Bachelors in
Biology

0918

WHAT DO STUDENTS LEARN?

At Chatham University, the study of biology spans the spectrum from unlocking the secrets of the gene at the molecular level to providing the knowledge to help understand the causes and spread of diseases. Chatham offers tracks tailored to different fields of interest. The **cell and molecular biology** concentration is appropriate for a career in research or medicine. The **human biology** concentration includes all of the prerequisite courses for our Master of Physician Assistant Studies program, and is well suited to careers in a variety of health professions. Students interested in the role of biology and ecosystems are encouraged to consider a major in **environmental science** at Chatham.

WHAT DO GRADUATES GO ON TO DO?

Graduates are prepared for immediate employment or for further study in graduate and professional schools, medical school, veterinary school, and many other health-related professions.

Biology

As a biology student at Chatham University, most of your classes will be small, and taught by faculty with doctoral degrees in their fields. As a senior, you will participate in a capstone seminar that integrates the knowledge that you've accumulated, and allows you to channel it into a project under close faculty guidance. Many of our students have presented their work at conferences, or had their work published in journals.

PROGRAM HIGHLIGHTS

- The Science Complex is Chatham's 10,000 square-foot laboratory building, which features a three-story glass atrium and a modern greenhouse in addition to individual, specialized research spaces; laboratories and classrooms; a range of modern analytical equipment including cell and tissue culture facilities, spectrometers (nuclear magnetic resonance, UV-VIS, IR, etc.), and one of the few drift tube mass spectrometers in the country.
- Enjoy ready access to outdoor areas for fieldwork, including the 388-acre Eden Hall Campus—the world's first academic community built for the study of sustainability, with its woodlands, streams, and research labs.
- Students have the opportunity for hands-on work in our large human cadaver lab.
- You can apply for Research Experiences for Undergraduates (REU) positions, sponsored by the National Science Foundation or others. This program allows undergraduate students to participate in active research projects during the summer before their junior or senior year.
- You can also leverage Pittsburgh's tight-knit academic and medical community through connections our faculty has around the region.
- Chatham has a robust Pre-Med Advising program to support and mentor students interested in applying to medical-related graduate programs.

SAMPLE COURSES

Neuropharmacology

This course examines the effects of therapeutic and recreational drugs on neural function and behavior. Basic anatomy, physiology, and pharmacology will be reviewed prior to an in-depth analysis of drug effects based upon the neural systems that are affected.

Immunology

This course covers fundamental principles of immunology with emphasis on molecular and cellular immunology, including antigen and antibody structure and function, effector mechanisms, complement, major histocompatibility complexes, and the cellular basis for the immune response.

Histology

A microscopic analysis of human and animal tissue and organ function at the cellular level. Material comes from textbooks, lecture, images and animations in addition to practical application and identification of histological specimens. Recommended for students planning to apply to professional schools of medicine, veterinary medicine, or dentistry.

▶ **www.chatham.edu/biology/curriculum.cfm**

AFTER GRADUATION

Graduate schools to which students have been accepted:

- University of Pittsburgh
- University of Stirling (Scotland)
- University of Michigan Medical School
- Chatham University Physician Assistant Studies program
- Lake Erie College of Osteopathic Medicine

Places of employment:

- University of Rochester Medical Center
- UPMC Montefiore
- University of Pittsburgh Cancer Institute
- Ohio University

FUNDING

Each year, Chatham runs a Summer Undergraduate Research Program. In addition to giving students experience in laboratory research prior to their capstone seminar, Chatham uses other sources of funding, such as the Hulme Award and the Theo Colburn and Lorin Maazel Awards, to provide money for biology students to travel to professional conferences and to fund their summer travel and research.

"Over the years, we've found that many students change or modify their career plans as they discover new fields within science. For example, epidemiology, bioinformatics, and healthcare analytics are some careers our graduates have entered, but which they had never thought about in high school. For this reason, we keep our first year or two very flexible to allow students to switch majors or tracks to pursue new interests."

— **LISA LAMBERT, PH.D.,** *professor of biology and chair of science*

Apply online at apply.chatham.edu

LEARN MORE

Chatham University
Office of Admission
Woodland Road
Pittsburgh, PA 15232

800-837-1290 or 412-365-1825
undergraduate@chatham.edu

Read faculty bios, browse course descriptions, and learn about program requirements at
chatham.edu/biology