We are seeking an exceptional, motivated, and enthusiastic post-doctoral scholar in the Circuit Repair Laboratory at the Burke Medical Research Institute (BMRI), led by Edmund Hollis II, PhD.

The Hollis laboratory studies the plasticity of the motor system, principally following spinal cord injury. The ability of the motor cortex to change in response to training is critical for the acquisition of skilled motor learning. Spinal cord injury disrupts the motor circuit and acquired skills, therefore it is likely that cortical plasticity is required for the recovery of function. Dr. Hollis has recently demonstrated that cortical maps shift in response to spinal cord injury and subsequent axonal sprouting (Hollis II et al., 2016). Our current studies detail the mechanisms of motor circuit plasticity and the genetic control over connections within the spinal cord required for appropriate function of the motor circuit. These studies utilize optogenetic and chemogenetic testing of circuit function in combination with more traditional anatomical and functional tools.

BMRI, located 35 minutes outside of NYC in White Plains, NY, is a leader in utilizing innovative scientific approaches to develop regenerative strategies to combat neurological disability with particular interests in stroke, spinal cord injury, traumatic brain injury and neurodegenerative diseases. The Institute is affiliated with Weill Cornell Medicine of Cornell University and faculty members are appointed in Departments at Weill Cornell Medicine.

Preferred qualifications include a Ph.D. in Neuroscience, Physiology, or Bioengineering, experience with in vivo electrophysiology/electromyography, in vivo imaging techniques, Matlab, and rodent studies. Compensation includes NIH scale salary, housing stipend, and full health benefits. Please contact Edmund Hollis II, Ph.D. at edh3001@med.cornell.edu.

Burke is an equal opportunity employer with competitive pay scales and benefits.