# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMI CORE FACULTY</td>
<td>2</td>
</tr>
<tr>
<td>MMI ADMINISTRATIVE PERSONNEL</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>4</td>
</tr>
<tr>
<td>RIGHTS AND RESPONSIBILITIES OF PhD STUDENTS</td>
<td>5</td>
</tr>
<tr>
<td>REQUIREMENTS FOR FULL-TIME PHD DEGREE CANDIDATES</td>
<td>6</td>
</tr>
<tr>
<td>Advisors</td>
<td>6</td>
</tr>
<tr>
<td>Thesis Advising Committee/Individual Development Plan</td>
<td>6-8</td>
</tr>
<tr>
<td>Annual Evaluation of Progress, Performance and Mentoring</td>
<td>8</td>
</tr>
<tr>
<td>Laboratory Rotations</td>
<td>8-9</td>
</tr>
<tr>
<td>Research Forum &amp; Lab Rotation Presentation</td>
<td>10</td>
</tr>
<tr>
<td>Required Courses</td>
<td>11-14</td>
</tr>
<tr>
<td>Academic Performance &amp; Academic Probation</td>
<td>15-17</td>
</tr>
<tr>
<td>PHD Comprehensive Written Examination</td>
<td>17-18</td>
</tr>
<tr>
<td>Preparation/ Final Seminar Final Oral Examination/Time Limitations</td>
<td>17-20</td>
</tr>
<tr>
<td>PROFESSIONAL DEVELOPMENT</td>
<td>21</td>
</tr>
<tr>
<td>ACADEMIC PERFORMANCE &amp; STUDENT CODE OF CONDUCT</td>
<td>22</td>
</tr>
<tr>
<td>ADDITIONAL AREAS</td>
<td>23</td>
</tr>
<tr>
<td>Vacation and Holiday Policy/LOA/Parental Leave</td>
<td>23</td>
</tr>
<tr>
<td>ADDITIONAL DEPARTMENTAL AND SCHOOL INFORMATION</td>
<td>24</td>
</tr>
<tr>
<td>Computer Accounts</td>
<td>24</td>
</tr>
<tr>
<td>MMI Fifth Floor Library and Conference Room</td>
<td>24</td>
</tr>
<tr>
<td>Departmental Mailboxes</td>
<td>24</td>
</tr>
<tr>
<td>Photocopying and Faxing</td>
<td>24</td>
</tr>
<tr>
<td>STUDENT SUPPORT</td>
<td>26-27</td>
</tr>
<tr>
<td>GRADUATE STUDENT OMBUDSMAN</td>
<td>28-29</td>
</tr>
<tr>
<td>DEPARTMENTAL GOVERNANCE STRUCTURE</td>
<td>30-31</td>
</tr>
<tr>
<td>Graduate Program Committee</td>
<td>30</td>
</tr>
<tr>
<td>Curriculum Committee</td>
<td>30</td>
</tr>
<tr>
<td>Committee on Admissions and Financial Support</td>
<td>30</td>
</tr>
<tr>
<td>Facilities Committee</td>
<td>31</td>
</tr>
<tr>
<td>Graduate Student Organization</td>
<td>31</td>
</tr>
<tr>
<td>Graduate Ombudsman</td>
<td>31</td>
</tr>
</tbody>
</table>
## MMI CORE FACULTY

<table>
<thead>
<tr>
<th>Name</th>
<th>Office</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Peter Agre(^A)</td>
<td>E5146</td>
<td>7-8743</td>
</tr>
<tr>
<td>Dr. Gundula Bosch(^B)</td>
<td>E5139</td>
<td>5-3475</td>
</tr>
<tr>
<td>Dr. Jay Bream</td>
<td>E5624</td>
<td>2-2511</td>
</tr>
<tr>
<td>Dr. Arturo Casadevall(^C)</td>
<td>E5132</td>
<td>5-3457</td>
</tr>
<tr>
<td>Dr. Isabelle Coppens</td>
<td>E5648</td>
<td>7-1589</td>
</tr>
<tr>
<td>Dr. Kimberly Davis</td>
<td>E2628</td>
<td>7-7589</td>
</tr>
<tr>
<td>Dr. George Dimopoulos</td>
<td>E3630</td>
<td>7-0128</td>
</tr>
<tr>
<td>Dr. Diane E. Griffin</td>
<td>E5636</td>
<td>5-3459</td>
</tr>
<tr>
<td>Dr. Anne Hamacher-Brady(^D)</td>
<td>E5642</td>
<td>4-2635</td>
</tr>
<tr>
<td>Dr. J. Marie Hardwick(^E)</td>
<td>E5140</td>
<td>5-2716</td>
</tr>
<tr>
<td>Dr. Marcelo Jacobs-Lorena</td>
<td>E4632</td>
<td>7-0839</td>
</tr>
<tr>
<td>Dr. Gary W. Ketner</td>
<td>E5138</td>
<td>5-3776</td>
</tr>
<tr>
<td>Dr. Sabra L. Klein(^F)</td>
<td>E5634</td>
<td>5-8898</td>
</tr>
<tr>
<td>Dr. Joseph Margolick</td>
<td>E5153</td>
<td>5-1436</td>
</tr>
<tr>
<td>Dr. Richard B. Markham(^G)</td>
<td>E5150</td>
<td>5-9601</td>
</tr>
<tr>
<td>Dr. Conor McMeniman(^H)</td>
<td>E5644</td>
<td>7-8764</td>
</tr>
<tr>
<td>Dr. Janet Markle(^I)</td>
<td>E5148</td>
<td>7-3418</td>
</tr>
<tr>
<td>Dr. Monica Mugnier</td>
<td>E3632</td>
<td>4-4894</td>
</tr>
<tr>
<td>Dr. Douglas Norris(^J)</td>
<td>E3628</td>
<td>4-2710</td>
</tr>
<tr>
<td>Dr. Andy Pekosz(^K)</td>
<td>E5636</td>
<td>2-9306</td>
</tr>
<tr>
<td>Dr. Sean Prigge</td>
<td>E4628</td>
<td>7-4822</td>
</tr>
<tr>
<td>Dr. Alan L. Scott(^L)</td>
<td>E5152</td>
<td>5-3430</td>
</tr>
<tr>
<td>Dr. Clive J. Shiff</td>
<td>E5142</td>
<td>5-1263</td>
</tr>
<tr>
<td>Dr. Photini Sinnis</td>
<td>E4626</td>
<td>2-6918</td>
</tr>
<tr>
<td>Dr. Prakash Srinivasan(^M)</td>
<td>E5628</td>
<td>7-3097</td>
</tr>
<tr>
<td>Dr. Monique Stins</td>
<td>E4135</td>
<td>2-3377</td>
</tr>
<tr>
<td>Dr. David Sullivan</td>
<td>W4606</td>
<td>2-2522</td>
</tr>
<tr>
<td>Dr. Fidel Zavala</td>
<td>E4630</td>
<td>7-1769</td>
</tr>
<tr>
<td>Dr. Ying Zhang</td>
<td>E2626</td>
<td>4-2975</td>
</tr>
</tbody>
</table>

\(^A\) Director of Malaria Research Institute  
\(^B\) Director of R3 program  
\(^C\) MMI Chair  
\(^D\) Research Forum Director  
\(^E\) Vice Chair for Scientific Development  
\(^F\) Graduate Program Committee Chair  
\(^G\) MHS Admissions Chair, MHS Program Director  
\(^H\) ScM Program Director  
\(^I\) Postdoctoral Fellow Program  
\(^J\) Postdoctoral Fellow Program  
\(^K\) Vice Chair for Facilities & Resources  
\(^L\) Vice Chair for Education, Admissions Chair  
\(^M\) Seminars Director

For additional details see [Departmental Governance Structure](#) section at the end of this handbook.
The department's main office is located in E5132. Below are staff members who serve the needs of the faculty and students.

**Lisa Walborn** (Room E5132) serves as the Department Administrator. Lisa directs all aspects of finances, budgets, permanent equipment, and space requirements for the department and has overall responsibility for the administration of the department and the Malaria Institute. This includes the pre- and post-award grant administration, HR/payroll, equipment and facilities.

**Gail O'Connor** (Room E5008) serves as Academic Program Administrator/Student Coordinator. She handles all aspects of students’ academic careers, tuition, medical and dental insurance and admissions. She attends meetings of several departmental and School committees concerned with students and academic programs.

**Lawanda Lewis** (Room E5014) serves as the Human Resources Coordinator. Lawanda handles all HR/payroll and visa issues for faculty, staff, post-docs and students.

**Patricia Bazemore** (Room E5001) serves as the course coordinator for Core Discussion of Scientific Literature and assists Lawanda Lewis with human resource and payroll matters.

**Leonid Shats** (Room E1305) has oversight of Departmental equipment. Leonid provides instruction in use of the Departmental microscopes, performs some routine maintenance, and repairs or arranges repairs of Departmental equipment. Repair requests are submitted online through the MMI web site.

**Maryann Smith** (Room E5132) serves as the assistant to the Department Chair. She is responsible for maintaining Dr. Casadevall’s daily schedule, arranging his appointments, meetings and travel. She also coordinates the Tropical Medicine Dinner.

**Kathy Spinnato** (Room E5132) serves as Administrative Coordinator in the Office of the Chair. She is responsible for reviewing the accuracy of invoices and preparing fiscal documents required to pay vendors for goods and services and coordinates the MMI Department Seminars on Thursdays.

**Genevieve Williams** (Room E5141) serves as Program Manager for the JHMRI. She organizes the Malaria Friday Seminars, World Malaria Day, the fall JHMRI retreat and ICEMR for Zambia and Zimbabwe.

**Trish Ward** (Room E5143) serves as the JHMRI Center Administrator and is also the assistant to Professor Peter Agre. She manages the JHMRI pilot grants and JHMRI fellowships and coordinates events associated with Vector Encounter.

**Joe Troilo** (Room E5137) serves as the Grants and Contracts Manager.

**Lena Johnson-Bey** (Room E5007) serves as a Senior Grants and Contracts Analyst.

**Joshua Weinzenpfel** (Room E5009) serves as a Senior Grants and Contracts Analyst.

**Thom Hitzelberger** (Room E5004) serves as a Grants and Contracts Analyst.
INTRODUCTION

The goal of the MMI doctoral program is to train independent scientists to take leading roles in advancing our understanding of the cellular and molecular mechanisms that drive infectious and immune diseases. The specific goals listed below are designed to foster ingenuity, creativity and critical thinking in students that will enable them to recognize and solve key problems in infectious and immunological diseases of public health importance.

This MMI PhD Guidebook, which supplements the School’s resources page, which can be found at https://www.jhsph.edu/offices-and-services/student-affairs/resources/ is intended to summarize most of the School and Departmental requirements for your degree program. In addition, other practical information is included for your convenience and consideration.

MMI PhD students will:

- Attain an in-depth understanding of the molecular and cellular basis for infectious and immunological diseases through structured course work, informal instruction, mentoring and firsthand knowledge gained during dissertation research.
- Develop the ability to critically analyze scientific data.
- Learn how to create sound hypotheses and to test hypotheses employing the scientific method.
- Attain a broad understanding of the theory, utility and limitations of classic and modern scientific approaches and techniques
- Develop the ability to adapt current methods or to develop a new methodology to address specific scientific problems.
- Acquire the communication skills necessary to effectively report research findings to other scientists as well as to the non-scientific community.
- Gain an appreciation for the tenets of professional and scientific ethics.

The Department’s Graduate Program Committee (GPC) and faculty constantly monitor the components of the MMI graduate program for its effectiveness. Adjustments are made when necessary to maintain an optimal balance of didactic, literature-based, and technical training.
Rights & Responsibilities of Ph.D. Students
at Johns Hopkins University

Preamble: Ph.D. education is fundamental to the University’s teaching and research mission. For an intellectual community of scholars to flourish, it is important to acknowledge the principles that underlie the compact between Ph.D. students, the faculty, and other members of the University community. It is in this spirit that the Doctor of Philosophy Board, in collaboration with faculty and students from across the University, has articulated a statement of rights and responsibilities for doctoral students at Johns Hopkins. The principles described in this document are to be realized in policies established by the various Schools of the University; the Schools will also develop mechanisms to monitor and enforce such policies.

RIGHTS

1. Ph.D. students have the right to education, supervision and training. This includes access to the classroom, laboratory and teaching opportunities necessary for completion of degree requirements, appropriate and regular faculty supervision consistent with the norms of the discipline, as well as appropriate research and/or clinical experiences.

2. Ph.D. students have the right to full and regular access to information about the requirements for the degree. This includes information regarding program requirements, assignment, selection, change of advisor, expected time to completion, graduation rates, and conditions of financial support.

3. Ph.D. students have the right to conditions of learning, teaching and research that are appropriate and reasonable for their discipline. This includes the right to information and ongoing consultation regarding their expected effort and specific duties, as well as clearly stated criteria for participation in collaborative work and/or research.

4. Ph.D. students have the right to be treated in a respectful and professional manner by all members of the University community. This includes freedom from discrimination and harassment as well as assurance of reasonable confidentiality in their communications, as governed by university policy.

5. Ph.D. students have the right to receive, on a regular basis, written evaluation of their progress and to be informed of the criteria upon which the evaluation is based. Students should also be provided with opportunities to discuss such evaluations with their advisor. Each program should make available their policies concerning academic probation, funding withdrawal, and dismissal; reasonable warning should be provided in advance of dismissal based on failure to make satisfactory academic progress.

6. Ph.D. students have the right to appropriate recognition for their contributions to research and scholarship. This will require discussion between the student, advisor and other relevant parties regarding expectations for student contributions and the nature of the recognition.

7. Ph.D. students have the right to academic freedom. This includes the right to express, without reprisal, independent opinions about scholarly issues (such as opinions regarding theoretical and methodological debates in their disciplines), opinions regarding matters of institutional policy, concerns about suspected research misconduct and personal opinions on public matters.

8. Ph.D. students have the right to have their views represented in the development of policies that govern the Ph.D. Student ideas and perspectives should be solicited and considered if substantive changes in the structure of a Ph.D. program are anticipated.

9. Ph.D. students have the right to clearly defined policies regarding benefits and nonacademic issues pertinent to their student status. These policies should cover (but not be limited to) such things as the provision of health care, recognition of family responsibilities, leave, vacation and other absences. These policies should acknowledge that students can, without reprisal, form clubs, associations or organizations around common interests, as long as these are consistent with general non-discrimination policies of the University.

10. Ph.D. students have the right to accessible procedures for redress of their grievances. Each School within the University must provide mechanisms to ensure that grievance procedures are fair and without reprisal. These procedures should include Ph.D. student representation, as appropriate.
There are several requirements for the completion of degree programs: those set by the school, those set by the department and those set by the thesis advisor. The degree requirements established by the School are contained in Policy and Procedure Memoranda available at: https://my.jhsph.edu/Resources/PoliciesProcedures/ppm/PolicyProcedureMemoranda/Academic_Programs_03_Doctor_Of_Philosophy_Degree_071717.pdf

School procedures, information and forms can be found here: https://my.jhsph.edu/Offices/StudentAffairs/RecordsRegistration/DoctoralCandidateInfo/Pages/default.aspx. The requirements for MMI are explained in this Student Guidebook. A student's thesis advisor with participation of the Thesis Advisory Committee (TAC) generally will set requirements regarding the preparation for, and completion of, the thesis or dissertation project. A brief summary with an approximate timetable of the requirements of the school and of the department is included at the end of this section.

Advisors.

Each new student is assigned an MMI faculty member as their academic advisor for the first year. The academic advisor assists the student in the selection of appropriate courses for the first year, acts as the student's source of information concerning school and departmental policies and procedures, and helps the student with problems they may encounter. A student who wishes to change their academic advisor should contact the Student Coordinator, who will consult the GPC.

Selection of a thesis advisor takes place after completion of laboratory rotations (see below), generally prior to June 1. After discussion with the prospective thesis advisor, the student should submit to the Student Coordinator a completed Thesis Advisor Selection form (available on the Departmental portal, https://my.jhsph.edu/sites/MMI/academic-forms/default.aspx signed by the prospective advisor, for approval by the department Chair.

Note that MMI graduate students must perform thesis research in the laboratory of a faculty member with a primary appointment in MMI, or in the laboratory of a faculty member designated as a trainer on the MMI training grant. Requests for thesis advisors other than these will not be approved.

Every effort will be made to accommodate a student's request to work with a specific faculty member for their thesis research. However, the department cannot guarantee that a student will be able to work in the laboratory that is selected as a first choice. In the event that a student's first choice cannot be met, an alternative will be arranged in consultation with the student.

Thesis Advisory Committees (TAC) and Individual Development Plans (IDP).

Thesis Advisory Committees (TACs) provide structured opportunities for students to discuss scientific goals, progress and issues relevant to their project and to develop an individualized plan to achieve projected career goals (Individual Development Plan; IDP) with a select group of faculty members. TACs meet at least annually; more frequently if desired.

Each student must form a TAC during his/her second academic year. The TAC should be formed and the initial meeting date scheduled by the end of the 4th term. The requirement is that the TAC meeting will take place sometime no later than the end of the first term of the following academic year. Students in their second years and beyond who do not complete the annual TAC meeting
including the submission of the TAC/IDP Report will not be allowed to register in the first term of the following academic year. It is the responsibility of the student and his/her faculty advisor to schedule the annual meetings. The Student Coordinator should be informed of the anticipated date of the meeting when it is scheduled. Note that a long lead time (months) may be needed to find a date when all TAC members are available for the meeting and so it is wise to begin the scheduling process early.

TACs consist of the student's Thesis Advisor and at least two faculty members with a primary appointment in MMI at the rank of assistant professor or higher. The highest-ranking MMI faculty member, other than the advisor, will serve as the committee chair. TACs can include additional members and members from other departments/divisions of JHU and from other institutions are welcome. Committee members should be jointly selected by the student and the thesis advisor.

TAC meetings are conducted in four parts.

**Introduction by the advisor.** With the student absent, the advisor should briefly introduce the student (thesis topic, year in the program, background, unusual career circumstances or other relevant matters) and assess the student's performance relative to the advisor's expectations. Factors that may be impeding the student's progress should be raised and discussed. At the discretion of the Committee, these may be discussed with the student during the meeting.

**Discussion of the scientific aspects of the student's project,** beginning with a concise presentation by the student that summarizes the current status of the research project, research accomplishments during the previous year, and an outline of research plans for the coming year. The scientific discussion is intended to provide fresh perspectives on the project, overall guidance, potential technical solutions to difficulties that have arisen, and access to expertise in varied fields. This part of the TAC meeting will be summarized at the end of the discussion by the TAC Chair in Part A of the Thesis Advisory Committee and Individual Development Plan (TAC/IDP) Report form, available on the MMI portal. [https://my.jhsph.edu/sites/MMI/academic-forms/default.aspx](https://my.jhsph.edu/sites/MMI/academic-forms/default.aspx)

**Review of the student’s professional development,** guided by the points listed in Part B of the TAC/IDP and the experiences gained in the programs offered by the JHU Professional Development and Career Office (see page 21). Part B should be completed by the student before the meeting and furnished to the committee members at the meeting. As appropriate, the committee will discuss the student's responses to the points on the form and offer recommendations, advice, and insights into how the student might best approach his/her professional goals. At the end of this discussion, the TAC Chair will summarize this discussion and note action items on the form. It is recognized that career goals evolve, and it is the intent that TAC/IDP reports will reflect, facilitate and potentially guide that evolution, not constrain it. At the end of this discussion, the TACR/IDP form should be signed by the committee and the student and returned to the Student Coordinator.

**Discussion with the student in the absence of the advisor.** At the conclusion of the discussion of the IDP, the advisor will leave the meeting to give the student an opportunity to evaluate the status of his project, the relationship with the advisor or the lab generally, and to identify measures that would enhance his/her educational and professional experience. Substantive issues that are revealed should be summarized in a confidential e-mail from the TAC Chair to the GPC c/o the Student Coordinator. The TAC chair should also inform the advisor of matters that arose, unless the student prefers that the discussion remain confidential.

Most students will defend their thesis before or during their sixth year in the program. Beginning in the sixth year, TAC/IDP reports must include a substantive analysis of the prospect for fulfilling the requirements and a detailed time-line for completion. A recommendation that a thesis be prepared without further laboratory work can be made by the TAC if appropriate. It is recognized that in some
cases that the status and trajectory of the dissertation project will be such that it is not possible to
successfully complete the requirements for graduation at the PhD level. In these cases, the TAC can
recommend that the research completed to date be used to fulfill the research requirement for the
ScM degree. These reports will be reviewed by the GPC and appropriate action taken on a case-by-
case basis.

Annual Evaluation of Progress, Performance, and Mentoring.

The principal element in the training and guidance of graduate students is the interaction with their
Thesis Advisor. Such mentoring commonly occurs on an ongoing basis involving frequent informal
discussions, lab meetings, etc. However, a formal mechanism of evaluation of performance and of
satisfaction of both the advisor and student is valuable in many cases. Annual progress,
performance, and mentoring meetings between each student and his/her mentor guided by the
Annual Evaluation of Progress, Performance, and Mentoring (AEPPM) form insures that such formal
performance and satisfaction discussions occur in MMI. Once per year, a month prior to the TAC
meeting, each student is required to complete this document (available on the MMI departmental
portal), and to discuss it with his/her Thesis Advisor. Following that discussion, the form, signed by
student and Thesis Advisor should be returned to the Student Coordinator. The signed form must be
turned in prior to the TAC meeting. Completed forms are reviewed by the GPC with the object of
identifying developing problems. This mechanism is intended to foster frank discussions between
student and advisor and will be of value only if the student's answers and the advisor's responses
during the following discussions are honest. Note: A GPC committee member will be added to the
TAC starting in year 5, if graduation is not scheduled.

Laboratory Rotations.

Doctoral students must rotate through at least three (3) laboratories of faculty members with primary
appointments in MMI or designated MMI training grant trainers. Rotation periods broaden a student's
knowledge of laboratory techniques and skills, provide exposure to a variety of research areas, help
in selecting a laboratory for thesis research, provide an opportunity for interaction with several faculty
members, and develop the ability to carry out a research project. Supervisors for the required
rotations must hold a primary full-time appointment in MMI. MMI ScM students who matriculate to the
PhD program are required to complete a total of 3 rotations over the course of both programs. These
rotations must be in different departmental laboratories.

During a laboratory rotation, a student will be given a specific research problem of limited scope as
his/her rotation exercise. At the end of the laboratory rotation term, the student will give a short oral
presentation on the project at the Research Forum in Molecular Microbiology and Immunology (see
below.) Students are encouraged to discuss expectations (time and effort spent, etc.) with the rotation
supervisor early in the rotation.

Each laboratory rotation lasts about 8 weeks. The rotation starting and ending dates are listed in the
table below. Because laboratory rotations do not correspond to standard academic terms, students
should register for Laboratory Rotation (260.851) during the second, third and fourth terms.
<table>
<thead>
<tr>
<th>Rotation Period</th>
<th>Dates</th>
<th>Register in term</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>11/11/19 - 1/17/20</td>
<td>2</td>
</tr>
<tr>
<td>Second</td>
<td>1/21/20 – 3/13/20</td>
<td>3</td>
</tr>
<tr>
<td>Third</td>
<td>3/23/20 – 5/15/20</td>
<td>4</td>
</tr>
</tbody>
</table>

2019-2020 MMI Laboratory Rotation Schedule

The selection of laboratories for rotations is the responsibility of the student. Students (with the assistance of their academic advisor) should identify potential laboratories for their rotations and consult with the faculty members in charge of these laboratories to arrange a rotation for a particular academic term.

Students may conduct rotations in addition to the three required in order to explore other laboratories or to learn particular laboratory techniques or skills. These extra rotations may be conducted in departmental laboratories or in labs outside MMI. Because PhD students must conduct thesis research in a laboratory within MMI or in the laboratory of a designated MMI trainer, rotations outside such labs should not be considered a means for identifying potential thesis research laboratories.

It is expected that substantial time will be spent in the laboratory during each rotation. It is critical that the student and rotation supervisor discuss this issue and reach an agreement on their mutual expectations. In the case of questions on this point, seek the advice of the MMI Ombuds, the GPC chair or any MMI faculty member.

At the conclusion of each rotation, the student and the rotation supervisor will complete a rotation report that will be turned in to the student coordinator. A copy of the form can be found on the MMI portal. [https://my.jhsph.edu/sites/MMI/academic-forms/default.aspx](https://my.jhsph.edu/sites/MMI/academic-forms/default.aspx)

NOTE: Animal protocols; radiation licenses; pathogen, and recombinant DNA registrations. Any student who participates in animal experiments must be added to the appropriate animal protocol before beginning work. This is the responsibility of the Principle Investigator (PI) of the protocol. Students also must complete online animal research training and must enroll in the Animal Exposure Surveillance Program prior to beginning work. Students must also be added to radiation licenses, pathogen registration and recombinant DNA registration, and human IRBs by the PI as required. In general, training in procedures is required for work with these agents or human samples.

MMI guidelines request that 1st year PhD students choose a research advisor by no later than June 1st, to ensure that any payroll change deadlines are met.
Research Forum and Laboratory Rotation Presentations. Ph.D. students are required to give oral presentation of their research. During the first year, the student will present the results of their rotation projects. These oral presentations will be delivered during weekly Departmental Research Forum. Rotation presentations are 20 minutes long and thesis research presentations are 30 minutes long. Suggested organization of presentations:

1. Introduction - Present the background and rationale of the work and outline the working hypothesis.
2. Experimental Design - Describe the overall experimental approach.
3. Results/Discussion - Results should be presented in an organized, meaningful and comprehensible manner.
4. Summary/Conclusion - Provide a short summary of the results and give an indication of future research directions.

An evaluation form (available from the departmental web portal and the TA) will be completed by two students and two faculty and returned to the student to provide constructive comments to improve future presentations.
Required Courses

All MMI required courses must be passed with a grade of A or B. Students not meeting that standard must repeat the relevant course(s) and pass with an A or B. A student who earns a grade below that threshold in a course that meets a core requirement must, at the next opportunity, make a second attempt to complete the core course by repeating the same course or by completing another course that has been approved by the GPC Chair. A grade below the threshold on the second attempt may be grounds for dismissal and must be reported to the School’s Committee on Academic Standards.

First year students must register for 16-22 credits each term. Students in their 2nd year and beyond should register for a maximum of 16 credits. First year students should register for 260.851 Laboratory Rotation in terms 2, 3 and 4. (See Laboratory Rotations, above).

First Year Course Requirements

Summer:
Introduction to Online Learning: https://courseplus.jhu.edu/core/index.cfm/go/course.home/cid/90/ (non-credit)

TERM 1:
PH 550.860 Academic and Research Ethics at JHSPH (0 credits)
PH 260.623 Fundamental Virology (4 credits)
PH 260.611 Principles of Immunology I (4 credits)
PH 260.801 Topics in Immunology (1 credit)
ME 260.709 Molecular Biology and Genomics (3 credits)
PH 260.607 Core Discussion of Scientific Literature MMI (2 credits)
PH 552.6XX Cells-to-Society (see Cells-to-Society Requirements below)
PH 260.821 Research Forum Molecular Microbiology and Immunology (1 credit)
PH 260.822 Seminars in Research in Molecular Microbiology and Immunology (1 credit)

TERM 2:
PH 260.635 Biology of Parasitism (5 credits)
PH 260.612 Principles of Immunology II (4 credits)
PH 260.802 Topics in Immunology II (1 credit)
ME 260.709 Molecular Biology and Genomics (Continued,)
PH 260.607 Core Discussion of Scientific Literature MMI (2 credits)
PH 260.851 Laboratory Rotation 1 (Variable credits)
PH 552.6XX Cells-to-Society
PH 260.821 Research Forum Molecular Microbiology and Immunology (1 credit)
PH 260.822 Seminars in Research in Molecular Microbiology and Immunology (1 credit)

TERM 3:
PH 260.627 Pathogenesis of Bacterial Infection (4 credits)
ME 110.728 Cell Structure and Dynamics (3 credits)
PH 260.607 Core Discussion of Scientific Literature MMI (2 credits)
PH 260.650 Vector Biology and Vector Borne Diseases (3 credits)
PH 260.851 Laboratory Rotation 2 (Variable credits)
PH 552.6XX Cells-to-Society
PH 260.821 Research Forum Molecular Microbiology and Immunology (1 credit)
PH 260.822 Seminars in Research in Molecular Microbiology and Immunology (1 credit)

TERM 4:
- PH 260.851 Laboratory Rotation 3 (Variable credits)
- PH 552.6XX Cells-to-Society
- PH 260.821 Research Forum Molecular Microbiology and Immunology (1 credit)
- PH 260.822 Seminars in Research in Molecular Microbiology and Immunology (1 credit)

Electives
PhD students are strongly advised to take at least one departmental advanced course during each of the third and fourth terms of their first year. The specific courses taken should be chosen after discussion between the student and his/her advisor. Generally, these courses will include at least one in the area in which the student expects to conduct his/her thesis research.

Cells-to-Society
The Council on Education for Public Health (CEPH) requires didactic coursework covering and assessing 12 CEPH-defined Introductory Public Health Knowledge Learning Objectives. It is important to emphasize that this is a School-level requirement of all degree programs.

The School’s Committee on Academic Standards approved 12 online, 0.5 credit, mini-courses, graded S/U (satisfactory/unsatisfactory) that will cover each of the 12 Introductory Public Health Knowledge Learning Objectives (see table below). Each of the mini-courses consists of 3-5, 30-40 minute presentations with an accompanying assessment.

The Cells-to-Society courses will be offered beginning in September 2019, with six of the mini-courses offered in the 1st and 3rd Terms and the remaining six offered in the 2nd and 4th Terms. Thus you will have two opportunities to take a topic each year.

These 12 mini-courses must be completed by the end of your first academic year

<table>
<thead>
<tr>
<th>Course #</th>
<th>Title</th>
<th>1st Term</th>
<th>2nd Term</th>
<th>3rd Term</th>
<th>4th Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>552.601.81</td>
<td>Foundational Principles of Public Health</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>552.602.81</td>
<td>The Role of Quantitative Methods in Public Health</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>552.603.81</td>
<td>Qualitative Methods &amp; Science in Assessing Population Health</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>552.604.81</td>
<td>Causes and Trends in Morbidity &amp; Mortality</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>552.605.81</td>
<td>Science of Primary, Secondary, &amp; Tertiary Prevention in Population Health</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>552.606.81</td>
<td>The Critical Importance of Evidence in Advancing Public Health Knowledge</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>552.607.81</td>
<td>Essentials of Environmental Health</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>552.608.81</td>
<td>Biologic, Genetic, &amp; Infectious Bases of Human Disease</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>552.609.81</td>
<td>Psychological &amp; Behavioral Factors that Affect a Population’s Health</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>552.610.81</td>
<td>The Social Determinants of Health</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>552.611.81</td>
<td>Globalization &amp; Health: A Framework for Analysis</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>552.612.81</td>
<td>Essentials of One Health</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Second Year Course Requirements

TERM 1
PH 550.600 Responsible Conduct of Research (1 credit)
PH.260.820 Thesis Research MMI (variable credits)
PH 260.821 Research Forum Molecular Microbiology and Immunology (1 credit)
PH 260.822 Seminars in Research in Molecular Microbiology and Immunology (1 credit)

TERM 2
PH 260.625 Scientific Grant Writing (2 credits)
PH.260.820 Thesis Research MMI (variable credits)
PH 260.821 Research Forum Molecular Microbiology and Immunology (1 credit)
PH 260.822 Seminars in Research in Molecular Microbiology and Immunology (1 credit)

TERM 3
PH.260.820 Thesis Research MMI (variable credits)
PH 140.615 Statistics for Lab Scientists I (4 credits) ** See note, below
PH 260.821 Research Forum Molecular Microbiology and Immunology (1 credit)
PH 260.822 Seminars in Research in Molecular Microbiology and Immunology (1 credit)

TERM 4
PH.260.820 Thesis Research: MMI (variable credits)
PH 260.821 Research Forum Molecular Microbiology and Immunology (1 credit)
PH 260.822 Seminars in Research in Molecular Microbiology and Immunology (1 credit)

Second year and beyond, PhD students should continue to register for a minimum of 16 credits per term, including courses (if any), 1 credit for Research Forum (260.821), 1 credit for Seminars in Research (260.822), and Thesis Research (260.820). PhD students must also register for summer term: 12 credits Summer Thesis Research (260.829), plus 4 credits Special Studies (260.840), for a total of 16 credits.

Additional Course Requirements

PhD students must complete the online course Academic and Research Ethics (550.860.82) in the first term they are enrolled. Additionally, PhD students must take Responsible Conduct of Research (550.600, 1st term) or Research Ethics and Integrity (306.665, 3rd term.) These courses are usually taken during the second year, and must be taken prior to taking the Preliminary Oral Exam (POE.)

**All doctoral degree candidates are required to take coursework in biostatistics. The recommended biostatistics course is 140.615 Statistics for Laboratory Scientists I. Other courses that fulfill the requirement include: 140.611/612 Statistical Reasoning in Public Health 1 & 2 and 140.621/622 Statistical Methods in Public Health 1 & 2.
Recommended R3 courses as electives

- 260.700 – How Do We Know What is True? Theory and Practice of Science
- 260.701 – Anatomy of Scientific Error
- 260.704 – Critical Dissection of the Scientific Literature: Taking the Scalpel to Journal Articles
- 260.707 – Evidence-Based Teaching in the Biomedical Sciences: Foundations
- 260.708 – Evidence-Based Teaching in the Biomedical Sciences: Practice

Distribution requirement. The School requires Ph.D. students to complete a minimum of 18 credits in formal courses outside his/her own department with no fewer than nine of these credits taken in the Bloomberg School of Public Health. All 18 credits must be taken for a grade (Pass/Fail is not acceptable). Credits earned for Molecular Biology and Genomics and Cell Structure and Dynamics count toward the required credits outside of MMI, as do credits earned for biostatistics. Credits for Academic and Research Ethics, Responsible Conduct of Research and Cells to Society are counted as separate School requirements and are not included in the 18-credit requirement.

Winter and Summer Institute courses. Tuition for these courses is charged separately by the registrar, and is not covered by tuition paid during the academic year. Students wishing to take any of these courses may do so at their own expense.

Certificate Programs. There are several certificate programs offered by the School in specific areas of public health that have fewer course requirements than do formal degree programs. Certificate programs are focused academic training programs designed to appeal to students seeking targeted education in a specific area of public health. Educational objectives, admissions requirements, courses of study, and other information is provided for each certificate program and can be found at http://www.jhsph.edu/academics/certificate-programs/

Academic Performance and Academic Probation. Doctoral students are required to maintain a 3.0 grade point average and, as noted above, complete required courses with a grade of B or better. Students who do not comply with these and other academic requirements may be placed on Academic Probation by the Graduate Program Committee. Formal notification of Academic Probation generally will be accompanied by conditions that the student must fulfill in order to be returned to good academic standing. Students who fail to meet those conditions may be dismissed from the program.
Written & Oral Exams

Departmental Comprehensive Examination (PhD Comps)

The School requires a departmentally-administered written comprehensive examination for students in doctoral degree programs. In MMI, the comprehensive examination is intended to test the student’s grasp of basic factual material necessary for Ph.D. level research in molecular microbiology and immunology and his/her ability to integrate the information obtained in the several disciplines of departmental interest. The examination also assesses each student's ability to identify important scientific problems and to formulate hypotheses and plausible experimental approaches to testing those hypotheses.

The MMI comprehensive exam is given at the end of the first year and has a written and an oral component. The written component of the exam takes the form of a critical review of the literature on a currently active topic relevant to first-year coursework. The review should be limited in scope, but a thorough, scholarly exploration of the topic area. Included should be a discussion of the public health and scientific significance of the topic, a critical analysis of the current state of knowledge in the field including important unanswered questions, a discussion of potential experimental approaches to address those questions, and their implications for future research. The student's review will be evaluated by a committee of three MMI faculty, with the student's Academic Advisor serving as Chair, and will be defended in an oral examination.

This is an examination and the written review must be the student's own work. However, students must select the review topic in consultation with the academic advisor, and will receive their committee's comments on their outline/description (see below). Additionally, students are encouraged to discuss their original ideas, concepts, experimental approaches, etc. with advisors, faculty and colleagues at whatever length. Faculty will not review the written review before submission. The GPC suggests that students hold at least three substantive meetings with their advisors: prior to topic selection, before finalization of the outline/description, and during preparation of the exam.

Summary of the Comprehensive Examination Process.

- Select a topic relevant to first-year coursework in consultation and with the approval of your academic advisor.
- Submit an email stating the topic, cc'd to the academic advisor, to the Student Coordinator.
- The GPC will appoint a review committee of three MMI faculty members. The student's academic advisor serves as the Chair of the committee.
- Submit an outline or brief description of your topic (about 1 page) to your review committee and to the Student Coordinator. The committee will comment on the proposed content and organization of the review. If necessary, your advisor will assist in revision of the outline.
- Give copies of the finished review (4000-5000 words, double spaced, 11 pt font) to each committee member and to the Student Coordinator. Committee members will grade the review.
- Arrange an oral exam - you are responsible for setting the date and time, subject to committee member availability.
- Present a 15 minute overview of the written exam document and answer general knowledge questions asked by the Committee. Committee members will grade the oral exam.
<table>
<thead>
<tr>
<th>Steps</th>
<th>Dates</th>
<th>Who is responsible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter stating topic due to Student Coordinator</td>
<td>4/6/2020</td>
<td>Student</td>
</tr>
<tr>
<td>Review Committee appointed</td>
<td>4/13/2020</td>
<td>GPC</td>
</tr>
<tr>
<td>Outline/description due</td>
<td>4/20/2020</td>
<td>Student</td>
</tr>
<tr>
<td>Committee response to student</td>
<td>5/4/2020</td>
<td>Advisor/Committee</td>
</tr>
<tr>
<td>Final review due</td>
<td>6/15/2020</td>
<td>Student</td>
</tr>
<tr>
<td>Grades/request for revision due from committee members</td>
<td>6/22/2020</td>
<td>Committee members</td>
</tr>
<tr>
<td>Oral examinations completed</td>
<td>7/24/2020</td>
<td>Student/Committee</td>
</tr>
</tbody>
</table>

**Written Component.** The written review will be graded Pass/Conditional Pass/Fail in its entirety on criteria that include:

- Significance to the field
- Quality of the literature review, including inclusion of primary literature, depth and synthesis of the review, and inclusion of recent literature
- Quality of critical analysis of the state of the field
- Clarity and precision of writing
- Quality of assessment of future research directions

Committee members will grade the review, meet to discuss the critiques and determine the outcome, and the committee chair, on behalf of the committee, will inform the student of a Pass, Conditional Pass, or Fail. A Conditional Pass constitutes minor revisions that the committee has decided would help the student improve the quality of the written document, but that does not preclude progression to the oral component.

A Fail constitutes major shortcomings in the written document that require substantial revision, which precludes progression to the oral component. For students who fail the written component, the revised document will be due at least two weeks prior to the rescheduled oral examination date. If a unanimous grade of pass is not obtained after rewriting the review, the student will have failed the Comprehensive Examination twice and considered by the GPC for dismissal from the PhD program.

The outcome of the written component will be reported to the Student Coordinator by the advisor via e-mail.

**Oral Component.** The oral exam will consist of a brief (10-15 minute) summary of the review, followed by questions from the committee. Students are strongly encouraged to use PowerPoint, Keynote, or similar software in presenting their summary. During the exam, questions will address topics both related to and outside the immediate subject area of the proposal to assess the student's breadth of understanding of material presented in required coursework, departmental seminars, and research forum. The oral exam will be one to two hours long. The student is responsible for reserving a room for the exam (the Student Coordinator can assist if needed.)

Scoring of oral component. After the oral exam, the committee will meet in private to determine an outcome. Possible outcomes are pass, conditional pass, or fail. The committee will impose specific conditions upon students who receive a conditional pass and will specify a timetable and
mechanism for satisfying the condition. The outcome of the oral component will be reported to the Student Coordinator by the advisor by e-mail.

A student who passed the written component in their first try, but fails the oral defense must repeat the oral defense within a time frame specified by the committee. The student should meet with each committee member to discuss the areas that need improvement before scheduling a second oral exam. A student who passed the written component after two tries and then failed the oral defense may be dismissed from the PhD program.

The following framework should be used in evaluating the oral defense:

- 20% of emphasis: Summary.
- 30% of emphasis: Discussion of questions posed by committee specific to the review, including
  - Explanation of why this topic was selected from subject matter
  - Demonstration of knowledge of concepts and terms used
  - Demonstration of understanding of experimental evidence discussed
- 50% of emphasis: Discussion of questions extending beyond immediate subject areas to other fields in microbiology and immunology. (Remember, this is a Comprehensive Exam.)

Outcome of the comprehensive exam. Each student has two attempts to pass their comprehensive exam. A failure on either the written or the oral component, constitutes failure of the comprehensive exam. A total of two determinations of ‘fail’, on either the written, the oral, or a combination of the components, constitutes failure of the exam and may result in dismissal from the PhD program.

**Preliminary Oral Examination**

**NOTE: 550.600 Responsible Conduct of Research and the 552.6XX Cells-to-Society series must be completed before taking the POE.**

The purpose of the preliminary oral examination (POE) required and administered by the University for all PhD candidates, is to determine whether the student has the depth and breadth of scientific and technical knowledge to undertake thesis research. Examiners will be concerned with the student's reasoning ability; depth and breadth of knowledge; and ability to develop and conduct research leading to a completed thesis or dissertation. The POE is conducted by a committee of examiners usually selected by the student’s advisor according to eligibility rules set by the university (link below). Note that the student’s advisor is NOT a member of the POE committee.

The POE must be scheduled by April 1 and completed by May 31 in the student’s second year. If a committee/date is not set by April 1, the GPC will assume the responsibility for committee assignment and scheduling. The GPC's decisions will be made with input from the advisor if offered, but to simplify scheduling, the GPC will not feel obligated to honor requests for certain examiners or dates. The student is responsible for arranging for a room for the exam.

The PPM describing the preliminary oral exam process:  

The preliminary oral examination form can be found here:
[https://my.jhsph.edu/Offices/StudentAffairs/RecordsRegistration/DoctoralCandidateInfo/Documents/Prelim%20PhD%20ScD%20Revised%202019.pdf](https://my.jhsph.edu/Offices/StudentAffairs/RecordsRegistration/DoctoralCandidateInfo/Documents/Prelim%20PhD%20ScD%20Revised%202019.pdf) Please note that the POE form must be submitted to the Registrar's Office at least one month prior to the exam.

At least two weeks prior to the scheduled date of the exam, the student should make his/her Grant
Writing Course proposal available to the committee members. This is for ground purposes and the proposal will not be evaluated as part of the exam by committee members, nor will the examination be confined to topics related to the proposal.

**Conduct of the exam:** The student’s advisor does not participate in the student’s POE. However, in the student’s absence, the advisor will provide a brief overview of the student’s research progress to the committee prior to the start of the POE.

The student may prepare a short talk (5 min) based on their proposal and/or their anticipated research project to serve as an introduction to the examination. If a presentation is made, students are strongly encouraged to make use of PowerPoint, Keynote, or similar presentation software.

Exams last 1 to 2 hours. After the exam, a form indicating the outcome (Pass, Fail, or Conditional Pass) will be filled out by the examiners and returned to the Registrar. It is suggested that the POE Committee Chair inform the student's PI of issues that arose in the course of the exam. In particular, if the outcome of the exam is a Conditional Pass or Failure, the advisor will require this information to assist the student in correcting deficiencies.

Requirement for a Conditional Pass includes demonstration of a limited deficiency in a specific area. Examples of acceptable requirements that can be used to fulfill a Conditional Pass include: 1) reading assigned literature in the area of deficiency and taking an oral examination on the subject material; and 2) Reading assigned literature in area of deficiency and writing a review paper to be read by one or more POE committee members.

Requirement for a Fail includes demonstration of a significant deficiency in two or more areas. Receipt of a Fail requires retaking the POE. A student who receives a Fail on a POE will be granted one additional try to pass the POE. Two Fails on the POE will result in termination from the PhD program.

After the completion of the preliminary oral exam, PhD students will be required to complete a “Thesis Documentation Form.” Melissa Cooke in the Dean’s Office collects these forms. Final orals paperwork will not be processed unless this form is on file with the Dean’s Office.

**MMI F31 Proposal Requirement.**

Success in obtaining independent funding for research is an essential element of most scientific careers. Therefore, as part of their training, each MMI PhD student is required to submit a grant proposal for funding by outside agencies. It is anticipated that most proposals will be for NIH F31 grants, but similar applications to NSF or other governmental or non-governmental organizations will also fulfill the requirement.

The grant application must be submitted by the end of the summer term (late August) in the student's second year, for example, on the F31 NIH submission deadlines of April 8th or August 8th.

Proposals will generally be written on the student's thesis project (or anticipated thesis project) and should be prepared in close cooperation of the student's PI. Additionally, each student must obtain written critiques of a draft of the proposal from two different MMI faculty members apart from the PI prior to submission. Since students will have formed Thesis Advisory Committees (TACs) by that time, it is suggested that members of the TAC prepare the reviews. Proposal drafts should be submitted to these reviewers at least ONE MONTH before the application is due at the School's Office or Research Administration (ORA) or to the sponsoring organization. Note that for many applications (for example, NIH applications), the ORA deadline is several days before the sponsor’s due date.
Students must notify the Student Coordinator of grant application submissions by completing a form available from the MMI portal. TACs will record submissions on the TAC report form.
https://my.jhsph.edu/sites/MMI/academic-forms/default.aspx

Publication Requirement.

Publication is an essential component of training for a research career and a strong publication record as a graduate student is of great benefit to the trainee, the laboratory, and the program. Therefore, each PhD student in MMI is required to have published or submitted for publication in a peer-reviewed journal one or more first-author manuscripts prior to the date of the Final Oral Examination. Publication plans should be discussed as part of the IDP portion of each TAC meeting, and the TAC must indicate on the TAC Report Form whether the student is making satisfactory progress toward publication. If not, the TAC must provide a written recommendation for steps to be followed to expedite publication. Students must notify the Student Coordinator of first author publications by completing a form available from the MMI departmental portal.
https://my.jhsph.edu/sites/MMI/academic-forms/default.aspx

Final Oral Exam

The PhD thesis/dissertation is the culminating product of a student’s PhD studies and provides a permanent record of a student’s intellectual contribution to the field. Unlike published papers that might result from the same work, the thesis both requires and provides opportunity for the student to creatively place his or her work in the broadest possible context, explore implications, and speculate on where the future of the field lies. Preparation of a thesis requires the greatest care both in thought and execution.

Most students find that writing a thesis requires much more time and effort than expected. For that reason, students are encouraged to write as they go, rather than wait for the final few weeks of their graduate careers. Students are also encouraged to work closely with their advisors on thesis organization, scope, and content. To facilitate these recommendations, the Department requires a student to submit a draft of each of the components of the thesis to his/her advisor at least eight weeks prior to the Final Oral Examination (thesis defense) date, and to submit a final draft of the complete thesis to the readers at least four weeks prior to that date. Readers will provide comments on the thesis at or before the Final Oral Examination, and may require that changes be made prior to approval.

The Committee of Thesis Readers conducts the Final Oral Examination and ultimately must approve the thesis. School-wide policies and deadlines governing the selection of readers, conduct of the oral examination, and approval of the written thesis are available from the Registrar's office and online: https://my.jhsph.edu/Resources/PoliciesProcedures/ogm/PolicyProcedureMemoranda/Academic_Programs_03_Doctor_Of_Philosophy_Degree_071717. Comprehensive information for doctoral students including timelines, guidelines, exam and graduation information for doctoral students, including Thesis Reader Appointment forms can be found here: https://my.jhsph.edu/Offices/StudentAffairs/RecordsRegistration/DoctoralCandidateInfo/Pages/default.aspx
Details of the required format of a PhD thesis are available at: https://www.library.jhu.edu/library-services/electronic-theses-dissertations/

For theses that contain published work, suitably modified versions of the published manuscripts may be used as chapters, with careful attribution of the work of co-authors. In general, because the depth of the introductions and discussions of published papers are not sufficient for thesis use, and
additional introductory and summary chapters will be required in the thesis.

Essay/thesis writing/editing assistance is offered at both campuses:
JHMI: Editing Referral Service: http://www.hopkinsmedicine.org/fac_development/researchers/publishing.html#ERS
JHU: Writing Center: http://krieger.jhu.edu/writingcenter/about/
Other resources: https://www.jhsph.edu/offices-and-services/student-affairs/resources/writing-resources.html

Official PhD thesis submission to the University is now done electronically. Please review the checklist for specific requirements regarding thesis submission: https://my.jhsph.edu/Offices/StudentAffairs/RecordsRegistration/DoctoralCandidateInfo/Documents/AFTER%20THE%20FINAL%20DEFENSE%20-%20Revised%20March%202019.pdf

The department requires one printed copy of the PhD thesis, which will be kept in the Department Library. Students should provide the Student Coordinator with a PDF, and she will have a copy printed for the department.

Final Seminar Presentation

At the conclusion of their thesis research, students are required to present their work at a formal seminar that is advertised throughout the University. This seminar is scheduled in conjunction with the Final Oral Examination.

Time Limits

PhD students must successfully complete all program-specific requirements (such as a thesis or dissertation, as detailed in the specific program PPMs) within 7 years. Extensions are possible and must be formally approved by the Committee on Academic Standards.
Professional Development.

In addition to the commitment to enhancing your scientific knowledge base, critical thinking and research skills, MMI is equally dedicated to your development as a science professional. Experience teaches that students who start the process of formulating and refining a career plan early in their academic career have a better chance of achieving their goals. In this spirit, MMI requires that starting in their first year each student participate in the structured career and professional development OPTIONS program offered by the Johns Hopkins Professional Development and Career Office (PDCO). This multi-year program is designed to help you identify career objectives and systematically devise and implement a strategic plan to achieve your goals. This plan includes a series of programs - Career Exploration, Career Development, and Career Readiness – that provide opportunities to explore career options, train in and develop valuable professional skill sets, and even gain hands on experience as an intern in your field of interest. In addition, PDCO holds Career Clinics to aid you in preparing winning resumes, CVs, and web pages to prepare you to enter the marketplace. See the PDCO web site for details of the program. https://pdco.med.jhmi.edu/. The progress and direction developed through the PDCO program will be monitored at each Thesis Advisory Committee meeting and documented in each student’s customized Individual Development Plan (IDP).

In addition to the program offered by the PDCO, MMI has academic offerings designed to assist students with professional development such as the required course Scientific Grant Writing (260.625) and the elective Business of Academic Biomedical Research (260.815).

Johns Hopkins Teaching Academy

The Teaching Academy serves as an exceptional graduate and post-doctoral fellow professional development program. The Teaching Academy offers Ph.D students and post-doctoral fellows, college teacher training and academic career preparation opportunities through courses, workshops, teaching practicums, teaching as research fellowship appointments and individual consultation. The Teaching Academy is located in the Center for Educational Resources (CER) in the Garrett Room of the Milton S. Eisenhower Library on the Homewood campus. How to find us: https://cer.jhu.edu/teaching-academy.

NOTE: Teaching or outside work: Federal law stipulates a maximum of 19 hours for paid work outside of laboratory thesis work. All paid fellowships, part-time working opportunities and teaching need to be discussed with the student’s primary advisor.

Career Resources

The Career Services Office at the Bloomberg School helps students, alumni, faculty, staff and employers navigate the world of public health jobs. Career Services Office provides valuable resources to assist you in the process. Specifically, the Bloomberg School’s Career Services Office provides career coaching, resume preparation, a database of jobs and internships, and networking opportunities.

Writing Resources

Students who need assistance in developing or enhancing their writing skills can find course work and resources at: https://www.jhsph.edu/offices-and-services/student-affairs/resources/writing-resources.html
Academic Performance & Student Code of Conduct

Academic Performance and Academic Probation. PhD students are required to maintain a 3.0 grade point average or better. Students who do not satisfy this and other academic requirements will be placed on Academic Probation by the GPC. Formal notification of Academic Probation generally will be accompanied by conditions that the student must fulfill in order to be returned to good academic standing. Students who fail to meet those conditions may be dismissed from the program. Students cannot graduate with a GPA lower than 3.0

Criteria for dismissal from the PhD Program. Students may be dismissed from the MMI Doctoral program for reasons that include (but are not limited to) failure to satisfy conditions specified for removal from academic probation, failure to maintain an adequate GPA, failure to pass required courses with a grade of B or better, failure of the Departmental Comprehensive Examination or Preliminary Oral Examination, failure to make satisfactory progress in thesis research, violations of academic or professional ethics, and failure to adhere to School time limitations.

Academic Ethics and Responsible Conduct of Research. MMI requires students to adhere rigorously to the School's standards for Academic Ethics and Responsible Conduct of Research in all activities. Violations of these standards are ground for dismissal from the program. Policies are detailed in Policy and Procedures Memoranda (PPMs) "Students 01 Academic Ethics" and (for research, including student research) "Faculty 07 Scientific Misconduct". A lecture introducing students to these topics will be presented during the first term. Time and location will be announced by the Student Coordinator. Attendance is required. All students are also required to complete the online module on Academic and Research Ethics (550.860.82) in their first term, Responsible Conduct of Research (550.600) in the 1st term of the second year, and the Cells-to-Society (552.6XX) series during the first academic year.

Student Conduct Code. The fundamental purpose of the JHU’s regulation of student conduct is to promote and to protect the health, safety, welfare, property, and rights of all members of the University community as well as to promote the orderly operation of the University and to safeguard its property and facilities. As members of the University community, students accept certain responsibilities that support the educational mission and create an environment in which all students are afforded the same opportunity to succeed academically and professionally. The JHU Student Conduct Code is outlined at: https://studentaffairs.jhu.edu/policies-guidelines/student-code.
Additional Areas

Vacation/Holiday Policy. Graduate student holiday and vacation schedules traditionally have been flexible to accommodate the varied demands of individual research projects. Guidelines which reflect the Department’s expectations are outlined below. These guidelines are not intended to eliminate flexibility in the scheduling of holidays and vacation, and do not replace any conditions that might be imposed by fellowships/funding agencies. These guidelines also do not restrict legitimate academic or research activities conducted off campus, such as attendance at scientific meetings and field work. Students are generally entitled to the following holidays and vacation time:

- University holidays
- Spring break
- The period between last day of 2nd term and the first day of winter intersession
- A fortnight vacation in the second and subsequent years as scheduled by arrangement with the advisor.

Graduate students are expected to be present during winter intersession and summer term or as required by their experimental protocols.

Leave of absence. A leave of absence (LOA) is for students who are forced to take a temporary break from their programs of study due to reasons beyond their control, such as illness, military service, financial exigency, or pressing personal reasons justifying an interruption of their graduate studies. A leave of absence is an officially recognized inactive student status that is entered on a student’s academic record. LOA cannot be used by a student working on a thesis who has completed all other degree requirements. LOA is limited to one academic year except for military service.

Application for LOA must be made on a form available from Student Coordinator. Please discuss any potential LOA with your mentor and the Student Coordinator.

Parental leave. Graduate students may request parental leave following the adoption or birth of a child. Parental leave applies to either or both parents and includes sixty calendar days of stipend/salary support and health insurance coverage. Parental leave must be requested on a Departmental Paid Leave of Absence form, available from the Payroll Coordinator. More detailed information is available here: https://www.jhu.edu/assets/uploads/2017/06/newchildaccommgradandpostdoc.pdf
**ADDITIONAL DEPARTMENTAL AND SCHOOL INFORMATION**


All full-time students will be issued an email account prior to orientation.

**MMI Fifth Floor Conference Rooms.** These rooms (E5130 and E5133/library) are available for journal club meetings, student or faculty committee meetings, special seminars, and group study sessions. There is a calendar available on line at: [https://my.jhsph.edu/sites/MMI/ConfRoomSched/default.aspx](https://my.jhsph.edu/sites/MMI/ConfRoomSched/default.aspx) Please see Maryann Smith or Gail O’Connor to schedule one of the conference rooms.

**Departmental Mailboxes.** All first year students in the Department are issued mail-slots located in Room E5003. These slots are used for telephone messages, Departmental and School correspondence and announcements, as well as for any mail addressed to students in care of the Department. It is important for students to check their mailboxes frequently. Mail is distributed twice a day, once in the morning and once in the afternoon. Starting in year 2, students’ mail will be delivered to their lab’s mailbox located directly across from the department office.

**Printing, Photocopying and Faxing.** To use the Departmental photocopier in Room E5003, students must have their badge activated. Please see Thom Hitzelberger to have your badge activated. Only work authorized by the Department, e.g., course-related copying, may be charged. Faxing can be done in the copier. The number is 410-955-0105.

**Departmental portal page** ([https://my.jhsph.edu/Departments/MMI/Pages/default.aspx](https://my.jhsph.edu/Departments/MMI/Pages/default.aspx)). Academic forms, conference room scheduling, and department information are available on the portal. You will need to log in with your JHSPH account ID.

**Personal information** - Please report changes in home address, phone numbers, etc. to Lawanda Lewis and update your SIS account with the new information.

---

**Important Links You Need to Know**
Office of Records and Registration –

Health Insurance Information -

Child Care Information -
Care@work program
Dependent Care Voucher program
Locate Child Care Information and Referral Program
Well-Being & Getting Help

Johns Hopkins University is committed to helping you thrive personally and professionally and providing an environment that supports your health and well-being. We encourage you to seek support from the following JHU resources, particularly if you are experiencing anxiety, stress, depression, or other concerns related to your health and well-being.

The Office of Student Life at JHSPH is available to assist students by providing support in navigating resources pertaining to personal and academic challenges. If you would like to schedule a one-on-one appointment with a staff member in the Office of Student Life, you can contact the Office of Student Life at jhsph-studentlife@jhu.edu or 410-502-2487.

Students can also contact the Johns Hopkins Student Assistance Program (JHSAP) that provides resources to assist students across the Johns Hopkins community with any pressures and difficulties they may face during their academic careers. Getting help is free, convenient, and confidential. Counselors are available to speak with you 24 hours a day, 7 days a week at 443-287-7000. Services include: Short-term counseling, crisis response, healthy relationship support, school-life coaching and adjustment and educational workshops.

Full-time, Baltimore-based students also have access to University Health Services (UHS) through the student health fee, which offers primary care and mental health clinical services and wellness initiatives. UHS-Mental Health provides psychiatric assessment and follow-up, medication management and individual psychotherapy. To make an appointment, call 410-955-1892.

Students in need of support regarding sexual assault and/or sexual violence can find resources and information on the University’s Sexual Assault Response and Prevention webpage.

If you or someone you know is in crisis, call JHSAP at 443-287-7000 for help immediately. In an emergency, call 911 or go to the nearest emergency room.

Security
- Security/Walking Escorts: 410-955-5585 (available 24 hours, 7 days per week)
- Transportation/Vehicle Escort: 410-502-6880 (4pm to midnight)

Harassment & Discrimination – Office of Institutional Equity
JHU is committed to providing a safe and non-discriminatory educational and working environment for its students, trainees, faculty, staff, post-doctoral fellows, residents, and other members of the University community. The University will not tolerate and is committed to providing an environment that is free from harassment based on sex, gender, marital status, pregnancy, race, color, ethnicity, national origin, age, disability, religion, sexual orientation, gender identity/expression, veteran status, or other legally protected characteristics. This conduct is disruptive of the learning and working environment of the University’s community and deprives students, employees and other community members of equal access to the University’s programs and activities. To that end, the University embraces its responsibility to increase awareness of sexual misconduct, prevent its occurrence,
support victims, deal fairly and firmly with offenders, and diligently investigate complaints of such misconduct and retaliation. If you or someone you know are experiencing harassment or discrimination you are encouraged to contact the Student Coordinator or the MMI Ombud to review the institutional options and mechanisms that are available to resolve the situation.

The University policies covering harassment and discrimination can be found at: https://oie.jhu.edu/discrimination-and-harassment/general-anti-harassment-policy.html

Emergency numbers are:
- Harassment and discrimination: 410-516-8075
- Sexual Assault Helpline: 410-516-7333 (confidential, available 24 hours, 7 days per week)
The MMI Student Ombud

The current concept of ‘Ombudsman’ is derived from a position established formally in the early 19th century in Sweden with the goal of designating a person to serve as the ‘people’s deputy’ to facilitate fair interactions between individual citizens and the government. Today, the term ‘Ombud’ or ‘Ombudsperson’ defines a person who is designated to investigate individual problems and conflicts and to mediate their solution or resolution.

Miscommunication, misunderstanding, and conflict among people are inevitable. **Most laboratory/workplace issues can be resolved through a timely and frank discussion with your advisor.** However, for those laboratory/workplace issues that cannot be resolved through direct communication with your advisor, it is often useful to involve a neutral party who can present options and devise solutions.

**Who is the current MMI Ombud?** Dr. Alan Scott currently serves as the MMI ombud.

**What does the MMI Student Ombud do?**

The MMI Ombud assists departmental students and postdoctoral fellows, informally and confidentially, in understanding and resolving a variety of workplace issues. Such issues may range from perceptions of unfair or discriminatory treatment to a desire to understand the formal complaint process to a concern about possible unethical or unprofessional practices.

The MMI Ombud will carefully listen to what you have to say and help you analyze your situation and evaluate options in the context of Departmental, School and University policies. The MMI Ombud may, with permission, initiate discussions with others involved in the issue and if appropriate, assist in direct communication or serve as an intermediary between parties. The MMI Ombud is also available if the student or postdoc simply needs a safe place to ‘vent’.


Confidentiality - The Ombuds will hold all communications with those seeking assistance in strict confidence, and will not disclose confidential communications unless given permission to do so. The only exception to this privilege of confidentiality is where there appears to be imminent risk of serious harm.

**Neutrality and Impartiality** – The MMI Ombud will not take sides. The mission of the Ombud is to listen, to understand, to explain, to discuss options, to weigh alternatives, and to point out possibilities and consequences.

**Informality** - Interactions with the MMI Ombud is informal and conversational. The Ombud will keep minimal records. The primary mission is to help individuals, confidentially, one at a time.

**Conflict of Interest** - For any case that may present a conflict for the MMI Ombud, arrangements will be made with another, non-conflicted individual, or with the School’s Deans for Students Network to manage the situation.

**Who has access to the MMI Ombud?**

All MMI graduate students and postdoctoral fellows have access to the MMI Ombud.

**When should I contact the MMI Ombud?**

- If you want or need to discuss a sensitive issue or question regarding your rights, obligations, responsibilities or roles as an MMI student/fellow.
• If you need a question answered, but don’t know whom to ask.
• If you think you may have been treated unfairly or arbitrarily.
• If you become aware of practices that you think are questionable, but don’t know whom to tell or don’t want to be involved.

What concerns can be discussed with the MMI Ombud?
• Perceived or apparent inequities in assignments or perquisites.
• Concerns about inappropriate behavior or speech, particularly as they impact study or working conditions.
• Questions about performance evaluation and retention.
• Concerns about practices risking or adversely affecting health and safety.
• Concerns about authorship or intellectual property.
• Concerns about compliance with relevant public laws/regulations, IRB protocols, IACUC protocols or University policies.

What is the process for contacting the MMI Ombud?
The student or postdoc can make initial contact with the MMI Ombud in person, by email, by phone or through a third party to schedule a meeting. There is no need to specify the reason for the meeting in the initial correspondence, just that you would like to set a time to meet.

Confidentiality
The goal of the MMI Ombud is to carefully listen to what you have to say and help you analyze your situation and evaluate options. Typically, the MMI Ombud will not take notes regarding the issues at hand (but may jot down ‘to do’ reminders). All materials used during the course of a case will kept in a locked cabinet, will not be duplicated and will be shredded or returned to you if you wish. The MMI Ombud will not acknowledge who has or who has not contacted the Ombud without express consent.

What the MMI Ombud will not do.
The MMI Ombud does not have any administrative or other type of authority within the Department, School or University. The MMI Ombud will not determine guilt or innocence, adjudicate or decide outcomes or participate in any way in a formal grievance process.
DEPARTMENTAL GOVERNANCE STRUCTURE

The administration of the Department is the task of the Chair, Dr. Arturo Casadevall, who has the overall responsibility for the educational and research programs in the Department. The Chair also appoints three Vice Chairs who assess and plan in designated areas. The current Vice Chairs are:

Vice Chair for Education – Alan Scott
Vice Chair for Facilities & Resources – Andrew Pekosz
Vice Chair for Scientific Development – Marie Hardwick

Major policies of the Department are adopted at monthly meetings of the full-time faculty. A representative of the Departmental student body attends the faculty meetings. A number of committees comprising intramural and extramural faculty and, in most instances, a student representative, voted for or volunteering at a meeting of the Departmental Student Association, carry on much of the business of the Department. The chair appoints the committees annually and membership rotates among the faculty. Each committee is responsible for some aspect of the Department's activities.

Graduate Program Committee. The overall responsibility for setting policy with respect to Departmental graduate students is vested in the Graduate Program Committee (GPC). The committee, with Dr. Sabra Klein currently serving as Chair, monitors the program of each graduate student, reviews the progress of each student on a semi-annual basis, and assures the maintenance of appropriate academic standards. The Graduate Program Committee meets on a regular basis and reports monthly at the Departmental faculty meeting, so that the entire faculty is kept informed of all policies and any specific problems that have occurred.

Student Communication with the Graduate Program Committee: Because many of the matters that come before the Graduate Program Committee involve individual students and therefore are confidential, the GPC does not include a student member. However, the GPC welcomes comments, questions, and concerns from the departmental students. Students can communicate with the GPC in several ways.

• Students may request that the Student Coordinator present issues to the committee.
• President of the Graduate Student Organization, acting as representative of the students, may request a meeting with the GPC to discuss a specific matter of concern to students.
• Students may request that the Departmental Ombud present an issue to the committee
• Students may ask any departmental faculty member (for example their advisor, the departmental chair, or the chair of the GPC) to address the GPC on an issue or concern.

Curriculum Committee. The Curriculum Committee, currently chaired by Dr. Alan Scott, in collaboration with the Graduate Program Committee, oversees the structure and content of the Departmental curriculum. In this capacity, the Curriculum Committee

Committee on Admissions. This committee is charged with the responsibility of selecting the best-qualified students for admittance to the Department. It works closely with the Graduate Program Committee to assess the financial needs of new and continuing students and to assign the available financial support based on merit and need. Current Chair: Dr. Alan Scott.
**Facilities Committee.** The Facilities Committee, currently chaired by Dr. Andrew Pekosz, supervises the operation and maintenance of commonly shared Departmental resources. The Facilities Committee

**Appointments and Promotions Committee.** This Committee, composed of full-time faculty at the level of Associate Professor and Professor ranks, advises the Department Chair on faculty promotion and tenure decisions and new appointments to the faculty.

**Graduate Student Organization.** All MMI graduate students are members of the MMI Graduate Student Organization (GSO). The GSO generally meets at the annual departmental retreat to elect officers, and can meet at other times as often as the students desire. Apart from the annual retreat meeting, GSO meetings and activities are organized by the students. Officers elected by the GSO who bear specific official responsibilities are a President, a faculty liaison who attends faculty meetings, a representative to the School’s Student Assembly, and Student Admissions Coordinators. Additional officers (Social Chair, Treasurer, etc.) can be chosen by the GSO if it wishes. In the past, activities sponsored by the GSO have included charity events, fundraisers, picnics, student birthday celebrations, etc.

**Graduate Student Ombud.** Selected by the students each year from among members of the Departmental faculty, the Ombud functions as a neutral party who can present options and devise solutions for those laboratory/workplace issues that cannot be resolved through direct communication with colleagues or advisor. (See Ombud section for additional details)

**Policies -** The Department of Molecular Microbiology and Immunology follows the University's Policy Statements on Nondiscrimination of Students, Privacy Rights of Students, Alcohol Abuse and Drug-Free Workplace, Award of Degrees, Smoking, and Sexual Harassment as specified in the catalog. Documents that outline BSPH policy on a number of areas – [https://www.jhsph.edu/offices-and-services/student-affairs/resources/student-policies/index.html](https://www.jhsph.edu/offices-and-services/student-affairs/resources/student-policies/index.html)