## Prof. Brad Story

Professor, Dept. of Speech, Language, and Hearing Sciences, The University of Arizona



Brad Story is a Professor in the Department of Speech, Language, and Hearing Sciences at the University of Arizona. His research is concerned with development of computational, physically-based models that simulate the observed structure, movement, and acoustic characteristics of specific components of the speech production system. He has taught courses at both the undergraduate and graduate levels in Speech Science, Speech Perception, Acoustics, Hearing Science, and Anatomy and Physiology. Dr. Story is a fellow of the Acoustical Society of America, recipient of the Rossing Prize in Acoustics Education and Willard R. Zemlin Lecture in Speech Science,

and has served as an Associate Editor of the Journal of the Acoustical Society of America. He has authored over 100 publications in the area of voice and speech science.

## Keynote Talk title: Recent advances in modeling voice production

Development of voice production models has been a particular area of focus over the forty-year history of the International Conference on Voice Physiology and Biomechanics (and the original Vocal Fold Physiology Conference). During this time, modeling of the vocal system has advanced in many ways. Computational power has allowed for increased complexity in the representation of tissue mechanics, aerodynamics of glottal flow, and acoustic wave propagation. Low-dimensional models of the vocal folds have also remained a viable modeling option for addressing specific research questions. This presentation will provide a brief overview of the purpose of developing models, various approaches to their construction, the essential process of integrating experimental data with modeling efforts, and how models might continue to be advanced to help answer complex questions about the voice and speech production.