



ABOUT THE PROGRAM

The program builds upon fundamental concepts to give an understanding of modern biology. Core courses in cell biology and genetics provide background for a range of electives, including biochemistry, biotechnology, cancer biology, evolution, field biology, immunology, neurobiology, physiology and structural biology. The flexible program prepares students for diverse careers. Some graduates work in technical positions in research laboratories. Others go on to graduate study in dentistry, medicine, veterinary medicine and allied health professions. Some students enter master's or doctoral programs in the life sciences. Many bring their scientific backgrounds to other professions, including business, education and law.

What makes the program distinctive?

Brandeis is known for cutting-edge research in the life sciences. Researchers in more than 50 labs investigate fundamental life processes ranging from the structure and function of individual proteins to

the mechanisms that control the behavior of whole organisms. Students play key roles in the research process. Additionally, many students choose to major in biology while pursuing the university's prehealth track.

FAST FACTS

Current number of majors: 232

Number of faculty: 31

Can you minor in this program? No

Emphasis within the major: cell biology; development; genetics; molecular biology; motility; neurobiology; structural biology

Popular second majors: biochemistry; chemistry; health: science, society and policy; neuroscience

Website: www.bio.brandeis.edu

ACADEMICS AND RESEARCH

State-of-the-art facilities

In addition to the striking Carl J. Shapiro Science Center, which opened in 2009, Brandeis University is home to the Facility for Correlative Light and Electron Microscopy for innovative studies of the functional organization of cells, as well as a state-of-the-art electron microscope facility.

Student research

The many research laboratories provide opportunities for undergraduates to work under the direction of expert faculty. Many students begin working in labs as early as their first semester, and many start as juniors, leading up to a senior honors thesis. Students are engaged in every area of investigation and may be invited to present their research at lab meetings or conferences.

BEYOND THE CLASSROOM

Study abroad

Many students take a summer, semester or year to study abroad. Popular programs include SIT Brazil, DIS Copenhagen and the University of Melbourne, Australia.

Career exploration

Biology major Manasa B. '11 interned at the Dermatology Research Center at Tufts Medical Center, exploring dermatology as a clinical specialization.

Summer internships

Biology major Kerwin V. '12 spent a summer working at Seventh Sense Biosystems on novel technologies for blood sampling and diagnostic testing.

Student-run clubs

Brandeis University hosts a chapter of the Society for the Advancement of Chicanos and Native Americans in Science, dedicated to fostering the success of Hispanic/Chicano and Native American scientists in attaining advanced degrees, careers and positions of leadership.

AWARDS AND RECOGNITION

Renowned faculty

Ten Brandeis life sciences professors are members of the National Academy of Sciences, a society of distinguished scholars engaged in scientific research. Four faculty members have been named

Howard Hughes Medical Institute Investigators, one of the top honors for biomedical scientists. One professor is the recipient of a Pioneer Award from the National Institutes of Health.

Undergraduate research awards

Students may be paid for research work from grants to their faculty sponsors or from competitive awards including the Schiff Undergraduate Fellows Program, the Barry M. Goldwater Scholarship and Excellence in Education Program, and the Pfizer Fellowship for Summer Research program.

AFTER BRANDEIS

Notable alumni

Brandeis biology graduates include Arthur Levine '70, former president of Columbia University Teachers College, and Shen Tong '91, a student leader at the 1989 Tiananmen Square uprising. Other recent alumni have gone on to become a neurosurgery resident at Kansas University Hospital, a director of development at Brigham and Women's Hospital, an analyst at CRA International Pharmaceuticals, a senior medical director at Pfizer Inc. and a veterinarian at Grayslake Animal Hospital.

Advanced degrees

Brandeis University offers a five-year B.S./M.S. program in biotechnology and advanced degrees in biochemistry and biophysics, biotechnology, cell and molecular biology, genetic counseling, molecular and cell biology, and neuroscience.

Medical school

The prehealth track at Brandeis prepares students for dental, medical and veterinary schools. Recent Brandeis graduates were admitted to medical school at a rate of 75 percent, compared to the national average of 45 percent.

"Professor Kosinski-Collins shows dedication to the learning experience of all her students in the time and effort she puts into being there for us. I feel comfortable going to her for a range of concerns, from technical questions on lab report discussions, to questions about my future in a field of science, to issues in science education. She has been a constant source of support."

A former student of Melissa Kosinski-Collins, recipient of the 2010 Louis Dembitz Brandeis Prize for Excellence in Teaching



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