

IGPBS - IMMUNOLOGY, PATHOLOGY & INFECTIOUS DISEASE (PHD AND MD/PHD)

Curriculum

Graduate Committee

*Dr. Rakesh Singh (Chair & Program Director), Dr. R. Lee Mosley (Co-Chair),
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The IGPBS - Immunology, Pathology & Infectious Disease doctoral program provides training in the areas of microbiology, pathology, immunology, neuroimmunology, host-pathogen interaction, and related fields, utilizing an approach that actively combines clinical and applied research with basic research interests.

PhD Curriculum

Code	Title	Credit Hours
Required Courses		
GRAD 800	RESPONSIBLE CONDUCT IN RESEARCH TRAINING *	0
IPBS 805	FUNDAMENTALS OF CELLULAR PROCESSES	3
IPBS 860	SUCCESS SKILLS FOR GRADUATE STUDENTS	1
PMI 896	NON-THESIS RESEARCH	1-9
PMI 970	SEMINAR	1
PMI 992	ADV TOPICS IN IMMUNOLOGY, PATHOLOGY AND INFECTIOUS DISEASES	1
PMI 999	DOCTORAL DISSERTATION	1-15
Electives (4 courses) *		
Each student will work with their Supervisory Committee to determine appropriate electives		
*Indicates course must be completed prior to Comprehensive Exam		
PMI 825	INTRODUCTION TO R PROGRAMMING FOR BIOMEDICINE	3
MEP 803	CELL PHYSIOLOGY & SIGNALING	3
PMI 857	INTRODUCTORY IMMUNOLOGY	2
PMI 870	BASIC PATHOLOGY FOR THE RESEARCHER	2
PMI 890	MOLECULAR BIOL VIRUSES	3
PMI 898	BACTERIAL GENETICS	3
PMI 910	BACTERIAL PATHOGENESIS	3
PMI 915	BACTERIAL PHYSIOLOGY AND METABOLISM	3
MGCB 802	MOLECULAR CELL BIOLOGY	2
BDHS 802	RESEARCH APPLICATIONS IN BIOLOGICAL DEFENSE AND HEALTH SECURITY	3
PMI 922	REDOX BIOLOGY IN HUMAN DISEASE	2
PMI 940	MOLECULAR BASIS OF DISEASE	3
PMI 950	SPECIAL TOPICS	1-3

PMI 955	ADVANCED IMMUNOLOGY	3
PHAR 902	HUMAN SPECIFIC DISEASE MODELING IN MICE	2
NSC 930	NEUROIMMUNOLOGY	3
BIOS 806	BIOSTATISTICS	3
CRGP 880	PRINCIPLES AND METHODOLOGIES IN CANCER RESEARCH	2-3
CRGP 910	INTENSIVE TRAINING IN TRANSLATIONAL CANCER RESEARCH	3
BISB 815	TOOLS AND ALGORITHMS IN BIOINFORMATICS	3
BMB 801	FUNDAMENTALS OF BIOMOLECULES	3

MD/PhD Curriculum

Upon successful completion of Phase 1 of the College of Medicine curriculum, the requirement to complete IPBS 805 and IPBS 860 will be waived. Hence, MD/PhD students in IGPBS - Immunology, Pathology & Infectious Disease must complete only the following courses and two electives:

Code	Title	Credit Hours
Required Courses		
PMI 896	NON-THESIS RESEARCH	1-9
PMI 970	SEMINAR	1
PMI 992	ADV TOPICS IN IMMUNOLOGY, PATHOLOGY AND INFECTIOUS DISEASES	1
PMI 999	DOCTORAL DISSERTATION	1-15
GRAD 800	RESPONSIBLE CONDUCT IN RESEARCH TRAINING *	0
Electives (2 courses) *		
Each student will work with their Supervisory Committee to determine appropriate electives		
*Indicates course must be completed prior to Comprehensive Exam		