

## **Postdoctoral Positions Available in the Neural Engineering and Plasticity Lab**

We are seeking multiple postdoctoral candidates or engineers for research into a “read/write” neural interface for stroke. The positions are based at the University of California, San Francisco (Weill Institute for Neuroscience, Mission Bay Campus).

This project is based on a newly funded 3-year multi-institution Weill NeuroHub grant to establish “neural co-processors” to improve neural dynamics after stroke. A core goal is to use reinforcement learning methods to optimize closed-loop stimulation. It is in collaboration with Anca Dragan at UC Berkeley and Rajesh Rao at UW.

Our own lab’s efforts, which are complementary to this grant, are also supported by 5-year NIH RO1s. More generally, our research takes a systems level perspective to the neurobiology underlying motor control in both normal and pathological conditions (<http://gangulylab.org/>). We are particularly interested in understanding how the motor network, a highly adaptive system of interconnected cortical and subcortical areas, is involved in the learning and the execution of skilled behaviors. Moreover, we aim to develop neuro-physiologically inspired neural interfaces to improve motor function.

Research activities include working with either rodents or non-human primates, development of computational models of multi-area dynamics and development of next-generation stimulation methods. Ideal candidates will have experience/familiarity in some or all of the following:

- High-channel count recordings in animals
- Real-time neural signal processing
- Writing custom programs to control electrical and/or optical stimulation
- Computational or biomechanical modeling

An advanced degree in Biomedical Engineering, Computer Engineering, or Neuroscience is preferred but other applicants will be considered.

This is a great opportunity to work with our interdisciplinary team of scientists, engineers and clinicians. Please send a CV and 3 names of potential letters of reference to [karunesh.ganguly@ucsf.edu](mailto:karunesh.ganguly@ucsf.edu). UCSF is an equal opportunity employer, and we encourage applications from a diverse range of candidates.

Karunesh Ganguly, MD PhD  
Associate Professor, Department of Neurology  
Center for Neural Engineering and Prosthetics (CNEP), UC Berkeley and UCSF  
[karunesh.ganguly@ucsf.edu](mailto:karunesh.ganguly@ucsf.edu)  
<http://gangulylab.org/>