Department: Neuroscience
Degree: PHD

GRADUATE LEARNING GOALS & OUTCOMES

GRADUATE OUTCOMES: The PhD program in neuroscience will equip students with the advanced knowledge and training necessary to conduct research and education in this interdisciplinary field. The program comprises three broadly defined areas: behavioral neuroscience involves work with humans in neuropsychology, experimental cognitive neuroscience, sensory psychophysics, animal behavior and electrophysiology; cellular and molecular neuroscience provides training in electrophysiology, molecular biology, biophysics, and biochemistry appropriate to neurobiology; and computational and integrative neuroscience trains students in the use of experimental and theoretical methods for the analysis of brain function.

Students graduating with a PhD degree in Neuroscience are expected to:

- Demonstrate a graduate-level understanding of the principles and techniques of at least two of the areas of research represented by the program: cognitive, computational, systems, cellular, and molecular neuroscience.
- Explore possible research areas and techniques through four first-year laboratory rotations
- Become confident in reading primary literature, critical thinking, and presentation
- Become proficient in scientific writing and oral defense of original research
- Obtain training in the preparation of grant applications
- Become confident in using quantitative methods or approaches
- Gain experience teaching students in a teaching assistantship role
- Learn ethical practices in the Sciences
- Complete a significant body of original work that advances the field of Neuroscience and that results in publication of the work in peer-reviewed scientific journals.

Department: Neuroscience
Degree: MS

GRADUATE LEARNING GOALS & OUTCOMES

GRADUATE OUTCOMES: The Neuroscience Master’s program will guide each student toward realizing her or his potential as a scientist and will foster their career development towards obtaining a position in research, teaching, or other scientific enterprises. Students are encouraged to become experts in the theory and practice of her or his chosen area of research, as well as to obtain breadth in other areas strongly represented in the program.
Students graduating with a Master’s degree in Neuroscience are expected to:

- Demonstrate a graduate-level understanding of the principles and techniques of at least two of the areas of research represented by the program: cognitive, computational, systems, cellular, and molecular neuroscience.
- Explore possible research areas and techniques through a semester of independent or semi-independent research
- Become confident in reading primary literature, critical thinking, and presentation
- Learn ethical practices in the Sciences