

National Center Focused on Newborn Hearing Joins the Institute for Disability Research, Policy & Practice at USU



The National Center for Hearing Assessment and Management (NCHAM) recently joined the Institute for Disability Research, Policy & Practice, which is housed in the Emma Eccles Jones College of Education and Human Services at Utah State University. The move is another step forward on NCHAM's journey to identify hearing loss in infants and young children nationwide.

It is also a homecoming of sorts. NCHAM founder Karl White, professor of psychology, began his work at Utah State University in 1978 as a researcher and division director at IDRPP (then called the Exceptional Child Center). Six years later, in 1984, White went on sabbatical in Washington, DC as a Congressional Science Fellow with the American Association for the Advancement of Science. That work ultimately led to the establishment of NCHAM as a research center at USU. NCHAM became the national leader in a movement to identify hearing loss in newborns, showing state health departments how it could be done on a universal scale. Thanks to those pioneering efforts, every US state now has a universal early hearing screening program for newborns.

Today, NCHAM offers products and services to promote evidence-based research and practices related to early identification of hearing loss among infants and young children. The 24th annual National Early Hearing Detection and Intervention Conference, a program of NCHAM, will take place in Pittsburgh in March 2025. More than 1,100 attendees, including audiologists, early interventionists,

family members, advocates, university faculty, and students are expected to attend from across the nation.



Karl White, founding director of NCHAM and professor of psychology

In addition, the *Journal of Early Hearing Detection and Intervention* has promoted evidence-based practice, research, and standards of care since 2016. It is available at no cost for both authors and readers on USU's Digital Commons. Articles from the journal are downloaded by people around the world more than 25,000 times each year.

NCHAM also offers a free web-based service that connects families to pediatric audiology [providers](#) and a [curriculum](#) for newborn hearing screening providers. It has also developed specialized [software](#) that collects newborn hearing screening results and tracks the newborns through the screening and identification process that is used throughout the United States and in several other countries.

"We are excited to have the National Center for Hearing Assessment and Management (NCHAM) join forces with the USU IDRPP," said IDRPP Executive Director Matthew Wappett. "Our shared commitment to improving the lives of individuals with disabilities and supporting families creates exciting opportunities for collaboration."

Early Hearing Detection and Intervention

In the early 1980s, universal newborn hearing screening programs did not exist in the United States. “People have argued for and advocated for identifying babies [with hearing loss] as soon after birth as possible for the last 100 years,” said White. “Unfortunately, the technology wasn’t available to do universal newborn hearing screening. By the mid-1970s, technology had been developed that could accurately diagnose hearing loss in babies, but it was too expensive to do it for all babies.”

White continues: “At about that time, an auditory physicist in England named David Kemp discovered what’s called otoacoustic emissions, which could be used to identify babies with congenital hearing loss. The test is inexpensive, simple, and noninvasive. Instead of costing \$500 per baby back in the early 80s, you could do it for \$20 a baby.”

As the technology was becoming better known, White was doing staff work on the Education of the Deaf Act of 1985 in Washington, DC. After the act passed, he was invited to help implement its provisions, starting with a universal newborn screening program in Rhode Island. The invitation surprised White: his background was in statistics and research methodology, not in audiology. But he did understand research design and evaluation, and the new screening program was a result of his policy work. He began work on the first systematic evaluation of a large-scale universal newborn hearing screening program known as the Rhode Island Hearing Assessment Project.

“As word got out that universal newborn hearing screening could be done successfully, other states began picking up on it,” recalled White. “Utah was one of the first.” NCHAM grew out of those efforts, with a mission to support a growing number of state programs.

Technology continued to advance. “About 60% of all childhood hearing loss has a genetic component to it,” said White. “In many ways we are now in a similar position with genetic screening as we were with otoacoustic emissions-based screening back in the early 80s. We know how to do it. The protocols have been researched extensively. It just hasn’t happened on a large scale.”

Wappett believes the future with NCHAM has some exciting possibilities. “By combining NCHAM’s expertise in early hearing detection and intervention with IDRPP’s dedication to interdisciplinary disability research, education, and services, we can develop innovative approaches to support children and their families,”

Wappett said. “Together, we will work towards a future where every child with hearing loss has the opportunity to reach their full potential.”

Learn more about [NCHAM](#) by visiting its website.