

Molecular Medicine Program



Join the Post-Genomic Biology Revolution

As we move through the twenty-first century, it is becoming increasingly clear that the biomedical sciences are entering the most exciting phase of their development! Rapid advances in biology have not only revolutionized the detection, management, and treatment of a wide range of diseases— but have also provided a greater understanding of the complex physiology underlying disease processes.

The **Graduate Program in Molecular Medicine at the University of Maryland** offers a multi-disciplinary, integrated program of study and research that provides students with knowledge, research skills, and state-of-the art methodologies to equip them for a successful research career in the Biomedical Sciences in the post-genomic era. The Program combines research tracks in Cancer Biology, Genome Biology, and Molecular and Cellular Physiology and Pharmacology into a unique interdisciplinary graduate training program that is ideally suited for training scientists for future biomedical research. Students seamlessly cross between track specialties to tailor their course of study to their research interests and career goals.

Quick Facts about the Program

Located in Baltimore, MD near the Inner Harbor

3 tracks of interrelated and complementary study :

- Cancer Biology
- Genome Biology
- Molecular & Cellular Physiology & Pharmacology

160 faculty research mentors

Average duration of study: ~5 years

Student retention rate: ~93% (2012-2021)

Graduations : 5-10/year

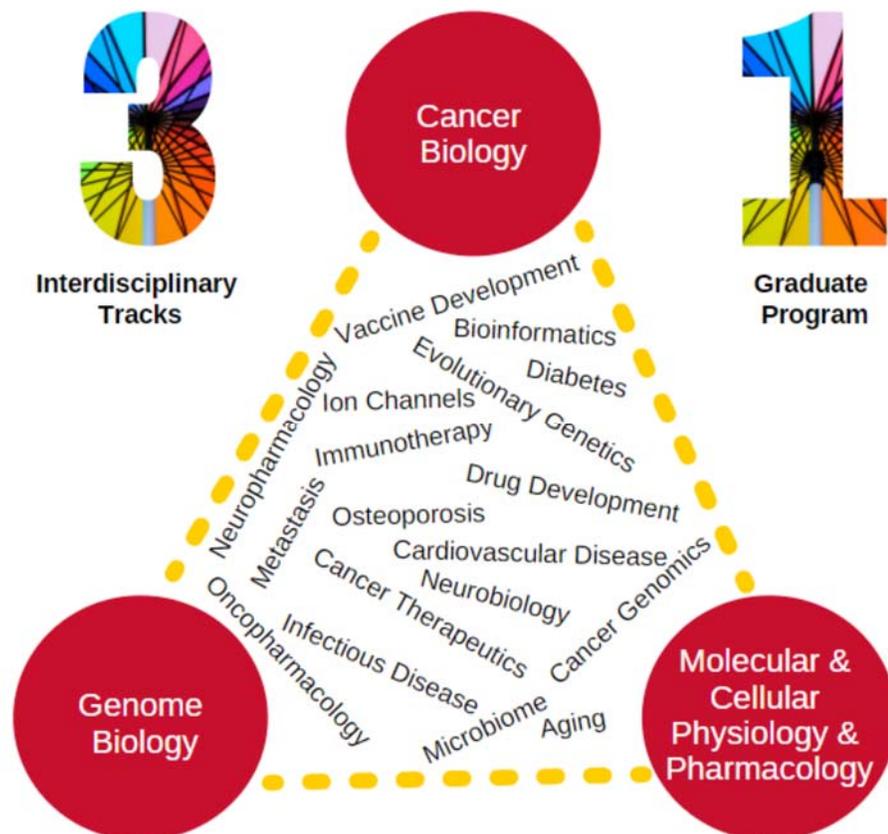
75 PhD graduates since 2015

Tuition, health insurance, and nationally competitive stipends provided throughout the duration of study

Career development workshops

Internships and networking opportunities

Opportunities to apply to NIH supported training grants and other funding sources



Training Progression

The core curriculum includes an introduction in molecular and cellular biology and biochemistry, and specialty advanced courses in the student's particular areas of interest. Students complete laboratory rotations and attend Professors' Rounds and student seminars to learn about the multiple diverse research opportunities available. In the third semester of study, students prepare for the qualifying exam by writing a proposal addressing a problem related to their research interests and defend the proposal in an oral qualifying exam. Following admission to candidacy, students pursue their thesis research under the direction of their mentor and a thesis advisory committee, and by the end of the third year in the program, present their research proposal to their thesis advisory committee and their peers. Completion of the PhD program, including the final thesis defense, usually requires five years. During their training students are encouraged to present their research results at national and international meetings and to publish in top tier research journals.



Internships and Career Development

The Office of Predoctoral and Postdoctoral Scholars housed within the Graduate Program in Life Science offers a variety of venues to enhance the training experience and expand the skill sets of predoctoral students for both academic and non-academic careers. These opportunities include Careers in Science presentations, grant writing workshops, a Teaching Pedagogy Seminar Series, a course in Entrepreneurship in Life Sciences, internship opportunities in the areas of science communications, undergraduate teaching at local universities, and biotech company research internships.



Location and Facilities

The University of Maryland School of Medicine was established in 1807 as the first public medical school in the United States. It is currently the fulcrum of a large academic health center that combines medical education, biomedical research, biotechnological innovation, patient care, and community service. Located in the heart of metropolitan Baltimore, near the famous Inner Harbor area, the campus occupies modern building facilities and has state-of-the-art technology, offering unique training opportunities for graduate students.



The Molecular Medicine Graduate Program is in the Graduate Program in Life Sciences (GPILS), an umbrella graduate program consisting of 7 PhD and MD/PhD granting programs and a current enrollment of over 260 students. The GPILS programs span a wide spectrum of biomedical disciplines, each placing a special emphasis on both fundamental discovery and translational research. Students in the Molecular Medicine Program are trained and mentored from faculty throughout the campus, including the School of Medicine, the Dental School, the School of Nursing, the Institute for Genome Sciences, the Center for Vascular & Inflammatory Diseases, the Center for Vaccine Development, the Center for Translational Medicine, the Marlene and Stuart Greenebaum Comprehensive Cancer Center, and the Institute for Human Virology. Specialized expertise, cutting-edge technologies, and sophisticated scientific resources and equipment all support a robust basic, clinical, and translational biomedical research environment through the Center for Innovative Biomedical Resources (CIBR); <http://medschool.umaryland.edu/CIBR/>.

Visit our website:

<http://lifesciences.umaryland.edu/molecularmedicine/>

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