

## Syracuse University Stuttering Research Laboratory



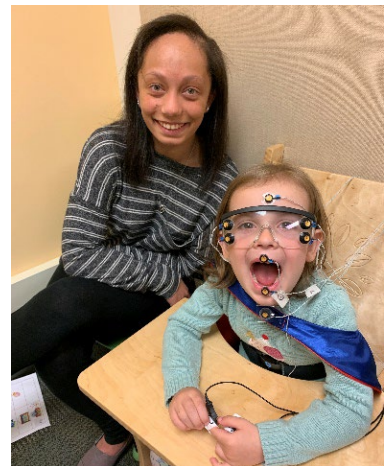
Dr. Tumanova places heart rate sensors on a child to measure physiological arousal during speaking tasks and examine how children regulate their excitement.

The Stuttering Research Lab at Syracuse University, directed by Dr. Victoria Tumanova, conducts research aimed at advancing the understanding and treatment of developmental stuttering in children. The lab integrates basic and clinical science to identify mechanisms underlying stuttering and translate those findings into effective, evidence-based interventions.

A central focus of the lab's current work is a clinical research program evaluating Flexible Rate Speech Therapy, an intervention grounded in principles of speech motor control and motor learning. This approach targets the temporal aspects of speech production, helping children who stutter develop more stable and efficient speech patterns. The research examines both treatment outcomes and the mechanisms through which changes in speech motor timing contribute to improved fluency.

In parallel, the lab continues to investigate how speech motor processes interact with emotional and linguistic factors in shaping stuttering. Using behavioral, physiological (e.g., heart rate variability, skin conductance), and language-based measures, the lab studies how temperament, emotional regulation, and linguistic complexity influence speech fluency in young children.

Support from the Hart Speech Foundation has been instrumental in advancing both research and clinical care. The Foundation's gift has been directly supporting the clinical trial of Flexible Rate Speech Therapy and enabled the provision of speech-language therapy services at no cost to families through the Gebbie Speech, Language, and Hearing Clinic.



Sensors placed on the child's face allow researchers to examine how children coordinate lip and jaw movements during speech and assess speech motor control.

The generosity of the Hart Speech Foundation makes it possible to deliver exceptional, hands-on training for both undergraduate and graduate students. Each semester, students work directly with Dr. Tumanova, actively contributing to clinical care and cutting-edge research that improves the lives of children who stutter. This support not only expands access to meaningful, real-world experience but also attracts outstanding students and prepares them to become the next generation of leaders in speech-language science and clinical practice.

The card below is a thank you message to Don Hart from children who participated in our summer therapy program for children who stutter.



This funding from the Foundation reduces barriers to care and allows children who stutter to access specialized, research-informed intervention regardless of financial constraints. By integrating clinical service delivery with rigorous research, the lab is able to both evaluate treatment effectiveness and ensure that families benefit immediately from advances in knowledge. This model accelerates the translation of research findings into practice while training the next generation of clinicians and scientists.

The partnership between the Stuttering Research Lab and the Hart Speech Foundation reflects a shared commitment to improving outcomes for children who stutter through innovative, accessible, and evidence-based care.