



CONNECTICUT COLLEGE

What can you do with a science major?

Xuefeng "Nick" Peng '10

Environmental studies, economics

Ph.D. candidate in geosciences at Princeton

Laura Frawley '10

Biological sciences

NSF Fellow and lab technician at the David H. Koch Institute for Integrative Cancer Research at MIT

Annemarie Brown '10

Self-designed major in cognitive neuroscience

Ph.D. candidate in cognitive neuroscience at Dartmouth

Curren Mbofana '08

Chemistry

Ph.D. candidate in organic chemistry at Yale

Scott Maddalo '07

Chemistry

Medical student at NYU School of Medicine; outreach coordinator for NYC Free Clinic

Puni Almony '07

Neuroscience

Clinical trial coordinator at the Dana Farber Cancer Institute

Zumara De la Cruz '07

Biological sciences

Research technician doing research on Alzheimer's disease at the Albert Einstein School of Medicine

Erica Gagne '07

Environmental chemistry

Teaching high school chemistry in Chicago with Teach for America

The Connecticut College Science Leaders Program



Thinking about a career in the sciences?

Apply for the Connecticut College Science Leaders Program, funded by a grant from the National Science Foundation and Connecticut College. This challenging undergraduate program will prepare you for a wide range of science-related careers and provide a solid foundation for graduate study or medical school. Simply indicate your interest in this program on the Connecticut College Supplement to the Common Application.

The Science Leaders Program is open to all prospective science majors at Connecticut College who are U.S. citizens and permanent residents, but we are particularly focused on students from groups that are currently underrepresented in the sciences. Admission priority will be given to women, students of color, first-generation college students and students who are economically disadvantaged.

As a science student at Connecticut College, you will experience:

- » Small classes and labs
- » Hands-on experience with sophisticated equipment
- » Independent study with a faculty mentor
- » Funds to support student research and internships
- » Opportunities to learn outside the classroom
- » Close collaborations with faculty that may lead to coauthoring professional papers or co-presenting at scientific conferences

Science Leaders will also receive:

- » An intensive first-year seminar with other Science Leaders
- » Additional mentoring and support
- » Career preparation and counseling
- » Assistance applying to graduate and medical school

Why study science at Connecticut College?

Connecticut College is a small, residential, liberal arts college. This means that we are focused on developing broad knowledge and critical intellectual skills in undergraduate students. It also means we have highly accessible faculty who are committed to teaching, mentoring and undergraduate research. We support and train young scientists in ways that larger universities cannot.

Connecticut College is a leader in interdisciplinary studies, in which problems and questions are examined with the perspectives and methodologies of several different academic disciplines. That's another great reason to study science here. Research in the sciences increasingly involves multiple disciplines, particularly collaborations among the biological sciences, mathematics and computer science. You may also choose to combine a science major with academic work in the humanities, arts or social sciences.

For more information and admission requirements:

Contact **Djiara Meehan** in the Office of Admission at djiara.meehan@conncoll.edu or **1-860-439-2200**.

Science majors and minors

Astronomy
Behavioral Neuroscience
Biochemistry, Cellular &
Molecular Biology
Biological Sciences
Botany
Chemistry*

Cognitive Science
Chemistry/Biochemistry*
Computer Science
Environmental Chemistry
Environmental Studies
Mathematics
Physics

* ACS certified



Faculty research

As a science student at Connecticut College, you will have opportunities to work with faculty on their research as well as develop your own projects. Following are the research interests of faculty members who mentor the Science Leaders.

Marc Zimmer, *Professor of Chemistry*

Imagine a mouse with neurons that fluoresce when they are used, glowing red cancer cells that can be followed wherever they go in a mouse, or a million-dollar pig with a yellow fluorescent nose. Thanks to green fluorescent protein, a protein from jellyfish, it's all been done. Professor Zimmer uses computational methods to try to understand why the protein fluoresces and to make different, brighter fluorescent proteins. Fifty-six undergraduate students have been involved in his research, including 37 women and 19 minority students.

Anne Bernhard, *George & Carol Milne Associate Professor of Biology*

When you think of bacteria, most likely you think of disease-causing germs. But most bacteria are beneficial and even essential for the Earth's many ecosystems to function properly. Bacteria not only decompose dead material, they also cycle nutrients that are necessary for plant and animal growth. Professor Bernhard uses molecular methods to study the diversity of nitrogen-cycling bacteria in near-shore marine ecosystems and how the microorganisms interact with their environment. Sixteen undergraduates have worked with Professor Bernhard on her research.

Joseph Schroeder, *Assistant Professor of Neuroscience*

The brain is a complex structure that controls many behaviors, from simple automatic actions

like breathing to complicated tasks like doing math. Behavioral neuroscience studies how the brain can affect behavior — and how behavior can alter the brain. Professor Schroeder uses animals (rodents, fish and even humans) to examine the relationships between brain and behavior. His interests include the causes of drug addiction and what happens to the brains of people with Parkinson's disease or Alzheimer's disease. His students use many methods of measuring animal behavior, perform animal brain surgery, and examine neurons and brain structures with the microscope.

Douglas Thompson, *Professor of Geology*

Ever wonder how flowing water and the resulting turbulence shape rivers? Professor Thompson combines fieldwork in local rivers with laboratory experiments using the state's largest indoor river simulation facility. This research involves efforts to restore the natural habitats in rivers to protect the Atlantic salmon and other aquatic species. His other research topics include the landforms and processes associated with glaciers, landslides, beaches and arid regions. Twenty-seven students have worked in Professor Thompson's lab, with 56 percent women and 13 percent students of color in paid summer research positions.

Deborah Eastman, *Associate Professor of Biology*

Professor Eastman is interested in the gene regulatory mechanisms that are involved in specifying particular cell types of the sensory organs in *Drosophila* (fruit flies). She hopes that possible cures may be found for diseases — such as tumors, stroke and dementia, Alzheimer's disease and Alagille syndrome — through studying the function of this pathway in model organisms, such as fruit flies, that are amenable to molecular and genetic experimentation.

Craig McCarrick '07

Environmental studies

Staff scientist at Excel Environmental Resources Inc.

Marissa Velarde '07

Biological sciences

Research assistant in the emergency medicine department of Beth Israel Hospital

Ram Prasad Neupane '05

Chemistry

Ph.D. candidate in chemistry at the University of Wisconsin

Amanda Marie Cook '05

Astrophysics

Ph.D. candidate in astrochemistry at Rensselaer Polytechnic Institute

Emily Elliot '05

Biological sciences

Ph.D. candidate in biomedical sciences at the University of California, San Francisco

Sarah Fleet '05

Chemistry/biochemistry

Medical student at the University of Connecticut

Desta "Mickey" Tadesse '04

Physics, computer science

Ph.D. candidate in computer engineering at Brown University

Patricia Zerra '03

Biological sciences

Student at Thomas Jefferson Medical School in Philadelphia

Jaime Goode '02

Environmental studies

Ph.D. candidate in geosciences at Colorado State University

ABOUT CONNECTICUT COLLEGE

Connecticut College is a highly selective, residential liberal arts college with 1,900 students from all over the country and the world. The academic program offers 47 majors in the arts, sciences, social sciences and humanities, as well as innovative interdisciplinary programs. Students engage with dedicated faculty and each other to create a vibrant social, cultural and intellectual community in which learning is valued for its own sake — and individuals' diverse perspectives enrich the experience of all.