

# Microbiology, PhD

Graduate study in microbiology is designed to help students become highly qualified in microbiology research and teaching. PhD students develop expertise in research in a specific area of microbiology and/or immunology.

Faculty members have strengths in bacteriology, parasitology, immunology, and virology. Areas of research include cellular microbiology, molecular virology and immunology, bacterial biochemistry and physiology, bacterial and viral pathogenesis, and molecular parasitology. Working in the laboratory of their PhD advisor, students learn to define and experimentally investigate scientific questions and to conduct original research in preparation for positions in academia, government, and industry.

## Learning Outcomes

Graduates will be able to:

- demonstrate detailed knowledge in their area of specialization;
- master the analytical/methodological and critical thinking skills needed to evaluate and conduct research in their areas of specialization;
- demonstrate their ability to design and conduct original research in their chosen fields of specialization;
- teach college-level courses in their areas of specialization; and
- communicate in both the written and oral form in a clear and effective manner.