Sensorimotor Dysregulation After Nerve Injury and in Disease

While moving through our ever-changing physical world we rely on the recruitment of neural circuits throughout the central nervous system. Embedded among composite parts of the neuromotor system, the spinal cord plays intriguing roles exemplified by its independent capacity to generate complex movements like stumbling corrections. The focus of Dr. Rotterman’s work is to advance our understanding of how spinal processing of somatosensory information produces biomechanically effective movements in healthy animals and how that processing goes awry following nerve injury and disease. Specifically, in this seminar, Dr. Rotterman will focus on the central degeneration of proprio sensor synaptic connections following peripheral nerve injury and in a disease model of peripheral neuropathy.