## Remembering Charles I. Berlin, PhD



Dr. Charles (Chuck) Berlin was an international guiding star in hearing research and clinical audiology for more than 50 years. He was a renowned scientist, mentor, teacher, clinician, colleague, an accomplished musician, and friend to literally hundreds of colleagues from around the world. Dr. Berlin passed away on August 21, 2024, at the age of 90 years.

As an accomplished pianist who studied at Julliard, his plan for a career as a professional musician was cut short by polio. Hearing science and audiology benefited from this turn of events as Dr. Berlin became one of the most accomplished clinician-scientists in our profession. Along with his scientific and clinical contributions, his colleagues and friends benefitted from his talent as a musician whenever he and a piano were in the same room. This included his research office, the French Quarter in New Orleans, evening jam sessions at professional meetings, and elsewhere. If one heard a piano at a meeting, it was highly likely that Chuck Berlin would be sitting at the keyboard.

Chuck Berlin was born and grew up in Brooklyn, New York. He received his BA degree from New York University with majors in Meteorology and English and minors in Sociology and Speech. He earned his Master's degree from the University of Wisconsin and his PhD from the University of Pittsburgh, majoring in Speech and Hearing. Military service in the U.S. Army took him to Letterman General Hospital in San Francisco for two years. He continued as a clinical audiologist at the Bay area Veterans Administration Hospital. A post-doctoral fellowship brought him to Johns Hopkins in Baltimore, Maryland where he received an NIH Research Career Development Award. With this award, he developed skills in physiology, animal surgery, temporal bone collection and study, and the modern concepts of cochlear electrophysiology, including electrocochleography. His early NIH R01 grant funding focused on dichotic listening, brain asymmetry, and hearing in deaf mice.

In 1967, his academic and research journey continued as he relocated to New Orleans where he developed and directed Louisiana State University Medical Center's first independently funded research laboratory, known as the Kresge Hearing Research Laboratory. He quickly rose through the academic ranks to Full Professor in 1970 and led the work at Kresge Lab for 38 years. Dr. Berlin assembled an exemplary multi-disciplinary group of scientists from the fields of hearing, anatomy, pharmacology, engineering, and psychology, with the addition of genetics in later years. The work of this group,

throughout the years of Chuck's leadership, led to numerous discoveries that advanced the knowledge base in audition and impacted clinical practices in audiology and otolaryngology.

Dr. Berlin is regarded as a world class auditory neuroscientist and his contributions have been groundbreaking. His depth of knowledge on a multitude of topics is remarkable. He was a leader in the discovery of new, unique forms of hearing loss: residual high-frequency hearing and Auditory Neuropathy/Dys-Synchrony, along with research supporting the efficacy of cochlear implants. His research provided foundations in the areas of dichotic listening, electrocochleography, and auditory efferent function. He was part of a team that was instrumental in discovering genetic characteristics of hearing loss in the Ashkenazi Jewish community. Dr. Berlin had continuous federal, state, and private funding throughout his career and has published more than 200 articles with the majority in peer-reviewed scientific journals. An amazing educational and entertaining speaker, Chuck was a sought-after speaker and a perennial presenter at hearing science and clinical conferences around the world.

Chuck Berlin was a highly recognized creative and effective mentor and teacher. His remarkable talent for teaching made the most complex concepts accessible to even beginning learners. He created and directed popular multi-day continuing education programs for practicing professionals, known as the Kresge Courses. These courses were a hub of learning for professionals from around the world to update their knowledge and skills in new methods of assessment, including ABR, real ear measurement, and OAEs. In true New Orleans fashion, each of the Kresge Courses ended with a Jazz Concert with music by Chuck and his musician colleagues.

He was dedicated to his patients in his continual search for ways to apply his knowledge to improve their lives. He worked directly and hands-on with patients throughout his entire career. Chuck's love of music and science led him to establish a Musician's Clinic in New Orleans to help preserve musician's hearing, allowing them to enjoy their craft while protecting themselves. He collaborated in the development of technology to protect hearing that many musicians use today.

Chuck was a leader in establishing directions for research in hearing science in the United States. He was involved in the creation of the NIH National Institute on Deafness and Other Communication Disorders (NIDCD) which gave hearing, balance, and communication research its own home on the federal health research map. Chuck was a frequent reviewer, board member, and consultant for numerous scientific organizations, including the NIH, the FDA, and the Deafness Research Foundation.

Dr. Berlin was honored by nearly every professional hearing-related organization with an array of awards recognizing his numerous contributions. He delivered the Carhart Memorial Lecture and received the Lifetime Achievement Award from the American Auditory Society. Awards and accolades also included the James F. Jerger Lifetime Career Research Award from the American Academy of Audiology, Presidential Citation from the American Academy of Otolaryngology, Honors of the American Speech-Language-Hearing Association, and Frank J. Kleffner Award for Lifetime Clinical Achievement from the ASHA Foundation. He completed his career at LSU as the Kenneth and Frances Barnes Bullington Professor in Hearing Science. Following retirement, he received the Lifetime Achievement Award from the Louisiana Academy of Audiology.

Chuck had a unique ability to weave basic science principles into audiology, teaching, mentoring, and clinical practice. He often combined his musical talent into his science and leadership, calling it "Scientific Jazz." In describing his philosophy as Director of Kresge Lab, he wrote, "Our major work covered many "hot topics" in audition, but the notion of 'Scientific Jazz' comes from my avocation as a jazz musician. The leader of a fine jazz band doesn't tell his/her players how to play, just what to play, and

at what tempo. The players then have to perform with support and respect for one another, allow each other to shine at solo time, but play tastefully and supportively in the ensemble periods."

Chuck credits many who impacted his career. Those individuals, as well as the history of the Kresge Lab, are described in "New Orleans as the Home of Scientific Jazz from 1967-2002", his introduction to a special issue of <u>JAAA</u> that recognized the research at Kresge Hearing Research Laboratory (<u>JAAA</u>, Vol. 14, No.6, 2003).

Chuck Berlin's guiding star greatness and his legacy to hearing science and audiology will be forever enduring.

---- Linda J. Hood, PhD, Colleague and Friend