NEUROSCIENCE

The study of neuroscience is one of the most rapidly growing areas in the sciences, reflecting the importance of the fundamental and applied interest in how the nervous system is coordinated and regulated. The field of neuroscience examines the physiology, anatomy, pharmacology, development, growth, maintenance, and evolution of nervous system processes. As an interdisciplinary major, students explore how neuroscience blends with associated fields leading to health careers, graduate school, and direct-to-career goals.

Students working toward completion of this degree choose coursework in Molecular/Cellular Neuroscience and Behavioral/Cognitive Neuroscience along with Pathway coursework in a choice of Pre-Health/Traditional Neuroscience, Philosophy, Medical Humanities, Computer Science, or Criminal Justice. Two optional Concentrations are available. The Medical, Health Sciences, and Research Concentration focuses students toward our neuroscience coursework particularly suited for health careers, graduate school and MCAT studying. The Computing and Neurotechnology Concentration focuses students toward careers or graduate studies in Applied Computing and Bioinformatics. The major provides both content and hands-on experience in various areas of neuroscience. An excellent choice for students with interests in pursuing neuroscience-related graduate programs, health careers (for example, students with post-graduate aspirations for attending medical, PA, dental, veterinary, or nursing school), or careers in private industry. Students will emerge from the major with the ability to think across disciplines, to formulate questions and seek answers, to interpret data and draw conclusions, and to effectively communicate the outcome of these processes to a larger audience. This suite of skills makes neuroscience majors eligible for a variety of career opportunities both within and outside the discipline of neuroscience.

Other Information

All coursework taken for the neuroscience major must be completed with a grade of "C-" or better.

Note for Double Majors in Neuroscience and Biology:
Beyond the neuroscience fundamentals courses, students cannot use a 3000/4000 level course to count toward both majors.

Note for Double Majors in Neuroscience and Psychology: Beyond the neuroscience fundamentals courses, students cannot use a 3000/4000 level course to count toward both majors. Students may overlap 3000/4000 level PSYC courses between the Psychology Neuroscience & Behavior concentration and the Neuroscience major.

Note for Students Completing a Neuroscience Major and Psychology Minor:

No psychology coursework will be allowed to count toward both programs.

Note for Students Completing a Neuroscience Major and Biology Minor:
No 3000/4000 level course(s) may count toward both programs.

Additional Laboratory Experiences

Students wishing additional laboratory experiences can enroll in Experiential Study in Neuroscience (NEUR 4960) or seek independent research opportunities with faculty conducting neuroscience research at UNO, UNMC, Creighton University, or Boys Town National Research Hospital.

Fast Track

The Neuroscience faculty have developed a Fast Track program for highly qualified and motivated students providing the opportunity to complete a bachelor's degree and a master's degree in an accelerated time frame.

With Fast Track, students may count up to 9 graduate hours toward the completion of their undergraduate program as well as the graduate degree program.

Program Specifics:

- This program is available for undergraduate students pursuing a BS in neuroscience desiring to pursue a MA in psychology, MS in human-centered computing or a MS in biomedical informatics.
- Students must have completed no less than 60 undergraduate hours.
- Students must have a minimum undergraduate GPA of 3.2.
- Students must complete the Fast Track Approval form and obtain all signatures and submit to the Office of Graduate Studies prior to first enrollment in a graduate course.
- Students will work with their undergraduate advisor to register for the graduate courses.
- A minimum cumulative GPA of 3.0 is required for graduate coursework to remain in good standing.
- Students remain undergraduates until they meet all the requirements for the undergraduate degree and are eligible for all rights and privileges granted undergraduate status including financial aid.
- Near the end of the undergraduate program, formal application to the graduate program is required. The application fee will be waived, the applicant will need to contact the Office of Graduate Studies for a fee waiver code.
  - Admission to Fast Track does NOT guarantee admission to the graduate program.
  - The admit term must be after the completion term of the undergraduate degree.

Special Note: Eligible undergraduate students may enroll in any dual level psychology or neuroscience course (PSYC 8xx6, NEUR 8xx6).

Student Groups

Nu Rho Psi – National Honor Society in Neuroscience
http://nurhopsi.org

Canvas Site – Neuroscience Majors should join the UNO Neuroscience Student Interest Group Canvas Site. If you are a Neuroscience Major and would like to be added to the Canvas page, email Dr. Sollars.

Contact

Neuroscience Director, Dr. Suzanne Sollars: 402.554.3981

Contact by email is best: ssollars@unomaha.edu

Website (http://www.unomaha.edu/college-of-arts-and-sciences/neuroscience/)

Degrees Offered

- Neuroscience, Bachelor of Science (http://catalog.unomaha.edu/undergraduate/college-arts-sciences/neuroscience/neuroscience-bs/)
- Neuroscience Minor (http://catalog.unomaha.edu/undergraduate/college-arts-sciences/neuroscience/neuroscience-minor/)

Neuroscience is a rapidly growing field, with a much higher than average projected jobs growth of in the next ten years (U.S. Department of Labor). Students in our program have been highly successful in admissions to graduate and medical schools and obtaining employment in neuroscience-related fields. Alumni from our Neuroscience Program have outstanding jobs as physicians, researchers, nurses, physician assistants, teachers, dentists, medical industry experts, technicians, and CEOs of neuroscience-related businesses.

Within your Neuroscience Program, you will gain knowledge in all aspects of how the brain and body function, with coursework in cellular, molecular, behavioral and cognitive neuroscience. The Pathway choices you have will build interdisciplinary strengths in Pre-Medicine, Pre-Health, Pre-Law, Philosophy, Medical Humanities, Computer Science, and careers in Criminal Justice fields. Built within the curriculum are opportunities for hands-on experimental experiences. We currently have neuroscience faculty with expertise in neuropharmacology, neuroimmunology, development, endocrinology, gerontology, genetics, sensory systems, behavior, philosophy, and biomechanics. Your curriculum will focus on understanding and engaging with new and innovative research within neuroscience, science writing, data analysis, and applications of the latest concepts in the field.

Career Opportunities:

- Physician & Other Healthcare Fields
- Data Analysis
- Research & Development
- Genetic Counseling
- Hospitals - Technology, Business, & Healthcare
- Universities/Colleges - Faculty, Research, Teaching, Administration
- Laboratories – Research Technicians & Research Associates
- Government Agencies
- Pharmaceutical & Other Science Industries
- Laboratory Software and Equipment
- Science Writing
- Neuroscience Consultancies
- Medical Illustrators, Neuroasthetics, and Neuroarts