

## **UPDATE: Dr. Grillo's Work on NIH R15 Grant**

Dr. Grillo is a faculty member in Communication Sciences and Disorders in the College of Health Sciences and a speech-language pathologist. Currently, Dr. Grillo has a National Institutes of Health (NIH) R15 grant from the National Institute on Deafness and Other Communication Disorders (2015-2019). She is also supported by the Loan Repayment Program from the NIH (2016-2019). Dr. Grillo is the only NIH-funded scientist at WCU.

Her R15 grant supported the development of the VoiceEvalU8 smartphone/tablet application (app), web portal, and server. Here's a link to the website. <https://voiceevalu8.com/>

With VoiceEvalU8, we now have a mobile tele or evoice evaluation tool that clients can use anytime and anywhere. VoiceEvalU8 is the first to record acoustic, perceptual, and aerodynamic voice data across multiple days in the morning before talking all day and in the evening after talking all day, analyze the data, and present the results to the clinician or researcher.

The R15 grant also supported training of student teachers at WCU. For the past 3 years, Dr. Grillo and her graduate students studying speech-language pathology have trained 60 plus student teachers. The student teachers are from early grades preparation, special education, middle grades, physical education, and music education. The training has focused on vocal education, vocal hygiene, and vocal training. Teachers are professional vocal athletes who depend upon their voice for their occupation. Half of teachers across the USA will develop a voice problem at some point in their career. Our work is addressing prevention of future problems because we are training student teachers in their educational programs before they become professional teachers and before voice problems occur. The treatment groups in the study receive vocal training on how to use an effective voice for one-on-one conversation, quiet talking, talking over noise, and healthy yelling. The voices that the student teachers learn and produce meet all of their needs for the classroom, music room, gym, cafeteria, playground, etc.

This work would not be possible without the graduate student clinicians studying speech-language pathology. Over the past 3 years, 20 graduate students have provided training to the student teachers at WCU under the direct supervision of Dr. Grillo. The method of the training has included traditional, in-person services and services through telepractice (i.e., online videoconferencing through Zoom or Blackboard Collaborate).

VoiceEvalU8 was used to assess change in voice measures on a daily basis before and after the training and while the student teachers were student teaching.

Over the summer of 2018, Dr. Grillo was awarded promotion to Full Professor at WCU and was selected to receive one of the American Speech-Language-Hearing Association's annual awards at the national convention in Boston, MA. Dr. Grillo will receive the 2018 Certificate of Recognition for Special Contributions in Higher Education. Please see the link. <https://www.asha.org/About/awards/Award-Recipients/>