a member of the American Speech-Language-Hearing Association (ASHA) and the American Cochlear Implant Alliance (ACIA). She is a principal investigator on an NIH-funded grant studying hybrid cochlear implants and an investigator on a Department of Defense grant studying hybrid cochlear implants in veterans.

Ruth Litovsky, PhD, is a Waisman Center investigator and professor in the Department of Communication Sciences and Disorders with a joint appointment in the Department of Surgery, Division of Otolaryngology - Head and Neck Surgery at UW-Madison. She directs the Binaural Hearing and Speech Lab at the Waisman Center. Her research questions focus on how people are able to hear in noisy environments and how to improve processing of cochlear implants so that children and adults who are deaf and rely on cochlear implants can maximize their communication success. Her research program is funded by the NIH-NIDCD.

Bryn Olson-Greb, MS, CCC-SLP, received her BA in communication sciences and disorders and MS in speech-language pathology from UW-Madison. Bryn is a pediatric clinical speech pathologist in the UW Voice and Swallowing Clinics. Her practice includes speech and language assessment and therapy for children with hearing loss, as well as assessment and treatment of children with voice disorders, swallowing disorders, resonance disorders, craniofacial anomalies, and disorders of the upper airway.

Jennifer Ploch, MA, CCC-A, is a senior clinical audiologist at UW Hospital and Clinics and American Family Children's Hospital. She obtained her undergraduate degree from UW-Madison and her master's degree from Northwestern University. After more than 22 years of practicing audiology at UW-Madison, she has developed primary interests in the areas of: cochlear implants, pediatric assessment, evaluation of the balance system, and providing hearing aid services to both adults and children.

Joseph Roche, MD, is board certified by the American Board of Otolaryngology – Head and Neck Surgery and specializes in otology, neurotology and skull base surgery. His specialty areas include: diseases and disorders of the ear, facial nerve, vestibular system, auditory system, hearing restoring and skull base surgery. Roche completed medical school at the Medical College of Wisconsin (2007), his residency in otolaryngology at the University of North Carolina (2014) and fellowship in otology, neurotology, and skull base surgery at the University of Iowa (2016). As an otologist and neurotologist, Roche provides comprehensive ear and hearing related care to patients of all ages, from infants to adults, including the implantation of cochlear and osseointegrated hearing devices. He is an assistant professor of otolaryngology in the Division of Otolaryngology within the Department of Surgery. His research interests include outcomes research after cochlear implantation, cholesteatoma removal and skull base surgery. Additionally, he has an active interest in investigating the mechanisms and consequences of hearing loss in the peripheral and central auditory system and the benefits that treatment of hearing loss provides.



Saturday, June 3, 2017

9:00 a.m. - 12:15 p.m.

John D. Wiley Conference Center

Waisman Center, University of Wisconsin-Madison

Learn about the latest advances in research and hear from a panel of experts including individuals with cochlear implants and family members

Sponsored by the Friends of the Waisman Center and the Department of Surgery, Division of Otolaryngology

Hosted in partnership with the Department of Communication Sciences and Disorders





SCHEDULE

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, 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 Cl 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.

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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 programs 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 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. *Moderated by Ruth Litovsky*.

COMMUNITY PANELISTS

- Pam Holmes is the executive director of Consumer & Regulatory Affairs & Captel Customer Service at Ultratec/Captel, Inc. where she has worked for over 30 years. She has served political appointments for two U.S. presidents and now serves on the FCC Disability Advisory Committee as co-chair of the Relay and Equipment Subcommittee. Her hearing loss was identified at the age of 13, and she wore binaural hearing aids regularly until she got a cochlear implant three years ago. She went from what became 0-4 percent speech discrimination with two hearing aids, to 95% speech comprehension based on listening in a quiet setting over a period of 4-6 months with her Cl. A profound hearing loss for much of her life has not stopped Pam from accomplishing what she wants to do. Where she previously used a sign language interpreter for meetings, she can now hold any conversation without an interpreter. Pam was the first Captel captioned telephone user in 2001. She still uses Captel today, but now uses the Bluetooth phone clip which provides terrific audio input and relies on captions as needed for clarity.
- Jackie Mihelcic, age 56, lives in Platteville, Wisconsin. She experienced profound hearing loss in the late 1990s due to nerve damage, presumably caused by a virus. In 2013, she had a hip replacement and developed an infection six months later. Doctors administered vancomyacin and completed a second surgery for a debridgement. Upon waking, Jackie could not hear the nurse. In 2014, she underwent bilateral cochlear implant surgery. Only expecting to hear sound, she was blessed with hearing conversation. She is an electrical engineer and hopes to return to work soon after healing from the hip surgeries. Crafts, entertaining, reading and swimming are just a few of her favorite hobbies.
- Alyssa Wciorka attends UW-Madison where she is double majoring in psychology and communication sciences and disorders. She was diagnosed with severe to profound hearing loss at 18 months and got her first implant at two years old. After using a hearing aid on her other ear with negligible results, she underwent surgery for her second implant when she was 10 years old. She aims on going to graduate school to become an audiologist with plans to specialize in either pediatric or cochlear implant audiology. Alyssa enjoys listening to music. Her favorite part about having cochlear implants is having a personal connection with her chosen field of study and educating others about cochlear implants.
- Mark David Wood lives in the northern suburbs of Chicago and will be entering the eighth grade next fall. Mark David was born with profound hearing loss in 2004, to parents David and Tatianna. He received his first implant at the age of 18 months. He got his second implant about a year later. Starting at age three, he attended Child's Voice School in Wooddale, Illinois. Child's Voice is a listening and spoken language program for children with hearing loss. Mark David made excellent progress in his early years, so much so that he entered the local mainstream school at age six, skipping first grade altogether. While his parents may have been concerned about the transition, Mark David has had nothing but success since then. He participates in the school chorus, plays soccer, water polo, is wicked fast with a Rubik's cube, enjoys a good game of chess, and can often be found reading or doing origami when he is not running around outside with his friends.

If you have questions for the panel, please write them on the enclosed insert.

At 10:00 a.m., Waisman Center staff will collect these forms. This will make it possible for the panelists to select initial questions to answer and have time to prepare responses.