

# PATHOBIOLOGY

---

## Learning Outcomes

### Master of Science (M.S.)

1. Know. Graduates will demonstrate specific mastery of core concepts related to molecular mechanisms of disease in humans and animals, as well as evidence-based decision making in general.
2. Research. Graduates will demonstrate ability to create and execute a research plan aimed at understanding disease mechanisms and/or developing disease detection and diagnosis strategies.
3. Communicate. Graduates will demonstrate ability to effectively communicate scientific ideas, proposals, and research findings using both written and oral formats.
4. Analyze. Graduates will demonstrate ability to critically analyze and assess scientific ideas and results related to the area of human/animal disease research.
5. Practice ethically. Graduates will demonstrate knowledge and understanding of core ethical values and right conduct in research, and maintain the highest ethical standards in their own research.

### Doctor of Philosophy (Ph.D.)

1. Know. Graduates will demonstrate specific mastery of core concepts related to molecular mechanisms of disease in humans and animals, as well as evidence-based decision making in general.
2. Research. Graduates will demonstrate ability to identify a knowledge gap based on reading and understanding the current scientific literature, to create a research plan that addresses the gap in knowledge, and to execute that research plan so that the result is a meaningful contribution to the understanding of disease mechanisms.
3. Communicate. Graduates will demonstrate ability to effectively communicate scientific ideas, proposals, and research findings using both written and oral formats.
4. Analyze. Graduates will demonstrate ability to critically analyze and assess scientific ideas and results related to the area of human/animal disease research.
5. Practice ethically. Graduates will demonstrate knowledge and understanding of core ethical values and right conduct in research, and maintain the highest ethical standards in their own research.