Overview

The Department of Molecular Microbiology & Immunology comprises a cadre of interactive and interdisciplinary faculty with diverse expertise. The overall mission of our department involves research and education, while bringing together basic and translational efforts through close collaborations.

-Alejandro Aballay, Ph.D.
William A. Whitsell Professor and Chair
Molecular Microbiology & Immunology

Contents

Checklist

- □ Successfully complete PMCB Year 1 Coursework and three Lab Rotations
- □ Pass Comprehensive Exam
- □ Select a lab, mentor, and academic degree program to complete PhD requirements
- □ Register and attend MMI elective course requirements
- □ Register and attend MMI Journal Club and Seminar each term
- □ Register for research credits each term (pre-qualifying students)
- □ Request Appointment for a Dissertation Advisory Committee
- □ Formally meet with Dissertation Advisory Committee at least once every 6 months
- □ Pass Qualifying Exam and request Advancement to PhD Candidacy
- □ Register for dissertation credits each term (post-qualifying students)
- □ Successfully complete 135 hours of approved graduate credits
- □ Request Oral Examination
- □ Defend dissertation and pass Oral Examination
- □ Submit final paperwork and bound dissertation
- □ Graduate!

General Timeline

General Timetable for most MMI graduate students (12-16 credit hours should be taken each term including summer terms):

Year 1: PMCB Courses

The main goal for the first year is to pass coursework with a "B-" or better grade and to identify a mentor with whom to work. In addition to the required course work, it may be desirable to take one or more elective courses. Some electives are offered once every two years and it may be desirable to take some electives during the first year in order to prepare for the qualifying exam at the end of the second year. Refer to Graduate Program in Molecular & Cellular Biosciences By-Laws, policies & guidelines.

Year 2:

Complete required PMCB courses and begin fulfilling MMI course requirements. A grade of B- or better is required in all courses.

A Dissertation Advisory Committee (DAC) should be assembled and begin meeting, starting at the beginning of a student's second year in graduate school.

Prepare for and complete the 2nd-year candidacy exam, which is required of PMCB students during the summer of their second year. The majority of the student's time and effort should be in research and in acquiring the laboratory skills and conceptual framework necessary for dissertation work.

Entering students are strongly encouraged to take the winter term MBIM 610 Introduction to Immunology as a means of becoming familiar with the discipline. However, students may elect to postpone this course to winter term of their second year.

Year 3 and up:

Continue research work leading to the Ph.D. dissertation and complete all MMI elective course requirements. Register for and attend Departmental Seminar Series and an MMI Journal Club.

Definitions

Sakai is OHSU's online course management system.

Graduate Program. Any educational program leading to the Doctor of Philosophy, Master's degree, Graduate Certificate or equivalent graduate degree at OHSU.

Nano Course. A nano course refers to a short course, offered for 0.5 credits. They are intended to be special topics courses that capitalize on timely subject matter, visiting expertise, and/or highlight new developments in a field. Flexibility in scheduling and course leadership (i.e. not part of the permanent curriculum) will insure these courses are nimble. Nano courses are only offered once. If a course is deemed to be worth offering regularly, it will go through the regular course review and approval process.

Program. The word "Program" shall refer to a department, interdepartmental committee or other School of Medicine administrative unit that has received approval from the Faculty Council and has been accredited to offer an educational program leading to the Master's or Ph.D. degree. A Program with a single administrative structure that oversees training for more than one degree (e.g., Master's and Ph.D.) shall be considered to be one program.

Program Director. "Program Director" shall refer to the department chair, chair of the interdepartmental committee, or director of the administrative unit responsible for overseeing the Program. Responsibility for representing the program may be delegated to a member of the program faculty when deemed appropriate by the Program Director.

Links

OHSU Registrar
Registration Information
Academic Calendar
General Registrar Forms

School of Medicine Graduate Studies
Policies and Guidelines
Bylaws
Guidelines and Regulations for Completion of Masters and Ph.D. Degrees
Student Forms and Policies
Faculty Forms and Policies
Graduate Faculty Index

Program in Molecular & Cellular Biosciences
PMCB Admissions
PMCB Curriculum

MMI Graduate Program
MMI Guidelines
MMI Seminars and Events
Shared Research Equipment
Vaccine and Gene Therapy Institute
Earle A. Chiles Research Institute at Providence

Other Helpful Links
OHSU Student Portal
Joseph B. Trainer Health & Wellness Center
OHSU Graduate Student Organization
Student Life
Sakai
Stipend Info
Vollum Writing Program
OHSU Code of Conduct

Program Contacts

Brandi Reese
Graduate Coordinator
503 418-9457

Philip Sobolewski
Grants & Contracts Coordinator
503 494-2432

Anthony Ambrose
Computer User Support
503 415-0425

Molly Brown
Administrative Assistant
503 494-6808

Katie Jones
Department Administrator
503 494-3488

Vishal Sharma
Financial Analyst
503 494-6803

Siara Wright
Human Resources Coordinator
503 494-9959

First Year Advisor

Initial advising will be provided by members of the PMCB Advisory Committee (PAC) made up of PMCB faculty knowledgeable in all aspect of graduate training in the School of Medicine at OHSU. PAC advising and mentoring provides consultation for PMCB students for academic and non-academic concerns. At the time of matriculation, each student is assigned a PAC advisor. PAC advisors are familiar with academic requirements of all five participating graduate programs, as well as the Graduate Council By-Laws, Student Handbook and general School of Medicine regulations.

PAC (1st year) Advisors:

1. Meet with the student during Orientation.
2. Meet with the student at least once each term.
3. Review and advise regarding rotation decisions, course choice, and registration.
4. Review the student's academic record and written rotation performance summary at the end of each term.
5. Promptly meet with student placed on academic probation to formulate a plan for amelioration.
6. Report any concerns to the PMCB Steering Committee and/or the PMCB Director.

Research Rotations

Students rotate in three research labs in the winter term. This experience allows the students to experience a variety of research opportunities and to help them choose a mentor for their graduate thesis work.

Refer to PMCB Academic Guidelines for detail on research rotations, including requirements for requesting a research rotation.

Selection of a Faculty Mentor

After successful completion of three research rotations, students select a faculty member to serve as their mentor. The decision of a student to enter into a laboratory to pursue research is dependent upon a joint agreement between the faculty member and the graduate student, and is subject to approval by the PMCB Director. Conditional approval based on an agreement that there will be a co-mentor will be at the discretion of the Program Chair and the PMCB Director. The mentors must be members of both School of Medicine Graduate Faculty and PMCB faculty.

Refer to PMCB Academic Guidelines for detail on selection of a faculty mentor.

Required Courses

Graduate students in the department of Molecular Microbiology & Immunology must fulfill both MMI and PMCB requirements with a grade of B- or better. If you have questions regarding the program requirements, contact the MMI Graduate Coordinator.

Students are required to:

1. Attend monthly PMCB Seminar Series
2. Register for and attend MBIM 605 Journal Club every term
3. Register for and attend the Departmental Seminar, MBIM 607, through end of program

Refer to PMCB Curriculum, By-Laws, policies & guidelines for detail.

1st Year PMCB Courses (Partial Listing)

• CONJ 650 Practice and Ethics of Science
• CONJ 661 Structure and Function of Biological Molecules
• CONJ 662 Genetic Mechanisms
• CONJ 663 Bioregulation
• CONJ 664 Cell Structure and Function
• Two of the CONJ series electives (CONJ 665, 667, 668, 669) offered in the spring term. Students may request permission from the PMCB to substitute an advanced graduate course of equal or greater credit for one of the required CONJ spring courses. For example, students planning to join MMI frequently substitute MBIM 608 (Advanced Virology), MBIM 612 (Advanced Immunology), or MBIM 615 (Dynamic Host Pathogen Interface) for a spring CONJ elective because these courses are offered only every other year. Note that an advanced course taken in place of a CONJ elective does not fulfill the MMI requirement for three additional graduate courses beyond the PMCB requirements.
• Three laboratory rotations
• Refer to Graduate Program in Molecular & Cellular Biosciences By-Laws, policies & guidelines for further detail.

All PMCB requirements and MMI elective requirements must be satisfied before advancement to candidacy. It is expected that MMI electives will be completed by the end of year three at the latest.

MMI Requirements

• At least three elective graduate courses of three or more graded credits each offered by MMI or other departments or CONJ courses. The MMI courses are MBIM 615 (Dynamic Interface between Pathogen and Host), MBIM 608 (Advanced Virology) and MBIM 612 (Advanced Immunology). MIBIM 610 (Introduction to Immunology) is a 2-credit course offered every year in the winter term, and is strongly recommended for first year students who are interested in joining MMI but who may not have completed an introductory immunology course or an immunology section of a comprehensive undergraduate microbiology course. As a 2-credit course, it does not count towards the three graduate course requirement. Students are expected to take courses related to their dissertation topic, in consultation with their advisor and committee.

• **MBIM 605** One of the MMI journal clubs. Required every term. The student may petition the MMI Graduate Program Director to substitute another journal club.

• **MBIM 607** MMI Department Seminar Series. Required every fall, winter, and spring term.

Electives

At least three elective graduate courses of three or more graded credits each offered by MMI or other departments or CONJ courses are required (not pass/fail).

Research Credits

Students who have not advanced to Ph.D. candidacy are required to register for at least 1 research credit.

Dissertation Credits

Ph.D. candidates are required to register for at least 1 dissertation credit.

Seminar

Several seminar series on campus expose students to additional research approaches and philosophies and provide opportunities for students to meet researchers at the forefront of their fields.

Journal Clubs

In addition to didactic coursework, which take approximately 1.5 years to complete, students participate in journal clubs and present their research results in a formal seminar setting every year. They are taught to think critically and independently and to write manuscripts and proposals in the NIH style.

Course Load

A normal course load is considered to be 9-16 credit hours per term.

Course Waivers

Students who have completed one or more years of full-time graduate training at another institution may be considered for direct admission to one of the Member Departments. Recommendations for admission of such students will be initiated by the appropriate Member Department and must be approved by a majority vote of the Steering Committee, which will also determine which (if any) PMCB requirements will be waived.

If a student wishes to be excused from taking a required course, the student and advisor should jointly petition the MMI Graduate Program Director stating their reasons for wishing to be excused from the requirement.

Grading

The grade of Incomplete is reserved for circumstances beyond the control of the student, (e.g. illness) preventing completion of the course requirements by the end of the fall term AND it is possible to complete the requirements within the subsequent term.

Students failing a term of research credits (i.e. receives an "NP-No Pass" on research) are immediately placed on academic probation. To return to good standing, the student must obtain a passing grade on

the next term of Research (and all subsequent terms). Failure to do so constitutes grounds for termination from the Program.

> **Pre-qualifier Students:** Students are required to notify and meet with their advisor immediately upon receiving a NP grade on Research. The advisor will suggest a course of action for correcting research performance.
>
> **Candidate Students:** After advancing to candidacy, students receiving an NP grade in Research will schedule a Dissertation Advisory Committee meeting to take place within two weeks of receipt of the NP grade in Research. The mentor and Dissertation Advisory Committee will suggest a course of action that the student must follow in correcting research performance.

The courses MBIM 605 Journal Club and MBIM 607 Seminar require documentation of attendance in order to be considered for the grade of "Pass". Post-qualifying, a student and advisor may petition the MMI Graduate Program Director to substitute another formal journal club.

Seminar attendance: A student is allowed 3 unexcused absences during the year. More than 3 unexcused absences during the year will result in a grade of "No Pass".

Following receipt of the first "No Pass", a pre-qualifying exam student must immediately meet with their mentor; a post-qualifying exam student must immediately meet with their Dissertation Advisory Committee. A plan for insuring the attendance goal for the next term should be designed.

> **Pre-qualifier Students:** Two grades of "No Pass" in any one of the three activities disqualifies a student from taking their qualifying exams, resulting in dismissal from the MMI Graduate Program.
>
> **Candidate Students:** Two grades of "No Pass" in any one of three activities for a candidate student may result in dismissal from the MMI Graduate Program.

Course Descriptions

MBIM 605
MMI Journal Club. Required every term.

MBIM 607
MMI Department Seminar Series. Required every fall, winter, and spring term.

MBIM 608
Advanced Virology 4 credits, Spring term, alternate odd years (eg. 2019). Ashlee Moses, Daniel Streblow. This course covers molecular biology and immunology of eukaryotic viruses. Particular emphasis is placed on structure, transcription and replication, entry, assembly and egress, latency, and oncogenesis.

MBIM 610
Introduction to Immunology 2 credits, Winter term, yearly. Evan Lind. This introductory course will provide students with an overview of how the immune system works and the special vocabulary and experimental systems that describe it. Reading and discussion of the textbook (Immunology by Janeway, et al.) with study questions and occasional experimental papers. The course is designed for two kinds of

students; those specializing in other areas who want to learn enough immunology to gain access to the experimental literature and those with a particular interest in immunology as preparation for the Advanced Immunology course.

MBIM 612

Advanced Immunology 4 credits, Spring term, alternate even years (eg. 2020). Jeffrey Nolz. This course is intended for students who have had Introduction to Immunology or equivalent. The intention is to cover, in some depth, important concepts and some current issues in basic molecular and cellular immunology. The course will be primarily literature based, supplemented as necessary with lectures, review articles and textbook material. Students are expected to read the assigned material and to discuss questions in the class. The course is taught by a small number of faculty, each of whom covers one area. Because the areas covered are chosen to reflect the areas of major active research in immunology, the actual topics may vary from year to year. Recent areas covered include: T cell activation and the immune synapse, NK receptors and related molecules and the expanding family of MHC class I like ligands; T and B cell development; T and B cell memory; toll-like receptors; T cell trafficking.

MBIM 615

Dynamic Interface Between Pathogen and Host 4 credits, Spring term, alternate odd years (eg. 2019). Eric Barklis. This course will explore strategies by which microorganisms avoid and subvert host defenses to cause disease. Emphasis is on the molecular basis of microbial pathogenesis. We will cover several mechanism shared by bacteria, viruses and parasites. Topics in the first half of the course include intracellular and extracellular infection strategies, microbial exploitation of the host vacuolar trafficking system, bacterial virulence gene regulation, secretion of effector molecules and toxins. The second part of the course will delve into host innate immune defenses, microbial avoidance and manipulation of immune signaling pathways, features of latent and persistent infections, and how commensal organisms interact with the host immune system. Finally, we will look into the future of microbial pathogenesis and discuss the role of "omics" in understanding pathogens and the potential of mathematical modeling of infections. This course will consist of both lectures and critical analysis of primary research literature. There will be two exams of equal weight, with the final examination being comprehensive.

Academic Progress

Students working toward a Ph.D. degree are expected to take the Qualifying Examination for advancement to candidacy by the end of their 12th term of graduate study; or they will be recommended for dismissal for failure to progress academically.

Training in the Responsible Conduct of Research

The National Institutes of Health requires continued ethics training for all trainees, fellows, participants, and scholars receiving support through any NIH training, career development, research education, and dissertation research grant (NOT-OD-10-019). To meet this requirement, all graduate students are required to complete CONJ 650 The Practice and Ethics in Science during the first year.

Comprehensive Exam

All first year PMCB students are required to take the comprehensive examination at the scheduled time following completion of their first year of graduate studies. This examination tests the student's ability to think scientifically using concepts covered during the first year of coursework. The comprehensive exam is prepared by the PMCB Comprehensive Exam Directors.

Dissertation Advisory Committee

DAC Formation

A DAC should be assembled and begin meeting, starting at the beginning of a student's second year (preferably in September or October, following completion of the first year comprehensive exam). The rationale for this is to give the student advice earlier in their graduate careers concerning research, coursework, and preparing for the Ph.D. Candidacy Exams. Students should assemble their DACs, keeping in mind that the committee should be composed of four faculty members (including their mentor), and should include as diverse a faculty membership as possible, so as to get advice from a multidisciplinary committee. Specific OHSU rules for the composition of DACs are listed below.

DAC membership requires approval from the Graduate Program Director and Associate Dean of Graduate Studies, and will include:

- At least four faculty members (including the student's advisor) with expertise in one or more aspects of the student's project and who are familiar with the requirements of the graduate program for completion of a PhD. Students (in consultation with their faculty advisor and program director) may request specific faculty to serve on their DAC.
- A majority of DAC members must be members of the Graduate Faculty. OHSU faculty from outside the Graduate Faculty may be included.
- One member may be from outside the university, but these require approval by the Associate Dean for Graduate Studies (the Program Director should include a brief cv and short explanation of non OHSU-faculty expertise on the committee to the Associate Dean)
- No more than two DAC members may lack any DAC experience and at least one member must have been on a DAC for a graduated student.
- DAC Chair: One DAC member, not the mentor, with significant experience in mentoring graduate students, and having served on a DAC before.
- DAC members may be added or removed with the approval of the Program Director and Associate Dean of Graduate Studies. Following the change, the DAC composition will still adhere to the above requirements.

Typically, DAC members will be invited to serve as part of the student's Oral Exam Committee.

Student Responsibilities

The student must meet twice per year with the Dissertation Advisory Committee. Following completion of the third year, the student may meet more frequently on the recommendation of his/her committee.

- The student must prepare a written report of progress, on the appropriate form, to be submitted a week before the meeting to Graduate Student Coordinator who will distribute it to committee members. Electronic submission to Graduate Student Coordinator is acceptable.

- The student is expected to provide a PowerPoint presentation summarizing goals, progress, and future plans.
- The student is expected to write a summary of the meeting and the plans for future work, following discussion with the thesis advisor.

Committee Responsibilities

Typically the Chair of the Committee is not the advisor. The responsibilities of the chair are:

- To schedule and coordinate the meetings
- To submit a completed Dissertation Advisory Committee meeting summary to the Graduate Student Coordinator. Copies of the summary will be distributed to the student, the Advisory Committee members and the MMI Graduate Program Director. A copy will be deposited in the student's file in the MMI Department Office.

Qualifying Exam

Overview

Training within the PMCB culminates with successful completion of the Qualifying Examination, which shall be given at the end of the second year.

MMI Qualifying Exam follows the format and guidelines listed on the OHSU PMCB website.

Eligibility

Timeline and Description

Specific dates for the exam must be arranged with your department, but the following steps are required prior to completing the QE during Summer term. Extension of deadlines for any reason will only be considered by written request to the student's QEC (or PMCB Director if the QEC has not been formed). Students may request permission to take the QE earlier than Summer Term. The request must be made in writing to the PMCB Director at least two months prior to the proposed exam date. The request must be pre-approved by the student's thesis advisor and department program director before submission to the PMCB Director.

1. Students submit a two-page, single-spaced prospectus to their department, the PMCB office (pmcb@ohsu.edu) and to all members of their QEC that defines the topic for their QE proposal describes potential questions to be addressed and outlines an experimental plan on their topic. Students should also note whether or not the QE subject material is part of their current research. Department program directors will oversee selection of the student's QEC.

2. The QEC, responsible for conducting the student's qualifying examination, is appointed by the department and the student is notified of the names of the panel members. The student is responsible for ensuring all members have a copy of their prospectus.

3. The QEC notifies the student in writing of acceptance or of any weaknesses or specific suggestions for improvement to their proposal.
4. Student schedules a date for the oral examination in consultation with his/her QEC. Work with the Dept. Coordinator to reserve a room.
5. at least one week prior to Oral Exam – Student submits final written proposal to the QEC and their thesis advisor.
6. at the Oral Exam – Student submits a letter to the QEC from their thesis advisor, describing their role during preparation of the proposal.
7. at least ten days before the beginning of Fall term – Oral examinations completed.

Qualifying Exam Committee

The QEC, responsible for conducting the student's qualifying examination, is appointed by the department and the student is notified of the names of the panel members. The student is responsible for ensuring all members have a copy of their prospectus.

Role of Advisor/Mentor

To facilitate an objective examination, the student's mentor is not permitted to edit or comment on the written proposal. Neither is the mentor, nor any other faculty member, permitted to coach the student in a rehearsal of their oral presentation. The student must submit a signed letter from their thesis advisor describing in specific detail the role of the advisor and of the student in the development of the hypothesis and research plan in this proposal. The thesis advisor must confirm that they have NOT contributed to the written portion of the exam, and that the student has NOT used any of the advisor's prose within the proposal. The QEC has two weeks from receipt of the written proposal and thesis advisor letter to request more information from the thesis advisor if deemed necessary.

Format of Written Proposal

The proposal shall be written following current general guidelines of a NRSA application. It is the student's responsibility to check on the guidelines, which are available on the NIH website. It shall consist of a hypothesis-driven series of experiments bearing directly on the question or hypothesis of the proposal, with a discussion of probable outcomes, interpretations and alternative approaches. The proposal shall be no longer than 7 pages, including figures and references (single-spaced; 1 page for the specific aims section and 6 additional pages for the rest of the grant). Students may discuss topics and proposed experiments with all sources (fellow students, post-doctoral fellows, faculty, and visiting scientists), but none of them may be involved in any aspect of the student's written proposal. Students may also seek general assistance in scientific writing and proofreading. However, it must be remembered that the written proposal is an examination, and must represent the student's ideas and development of the research topic. Students are expected to adhere to established guidelines for professional ethical conduct in the preparation of their QE proposal topics.

Format of Oral Exam

The oral examination will probe the breadth of the student's knowledge and also the depth of the student's understanding of his/her research proposal. Students are expected to begin the oral

examination by giving a short (20-30 minute), formal presentation summarizing the written proposal. Audio-visual aids may be used during the summary of the proposal. During the oral examination by the panel, the use of prepared visual aids, textbooks, or other reference material is not permitted. Slides and figures from the oral summary may be referred to if they are the subject of a question from the exam panel. Questions from the Examination Panel should focus primarily on issues pertaining to the proposal; however, the student is responsible for all areas of cellular and molecular biology that have been covered during the first two years of graduate study. Therefore, students also should expect questions on general knowledge in addition to questions relating to the scientific background pertinent to their areas of specialization, as well as more general issues related to the proposed experiments. Students may be asked about the choice of methodologies, their relative advantages and disadvantages, and potential alternative strategies (when appropriate). Students will be expected to understand and be ready to explain the scientific basis of technical methods they intend to employ. The student should be prepared to discuss the rationale for the proposed study, the strengths and limitations of the proposed experimental strategies, and potential pitfalls and alternatives.

Preparation for Oral Exam

Students should be thoroughly familiar with key historical and background publications that provide the foundation for their proposal, as well as any current literature that directly pertains to their specific aims. In addition, students are encouraged to review the more general areas of cellular and molecular biology that provide the conceptual framework for their proposal. Once a student has submitted their final written proposal to their QEC, they may contact panel members for guidance in preparing their oral exam presentation.

Preparatory course Enrollment in PHPH 607 Grant Writing & Qualifying Exam Preparation is strongly recommended. This 1- credit course is offered in the spring. As a 1-credit course, it does not count towards the MMI three graduate course requirement.

Outcomes

The outcome of the Qualifying Examination must be certified in writing both by the Member Departmental Graduate Director and by the PMCB Director, who will also confirm successful completion of all other PMCB requirements. After certification of successful completion of the Qualifying Examination, responsibility for overseeing fulfillment of remaining requirements for the Ph.D. degree resides with the Member Department.

Advancement to Ph.D. Candidacy

Advancement to Candidacy (Ph.D. programs only). Admission to a Ph.D. program does not automatically identify a student as a degree candidate. Students must first be admitted to candidacy for the Ph.D. degree. Advancement is granted only after the student has demonstrated knowledge of the fundamentals of his or her field and the ability to do work of graduate caliber.

The Member Departmental Graduate Director shall have responsibility for recommending students for advancement to Ph.D. candidacy when all of the program's other academic requirements have been met, as specified in the Graduate Council By-Laws.

Formation of Oral Examination Committee

All instructions and guidelines adopted by the Graduate Council By-Laws shall be carefully followed.

According to the Graduate Council By-Laws, the Oral Examination Committee for a dissertation defense:

- Must include no fewer than four (4) members of the Graduate Faculty who do not all have primary appointments in the same department or institute.
- Must include at least one (1) member who is not a member of the student's Dissertation Advisory Committee.
- Must be chaired by a member of the Graduate Faculty.
- The student's mentor should serve on the committee but may not serve as Chair.
- Programs may request permission to replace one of the committee members by a recognized scholar who is not a member of the Graduate Faculty.

    1) This individual may not serve as Chairperson of the exam committee.
    2) Requests to appoint an outside member to the exam committee must be supported by a letter from the Program Director and a copy of the scholar's curriculum vitae.
    3) Appointment of an outside member may be used to meet the requirement that not all members have primary appointments in the same department or institute, and/or that the committee includes at least one member who was not a member of the student's Advisory Committee.

The Oral Exam Committee is appointed by the Associate Dean for Graduate Studies based upon the recommendation of the student's Program in the term prior to the student's defense.

Preparation and Submission

Distribution of Dissertation to Oral Examination Committee.

a) All members of the Examination Committee must receive the following at least two weeks prior to the oral examination:
    - An unbound copy of the dissertation from the student.
    - A copy of the approved REQUEST FOR ORAL EXAMINATION form which will be forwarded to the Chair by the Graduate Studies Office upon approval.
    - A copy of the "Instructions for Members of the Oral Examination Committee" which will be forwarded to the Chair by the Graduate Studies Office upon approval of the Request for Oral Examination.

b) Upon approval of the Request for Oral Examination form, the Office of Graduate Studies will prepare the ORAL EXAMINATION CERTIFICATION form for and forward to the Chairperson of the Examination Committee with the "Instructions for the Chair of the Oral Examination Committee.

c) The ORAL EXAMINATION CERTIFICATION form includes student's name, thesis title, degree sought and names of committee members.

Dissertation Seminar

The exam must be held on campus and be open to the public. The Program is responsible for setting the date, time and place of the exam and for posting notices on campus.

Finalizing Ph.D. Requirements

OHSU awards diplomas each term, based on the completion of final paperwork and thesis binding. The following requirements must be completed within six months following the completion of the Oral Examination. However, students must complete all requirements before May 20th in order to participate in the graduation ceremonies in June of the same year.

a) Corrections to Dissertation. If necessary, make corrections to the dissertation.
   • All members of the Examination Committee who recorded a satisfactory vote for the oral examination must sign the CERTIFICATE OF APPROVAL page. Signing of the approval page indicates that all required corrections have been completed.
   • All required corrections must be completed and approved by the Examination Committee within 6 months after the oral exam. Programs may impose a stricter deadline. Graduate Studies will defer to program.
   • Failure to submit an approved dissertation within this time limit will void the oral exam and the oral examination will need to be retaken.

b) Electronic Submission of Dissertation. The Library requires OHSU students to submit an electronic copy of their doctoral dissertation. Additionally, students are required to submit an electronic copy to the MMI graduate program coordinator for program records.

   - Students should email their electronic copy in PDF format along with required forms to mailto:ethesis@ohsu.edu at least two weeks before signed forms are due in the Graduate Office.
   - The page containing your committee members' signatures should not be filled out for the copy you submit to the library.
   - Workstations in the library are set up with all necessary applications. Limited support can be arranged prior to submission.
   - Review Theses, Dissertations, Capstones, & Portfolios on the OHSU library website for required forms, more detail on submission requirements and options for electronic publishing.
   - The OHSU LIBRARY DOCUMENT SUBMISSION FORM & RECEIPT is required by the Graduate Studies Office. The Library will copy the Graduate Studies Office when they email their signature acknowledging receipt to you for your thesis/dissertation. In addition, you may forward the signed librarian receipt to somgrad@ohsu.edu. If you receive a hard copy receipt, please deliver the original receipt to the Graduate Studies Office. A copy of the credit card or payment receipt is not required.

c) Application for Degree. The Office of the Registrar requires that the APPLICATION FOR DEGREE form be completed and is required in the Registrar's Office one term prior to completing degree requirements. Exit contact information will be collected on the 'Application for Degree' form.

d) Exit Photograph. The School of Medicine Exit Photo consists of one (1) digital image from the OHSU Photography & Graphic Design or the student. Students may request their photo not be included in the class photo by sending an email to somgrad@ohsu.edu.

e) Survey of Earned Doctorates. The required Survey of Earned Doctorates can be found at http://survey.norc.uchicago.edu/doctorate. Student responses are confidential, except for the

postgraduate placement information (institution and job title), which may be shared with the programs.

f) After all of the preceding requirements have been completed, the Associate Dean for Graduate Studies will review all paperwork and sign the Oral Exam Certification form. • The original form will be forwarded to the Registrar as final approval of the thesis and acceptance for graduation.

Graduation. Information regarding graduation will be posted to the Graduate Studies website at http://www.ohsu.edu/xd/education/schools/school-of-medicine/academic-programs/graduatestudies/

School of Medicine Commencement Ceremony. This is a special event when graduate degrees are formally conferred for those who received a degree from the School of Medicine during the prior academic year. Family and friends are encouraged to attend and no ticket is required. Degrees will not be awarded until all academic requirements have been met and the student pays all debts and discharges all other obligations he or she has to the University, including the Registrar's graduation fee.

Ethical and Professional Behavior

In compliance with federal regulation and OHSU institutional policy, all investigators, research staff, and other relevant personnel (those reasonably involved in the design and/or conduct of human, animal, applied and/or basic science research) must complete OHSU's Responsible Conduct of Research (RCR) education.

All Doctoral and Master's students are required to successfully complete at least one course in ethics and professional conduct or be exposed to equivalent content.

Graduate Student Stipends

All MMI students are fully supported by stipends from NIH training grants or from grants held by their mentors.

Refer to Graduate Studies Policies and Guidelines for more PhD Student Stipend Information.

Time Limit for Completing Degree Requirements

MMI students often take less than five years to obtain their PhD degree (a little less for MD/PhD students).

For the Ph.D. degree, 135 approved graduate credits are required. Graduate credit toward Ph.D. degree requirements shall be granted only for course work completed during the 8 calendar years (32 terms) prior to completing all degree requirements.

Extracurricular Employment

The Department of Molecular Microbiology and Immunology considers training as a graduate student in the Ph.D. program to represent a full-time commitment. Any student wishing to pursue outside employment must submit a written request to the TAC advisor and/or mentor, the MMI Graduate Program Director and the Chair of MMI. The student must receive written authorization from the above individuals prior to accepting employment.

Sick Leave, Vacation, Parental Leave and Leave of Absence

Vacations and Holidays; Parental Leave

Students and mentors are expected to be both reasonable and flexible in making decisions about the student's commitments of time to course and laboratory work as well as other training-related activities. Graduate students who receive stipend support will not accrue paid vacation leave. Students are entitled to the normal holidays in the academic calendar. The time between academic quarters is to be used as an active part of the student's training.

This policy applies to any student enrolled in a master's level or PhD degree granting program in the School of Medicine at Oregon Health and Science University, who is receiving a stipend to offset living expenses.

Vacations and Holidays: Students are entitled to the normal holidays for unclassified employees in the academic calendar. Even though classes are not in session in between academic quarters, students are expected to continue their research during these periods unless they take vacation or are on leave as outlined in this policy.

Leave with pay: Graduate students may take up to 20 work days of paid leave each academic year (July 1 – June 30). Leave days may be used for any purpose including illness or vacation. Additional leave or "leave of absence" must be without pay. Leave days will be tracked by the student and mentor and will accumulate at the rate of 5 work days/quarter. Students may accrue up to a maximum of 30 days (i.e. 10 days can be carried forward each year). Students are not entitled to compensation for unused leave days at the time of graduation.

Scheduling: Students and faculty and programs are expected to be responsible, reasonable and flexible when scheduling leave. Using leave does not excuse the student from required course work.

Student must provide written notification to the Graduate Program director whenever:

1. The number of leave days exceeds 5 in any academic quarter.
2. The number of leave days exceeds 20 in one academic year.

The Program Director will determine whether the student is able to maintain his/her current course load. If it appears that the leave will interfere with satisfactory completion of current course work the student should request a formal "leave of absence".

Parental Leave: Academic Adjustments for Birth or Adoption of Child

POLICY STATEMENT
OHSU is committed to achieving a diverse graduate student body and facilitating participation of all students in research and their graduate studies. The birth or adoption of a child can be a demanding time for parents and may require unique academic adjustments in order to allow students the opportunity to continue progress towards their degree during such time. While not considered employees, OHSU graduate students are in a unique situation and need special consideration for the birth or adoption of a child, distinct from accommodation and leave including sick leave.

This policy establishes minimum adjustments that must be offered to a graduate student anticipating the birth or adoption a child. Nothing in this policy is intended to deter advisors, academic staff, and departmental leaders from considering other options beyond the adjustments described in this policy.

This policy applies to all matriculated, registered, graduate students regardless of sex or gender.

ACADEMIC ADJUSTMENTS
Students who anticipate the birth or adoption of a child are responsible for informing their mentors, program and (if applicable) thesis advisory committee as early as possible prior to the birth or adoption. Programs must provide the following options for students during pregnancy (before birth) and/or in the weeks immediately following birth or adoption of a child:

Academic Requirements: Students may postpone course assignments, examinations, and other academic requirements for up to one term (students will work with their academic advisors and instructors as soon as possible to determine whether interrupted courses will receive a Withdrawal or Incomplete designation).

Academic Milestones: Students will be granted an automatic one-term extension of departmental requirements and academic milestones including cumulative and qualifying exams. This extension is separate from and in addition to any extensions that students may petition for to complete their degree.

Stipend Support for 8 weeks: Graduate students supported by stipends or fellowships will be relieved of full time graduate responsibilities and modify their duties for 8 weeks to accommodate the birth or adoption of a child.

Students will maintain full-time enrollment at the minimum number of credits. By remaining on full-time status, student visa status and loan repayment schedules will remain unchanged and students will retain health insurance benefits. This policy is not a leave of absence.

Eligible students who are receiving stipend support would continue to receive this support throughout the 8-week period. Students will not receive a stipend or salary if none was received previously but are eligible for adjustments/extensions described under “Academic Requirements‟ and “Academic Milestones‟ above.

Students who are supported by fellowships or grants external to Oregon Health & Science University must adhere to the rules of the fellowship or grant source with respect to absences from academic and research work. Most granting agencies provide for a short period of reduced activity due to health or personal issues. The student cannot be removed from research support for this 8-week period unless the granting agency requires such removal during such a period..

Leave of Absence

All students admitted to the graduate program must be continuously enrolled until graduation, except for periods in which they are absent for an approved leave of absence. Taking a minimum of 1 credit per term during the regular academic year (Fall, Winter and Spring terms) will constitute continuous enrollment. Registration during the Summer term is not required to meet the continuous enrollment requirement, although it may be required by the student’s graduate Program. Failure to register without an approved leave of absence will result in administrative withdrawal of the student’s admission to a graduate program.

Additional Concerns: There may be additional restrictions or requirements for graduate students who receive stipend support from individual or institutional traineeship or fellowship awards from NIH or other sources. Students should consult their training program director and the awarding agency for additional information.

Dismissal

Refer to Graduate Council Bylaws for information on dismissal.

Grievances

The procedure for handling grievances is outlined in the Graduate Council Bylaws.

Exceptions

In matters related to coursework, exceptions must first be approved by the Course Director and the Program Director. Other exceptions must first be approved by the Program Director