



EMORY  
LANEY  
GRADUATE  
SCHOOL



GRADUATE DIVISION OF BIOLOGICAL AND BIOMEDICAL SCIENCES

# BIOCHEMISTRY, CELL AND DEVELOPMENTAL BIOLOGY

The life sciences are advancing at an unprecedented pace. At the core of these advances are three foundational life sciences: Biochemistry, Cell Biology, and Developmental Biology. Biochemists elucidate the chemical reactions that sustain all living things; Cell Biologists examine how these reactions govern cellular processes; and Developmental Biologists investigate the interactions of cells during the growth and differentiation of organisms.

Emory's Biochemistry, Cell, and Developmental Biology (BCDB) program combines these complementary disciplines, into an interdisciplinary doctoral training program of the highest caliber. BCDB students are making discoveries at the levels of molecules, cells and organisms that improve our understanding of biological processes, including those that cause or prevent human disease. The pathways to discovery provide the experience necessary for successful scientific careers in academia, industry or government. Whether your goal is basic science or translational research we offer research opportunities that will enable you to impact human health and our understanding of the world.

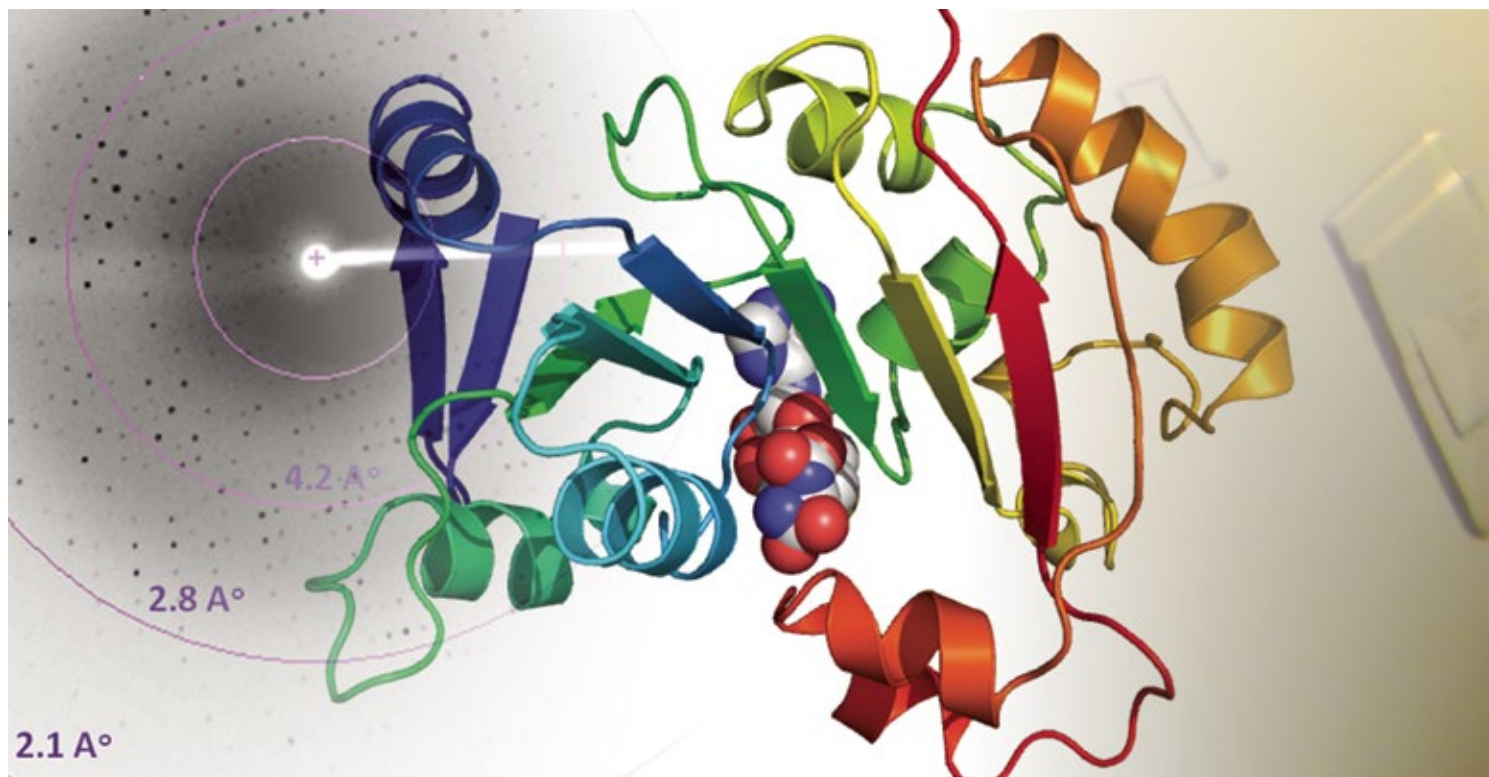
## DISCOVER EMORY

Emory University is a premier research institution. Trends in NIH funding rank Emory among the fastest growing medical centers in the U.S. The medical school is highly ranked, and major research centers, such as the U.S. Centers for Disease Control and Prevention (CDC), Yerkes Primate Center and Winship Cancer Institute are located on or near campus. Emory is well known for strengths in many scientific disciplines. With over 50 faculty members in our program and over 300 faculty in the Graduate Division of Biological and Biomedical Sciences, Emory is sure to have a leading researcher with state-of-the-art facilities in the specialty of your choice.

## PROFESSIONAL DEVELOPMENT

The Laney Graduate School offers a range of programs that encourages students to develop their professional skills, engage with broader professional communities, and prepare for their careers.

VISIT [GS.EMORY.EDU](https://gs.emory.edu) TO LEARN MORE.



### COLLABORATIVE

The BCDB program reflects the interdisciplinary nature of modern research. Our faculty members are drawn from a number of basic science and clinical departments at Emory. Our program encompasses diverse disciplines, including biochemistry, cell biology, development, molecular biology, structural biology, cancer biology, genetics, neuroscience, and others. Students may work with any of the ~330 faculty in the Graduate Division of Biological and Biomedical Sciences, or visit their labs to learn new techniques.

Find out more about our faculty and the projects they are engaged in. You will find a complete list, with links to brief project descriptions, on the faculty research page of our website. Visit [biomed.emory.edu/PROGRAM\\_SITES/BCDB/research/index.html](http://biomed.emory.edu/PROGRAM_SITES/BCDB/research/index.html)

### CURRICULUM

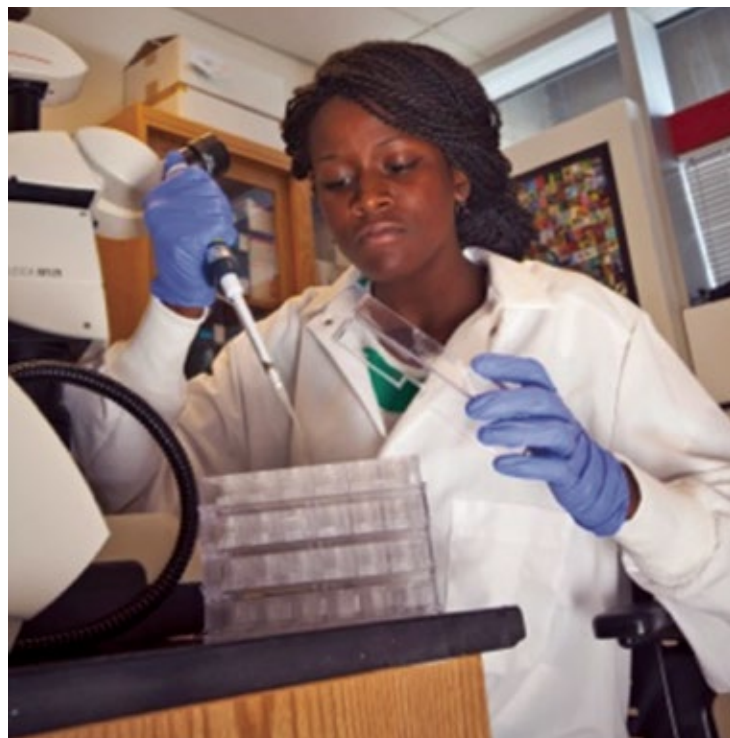
The BCDB program offers an ideal training venue for students. In the first year, BCDB students participate in an innovative series of mini-courses covering a range of topics in biochemistry, cell biology and development. They also get research experience through three laboratory rotations.

In the second year and beyond, students focus on dissertation research in their chosen laboratory but also supplement their training with a course in biostatistics and one in hypothesis development and experimental design in a unique faculty peer-reviewed grant-writing course. Students may also choose from a number of electives in their specialized area of interest. The curriculum emphasizes communication, and critical thinking skills through journal clubs and student seminars. Students also gain valuable classroom teaching experience with a one-semester requirement that can be expanded to benefit students interested in additional experience in teaching. Enhancing the educational experience in the BCDB program are monthly workshops devoted to ethical issues related to scientific research.

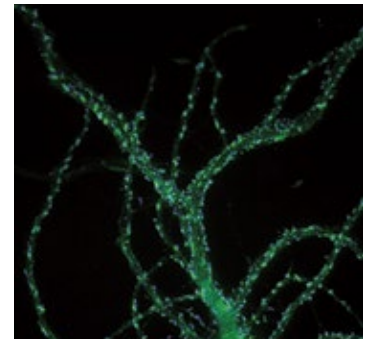
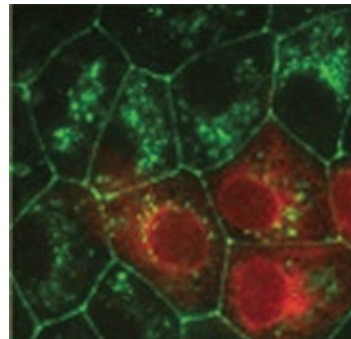
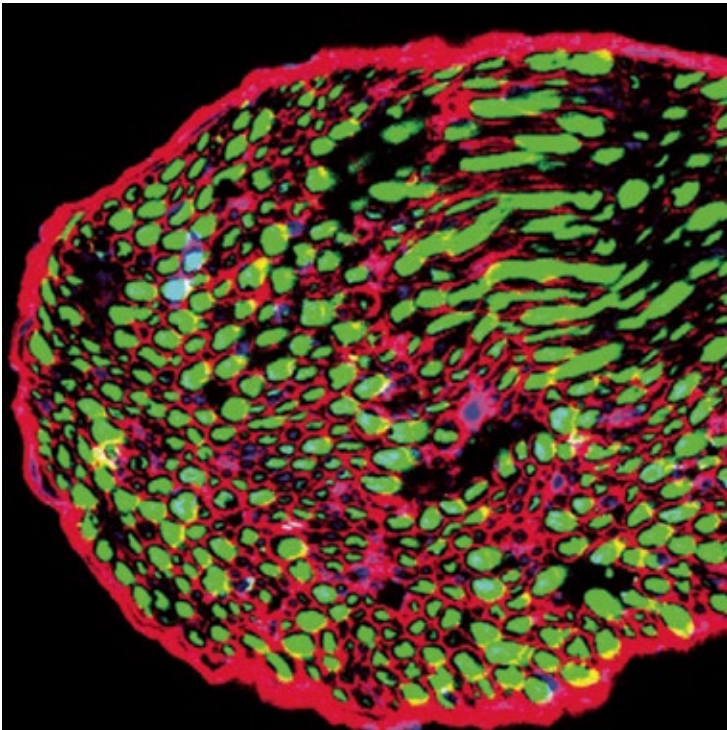
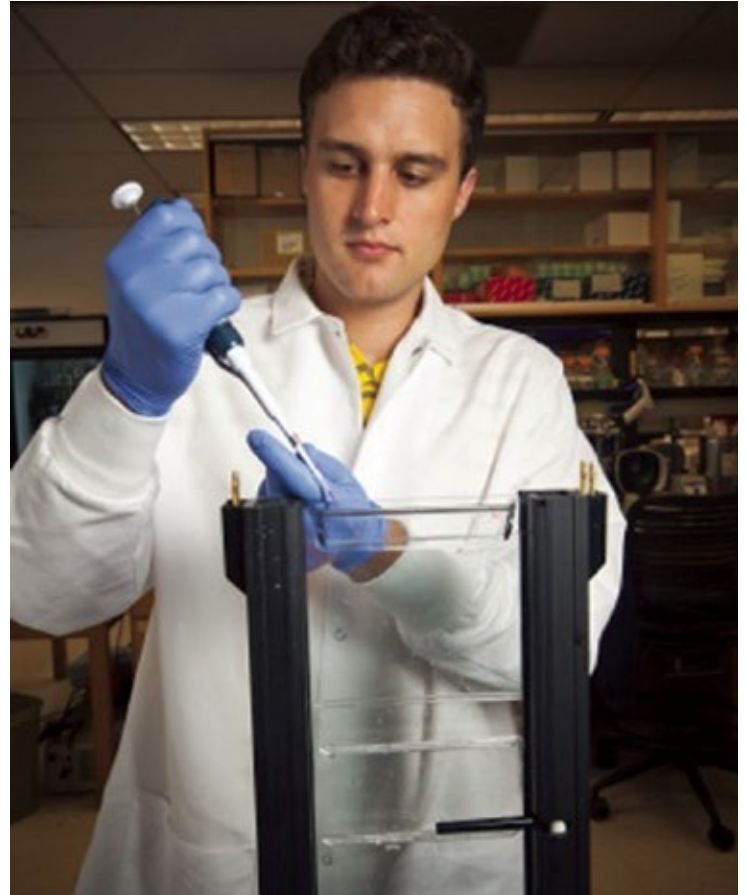
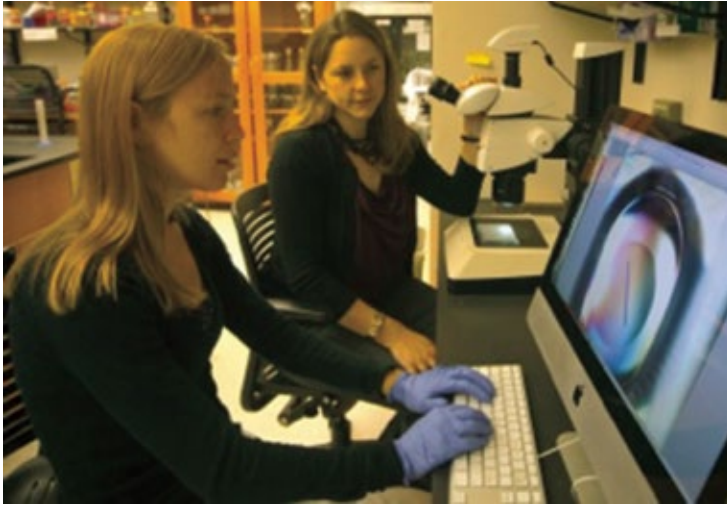
The prospective and current student part of our website has details about all degree requirements, and more. Visit [biomed.emory.edu/PROGRAM\\_SITES/BCDB/guides/prospective.html](http://biomed.emory.edu/PROGRAM_SITES/BCDB/guides/prospective.html)

### SUPPORTIVE

BCDB students conduct world-class research in a cooperative environment. A high faculty : student ratio ensures that each student receives a level of personal attention and guidance that cannot be matched by larger programs. Travel to scientific meetings is encouraged and financially supported. Workshops on different aspects of professional development occur monthly. All students receive biannual guidance from interdepartmental dissertation committees, and develop broad skill sets that contribute to competitiveness in a number of different career paths in academia, industry, or government.







## EXPERIENCE ATLANTA

Atlanta is one of the most vibrant and exciting cities in the U.S. It is a culturally diverse metropolis with 45 colleges and universities and a broad range of restaurants, nightclubs, cafes, museums, shops and outdoor activities to suit every taste. Emory is located on a beautiful campus in the historic Druid Hills neighborhood of Atlanta, which features a stimulating, eclectic atmosphere and a reasonable cost of living. The nearby Hartsfield-Jackson International Airport provides easy access to all corners of the U.S. and the world.

## ARE YOU READY FOR THE CHALLENGE?

We are both selective and rigorous, but don't follow a cookie-cutter approach to finding the best students. Successful applicants have strong undergraduate records in the sciences, and usually have research experience. But the desire to learn can be more important than experience, and each applicant is individually assessed for those qualities that are not contained in quantitative test scores. Are you creative? Are you curious and intuitive? Are you ready to devote yourself to research at the highest level? You may be someone we are looking for.

## FOR MORE INFORMATION

Visit [biomed.emory.edu/PROGRAM\\_SITES/BCDB](http://biomed.emory.edu/PROGRAM_SITES/BCDB)

email: [BCDB@emory.edu](mailto:BCDB@emory.edu)

**About Emory:**

Emory University is one of the major biological research and medical referral centers in the Southeast and is among the fastest growing Medical Centers in the United States. Emory is consistently ranked in the top 20 institutions nationally for NIH research support and ranks at or near the top of institutions for students with NIH predoctoral fellowships. Emory is recognized as a leader in higher education in sustainability and has won numerous awards. The Best Colleges has placed Emory in the top 10 in the nation in the categories of greenest universities and the most beautiful college campuses.

The Graduate Division of Biological and Biomedical Sciences (GDBBS) has around 400 graduate students in eight interdisciplinary Ph.D. programs:

- Biochemistry, Cell and Developmental Biology
- Cancer Biology
- Genetics and Molecular Biology
- Immunology and Molecular Pathogenesis
- Microbiology and Molecular Genetics
- Molecular and Systems Pharmacology
- Neuroscience
- Population Biology, Ecology and Evolution

Over 330 world-renowned researchers mentor students admitted to these programs, giving them a unique opportunity to train with faculty at:

- American Cancer Society
- the U.S. Centers for Disease Control and Prevention
- Children's Healthcare of Atlanta, Inc.
- Emory College
- the Robert W. Woodruff Health Sciences Center
- the Rollins School of Public Health
- The Carter Center
- Veterans Administration Medical Center, Atlanta
- the Winship Cancer Institute
- the Yerkes National Primate Research Center

Financial support includes a tuition scholarship, health insurance and a competitive stipend (\$32,569 for the 2020 – 2021 academic year). Funding is guaranteed as long as the student is making satisfactory progress toward their degree. The average time to degree is typically around 5.5 to 6 years. Training is interdisciplinary and students have the flexibility to perform their thesis work with GDBBS faculty outside their chosen program. Students typically perform three rotations before affiliating with a faculty member for their dissertation research.

**The application deadline is December 1st for the following fall semester.**



Requests for Additional Information:

Recruitment and Admissions  
 James T. Laney School of Graduate Studies  
 209 Administration Building  
 201 Dowman Drive  
 Atlanta, GA 30322

(404) 727-2547  
 gdbbs@emory.edu

biomed.emory.edu  
 biomed.emory.edu/PROGRAM\_SITES/BCDB



**LANEY GRADUATE SCHOOL DEGREE PROGRAMS**

Anthropology	Biostatistics	Computer Science and Informatics	French	Immunology and Molecular Pathogenesis*	Molecular and Systems Pharmacology*	Philosophy
Art History	Business (PhD)	Development Practice	Genetics and Molecular Biology*	Islamic Civilizations Studies	Neuroscience*	Physics
Behavioral Sciences and Health Education	Cancer Biology*	Economics	Health Services Research and Health Policy	Mathematics	Neuroscience and Animal Behavior (Psychology)	Political Science
Biochemistry, Cell and Developmental Biology*	Chemistry	English	Hispanic Studies	MD/PhD	Nursing	Population Biology, Ecology, and Evolution*
Bioethics	Clinical Psychology	Environmental Health Sciences	History	Microbiology and Molecular Genetics*	Nutrition and Health Sciences	Religion
Biomedical Engineering	Cognition and Development (Psychology)	Environmental Sciences				Sociology
	Comparative Literature	Epidemiology				Women's, Gender, and Sexuality Studies

\*The Graduate Division of Biological and Biomedical Sciences is home to eight interdisciplinary graduate programs.