Northeastern University
Bouvé College of Health Sciences

You are cordially invited to attend a presentation
by SoCRS Faculty Candidate
Hannah Rowe, PhD, CCC-SLP

Friday, January 19, 2024
11:00am-12:00pm
107 Robinson Hall

Towards Personalized Medicine in Speech Motor-Impaired Populations

Abstract: An estimated 130 million adults worldwide live with a speech motor disorder (i.e., difficulties with coordination, strength, and precision of the muscles involved in speech), which significantly impacts their quality of life. However, substantial heterogeneity across clinical populations and limited mechanistic understanding of speech motor control contribute to diagnostic challenges and a lack of targeted treatments. This job talk describes my long-term research goals to further the field of personalized medicine in speech motor-impaired populations, with a particular focus on individuals with neurodegenerative diseases and adults who stutter. I will talk about using behavioral, neurological, and physiological measures to develop clinical phenotypes for (1) informing diagnostic decision-making and (2) guiding individualized treatment. Towards my first research aim, I will highlight my dissertation work, which explores the efficacy of acoustic-based phenotypes for characterizing and classifying divergent neurodegenerative diseases. Towards my second research aim, I will highlight a project exploring the neural correlates of different disfluency types in adults who stutter, which served as pilot data for a recent grant submission on feedback- and feedforward-based phenotypes of stuttering. I will conclude by discussing future directions that support both aims of my research program.