

MASTER OF SCIENCE IN MICROBIOLOGY, PLAN B

The fully online non-thesis Master of Science in Microbiology program is designed to strengthen the scientific academic portfolio of those seeking professional degrees and provide differentiating preparation for those seeking careers in industry. Students work with one of the leading microbiology and immunology departments in the nation as they develop professional knowledge and skills.

With the growth of biotechnology and the increase in technology and specialization in applied microbiological sciences, there is a significant national need for additional educational opportunities for individuals wishing to pursue a career in these industries. In addition, many students wish to pursue additional post-baccalaureate studies due to a variety of interests such as improved preparation for professional (medical, veterinary, DO, etc.) schools or Ph.D. programs. The Department of Microbiology, Immunology, and Pathology's (<https://vetmedbiosci.colostate.edu/mip/>) Master of Science in Microbiology online program provides an excellent opportunity to meet these needs. As a recognized world leader in infectious disease basic and translational research (including over \$144 million in active extramurally funded research programs, including a good variety of translational efforts that interface with industrial partners), the Department of Microbiology, Immunology, and Pathology is uniquely positioned to effectively provide high-quality advanced microbiology and immunology training.

Learning Objectives

The overall goal of the online program is to give each student a competitive advantage for their career in industry or continued academic and professional studies. To develop this advantage, the program leverages your undergraduate education and training in life science and provides the advanced knowledge and skills required through:

1. A rigorous curriculum designed to provide cutting-edge knowledge in both theoretical and applied aspects of microbiology, virology, immunology, and molecular biology.
2. A strong emphasis on aspects of the discipline that are useful in real world employment scenarios.
3. A well-rounded curriculum that includes the development of vital professional skills such as verbal and written communication, responsible conduct of research, and biosafety/biosecurity.
4. Active communication with regional and national representatives from the pharmaceutical, biotech, government, and public health sectors to ensure that the program's curriculum remains pertinent and effective.
5. A high-level of communication in the program to facilitate active mentoring, networking and career discussions, and access to real-world research expertise within the Department of Microbiology, Immunology, and Pathology.