Towards Hearing Restoration
concepts, challenges and progress

Organized by the Center for Comparative and Evolutionary Biology of Hearing, of the University of Maryland

This event is partially sponsored by Otonomy and Decibel therapeutics.

Program

8:00-8:40  Gathering and Continental Breakfast
8:40-9:00  Opening Remarks
Ronna Hertzano, MD, PhD
University of Maryland School of Medicine
E. Albert Reece, MD, PhD, MBA
Dean, University of Maryland School of Medicine
Catherine Carr, PhD
University of Maryland, College Park

9:00-9:45  From Development to Degeneration
An overview of critical steps in inner ear development, and review of the status of the inner ear in the deafened individual
Matthew Kelley, PhD
Section on Developmental Neuroscience, NIDCD, NIH

9:45-10:30  Hair Cell Regeneration: Lessons From Other Species
Hair cells can regenerated in the chick basilar papilla and lateral line but not in mammals; The road towards regeneration in Human
Jennifer Stone, PhD
Virginia Merrill Bloedel Hearing Research Center
University of Washington, Seattle

10:30-11:00 Coffee Break

11:00-11:40  Stem Cell Research for Hearing Restoration
What are stem cells? Why study organoids/stem cells? What has been done successfully so far, how does this apply to patient care?
Eri Hashino, PhD
Indiana University School of Medicine

11:40-12:20  Hair Cell Regeneration In-Vivo in Mouse
Accepted mouse models for hair cell regeneration, the DTR mouse, in-vivo gene transfer to mice, and how does this apply to patient care?
John Brigande, PhD
Oregon Hearing Research Center, OHSU

12:20-1:00 Lunch Break
1:00-1:35  Transcription Factors as Drivers of Cell Fate
What are transcription factors? Why and how are they used in regenerative studies? How does it apply to patient care?
Ronna Hertzano, MD, PhD
University of Maryland School of Medicine

1:35-2:10  Gene Editing for Hearing Restoration
What is gene editing? How can it contribute to hearing restoration? Gene editing and the FDA - is it an approved therapeutic?
Wade Chien, MD, PAMS
Johns Hopkins University; NIDCD, NIH

2:10-2:45  Hearing Is Not Just Hair Cells
Thomas Caote, PhD
Georgetown University

2:45-3:30  Clinical Panel: Bridging the Gap - Critical Steps and Questions in Translating from the Bench to the Bedside
David Eishesman, MD,
University of Maryland School of Medicine
Yuri Agrawal, MD, MPH,
Johns Hopkins University
Michael Hoa, MD, NIDCD,
NIH and Georgetown University
Pamela Roehn, MD, PhD,
Temple University
Wade Chien, MD,
NIDCD, NIH and Johns Hopkins University
Ronna Hertzano, MD, PhD,
University of Maryland School of Medicine

3:30-3:40 Closing Remarks
Sandra Gordon-Salent, PhD
University of Maryland, College Park

https://cebh.umd.edu/