



One PhD position available in neural mechanisms of recovery after stroke

One PhD studentship position is available in the Sensorimotor Plasticity Lab at the University of Florida to study neural circuit mechanisms and reorganization after stroke in humans. This project involves working with stroke patients, EMG recordings, brain and spinal cord fMRI using advanced statistical and image analysis methods.

Location: Department of Applied Physiology and Kinesiology, University of Florida

Funding: University/Departmental funding available for this position upon approval

Qualifications: The Successful applicant must have a master's degree in Biomedical Engineering, Computer Science, Psychology or related field. Strong computational skills/statistics, computer programming, and familiarity with neuroimaging analysis software is preferred.

Start date: Aug. 2020

Applicants must send their CV (including contact information of two references; will only be contacted if the candidate is shortlisted), and a cover letter outlining the position they are applying to (humans or rodents), and their suitability for the post to: svahdat@ufl.edu.

About Sensorimotor Plasticity Lab, Director: Dr. Shahab Vahdat

Using both human and rodent models, we study the mechanisms of neural plasticity in the sensorimotor system. We are particularly interested in how the brain and spinal cord circuits change to support “learning” in the intact nervous system and “relearning” after stroke. We use this knowledge to develop novel therapies to promote motor recovery post-stroke. Our lab uses a variety of multimodal techniques including simultaneous brain-spinal cord fMRI and paired-pulse stimulation. In rodents, we use optogenetic fMRI for cell-type specific stimulation and visualization of neural circuits.