

Studying the world for a greater good

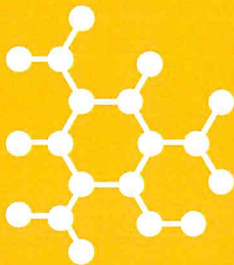
A FOUNDATION FOR SHAPING THE WORLD'S FUTURE

A biology degree grounded in a liberal arts education gives you a perspective that many other institutions just can't provide.

CONNECTED TO A CITY OF OPPORTUNITIES

At JCU, you'll be well prepared for the real world. As a small liberal arts university located in a major U.S. city, we've created opportunities to ensure you have access to the undeniable advantages that Cleveland offers. We'll connect you with valuable internships, as well as permanent positions after graduation, at fast-rising startups, Fortune 500 companies, and government, academic, and nonprofit organizations.

Cleveland is a medical innovation hub — and JCU connects you to three major hospitals and countless health-related firms for internships and research opportunities. Our students have conducted laboratory and clinical research at the Cleveland Clinic, University Hospitals of Cleveland, and The MetroHealth System.



We have a dedicated undergraduate research program with the Cleveland Clinic Foundation, where students engage in cutting-edge research.

THE WORLD AWAITS

You'll have the opportunities to engage the world during your studies. In field courses, you'll study the biology of the Appalachian Mountains, California deserts, Costa Rican cloud forests, and Kansas grasslands. Transformative experiences, such as the annual medical immersion trip to Honduras, place your knowledge in action and prepare you to be men and women for and with others.

VALUABLE HANDS-ON EXPERIENCE

Many of our students gain valuable experience working with faculty, leading to participation in professional conferences and co-authorship on published papers. At other schools, these opportunities are often reserved for graduate students. These experiences will help set you apart when seeking employment and securing admission to graduate programs.

Our department puts a strong emphasis on research. You'll have numerous opportunities to participate in research — inside and outside of the classroom — even during your first year. Biology majors work together with faculty on research projects related to topics such as:

- How drugs can be used to modulate the immune system
- The chemical ecology of poison dart frogs
- The timing of bone development
- The traits that make some plants invasive

You can participate in research during the school year, or take part in our paid summer research fellowships, working directly with faculty on original projects.

You'll benefit from our department's ample facilities to support your projects, including greenhouse and growth chamber space, animal care facilities, and dedicated undergraduate student research laboratory space.

PURSUE A NUMBER OF PATHS

BIOLOGY B.S.

Gain a broad knowledge base in all three core areas of biology: cell and molecular; organismal; and evolutionary biology, ecology, and diversity. This major is for students preparing for careers in the health industry, including medicine, dentistry, optometry, pharmacy, nursing, physical therapy, occupational therapy, physician's assistant, public health, and veterinary medicine. You'll also be prepared for graduate programs and research positions in biology and related disciplines such as physiology, neuroscience, and evolutionary biology.

CELL & MOLECULAR BIOLOGY B.S.

Gain in-depth knowledge of biology and chemistry, with emphasis in genetics, biochemistry, and cell biology. You'll also develop laboratory skills required for fundamental and applied research. This major is for students seeking careers in medicine, biomedical research, biotechnology, pharmacy, healthcare, teaching, and other professions requiring a strong foundation in cellular and molecular processes.

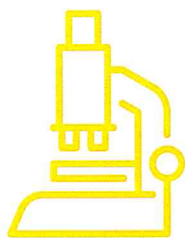
ENVIRONMENTAL SCIENCE B.S.

Learn how pressing environmental issues affect natural systems through classes about terrestrial and aquatic ecology, global climate change, and environmental policy. Travel locally and globally to study different systems while building foundational skills. This major is for students seeking careers in environmental consulting, government, parks and recreation, teaching, research, and environmental law. The major also prepares you for graduate programs in ecology and environmental science.

SMALL CLASS SIZES

Only 30-35 students in introductory courses

8-12 in your upper-level lab courses



Students in their first semester of biology classes have helped departmental faculty identify new species of algae, previously unknown to science!

SPOTLIGHT:

PRE-HEALTH PROFESSIONS PROGRAM

Our programs are great preparation for careers in medicine. John Carroll's Pre-Health Professions Program provides John Carroll students with many opportunities to fulfill their goal of becoming a healthcare professional. We advise students on issues such as course selection, career paths in healthcare, and preparing for and applying to medical or professional school.

CONSIDER ADDING A MINOR OR CONCENTRATION

INTERDISCIPLINARY NEUROSCIENCE CONCENTRATION

Delve into physiological and behavioral methods investigating the nervous system. Most of our neuroscience graduates pursue a graduate or professional degree in areas such as healthcare, law, or research.

POPULATION AND PUBLIC HEALTH INTERDISCIPLINARY MINOR

Learn about preventing disease and improving the health of populations. This minor addresses biological, social and cultural, environmental, ethical, and public policy influences on a population's health.

OUTCOMES

Biology graduates go on to a wide range of careers and professional schools after graduation.

Members of our Class of 2018 have gone on to positions such as researchers, field assistants, physical therapy aides, medical scribes, and science recruiters. One member of the class was awarded a prestigious Fulbright Fellowship/Research award and is currently working in Spain! Other members of the class are pursuing graduate or professional degrees at institutions such as the Ohio University's Heritage College of Osteopathic Medicine, the Penn State College of Medicine, Cleveland Clinic's Lerner College of Medicine, the Ohio State University College of Dentistry, and the University of Michigan.

INTERNSHIP PLACEMENTS

Members of our Class of 2018 held a diverse range of internships at locations including:

- The Cleveland Clinic
- The Cleveland Department of Public Health
- The Cleveland Museum of Natural History
- The MetroHealth System
- Saucy Brew Works - a Cleveland brewery and brewpub
- Xellia Pharmaceuticals