

MAJOR IN NEUROSCIENCE

biomedical-sciences/biomedical-sciences/neuroscience-major-cell-molecular-concentration/)

The B.S. in Neuroscience (<https://vetmedbiosci.colostate.edu/degree-programs/undergraduate/bs-neuroscience/>) allows you to choose from two different concentrations: Behavioral and Cognitive Neuroscience and Cell and Molecular Neuroscience. Both concentrations have a strong foundation in mathematics, physics, chemistry and biological sciences that utilize a common core for the first two years, differing in only a single course for each concentration, thus making it easy to switch between concentrations if a student's interest changes during the first two years. Both concentrations require completion of an undergraduate thesis, providing significant opportunities for experiential learning in research laboratories in which they work closely with faculty, and which sometimes lead to authorship of original publications. Electives allow students in one concentration to acquire breadth and depth in the other area, if desired.

Learning Objectives

Students will obtain:

1. A command of basic concepts in chemistry, physics, biology, biochemistry, molecular biology, and cellular biology as well as a more in-depth understanding of the structure and function of the nervous system.
2. An understanding of how the brain works, from molecules to the mind, and how its function becomes disrupted in diseases and following brain injury.
3. The ability to critically analyze and present the methods, results, and conclusions of scientific papers in the current neuroscience literature, and orally present technical material in a clear and comprehensible form.
4. Experience in the use of a variety of laboratory techniques, ability to critically interpret experimental results, and ability to design new experiments.
5. The ability to perform original research or to critically analyze published work to advance an understanding of a specific area of neuroscience by preparing and defending an undergraduate thesis.

Potential Occupations

Possible career opportunities for students with a B.S. in Neuroscience include, but are not limited to: research technician, medical or clinical lab technologist, production/quality assurance lab technician, pharmaceutical research worker or salesperson, human resource specialist, neurotoxicology technician, teacher, writer, and research analyst. Many Neuroscience majors go to professional schools in medicine, veterinary medicine, or health sciences, or into graduate programs encompassing virtually all areas of biomedical sciences and psychology.

Concentrations

- Behavioral and Cognitive Neuroscience Concentration (<https://catalog.colostate.edu/general-catalog/colleges/veterinary-medicine-biomedical-sciences/biomedical-sciences/neuroscience-major-behavioral-cognitive-concentration/>)
- Cell and Molecular Neuroscience Concentration (<https://catalog.colostate.edu/general-catalog/colleges/veterinary-medicine-biomedical-sciences/biomedical-sciences/neuroscience-major-cell-molecular-concentration/>)