Neurosciences


Doctor of Philosophy in Neurosciences

University requirements for the Ph.D. are described in the "Graduate Degrees (http://explored egrees.stanford.edu/archive/2012-13/graduatedegrees)" section of this bulletin.

The interdepartmental Neurosciences Program offers instruction and research opportunities leading to a Ph.D. in Neurosciences. The requirements for a Ph.D. degree follow those of the University and in addition are tailored to fit the background and interests of the student. Accepted students receive an award covering tuition, a basic health plan, and a living stipend. Qualified applicants should, where possible, apply for the predoctoral fellowships in open competition, especially those from the National Science Foundation. December 2 is the deadline for receipt in the Neurosciences Program office of applications with all supporting material.

Applicants should familiarize themselves with the research interests of the faculty and indicate their preferences clearly on the application form.

Since students enter with differing backgrounds, and the labs in which they may elect to work cover several different disciplines, the specific program for each student is developed individually with an advisory committee. All students are required to complete the basic introduction to neurobiology (NBIO 206 The Nervous System or equivalent). All students must complete nine quarters of Professional Development and Integrity in Neuroscience (NBIO 300 Professional Development and Integrity in Neuroscience). Lastly, students must also take five courses within (and at least one course in each of) the following three areas:

1. Molecular, Cellular and Developmental Neuroscience
2. Systems, Computational, Cognitive and Behavioral Neuroscience
3. Translational Neuroscience

Courses from outside the neuroscience core can satisfy the elective requirement.

Students usually rotate through several labs during their first year, although they may choose to begin thesis research on entry. After the first rotation, students may rotate both within and outside the Neurosciences Program. Required course work should be completed by the end of the second year. Passing of a comprehensive oral preliminary examination given by the student’s advisory committee is required for admission to Ph.D. candidacy. This examination is usually taken by the end of the second year. The student is required to present a Ph.D. dissertation, which is the result of independent investigation contributing to knowledge in an area of neuroscience, and to defend his or her dissertation in a University oral examination, which includes a public seminar.

Medical students may participate in this program provided they meet the prerequisites and satisfy all the requirements of the graduate program as listed above. The timing of the program may be adjusted to fit their special circumstances.
Psychiatry and Behavioral Sciences: Lu Chen (Associate Professor), Luis de Lecea (Associate Professor), Karl Deisseroth (Associate Professor), Firdaus Dhabhar (Associate Professor), Amit Etkin (Assistant Professor), Craig Garner (Professor), David Lyons (Associate Professor, Research), Robert C. Malenka (Professor), Vinod Menon (Professor, Research), Karen Parker (Assistant Professor), Allan L. Reiss (Professor), Jamie Zeitzer (Assistant Professor)

Psychology: Ian Gotlib (Professor), Kalanit Grill-Spector (Associate Professor), James J. Gross (Professor), Brian Knutson (Associate Professor), James McClelland (Professor), Samuel McClure (Assistant Professor), Anthony Norcia (Professor), Anthony Wagner (Associate Professor), Brian Wandell (Professor)

Radiology: Gary H. Glover (Professor)