**WANTED:**

Computer science/Electrical & Mechanical Engineering undergrads for the W.M. Keck Center for Neurophysics

**Desired skills:** Basic circuit knowledge, programming skills, Arduino/hardware-software interfacing, & some Linux and Python familiarity is a plus

No prior knowledge of neuroscience is necessary!

**Description:** We are seeking motivated undergraduate volunteers who want to get involved in cutting-edge neuroscience research. The overarching goal of our lab is to understand how information about the physical world is represented by ensembles of neurons. In particular, what are the neural mechanisms of perceiving space-time, and how do these neural representations evolve with learning? To answer these questions, we have developed hardware to measure and manipulate neural activity and behavior. Concomitantly, we work in developing new computational tools to analyze the data we generate and better understand information flow in neural populations, as well as create better correlates of consciousness.

We're looking for undergraduate volunteers interested in the following projects:

- Developing and refining the hardware needed for large scale neural recordings (multi-tetrode arrays & high-density silicon probes)
- Modifying and refining software tools for automatic sorting/clustering of neural activity
- Developing computational tools for analyzing large datasets of neuronal activity. This project will entail extensive coding, thus a computational background/previous experience with programming is strongly preferred

All positions require a commitment of 10-20 hours/week and at least 2 quarters

Depending on your major, the lab is able to provide research credit (and letters of recommendation).

Please contact wcsmit@ucla.edu OR chinmay.purandare@gmail.com for more info!