



RecTech Postdoctoral Research Fellow Candidate Seminar

To Walk or Wheel? The Importance of Mobility Prognosis after Spinal Cord Injury and New Directions

**Stephanie Rigot, DPT
Candidate, PhD in Bioengineering
University of Pittsburgh**

Date and Time: Friday, April 16, 2021 at 2:00pm CDT

Location: Zoom

Seminar Description: One of the first questions that a patient asks after a spinal cord injury is often “Will I walk again?” While gait training can be beneficial, it is not without risks and clinical prediction rules for ambulation underperform for those with incomplete spinal cord injuries who would benefit from them the most. By using novel measures of limb accelerations and machine learning we are building a new clinical prediction rule to provide a more accurate and descriptive prediction of long-term ambulatory ability. Additionally, this presentation will explore future directions for this technology and related projects.

Candidate Bio: Stephanie Rigot, DPT, is a Physical Therapist and PhD candidate at the University of Pittsburgh. Stephanie graduated in 2015 from the University of Rochester with a Bachelor of Science in Biomedical Engineering and minor in Psychology as a Social Science. Stephanie then became a member of the inaugural class of the dual Doctor of Physical Therapy- PhD in Bioengineering program at the University of Pittsburgh and graduated with her DPT in 2018. As a graduate student, Stephanie has won multiple funding awards including a TL1 Clinical and Translational Science Post-Doctoral Fellowship and a NIH F30 Individual Fellowship for Students in Pre-doctoral Dual Degree Training Programs. Stephanie currently works as a Physical Therapist primarily at the UPMC Rehabilitation Institute on the Spinal Cord Injury Inpatient Rehabilitation Unit. Her research is broadly focused on improving the quality of life for people with spinal cord injuries, with emphasis on neuromuscular and mobility prognosis, wearable sensors, the relationship between pain and mobility, and wheelchair transfers. More specifically, her dissertation work is aimed at developing a clinical prediction model using machine learning and limb accelerations from wearable sensors to predict long-term ambulatory ability for individuals with a new spinal cord injury.