

Molecular Medicine Program



Join the Post-Genomic Biology Revolution

As we move through the twenty-first century, it is 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. The Program combines research tracks in Cancer Biology, Genome Biology, and Molecular and Cellular Physiology and Pharmacology into a unique and 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.

**How to apply by
December 1, 2024:**



SCAN ME

Quick facts:

Located in Baltimore, MD
near the Inner Harbor

3 tracks of interrelated and
complementary study :

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

170+ faculty research
mentors

Average duration of study:
5 years

Graduations : 5-10/year

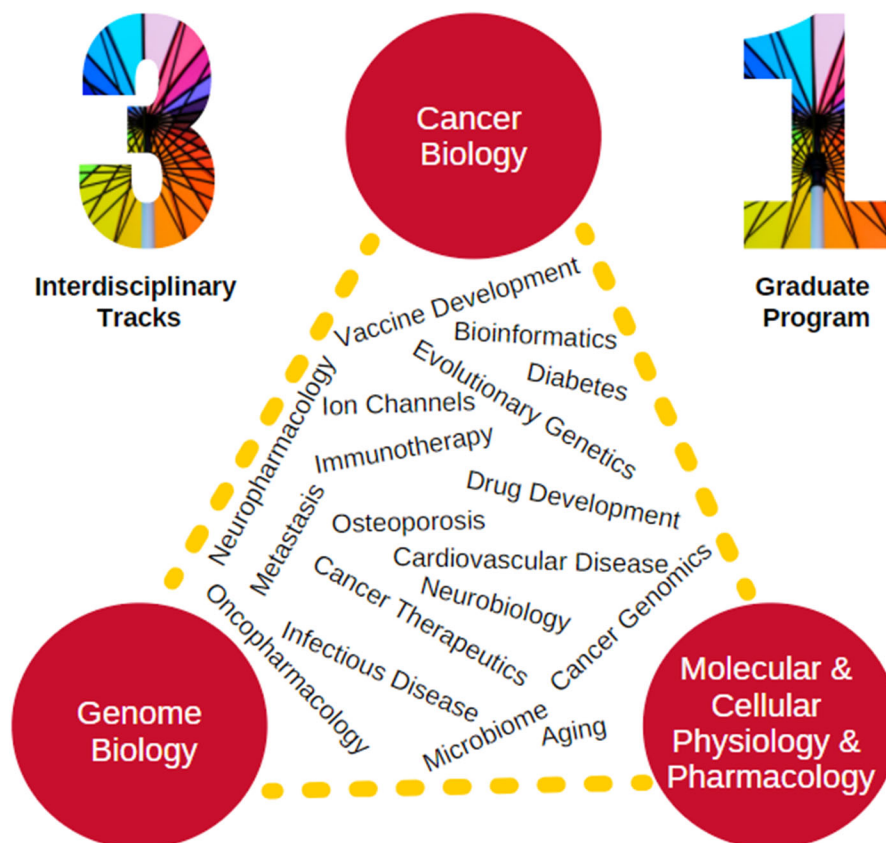
52 PhD graduates since 2019

Tuition, health insurance,
and student fee coverage

Nationally competitive
stipend provided
throughout the duration
of study

Career development
workshops

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



Training Progression

The core curriculum includes an introduction to molecular and cellular biology and biochemistry, and specialty advanced courses in the student's particular areas of interest. Students complete laboratory rotations and attend Professor 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 defending 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.



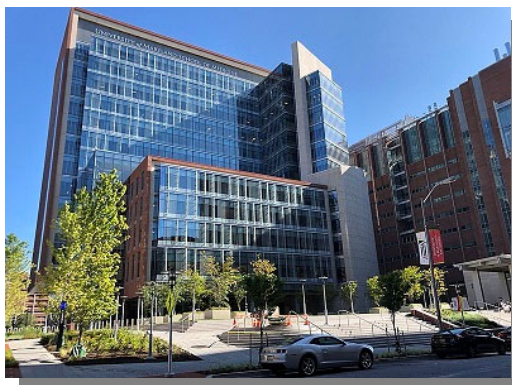
Internships and Career Development

The Office of Predoctoral and Postdoctoral Scholars, housed within the Graduate Program in Life Sciences, is committed to providing student researchers the training and support needed to excel in their careers. In addition to receiving top-tier mentoring from world-renowned researchers, our trainees are afforded a variety of career development training workshops and counseling activities throughout the year. These workshops range from leadership skills to grant and paper writing. Furthermore, students are offered individual advising and career coaching.



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 350 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). To learn more about our core facilities, please visit:

<https://www.medschool.umaryland.edu/cibr/core/>

Visit our website:

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

Academic Services Specialist
Chelsea Leonard

Program Director
Ryan Riddle, PhD

Contact us:

molecularmedicine@som.umaryland.edu