

Center for Physical Therapy and Movement Science

Summer Newsletter - July 2025

VISIT THE WEBSITE: MED.EMORY.EDU/MOVEMENTSCIENCE



From our Director

I am happy to share exciting developments since our inaugural newsletter! Our Center continues to thrive at the intersection of innovation and clinical excellence.

Building on our successful implementation of Kinesis Health Technology in the Neurosciences Clinic, we have now launched specialized Vagus Nerve Stimulator screenings – expanding our toolkit for precision interventions in movement and rehabilitation science. This cutting-edge addition exemplifies our commitment to integrating emerging technologies with evidence-based practice.

Vagus Nerve Stimulation is a technique in which therapy and activities of daily living are paired with a neuroplasticity enhacing device implanted in the chest wall. The combination of high quality therapy and stimulation has demonstrated improved motor outcomes after stroke.





Alongside STORMS, the work of our Center continues to reinforce the vision of creating synergy between innovative research, clinical practice, and education. With each new program, we move closer to establishing Emory as the premier learning health system in Movement Science.

Sincerely,

Dr. George Fulk
Director, CPTMS
Interim Chair, Dept of
Rehabilitation Medicine,
Chair, Division of Physical Therapy

Collaboration at Scale

CPTMS brings together diverse expertise from many disciplines and institutions, spanning from biomedical engineers to clinical scientists, and extending beyond Emory to include external collaborators.

We are happy to highlight the work of one Core faculty member and an additional collaborator in each issue of our Newsletter. This Summer issue focuses on Dr. Trisha Kesar and Dr. Hyeok Kwon

Core Faculty Highlight

Dr. Trisha Kesar PT, PhD has been appointed the Associate Director of Research at CPTMS. Her work investigates the neurobiological mechanisms underlying post-stroke gait rehabilitation strategies comprising treadmill training, functional electrical stimulation, and real-time biofeedback. She brings a superb eye for research to the Center's work in the Neurosciences Clinic and as a Collaborator across all Center programs.



Behind the Scenes - Our Strategic Goals

CPTMS is working on multiple fronts to establish Emory as a premier Learning Health System in Movement Science. We are developing annual offerings that bridge academic research, student development, and public engagement, while creating new clinical opportunities that seamlessly connect practice, research, and education.

Key initiatives include expanding our movement-related documentation tools across Emory Healthcare, growing trainee opportunities, and developing accessible resources—from clinical consulting databases to layperson-friendly movement science toolkits. Through community touch points and enhanced clinician engagement, we're translating cutting-edge research into meaningful health improvements for patients and the broader community.



STORMS resume in August

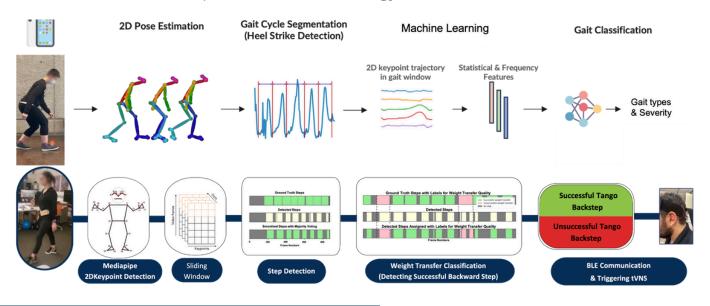
CPTMS is proud to host a biweekly Seminar Series on Thursdays at noon: Stimulating Translational Opportunities in Rehabilitation and Movement Science. Following our Summer hiatus, we will kick off on August 7th highlighting the work of Emory's Neurologic Physical Therapy Residents.

Check out our archive at med.emory.edu/STORMS and Join Us live or on Zoom

03/04

Collaborator Highlight - Hyeok Kwon

Dr. Hyeok Kwon PhD is the Principal Investigator of the Computational BehaVior and HealTh AnaLytics (ViTAL) Lab, where he develops patient-oriented artificial intelligence systems for healthcare applications. His research focuses on ubiquitous computing, computer vision, and machine learning systems using ambient, mobile, and wearable devices to monitor patients in clinical and daily living environments. His work emphasizes developing scalable, accessible, and ethical AI solutions for brain health, with particular expertise in movement analysis for conditions including Parkinson's disease, mild cognitive impairment, stroke, and autism spectrum disorder. Dr. Kwon works with CPTMS to incorporate new technology into the Center's clinical work.



Health Services Research Day

Ben Braxley, PT, DPT, CPTMS Senior Program Coordinator presented preliminary data from CPTMS research at the 11th Annual Georgia CTSA and Emory Health Services Research Day in May. The presentation showcased our Center's commitment to facilitating best practices in clinical settings and highlighted our growing contribution to the broader Emory Healthcare community. The opportunity to share our work at this prestigious venue underscores CPTMS's expanding role in advancing health services research and our mission to bridge research, clinical practice, and education.

Contact

To find out more, to contribute to our growing network of Movement Scientists, or to join the STORMS listsery, email us!

MovementScience@emory.edu

