



# Movement Neuroscience Laboratory

**Department of Physical Therapy, Movement, and Rehabilitation Sciences**

Advancing scientific knowledge of human neural control of movement to understand neurological disease, develop diagnostic markers, and innovate rehabilitation

## What We Study

Neural underpinnings of perception and action in health and disease. Projects focus on developing early biomarkers for individuals with ALS, identifying hidden impairment in individuals with stroke, facilitating recovery after stroke via early delivery of virtual reality and robotic interventions, innovating technological approaches to improve human-robot interaction, and advancing knowledge about organization of the human motor system.

## Who We Are

An interdisciplinary team of neuroscientists, physical therapists, engineers, computer scientists, physicians, students, and postdocs working together toward use-inspired basic and applied health research.

## Our Approach

- Virtual Reality • Robotics • Motion Capture
- Electromyography • Non-Invasive Brain Stimulation
- Magnetic Resonance Imaging • Computational Modeling



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