

Veterinary Microbiology and Preventive Medicine

Professional Program of Study

For the professional curriculum in veterinary medicine leading to the degree doctor of veterinary medicine, see Veterinary Medicine, Curriculum.

The Department of Veterinary Microbiology and Preventive Medicine provides instruction on pathogenic bacteria, fungi, and viruses and their interaction with host animal species. Principles and applications of infectious diseases, immunity to disease, diagnostic methods for infectious diseases, and vaccinology are covered. Principles and applications of epidemiology, public health, preventive veterinary medicine, regulatory veterinary medicine and food safety are also emphasized.

Graduate Study

The department offers opportunities for the degree doctor of philosophy with a major in veterinary microbiology. A specialization in preventive medicine is an option for this degree. Graduates in the Veterinary Microbiology and Preventive Medicine programs have a broad understanding of the fundamental processes involved in infectious diseases, pathogenesis and immunology. They are able to effectively establish research programs, which involve complex biological systems and disease syndromes. They are also prepared to address microbial-based social, ethical and environmental problems. Graduates acquire effective written and oral communication skills which lead to successful research and teaching careers in the medical and veterinary sciences. The department also offers work towards the master of science with majors in veterinary microbiology or veterinary preventive medicine. A non-thesis master's option is available for majors in preventive medicine. Courses are open for students majoring in other graduate programs.

Prerequisite to graduate study is completion of coursework in general microbiology, biology, biochemistry, mathematical sciences, and physics. Candidates for the majors in veterinary microbiology should possess an undergraduate degree in biomedical science with emphasis in medical microbiology or the D.V.M. degree. Candidates for the major in preventive medicine should possess the D.V.M. degree.

The department also participates in the interdepartmental majors and programs in genetics, immunobiology, and MCDB (molecular, cellular, and developmental biology; see Index).

Each graduate student must demonstrate proficiency in English composition within two semesters in residence.