Biological Sciences

Overview

Coursework, facilities and research opportunities will prepare you for the most competitive graduate schools, professional schools and science-related jobs. Almost every course has a hands-on lab. Our location in coastal New England gives you access to estuaries and salt marshes and the ability to interact with industry scientists at nearby research facilities. Areas of faculty-student research include cell and molecular biology, genetics and evolution, developmental biology, ecology and physiology. Major supporters of this research include the National Science Foundation and the National Institutes of Health. You are encouraged to work with one of your professors on an independent research project, and many students publish papers with faculty in peer-reviewed journals and present research at conferences.

Research Opportunities

Many students have summer research internships with their professors; some take a semester to study at the Marine Biological Laboratory in Woods Hole, Mass. Recent student projects have included mapping genes that affect flight in fruit flies, studying bacteria in a salt marsh, analyzing genes using bioinformatics, tracking the nesting of birds along power line corridors and creating an interactive database of lakes and ponds. Students in “Tropical Biology” travel with their professors to Belize over spring break for research. The “Frontiers in Molecular Biology” class visits the Fred Hutchinson Cancer Research Center and the Institute for Systems Biology in Seattle.

Facilities

We offer hands-on experience with electron and fluorescent microscopes, digital image analysis, cell culture and real-time polymerase chain reaction in our well-equipped labs. They are complemented by an equally impressive living laboratory — the College’s 750-acre Arboretum — and the resources of our interdisciplinary Goodwin-Niering Center for the Environment.
WHAT CAN YOU DO WITH A MAJOR IN BIOLOGY?

Marine Biologist, Biscayne National Park

Molecular Biologist, Broad Institute

Pediatrician, Friendly Medical Group

Clinical Research Coordinator, Massachusetts General Hospital

Environmental Planning Supervisor, City of Boulder

Director CSU Council on Ocean Affairs, Science & Technology, Biscayne National Park

Fishery Biologist, Northeast Fishery Center

Engineer, Seagate Technologies

Veterinary Technician, Borash Veterinary Clinic

Research Assistant I Lab Neurobiology, Harvard Medical School

Ecologist, Natural Resources Conservation

Faculty

Robert A. Askins, Professor of Biology
B.S., University of Michigan; M.S., Ph.D., University of Minnesota
Ecology, ornithology; impact of forest fragmentation on natural communities, ecology of early successional birds

Phillip T. Barnes, Associate Professor of Biology
B.S., Xavier University; Ph.D., University of Minnesota; post-doctoral fellowship, North Carolina State University
Genetics; evolution of complex quantitative traits; evolution of insect flight

Anne Bernhard, Associate Professor of Biology, Chair of Biology Department
B.S., Texas A&M University; M.S., Western Washington University; Ph.D., Oregon State University; post-doctoral fellowship, University of Washington
Microbial ecology of estuaries and salt marshes; community ecology; population dynamics of ammonia-oxidizing bacteria

Deborah Eastman, Associate Professor of Biology
B.A., Grinnell College; Ph.D., University of Minnesota; post-doctoral fellowships, Institute of Molecular Biology and Biochemistry, Greece, and Yale University
Developmental biology; molecular biology; genetics; microbiology

Marylynn B. Fallon, Senior Lecturer in Biology, Pre-Health Adviser
B.A., Cardinal Cushing College; M.A., University of Northern Colorado
Human physiology; general biology

Martha J. Grossel, Professor of Biology
B.S., Colorado State University; Ph.D., Tufts University School of Medicine; post-doctoral fellowship, Harvard Medical School
Molecular biology; cell biology; cancer and the cell cycle; cell cycle regulation

Kristine Hardeman, Senior Lecturer of Biology and Botany
B.S., University of Iowa; Ph.D., University of Oregon; post-doctoral fellowships, Oregon State University
Molecular biology; plant biotechnology

Stephen H. Loomis, Jean C. Tempel 65 Professor of Biology
B.S., M.S., California Institute of Technology; Ph.D., University of Wisconsin; Ph.D., University of California
Comparative biochemistry; physiology

Sardha Suryapparuma, Senior Lecturer in Biology and Botany
B.S., University of Colombo, Sri Lanka; M.S., Ph.D., University of Rhode Island; post-doctoral fellowships, University of Connecticut Health Center
Molecular biology; microbiology

Susan W. Warren, Senior Lecturer in Biology
B.S., Delaware Valley College; M.S., Adelphi University
Organismal and cell biology

Stephen Winters-Hilt, Visiting Associate Professor of Computer Science and Biology
Machine learning; bioinformatics; genoanalyzer; signal processing; pattern recognition; nanopore detector cheminformatics

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Engineer, Seagate Technologies

Veterinary Technician, Borash Veterinary Clinic

Research Assistant I Lab Neurobiology, Harvard Medical School

Ecologist, Natural Resources Conservation

Environmental Scientist, Vanasse Hangen Brustlin, Inc.

Oceanographer, U.S. Dept. of the Interior

Biology Teacher, Hampshire Regional High School

Cardiac Registered Nurse, Cape Cod Hospital

Physician Assistant, Saint Francis Hospital

National Accounts Manager, Macmillan/ McGraw-Hill

Instrument Specialist, Oceanographic Research

ER Resident, NYU/ Bellevue Hospital Center

EXAMPLES OF STUDENT RESEARCH IN BIOLOGY

Khushbu Panda ’16
Impacts of the Deepwater Horizon oil spill on nitrogen-cycling microorganisms in Louisiana salt marshes

Corrine Kraemer ’15
Behavioral Genetic Analysis of Activity Level Differences Between Two Laboratory Populations of Drosophila melanogaster

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

Selected Courses

Cell Biology; Ecology; Genetics; Molecular Development; Marine Ecology; Freshwater Ecology; Molecular Biology; Psychopharmacology; Electron Microscopy; Neurobiology of Disease; Frontiers in Molecular Biology; Molecular Basis of Cancer; Conservation Biology and Genetics; Biochemical and Molecular Evolution; Stem Cells and Cell Signaling

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, and the option for students to self-design majors. The College offers a high level of intellectual challenge, and a campus culture that supports students to tailor their educational experience to their own interests and goals. A four-year career development program teaches students how to translate a liberal arts degree into a first job or graduate school admission.