NEURL-UA 302.012 SPECIAL TOPICS: Sensory Motor Integration

Meeting: M 2-4PM, Meyer 815

Prereqs: BINS

Instructor: Pesaran

This Special Topics class will examine how the nervous system integrates sensory and motor signals to guide behavior. We will focus on how vision, audition and proprioception are used to guide movements of the eyes, arm and hand as well as the faculty of speech. Our knowledge of sensory-motor integration rests on a range of techniques including:

- neuropsychological studies of brain damaged patients.
- behavioral psychophysical studies that measure performance.
- electrophysiological and imaging studies that measure neural activity.
- stimulation and inactivation studies that manipulate neural activity.
- computational studies that model the computations performed by the brain.

In this class, you will learn to read and evaluate the primary literature that employs these techniques to investigate sensory-motor integration.