Botany

Overview

Plant science holds a special place at Connecticut College. Here, botany is its own department, distinct from biology. Major in botany and you have unparalleled study and research opportunities. Teaching and research are inextricably linked, and the department has an international reputation in coastal, marine and estuarine studies. We have an exceptionally strong program in freshwater botany, as well as courses in such diverse areas as terrestrial ecology, plant systematics, ethnobotany and plant cell biology. You focus on your areas of interest while developing a strong background in all aspects of plant biology.

Research Opportunities

Thanks to a low student-faculty ratio and ample funding, you are able to conduct research with a botany faculty member, often as early as your first or sophomore year. In recent years, students have worked on projects in many parts of New England and the continental U.S., as well as Nova Scotia, Newfoundland, Venezuela and Peru. Faculty-student collaborations often lead to presentations at conferences and co-authorship of papers in top journals.

Facilities

We offer top-flight transmission and scanning electron microscopes as well as light microscopes. You get hands-on experience in our extensive greenhouses and learn plant identification and classification in our Graves Herbarium, a renowned resource for scholars. Another unusual resource for a small college is our 750-acre Arboretum, a living laboratory with hundreds of species of native trees and shrubs and a large variety of wetland and upland habitats.

Daniel Evanich

Botany major, chemistry minor

Q: Why Connecticut College?
A: I have always been really interested in plant biology and I knew coming in that I wanted to be a Botany major. The Botany Department is a huge reason why I decided to come to Connecticut College. It is unique for a small school like Connecticut College to offer a Botany major so I really felt like coming here was the best of both worlds. I also knew I wanted to do research and was excited at the prospect of getting involved in a lab early on.

Q: Have you done research?
A: I started working in Professor Rachel Spicer’s lab in the second semester of my freshman year and I can truly say it has been one of the most rewarding experiences. Professor Spicer’s research centers on the plant hormone auxin and its role in vascular development and connectivity. My current project is looking at alternative sites for auxin biosynthesis and trying to determine how these sites might contribute to the auxin content of the whole plant.

Q: What are your plans for the future?
A: I am planning on applying to graduate schools early next year with the goal of beginning in the fall of 2015. I am particularly interested in plant biochemistry and am hoping to join a lab doing research in that area.
Faculty

Glenn Dreyer, Charles and Sarah P. Becker ’27
Director of the Arboretum; Adjunct Associate Professor of Botany
B.S., University of California, Davis; M.A., Connecticut College
Vegetation management; ecology and horticulture of native plants; invasive exotic woody plants; large and historic trees

Kristine Hardeman, Senior Lecturer of Biology and Botany
B.S., University of Iowa; Ph.D., University of Oregon
Molecular biology; genetics; plant biotechnology

Pamela Hine, Senior Lecturer in Botany
B.A., Bates College; M.A., Connecticut College
Tidal marsh ecology; pollination ecology; environmental education; plant ecology

Chad Jones, Associate Professor of Botany
B.S., Brigham Young University; Ph.D., University of Washington
Plant ecology; invasive plants; plant succession; GIS and ecological modeling

Manuel Lizarralde, Associate Professor of Botany and Anthropology
B.A., M.A., Ph.D., University of California at Berkeley
Ethnobotany; environmental anthropology

T. Page Owen, Associate Professor of Botany; Chair of Botany Department
B.A., Oberlin; Ph.D., University of California, Riverside

Peter Siver, Charles and Sarah P. Becker ’27
Professor of Botany; Director of Environmental Studies Program
B.A., SUNY Binghamton; M.S., University of New Hampshire; Ph.D., University of Connecticut
Limnology; acid rain; phycology

Rachel Spicer, Assistant Professor of Botany
B.S., University of Massachusetts-Amherst; M.S., Oregon State University; Ph.D., Harvard University
Xylem structure and function; vascular development in trees; parenchyma physiology

Sardha Suriyapperuma, Senior Lecturer in Botany and Biology
B.S., University of Colombo; M.S., Ph.D., University of Rhode Island
Molecular biology; plant and cell biology; microarray; genomics and linkage mapping; plant-microbe interactions

Selected Courses

Plants, Protists and Fungi; Indigenous Use of Tropical Rainforests; Ethnobotany of Southern New England; Ecology of Terrestrial and Wetland Plant Communities; Marine and Freshwater Botany; Genetically Modified Crops; Electron Microscopy; Plant Structure and Function; Plant Systematics and the Local Flora

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. Connecticut College is situated in the small New England seaport of New London.

WHAT CAN YOU DO WITH A MAJOR IN BOTANY?

Director, The Harvard Forest
Agreements Officer, Convention on Migratory Species
Ecologist, Maryland Department of Natural Resources
Project Leader, U.S. Forest Service
CEO and President, Connecticut United for Research Excellence
Forest Tech, U.S. Forest Service
Landscape Designer, Sprigs & Twigs
Owner, Highland Foods LLC
Producer/ Reporter, KQED Public Radio
Environmental Protection Specialist, U.S. Environmental Protection Agency
Research Scientist, Novartis
Executive Director, Delaware Center of Horticulture
Resident Ethnobotanist, Kona Kai Resort
Meteorologist, National Weather Service

EXAMPLES OF STUDENT RESEARCH IN BOTANY

Christopher Haight ’11,
Clara Chaisson ’12
Ecosystem-scale study of the impact of excess nutrients on a salt marsh within the Plum Island Estuary of Massachusetts

Jordan Bishop ’14
Valve shape in eunotia: comparing modern and fossil floras to determine impacts of greenhouse climates

Sarah Beaudoin ’09
Ultrastructural changes in the digestive glands of Nepenthes alata during protein absorption

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