

Infection, Immunity, and Inflammation—Curriculum

Year 1			
Sep/Oct	Block 1	IBMS-1 (2.5) Classic and 21st Century Pathogens (2) Critical Readings in I3 (0.5)	1st Rotation Oct/Nov/Dec (2)
Nov/Dec	Block 2	IBMS-2 (2.5) Basic Immunology (2) Critical Readings in I3 (0.5)	
Jan/Feb	Block 3	Advanced Immunology (1) Advanced Microbiology (1) Critical Readings (choice) (0.5) Elective	2nd Rotation Jan/Feb/Mar (2)
Mar/Apr	Block 4	Advanced Concepts in I3 I (2) Critical Readings (choice) (0.5) Elective	
May/June	Block 5	Advanced Concepts in I3 II (2) Ethics (1) Elective	3rd Rotation Mar/Apr/May (2)
Jul/Aug	Block 6	Initiate Research with Mentor (2)	
Year 2			
Sep/Oct	Block 7	Experimental Design and Statistics (2) Research (2) Elective	
Nov/Dec	Block 8	Professional Skills—Presentations (1) Statistics (1) Research (2) Elective	
Jan/Feb	Block 9	Professional Skills—Grant Writing (2) Research (2)	
Mar/Apr	Block 10	Candidacy Exam	
May/June	Block 11	Thesis Research	
July/Aug	Block 12		

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Required Courses are indicated by bold lettering (24 credits). “Choice” indicates any of the Critical Readings courses. 12 Research Credits are also required.

Elective courses. Each student must choose 2 2 credit courses (only 1 “applied” course will count toward the 29 course credit requirement) and 1 1 credit course (note—there are more “elective” slots in the table than needed, to allow flexibility in scheduling).

2 credit electives

Viruses, Cells, and Disease (BIOC 5125Q)

Cancer Biology (GSND 5225Q)

Protein Dynamics in Health and Disease (BIOC 5030Q)

Introduction to Genomics, Proteomics and Bioinformatics (BIOC N5002)

Cell Biology (modification of PATH 5100Q)

Biochemistry of Nucleic Acids (BIOC 5070Q)

Stem Cell Biology and Applications in Molecular Medicine (MSBS 5130Q)

Hematopoietic Stem Cell Biology (MSBS N5134)

Oral Immunology (DENT 5310Q)

Transmission Genetics

Prokaryotic Genetics

Signal Transduction

Neuroscience

Applied Courses

Basic Histology (CBMM N5001)

Practical Approaches for Studying Protein Function (CBMM 5002Q)

Methods in Microscopic Imaging (DENT 5220Q)

Animal Models in Biomedical Research (GSND 5215Q)

Current Molecular Techniques (MSBS 5100Q)

Laboratory Animal Science (PATH 5070Q)

Experimental Model Systems

1 credit electives

Critical Readings (journal club format, 1 credit over two consecutive modules)

Critical Readings in I3

Critical Readings in CPMB

Other 1 credit electives:

Introduction to Structural Biology

Advances in Genomics, Proteomics, and Bioinformatics (BIOC 5003Q)

Advanced Stem Cell Seminar (MSBS 520AQ)

Seminar in Biomedical Sciences (PHMS 5910Q)

Microbial Biofilms (PHMS 5025Q)

Pathology Journal Club (PATH 5920Q)