# Microbiology

## College of Natural Resources,
(http://www.cnr.berkeley.edu/site)
## Interdepartmental Graduate Group
## Office: 111C Koshland Hall, (510) 642-5167

### Chair: N. Louise Glass, PhD (Department of Plant and Microbial Biology)
### Department Website: Microbiology (http://pmb.berkeley.edu/ggm)

#### Graduate Program in Microbiology

The Graduate Group in Microbiology is composed of 54 faculty from diverse departments, colleges, and schools (Plant and Microbial Biology; Molecular and Cell Biology; Public Health; Civil and Environmental Engineering; Chemical and Biomolecular Engineering; Environmental Science, Policy, and Management; Nutritional Sciences and Toxicology; Optometry; and Integrative Biology) and is administered by the Department of Plant and Microbial Biology. The group awards the PhD degree in Microbiology. Students in the group have access to diverse disciplines through an integrated program of study that allows each student to pursue specialized interests. Students gain a breadth of understanding of microbiology from the molecular to the cellular levels of organization, as well as the interactions of microbes—beneficial and pathogenic—with other organisms.

The graduate program features an introductory seminar (Faculty Research Review), a two-semester core course, and additional special-topic courses and seminars in areas of faculty specialties. The core course is comprised of six modules, which cover the following topics: microbial genetics, genomics and computational biology, microbial diversity and evolution, cell structure and function, microbial physiology, and microbial ecology.

Faculty in the Graduate Group in Microbiology have research interests in four broad areas: ecology and evolution, genetics and development, physiology and biochemistry, and host-microbe interactions. The research of many faculty spans more than one of these categories. In addition, the research goals vary from addressing fundamental questions in biology to applied studies in the control or use of microbes. Some faculty conduct research on both fundamental and applied topics.

Students admitted to the Graduate Group in Microbiology program are expected to demonstrate academic excellence and potential for independent scientific research and to have satisfied, or satisfy through additional coursework, the curriculum required of an undergraduate major in microbial biology. Students are expected to have a background in chemistry, physics, mathematics, and biology. An admissions committee composed of nine faculty members and one graduate student will review applications and make recommendations to the full faculty on admissions matters. Recommendations for admission will be based on grades in university-level undergraduate and graduate courses, letters of recommendation, written statements of academic and professional goals, and other evidence of academic accomplishment. Scores on standardized tests, such as the Graduate Record Examination, are required of all applicants. Students seeking detailed information about matters such as admission and curriculum should contact the student affairs adviser or the graduate adviser.