Thinking about a career in the sciences?

Apply for the Connecticut College Science Leaders Program, a challenging undergraduate program that 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, students with disabilities, 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. Our highly accessible faculty 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.

The Science Leaders program is funded by The National Science Foundation; The Lloyd G. Balfour Foundation; The Petit Family Foundation; and The Maximilian E. and Marion O. Hoffman Foundation, Inc.

For more information and admission requirements, contact Salem Harry, Assistant Director of Admission, at sharry@conncoll.edu or 1-860-439-2200.
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.

**Anne Bernhard**  
Associate Professor of Biology  
Microorganisms are the smallest organisms on the planet, but they are also probably the most important in keeping Earth's ecosystems functioning properly. They help to cycle important nutrients, like nitrogen and carbon, that are essential for plant and animal growth. Professor Bernhard studies communities of nitrogen-cycling bacteria in near-shore marine ecosystems and how the microorganisms interact with their environment. Students working with Bernhard learn how to apply molecular techniques to characterize microbial communities and their responses to different environmental disturbances, including oil spills and other pollutants.

**Stanton Ching**  
Margaret W. Kelly Professor of Chemistry  
Naturally occurring substances often inspire the development of new technologies. Professor Ching and his students gain inspiration from manganese oxide materials found as marine nodules in the deep ocean and as rock varnish coatings in terrestrial environments. This guides their research in designing syntheses of porous manganese oxides that have potential applications in catalysis, hazardous waste treatment and rechargeable battery technology.

**Mohamed Diagne**  
Oakes Ames Associate Professor of Physics  
Mohamed Diagne is interested in semiconductor device physics. He primarily focuses on vertical surface emitting lasers and avalanche photodiodes design, fabrication and how they are used in free-space optical communications. His other interests include optogenetics and he has been working in collaboration with Brown University to develop novel devices to probe and record responses of targeted cells.

**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.

**Tanya Schneider**  
Assistant Professor of Chemistry  
Many important drugs, including antibiotics, are derived from molecules found in nature. Professor Schneider and her research group are interested in understanding how bacteria make antibiotics with an eventual goal of biosynthesizing novel and bioactive natural product analogs. Twelve undergraduates have been involved with this research, including three Science Leaders, and they have used techniques ranging from organic synthesis to molecular biology to work on their projects.

**Joseph Schroeder**  
Associate 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.

**Marc Zimmer**  
Jean C. Tempel ’65 Professor of Physical Sciences  
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 42 women and 27 minority students.