DEPARTMENT OF IMMUNOLOGY

UNIVERSITY of WASHINGTON

GRADUATE PROGRAM REQUIREMENTS (2016-17)

The following is a summary of requirements for the PhD degree in Immunology at the University of Washington, including requirements mandated by the Graduate School. The entire faculty reassesses the graduate requirements annually, and this summary reflects the current requirements approved at the September 16, 2016, Faculty Meeting. Changes to these requirements made after the beginning of a quarter will go into effect at the beginning of the following quarter.

Coursework and Registration:

Quarterly enrollment is the responsibility of each student.

The curriculum is designed for each student to achieve 18 graded credits in the first two years of study, a requirement for taking the General Exam - see the Graduate School's Doctoral Degree Policies. First year coursework will consist of consecutive 5-week or 10-week long approved courses taken in Autumn through Spring Quarters. In Winter Quarter, all first year students also take IMMUN 532: *Advanced Immunology*, for 4 graded credits. Thus, in the first year, the curriculum achieves 13 or 13.5 total graded credits, depending on course choices (see below). Therefore, in the second year, 4.5 or 5 additional graded credits are required to achieve 18 graded credits. These will be earned by taking electives during Winter and/or Spring Quarters.

In Autumn Quarter of the first year, students may want to take an elective and/or attend selected lectures in the undergraduate immunology course, IMMUN 441: *Introduction to Immunology*. Students are also required to register for and attend the departmental Research in Progress (IMMUN 550) and Seminar Series (IMMUN 573).

The elective courses that you choose must be relevant to biomedical research and be rigorous enough to include either a final exam or required written paper for a grade. Elective classes must be approved by the first year faculty advisor, department chair, or curriculum committee, be at the 500-level, and receive a numerical grade (graded credit). Check with the Graduate Program Advisor (GPA) *Sandy Turner* for the list of previously approved electives.

Full Time Enrollment and Grade Point Average

Ten (10) credits per quarter (AUT, WIN, and SPR) is considered full time enrollment; enrollment for a greater number should be cleared with the Graduate Program Advisor (GPA) *Sandy Turner* before registration. Standard summer enrollment is 2 credits, but may also be variable depending on a student's funding source or deferred outstanding student loans. Please check with Sandy Turner (Advisor) before registering for more than 2 credits in Summer Quarter.

The Graduate School specifies that all students must maintain a cumulative grade point average of at least 3.0 to graduate. As stipulated by the Graduate School, failure to maintain this minimum GPA will result in a written warning or a notice of academic probation. A minimum grade of 2.7 must be earned in each course to satisfy the above course requirements. Required courses for which a student receives a final grade below 2.7 must be retaken. In addition, the Department of Immunology requires a grade of at least 3.2 in IMMUN 532, 534, 537 and 538. The faculty will address grades below 3.2 on a case-by-case basis.

* Immunology MSTP students are encouraged but not required to comply with this requirement.

First Year (Non-MSTP Students) – total of 13 or 13.5 graded credits

Autumn Quarter – 3 graded credits

Weeks 1-5

IMMUN 537 *Immunological Methods* – 1.5 graded credits

Weeks 6-10

Conjoint 532 *Signal Transduction from the Cell Membrane to the Nucleus* (PHCOL) – 1.5 graded credits
Conjoint 537 *Mechanism of Transcriptional Regulation* (BIOCHEM) – 1.5 graded credits
Or another approved electives course

Weeks 1-10

IMMUN 550 *Selected Topics in Immunology* (Research in Progress) – 1 ungraded credit
IMMUN 551-579 *Research Conferences & Lab Meetings* – 1 ungraded credit
IMMUN 573 *Immunology Seminar Series* – 1 ungraded credit
IMMUN 599 *First Lab Rotation* – variable ungraded credits

Winter Quarter – 7 graded credits

Weeks 1-5 (choose 1 or 2 for the 1st 5 weeks of Winter Quarter)

MolMed 514**A** *Molecular Medicine* (MolMed) – 1.5 graded credits (must be paired with MolMed 514B)
Conjoint 544 *Protein Structure, Modification and Regulation* (MCB) – 1.5 graded credits
Conjoint 526 *Introduction to Systems Biology and Quantitative Approaches to Biomedical Sciences (Biochem)* – 1.5 graded credits

Weeks 6-10

MolMed 514**B** *Molecular Medicine* (MolMed) – 1.5 graded credits (must be paired with MolMed 514A)

Weeks 1-10

IMMUN 532 *Intersection of Innate and Adaptive Immunity in Disease* – 4 graded credits
IMMUN 550 *Selected Topics in Immunology* (Research in Progress) – 1 ungraded credit
IMMUN 551-579 *Research Conferences & Lab Meetings* – 1 ungraded credit
IMMUN 573 *Immunology Seminar Series* – 1 ungraded credit
IMMUN 599 *Second Lab Rotation* – variable ungraded credits

Spring Quarter – 3 or 3.5 graded credits

Weeks 1-5

Conjoint 547 *Molecular Evolution of Viral-Host Interactions* (MICRO) – 1.5 graded credits

Weeks 6-10

Conjoint 549 *Pop Biol Microorg* – 1.5 graded credits
or
Molmed 504 *Challenges in Molecular Medicine* – 1.5 graded credits

or Weeks 1-10

Conjoint 530 *Directing Stem Cells toward Regenerative Medicine* (Biochem) – 3 graded credits

Weeks 1-10

IMMUN 534 *Central Issues in Immunology* – ungraded credits (TBD)
IMMUN 538 *Immunology - Disease and Treatment* – 2 graded credits
IMMUN 550 *Selected Topics in Immunology* (Research in Progress) – 1 ungraded credit
IMMUN 551-579: *Research Conferences & Lab Meetings* – 1 ungraded credit
IMMUN 573 *Immunology Seminar Series* – 1 ungraded credit
IMMUN 599 *Third Lab Rotation* – variable ungraded credits

Summer Quarter

UCONJ 510 *Introductory Laboratory Based Biostatistics* – 2 graded credits (required course)
or
IMMUN 551-579: *Research Conferences & Lab Meetings* – 1 ungraded credit
IMMUN 600 *Independent Research* – variable ungraded credits, usually 1credit

Biomedical Research Integrity Series – Beginning with their first summer quarter, all students are required to attend lectures offered as part of a Summer Quarter series on *Biomedical Research Integrity*, and will be informed of these lectures as they are scheduled. The Department of Immunology requires Immunology graduate students to attend every offered lecture and a minimum of one discussion workshop in the *Biomedical Research Integrity Series* every 4th year.

Note for 1st & 2nd Year Approved and/or Elective Courses:

Conjoint courses change occasionally. Students should check the Time Schedule on a quarterly basis for the most current Conjoint course listings and descriptions.

When choosing Conjoint courses or electives, please keep in mind that the following courses are ***not recommended*** for Immunology graduate students (as of AUT/15):

Conjoint 524 Structural Basis of Signal Transduction
Conjoint 531 Signaling Mechanisms in Excitable Cells
Conjoint 536 Experimental Design in Cell Biology
Conjoint 545 Molecular Interactions and Medicine
Conjoint 546 Survey of Technologies for Molecular Biology
Conjoint 551 Immunity (Roland Strong's course)

Other courses are more valuable to your Immunology course of study. Check with the Graduate Program Advisor (GPA) *Sandy Turner* for a list of previously approved electives.

Second Year (Non MSTP students) – total of 4.5 or 5 graded credits:

Autumn, Winter, Spring & Summer Quarters (as indicated)

IMMUN 550 *Selected Topics in Immunology* (Research in Progress) – 1 ungraded credit (A,W,Sp)
IMMUN 551-579 *Research Conferences & Lab Meetings* – 1 ungraded credit (A,W,Sp,S)
IMMUN 573 *Immunology Seminar Series* – 1 ungraded credit (A,W,Sp)
IMMUN 600 *Independent Research* – variable ungraded credits (A,W,Sp,S)

PLUS

Autumn Quarter

Teaching Assistant for IMMUN 441
Elective(s) of 2-3 graded credits – optional because of TAship

Winter Quarter

Elective(s) of 2-3 graded credits

Spring Quarter – 2 graded credits

IMMUN 534 *Central Issues in Immunology* – graded credits (TBD)
IMMUN 538 *Immunology - Disease and Treatment* – 2 graded Credits (if not taken in 1st year)
or Elective(s) of 2-3 graded credits

Third Year and Beyond:

IMMUN 550 *Selected Topics in Immunology* (Research in Progress) – 1 ungraded credit (A,W,Sp)
IMMUN 551-579 *Research Conferences & Lab Meetings* – 1 ungraded credit (A,W,Sp,S)
IMMUN 573 *Immunology Seminar Series* – 1 ungraded credit (A,W,Sp)
IMMUN 600 *Independent Research* (pre-General Exam)– variable ungraded credits (A,W,Sp,S)
or
IMMUN 800 *Doctoral Dissertation* (post-General Exam)– variable ungraded credits (A,W,Sp,S)

MSTP Students: See Supplemental Material for coursework specifications

Student Conduct Code

All students are expected to adhere strictly to the guidelines set forth by the Office of the Vice President for Student Affairs in its Student Conduct Code. Failure to comply with these guidelines can result in disciplinary action, the nature of which will be decided upon by the faculty as a whole on a case-by-case basis.

Teaching Assistant Experience

Students are required to serve as Teaching Assistants (TAs) for one quarter in IMMUN 441: *Introduction to Immunology*. MSTP students will serve as TAs in either IMMUN 441 or another course determined by the faculty. For most students, TA-ships will be scheduled during the second year.

Laboratory Rotations

Each non-MSTP student is required to rotate through three laboratories during the first year, each rotation lasting one quarter. The first rotation is assigned by the Graduate Program Coordinator (GPC) aka Student Advisor, Dr. Ram Savan, from a list of preferred labs provided by each student. The subsequent two rotations are arranged by the student as he/she nears the end of each quarter. To arrange a rotation, each student should discuss potential projects first with the prospective advisor(s), and the student and advisor should come to a mutual decision before the end of the preceding quarter. *The Graduate Program Coordinator (GPC) aka Student Advisor, Dr. Ram Savan and the Graduate Program Advisor (GPA) Sandy Turner must be notified of each decision*. Because these rotations are the primary means for each student to become acquainted with the range of techniques, scientific interests, administrative styles, and personalities the Immunology department has to offer, the selection of a rotation lab each quarter should be a systematic process. During Summer Quarter *after* the first three rotations, a fourth rotation may be allowed under special circumstances.

At the end of each quarter (with the exception of summer rotations), each non-MSTP student presents a short departmental talk, summarizing the experimental problem addressed, techniques used to approach it, and any preliminary data acquired by the student during the rotation. MSTP students have finished rotations when they join the Department, and will only be required to present a 'rotation talk' at the end of Autumn Quarter during their first year. This will give members of the Department an opportunity to view them on a plane with the other new graduate students. The rotation advisor must complete a written evaluation of the student's performance during the rotation and the rotation talk, and discuss this evaluation with the student. MSTP students' advisors will submit an evaluation only for Autumn Quarter when the student gives the rotation talk. The evaluations are part of the student's academic record.

Selection of Dissertation Advisor (Supervisory Committee Chair)

Dissertation advisors are chosen by mutual consent of the student and the faculty member, usually, though not necessarily, based on the experiences gained during a quarter-long rotation by the student in the lab in question. Non-MSTP students usually identify their choice of advisor between May and September of their first year. Faculty will not make firm commitments until the end of Spring Quarter. The Immunology faculty must approve the choice of advisor during the last faculty meeting of the academic year (usually the second week in June).

Doctoral Supervisory Committee

The Dissertation Advisor is the chair of each student's Doctoral Supervisory Committee. Students must have their Doctoral Supervisory Committee formed by the end of Summer Quarter of their second year. Each graduate student must provide their committee list to the Graduate Program Advisor (GPA) *Sandy Turner* via email. The GPA then conveys the recommended members of the Doctoral Supervisory Committee to the Dean of The Graduate School by entering this information into the MyGrad Program (MGP). The Doctoral Supervisory Committee consists of the following:

1. The Dissertation Advisor (Doctoral Supervisory Committee Chair)
2. A *minimum* of two additional departmental faculty members, chosen by the student with agreement of the faculty members
3. The Graduate School Representative (GSR): see **The GSR Explanation** below

The GSR Explanation:

GSR Role and Responsibilities:

1. The GSR is a voting member of the Doctoral Supervisory Committee.
2. The GSR represents the broad concerns of The Graduate School.
3. The GSR attends the General and Final examinations and completes standardized exam reports.
4. The GSR is not involved in dispute resolution.

GSR Selection process and criteria:

1. The GSR is selected by the student in consultation with the Doctoral Supervisory Committee Chair and/or the Graduate Program Coordinator (GPC) aka Student Advisor, Dr. Savan Ram.
2. The GSR may have an adjunct appointment within the department(s) of the student or Committee Chair, but not an affiliate, joint or primary appointment.
3. The GSR has no conflict of interest with the Committee Chair or student (i.e., budgetary, familial, romantic).
4. The GSR must be a UW Graduate Faculty member with an endorsement to chair doctoral committees. Look for the *asterisk when searching online using the Graduate Faculty Locator.

Annual Doctoral Supervisory Committee Meetings and Progress Reports

Students must meet with their Doctoral Supervisory Committee before taking their General Exam, ideally in the Autumn Quarter of their third year. Thereafter, the Doctoral Supervisory Committee must meet at least yearly to review progress towards completion of the dissertation. The student is expected to arrange annual Doctoral Supervisory Committee meetings, and to inform the Graduate Program Advisor (GPA) of the scheduled date. At least 1-2 weeks before the date, the student must submit to the Doctoral Supervisory Committee members and the Graduate Program Advisor (Sandy Turner) a 1-to-2 page written report summarizing the work completed since the General Exam or previous meeting. This report should be formatted as a WORD document, double-spaced in 12-point font, and complete with title page. Figures and references may be on additional pages.

After each Committee meeting, attended by at least 3 members (including the chair), the chair or his/her designate completes an evaluation form signed by all the Committee members in attendance. The evaluation is shown to the student for concurrence and/or comments and signature, and is then placed in the student's file as a permanent record of progress. This evaluation should clearly state any weaknesses noted and expectations for progress during the upcoming year. (Although the GSR is not required to attend Committee meetings, the student should keep the GSR apprised of all progress.) The evaluation form is provided by the Graduate Program Advisor (GPA), and must be completed and

returned with 10 days of the meeting. The Doctoral Supervisory Committee meeting at the end of the fifth year of the student's tenure in our program is especially significant. This meeting should include a frank discussion of the student's progress and future plans; keeping in mind the time limitations on earning a Master's Degree and a PhD (see below).

General Exam

Graduate students must take the General Exam by the end of Spring Quarter of Year 3 and MSTP students in Autumn Quarter of their third year. Each student's Doctoral Supervisory Committee administers the General Exam. Each student is responsible for scheduling his or her General Exam date after formation of the Doctoral Supervisory Committee. Instructions for setting up the Doctoral Supervisory Committee Instructions are included in these Program Requirements and online in Graduate School Memorandum #13.

Scheduling the General Exam requires the approval of all Doctoral Supervisory Committee members. Once you have agreement in writing (via email) from all committee members, please send an email to the Graduate Program Advisor (GPA) *Sandy Turner* with the title, date and time of your General Exam. She will reserve a conference room at SLU for your General Exam and provide you with the room number. Each Graduate Student must then apply for the Request for General Examination online through the Graduate School's MyGrad system. Additional to the online request is departmental paperwork. The GPA will provide the student with a departmental form for their committee members to sign, signifying faculty approval. Original signatures or attached copied emails are acceptable. Completing and returning the form to the GPA prompts approval of the online request.

The focus of the General Exam is in defining a scientific problem and describing the means to approach it. The emphasis is NOT on data at this stage, but on strategy.

The written section of the General Exam consists of the dissertation proposal — a description of the dissertation project of no more than 10 double-spaced pages in length, with approximately 1-inch margins and in a type face no smaller than 12-point font in Arial or Times style*; the title page, figures and references can be included on additional pages*. The proposal should follow the format of an NIH grant application:

A. Specific Aims: List the broad, long-term objectives and the goal(s) of the research proposed, e.g., to test a stated hypothesis, create a novel design, solve a specific problem, and/or challenge an existing paradigm.

B. Background and Significance: Briefly sketch the background leading to the present application, critically evaluate existing knowledge, and specifically identify the gaps that the project is intended to fill. State concisely the importance of the research described by relating the specific aims to the broad, long-term objectives. If the aims of the application are achieved, state how scientific knowledge will be advanced. Describe the effect of these studies on the concepts, methods, technologies, and/or interventions that drive this field.

C. Progress To Date/Preliminary Findings: Provide a brief account of your results and preliminary findings to date with the goal of indicating the feasibility of your proposed studies and their ability to address clearly your aims and hypotheses. It is not expected that you will have definitive answers and an extensive set of data for the General Examination. For the findings you do have, be prepared to present your interpretation and to discuss the limitations of the results or experimental strategies and how you intend to address these limitations.

D. Research Design and Methods: Describe the rationale, procedures, and analyses to be used to accomplish the specific aims of the project. Describe any novel concepts, approaches, tools, or technologies for the proposed studies. Discuss the potential difficulties and limitations of the

proposed procedures and alternative approaches to achieve the aims. As part of this section, provide a tentative sequence or timetable for the project.

The written part of the General Exam must be delivered to Committee members 2 weeks before the exam date, and a copy provided to the Graduate Program Advisor (GPA) *Sandy Turner* to place in the student's file. Submission of a proposal that does not conform to the page limitations and format indicated above or that is delivered to the Doctoral Supervisory Committee less than 2 weeks prior to the exam will likely result in exam rescheduling.

For the oral examination, the student should be prepared to give a short presentation of the dissertation proposal and to address questions regarding their project and the literature relevant to their project, relevant methodologies and their strengths and weaknesses, data analysis and interpretation, and alternative approaches and directions that might be taken based on outcome(s). The Exam will take approximately 2 hours, and after a brief discussion, the Committee will notify the student of its decision.

The chair of the Exam Committee (chosen from the members and excluding the Thesis Advisor) will write a summary of the student's Exam, including any formal recommendations (such as coursework) made to remedy weakness in background knowledge. A copy of this report will be made available to the student. After passing the Exam, the student officially qualifies as a Candidate with the UW Graduate School, and for the PhD program in the Department of Immunology. General Exam failure may occur if the examining Committee believes that the student has not identified a satisfactory research problem and an experimental approach that can be expected to illuminate aspects of this problem, or has failed to assimilate sufficient background to place the problem in an appropriate scientific context. A student may retake the General Exam once.

Assessment of Progress

The departmental Student Advisor, Dr. Savan Ram, will meet with each student as often as needed for the first 2 years. After the Doctoral Supervisory Committee Chair (Thesis Advisor) is chosen, he or she will assume the role of the student's advisor. However, the departmental Student Advisor is available for consultations whenever students encounter difficulties. Progress is assessed during the first year by grades and by rotation evaluations. Thereafter, progress is assessed by grades in the elective courses, performance in Immunology courses such as 534, 537, 538 and 550, the results of the General Exam, and the written summaries of annual Doctoral Supervisory Committee meetings.

Publication Requirement

Recognizing the value of learning to write scientific prose in a clear and concise fashion, it is ***required*** that students will, before graduation from the doctoral program, have published or accepted for publication one or more first-authored peer-reviewed manuscripts describing work directly related to their dissertation research. ***In rare cases***, students may request permission to defend their dissertation prior to acceptance of a first-authored paper.

To petition a waiver for this program requirement, the student must do the following:

1) Have received favorable reviews of a submitted, first-authored publication
2) Prepare a written petition explaining the situation and the reason for the request to waive the publication requirement
3) Obtain permission from the Doctoral Supervisory Committee after discussion of the manuscript reviews and petition with all members of the Committee

4) Submit to the Graduate Program Coordinator and Graduate Program Advisor the petition along with the following:
    a) Manuscript and Reviewer comments
    b) Cover letter written and signed by the Doctoral Supervisory Committee Chair explaining the situation
    c) Written recommendation generated by a Doctoral Supervisory Committee member other than the Chair regarding the extent to which the Committee supports the student's petition. NOTE: All Committee members (except the Committee Chair) must sign this second letter of recommendation.

The faculty will consider the petition at the next regularly scheduled faculty meeting. After adequate in-person verbal discussion, all members of the Immunology graduate faculty (primary, joint, affiliate and adjunct) will vote on the petition by confidential ballot: Yes, No, or Abstain. If a majority of the graduate faculty that are eligible to vote cast a "Yes" vote, the petition will be approved.

Only after the petition is approved will the student be allowed to set a defense date.

Writing and Defending the Dissertation

The dissertation is written according to the general rules put forward by the UW Graduate School, and must be electronically uploaded online before being accepted by the Graduate School. Students are strongly encouraged to review the procedures with the Graduate School well in advance of their anticipated completion to make certain that all registration and procedural requirements are met. The University Bulletin states that:

> *The Candidate must present a dissertation demonstrating original and independent investigation and achievement. The dissertation should reflect not only mastery of research techniques but also the ability to select an important problem for investigation and to deal with it competently. When the Doctoral Supervisory Committee agrees that a doctoral Candidate is prepared to take the Final Examination, the Dean of the Graduate School should be informed of the decision and asked to designate a Reading Committee from among the members of the Doctoral Supervisory Committee.*

The Reading Committee is established officially with the Graduate School by the student identifying those Committee Members who have agreed to serve in this additional capacity and by conferring that information via email to the GPA *Sandy Turner*. The GPA will then proceed with the online process of relaying this information to the Graduate School. The Request for Final Examination is also an online process accessed by the student on his/her MyGrad webpage. The Final Exam must be requested at least 3 weeks prior to the final examination date, and if the Candidate has met all other requirements, a warrant authorizing the Final Examination is issued by the Graduate School. If the Final Examination is satisfactory, the Doctoral Supervisory Committee signs the warrant immediately following the defense, and gives it to Sandy Turner. Departmental approval of the Final Exam is processed online with the Graduate School only after the signed warrant is returned. The PhD is granted by the University of Washington on the last day of the quarter in which the requirements are completed.

TIMELINE TO DEFENSE DATE

Before engaging in arrangements for thesis defense, students must obtain permission to defend from their Doctoral Supervisory Committee members. The following timeline is not flexible. Please allow enough time when choosing your defense date. Begin 7 weeks or more BEFORE your defense date. *Note: MSTP students must defend before returning to the clinical clerkship part of the MSTP program (3rd year of medical school). This usually means July 1.*

≥Week-7: **Reading Committee Established** – Designation of the Reading Committee must be conveyed to the Graduate Program Advisor (GPA) via email no later than 7 weeks before the date of defense. In practice, the student asks two members of the Doctoral Supervisory Committee, in addition to his or her advisor, to serve on the Reading Committee. Although 7 weeks is the minimum amount of time needed, students are encouraged to designate their Reading Committees 3 or 4 months in advance of their intended defense date.

Defense Date and Time Set – By Week 7, the student should have contacted all Committee members for agreement on the date and time of the defense. Students must keep documented proof of agreement by all Committee members (i.e. email) should there be future discussion of availability. The student should convey the information to the GPA, who will in turn reserve an auditorium at SLU.

Week-6: **Draft Dissertation Delivered to Doctoral Supervisory Committee Chair** – The dissertation *should* be delivered to the Doctoral Supervisory Committee Chair (who is also the student's mentor) no later than 6 weeks before the dissertation defense. Doctoral Supervisory Committee Chairs must have ample opportunity to review dissertation drafts, counsel the student and suggest changes before the student distributes his/her dissertation to the Reading Committee. The dissertation should be at the 'final' draft level of completion before distribution to Reading Committee.

Week-3: **Distribute Draft Dissertation to Reading Committee for Review and Approval –** After the mentor has read and edited the student's draft dissertation, the draft dissertation *must* be provided to the entire Reading Committee for review.

Scheduling Final Exam Online – After reading the FINAL DRAFT of the dissertation, the Reading Committee and other members of the Supervisory Committee agree to the student scheduling their Final Exam online via MyGrad. The student provides the Dissertation Defense date and time to the GPA as early in the process as possible (often weeks to months early – see ≥Week-7) in order to confirm an auditorium reservation. The online request can be applied for earlier than Week 3, but should be no closer than 3 weeks to the scheduled defense, providing adequate time to process departmental and Graduate School paperwork. At the same time, the GPA produces a paper document of the **departmental** Request for Final Exam, giving the student time to obtain signatures from all of the committee members or attach their approving emails, and return to the GPA 2 weeks before the defense date.

Week-1: **Warrant and Graduate School Representative (GSR) Form is Printed** – If the Candidate has met all requirements, the Graduate School issues a Warrant through the MyGrad Program authorizing the Final Examination. One week before the defense date, the Warrant and GSR form are printed by the GPA. The Warrant and GSR form remain in the student's file until the date of the defense, at which time the student picks it up from the GPA and takes it to the defense in anticipation of gaining the signatures of the committee.

D-Date: **Defense Date** – The defense consists of a public seminar followed immediately by a meeting of the Doctoral Supervisory Committee.

The **Doctoral Supervisory Committee is responsible for the following**:

1. Sign the Department's Warrant for Final Examination for the Doctoral Degree. The student returns the signed Warrant to the GPA (Sandy Turner), who then advises the Graduate School through the MyGradProgram system that the Final Exam has been approved by the department.
2. Sign the Graduate School's "Doctoral Dissertation Reading Committee Approval Form" to be submitted electronically by the student through the Administrative Documents Section of the ETD Administrator Site at the time of your electronic thesis/dissertation submission.

The **Graduate Student is responsible for the following**:*

1. Complete the Survey of Earned Doctorates (SED) online at https://sed.norc.org/showRegister.do. Upon completing the SED, students receive an SED notification email from SEDWEB@norc.uchicago.edu, which includes the SED Certificate of Completion. Forward this via email to uwgrad@uw.edu.
2. Upload the signed scanned "Doctoral Dissertation Reading Committee Approval Form" (PDF) to the Administrative Documents section of the UW ETD Administrator Site by the deadline on the Graduate School's website: (11:59 p.m. PST on the last day of the quarter)
3. MSTP students must defend before returning to the clinical clerkship part of the MSTP program (3rd year of medical school), usually by no later than June 30.

***GEMS cannot graduate a student until the signed forms have been submitted. Failure to submit the forms by the last day of the quarter may require the student to register for the following quarter and remain in the lab as a Graduate Student for 5 out of 6 pay periods of that next quarter, or pay the $250** Graduate Registration Waiver Fee**.**

Doctoral Dissertation: Final Submission Instructions

The University of Washington Graduate School has specific guidelines for the formatting of the dissertation. When you are ready to proceed to actually submitting the dissertation to the UW Graduate School, please follow these instructions Final Submission of Your Electronic Thesis/Dissertation.

Bound Dissertations

Not included in the GEMS instructions for Final Submission of Your Electronic Thesis or Dissertation (ETD) is that the department requires each student to provide a bound dissertation for the department library. The department pays for one hardbound 8 ½ x 11 copy of your dissertation. Please ask the GPA or Department Administrator for a UW Budget Number. Take this budget number with you to the UW Copy Center in the basement of the Communications Building.

First, consider making a 'Doctoral Supervisory Committee signature page' for your entire committee to sign (not just the Reading Committee) at the end of your dissertation defense, one for each bound copy. Then print your complete dissertation on quality paper. Pages with figures or graphs with color must be printed in color. Be sure to print the total number of copies you need for binding. Ordering your dissertation binding is "in person" at the UW Copy Center located in the Communications Building. *You cannot order binding online – the UW Budget number will not be a valid method of payment unless you use the UW Copy Center.*

The average graduate student orders three or more bound copies:

- 1 for the department (request budget # from Graduate Program Advisor)
- 1 for her/himself

- 1 for the mentor
- Please consider ordering additional copies as gifts for parents, grandparents, undergrad mentor/advisor, etc. Some mentors are willing to contribute to printing and binding expenses.

Years to Doctoral Degree

The Immunology program requires that students earn their doctoral degree within 7 years (28 Quarters) of entering the program. The average is 5.6 years to an Immunology doctoral degree. The timeframe/ clock begins on the first day of the quarter that the Graduate Student uses a course to satisfy degree requirements when he/she is coded as a Graduate Student (Department code with class 8) in the Immunology department.

In rare cases, students may request permission to extend their dissertation defense date beyond the 7 year program requirement. The maximum extension is 12 months (4 Quarters). To petition for a waiver to this program requirement, the student must submit a petition to the Graduate Program Coordinator (faculty advisor) no later than the end of the 26th Quarter (6 years and 6 months) into the program.

The petition must consist of:

1. a cover letter written by the student outlining the reason for the request,
2. a letter of support written and signed by the Thesis Committee Chair, and
3. a letter generated by a Doctoral Supervisory Committee member other than the Chair regarding the extent to which the Committee supports the student's petition. All Committee members (except the committee Chair) must sign the second letter of recommendation.

Department faculty will consider the petition at the next scheduled faculty meeting or after an alternate discussion forum. After adequate discussion, all members of the Immunology graduate faculty (primary, joint, affiliate and adjunct) will vote on the petition by confidential ballot: Yes, No, or Abstain. If a majority of the graduate faculty that are eligible to vote cast a "Yes" vote, the petition will be approved. This process is expected to take up to 4 weeks, to allow proper vetting of the request after viewing the required documents. Only after the petition is approved will the student be allowed to extend the defense date.

Requirements for Terminal Master's Degree (TMD)

Students are not admitted into the Department specifically as candidates for a Master's Degree. In some cases, a Master's degree can be awarded if the faculty deems that the student has made some progress in the program but not enough to be consistent with earning a PhD within the required time. A written thesis may be required; determination of specific requirements will be made on a case-by-case basis by the faculty. Graduate School regulations preclude issuance of a Master's Degree after 6 years have passed since the student first enrolled in a graduate program. The Graduate School may grant a petition to waive the 6-year requirement if a petition from the student is compelling and has the support of the Immunology faculty. Therefore, any petition to the Graduate School must first be approved by the departmental Graduate Program Coordinator (faculty advisor) and then by the Immunology faculty, using the same process as specified above in the "Years to Doctoral Degree" section.

Special Circumstances

The department recognizes that graduate program requirements must occasionally be tailored to meet specific conditions that apply to individual students. Alterations in the standard program (such as course substitutions, delay of the General Exam, or leave of absence) may be requested by petitioning the faculty directly through the Graduate Student Coordinator or the Dissertation Advisor.