Neuroscience at BELMONT UNIVERSITY

Neuroscience is a growing field and includes a wide range of subdisciplines like cognition, behavior, cellular neuroscience and computational neuroscience. As a result, the neuroscience major is truly interdisciplinary, built upon the interconnections between biology, psychology, chemistry, mathematics and computer science, with sufficient flexibility to allow students to focus on those aspects that they enjoy most.
The neuroscience program is characterized by small classes taught by motivated faculty who are committed to Belmont’s student-centered approach. Neuroscience courses provide a rich array of experiences in classes as well as in the faculty-taught labs. Furthermore, neuroscience faculty serve as academic advisors who work closely with students to help them achieve their goals. This personal attention helps to transform students into neuroscientists. Neuroscience majors design and conduct original research projects mentored by faculty members. These research experiences build critical thinking skills in addition to honing laboratory skills. Students then have the opportunity to present their findings at regional or national science meetings. Previous student work has employed two popular model organisms, *C. elegans* (a nematode) and *D. rerio* (zebrafish), and has utilized software and hardware (video tracking) developed by computer science students to monitor animal behavior in different pharmacological exposures, mutational and phenotypic backgrounds, and learning and memory paradigms.

Students who complete the program are well prepared for entry into graduate schools in neuroscience, psychology or cognitive studies. Graduates also attend medical school or choose to teach or work in entry-level careers as laboratory scientists in pharmaceutical or basic research. The field of neuroscience is growing, and the National Institutes of Health’s BRAIN (Brain Research through Advancing Innovative Neurotechnologies) makes this an especially exciting time to be a neuroscientist.

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**MAJORS & MINORS**

**MAJOR**

All neuroscience majors take a core of courses that includes biology, psychology, chemistry and physics. This core curriculum includes several courses designed to help students understand and conduct research. In addition to this core, students select upper level courses in biology and psychology to suit their interests. Neuroscience majors do not need to declare a minor due to the interdisciplinary nature of this program.

**MINOR**

The neurobiology minor is a collection of courses centered around cellular and molecular neuroscience and the effect of molecular changes on behavior.