

Little Rock is centrally located in Arkansas. It is the largest city and the seat of government and business in the state. The city has activities for all interests including a professional symphony and repertory theater, professional and college sports, and is the home of the Clinton Presidential Library and the international headquarters of the Heifer

Project. With a population of over a half million and affordable cost-of-living, the city has the advantages of a larger city but the feel of a town.



Arkansas is a state of natural beauty with outdoor wilderness preserved in the state's two mountain ranges, 600,000 acres of lakes, 9,700 miles of rivers and streams,

and 2.4 million acres of national forest land. Hiking, biking, camping,



fishing, canoeing and other outdoor activities are available within an hour's drive from Little Rock.

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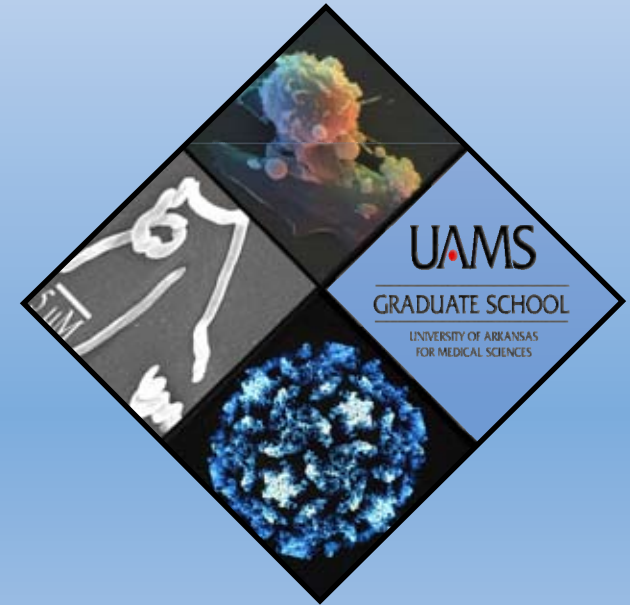


## Department Inquiries

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# Department of Microbiology & Immunology



## GRADUATE PROGRAM

Immunology

Immunopathology    Microbial Genetics

Microbial Pathogenesis

## THE DEPARTMENT

The Department of Microbiology and Immunology is a basic science department in the College of Medicine at the University of Arkansas for Medical Sciences in Little Rock, Arkansas.

The Department has as its major objectives the pursuit of basic and applied research in immunology and pathogenic microbiology, and the education of graduate students and medical students in medical microbiology and immunology. Research programs within the Department are the driving force of the Department's intellectual pursuits and make possible the training of outstanding graduate students. Our students go on to pursue research careers in academia, medicine, and biotechnology.

### PROGRAM OBJECTIVES AND STRUCTURE

The goal of the Graduate Program of the Department of Microbiology and Immunology is to prepare students for a challenging research and/or teaching career in immunology, immunopathology, bacteriology or virology.

We aspire to develop productive scientists who can meet the challenges of the 21st century. It has become very apparent that today's research problems often lie at the interfaces of the traditional disciplines of microbiology, immunology, physiology, cell biology, biochemistry, and pathology. Investigators who can transcend traditional boundaries and bring to research problems a strong knowledge of multiple disciplines will have much success.



There is increasing emphasis on translating research advances into improved patient care and public health. Thus exposure to ethical and research issues along the translational research continuum from bench

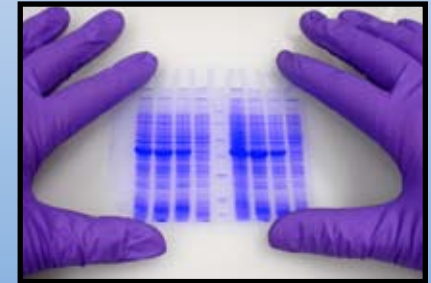


to bedside enhances the student's future abilities to participate in collaborative investigator teams that engage in translational research. The

Graduate Program in the Department of Microbiology and Immunology have been designed with these concepts in mind.

Graduate students in the Department of Microbiology and Immunology take a common first year curriculum that provides a broad foundation in cell and molecular biology, microbiology, and immunology. The students then select advanced electives from courses that are loosely organized into two areas of specialization - Bacterial and Viral Pathogenesis, and Immunology and Immunopathology. Students also participate regularly in seminars and journal clubs, thus providing further opportunities to broaden their base of scientific knowledge and develop their abilities to present their research to the scientific community. In the first year of study, each student also rotates through selected laboratories of Departmental faculty to observe and participate first-hand in the research projects being conducted in the laboratories of departmental faculty. After completing the first year of study, students choose a faculty member to serve as their major advisor with whom they will develop their dissertation project.

Research programs in microbial pathogenesis, immunobiology and immunopathology are directed by the Department's fifteen primary, and seven secondary/adjunct faculty. Graduate research assistantships are available because research programs are supported extramurally by federal institutions, national non-profit organizations, and private industry and include the National Institutes of Health, American Cancer Society, National Science Foundation, Department of Defense, and biotechnology and pharmaceutical industries.



The Department is actively recruiting new faculty and expanding its research opportunities. Faculty research programs in microbial pathogenesis and genetics focus on the host-pathogen interface for a number of important human bacterial and viral pathogens including staphylococci, chlamydiae, rickettsia, herpes virus, coronaviruses, and picornaviruses. Departmental research in immunology and immunopathology focus on immunological mechanisms important to human health and include programs in tumor immunology and immunotherapy, autoimmunity and tolerance, allergy, immune senescence, and regulation of pathogen-induced immune responses.