Wideband Acoustic Immittance (WAI) Workshop

PRESENTER BIOS:

Lisa Hunter, Ph.D.

Dr. Lisa Hunter is the scientific director for Audiology in the Communication Sciences Research Center at Cincinnati Children's Hospital Medical Center, and a professor of Otolaryngology and Communication Sciences and Disorders at the University of Cincinnati.

She has more than 25 years of pediatric clinical, research, and teaching experience. A graduate and former faculty member of the University of Cincinnati and the University of Minnesota, she developed and directed the AuD program at the University of Utah. She was a visiting scientist at the Karolinska Institute in Stockholm, Sweden, and has volunteered in Kenya on audiologic missions at a school for the deaf.

She has authored more than 90 published articles, chapters, and books in pediatric audiology and frequently lecture nationally and internationally, as well as serve on expert panels and task forces. She is currently conducting studies on a range of pediatric hearing loss, funded by the National Institute on Deafness and Other Communication Disorders and the Centers for Disease Control (CDC). Dr. Hunter also serves as chair of the Accreditation Commission for Audiology Education (ACAE).

Dr. Beth A. Prieve, Ph.D., CCC-A, licensed audiologist in the State of NY

Dr. Prieve completed her Bachelor of Science degree in Speech/Hearing Science in 1981 and pursued a masters degree in Audiology in 1983 at the University of Minnesota. In 1989, Dr. Prieve obtained her Ph.D degree in Audiology/Hearing Science at the University of Iowa, and continued on to a post-doctoral fellow in 1990 at the Boys Town National Research Hospital.

Dr. Prieve began her career at Syracuse University in 1990 as an assistant professor and transitioned to her present position as a professor for the Communication Sciences and Disorders department, where she teaches a number of courses as part of the Audiology doctoral program.

Dr. Prieve began her career as a hearing scientist with focus on anatomy and physiology and physiological measures of auditory function. This focus merged with her passion for pediatric hearing science which led to her well recognized reputation in pediatric audiology.

ABSTRACT:

The Wideband Acoustic Immittance (WAI) Workshop will cover the following topics:

1. Fundamental Introduction to WAI & Terminology,
2. Hardware for Measurement of WAI with a demonstration of hardware,
3. Ambient and Pressurized WAI with demonstration in real ears,
4. Development of WAI in infants and children,
5. Analysis and Interpretation of WAI Results with example recordings,
6. Normal newborn and abnormal cases,
7. Cases of temporary, fluctuating conductive loss including Down syndrome, cleft palate, and other conditions,
8. Cases of permanent conductive loss

Learning Objectives

1. Participants will be able to list two main differences between wideband absorbance and standard tympanometry.
2. Participants will be able to describe two anatomical differences between the newborn external and middle ear as compared to the adult external and middle ear.
3. Participants will be able to describe how wideband absorbance changes with age from newborns to 1 year old children.
4. Participants will be able to state at least two advantages and any disadvantages for