

IGPBS - MOLECULAR GENETICS AND CELL BIOLOGY (PHD AND MD/PHD)

Curriculum

Graduate Committee

Dr. Kyle Hewitt (PhD Program Co-Director), Dr. Gargi Ghosal (PhD Program Co-Director) Dr. Kishor Bhakat, Dr. Subu Ramanathan, Dr. Shantaram Joshi, Dr. Bin Duan, and Dr. Ying Yan

The IGPBS - Molecular Genetics and Cell Biology doctoral program trains students to conduct rigorous and interdisciplinary research focused on understanding the cellular, molecular and genetic basis of normal development as well as disease pathogenesis. The program is designed to prepare students for careers as independent biomedical scientists and educators, offering two PhD degree tracks:

- Research Track
- Anatomy Teaching Track

PhD Curriculum

Research Track Coursework

All students enrolled in IGPBS - Molecular Genetics & Cell Biology doctoral program (Research Track) must complete the required courses listed below:

Code	Title	Credit Hours
GRAD 800	RESPONSIBLE CONDUCT IN RESEARCH TRAINING *	0
IPBS 805	FUNDAMENTALS OF CELLULAR PROCESSES	3
IPBS 860	SUCCESS SKILLS FOR GRADUATE STUDENTS	1
MGCB 896	RSCH OTHER THAN THESIS (or IPBS 896) *	1-9
MGCB 903	JOURNAL CLUB (every semester)	1
MGCB 907	TEACHING AND RESEARCH PRESENTATION SKILLS *	2
MGCB 912	MODERN APPROACHES IN CELL BIOLOGY & MOLECULAR GENETICS *	3
MGCB 970	SEMINAR (every semester)	1
MGCB 999	DOCTORAL DISSERTATION	1-15

Electives (3 courses) *

Electives will be chosen in consultation with the primary advisor and supervisory committee.

A. One elective MUST be a graduate level statistics course (unless a full semester statistics course was previously completed in an undergraduate or graduate program - a satisfactory grade of 'B' or better must appear on the relevant transcript)

*Indicates course must be completed prior to Comprehensive Exam

Anatomy Teaching Track Coursework

All students enrolled in IGPBS - Molecular Genetics & Cell Biology doctoral program (Anatomy Teaching Track) must complete the courses listed below:

Code	Title	Credit Hours
GRAD 800	RESPONSIBLE CONDUCT IN RESEARCH TRAINING *	0
GCBA 813	NEUROANATOMY LECTURE	3
GCBA 814	NEUROANATOMY LAB	2
GCBA 825	HUMAN HISTOLOGY	5
MGCB 896	RSCH OTHER THAN THESIS	1-9
MGCB 903	JOURNAL CLUB	1
MGCB 907	TEACHING AND RESEARCH PRESENTATION SKILLS	2
GCBA 908	GROSS ANATOMY LECTURE	5
GCBA 909	GROSS ANATOMY LABORATORY	6
GCBA 940	TEACHING PRACTICUM: HUMAN GROSS ANATOMY	2
MGCB 970	SEMINAR	1
MGCB 999	DOCTORAL DISSERTATION	1-15
GCBA 942	TEACHING PRACTICUM: HUMAN NEUROANATOMY	1
GCBA 949	TEACHING PRACTICUM: HUMAN HISTOLOGY	2

*Indicates course must be completed prior to Comprehensive Exam

MD/PhD Curriculum Coursework

Upon successful completion of Phase 1 of the College of Medicine curriculum, the requirement for completing the **IPBS 805 and IPBS 860** will be waived. Each MD/PhD student enrolled in this program must complete the following courses:

Code	Title	Credit Hours
MGCB 903	JOURNAL CLUB	1
MGCB 912	MODERN APPROACHES IN CELL BIOLOGY & MOLECULAR GENETICS	3
MGCB 970	SEMINAR	1
MGCB 999	DOCTORAL DISSERTATION	1-15

Elective (1 course)

This course will be selected by the student in consultation with the primary advisor and supervisory committee.