Neuroscience, PhD

The neuroscience program provides cutting-edge, interdisciplinary training for graduate students.

Program Description

Degree Awarded: PHD Neuroscience
Neuroscience involves the study of the nervous system and its relation to an organism's function. It encompasses how gene and nerve networks interact with the environment throughout an organism.

Students integrate several levels of analysis --- molecular, cellular, systems, behavioral and cognitive --- to investigate basic, translational and clinical questions about the relationship between the brain and behavior. The program may be tailored to meet students' specific professional goals.

The PhD program in neuroscience integrates aspects of graduate-level training from many different units on campus as well as from the program's partner institutions distributed across the greater Phoenix area. Partner institutions include Barrow Neurological Institute, Translational Genomics Research Institute, University of Arizona College of Medicine and Sun Health Research Institute.

At a Glance

- **College/School:** The College of Liberal Arts and Sciences
- **Location:** Tempe campus

Degree Requirements

84 credit hours, a written comprehensive exam, an oral comprehensive exam, a prospectus and a dissertation
Required Core (11 credit hours)
BIO 610 Introduction to Responsible Conduct of Research in Life Sciences (1)
NEU 555 Advanced Molecular and Cellular Sciences (6)
NEU 556 Human Systems Neuroscience (4)

Electives or Research (55 credit hours)

Other Requirements (6 credit hours)
NEU 558 Neuroscience Journal Club (3)
NEU 591 Seminar (3)

Culminating Experience (12 credit hours)
NEU 799 Dissertation (12)

Admission Requirements

Applicants must fulfill the requirements of both the Graduate College and The College of Liberal Arts and Sciences.

Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree from a regionally accredited institution. Regular admission may be granted to applicants who have achieved a GPA of 3.00 (scale is 4.00 = "A") or better in the last two years of work leading to a bachelor's degree and who are competitive in the applicant pool as evidenced by letters of recommendation. Particular attention is paid to research experience and overall preparation in problem-solving abilities as evidenced by previous coursework and research experiences.

Because this program draws on an extremely broad range of disciplinary backgrounds in recruiting students, there is no specific set of undergraduate course requirements other than those implied by the degree requirements described above. Most students are expected to have had coursework in biology, chemistry and math.

Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

1. graduate admission application and application fee
2. official transcripts
3. academic record form
4. personal statement
5. curriculum vitae or resume
6. three letters of recommendation
Additional Application Information
An applicant whose native language is not English must provide proof of English proficiency regardless of current residency.

Research experience is a desired qualification.

Career Opportunities
A doctorate in neuroscience provides strong preparation for academic careers at every level from community colleges to research universities. The skills and knowledge obtained in this program are also valuable for government careers in federal and state agencies and for careers in industry (biotech, medical or pharmaceutical) and as well as nongovernmental organizations.

Career examples include:

- health care scientists in academic, private, and industrial labs
- principal investigators in government labs and non-profit organizations
- professors or instructors in universities and colleges
- science teachers in elementary and high schools

Contact Information
School of Life Sciences | LSA 181
sols.grad@asu.edu | 480-965-1768