

Graduate Program Assessment Plan: Molecular Bioscience program (MBS)

9/10/2016, Mark Jutila

The Molecular Biosciences Program offers an interdisciplinary program towards a Doctorate in Philosophy in the Life Sciences. Students in the MBSP program are able to pursue research across department boundaries, before selecting a specific area of study at the end of the first year. This program allows graduate students to rotate in three different laboratories during their first year, within their chosen area of research. By the end of the first year they must select a research advisor and be formally admitted to a department to conduct a research project leading to the completion of a Doctorate of Philosophy.

Research Areas:

Biofilm Sciences & Engineering
BioInspired Materials
Bioinformatics/Genomics/Proteomics
Biomedical Sciences
Biophysics
Cell, Developmental, & Molecular Biology
Chemical Biology
Environmental Microbiology
Immunology & Infectious Disease
Life in Extreme Environments
Biological & Mathematical Modeling
Neuroscience
Plant Sciences
Virology

Departments and Research Centers:

Cell Biology and Neuroscience
Chemical and Biological Engineering
Chemistry and Biochemistry
Earth Sciences
Ecology
Land Resources and Environmental Sciences
Mathematics
Microbiology & Immunology
Plant Sciences and Plant Pathology
Center for Biofilm Engineering
Center for BioInspired Materials
Computer Science Department
Thermal Biology Institute

Upon selection of a faculty mentor from one of these departments, the MBS graduate student then follows the requirements for a Ph.D. degree from that department.

Program Learning Outcomes

1. Students will rotate in three different laboratories during their first year within their chosen area of research.
2. Students will select a research advisor and home laboratory by the end of their first year.

Student Performance: Data Source

	Outcomes	
	1	2
Completion of 3 laboratory rotations ¹	X	
Selection of research advisor and home laboratory ²		X

¹ Program will track registration and grading of laboratory rotations.

² Students will submit an agreement signed by the students and research advisor to the program coordinator.

Response Threshold

100% of students will complete 3 laboratory rotations by the end of their first year.

100% of students will select a research advisor and home laboratory by the end of their first year.

Process for Assessing the Data

Data are collected from students as they progress through and complete their first year. The program coordinator will ensure that students are registered for 2 laboratory rotations during the fall term and 1 laboratory rotation during the spring term. Students are required to submit electronic laboratory summaries to the coordinator at the end of each rotation. In addition, the coordinator will collect individual grades from the respective research advisors per student for each rotation. After completion of their third rotation, students will submit to the coordinator, a written [and signed?](#) agreement between the student and selected research advisor.

Assessment Report for the Molecular Biosciences Program

Fall 2014 – Spring 2016

Total # of MBSP students admitted: 8*

of student who completed 3 rotations by the end of their first year: 7

of students who identified a research advisor by the end of their first year: 7

1 student exited the program due to medical reasons before completing the first year of the program.

* The available funding limits the number of students that can be admitted in the fall of each year.