School Highlights

The Graduate School of Biomedical Sciences has over 350 internationally renowned faculty, including Nobel Prize winner Craig Mello; 5 members of the National Academy of Sciences; and 4 Howard Hughes Medical Institute investigators. GSBS faculty are leaders in diverse research areas including RNA biology, cancer biology, immunology, diabetes, and neuroscience. The GSBS student body currently stands at 400 students, and it annually admits 35-60 Ph.D. and 10 MD/Ph.D students. More than 580 doctoral graduates have published over 3,000 research articles en route to graduation.

Eligibility

Applicants must be a US citizen or permanent resident and be a member of a group considered underrepresented in the biomedical sciences as defined by the NIH. This includes individuals from underrepresented racial and ethnic groups, individuals with disabilities, and individuals from disadvantaged backgrounds. Applications are especially encouraged from students who are Black or African American, Hispanic or Latino, American Indian or Alaska Native, Native Hawaiian and Pacific Islander. Applicants must have received their bachelor's degree from an accredited U.S. college or university, prior to the start of the program, but no more than 3 years prior to starting the PREP; not be concurrently enrolled in a degree program; intend to pursue doctoral study in the biomedical sciences and will apply to biomedically relevant Ph.D. programs the fall of the PREP year.

Financial Support

PREP students receive a salary ($28,050 for academic year 2019-2020), health and dental insurance and paid tuition and curriculum fees.

Application Procedures

Candidates for the PREP begin the application process by visiting the GSBS application web site. Requirements include transcripts from all undergraduate and graduate institutions attended (only scanned copies are needed for our initial review) and 3 letters of reference. Graduate Record Exams (GRE) are not required, but must be taken during the PREP year in preparation for application to PhD programs.

www.umassmed.edu/gsbs

Postbaccalaureate Research Education Program

The Postbaccalaureate Research Education Program (PREP) in the Graduate School of Biomedical Sciences (GSBS) at the University of Massachusetts Medical School (UMMS) offers an outstanding opportunity to enhance student academic preparedness and laboratory-based or clinical research experience. The result is a graduate who is competitive for admission into top-tier graduate programs. Successful students will be presented to the GSBS admissions committee for acceptance into the PhD program for the following fall semester.

The PREP prepares students with a Bachelor's or Master's degree in the Physical or Life Sciences (if interested in Basic Biomedical Science study) or a Bachelor's or Master's degree in Public Health or related social science degree (if interested in Clinical and Population Health Research) for doctoral study. Those interested in the Basic & Biomedical Sciences undertake a yearlong mentored research project. PREP students interested in Clinical & Population Health Research undertake a yearlong mentored research project while studying foundational principles in health and epidemiology research methods.

An important goal of the PREP is to broaden diversity among biomedical sciences graduate student populations. Therefore, applications are encouraged from students belonging to groups underrepresented in the biomedical sciences, including racial minorities, students with disabilities, or from economically disadvantaged backgrounds.

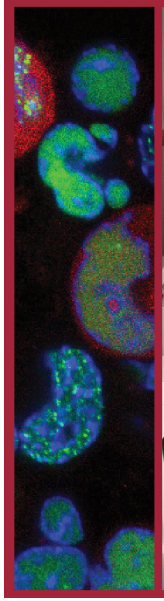
The PREP is funded in part by a NIH Postbaccalaureate Research Education Program (PREP) grant (R25GM121220).

University of Massachusetts Medical School
Graduate School of Biomedical Sciences
Pathway to Graduate Study Program
55 Lake Avenue North, Room S1-824
Worcester, MA 01655-0002
508.856.4135
prep@umassmed.edu

www.umassmed.edu/gsbs

University of Massachusetts Medical School
Graduate School of Biomedical Sciences

Postbaccalaureate Research Education Program



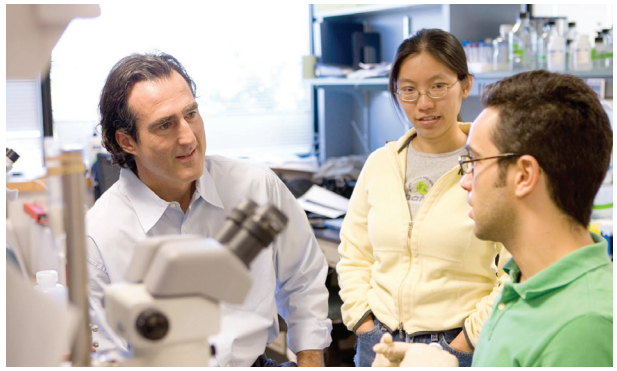
Basic & Biomedical Sciences Pathway

Students selecting the Basic & Biomedical Sciences pathway undertake a core curriculum comprising Biochemistry, Molecular Genetics, Cell Biology, Scientific Writing and Research Ethics. This is a blended, yearlong curriculum comprised of interactive lectures, critical evaluation of the primary research literature.

At the beginning of the program in July, students take an intense 3-week course, BBS748: Introduction to cellular metabolism and disease, that prepares entering GSBS students to the independent learning, critical thinking and written communication skills that facilitate success in the graduate curriculum. In the spring semester, students take an advanced topics course in an area of specialization of their choosing. These courses typically consist of a combination of lectures and paper discussion sessions.

Classes in the Responsible Conduct of Research and Communicating Science expose students to critical issues in research ethics and sharpen the ability of students to write clear and concise research proposals and research articles.

	SUMMER 1	FALL	SPRING	SUMMER 2
CORE	BBS 748: INTRO TO CELLULAR METABOLISM AND DISEASE		ADVANCED TOPIC	
RESEARCH	RESEARCH INTERNSHIP			
MENTORING	LAB PRINCIPAL INVESTIGATOR - RESEARCH ADVISING			
	FACULTY ACADEMIC MENTORS - CURRICULUM ADVISING			
	PREP FACULTY & PEER ADVISING			



Clinical & Population Health Research Pathway

PREP students selecting the Clinical & Population Health Research Pathway have a curriculum tailored to their academic experiences and research goals. In the summer, students take CTS605A: Introduction to Clinical Epidemiology and Biostatistics. This course reviews basic principles of epidemiology, investigation of disease outbreaks, and the application of various observational and experimental research designs and strategies to clinical, epidemiological, and translational research. In the fall and spring semesters, PREP students take foundation courses in Epidemiology, Research Methods, and Biostatistics. Typically, courses in the Clinical & Population Health Research Program consist of small group lectures and discussions, student papers and presentations, and hands on exercises. Students develop skills in use of clinical and epidemiological databases. They develop their applied research skills working with a research mentor for the full year where they will contribute to the mentor's work as well as develop an independent project.

Courses will be selected with the mentor. All PREP students must consider that some of the courses available have pre-requisites and students entering the courses must have met the prerequisites.

	SUMMER 1	FALL	SPRING	SUMMER 2
CORE	RESEARCH BOOTCAMP	HUMAN SUBJECTS RESEARCH CERTIFICATION	SCIENTIFIC WRITING TUTORING	
	CURRICULUM TAILORED TO STUDENTS NEEDS & RESEARCH GOALS			
RESEARCH	RESEARCH PROJECT			
	BRIDGE SEMINARS			
MENTORING	TEATIME, INSIDE THE RESEARCHER'S STUDIO, JOURNAL CLUB			
	RESEARCH MENTOR			
	PREP FACULTY & PEER MENTORS