

Meet Our Members: Dr. Daria Pressler

We are pleased to welcome Daria Pressler, PT, DPT, as a new ASRN member in 2026! Dr. Pressler is a physical therapist and a third-year PhD candidate in the University of Cincinnati's interdisciplinary Health and Rehabilitation Sciences program. She joined ASNR to connect with a diverse, interdisciplinary community of clinicians, researchers, and trainees focused on advancing neurorehabilitation. She was drawn to ASNR's strong research focus, collaborative environment, and shared commitment to improving outcomes for individuals with neurological conditions. In particular, Dr. Pressler appreciates the excitement and passion that the ASNR community brings to conversations about research, as well as the opportunities to learn from others working to improve neurorehabilitation care.



1) How did you get interested in science, and what steps did you take to get to your current role?

I have always been drawn to science, puzzles, and trying to understand how things work. Growing up, that curiosity often showed up in small ways, whether I was learning about nature with my dad or doing kitchen science experiments with my mom. I felt most excited when I had the chance to explore and ask questions to better understand my surroundings. That same curiosity carried into undergrad, where I discovered my interest in anatomy, physiology, and movement science.

Physical therapy became a natural fit because it allowed me to combine my interest in human movement with the opportunity to support patients as they worked toward improving their function and participation in daily life. As I moved through my DPT training, I found myself increasingly drawn to neuroscience and neurorehabilitation. For me, the brain and nervous system were, and still are, fascinatingly complex, especially in how they interact with the musculoskeletal system to shape movement. The more I learned, the more interested I became in how neurological injury changes movement, why similar diagnoses can lead to very different movement patterns, and how rehabilitation can be better tailored to each person's abilities and goals.

Those questions became even more meaningful through my early research and clinical experiences. As a graduate assistant during my DPT training, I had the opportunity to study postural control in individuals with multiple sclerosis. This helped me see how research could deepen and complement the questions I was already asking. Later, practicing as a neurological physical therapist reinforced how much I valued working with patients while also highlighting the

importance of research that guides clinical decision-making. Those experiences ultimately led me to pursue a PhD, where I could build on my clinical experience to ask research questions that inform how neurorehabilitation is studied, delivered, and individualized.

2) What is the focus of your current research, and what are some of your findings?

Broadly, my research focuses on the control and coordination of movement in adults with chronic stroke, emphasizing factors underlying movement deficits and informing strategies to optimize neurorehabilitation. My dissertation research focuses specifically on the rehabilitation of walking post-stroke and examines clinical and biomechanical factors associated with musculoskeletal adverse events during moderate- to high-intensity walking training. This work is embedded in the NIH-funded HIT-Stroke Trials 1 and 2. These are multisite randomized controlled trials examining moderate- and high-intensity walking training to improve walking speed and endurance after stroke.

At the ASNR 2026 Annual Meeting, I presented the first part of my dissertation research, in which I developed and internally validated a clinical prediction model for musculoskeletal adverse events during moderate- to high-intensity walking training. The model demonstrated moderate predictive ability and suggested that these events are multifactorial, reflecting the combined influence of baseline musculoskeletal status, habitual activity exposure, and neurological capacity rather than any single domain in isolation. The next steps of my dissertation will externally validate this model and examine whether biomechanical factors are also associated with the occurrence of musculoskeletal adverse events during walking training in chronic stroke. Identifying these factors provides a foundation for future efforts to improve risk stratification and support more precise, individualized prescription of walking rehabilitation for individuals with chronic stroke.

3) What are your longer term career goals?

My long-term career goal is to establish myself as a clinician-scientist and tenure-track faculty member within a physical therapy or rehabilitation sciences program. I seek to specialize in post-stroke rehabilitation and motor recovery, using clinical insights and advanced analytic methods to address critical challenges in post-stroke rehabilitation. Through interdisciplinary collaboration and dissemination of findings to clinicians, researchers, and community stakeholders, I aim to generate evidence that informs clinical decision-making, improves functional outcomes, and addresses real-world barriers to effective clinical rehabilitation after stroke.

Find [Dr. Pressler on LinkedIn](#) to connect and learn more.