Overview

Graduate Division of Biological and Biomedical Sciences

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 was recently named one of the 25 “New Ivies” by Newsweek, a testament to its quality and dedication to education. Emory was also ranked as having the sixth most beautiful campus in the nation by The Best Colleges. The Winship Cancer Institute recently earned the prestigious National Cancer Institute (NCI) Cancer Center designation. With NCI designation Winship Cancer Institute joins the ranks of the nation’s elite cancer research and treatment facilities, and becomes one of only sixty-five NCI Cancer Centers in the United States.

The Graduate Division of Biological and Biomedical Sciences (GDBBS) provides our students with unique opportunities to work with world-renowned researchers who are located on, or near, the Emory campus.

The Graduate Division of Biological and Biomedical Sciences (GDBBS) is composed of nine interdisciplinary programs. Training is interdisciplinary and students have the flexibility to perform their thesis work with GDBBS faculty outside their chosen program. Because of the Division structure students are exposed to a wider range of faculty research interests than is possible within a single department, and there is great flexibility in tailoring graduate education to the particular needs and interests of each student.

Unique Opportunities and World Class Relationships

Division students can choose to work with over 310 faculty members who may be affiliated with:

- American Cancer Society
- Centers for Disease Control and Prevention
- Emory College
- Robert W. Woodruff Health Sciences Center
- Rollins School of Public Health
- The Carter Center
- Winship Cancer Institute
- Yerkes National Primate Research Center
The Graduate Division Programs are interdisciplinary and students have access to the research resources of Emory University, the School of Medicine and several university affiliates. The O. Wayne Rollins Research Center, Whitehead Biomedical Research Building, and the Rollins School of Public Health (including Epidemiology and Global Health) are all adjacent to one another and house faculty from over 30 departments, including Biochemistry, Biology, Cell Biology, Human Genetics, Microbiology and Immunology, Pathology and Laboratory Medicine, Pharmacology, and Physiology. Division faculty are also drawn from the departments of Anthropology, Chemistry, Medicine, Neurology, Pediatrics, Psychiatry and Behavioral Sciences, Psychology and Surgery. Division students also have opportunities for collaborative training and research in major components or affiliates of Emory University. These affiliates include the Yerkes National Primate Research Center, Winship Cancer Institute, various university hospital and clinical research facilities, several programs within the Georgia Institute of Technology and Georgia State University, as well as at the U.S. Centers for Disease Control and Prevention, which is located only one block from the primary research buildings on the Emory campus.

Interdisciplinary Programs Training
You for Success

The resources and faculty available to our graduate students provide them with the necessary training to excel. The Division has over 450 students in various stages of graduate training. In a typical year Division students are primary or co-authors on more than 200 research papers or abstracts. The publications appeared in the top journals, with over half of the papers appearing in the top 7% of journals in the Biological Sciences (based on Impact Factor compiled by ISI). The training our students receive prepares them for jobs in many different career areas, including faculty and postdoctoral positions at top research universities, prestigious institutions such as the U.S. Centers for Disease Control and Prevention and the National Institutes of Health, and positions in government and the pharmaceutical industry.

Ph.D. Training Programs

The Division consists of nine interdisciplinary training programs, each leading to the Ph.D. degree. Each program focuses on a major area of contemporary biology, and each emphasizes the interdisciplinary approach that has proven to be successful in advancing research in the life sciences. Each program seeks to provide students with a broad multidisciplinary background and provide students with more modern and competitive training than can readily be achieved through education in a traditional single departmental program. Students are also exposed to a wider range of faculty research interests than is possible within a single department and there is great flexibility in tailoring graduate education to the particular needs and interests of each student. Students enter into one of the nine Division Programs and typically perform three research rotations before affiliating with a lab for their dissertation research. Each Program has its own Executive Committee that oversees student progress. Students typically complete the course work requirements prior to the end of the second year of study. Because of the Division structure, every student potentially has access to training with any of the more than 325 faculty members affiliated with the training programs.

The Programs in the Division are:
- Biochemistry, Cell and Developmental Biology
- Cancer Biology
- Genetics and Molecular Biology
- Immunology and Molecular Pathogenesis
- Microbiology and Molecular Genetics
- Molecular and Systems Pharmacology
- Neuroscience
- Nutrition and Health Sciences
- Population Biology, Ecology and Evolution
Financial Information
Students receive a tuition scholarship, health insurance coverage, and a competitive stipend ($26,500 for the 2011–2012 academic year). Funding is assured for all students who are making satisfactory progress toward their degree. Applications that are complete by the deadline will be considered for a number of competitive fellowships, including the Emory Graduate Diversity Fellowship, Woodruff Fellowship, and Division Scholar Fellowship. Each fellowship provides students with a supplement to their stipend that ranges from $2,000 to $5,000 per year for five years. Students who apply for and receive external funding that provides for at least 75% of their stipend receive a $2,000 supplement to their stipend for the duration of the award. The cost of living in suburban Atlanta compares very favorably to other university cities, and in only rare instances is the cost of living in the Emory area higher than that of comparable universities.

Admission Requirements
Students are admitted to the Division as trainees in one of the nine Ph.D. training programs. The average time to degree is about 5.5 years. Applicants to the Division should have strong undergraduate backgrounds in the physical, biological, or behavioral sciences; hold a cumulative average of B+ or better in major science courses; and be highly motivated for a career in biological or biomedical research. In addition, all applicants must submit scores from the Graduate Record Examination General Test (GRE). Scores must be less than five years old. International applicants whose native language is not English must also complete the Test of English as a Foreign Language (TOEFL) and scores must be no more than two years old. Students who have strong qualifications in all but one of these predictors of graduate performance and who can provide evidence of a productive experience in laboratory or field science will also be considered for admission. Applicants must submit three letters of recommendation, a statement of purpose, and transcripts from the universities they have attended, as well as required test scores.

Degree Requirements
In addition to meeting the general requirements for the Ph.D. degree (described in the bulletin of the Laney Graduate School of Arts and Sciences of Emory University), students in the Graduate Division of Biological and Biomedical Sciences participate in research seminars and in laboratory training rotations with selected faculty members. There are two types of research seminars: those presented by outstanding scientists, from inside and outside the university, which serve to acquaint the student with current research problems; and those where the student participates as a speaker and discussant, a format that helps develop the student’s organizational and communication skills. To develop these skills further, students also participate in the planning and presentation of courses in the biological sciences. Finally, programs require that students prepare a Ph.D. research dissertation proposal, most in the form of a National Institutes of Health or National Science Foundation research grant application, which is then critiqued by Division faculty who serve as members of, or consultants to, the review panels of these major research-funding institutions. These requirements provide Division students with skills that are essential for success in academic or industrial research careers, but are often overlooked in graduate training programs.
Career Development

The Division is committed to providing career development opportunities for their students. COBBS (Career Opportunities in the Biological and Biomedical Sciences) is a program that helps inform students about different career paths outside of academia. A group of Division students and administrators form the Career Development Committee. In their monthly seminar series guest speakers discuss their own careers and provide insight and advice. Students may take coursework in other Ph.D. programs, such as biostatistics, epidemiology and computer science. The committee is also investigating joint degree opportunities, which are currently handled on an individual basis. The goal of the COBBS program is to graduate students who are well-rounded and competitive candidates in a wide variety of fields. Students who are interested in teaching can take advantage of additional teaching opportunities through the Graduate School’s TATTO Program (Teaching Assistant Training and Teaching Opportunity). Two other selective programs are available to students who have an interest in teaching. PRISM participants (Problems and Research to Integrate Science and Mathematics) work with K-12 students and ORDER (On Recent Discoveries by Emory Researchers) provides students with experience teaching at the under-graduate level. In addition to writing articles for major journals, students have opportunities to enhance their scientific writing skills by becoming involved in Hybrid Vigor, which is published by a group of students who are involved in every aspect of the magazine’s publication (writing, illustrating, and design layout).

Application Deadlines

Students are expected to begin their training in the fall semester and are urged to file applications by the preceding December 1st. Minority students are encouraged to apply.