Mentor: Gabriel Kreiman, Ph.D

Contact information:

gabriel.kreiman@tch.harvard.edu
617-919-2530
http://klab.tch.harvard.edu

Duration: minimum of eight weeks, and longer electives are encouraged when possible.

Start dates: flexible.

Our lab is interested in the neuronal circuits and mechanisms responsible for visual object recognition. Visual object recognition is essential for most everyday tasks. Yet, the mechanisms underlying pattern recognition are only poorly understood. We combine electrophysiology, psychophysics and computational models to understand the processing steps in visual cortex. In addition to shedding light on the architecture and function of visual cortex, the work can also lead to the development of computer vision algorithms and visual prosthetic applications for the visually impaired. Several short-term projects are available including the analysis of existing physiological data, running visual psychophysical and physiological tests and also more computational efforts to understand the algorithms involved in vision.

For a general overview of Visual Object Recognition, see:
http://www.scholarpedia.org/article/Biological_object_recognition
For more about the lab and publications, see:
http://klab.tch.harvard.edu