The master's degree is offered only under special circumstances and upon recommendation by the program COGS and approval by the Graduate Dean.

*IMPORTANT Note About the Doctor of Philosophy in Molecular Medicine Degree*
This program is no longer accepting students at this time as this field of study is now the Cell Biology, Genetics and Molecular Medicine discipline within the new Integrated Biomedical Sciences (IBMS) Program. All information in this section of the Catalog is for the current Molecular Medicine students only.

The program in Molecular Medicine offers a research oriented, interdisciplinary course of study leading to the M.S. and Ph.D. degrees. The faculty is composed of both basic and clinical scientists drawn from the Departments of Biochemistry, Cellular and Structural Biology, Medicine, Molecular Medicine, Surgery, Pathology, and Physiology. The objective of the program is to train future scholars in the use of molecular biological approaches for the investigation of fundamental biomedical questions associated with the diagnosis and treatment of human diseases. Through completion of the program, students will have the opportunity to prepare for careers as independent investigators and teachers in cellular and molecular medicine.

The research interests of the faculty cover many areas of molecular and cell biology, including the molecular genetic basis of cancer and tumorigenesis, mechanisms of cancer metastasis, animal models of disease, transcriptional regulation, developmental, bone cell biology in health and disease, mouse genetics, molecular biological basis of aging, DNA repair, genetic recombination, eukaryotic cell-cycle regulation, protein structure, protein degradation, and signal transduction.

State-of-the-art facilities for cellular and molecular biological research and biochemistry are available, as well as specialized instrumentation required for electron, fluorescence, confocal, and atomic force microscopy, the generation of transgenic and chimeric mice; biomolecular interaction studies; biopolymer synthesis; peptide and nucleic acid sequencing; and protein purification.

Molecular Medicine Degree Requirements
A minimum of 30 credit hours and a minimum overall GPA of 3.0 is required for the M.S. degree. In addition, all master's candidates must register for MMED 6098 Thesis for at least one semester in order to graduate. The student must successfully defend a thesis and be recommended by their program COGS for approval of their degree to the Dean of the Graduate School of Biomedical Sciences.

Molecular Medicine Objectives/Program Outcomes
1. Proficiency in fundamental biological principles
2. Critically review and interpret research literature
3. Communicate effectively in writing
4. Communicate effectively in verbal presentation
5. Conduct independent research in an ethical manner