## Workshop: Strategies for Data Science and Data Management



Contribution ID: 57 Type: Poster

## Data management for the Vocal Control and Vocal Well-Being Lab

School teachers are disproportionately more likely to experience voice problems compared to the general population. One understudied component of this elevated risk is the role of stress on motor control for voice and speech production. The goal of this study is to determine the functional and clinical relevance of stress on the motor control for voice and speech production in the brain and will determine neural (functional MRI), psychobiological (cortisol, personality), and vocal function (surface electromyography, acoustic) signatures of stress responders and nonresponders in early career teachers with vocal fatigue and control participants. The research plan includes a variety of modalities spanning multiple acquisition methods and time spans for a hundred participants. The primary challenges of the data management for this project are the organization, storage, and sharing and analyzing of the large quantity of multimodal data. Furthermore, working within a clinical environment that requires strict participant privacy and its own data security presents additional difficulties such as needing different storage systems than the acquisition systems. Mitigation of these challenges includes the successful implementation of a research data management plan which is constructed from best practices. Important aspects of this plan include personnel hierarchy for accountability and management of the necessary data sharing and archival systems and proper documentation for the storage location, naming conventions, and type of the variety of data. Attending workshops and seeking advice from colleagues and experts such as the data privacy officer also facilitate data management. Successful implementation of a research data management plan for this study will facilitate efficient data analysis and continuity when there is turnover in lab membership.

Primary authors: VON DER HEYDE, Juliane (uni-bonn); BERARDI, Mark (uni-bonn); DIETRICH, Maria

(uni-bonn)

Presenters: VON DER HEYDE, Juliane (uni-bonn); BERARDI, Mark (uni-bonn)

Session Classification: Posters