Behavioral Neuroscience

Overview

Behavioral neuroscience is an interdisciplinary major that explores the neural basis of behavior through psychology, chemistry, philosophy, molecular biology, cellular biology and many other disciplines. The relationship between the brain’s function and behavior is examined at multiple levels of analysis, from how a cell functions to how a facial expression conveys trust or fear.

Research Opportunities

We emphasize research skills in our courses, and we use animals extensively to help you learn. Both core courses, “Behavioral Neuroscience” and “Psychopharmacology,” have a lab requirement. Many students conduct individual studies to hone their research skills. The experience you gain will be invaluable as you prepare for medical school, graduate school or a research position.

Internships and Service Learning

The College’s extensive programs can lead you across the United States and around the world. Many students conduct summer research internships. As a behavioral neuroscience major, you also have the chance to inspire others to learn about science with community events like the College’s Kids Judge! Neuroscience Fair. You and your fellow students plan and create interactive demonstrations, games and crafts to teach elementary students how the brain works – and your projects are judged by them.

Conferences and Scientific Societies

Behavioral neuroscience majors participate in the annual meetings of the Society for Neuroscience and NEURON, the Northeast Under/graduate Research Organization for Neuroscience. NEURON will put you in contact with undergraduates, grad students and faculty at many other institutions.

Talia Hahn
Behavioral neuroscience

Q: Why Connecticut College?
A: I was attracted to the vast study abroad opportunities at Connecticut College, along with the diversity of academic options. I loved the idea of being part of a tight-knit community where students take initiative, host activities and put their ideas into action.

Q: Why did you decide to study behavioral neuroscience?
A: I was drawn to the interdisciplinary nature of the major - behavioral neuroscience combines biology, psychology, chemistry and even anthropology. I knew I liked science, but the brain in particular intrigued me, and I was interested in discovering how it governs human behavior. The major also encourages independent research projects with professors, which I took advantage of.

Q: What role has CELS played in your experience at Connecticut College?
A: CELS has been a tremendous resource for me. The workshops have given me the necessary tools and practice for networking, applying to jobs and presenting myself in a professional manner. My CELS counselor in particular has been beyond helpful in revising my resume and giving me advice on where to look for opportunities. I always feel a little more at ease with my post-graduation planning after leaving her office. I did my CELS internship at Harvard University in a cognitive neuroscience memory research lab.
Faculty

Ruth E. Grahn, Associate Professor of Psychology; Chair of the Psychology Department
B.A., Mount Holyoke College; M.A., Ph.D., University of Colorado
Impact of stress on behavior and neural function; animal models of psychopathology; role of serotonin in fear/anxiety-related behaviors; protein immunohistochemistry

Joseph Schroeder, Associate Professor of Neuroscience; Director of the Behavioral Neuroscience Program
B.A., Franklin & Marshall College; Ph.D., Thomas Jefferson University
Neurobiology of analgesia; the neurobiological mechanisms of psychostimulant-related behavior; animal models of neurodegenerative disease and drug abuse; heavy metal neurotoxicity; spatial navigation learning and memory; development of zebrafish behavioral pharmacology models

Selected Courses
Behavioral Neuroscience; Psychopharmacology; Cognitive Brain Imaging; Medical Anthropology; Neurobiology of Disease; Sensation and Perception

About Connecticut College
Connecticut College is a private, highly selective liberal arts college with 1,850 students and more than 40 majors in the arts, sciences, social sciences and humanities, as well as the option for students to self-design majors. The College offers a high level of intellectual challenge, a campus culture that supports students to tailor their educational experience to their own interests and goals, and a four-year career development program that teaches students how to translate a liberal arts degree into a first job or graduate school admission. Connecticut College is situated in the small New England seaport of New London.

WHAT CAN YOU DO WITH A MAJOR IN BEHAVIORAL NEUROSCIENCE?

Psychiatrist, Mt. Sinai Health
Study Coordinator, Joslin Diabetes Center
Owner, Conlin Rudd Interior Design
Emergency Room Technician, Framingham MetroWest Medical Center
Teacher, Equality Charter School
Nurse Practitioner, CVS Minute Clinic
EMT-B, Mt. Sinai Health
Lab Technologist, Massachusetts General Hospital
Research Assistant, Cummings School of Veterinary Medicine at Tufts
Psychiatric Nurse, Four Winds Hospital
Veterinarian, Bristol-Myers Squibb
Anesthesiologist, Anesthesia Associates of New Haven
Emergency Planner, Hartford Health Department
Assistant Scientist, Palatin Technologies

EXAMPLES OF STUDENT RESEARCH IN BEHAVIORAL NEUROSCIENCE

Jamie C. Honohan ’13, Rebecca H. Markson ’13, Lauren Cameron ’14
Are Oreos addictive? Nucleus accumbens C-Fos expression is correlated with conditioned place preference to cocaine, morphine and high fat/sugar food consumption

Nicolas G. Tolman ’13, Chelsea N. Louis ’14, Gwen Galvin ’14
Comparison of prenatal and post-weaning lead exposure and enriched versus impoverished rearing environment on visuospatial learning and memory in rats

FOR MORE INFORMATION, VISIT WWW.CONNCOLL.EDU/ACADEMICS/