

Pathobiology Area Program

College of Veterinary Medicine
201 Connaway Hall
Columbia, MO 65211
573-882-6550

About the Pathobiology Area Program

The Pathobiology Area Program is university-wide and staffed by faculty from the College of Veterinary Medicine (Veterinary Pathobiology, Veterinary Medicine and Surgery), School of Medicine (Pathology and Anatomical Science, Molecular Microbiology and Immunology, Biochemistry), College of Arts and Science (Biological Sciences), and College of Agriculture, Food and Natural Resources (Biochemistry, Animal Sciences).

Note: The master of science program in biomedical sciences, with an emphasis in veterinary pathobiology, is listed separately in this catalog but shares the pathobiology doctoral courses and faculty list.

Faculty

Professor D. M. Anderson**, B. T. Beernstsen**, D. Beversdorff**, C. R. Brown**, J. N. Bryan**, E. Bryda**, M. Calcutt**, J. Coates**, L. Cohn**, J. Cook**, D. D. Cornelison**, G. Davis**, P. de Figueiredo**, J. Dodam**, D. Duan**, D. Duren **, D. Fox**, A. Franz**, L. Gangwani**, R. Ganta**, S. A. Grant**, B. Hahm**, R. Hammer**, E. Hasser*, C. Henry**, T. Hoffman*, G. C. Johnson**, M. Johnson**, M. Katz**, D. Kline II**, K. Kuroki**, M. Lewis**, C. Lorson**, D. Lubahn**, L. Lyons**, J. Middleton**, R. Mohan**, D. O'Brien**, D. Pintel**, R.S. Rector**, C. Reinero**, R. M. Roberts**, R. Sherwood**, C. J. Smith**, J. P. Stannard**, M. Thakkar**, H. XF. Wan**, C. V. Ward**, H. Zaghouani**, S. Zhang**

Associate Professor Y. Agca**, K. Aldridge**, J. Amos-Landgraf**, R. C. Backus**, C. P. Baines**, G. Blomquist**, P. Brown**, M. Daniels**, T. Domeier**, A. Ericsson**, T. Evans**, D. Fox**, D. Gil Pages**, V. Glinskii**, Z. Gu**, C. Holliday**, X. Kang**, T. Lever**, R. Ma**, W. Ma**, C. Maitz**, S. McKarns**, N. Nichols**, C. Phillips**, S. Rachagani**, C. Reddy**, D. Shin**

Assistant Professor P. Adkins **, B. Flesner*, E. Leary**, J. Nuelle**, D. Shin**, K. Singh**, R. Whiting**

Assistant Clinical Professor S. Odemuyiwa**, A. Royal**

Associate Research Professor M. Lorson*, A. Stoker**

Assistant Research Professor D. Davis**, H. Men*, L. Royse**, M. Shababi*

Professor Emeritus C. A. Carson*, S. Casteel*, W. Fales*, C. Franklin**, K. Middleton**, G. C. Stewart**, G. P. Smith**, R. W. Stich**

* Graduate Faculty Member - membership is required to teach graduate-level courses, chair master's thesis committees, and serve on doctoral examination and dissertation committees.

** Doctoral Faculty Member - membership is required to chair doctoral examination or dissertation committees. Graduate faculty membership is a prerequisite for Doctoral faculty membership.

Undergraduate

While MU does not offer undergraduate degrees specifically in pathobiology, the University does offer baccalaureate opportunities in a number of related areas in the other Schools and Colleges that make

up the University. The catalog provides a complete list of these degree options (<https://catalog.missouri.edu/degreesanddegreeprograms/>).

Graduate

- PhD in Pathobiology Area Program (<https://catalog.missouri.edu/collegeofveterinarymedicine/pathobiologyareaprogram/phd-pathobiology-area-program/>)

Contact Information

College of Veterinary Medicine
201 Connaway Hall
573-882-6550
<http://vpbio.missouri.edu/>

Director of Graduate Studies: Aaron Ericsson

About the Program

The Pathobiology Area Program is university-wide and is staffed by faculty from the College of Veterinary Medicine (Veterinary Pathobiology, Veterinary Medicine and Surgery), School of Medicine (Pathology and Anatomical Science, Molecular Microbiology and Immunology, Biochemistry), College of Arts and Science (Biological Sciences), and College of Agriculture, Food and Natural Resources (Biochemistry, Animal Sciences).

Note: The master of science program in biomedical sciences, with an emphasis in veterinary pathobiology, is listed separately in this catalog but shares the pathobiology doctoral courses and faculty list.

Financial Aid from the Program

Some programs require an extra form or statement from those who wish to be considered for internal assistantships, fellowships or other funding packages. In this program, various stipends are available, including teaching and research assistantships and postdoctoral fellowships. Check the program Web site or ask the program contact for details.

Career Preparation

Graduate training relates to the major departmental thrust — application of advanced biotechnology to solving today's most perplexing agricultural, biomedical and companion animal questions. The faculty in the Pathobiology Area Program consists of scientists engaged in a wide variety of research programs supported by grants and contracts from government, foundations and private industry.

The Pathobiology Program is designed to prepare students for advanced professional careers in universities and colleges, research institutes, public health, hospital laboratories and industrial research. The broad scope of the program and its organization across departments creates an atmosphere for meaningful interdisciplinary dialogue between graduate students and faculty. Furthermore, it increases availability of advisors, committee members, facilities and equipment for doctoral candidates.

A PhD candidate may choose a plan of research to take advantage of a wide range of interests and specialties in pathology and microbiology.

Facilities and Resources

Facilities are available that are suitable for advanced research in pathology, microbiology and molecular biology. A wide range of equipment for advanced molecular biological procedures is available. BSL-3 biocontainment facilities are available.

Areas of Study

Toxicology, environmental toxicology, comparative medicine, epidemiology and pathogenesis of avian and mammalian diseases (companion animal, food-producing animal and spontaneous disease of laboratory animals), molecular biology, ultrastructure, parasitology, DNA and RNA analysis, biomechanics, physiology, pathophysiology, oncology, bioinformatics, diagnostic anatomic pathology, veterinary neuropathology, pathology of infectious disease, quantitative pathology, molecular genetics, domestic animal genomics, bacteriology/mycology, virology, cell biology, genomics, and antimicrobial resistance.