Specialization in Infectious Diseases

The Department of Pathobiology offers an area of specialization in infectious diseases. The program is flexible and provides the student with proficiency in several areas of epidemiology, immunology, parasitology, virology, bacteriology and molecular pathogenesis of infectious disease and ecology of infectious diseases. Students electing this area should have completed coursework in basic genetics, biochemistry, and microbiology. The program of study for each student in the specialization is decided individually. Interested students should direct inquiries and applications to the department.

Specialization in Anatomic, Clinical and Zoo Pathology

The Department of Pathobiology offers an area of specialization in anatomic, clinical, and zoo pathology. These programs are residency programs available to qualified graduate veterinarians. Veterinarians entering this specialization will be specifically trained in pathology so they can function as competent and innovative professionals and assume leadership roles in academia, government, and industry. Students electing this area must have completed coursework in the D.V.M. curriculum. The program of study for each student in these specializations is decided individually. Interested students should direct inquiries and applications to the department. Students completing the specialization will be qualified to take the ACVP Board examinations during the program.

Joint Degree Program

Students accepted into the Veterinary Medical Scholars Program (http://www.vetmed.illinois.edu/asa/vmsp.html) can complete a D.V.M. and Ph.D. simultaneously.

Faculty Research Interests

Expertise in the Department of Pathobiology spans epidemiology, immunology, parasitology, virology, bacteriology and comparative pathology. Through its multidisciplinary approach, the department addresses complex problems in biomedical and veterinary sciences. Research emphasizes multi-host disease systems, with the goal of improving human and animal health at the individual and population levels in a broad social and environmental context. Specific areas of research interest include:

- Molecular mechanisms of infection, host-pathogen interactions, and immunity
- Strategies for vaccine design and disease control
- Experimental pathology
- Molecular virology
- Bacteriology
- Cancer biology
- Spatial and contextual aspects of health and illness, combining human, animal, and ecosystem health
- Mathematical modeling of infectious diseases to promote disease control
- Foreign animal disease prevention, preparedness, and response

Training Programs, Centers and Institutes

Our faculty provide undergraduate and graduate instruction in molecular virology, infectious diseases, epidemiology, bacteriology,
Pathobiology and anatomic and clinical pathology. They also participate in interdisciplinary training programs including the Emergent Behaviors of Integrated Cellular Systems (EBICS) Center, the Division of Nutritional Sciences (http://www.nutrsci.illinois.edu), Beckman Institute (http://www.beckman.uiuc.edu), and the Institute for Genomic Biology (http://www.igb.illinois.edu). Pathobiology faculty also lead the Anatomical and Clinical Pathology Residency Program (http://vetmed.illinois.edu/cb/vcp.html), which prepares graduate veterinarians for the certifying examination of the American College of Veterinary Pathologists (ACVP).

**Graduate Teaching Experience**

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all M.S. candidates in this program.

**Financial Aid**

A limited number of teaching and research assistantships or associate positions are available.

**VMS Pathobiology, MS**

**Joint Degree Program**

Students accepted into the Veterinary Medical Scholars Program (http://www.vetmed.illinois.edu/asa/vmsp.html) can complete a D.V.M. and Ph.D. simultaneously.

*Information listed in this catalog is current as of 05/2019*