MICROBIOLOGY, PH.D.

LEARNING OUTCOMES

1. Gain a broad understanding of the microbiology principles that underlie all biological processes.
2. Articulate, discuss and define limits to the theory and knowledge in microbiology.
3. Think critically to address research challenges using a broad range of the theories, research methods, and approaches to scientific inquiry.
4. Communicate complex ideas in a clear and understandable manner.
5. Collaborate with investigators within the program, university, and beyond to advance the science of microbiology.
6. Foster professional and ethical conduct in the sciences.
7. Ethical design of experimental protocols.
8. Reproducibility of experimental results.
9. Professional behavior in industrial, government and academic settings.
10. Develop communication skills that enable the articulation of research to fellow scientists and non-scientists.
11. Develop teaching and mentoring skills in both lecture and laboratory settings.
12. Explore career development opportunities in industry, government, academia and private industry to realize professional goals.