Audiology and audiologists face many challenges in the current business and clinical climate. One way to address this on several fronts is for clinical approaches to move beyond the audiogram and to begin to routinely apply behavioral tests of hearing ability that specifically and reliably assess the integrity of the entire auditory system. Currently, this is a serious challenge as there is no proven way to dissociate dysfunction in various parts of the auditory system in a cost-effective, rapid and reliable manner.

This talk will describe a set of automated measures of auditory processing ability that have been successfully related to age and/or hearing loss in the laboratory and that are currently being implemented for calibrated testing on a tablet computer using inexpensive headphones and standard audio hardware.

This talk will describe the laboratory evidence behind these tests and the ways in which clinical versions are being developed and evaluated, as well as the vision of a future in which such tests – and similarly designed auditory training programs - are associated with strong clinical evidence and effective rehabilitation procedures and are routinely used by clinicians and patients alike.

Biography
Dr. Gallun received his B.A. degree from Reed College and his Ph.D. degree from the University of California, Berkeley. He then completed a postdoctoral fellowship at Boston University, where he continued to work on applying the cognitive psychological theories of memory and attention to better describe and understand auditory perception. Upon joining the Department of Veterans Affairs in 2006, the focus of Dr. Gallun's lab turned to attempting to understand the impacts of age, hearing loss, and traumatic brain injury on central auditory function. His recent work seeks to translate what has been learned in the laboratory into a form usable in the clinic and beyond.