

Example Program of Study *Infection and Immunity: From Molecules to Populations (IIMP)* training focus in the Translational Biomedical Science PhD Program. The core curriculum provides students with ~34-36 credit hours of didactic training in the first two years. The IIMP pathway-specific core curriculum allows a selection of the best courses available to provide fundamental and deep knowledge so that IIMP students emerge from the training program prepared for a productive academic career at the interface between laboratory and population science.

Fall Year-01		Spring Year-01	Summer Yr-01
<ul style="list-style-type: none"> • IND 501 (1 credit, 8 weeks) Ethics and Professional Integrity in Research 		<ul style="list-style-type: none"> • IND 417 (1 credit) Workshop in Scientific Communications 	<p>Summer-in-Residence</p> <ul style="list-style-type: none"> • Begin Dissertation Research
<ul style="list-style-type: none"> • PM 415 (3 credits) Principles of Epidemiology 		<p>Choose 1 Course (3 credits)</p> <ul style="list-style-type: none"> • IND 419 Intro to Quantitative Biology • PM 486 Medical Ecology 	
<ul style="list-style-type: none"> • First 5 weeks, meet with TBS program Co-Directors to Discuss Eligible Research Rotation Lab and Population Science Co-Mentors aligned with research interests • Oct 1 - Dec 15, Rotation 1 		<ul style="list-style-type: none"> • Jan 2 - March 15, Rotation 2 • March 16 - May 31, Rotation 3 	<ul style="list-style-type: none"> • July 1-Aug 31, Rotation 4 (optional) • PM 403 - Res. Team Science Seminar (1 cr) (optional)
<p>*Choose 1 Lab Science course</p> <ul style="list-style-type: none"> • IND 408 - Advanced Biochem & Recitation (5 credits) • IND 409 - Cell Biology (4 credits) • MBI 473/573 - Immunology and Immunology Seminar (5 credits) 		<p>*Choose 1 Population Science course</p> <ul style="list-style-type: none"> • BST 465 - Design of Clinical Trials (3 credits; (BST 463 is prerequisite) • PM 458 - Qualitative Health Care Research (3 credits) • PM 487 - Fundamentals of Science, Technology & Health Policy (2 credits) (<i>offered every other year</i>) • PM 426 - Social & Behavioral Med (3 credits) 	<p>Selection of Laboratory & Population Science Research Co-Mentors</p> <ul style="list-style-type: none"> • Meeting with program directors to choose laboratory and population science research co-mentors and finalize dissertation lab assignment. Student and prospective co-mentors meet with TBS Program Directors to discuss the expectations of the Mentors-Protégé pairing, the dual focus dissertation research project, funding strategies and responsibilities of mentors and protégé. <p>Create Individual Development Plan (IDP)</p> <ul style="list-style-type: none"> • Online Ever Better Mentoring Curriculum for trainees and mentors and IDP oversight. All TBS-IIMP students and their co-mentors are assigned to a member of the Mentor Development Working Group to craft the student's IDP and set goals, define activities to meet goals and establish benchmarks for success.
<p>Choose 1</p> <ul style="list-style-type: none"> • BST 463 - Introduction to Biostatistics (3 credits) 		<ul style="list-style-type: none"> • BST 467 - Applied Biostats for Biomedical Science (Spring) (3 credits) 	
<ul style="list-style-type: none"> • IND 436 - Unifying Population & Laboratory Based Sciences (1 credit) each semester. 			
<ul style="list-style-type: none"> • IND 595 - PhD Research (enough hours to total 16 credits per semester) 			
Fall Year-02		Spring Year-02	Summer Yr-02
<p>*Choose 1 Lab Science Course</p> <ul style="list-style-type: none"> • MBI 414/514 - Microbial Pathogenesis & Seminar (4 credits) 		<ul style="list-style-type: none"> • MBI 421/521 - Microbial Genetics & Seminar (4 credits) • MBI 456 - General Virology (4 credits) 	<p>Intentionally left blank</p>
<p>*Choose 1 Population Science course</p> <ul style="list-style-type: none"> • PM 410 - Intro Data Management and Analysis (SAS) (3 credits) (+ summer) • PM 412 - Survey Research • PM 445 - Introduction to Health Services Research (3 credits) • PM 420 - American Health Policy and Politics (3 credits) • PM 419 - Recruitment & Retention of Human Subjects in Clin Res (3 credits) (<i>offered every other year</i>) • PM 488 - Experimental Therapeutics (3 credits) • BME 431 - FDA & Intellectual Property (2 credits) 		<ul style="list-style-type: none"> • IND 438 (3 credits) Practical Skills in Grant Writing OR equivalent grant writing modules and Workshops from Center for Professional Development • Write Qualifying Exam proposal in style of NIH R01 grant or F31 with permission 	
		<ul style="list-style-type: none"> • BME 432 - FDA and Intellectual Property Commercialization (2 credits; Optional but recommended if take BME 431) 	<p>Summer-in-Residence</p> <ul style="list-style-type: none"> • Dissertation research • Pass Qualifying Exam by Oct 1st of 3rd year • Optional, but encouraged - Participation in URBEST and Center for Professional Development programs.
<ul style="list-style-type: none"> • IND 436 - Unifying Population & Laboratory Based Sciences (1 credit) each semester. 		<p>*With approval from Program Co-Directors and Co-Mentors, courses in population or lab sciences may be substituted to tailor didactic training for each student.</p>	
<ul style="list-style-type: none"> • PM 451 - (3 credits) Epidemiology of Infectious Diseases 		<ul style="list-style-type: none"> • Educational and mentoring experience gained through one required Teaching Assistantship in 2nd or 3rd year 	
<ul style="list-style-type: none"> • IND 595 - PhD Research (enough hours to total 16 credits per semester) 			<p>Summer Yr-03</p> <p>Immersive Cross-disciplinary Internship or Externship (e.g., CDC, Monroe County Department of Public Health, Pharma) aligned with research project (8 weeks, required)</p>
Choose from several	Required TBS IIMP Curriculum	*Flexibility in didactic courses	