The Graduate Group in Immunology

STUDENT HANDBOOK

2024-2025

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THE GRADUATE GROUP IN IMMUNOLOGY STUDENT HANDBOOK

The Graduate Group in Immunology (GGI) is one of 103 graduate programs on the UC Davis campus. This handbook will provide you with an overview of the GGI and its organization, specifics about the GGI curriculum, degree requirements for the M.S., Doctor of Philosophy, and Dual-Degree (M.D./Ph.D. and D.V.M./Ph.D.) programs, and information about funding opportunities. Please keep this handbook for future reference, and be sure to check the GGI website for updates. You should be aware that there are many campus-wide services for graduate students, some of which are listed below. For further information please check out the Graduate Studies website (https://grad.ucdavis.edu/) and the UC Davis Graduate Student Resource Guide (https://grad.ucdavis.edu/graduate-student-resource-guide) that provide detailed information on those campus opportunities that we can only briefly refer to in this GGI student handbook. The Graduate Student Guide also provides more detailed information on UC Davis policies that affect graduate education on this campus.

GRADUATE STUDIES & OTHER IMPORTANT OFFICES

GRADUATE STUDIES (GS)
You should assume that any action that might affect your enrollment status would need to be cleared by Graduate Studies, which administers graduate education on this campus. The GGI administrator (see below) can help you with specific questions. As of April 1, 2024, all Advising forms must be submitted via GradSphere.

Graduate Studies website: https://grad.ucdavis.edu/

Graduate Studies Forms: https://gradsphere.ucdavis.edu/suite/sites/eforms

Office of the Registrar: https://registrar.ucdavis.edu/

GradLink (Graduate Student e-newsletter published October - June):
This monthly e-newsletter publication by Graduate Studies is for the UC Davis graduate education community. It includes news, announcements, updates, and other information that pertains to graduate students and postdoctoral scholars at UC Davis.
https://grad.ucdavis.edu/gradlink-e-newsletter.

CAMPUS-WIDE GRADUATE STUDENT ASSOCIATION
The Graduate Student Association (GSA) is the primary governing body for graduate students at UC Davis. GSA is a vital communications network linking you and other graduate students from all corners of the campus to the UC Davis administration. GSA provides a forum for discussion of any issue affecting graduate student academics and quality of life. If you'd like to receive the weekly newsletter, you may subscribe to the listserv.
https://gsa.ucdavis.edu/about

For GSA to advocate effectively for your concerns, input is needed from the graduate student body. GSA provides advocacy, services and information to all graduate students, but in turn, needs your participation. Your voice counts!

Based on our size, GGI is appropriated two positions for GSA representatives. GSA General Assembly meetings are held once a month and are open to all. Graduate students are elected to the GSA Executive Council in a variety of positions that are mandated to carry out the policies and/or functions of the organization. A small portion of your registration fees is used to support the activities of GSA. In addition to the Executive Council, there are a number of ways you can participate in the GSA, including GSA organized events and advisory boards/ committees addressing issues. https://gsa.ucdavis.edu/.

THE GRADUATE GROUP IN IMMUNOLOGY - OVERVIEW

The Graduate Group in Immunology (GGI) at the University of California, Davis, offers a broad, flexible program in an exciting field of biomedical science. It is a university-wide interdepartmental graduate program that comprises a group of 67 faculty and 51 students. Participating faculty are located in various departments within the Schools of Medicine and Veterinary Medicine, the College of Agriculture and Environmental Sciences, the College of Biological Sciences, the College of Engineering, as well as the Primate Center, Center for Vector-borne Diseases, and the Comprehensive Cancer Center. The GGI offers a Ph.D. degree in Immunology. Under special circumstances, the GGI offers a M.S. degree program to some students.

Administrative Home

GGI is an interdisciplinary graduate program with faculty from various schools, colleges and centers across campus. GGI's administrative home is within the School of Veterinary Medicine. The GGI administrative office address is:

Graduate Group in Immunology
1024 Vet Med Administration Building
University of California, Davis
Davis, CA 95616

The GGI is responsible for your curriculum, including coursework requirements, and the constitution of the committees that assess your performance. After you join a laboratory, you will also have a departmental/center home, based on your Major Professor's affiliation. This department/center home will provide you with access to mail, office space, laboratory resources, and funds for research. Note: Ph.D. students are either admitted directly to a lab or are provided rotation funding to complete two six-week rotations during fall quarter. Dual degree students (M.D.-Ph.D. or D.V.M.-Ph.D.) must identify a lab prior to matriculating; fall rotation funding is not provided.

Graduate Group Administrator: Erin Kent, Ph.D.

Ms. Kent is your first point of contact for all administrative concerns and questions you may have. She works with both Graduate Studies and the department/center in which your Major Professor (research mentor) is located to ensure that all necessary paperwork is in place. Contact information:

Phone: (530) 752-3737
E-mail: eckent@ucdavis.edu
Address: 1024 Vet Med Admin Bldg (T/R); Remote (M/W/F)

Website and E-mail List

Check the GGI website for updates on study plans and other useful information. The address is: https://immunology.ucdavis.edu/.

You can contact **all** GGI students and faculty via the following e-mail listserv addresses:

Students: iggstud@ucdavis.edu
Faculty: iggfac@ucdavis.edu

Graduate Group Chair: Dr. Robert Canter

The Graduate Group Chair is elected from among the GGI faculty members for a 3-year appointment that can be renewed. The Chair administers the Graduate Group and is responsible for financial and programmatic aspects of the Group. You are encouraged to contact the Chair at any time with any concerns or suggestions you may have.

e-mail: rjcanter@ucdavis.edu

Graduate Advisors

Upon entering the program, all GGI students are assigned to one of the five Graduate Advisors (listed below). Your Graduate Advisor will guide you in all programmatic issues regarding your graduate education, such as selection of courses, identification of faculty members for the qualifying exam and dissertation committees, etc. Do not confuse your Graduate Advisor with your Major Professor, who will mentor your dissertation research and research- related matters. For Ph.D. students, your Graduate Advisor will serve as your principal mentor until you complete rotations and identify a Major Professor. Even after you identify a Major Professor, as a Ph.D. student you will meet periodically with your Graduate Advisor to discuss class selections and offerings, and your academic progress (ideally, every quarter, but at least annually). For M.S. students, you will have a similar relationship with your Graduate Advisor. For all students, your Graduate Advisor is the person who signs official forms to be submitted to Graduate Studies via GradSphere. Matters discussed with your Graduate Advisor are confidential (within the usual University guidelines), and it is not uncommon that Graduate Advisors can be valuable resources to resolve conflicts with course instructors and major professors.

Dr. Paul Ashwood
e-mail: pashwood@ucdavis.edu

Dr. Roger Sciammas
e-mail: rsciammas@ucdavis.edu

Dr. Judy Van de Water
e-mail: javandewater@ucdavis.edu

Dr. Athena Soulika
e-mail: asoulika@ucdavis.edu

Dr. Lillian Cruz Orengo
e-mail: cruzorengo@ucdavis.edu

Your Graduate Advisor will work with you on the following:

- Your Graduate Advisor can assist you in identifying a suitable Major Professor, select elective/selective courses, and formulate your study plan (Appendix 1-3).

- Your Graduate Advisor periodically reviews your academic progress, shares that information with the Executive Committee, and reviews/approves your annual Student Progress Assessment (SPA). Completing an annual SPA is a Graduate Studies requirement, and is used to document your progress towards your degree objective.

- Your Graduate Advisor has signature authority on all Graduate Studies forms. They review and act on petitions to drop or add courses, to take courses on a S/U (Satisfactory/Unsatisfactory) basis, and approve petitions for late adding and dropping of courses.

- For M.S. students, your Graduate Advisor reviews and approves your petition for advancement to candidacy for the M.S. degree and makes recommendations for the composition of your M.S. Thesis (or exam) Committee.

- For Ph.D. students, your Graduate Advisor recommends to the Dean of Graduate Studies the composition of your Qualifying Examination Committee (after consulting with you and following discussion with the GGI Executive Committee).

- For Ph.D. students, your Graduate Advisor recommends the composition of your Dissertation Committee, after consulting with you/your Major Professor.

- Your Graduate Advisor is responsible for the approval (following discussion with the Executive Committee) of any Planned Educational Leave (PELP) you might request.

- Finally, and importantly, your Graduate Advisor will serve as your advocate in the rare event that you have conflicts with your Major Professor (or any other faculty member). In such cases, your Graduate Advisor should be your first contact in cases where you have differences of opinions that you feel require outside advice and help. For this reason, we try to match you with a Graduate Advisor who is not a close collaborator with your Major Professor. Your Graduate Advisor will often be in an academic department different from your own. This distance permits your Advisor to more freely provide you with independent and unbiased advice and to better act as your advocate. Within usual University guidelines, matters discussed with your Graduate Advisor will be kept confidential. If you need to switch Graduate Advisors for any reason, please contact the graduate program administrator.

GGI Committees

Like other UC Davis graduate programs, the GGI is governed and administered by its faculty with input from its students. We encourage and seek student participation and have numerous opportunities for student involvement, such as GGI Breakfast Club, GGI Research and Recruitment Committee, Executive Committee, Admissions Committee, Graduate Student Association, and Chair- Student Town Hall meetings. Contact your fellow students, the graduate group administrator and/or the GGI Chair if you'd like to get involved!

Executive Committee 2024/2025

Chair: Robert Canter

Appointed Faculty Members:
- Allison Ehrlich
- Colin Reardon
- Barbara Shacklett

Graduate Advisors:
- Paul Ashwood
- Lillian Cruz-Orengo
- Roger Sciammas
- Athena Soulika
- Judy Van de Water

Admissions Chair:
- Colin Reardon

Student Members:
- Nicolle Sweeney
- Alvin Lam

GGI Administrator (a.k.a. Coordinator)
- Erin Kent

GRADUATE GROUP IN IMMUNOLOGY BYLAWS

Revised: February 16, 2008
Graduate Council's Approval Date: May 14, 2008

Article I. Objective

The Graduate Group in Immunology is organized to establish and administer a graduate program of instruction and research leading to the Master of Science and the Doctor of Philosophy degrees in immunology, in conformance with the policies and procedures of the Graduate Council and the Office of Graduate Studies. Because of the importance of immunology and immunological methods in so many areas of biomedical research and teaching, it is the main objective to offer a strong, diversified, graduate program which will foster cooperation among members of the group in the development of course offerings and in research.

Article II. Membership

A. Criteria for Membership in the Graduate Group

Membership in the Group shall be limited to persons who have an interest and background in immunology, independent of department appointment, as evidenced by their publications and/or course offerings and following the Guidelines for Membership in Graduate Programs as adopted by Graduate Council.

Membership in the Graduate Group in Immunology requires an active research program in immunology and willingness to participate in the teaching and administrative responsibilities of the group. All active members are eligible to vote.

B. Application for Membership

A prospective member may self-nominate or be nominated by any member of the Group. Graduate group faculty members must be willing to contribute to the administration and teaching of the group; must maintain an active program in research in immunology suitable for training graduate students; and must also be prepared to serve on dissertation/thesis committee and qualification exams.

Election to the Group shall be by a majority vote of the Executive Committee after consultation with the faculty of the group. Faculty will be consulted via e-mail. A week for expression of opinions about the applicant will be provided, prior to the executive committee vote.

C. Emeritus Status

Emeritus faculty underlie the same membership criteria as outlined for non-emeritus faculty with all rights (including voting rights) and obligations as outlined under Article II, A and following the guidelines for membership in graduate programs as adopted by Graduate Council. Upon approval by the Executive Committee they can serve on qualifying committees or teach in graduate level courses.

D. Review of Membership

Membership will be reviewed every two years. A questionnaire will be sent out to faculty members asking for information on their participation during the prior two years. Members who fail to provide evidence of active participation in graduate group teaching and/or research and/or administration of the Group, will be asked to resign.

Membership Appeal Process

Faculty who have been denied membership or renewal of membership may appeal to the Executive Committee. The membership may use the final appeal to the Dean of Graduate Studies.

Article III. Administration

The administration of the Group and its activities shall be vested in the Group Chair and the Executive Committee consisting of 4 faculty members, the student advisers and is chaired by the graduate program Chair.

Article IV. Graduate Group Chair

A. Chair Appointment Process

The Chair will be appointed in accordance with the Academic Personnel Manual policy UCD-245.B and the policies and procedures of the Graduate Council and the Office of Graduate Studies.

A "Nominating Committee" will be named by the Executive Committee to solicit, from the faculty and graduate students of the group, names of nominees for Graduate Group Chair. Those nominated will then be contacted regarding their willingness to serve. The names of the nominees who have indicated a willingness to serve will then be submitted to the Group's faculty and graduate students for comments. All comments will remain confidential.

The Nominating Committee will forward two names to the Dean of Graduate Studies along with all comments received on the nominees. All comments solicited from faculty and students of the group will be treated as confidential information by the Group's Nominating Committee and by the Office of Graduate Studies.

The Group may express a preference and, if it does, should indicate the basis for determining that preference. After interviewing the nominees the Dean of Graduate Studies will forward his/her recommendation to the Chancellor. The normal term of the Chair's appointment is three years, however what is recommended will be based on the nominees' willingness to serve.

B. Duties of the Chair:

The Chair will a) provide overall academic leadership for the program; b) develop and implement policies for the program; c) represent the interests of the program to the campus and University administrators; d) call and preside at meetings of the Executive Committee; e) call and preside at meetings of the program; f) be responsible for coordinating all administrative matters with the Office of Graduate Studies; g) manage the budgets of the program; h) nominate graduate advisers for appointment; i) handle all faculty or student appeals and mediate when necessary.

Article V: Committees

Executive Committee

The Executive Committee consists of: The Group Chair and four elected faculty members, with at least 3 departments represented and no more than three members from a given department. The graduate advisers serve on the Committee as ex- officio voting members.

Term of membership is three years without reappointment for the four elected members. All elections thereafter shall be conducted during the annual fall meeting, with the newly elected officers assuming their duties immediately. Vacancies on the Executive Committee arising through resignation, sabbatical leaves or for other reasons will be filled by appointment by the remaining members of the Executive Committee

Duties of the Executive Committee:

a. To conduct all business matters and to prepare the agenda for all meetings of the Group.

b. Representation of the Group in all official matters pertaining to the Group in its conduct of business with the Office of Graduate Studies as well as business matters involving departments, and other graduate programs, including Immunology Groups on other campuses.

c. To oversee and bring to the attention of the Group matters related to the quality and content of the program in Immunology.

d. To recommend students to the Dean of Graduate Studies for admission into the Group.

e. To recommend to the Dean of Graduate Studies, committees for theses, dissertations and examinations.

f. Membership review.

Committee on Educational Policy

This committee will consist of a Chair, recommended by the Executive Committee, a minimum of two faculty members and two student members chosen by the appointed Chair. Term of appointment is two years with reappointment an option. All members have voting rights.

The duties of the committee will include review and revision of the curriculum and design of new course offerings and overseeing submission course change and course approval forms to the Office of Graduate Studies.

Committee for Recruitment and Professional Development

This committee will consist of a Chair, recommended by the Executive Committee, at least two faculty members and at least three student members chosen by the appointed Chair. Term of appointment is two years with reappointment an option. All members have voting rights.

The duties of the committee will be to organize a recruitment weekend, an orientation and a social event for incoming students, and an annual event at which continuing students present their research progress. This may correspond to the recruitment weekend. In addition, the committee will discuss issues of student morale and bring suggestions to the executive committee for strengthening the ongoing program and strengthening recruitment of students into the group.

Article VI. Student Representative

Students appointed to sub-committees are made by the chair of the relevant committee in consultation with the Chair of the Group and the student organization. Term of appointment is two years with reappointment an option. Student representation at annual meetings is by invitation only.

The Chair of any committee with student members must excuse the student representatives from meetings during discussion about other students, personnel actions or disciplinary issues relating to faculty, during rankings of existing students for funding, and for disciplinary issues related to students.

Article VII. Graduate Advisers

Graduate Advisers are appointed in compliance with the policies and procedures of the Graduate Council and the Office of Graduate Studies, after consultation with the Group Chair. Term of appointment is two-years with reappointment an option. Numbers of advisers to be appointed will depend on the number of students in the program. A minimum of 2 advisers will be appointed to achieve a ratio of no more than 15:1 students/adviser.

The Master Adviser has signature authority for admission documents. The advisers are each assigned a sub-set of students whom they meet on a regular basis to discuss their academic progress. The advisers will meet at least annually to discuss consistency of advising policies.

Article VIII. Meetings

There shall be at least one "annual" meeting of the Group in the fall quarter called by the Group Chair and advertised by e-mail at least two weeks prior to the scheduled time of the meeting. The Executive Committee may itself schedule special meetings at any time or on written notice by at least three members of the Group.

These meetings shall be conducted in accordance with parliamentary procedures. A quorum of the group membership is required for vote.

Article IX. Quorum

The Graduate Council has defined a minimum quorum. It specifies that all issues that require a vote must be:

- Voted on by 50+% of the eligible members
- Passage requires a 50+% supporting vote of the members voting.

Balloting will be conducted at a meeting of the group or via e-mail. If via e-mail, a one-week time for expression of opinions about a proposed change will be allowed prior to acceptance of votes. Failure to respond within the one-week period will be considered a positive vote.

Article X. Amendments

Adoption of these By-laws and amendments to the By-laws shall require that more than 50% of the faculty member's vote. Passage of proposals requires a minimum of 50% + 1 of the members who actually vote. Balloting will be conducted at a meeting of the group or via e-mail. If via e-mail, a one-week time for expression of opinions about a proposed change will be allowed prior to acceptance of votes. Failure to respond within the one-week period will be considered a positive vote. Revised By-laws will be submitted to Graduate Council for review and approval.

YEARLY SPECIAL EVENTS

- Graduate Group in Immunology Orientation & Welcome Events, September (required)
- GGI Chair-Student Town Hall meeting (required). Typically held in Fall.
- Graduate Group in Immunology Annual Research Retreat & Recruitment Event, February (required)
- New, starting Fall 2024: Student Research in Progress Talks, held monthly. (strongly encouraged)

These recurring special events provide you with an opportunity to interact with faculty and other GGI students, exchange ideas, socialize and have fun! First year students are required to attend GGI's Orientation and Welcome Events. All GGI students are required to attend the GGI Annual Research Retreat & Recruitment Event. Presentation of a poster during this retreat is ***mandatory*** for all second year GGI students and above. You will receive e-mails notifying you of the exact date of the events.

CURRICULUM

The degree requirements, which include curriculum requirements, can also be found at: https://grad.ucdavis.edu/programs/gimm > https://programs.gs.ucdavis.edu/api/doc/4257.

Recommended Unit Load

To be considered a full-time graduate student, students must enroll in at least 12 units each quarter (fall, winter, and spring), but no more than 16 units/quarter without approval from your graduate advisor. Normally, no more than 12 units of 200 level course work should be taken per quarter. You can enroll, however, in a maximum of 16 units of upper division (100 level) and graduate (200 level) courses per quarter.

Class Requirements and Description

The didactic curriculum is divided into a number of sections: core courses, selectives, seminars (participatory and non-participatory), and electives. For each section, certain minimum unit requirements must be fulfilled before you can advance to candidacy.

All GGI students are required to take a number of immunology classes (core classes and selectives). Additional immunology selective classes may be taken to fulfill the requirement for electives. The immunology classes are designed to teach a core base of knowledge in immunology, and importantly, to enhance your ability to critically evaluate current literature and design/execute scientific experiments. To further enhance your ability to read, comprehend, and talk about current research, you must also sign-up for seminars. Finally, you are required to take classes in outside areas of study (elective). These areas depend on your interests and your particular focus of study. Classes in those outside areas might pertain to, but are not limited to, topics in microbiology, molecular biology, neurobiology, and pathology. Those elective classes should be chosen after you consult with your Graduate Advisor and your Major Professor. The GGI Program Administrator can provide an up-to-date list of course offerings (IMM courses and popular electives).

Core Courses in Immunology (12 or 17 units)

The following **core courses** are required for all GGI Ph.D. students. Dual-degree students in the combined M.D./Ph.D. or D.V.M./Ph.D. programs must take the same core courses, however, only one quarter of research rotation (IMM 201L) is required and will consist of presenting on work in your chosen lab.

IMM 201	Basic Immunology	(4 units)
IMM 201L	Laboratory Rotations	(4 units)
IMM 202L	Laboratory Rotations	(5 units)
IMM 293	Current Concepts in Immunology	(4 units)

Ph.D. students are required to take 17 units of core courses.
Ph.D. dual degree students are required to take 12 units of core courses (exclude IMM 202L).

IMM 201 Basic Immunology (Fall)

This course offers a comprehensive introduction to basic principles of immunology and is a prerequisite for IMM 293 and other advanced immunology electives. The course content includes lectures based on immunology textbooks, as well as discussions of concepts and current literature pertinent to lecture topics. Letter grading is based on a midterm, a comprehensive final exam and discussion participation. *Required* for all first year GGI students.

IMM 201L/202L Laboratory Rotations (Fall, Winter)

Laboratory rotations are considered a fundamental aspect of the GGI curriculum. Ph.D. students will enroll in this class during fall and winter quarters of their first year; dual degree students only enroll in IMM 201L. Students will complete two 6-week rotations in the laboratories of GGI faculty members during the fall quarter, with the expectation they will join a lab and be hired by January 1. Selection of laboratories for rotations are identified in consultation with the IMM 201L course instructor and your Graduate Advisor. Following each rotation, students must submit a written research report and present their research findings in a short oral presentation to the class. During Winter Quarter (IMM 202L), Ph.D. students will submit a written research report and present on continued research in their chosen laboratory. While dual degree students are not required to register for IMM 202L, schedule permitting, we encourage them to attend the Winter Quarter rotation talks to support their cohort

**Rotation funding is not provided to Ph.D. students who are admitted directly to a lab or to dual degree students, who must identify a lab before matriculating.*

IMM 293 Current Concepts in Immunology (Winter)

This is an advanced level graduate course in immunology required for all GGI students. IMM 201 is a prerequisite. Topics include: innate immune defense mechanisms, inflammation and leukocyte migration, macrophage and dendritic cell biology, T and B cell development and function, and current models of immunologic responses. The class is divided into lecture and topic discussion. For the lectures, students are required to read assigned recent literature reviews as background to obtain and comprehend up-to-date information on various aspects of both innate and adaptive immunity. In the second part of the class, assigned research papers on the lecture topics are reviewed and discussed to enhance the student's ability to design and critically evaluate experiments. Letter grading is based on 2 comprehensive take-home exams, a written evaluation of a recent research article, and participation in discussion.

Selective Courses in Immunology (6-10 units). Courses will be selected from:

IMM 203	Cancer Immunology	(2 units)
IMM 204	Topics in Innate Immunity	(2 units)
IMM 210	Neuroimmunology	(2 units)
IMM 294	Clinical Immunology	(2 units)
IMM 297	Mucosal Immunology	(2 units)
RAL 209	Current Topics in Immunology	(3 units)
NUT 251	Nutrition and Immunity	(2 units)
ETX 260	Immunotoxicology	(3 units)

Ph.D. students MUST take a minimum of three "selective" courses, for a minimum of 6-10 units. Ph.D. dual degree students are only required to take two "selective" courses, for a minimum of 4-7 units.

Note: Because most of the selective courses are only offered every other year, please review the sample study plan (Appendices 1-3) to determine if you will take these courses in your first or second year.

IMM 203 Cancer Immunology (Spring, even years)

This course will cover concepts in cancer biology, progression, and immune evasion. It will also cover topics such as: immune surveillance, immune effector mechanisms, and current concepts in immune therapy.

IMM 204 Topics in Innate Immunity (Spring, even years)

The course addresses topics in the field of innate immunity through student seminar presentations and critical evaluation of the literature. Concepts include: pathogen recognition, intercellular communication, specialized cellular function and effector/signaling molecules.

IMM 210 Neuroimmunology (Winter, odd years)

This course covers molecular and cellular interactions between the immune system and the nervous system. Class includes an overview of new neuroimmunology concepts in health and disease.

IMM 294 Clinical Immunology (Winter, even years)

This class focuses on various aspects of clinical immunology including tumor immunology, allergy, autoimmunity, the immunology of transplantation, methods of clinical diagnosis and laboratory methods. Classes are divided between lecture and topic discussion in which students review and present a clinical case to the class. There is one take-home midterm and a final exam.

IMM 297 Mucosal Immunology (Spring, odd years)

This class includes an overview lecture by faculty to provide the context of current knowledge on various aspects of immunology as they pertain to immune defenses at the mucosal surfaces of the body, including respiratory tract, gastrointestinal tract, and the urogenital tract. Each lecturer assigns a recent review and a research paper that forms the basis of student presentations that follow each lecture. A final writing assignment reviews a current research paper in a News and Views format.

ETX 260 Immunotoxicology (Fall, most years)

This class provides students with skills and knowledge for evaluating and applying research on the impact of environmental toxicants on immunological function in human and wildlife populations.

Selective Courses in Immunology (Continued)

RAL 209 Topics in Immunology: From Presentations to Grants (Winter, every year)

The purpose of this course is to prepare Ph.D. students for their Qualifying Exam. Consider it a required selective course. Students learn strategies for effective oral presentations, poster preparation, writing a research paper on their work, and the basics of grant preparation. Students will learn how to use these tools for career development. Topics will depend on the focus of ongoing student research.

**Ph.D. students should take RAL 209 in year 2; dual degree Ph.D. students should take RAL 209 in year 1.*

NUT 251 Nutrition and Immunity (Winter, offering determined by department)

This course explores the mechanisms by which nutrition and diet affect the immune system, as well as resistance to infectious diseases and cancer. It also explores the impact of an immune response on metabolism, appetite, and nutritional needs. The class includes both lectures and discussions.

Seminar Courses (2-3 units per year)

You must enroll in one participatory and one non-participatory seminar per year until you advance to candidacy. Below is a list of seminars coordinated by members of the GGI faculty. Many other seminars are available on campus. Seminars relevant to your area of research should be chosen in discussion with your Graduate Advisor and Major Professor.

IMM 291	Intro to Critical Analysis of Immunology Research (participatory)
IMM 296	Advanced Topics in Immunology (non-participatory)
MMI 291	Research Seminars in Microbiology and Immunology; Fall, Winter, Spring
PMI 298	Cancer Immunology Journal Club (participatory); Contact Dr. William Murphy
PMI 298	GGI Breakfast Club (participatory); Fall and Spring

The GGI administrator circulates seminars that are announced. Students can also look up courses by subject code by searching subject codes of interest in the UCD Registrar's Class Search Tool.
https://registrar-apps.ucdavis.edu/courses/search/index.cfm
Seminar courses are typically listed as 290, 291, 294, 296, and 298. If a day/time is not listed, contact the instructor to inquire.
Some course codes of interest may include: APC, ANB, ABG, BCB, BST, BIM, CHA, CLH, DEB, ETX, FSE, GGG, MMI, PHA, MIC, MCB, MCP, NPB, NSC, NUT, PMI, PTX, and STA.
https://catalog.ucdavis.edu/courses-subject-code/

IMM 291 Seminar in Immunology (Fall)

This course stresses student participation through presentations and discussion of topics covered in IMM 201. Each week, a student will present an assigned research paper relevant to the topic. A major emphasis is in-depth, figure-by-figure discussion of the research papers. Experimental approach, research methodology, techniques and statistical analysis are discussed in view of the stated conclusions and implications of the findings. Attendance is mandatory, since students are required to participate in active class discussion. **Strongly recommended for all first year GGI Students.**

IMM 296 Advanced Topics in Immunology (Fall)

This course offers presentations by faculty on advanced topics in immunology research. The course outlines current research of faculty members in GGI and thus can help 1st year students identify possible mentors. **Strongly recommended for all first year GGI students**.

MMI 291 Seminars in Microbiology and Immunology (Fall, Winter, Spring)

Research seminars on current topics in microbiology and immunology.

PMI 298 Cancer Immunology Journal Club
Dr. Bill Murphy's Journal Club focuses on cancer immunology research. Open to all interested GGI students. Meets on Friday afternoons, and is offered most quarters.

PMI 298 Immunology Breakfast Club (Fall and Spring)
GGI Breakfast Club was created to help students achieve major milestones. During Fall quarter, the student-run discussion group helps reinforce areas that may be especially challenging and/or cover gaps in the curriculum. It also serves as a study group companion for IMM 201 first year students. During Spring quarter, the student-run group focuses on helping GGI students prepare for their Qualifying Exam (QE) through student presentation and critiques of QE proposals.

** Ph.D. students should enroll in this course Fall quarter of year 1 and Spring quarter of year 2. Dual degree Ph.D. students should enroll in this course in Fall and Spring quarters of year 1.*

Elective Courses (8 units)

BIM 209 Scientific Ethics and Integrity (recommended elective, taught in spring)

PMI 203 Experimental Design & Data Analysis (recommended elective, taught in fall)

In addition to required immunology courses, Ph.D. students are required to take a minimum of 8 units of elective courses. These can include additional selectives, statistics, scientific writing, or other classes that provide students with additional research tools and skill sets. Courses should be upper division (100 level) or graduate courses (200 level). The elective unit requirement is waived for dual degree Ph.D. students.

It is recommended that students take an elective class on the topic of their "outside area" for their Qualifying Examination. Classes in the outside area may be used to fulfill GGI requirements for elective courses for a maximum of 3 units. Courses should be chosen in discussion with your Graduate Advisor and Major Professor.

Courses for Designated Emphasis Programs
GGI students may elect to pursue a Designated Emphasis (DE), an area of specialization that overlaps with the traditional disciplinary boundaries that define existing Ph.D. programs. More information on how to apply to a DE can be found here. The "Designated Emphasis" is awarded in conjunction with the Ph.D. degree and is signified by a transcript designation - for example, "Ph.D. in Immunology with a Designated Emphasis in Biotechnology".

Students in GGI have pursued DEs in the following areas:
- Biotechnology
- Biology of Vector-Borne Diseases
- Translational Research
- Host-Microbe Interaction

GGI Ph.D. students enrolled in a Designated Emphasis (DE) program must take all required classes for the relevant DE as outlined in the DE degree requirements as additional course load. The DE classes may not be used to fulfill any of the GGI course requirements, including electives.

Satisfactory/Unsatisfactory grading option

The purpose of the Satisfactory/Unsatisfactory (S/U) option is to encourage graduate students to explore academic coursework in areas unrelated to their academic discipline. S/U petitions must be filed with Graduate Studies by the end of the fifth week of the quarter (25th day of instruction). After the fifth week, students must complete the late request portion of the Grading Option Change Form, and provide compelling justification explaining why the late request. No petitions will be approved after the final day of instruction for the term. For the complete policy regarding S/U grading, please refer to http://gradstudies.ucdavis.edu/gradcouncil/policiesall.html.

Courses that fulfill GGI program requirements, may not be taken on an S/U basis. The only exception to this rule is if the Graduate Council has granted prior approval to the program. Only one graded course per quarter may be taken S/U. To receive an S grade in lower or upper division undergraduate coursework, you must earn at least the equivalent of a C-. To receive an S grade in graduate coursework, you must receive the equivalent of a B- or better.

Student Progress

Annually, all currently enrolled graduate students are **required** to be assessed for their degree progress via the online Student Progress Assessment (SPA) tool. The SPA was designed in an effort to improve the mentorship experience of graduate students at UC Davis, and to provide trainees the opportunity to participate in a conversation with their major professor and graduate advisor regarding their progress. It is also a great opportunity to set clear goals and expectations for the coming year!

Graduate Studies launches the annual Student Progress Assessments (SPAs) in early April. You will receive an email prompting you to complete the assessment by June 30th. Your graduate administrator will provide more instructions on how to complete the SPA.

General requirement for satisfactory progress:

- Maintain a GPA of >3.0
- Present a poster at the annual research retreat (2nd year students and above); this is a program degree requirement
- Once formed, meet at least annually with your dissertation (or M.S. thesis) committee
- Make satisfactory progress in laboratory work towards your degree objective
- Provide all information and forms requested by GGI in a timely manner

Students may also receive a marginal or unsatisfactory progress report. A marginal report indicates a progress issue, but one that has a slight impact on the student's degree completion. This rating serves as a warning to graduate students to begin addressing the issue before it has more significant consequences for progress. An unsatisfactory progress report means that something is impeding the student's progress and it needs to be addressed in order for the student to succeed. For both marginal and unsatisfactory reports, the major professor and academic advisor must explain why the progress is not satisfactory and provide a detailed timeline of expectations for improvement.

Marginal and Unsatisfactory reports are not reflected on a student's transcript and do not affect the student's ability to be employed or receive fellowships.

Academic Misconduct

Academic misconduct involves behavior in which a student engages in dishonest acts, taking an action that gives them an unfair advantage over others, or engages in behavior that creates the appearance of dishonesty. It also includes behavior in which a student fails to follow course or exam rules, or disrupts the educational environment.

All students should review and abide by the University of California, Davis, Code of Academic Conduct (https://ossja.ucdavis.edu/code-academic-conduct).

Information regarding processes connected to suspected cases of academic misconduct is discussed at https://ossja.ucdavis.edu/disciplinary-process.

Required action by the faculty:
The IOR (or other faculty member) does not establish whether a case of academic misconduct has occurred. Instead, faculty are required to report any cases in which they *suspect* misconduct to the Office of Student Support and Judicial Affairs (OSSJA). OSSJA will investigate and determine whether there is evidence that identifies misconduct and will take any necessary action. The OSSJA-led process occurs independent of the involved faculty, and faculty do not have influence over the process. The process proceeds independent of whether a student agrees that s/he/they has committed academic misconduct.

Should the potential for misconduct occur close to filing a course grade, the faculty will file a grade of "Y". The grade will be adjusted, depending on the outcome of the investigation by OSSJA. Should OSSJA identify academic misconduct at the conclusion of the inquiry process, the IOR (or faculty member) will decide whether to provide an opportunity for the student to take a make-up exam (and in which form the exam will be). The outcome of any make-up exam will be averaged with the initial grade/points the student obtained for the exam in which misconduct was identified (0%).

Here is an important excerpt from the OSSJA page (https://ossja.ucdavis.edu/disciplinary-process):

"The Office of Student Support and Judicial Affairs (OSSJA) strives to balance the goal of upholding our standards of academic integrity and responsible conduct with the need to protect the welfare and reputation of our UC Davis community. When possible, OSSJA uses informal procedures to resolve disciplinary matters, emphasizing education, personal growth and the development of ethical behavior. When formal fact-finding procedures are necessary, the system is designed to provide a timely, fair, and impartial hearing and resolution of the matter. A student may have an advisor with them at any stage in the informal or formal process."

Other support: Student Counseling Services. This process can be quite stressful and students are encouraged to reach out to campus counseling services. (https://shcs.ucdavis.edu/services/counseling-services)

Reference:
https://ossja.ucdavis.edu/academic-misconduct

DEGREE PROGRAMS

The Graduate Group in Immunology offers three distinct degree programs: The Ph.D. program, the dual-degree program (M.D./Ph.D. or D.V.M./Ph.D.) and M.S. programs. Each program has specific study plans (**Appendices 1-3**) that you will follow in order to fulfill the necessary degree requirements. Study plans are subject to change and when necessary are promptly updated.

THE PH.D. PROGRAM IN IMMUNOLOGY

Overview

The Ph.D. in Immunology is awarded after completion of three phases of study: (i) course work; (ii) an oral qualifying examination, and (iii) the conduct of original and independent research of significance as is evident by the written dissertation. Apart from core, selective, and seminar courses in immunology, you will select coursework in an outside area, which together will provide you with general background, a knowledge base for the oral qualifying examination, and preparation for the research on which your dissertation is based. Your selection of appropriate course work is made in consultation with your Academic Advisor and your Major Professor. Following laboratory rotations, you will identify a Major Professor and in the following months, develop a research proposal.

Degree Requirements

You are required to maintain a grade point average of at least 3.0 (4.0 scale) throughout your graduate studies. If you are seeking an additional Designated Emphasis, all additional course requirements of that program must be met before the qualifying examination is conducted. In addition, as a Ph.D. student in immunology, you are expected to:

- Participate in the Rotation Program during the Fall and Winter quarter of year 1
- Present yearly a research poster at the Annual Graduate Group Retreat (2nd year and above). This is a GGI degree requirement.
- Participate in the events organized by the graduate group and actively engage in the various activities of the program. This includes attending Exit Seminars of your fellow GGI students.
- Take your qualifying examination and advance to Ph.D. candidacy in a timely manner. For most students this is usually by the end of summer of year 2 in the program.
- Meet regularly, but at least once a year, with your dissertation committee following your advancement to candidacy.
- Make adequate progress in your research project.
- Take an exit exam prior to submission of your dissertation. Provide to the Final Exam Committee an oral presentation of the dissertation. The oral presentation shall be open to the campus community, while the exit examination itself shall be restricted to the members of the dissertation and final examination committee.
- Submit a dissertation to Graduate Studies in a timely manner following approval by all members of your dissertation committee. This is usually done in years 5-6 of residence.

Time to Degree

The curriculum is designed to enable Ph.D. students to complete the program within 5-6 years. The curriculum will allow you to complete all necessary coursework in 5-6 quarters of study. Most Ph.D. students advance to candidacy (i.e. take their qualifying examination) in the summer of their second year. The program then includes 3-4 years of uninterrupted time for research, which is generally sufficient to write a satisfactory dissertation and complete all degree requirements.

GGI Study Plans

A study plan is formulated in consultation with your Graduate Advisory and Major Professor. The study plan depends on the degree program: Ph.D., Dual-degree D.V.M.-Ph.D. or M.D.-PH.D., or M.S. programs. For an example Ph.D. study play, see **Appendix 1.** Please note, depending on whether you enter the program in an odd or even year, selectives will be taken in either year 1 or year 2; the curriculum is designed to enable you to take all selective course offerings prior to taking your qualifying examination.

The Laboratory Rotation Program

As a Ph.D. student, you will participate in the laboratory rotation program. You will enroll in IMM 201L during the fall and IMM 202L during the winter quarter of year 1 (see **Appendix 1**). You will rotate with 2 different faculty members during your first quarter of residence.
Therefore, it is not necessary for Ph.D. students to contact faculty members prior to application to the program. Even if you identify a likely mentor prior to matriculation, you will nonetheless enroll in IMM 201L/IMM 202L during your first two quarters of residency and rotate in 2 different laboratories, *before* joining the lab of the identified mentor. Rotation students are expected to be hired into a lab by January 1 of their first year. In the ***rare event*** that fall rotations are unsuccessful, students will need to submit a detailed petition to the GGI Executive Committee, stating why rotations were unsuccessful and why the program should fund additional rotations. Not all petitions are approved, so choose rotations wisely and communicate with the rotation program instructor if you are experiencing any challenges.

Finding a Major Professor

With few exceptions, the Major Professor is the single most **important** person with whom you will deal with while at UC Davis as a Ph.D. student. Sometimes the Major Professor is referred to as the "faculty mentor" or “research professor” or “PI” because they are the person you will work with while conducting graduate research.

Towards the end of the rotation program, as a Ph.D. student, you will identify the faculty member with whom you will conduct your dissertation research. This selection is made by joint decision of you and the faculty member, and is typically based upon the experience of the laboratory rotation. It is an important decision and you should consult with both your Graduate Advisor and the Instructor on Record for IMM201L (currently Dr. Athena Soulika) before committing to a lab. Many factors have to be weighed including such issues as your personal relationship with the potential Major Professor, security of financial support, interest in ongoing research projects, quality of research conducted in a lab, and interactions with other laboratory members. The rotation program allows you to inquire in an informal setting about these and other issues.

Exceptions to this process can be made on rare occasion, when a Ph.D. student wishes to join the laboratory of a particular faculty member directly. This arrangement is contingent upon the applicant fulfilling all requirements for joining the Ph.D. program as set forth by the Dean of Graduate Studies and the Graduate Group in Immunology. In addition, the faculty member must state in writing to the Executive Committee of the group their willingness to mentor and financially support the applicant. Despite the "direct placement" the student will nonetheless enroll in IMM201L/ IMM202L during the fall and winter quarter of the first year. Exceptions to this rule need to be requested *a priori* in writing to the Executive Committee.

Your Major Professor is responsible for the following:

- Your Major Professor serves as your mentor and is your primary resource for information on research projects.

- Your Major Professor is responsible for providing you with financial support (stipend/salary and tuition/fees, including health insurance) throughout your graduate studies.

- Your Major Professor, in consultation with your Graduate Advisor, may require you to take additional courses to formulate a program best-suited to your academic research and professional needs. Any exception to the core requirements must be supported in writing by your Major Professor, in concurrence with your Graduate Advisor, and then approved by the GGI Executive Committee.

- Your Major Professor serves as Chairperson of your Ph.D. Dissertation (or M.S. Thesis) Committee.

- In general, even though your Major Professor plays a very important role in providing guidance to you on your research projects, they may not be as informed as possible of the latest academic requirements. Therefore, you should consult your Graduate Advisor on a regular basis (ideally, every quarter) and report your academic progress. Also, be sure to check with your home department for other possible sources of financial support if your Major Professor is unable to provide that information.

Outside Area of Study

You will choose an outside area of study in discussion with your Major Professor and Graduate Advisor. While it can be on <u>*any*</u> topic taught at the UC Davis campus, it usually is related to your particular research area. In order to prepare for the qualifying examination (QE), you are expected to enroll in a minimum of 3 units of upper division undergraduate or graduate level classes in an outside area or study. These units may be used to fulfill part of the course requirements for electives. In conjunction with your Graduate Advisor and your Major Professor, you will identify a faculty member (usually outside of GGI) that can examine you in that subject area. Thus, taking a class with subject areas that cover the outside area of study is usually helpful in identifying a suitable examiner. Below is a list of some examples that GGI students have chosen in the past as outside areas for examination during the QE.

Anatomy
Biochemistry Bioinformatics
Biomaterials Biostatistics Cancer
Biology Cell Biology
Environmental Toxicology Genetics
Microbiology
Molecular Biology Nutrition
Neurotoxicology Neuroanatomy
Pathology
Virology

Focus Areas in Immunology

In addition to general immunology, you are required to identify two sub-specialties in immunology that you will defend during your qualifying examination. Below is a list of defined areas in Immunology actively engaged by GGI faculty members, which can serve as sub-specialties. Additional areas may be identified, but these must be chosen following discussion with your Graduate Advisor and approved by the GGI Executive Committee.

Autoimmunity: Including research on the molecular basis of autoimmune diseases, such as autism, arthritis, chronic liver disease, diabetes, kidney disease and systemic lupus erythematosus.

Cancer Immunology: Including research ranging from basic mechanisms of carcinogenesis to targeting novel drugs to tumors using combinatorial chemistry and immunotherapy.

Comparative Immunology: Including comparative studies of immune responses, such as allergy and infection, in humans and non-human primates, avian, bovine, equine, feline, marine mammals, and zoo animal species. Our program benefits from research at School of Veterinary Medicine and one of only a handful of National Primate Research Centers

Host-Pathogen Interactions: Including research that explore how viral, bacterial and protozoan pathogens, interact with their hosts to cause diseases such as AIDS, malaria, influenza, Lyme disease, salmonellosis and vascular disease. Active research on campus ranges from the molecular interactions underlying disease processes and host immune response regulation, to development of vaccines and diagnostics.

Immune Signaling: Including research on signaling pathways within immune cells and how they are perturbed during disease, on cell-to-cell communication within the immune system, on molecular interactions between cells, on immune regulation of inflammation, and on computational modeling of immune responses.

Mucosal Immunology: Including research on homeostatic and defense mechanisms, on mucosal barrier functions, on reactions of the respiratory mucosa to allergens and pollutants, and on how viral and bacterial pathogens subvert the defenses of the intestinal mucosa to cause disease.

Nutritional Immunology: Including research on the effects of nutrition on the immune response, on how ongoing immune responses affect the host's nutritional requirements, on the effects of micronutrients such as Vitamins A and D and omega fatty acids on immunity, and on characterization of food allergens causing anaphylaxis.

Neuroimmunology: Including research on neuroinflammation, on multiple sclerosis, on links between the immune system and the spectrum of autism disorders, and on the relationships of the immune system with behavior.

The Qualifying Examination

Requirements. After successful completion of all required coursework for the Ph.D. (Study Plan) and the Designated Emphasis (if applicable), students advance to Ph.D. candidacy by passing a comprehensive oral qualifying examination (QE). All Ph.D. students must take this exam. For most students, the examination should be taken in summer of the second year or the autumn of the third year of residence within GGI. Any delay in taking the QE must be approved by your major professor, academic advisor, and the GGI Executive Committee.

Overview. Examination is on the student's knowledge in general immunology, two sub- specialties of immunology, as well as an outside research area chosen in discussion with the major professor. In preparation of the QE, the student will be asked to name two sub- specialties in immunology (e.g. innate immunity, cellular immunity, cytokines, autoimmunity) and an outside area of research (e.g. virology, microbiology, molecular biology) in which to be examined. Usually the outside area is connected to the proposed dissertation research, but can be chosen from any discipline taught on the UC Davis campus. The student should have preparation equivalent to an upper division course in the outside area. The student's written research proposal (described below), will serve as context to initiate the QE. For the QE, the student should be prepared to demonstrate adequate background knowledge related to the proposed research and its underlying hypotheses, sound familiarity with the proposed experimental design and execution, knowledge of proposed technologies and alternative technologies, familiarity with appropriate statistical analysis of data, and adequate perspective for interpretation of the anticipated data. Examination of the student in general immunology and the three more specialized areas will ensue both in the context of the research proposal, as well as in subsequent questioning by the QE Committee.

The Written Research Proposal. In consultation with their major professor, the student will develop a written research proposal on their dissertation topic. The QE Committee will decline to accept proposals that fail to adhere to the following formatting guidelines.

The proposal should be approximately 5-7 pages, not including references (single spaced, Arial 11 point font, 1.0 inch margins) and conform to the general format for NIH research (R21) and fellowship (F32) grant applications (https://grants.nih.gov/grants/how-to-apply-application-guide.html). The proposal should describe the student's: dissertation-specific hypotheses, topic background, rationale for experiments, research aims, experimental approaches, expected outcomes, potential problems, alternative approaches, and progress to date (if any).

The format should follow NIH guidelines and include four sections: Specific Aims. (3/4-1 page), Significance (briefly state why the investigation being done, 1/4-1/2 page), Innovation (briefly comment: a new hypothesis? a new technique? a new model? 1/4-1/2 page), and Experimental Approach (remainder up to 5 pages total).

> Specific Aims: The Specific Aims section should begin with one or two brief paragraphs of project background and include an introduction of the scientific issues to be addressed. State the hypotheses explicitly. Succinctly state the specific aims, usually including one or two sentences describing the general experimental approach for each aim. This section then typically concludes with a statement about how the field will benefit from the successful completion of the proposed studies.

The preliminary data (if any) can be incorporated into any of the four sections. Each literature citation must include the names of all authors, the article title, journal (or book) title, volume number, page numbers, and year of publication. Please note that discussion of the expected outcomes, potential problems, and alternative approaches are especially important for QE proposals, although sometimes mistakenly not given adequate attention.

The student should provide the finalized written proposal to all members of the QE Committee at least ten days prior to the scheduled exam date.

> Tip: NIH posts examples of properly formatted grant applications. (https://www.niaid.nih.gov/grants-contracts/sample-applications)

The QE Committee. The QE is administered by a committee of five members appointed by the Dean of Graduate Studies on the recommendation of the GGI Executive Committee. Members will be selected to represent general immunology as well as two sub-specialties in immunology identified by the student as their focus areas and one "outside area". In accordance with the guidelines and policies (Service on Advanced Degree Committees and Doctoral Qualifying Examinations) set forth by Graduate Council, the QE Committee consists of 5 faculty members, of which 4 are members of the Graduate Group in Immunology and one is from outside of the graduate group. The student will identify a timeframe during their second year in the program in which they will take their QE, and provide the name of a faculty member who has agreed to act as Chair of the QE Committee. The student will provide the name of at least one faculty member who can test the student in the outside area of research. While the Chair is to be selected from the faculty members of the GGI, the faculty member examining the outside area does not have to be a member of the group. The GGI Executive Committee will identify three additional faculty members to serve on the committee. The GGI Executive Committee will assign one (or more) faculty member to examine the student in general immunology and the sub-specialties in immunology. The student's major professor may not participate in the QE. The student is encouraged to meet with each QE Committee member prior to the exam in order to discuss his or her dissertation research proposal, as well as potential topics for the exam to help the student prepare.

The student and the QE Committee should review the updated QE Policy.

The Process. The QE is approximately 3 hours in length. All QE Committee members must be present for the entire duration of the exam. In the first part of the exam, the student will be asked to briefly outline the dissertation research proposal. QE Committee members will test the student on their preparedness to embark on the proposed research, including depth and breadth of knowledge associated with that proposal. In addition, the student will be tested on their understanding of the soundness of the underlying hypotheses, experimental design and execution, technologies and alternative technologies, statistical analysis of data and interpretation of the anticipated data. During the second part of the exam, the student will be tested on the depth and breadth of knowledge in general immunology and chosen sub-specialties in immunology as well as the identified outside area of research. More information about the Doctoral Qualifying Exam (QE) can be found on the Graduate Studies website.

In accordance with the Doctoral Qualifying Examination Policy (Revised March 22, 2024), QEs **must be held fully in-person** with the option to include up to one committee member participating remotely, other than the QE Chair.

The Outcomes. Students will be informed of the outcome immediately after the QE Committee has had a chance for brief deliberations at the conclusion of the exam. The outcome of the exam is: PASS, RETAKE, FAIL, OR SPLIT QE.

PASS: The committee unanimously decides that student passed the examination and is prepared to advance to candidacy for the doctoral degree. No conditions or additional requirements may accompany this decision.

RETAKE: The QE Report must specify whether the student is required to retake all or part of the examination, list any additional requirements, and state the expected timeline for completion of requirements before retaking all or part of the exam. The format of the secondary attempt may include a retake of all or a portion of the exam, a rewritten proposal, a paper addressing the areas of deficiency, or an alternate format determined by the QE Committee and approved by the Dean of Graduate Studies. The second QE may include multiple components (e.g. responding to committee questions in writing and then retaking the oral exam), but requirements must be stated in full on the QE Chair memo. Requirements may not be added or determined necessary after submitting the memo to Graduate Studies.

FAIL: The committee unanimously determines the student failed the examination due to significant deficiencies, and the student is not currently prepared to continue in the doctoral program. A unanimous fail on either the first or second exam is a recommendation of the student's disqualification from the

degree objective.

SPLIT QE: If the QE Committee is unable to reach a unanimous decision on pass, retake, or fail, the QE Chair will inform the student that the committee is divided, that the majority and minority are making recommendations subject to further review and that the Administrative Committee of Graduate Council or its designee will make the final decision with all available input.

For advancement to candidacy the student must submit to Graduate Studies the required form (Candidacy for the Degree of Doctor of Philosophy, Plan C) signed by the Chair of the QE Committee and the student's GGI graduate adviser via GradSphere.

QE Preparation Timeline

To help students prepare for the Qualifying Exam (QE), GGI has built QE preparation into its degree requirements. Second Year Ph.D. students should enroll RAL209 (winter) and Breakfast Club (spring). Dual degree students should enroll in RAL 209 (winter) and Breakfast Club (spring) of year 1.

Timeline:

December

- GGI Administrator sends email to 2nd year Ph.D. and 1st year Ph.D. dual-degree students
  - QE Info, QE Preparation Document, and GGI QE Guide

March 1

- QE Prep Form due to Graduate Administrator (Ph.D. only students); QE Prep Form due June 1 for Ph.D. dual degree students.
- Students need to provide:
  1) QE Chair Selection (GGI faculty)

     Student should confirm faculty's willingness to serve.
  2) Outside Area & non-GGI faculty selection

     Student should confirm faculty's willingness to serve.
  3) Content and Initial Logistics
     a. Student should decide Immunology Subareas; Must select two subareas.
     b. Student to provide timeframe for QE (4 to 6-week window)
     c. Student should declare participation in a Designated Emphasis (DE). If applicable, they must confirm the DE faculty's willingness to serve on the exam.

        Students participating in a DE are responsible for making sure a DE Application form has been submitted/approved by Graduate Studies.

April

- QE Committee Roster is arranged at the April GGI EC meeting (1st Thursday of the month)

  Mid-April, the graduate administrator sends an email to the student's QE Committee, requesting they confirm their service on the exam. The student, their major professor, and their academic advisor are cc'ed on this communication.

  Note: It should be **rare** that a faculty is unable to serve on a QE. In the event there is a scheduling conflict, the GGI Executive Committee will identify a replacement committee member.

Student Responsibilities:

- Once all members confirm their willingness to serve, the student will immediately work to identify a date for the exam.
- In consultation with the QE Chair, the student should discuss possible emergency plans. The QE Application will ask you to select one of three emergency plans: 1) Remote Exam 2) Alternative Examiner or 3) Pre-scheduled Back-Up Date/Time. We do not recommend selecting option 2, as the QE Chair and the Outside member can't be replaced. Moreover, it may be difficult to identify a GGI faculty to cover your specific topic area(s). If an emergency plan is needed, GGI recommends a remote exam or a back-up date.
- Once an exam date is agreed upon, the student MUST submit a Qualifying Examination (QE) Application via GradSphere. This **MUST** be done at least 40 days in advance of the exam date. The QE cannot proceed until the application is approved by Graduate Studies! Approval is confirmed when the QE Chair and the student receive emails with additional instructions.
- Meet with the QE Chair to discuss the exam, the rough draft of your aims, and to get feedback.
- Meet individually with the other committee members one-on-one to discuss your aims and expectations for the exam.

6-8 weeks before exam date

- ✓ Students should hold initial meeting with each QE faculty member to discuss general expectations. Preferably, students should meet first with the QE Chair.

5-6 weeks before exam date

- ✓ Students should send initial proposal to Chair for discussion.

3-5 weeks before exam date

- ✓ Students should send revised proposal to all QE members.

2-4 weeks before exam date

- ✓ As necessary, students should hold follow-up meeting with QE Chair and other committee members.

1 week before

- ✓ Students should send friendly email reminder to all committee members (date, day, time, location of exam).

1 night before

- ✓ Students should send friendly email reminder to all committee members (date, day, time, location of exam).

QE Chair Responsibilities:

The Chair's responsibility is to facilitate the work of the committee and ensure that the examination is conducted fairly and in accordance with any academic accommodations that may be in place.

Before the exam – The Chair must meet with the student to discuss scheduling, procedures, format, and general exam content. The Chair must provide the student with clear written guidelines on these matters. The QE Chair must also discuss the procedures, format, general exam content, and evaluation expectations with the other members of the committee, as well as the approved Emergency Plan. Should
an emergency occur, the QE Chair is responsible for implementing the Emergency Plan or assisting with rescheduling the QE.

During the Exam – The Chair should put the student at ease, ensure that the examination conforms to the approved format and general norms of the program, and that the examination addresses both breadth and depth of knowledge. The Chair must ensure that the QE adheres to the expected schedule during the examination.

After the Exam – Facilitate discussion among the committee members, inform the student of the result, and file the committee report with Graduate Studies within 3 business days.

The Dissertation Committee

The Ph.D. student, in consultation with their Major Professor and Graduate Advisor, nominates three faculty to serve on the Dissertation Committee. The Major Professor serves as the Chair of the Dissertation Committee. Nominations are submitted to Graduate Studies for formal appointment in accordance with Graduate Council Policy (Service on Advanced Degree Committees). The student shall meet with the Dissertation Committee on a regular basis, **at least** once a year; meetings are typically held in advance of the **required** annual student progress assessment. During the dissertation committee meeting, the student should present the research work conducted for the Ph.D. The Dissertation Committee shall judge the level of progress and guide the student in their future scholarly work. The Dissertation Committee shall also establish and outline to the student what, if any, additional research work is necessary to complete the dissertation requirements. In addition, the committee shall guide the student through their studies and conduct a final oral examination.

The Dissertation Committee is formalized once the student passes their QE and submits the UCD Advancement to Candidacy Application (GIMM PhD Plan C) in GradSphere. Both the Dissertation Committee Chair (student's major professor) and academic advisor sign the candidacy form.

It is GGI's expectation students submit the Advancement to Candidacy form within one month of passing the QE. Once a Ph.D. student has advanced to candidacy, they become a Ph.D. candidate and work towards completing their research, dissertation, exit seminar, and final exam.

You are encouraged to seek out faculty for your dissertation committee whom you feel comfortable with and who can provide scientific guidance to your project. In addition, you should consider identifying faculty who could help in any potential disputes with your major professor. While such disputes are rare, having advocates and trusted faculty members on your dissertation committee can greatly help you in overcoming any problems, particularly those pertaining to differences in expectations between you and your Major Professor when it comes to timelines and extent of work required for the dissertation/thesis.

The Dissertation

The Ph.D. student will provide a written synopsis of the scholarly research activities conducted for the Ph.D. degree in form of a written dissertation. The content of this dissertation will be presented during the final oral exam. The dissertation should be comprised of an overall introduction to the topic and research problem at hand, at least two or more research chapters outlining the original research conducted for the PhD and a brief overall conclusion section that describes how the completed work affects the standing knowledge of the research problem investigated. The chapters describing the original research may be organized in form of a research publication. There is no absolute requirement that any or all parts of the dissertation are published prior to degree submission or award. However, it is expected that at least some part of the original scholarly work will result in publication(s) to aid the dissemination of research information, allow for broader peer review of the work, as well as to allow public recognition of the student's work. There are no specific requirements as to the length, style and format of the dissertation in addition to those outlined above. However, the dissertation must fulfill the requirements set forth by the Dissertation Committee and comprise a generally acceptable, consistent and understandable document.

Students may use previously published material as chapters. Published or publishing pending material may be used with permission from the copyright owner, if not you, and the Graduate Chair, if you are not the first author. See Copyright FAQ for information about permissions when using published material. Material you have authored, and which has been previously published or is pending publishing, may be used in its published format with three exceptions:

1) Margins - You must maintain 1" margins on all sides throughout the paper.
2) Pagination - page numbers must follow the UC Davis standards.
3) The title page must follow UC Davis standards and you must include an overall abstract.

Following approval of the dissertation by each member of your dissertation committee, you will submit the dissertation to Graduate Studies.

Note the deadline dates for filing of the dissertation (https://grad.ucdavis.edu/preparing-filing-your-thesis-or-dissertation). We encourage students to attend the Graduate Studies "Filing your Thesis or Dissertation Workshop" 1-2 quarters before they plan to submit, so they are familiar with the process. The graduate administrator is also available to meet with you to discuss your filing timeline.

Exit Exam

The motivation behind adopting a Plan C (Exit Exam) format was to bring more formality and celebration to the conclusion of your Ph.D. degree. All GGI students are expected to attend the GGI Exit Seminars of fellow students.

Per the GGI Degree Requirements:

> **Final Examination Committee**
> The three-member Dissertation Committee will serve as the Final Examination Committee. The committee shall conduct a final oral examination following an oral presentation of the dissertation by the student. Each member of the committee signs the dissertation after successful completion of the oral examination.
>
> **The final examination**
> Prior to the final examination, the student shall provide to the Final Examination (Dissertation) Committee an oral presentation of the dissertation. The oral presentation shall be open to the campus community, while the final examination itself shall be restricted to the members of the Final Examination (Dissertation) Committee. Requests (with justification) for attendance by others at the closed final examination shall be made *in writing* to the Chair of GGI no later than 2 weeks prior to the date of the examination - otherwise, only the Dissertation Committee will attend.

Thus, in accordance with these Degree requirements, the expectation for the two-part final examination will occur as follows:

Part One - Exit Seminar. You will present the major findings of your dissertation research in a roughly 40-minute presentation, which is open to the public (including your family and friends, if desired). Your seminar will conclude with a brief question and answer session with the public.

Part Two - The Formal Examination. The public will be asked to step outside of the room, and you will field questions about the seminar from your Dissertation Committee in private. Since the Committee has worked with you for >3 years, there should not be any surprises for anyone. Given the circumstances of supervision for 3+ years, it is the expectation of the GGI that final examinations will be scheduled only after all Dissertation Committee members are satisfied with the progress of the Ph.D. student and convinced that the dissertation fulfills the requirements as set forth by the University of California's requirement for a Ph.D.

Students can still be working on formatting and minor edits of the dissertation; but they should NOT be writing a chapter(s) of the dissertation at the time of the Exit Seminar. Please consult with your committee to make sure you will be able to meet your proposed filing deadline. Per campus policy, faculty have up to 4 weeks to read and provide you with comments.

http://academicsenate.ucdavis.edu/bylaws_and_regulations/regulations.cfm?_-_519-

Following the examination, you will be asked to leave the room and the committee will vote. Because the final examination will commence only after the Dissertation Committee has approved the dissertation, your Major Professor and your Dissertation Committee members should be in a position to sign the dissertation title page at the conclusion of the examination. What the formal examination provides is an opportunity for you as a graduating Ph.D. student to proudly address questions and provide research perspective to your dissertation committee, AND an opportunity for your major professor to congratulate you as a graduating student as the Dissertation Committee emerges from the examination (seminar) room.

Scheduling. We would like for these exit seminars to be held at the beginning or end of the day, when possible, to make it easier for students and faculty to carve out time to attend. We would encourage the use of seminar rooms of optimal size (not too big and not too small). Examples are GBSF 1005 (first floor seminar room) and perhaps the first-floor seminar room in the Cancer Center. Please engage the Program Administrator, Erin Kent, for assistance and advice on logistical details.

Designated Emphasis

A Designated Emphasis (DE) is an area of specialization, such as a new method of inquiry, important field of application, or focus that maps near the edges or overlaps with the traditional disciplinary boundaries that define existing Ph.D. programs. The curriculum of a DE tends to focus on emerging fields or technologies that are interdisciplinary in nature, and are relevant to more than one doctoral program. DEs are organized much like a Graduate Group, with Bylaws, a Chair, Executive Committee, curriculum, admissions policy, and faculty from more than one graduate department. Completion of a Designated Emphases is reflected with a notation on the diploma: "Ph.D. in Immunology with an Emphasis in Host Microbe Interaction."

Selecting one or more Designated Emphases

Each DE has a chair with authority to admit students to the DE. The DE chair is the sole signing authority for all forms related to DE admission and verification. Students may admit to more than one DE and must consult with their Graduate Advisor prior to enrolling in a DE.

Applying for and Completing the Designated Emphasis

1. **The Designated Emphasis Application** must be completed and submitted to Graduate Studies, by the DE Chair, prior to or at the same time as the Qualifying Exam Application. The application must also be approved by the student's Graduate Advisor.

2. **Qualifying Exam** - A DE affiliate faculty member must serve on the Qualifying Exam (QE) committee on behalf of the DE. The member must be indicated on the QE Application. The DE chair will also sign the QE Application to confirm that the student has completed all DE coursework.

3. **Candidacy & Dissertation Committee** - The student must identify a DE affiliate faculty member who will serve on the dissertation committee and read on behalf of the DE, and include the member on their Candidacy Application.

4. **DE Final Verification Form** - When the student files their dissertation with Graduate Studies, they must also submit the DE Final Verification Form signed by the current DE Chair. The student will be placed on the upcoming degree list for the doctoral degree with a designated emphasis.

Additional courses and other requirements specified by these programs must be fulfilled before your Qualifying Exam can be taken. For more information on the additional requirements contact those programs directly.

THE DUAL-DEGREE PROGRAM IN IMMUNOLOGY
(D.V.M./Ph.D. OR M.D./PH.D.)

Overview

The School of Medicine (SOM) and the School of Veterinary Medicine (SVM) offer programs leading toward dual M.D./Ph.D. and D.V.M./Ph.D. degrees. The GGI has established a Memorandum of Understanding for students in both of these programs. See below for the current M.D./Ph.D. (PSTP) Memorandum. Students enter these programs by first matriculating in the professional schools (SOM or SVM), and then typically enter the graduate studies phase after completing two years of basic science curriculum in the respective professional school. The aim of these programs is to train physicians and veterinarians capable of addressing the broad diversity of interdisciplinary problems facing human and animal health, and who are especially well prepared to help meet evolving scientific, social, and ethical challenges in these areas. To complete the requirements of both degrees, students usually need seven to nine years. For further descriptions of these programs, please see:

Dual-Degree Program in Medicine
https://health.ucdavis.edu/mdprogram/MD_Ph.D/about.html

Dual-Degree Program in Veterinary Medicine
https://vstp.vetmed.ucdavis.edu/

Study plan and degree requirements for dual-degree programs

Completion of course requirements for the Ph.D. and advancement to Ph.D. candidacy are typically achieved after 3 quarters of graduate study for dual-degree students, as outlined in the dual-degree study plan in Appendix 2. The basic science curriculum in the SOM or SVM fulfills much of the requirement for elective coursework of the Ph.D. curriculum. In addition, most students in the dual-degree programs will have completed 2 laboratory rotations prior to starting the GGI Curriculum.

After successful completion of all required coursework outlined in the Dual-Degree Study Plan, students advance to Ph.D. candidacy by passing the Qualifying Examination, usually in the summer of their first year in the GGI program (third year of residence in the dual-degree program). With that being said, if a dual-degree student needs longer to prepare for this milestone, they should consult with their graduate administrator, academic advisor, and major professor. The QE follows the same content, format, guidelines and policies as for the traditional GGI Ph.D. students.

Other Degree Requirements for dual-degree programs

The study plan and degree requirements for the dual-degree program only differ in the types and number of classes that the student has to take and a greater degree of flexibility in the rotation program. For all other requirements, including but not limited to the Qualifying Examination, Dissertation Committee and Exit Seminar please refer to the Ph.D. Program.

In the dual-degree program, students should identify a Major Professor before entering the graduate portion of their Ph.D. through rotations conducted during their first 2 years of Medical/Veterinary School. Such students will then join that laboratory upon entering the Ph.D. program but still enroll in IMM201L. Course requirements of IMM201L will be fulfilled by presenting (oral and written reports) work conducted in the laboratory of the Major Professor, instead of a rotation laboratory.

UC DAVIS HEALTH | SCHOOL OF MEDICINE

M.D./Ph.D. Program

Memorandum of Understanding between the UC Davis M.D./Ph.D. Program and the Graduate Group in Immunology (GGI)

1. **Admissions:** MD/PhD students are encouraged to apply to the Graduate Group in Immunology (GGI) by the December 1st deadline during their first year of medical school, deferring admission until the summer after their second year of medical school.
    - Transcripts and reference letters will be transferred from the School of Medicine (SOM) to the Graduate Studies application platform while maintaining confidentiality.
    - Students must complete all other portions of the application in the application portal.

2. **Funding:** The financial support of MD/PhD students during graduate school is the responsibility of the Major Professor. Financial support will include tuition, fees, and salary in accordance with the GGI Graduate Group minimum student financial support expectations.
    - The SOM will provide financial support to MD/PhD students through June 30th of the summer following their second year of medical school.
    - It is expected their GGI major professor will support the MD/PhD student starting July 1st of the summer following their second year of medical school.
    - If an MD/PhD student requires additional laboratory rotations after June 30th but prior to the start of the initial Fall quarter of graduate school, the SOM will provide, in the absence of other support, funding for tuition, fees, and stipend until the start of the Fall quarter.
    - No financial support is guaranteed by the SOM or GGI in the initial Fall quarter of graduate school or beyond.

3. **Rotations:** MD/PhD students are expected to complete at least two laboratory rotations, but a second rotation may be waived with GGI approval. MD/PhD students will enroll in the rotation course (IMM 201L) in the Fall Quarter of their first year of graduate school, typically fulfilling the oral and written course requirements by reporting on initial work done in their chosen mentor's laboratory.

4. **Courses:** MD/PhD students are expected to fulfill the GGI course requirements, including core courses and electives.
    - The core courses should be taken in sequence beginning in the Fall Quarter.
    - Medical school courses may serve to fulfill elective coursework requirements when appropriate for the student's research area, with prior approval of the student's Graduate Group Advisor.

5. **Teaching (TA):** Service as a teaching assistant (TA) is not required.

6. **Dissertation:** MD/PhD students are required to submit their committee-approved dissertation and complete the exit seminar before re-entry into medical school.
    - Note: MD/PhD students ***must*** re-enter medical school on May 1st in order to be on the clinical clerkship rotation schedule. Thus, it is critical that students are on time for completion of all degree requirements prior to medical school re-entry.

Agreed to on **April 11, 2024**

John A. Gray, MD PhD Director, MD/PhD Program

Robert Canter, MD
Chair, Graduate Group in Immunology

THE M.S. PROGRAMS IN IMMUNOLOGY

Overview

There are two plans under which a student may pursue a M.S. degree at UC Davis: Plan I (by thesis), and Plan II (by comprehensive examination). The GGI only offers admission to the M.S. Plan I (by thesis). M.S. by comprehensive examination (Plan II) is available only under exceptional circumstances. To receive a M.S. degree, students are required to be in residence a minimum of three quarters. Two regular six-week summer sessions may count as the equivalent of one quarter. Usually, all work for the M.S. degree is done in residence on the Davis campus. However, with the consent of the GGI Graduate Adviser and the Dean of Graduate Studies, some work taken elsewhere may be credited toward a M.S. degree. A M.S. Plan I degree is usually obtained within 2 years.

General M.S. Degree requirements

M.S. graduate students in immunology are required to maintain a grade point average of at least 3.0 (4.0 scale) throughout their graduate studies.

Degree requirements for required coursework are outlined in the study plan for M.S. Plan I students (see Appendix 3).

In addition, M.S. students in immunology are expected to:

- Present yearly a research poster at the Annual Graduate Group Retreat (2nd year and above).
- Participate in the events organized by the graduate group and actively engage in the various activities of the program.
- Make adequate progress in their research project.

Advancement to Candidacy

Every student must file an official application for *Candidacy for the Degree of Master of Science in Immunology* after completing one-half of their course requirements and at least one quarter before completing all degree requirements. The *Candidacy for the Degree of Master* form can be found in GradSphere. A completed form includes a list of courses the student will take to complete degree requirements. If changes must be made to the student's course plan after she/he/they has advanced to candidacy, their Graduate Adviser must recommend these changes to Graduate Studies.

Students must have their Graduate Adviser and Thesis Committee Chair sign the candidacy form before it can be submitted to Graduate Studies. If the candidacy is approved, Graduate Studies will send a copy to: The Thesis Committee Chair, the appropriate graduate staff person, and the student. If Graduate Studies determines that a student is not eligible for advancement, the program and the student will be told the reasons for the application's deferral. Some reasons for deferring an application include: grade point average below 3.0, outstanding "I" grades in required courses, or insufficient units.

Plan I (M.S. degree by thesis)

Students must identify a sponsoring faculty member for admission to the M.S. degree program. Upon entering the program, the student will conduct coursework and research under the guidance of the identified Major Professor. The degree requires completion of course work as outlined in the Degree Requirements (see study plan at Appendix 3) and a written thesis. A minimum of 30 units of course work is required of which at least 12 must be in graduate level (200) courses with not less than 12 units in graduate research (courses numbered 299). As soon as possible, but no later than spring quarter of the first year, the student, in consultation with their Major Professor and Graduate Advisor, will identify a Thesis Committee. The student must meet regularly, but at least once a year, with their Thesis Committee. Under this plan, students will submit a written thesis to Graduate Studies following approval by all members of their Thesis Committee in a timely manner, usually within 2 years of study.

The M.S. Thesis Committee (Plan I) The M.S. Plan I student, in consultation with his/her/their Major Professor and Graduate Advisor, nominate 3 faculty to serve on the Thesis Committee. The Major Professor serves as the Chair of the committee. These nominations are submitted to Graduate Studies for formal appointment in accordance with Graduate Council policy (Service on Advanced Degree Committees).
An example of a M.S. Thesis can be obtained from the GGI administrator Erin Kent. In contrast to the Ph.D. dissertation, a M.S. Thesis does not necessarily have to contain chapters that are of sufficient quality to warrant peer-reviewed publication. However, it has to demonstrate completion of novel scholarly activity. The thesis must be submitted to the entire committee for review and approval. All Thesis Committee members must sign the thesis title page to certify their approval. Please note the deadlines for submission: https://grad.ucdavis.edu/preparing-filing-your-thesis-or-dissertation.

Plan II (M.S. degree by comprehensive examination)

GGI currently does not admit students to the M.S. Plan II. However, students that may want to change from the Ph.D. to the M.S. degree will be considered for the M.S. II after discussion with their mentor and graduate advisor. The program requires completion of 36 units of upper division and graduate course work; at least 18 of the 36 units must be earned in graduate courses in the major field; however, no more than 9 units may be in research courses. Under this plan passing of a comprehensive final examination is required of all students in order to obtain the M.S. The exam consists of two components: preparation of a written scientific essay and an oral examination on materials covered in the curriculum.
Please refer to the GGI Degree Requirements for details regarding the M.S. Plan II.

The M.S. Comprehensive Exam (Plan II) Under exceptional circumstances a student enrolled in the GGI Ph.D. (or M.S. Plan I) program might request to change their degree objective to a M.S. Plan II. If recommended by the student's Graduate Advisor, in consultation with their Major Professor, a three-faculty member Comprehensive Examination Committee will be assembled to conduct a comprehensive examination that covers depth and breadth of knowledge in immunology, and includes both a written and oral component. The M.S. Plan II student, in consultation with his/her Major Professor and Graduate Advisor, nominate the Examination Committee to the GGI Executive Committee for approval.

A Graduate Studies-approved Ph.D. Qualifying Examination Committee (see Ph.D. program) can serve as the Masters Plan II Comprehensive Examination Committee. If the QE Committee fails the Ph.D. student relative to Ph.D. criteria, they may deem performance sufficient to meet the requirements of a M.S. level exam. For details on the M.S. Plan II examination requirements, please refer to the GGI Degree Requirements.

ENROLLMENT AND ENROLLMENT STATUS

Registered Student Status

University policy requires continuous registration for students from the first quarter of enrollment in a program until completion of the degree. To be considered a registered student, students must be enrolled in coursework or 299 (research) units and pay tuition and fees for fall, winter, and spring quarters. Unless on approved part-time status, full-time registration in at least 12 units is required. Students do not enroll in units in the summer.

There are some special registration statuses, such as Filing Fee or the Planned Educational Leave Program (PELP), where students do not register. If you are considering one of these options, please reach out to your academic advisor and graduate program administrator.

Filing Fee Status

Filing fee is an optional, one-time, non-registered status available to graduate students who have advanced to candidacy and completed all degree requirements except for the final administrative/clerical (non-research) steps. This includes taking the MS Comprehensive Exam or filing your thesis/dissertation. Filing Fee is **not** intended for students who are still in the process of completing/writing their thesis/dissertation/project and/or still require committee review of their final draft. See the Policy on Administration of Filing Fee (GS2022-02) for more details. Students in this status pay a $192 Filing Fee (in lieu of enrollment fees).

To be eligible for filing fee status:

- Enrolled in the previous academic quarter (Fall, Winter, or Spring), including enrolled in In Absentia. Students returning from PELP are not eligible for Filing Fee.
- Advanced to Candidacy
- Completed all coursework and degree requirements, except the final requirement(s)
- Completed all research
- Completed a final draft of the thesis or dissertation that has been reviewed by your entire committee (not required for students completing a comprehensive exam).

More information on Filing Fee can be found here: https://grad.ucdavis.edu/filing-fee.
You must either be registered or on filing fee when you submit your dissertation or thesis (or take your M.S. comprehensive exam).

If students do not file their thesis or dissertation by the end of the filing fee period, they are required to register and pay full fees. If they do not fulfill all degree requirements, take the required additional coursework and/or examinations, and re-advance to candidacy, they may be disqualified from the program.

Planned Educational Leave Program (PELP)

The Planned Educational Leave Program (PELP) allows students to take a temporary pause in enrollment and academic work, while guaranteeing return to their program to resume their studies. The purpose of PELP is to increase a student's potential for successfully completing their academic program by allowing time to pursue other activities that will assist with: clarifying educational goals; job opportunities away from campus (not related to academic research); and time to resolve personal, financial or medical concerns.

To be eligible for PELP:

- Continuing graduate students are eligible to participate in PELP for up to 3 quarters, with the approval of an academic advisor and Graduate Studies.
- New graduate students are not eligible to participate in PELP their first term of instruction.

More information on PELP can be found here: https://grad.ucdavis.edu/planned-educational-leave-program-pelp.

What is the difference between PELP and FILING FEE Status?

PELP is for those students who have not completed all their requirements, who still need to use University facilities, and who will be away from campus from 1 to 3 quarters. This is for students who intend to return to campus and enroll in classes. Filing fee is for students who have advanced to candidacy, no longer need University facilities, and only need to submit their dissertation (or take their M.S. comprehensive exam or submit their thesis).

Family and Medical Leave Options for Funded Graduate Students

The Graduate Studies *Policy for Family and Medical Leave Accommodation for Graduate Students with Funding* (GS2015-01) is designed to support communication and cooperation between students, faculty and department personnel and the good-faith efforts of all to accommodate outside demands so that students can successfully complete their program of study. Because graduate student support and employment is often variable by quarter, and because most graduate student employees do not meet the eligibility requirements for the Family and Medical Leave Act (FMLA), it is the intention of this policy to provide a consistent and equitable leave accommodation for medical and familial needs.

While the Planned Educational Leave Program (PELP) remains available to any student, the leave policy is offered as an alternative for students who are able to benefit from continuous enrollment in order to receive financial support during short periods where leave is appropriate.

FUNDING GRADUATE SCHOOL

Overview

Graduate students may be offered various employment opportunities during their time in the program. These may include Academic Student Employee (ASE) positions (ex. Teaching Assistant or Reader) or a Graduate Student Researcher (GSR) position. More information can be found here: https://grad.ucdavis.edu/student-employment.

Before you join a lab, talk with your prospective mentor about their financial situation. How will you be supported currently and for the duration of your studies? Are there expectations for alternative employment (ex. they expect you to TA once a year, not at all, or etc.)? Students should keep in mind that most grant support is subject to fluctuation and may not always be guaranteed.

If you need to TA, you should look for positions one to two quarters in advance. While GGI shares open TA positions we become aware of, we are not responsible for identifying TA positions for you. If the need arises, you must take an active role in the process. HandShake is a useful resource in identifying employment opportunities. Onboarding is also a great time to ask about expectations in the lab (ex. requesting time-off, lab policy/procedures, and etc.).

As an employee you will receive official written notice of appointment outlining the terms and conditions of employment, in accordance with the relevant collective bargaining agreement. A GSR hire letter should be provided by your major professor's hiring department. If hired as an ASE, you will receive a letter from the department hiring you as a TA or Reader. Keep these letters for your records.

Salary scales for employment titles can be found here: https://www.ucop.edu/academic-personnel-programs/compensation/. During terms in which you are employed as an ASE and/or a GSR, your compensation will be governed by the collective bargaining agreement(s) which cover your employment title. Please note the pay scale shows salary at 100% FTE. Employees may qualify for experience-based increases pursuant to the collective bargaining agreements. *Note: For GSRs, the experience-based increases only apply to SP1-3. Once at SP3, there is no expectation of an increase*.

Fellowship applications for GSR Trainee/Fellows, in the BR unit, open a year in advance of them being awarded. Ph.D. students are often competitive for NIH T32s and NIH F30/F31 awards. For your convenience, a list of UCD T32s is included in this handbook, as well as information on how to apply for an NIH F30 award. If you need a GGI program specific letter for an NIH F31/F30 application, please reach out to the graduate program administrator.

Research Training Grant Programs
UC Davis maintains Research Training Grant Programs that provide specialized training and financial support.
https://gradstudies.ucdavis.edu/training-grant-support-services.

UC Davis Chemical Biology Program:
https://reporter.nih.gov/search/ZfqB5LTcOk2HxCQGTVIzdQ/project-details/10618869
Training Program in Vision Science Program:
https://reporter.nih.gov/search/vnr5Sp6csUGuNrQdl3ASGQ/project-details/10479903
UC Davis Comparative Oncology Training Program:
https://reporter.nih.gov/search/ZfqB5LTcOk2HxCQGTVIzdQ/project-details/10474468
UC Davis DVM/PhD Medical Scientist Training Program:
https://reporter.nih.gov/search/ZfqB5LTcOk2HxCQGTVIzdQ/project-details/10641812
IMSD at UC Davis:
https://reporter.nih.gov/search/ZfqB5LTcOk2HxCQGTVIzdQ/project-details/10553192
Training Program in Pharmacology:
https://reporter.nih.gov/search/ZfqB5LTcOk2HxCQGTVIzdQ/project-details/10656570
Training Program in Comparative Lung Biology and Medicine:
https://reporter.nih.gov/search/ZfqB5LTcOk2HxCQGTVIzdQ/project-details/10676973
Learning, Memory, and Plasticity (LaMP) Training Program:
https://reporter.nih.gov/search/ZfqB5LTcOk2HxCQGTVIzdQ/project-details/10614615
Comparative Medical Scientist Training Program:
https://reporter.nih.gov/search/ZfqB5LTcOk2HxCQGTVIzdQ/project-details/10554734 (post DVM-PhD)
Advanced Training in Environmental Health Sciences:
https://reporter.nih.gov/search/ZfqB5LTcOk2HxCQGTVIzdQ/project-details/10628894
Animal Models of Infectious Disease Training Program:
https://reporter.nih.gov/project-details/10458773
Training Program in Molecular and Cellular Biology:
https://reporter.nih.gov/project-details/10412974
Training Program in Basic Neuroscience:
https://reporter.nih.gov/project-details/10436896
Training Program in Basic and Translational Cardiovascular Science:
https://reporter.nih.gov/project-details/10442646
UC Davis DVM/PhD Medical Scientist Training Program:
https://reporter.nih.gov/project-details/10421430
MUSCLE: MUsculoSkeletal Clinical Learning Experience Transdisciplinary Musculoskeletal Research Training Program:
https://reporter.nih.gov/search/vnr5Sp6csUGuNrQdl3ASGQ/project-details/10612446

*NIH RePORTER is an excellent resource to learn more about these training grants. Calls for training grants go out at different times during the year. If you are interested in a specific training grant, reach out to their administrator or Program Director to learn more. Being awarded a T32 is prestigious. This should be reported on your CV and your annual Student Progress Assessment.

Apply for External Fellowships (Ex. NIH F30). If you are awarded an External Fellowship, please make sure you review the UC Davis Matching Commitment Program to see if you are eligible for a match. Note: If you qualify for a matching commitment on a multi-year award, you MUST apply for the match annually.

While GSR positions are a convenient way to pay for your graduate education – in the end you are paid for the work you do in the laboratory earning your degree – students are strongly encouraged to apply for intra and extramural fellowships and scholarships whenever they can. This is not only to help your mentor pay the bills, but more importantly increases your competitiveness when you are finished with your degree and try to get the next position, be it in industry or academia.

Most students use a mix of support throughout their studies; these include **Financial Aid, Teaching Assistantships, Graduate Student Researcher (GSR) Assistantships, Fellowship, Scholarships, and Grants.** There are different procedures for applying for each type of financial assistance. It is essential that you apply as early as possible for financial support and keep yourself informed about the various opportunities (large and small).

Graduate Studies Internal Fellowship Application

Each year Graduate Studies calls for applications for over 100 fellowships and scholarships across the disciplines. Awards are made once per year for the following academic year based on academic merit. Applications are available online at:

https://grad.ucdavis.edu/continuing-graduate-student-internal-fellowship-application

A complete list of fellowships/scholarships can be found:
https://grad.ucdavis.edu/annual-internal-fellowship-competition-continuing-graduate-students

Applications include:

- A statement of purpose and personal history statement.
- Three (3) Letters of Recommendation (recommenders should be registered by December 20th, so that letters are received by the application deadline)
- Continuing student deadline: January 15th at 11:59 pm PST.

Current students are encouraged to apply for internal fellowships every year. The Graduate Group in Immunology Executive Committee ranks each applicant from GGI students and submits this ranking to the Campus. A group of faculty reads and further ranks applications from students across all the graduate programs.

Awards are made as a mark of honor, primarily on the basis of scholarship and promise of outstanding academic and professional contribution. In evaluating applications, consideration is given to the extent and quality of previous undergraduate and graduate work, evidence of ability in research or other creative accomplishment, evidence of intellectual capacity, and promise of productive scholarship. Items to be included in this evaluation are: graduate grade point average, academic transcripts, statement of purpose, letters of recommendation, and other documentation, such as publications and awards. The minimum cumulative graduate grade point average required for a stipend, in-state fee/tuition award, or a nonresident supplemental tuition fellowship is 3.0. The minimum required grade point average to hold an academic appointment is 3.0. Financial need or the availability of other sources of support in your graduate program is not relevant to the evaluation of academic merit.
Financial need is a component of the eligibility criteria for many fellowships, and for all forms of financial aid (including work-study).

Graduate Student Travel Awards

Graduate Studies and the Graduate Student Association (GSA) both offer travel awards.

Graduate Studies Travel Awards:

These awards are for travel to professional meetings. There are fall and spring awards. (https://grad.ucdavis.edu/travel-awards).
Eligibility: Graduate students at or near the completion of their studies who have not previously received this award and who are presenting their research (acceptance of the abstract may be pending at the time of application) are eligible. Students must be in good academic standing and maintain a minimum GPA of 3.0. Applicants must be registered graduate students. Students on PELP (Planned Educational Leave Program) and filing fee status are not eligible for this award. Travel must take place during the award period (see above) and before the student submits their thesis or dissertation.

Graduate Students must submit a completed application through InfoReady. Then, each program ranks the applicants and submits this to the Campus. Be aware of the bi-yearly deadlines!

GSA Travel Awards:

Graduate students attending conferences or professional development are eligible to apply for a GSA Travel Award.
https://gsa.ucdavis.edu/funding-opportunities

Graduate Group in Immunology Fellowship Support

Each entering graduate student in the Ph.D. program who conducts laboratory rotations during the Fall quarter of their first year is given financial support covering stipend, tuition/fees, health insurance, and if applicable, non-resident supplemental tuition. Students in the M.S. Degree programs are not supported financially by the group, or their mentor.

FAFSA & Financial Aid

If you need advice or information concerning federal financial aid please visit the following website for information: https://financialaid.ucdavis.edu/graduate

> **NOTE:** Graduate students who are US citizens, permanent residents or immigrants are required to file a "Free Application for Federal Student Aid" (FAFSA) as early as possible, but no later than March 1. This form, submitted directly to the Federal Student Aid Program Office, is used to determine financial need only. Financial need is a component of the eligibility criteria for many fellowships, and for all forms of financial aid. The FAFSA may be obtained from the Financial Aid Office or online: http://www.fafsa.ed.gov.

Work-Study Support

The Graduate Group in Immunology receives each year from Graduate Studies a certain number of "work-study units" to support **Graduate Student Researchers (GSRs)** with demonstrated financial need. Financial need is established by the filing of FAFSA. This support pays for partial CA-resident fees (international students are not eligible) and partial stipend support. The Major Professor of the student receiving work-study support is expected to provide the additional support to bring the student to the expected level of financial support. Should the number of qualified students requesting work-study support exceed the number of work- study allocations made to GGI, GGI will consider situational "need" as the overriding selection criterion for this award. Simply indicate to the GGI Administrator your desire to be considered for work-study support. More information can be found: : https://gradstudies.ucdavis.edu/faculty-staff/student-financial-support/work-study-graduate-students.

Eligibility

- US Citizen or Permanent Resident
- Filed FAFSA
- Employed as GSR
- Minimum GPA 3.0-in good academic standing
- Registered as full-time graduate student – 12 units

Extramural Funding Opportunities

Funding for graduate education is available from many sources, including the National Science Foundation (NSF), The National Institutes of Health (NIH) and the American Association for the Advancement of Science (AAAS). Another good source are smaller organizations such as "The American Association for Immunologists (AAI)" and the American Society for Microbiology (ASM). Ask your Major Professor what organizations s/he belongs to – and check out their websites! Further information can also be obtained from:

Graduate Studies: http://gradstudies.ucdavis.edu/ssupport.

MENTORING GUIDELINES

Revised and endorsed by Graduate Council May 19, 2023

Mentoring is defined as a close relationship between a graduate student and a faculty member who provides guidance, support and research advice in an individualized manner. Mentors use inclusive approaches that acknowledge and affirm diverse identities and backgrounds. Mentors provide holistic support of mentee personal and professional growth and success by providing research training and linking mentees with appropriate resources when needed.

Graduate Council recognizes that the mentoring of graduate students by faculty is an integral part of the graduate experience for both students and faculty. The responsibilities of the faculty mentor are broad and diverse. They include, but are not limited to serving as a role model, advising a student as to course work requirements, and providing formal instruction in a given discipline as well as helping students identify and achieve their individual short and long-term educational goals. While the major professor usually acts as a student's primary mentor, many of the mentoring "functions" described below, may also be performed by other program/group faculty and staff over the course of a student's graduate experience. A corollary to this recognition is that much of the interaction of faculty with all students includes important mentoring components, and we acknowledge that mentees benefit from a network of multiple mentors. Similarly, graduate students have important responsibilities to ensure they are open to and accepting of faculty mentoring and articulate their needs effectively. Thus, it is together that faculty and students identify and discuss their goals and expectations for each other, and outline approaches to reach those goals and satisfy those expectations.

Basic mentoring practices include guiding students through program expectations, protocols of academic conduct, degree requirements, research and teaching, capstone work (such as thesis or dissertation research), and professional development. Mentors should also act to support students with disability and the well-being of mentees, but it is acknowledged that mentors may not have the training to provide psychosocial support. When needed, mentors should help the mentee seek appropriate resources that may include: trained faculty, graduate group Academic Advisors, peer-councilors and support groups, Grad Program Administrators and Chairs, Grad Studies staff (https://grad.ucdavis.edu/mental-health-and-counseling-services) and support programs (https://grad.ucdavis.edu/problems-and-dispute-resolution), or other university resources such as the Ombuds office (https://ombuds.ucdavis.edu/) or student health and counselling services (https://shcs.ucdavis.edu/) and other support (https://ossja.ucdavis.edu/).

Mentors and/or the advising system should provide, and students should acquire, a clear map of program requirements from the beginning, making clear the course work requirements, and expected timelines for completion of all required examinations and capstone requirements.

Mentors should approach the mentor-mentee relationship through these actions:

- Recognizing the possible educational, cultural, systemic, and/or socio-economic disparities affecting their mentee(s) due to their identity and set of circumstances.
- Respecting their mentee(s), including the mentee(s)' identity including race, ethnicity, gender and gender expression, age, visible and non-visible disability, nationality, sexual orientation, citizenship status, veteran status, religious/non-religious, spiritual, or political beliefs, socio-economic class, status within or outside the university, or any of the other differences among people.
- Offering support and advocacy to students of all backgrounds, especially those facing challenges related to racism, injustice, and inequity.

- Making an effort to know your mentee and build a positive relationship based on mutual respect and understanding.
- Establishing concrete and transparent expectations, preferences, and goals with your student.
- Recognizing boundaries and priorities your student may have within or outside of the university.
- Respecting your student's private information by not disclosing it unless otherwise stated or required by policy.
- Assisting students in the identification of diverse support networks (people who provide meaningful representation and can help the student for different aspects of their tenure at UCD).
- Being a student's advocate and assisting the student in a timely manner in finding sources to support dissertation research (teaching assistantships, research assistantships, fellowships, research needs and required resources, including desk and/or laboratory space).
- Addressing problems or challenges that could affect completion of the degree as soon as they become aware of them.
- Tailoring, modifying or adjusting the faculty member's mentoring style to the particular needs of each graduate student, to a reasonable extent.
- Educating themselves on microaggressions and avoid committing them towards your mentee; undertake implicit bias training.
- Encouraging an open exchange of ideas, including by empowering students to independently follow research ideas of their own whenever feasible.
- Checking regularly on progress. Graduate Council recognizes each graduate program/group, mentor and mentee should agree upon a reasonable frequency of meetings and communications, which may vary widely by discipline, but should not usually occur less than at least once per quarter.
- Encouraging and giving feedback on written work, oral presentations and experimental work in a timely manner within a mutually agreed upon time frame, and consistent with Graduate Council policies.
- Providing and discussing clear criteria for authorship of collaborative research, consistent with Graduate Council policies on co-authorship.
- Encouraging participation in professional meetings of regional groups as well as of learned societies and facilitating interactions and networking with other scholars, on campus and within the wider professional community.
- Helping the student in identifying appropriate resources for career guidance, providing help with preparations of CV and job interviews, as well as writing letters of recommendation in a timely manner.
- Empowering and encouraging the student in seeking their own career paths and supporting the student independent of the chosen career paths they identify.
- Participating regularly in mentorship training, including diversity, equity, and inclusion training so as to provide inclusive approaches to mentoring that acknowledge and affirm diverse identities and backgrounds.
- Maintaining professionalism and open-mindedness, even when confronted with difficult conversations.
- Avoiding intended or unintended misuse of authority.
- Refer mentees to relevant resources to support their well-being.

As partners in the mentoring relationship, graduate students have responsibilities. Mentees should approach the mentor-mentee relationship through these actions:

- Respecting their mentor, including their mentor's identity including race, ethnicity, gender and gender expression, age, visible and non-visible disability, nationality, sexual orientation, citizenship status, veteran status, religious/non-religious, spiritual, or political beliefs, socio-economic class, status within or outside the university, or any of the other differences among people.
- Making an effort to know their mentor and building a positive relationship based on mutual respect and understanding.
- Establishing concrete and transparent expectations, preferences, and goals with their mentor.
- Recognizing boundaries and priorities their mentor may have within or outside of the university.
- Respecting their mentor's private information by not disclosing it unless otherwise stated or required by policy.
- Educating themselves on microaggressions and avoid committing them towards their mentor.
- Seeking assistance from multiple individuals/organizations to fulfill the mentoring roles described above, because one faculty member may not be able to satisfy all of a student's mentoring needs.
- Understanding and clearly articulating to their mentors their own mentoring needs and how they change through their graduate tenure.
- Respecting their mentor's other responsibilities and time commitments.
- Communicating regularly with their mentors, especially their major professor, including updates on progress, challenges, needs, goals and expected completion timelines.
- Completing tasks in a timely fashion and following mutually agreed upon timelines and informing mentors about expected absences and delays before they occur.
- Participating in departmental and graduate program/group community including attending activities, lectures, and events.
- Seeking constructive criticism and feedback on academic work and acting in a manner that will encourage mentors to see them as colleagues.
- Seeking information, exploring career options and developing clear career goals.
- Participating regularly in mentee-ship training, including diversity, equity, and inclusion training.
- Maintaining professionalism and open-mindedness, even when confronted with difficult conversations.

While we have tried to provide general examples of what mentoring means, we recognize that each discipline has its own special set of mentoring needs and challenges. Therefore, Graduate Programs/Groups may set specific guidelines to further define the individual roles of Graduate Academic Advisors, major professors, faculty supervisors, and staff program/group advisors (see Appendix A for an example). Graduate programs/group mentoring guidelines and activities will be reviewed during the program review process.

Additional Resources and Guidelines

E. Graduate Studies Mentor Resources
F. Graduate Studies Mentee Resources
G. Graduate Mentoring Initiative
H. Mentoring Up
I. Graduate Program Resources
J. Mentor/Mentee Consultations (Director of Mentoring, Graduate Studies)

Appendix A: Example Breakdown of Roles and Responsibilities

Academic advisors are expected to:

- Communicate degree requirements to advisees.
- Respond promptly to communications from advisees.
- Set clear expectations for the timeline of degree progress.
- Review mentees' degree progress on an annual basis.
- Meet with students' academic advisory committee as required by the graduate program.

Major professors are expected to:

- Set clear and reasonable expectations for their students.
- Respond promptly to communications from students.
- Review expectations and progress on a regular basis.
- Provide timely feedback on students' preparation of publications, conference presentations, exhibitions, performances, or comparable communication with the academic community.
- Establish in advance a mutual understanding on criteria for co-authorship of collaborative work consistent with Graduate Council policy, if applicable.
- Hold meetings of students' dissertation committees as required by the graduate program.
- Provide clear guidelines for starting and finishing dissertation or thesis work
- Meet individually with each of their students to review degree progress, goals and other topics on a quarterly basis.

Faculty supervisors of graduate students are expected to:

- Set clear and reasonable expectations for their supervisees.
- Respond promptly to communications from supervisees.
- Ensure justifiable resource allocation among supervisees.
- Establish in advance a mutual understanding on criteria for co-authorship of collaborative work consistent with Graduate Council policy.
- Review supervisees' performance on an annual basis.
- Comply with applicable policies and laws regarding employer-employee relationships including non-discrimination and sexual harassment laws, and applicable Collective Bargaining agreements and the Higher Education Employee Relations Act.

CAMPUS-WIDE PROGRAMS, RESOURCES, AND CENTERS

The UC Davis campus offers a wide range of organizations, benefits, and activities to complement your academic work, to entertain you, and to give you support. Below are a **small** sample of campus resources and information that might interest you. All of these organizations and dozens more can be accessed through the UC Davis Web site at https://www.ucdavis.edu/academics/teaching-learning/student-resources#footer.

Establishing California Residency

If you are a U.S. citizen, originally from out-of-state, it is important that you file for California residency at the conclusion of your first year of study at UC Davis. The information about becoming a California resident for fee purposes can be found at: https://registrar.ucdavis.edu/tuition/residence
If you have questions, contact the Residence Deputy in the Registrar's Office at residencedeputy@ucdavis.edu. You are required to file a petition with the Registrar's Office to change your status from nonresident to resident.

Support for International Students

The best source of information for international students is the Services for International Students and Scholars Office (SISS), (530) 752-0864, siss@ucdavis.edu, https://siss.ucdavis.edu/. It is important that you contact SISS before Changing Major, Changing Degree Objective, going on PELP (Planned Educational Leave Program), and going on Filing Fee. Changes in your academic status could change your visa.

UC Davis Computing Account & IET Support Desk
https://iet.ucdavis.edu/support

IET Support Services provides world-class service for Information and Educational Technology's enterprise systems and services. Leveraging ever-changing technology, data, and knowledge, the Support Services team enhances the value of the customer experience in support of the UC Davis mission to teach, learn, and research.

Call: (530) 754-HELP (4357), Email: ithelp@ucdavis.edu, Chat: Start a chat

UC Davis Transportation Services
https://transportation.ucdavis.edu/parking/permit

Student Parking Options

- Daily Rates are paid for through the AMP Park app. Be sure you are registered with your UC Davis email address in order to access affiliate rates. Daily/hourly parking can also be purchased at the COSMOS terminals, at the non-affiliate/visitor rate.

- Students living in residence halls and campus-affiliated privatized housing are not eligible for affiliate rates. Most privatized housing residents are provided parking accommodations to park near their residences. For more information, visit our campus resident parking page.

UC Davis Campus Map
https://campusmap.ucdavis.edu/

Academic Success & Support

Graduate Studies: https://grad.ucdavis.edu/

Graduate Studies provides academic, financial, personal, and professional support services that support the success and well-being of UC Davis graduate students and postdoctoral scholars.

Get to know what Graduate Studies Senior Academic Advisors (SAAs) can do for you: https://gradstudies.ucdavis.edu/senior-academic-advisors-graduate-studies

Office of the University Registrar: https://registrar.ucdavis.edu/

Registration, academic records, tuition and fee assessment & residence.
Quarters, dates, and deadline. https://registrar.ucdavis.edu/calendar/quarter.cfm

Office of Student Support and Judicial Affairs (OSSJA): https://ossja.ucdavis.edu/

Upholds standards of academic honesty and responsible behavior, promotes student development, and assists students in need.
Provides services for students in crisis or distress. If you are concerned about a fellow student. File a CARE report.

UC Davis University Writing Program: GWAC

Graduate Writing Across the Curriculum (GWAC) support writing activities by graduate students and graduate faculty in most fields of graduate study.
https://writing.ucdavis.edu/graduate-writing-across-curriculum

Student Disability Center

https://sdc.ucdavis.edu/

Libraries

https://www.library.ucdavis.edu/

Funding & Employment

Funding & Financial Support for Graduate Students

https://grad.ucdavis.edu/financial-support

UCPath & Student Employees

https://ucpath.ucdavis.edu/student-employees

Fellowship Funding, Taxation, & 1098-T

https://afs.ucdavis.edu/student-resources/accounting/tax-info

Health & Wellbeing

UC Davis Student Health Insurance Plan

Registered students are automatically enrolled in UCSHIP unless they submit a waiver. Coverage dates and benefit information is listed on the website.

***** Services at the Student Health and Counseling Services are available to all students, even if you waive enrollment in UCSHIP.*****

Student Health and Counseling Services

https://shcs.ucdavis.edu/

Health 34: Reducing crisis through compassion and kindness

Health 34 is a team of healthcare educators and providers who will deliver free, non-emergency support and service navigation for mental health and basic medical care to every segment of the UC Davis campus.

https://fire.ucdavis.edu/health34

Safe Party

https://safeparty.ucdavis.edu/

Aggie Compass: Helping Meet Your Basic Needs

https://aggiecompass.ucdavis.edu/

The Food Pantry (student food assistance)

https://thepantry.ucdavis.edu/

Campus Recreation Resources

https://campusrecreation.ucdavis.edu/

Professional Development

Internship and Career Center

https://icc.ucdavis.edu/

GradPathways Institute for Professional Development

https://gradpathways.ucdavis.edu/

Professors for the Future

https://gradpathways.ucdavis.edu/pftf

Other Important Resources

Confidential and Non-Confidential Support Services

https://sexualviolence.ucdavis.edu/get-support

Confidential: University CARE Advocate, Student Health and Counseling Services (SHCS), Academic and Staff Assistance Program (ASAP), Women's Resources and Research Center (WRRC), LGBTQIA Resource Center, OMBUDS Office, and Family Protection and Legal Assistance Clinic

Non-Confidential: HDAPP, OSSJA, SISS, UC Davis Title IX Officer

Harrassment & Discrimination Assistance and Prevention Program (HDAAP)

Supports the University's commitment to a harassment and discrimination-free work and learning environment for all.

https://hdapp.ucdavis.edu/

UC Davis OMBUDS Office/Mediation Center

https://ombuds.ucdavis.edu/

Confidential, independent, impartial, and informal problem solving & conflict management resource for all members of the UCD campus community.

Assist by listening, clarifying issues, identifying polices and resources, and by providing coaching and communication strategies.

Parenting and Childcare

https://grad.ucdavis.edu/parenting-and-childcare

Cross Cultural Center

397 Hutchison Drive, Davis, CA 95616, (530) 752-4287, ccc@ucdavis.edu

Harassment & Discrimination Resources

https://hdapp.ucdavis.edu/

This includes Student Judicial Affairs and the Sexual Harassment Education Program

Lesbian, Gay, Bisexual, Transgender Resource Center

University House Annex, Room 105, 752-2452, https://lgbtqia.ucdavis.edu/

Women's Resource and Research Center

First Floor, North Hall, (530) 752-3372, http://wrrc.ucdavis.edu. The WRRC offers discussion groups including a support group for women graduate students.

AB 540 & Undocumented Student Center

1003 Student Community Center, 752-9538, https://undocumented.ucdavis.edu/

INFORMATION ABOUT LABORATORY AND ANIMAL USE

Animal Use and Care Protocols

If you plan to conduct research that uses live, vertebrate animals, you must first obtain approval from the ANIMAL USE AND CARE ADMINISTRATIVE ADVISORY COMITTEE (AUCAAC). You cannot initiate your project, nor can you purchase your animals until you and your Major Professor/Principal Investigator have received written documentation that your protocol has been approved. AUCAAC review takes an average of 30 days, but can take as long as six weeks. You can get blank Animal Use and Care Protocol forms from the Environmental Health and Safety Office (TB 30; 752-2364), or from their web site: http://ehs.ucdavis.edu/

The completed protocol must be signed by your Principal Investigator (usually your Major Professor) and the chair of your department. You then submit your completed form to the AUCAAC Secretary in care of the Campus Veterinarian (TB 30). Questions about animal protocols should be directed to the AUCAAC Secretary, 752-2364. Once your protocol has been approved, you should post the first page of the protocol form in the facility where your animals are housed.

Animal Handling Course

If you are interested in learning how to handle and use lab animals, you can sign up with the Campus Veterinarian (530-752-2364) for the LABORATORY ANIMALS SKILLS COURSE. Offered in response to demand, this course may be given as often as monthly during the academic year, and includes two to three hours of instruction on the care and handling of rabbbits, rats, mice, guinea pigs, and hamsters. Records are kept on file of all students who have completed the training.

Campus Animal Facilities

There are animal facilities located throughout the campus. In general, the procedures enforce at each facility vary with the type of animals housed in that facility, the type of experiments that are to be conducted with these animals, and the usual protocol requirements. Your best sources for information about animal facilities are your Major Professor, the faculty member who supervises the facility, and the facility supervisor and support staff.

Laboratory Safety Information

Students have the right and responsibility to know what hazards they may encounter while pursuing their education and what measures to take to protect themselves and others.
Campus policy requires all UCD employees and students to receive safety information and training. This training encompasses chemical, biological, animal, physical and radiation hazards, including specific safety training in unit unique protocols and instrumentation.

You will be required to familiarize yourself with the Injury/Illness Prevention Program (IIPP) and take the Hazardous Chemical Class at EH&S. Your Major Professor, supervisor, unit safety officer, or the Department Safety Coordinator will be able to assist you in required training, EH&S classes, and documentation requirements for your projects and safety. If you TA or supervise students, you will be responsible for their safety and safety training. All TA's are to attend the TA Safety Training Class offered each fall. There will be Required Annual Training for Chemical, Biological, Evacuation Procedures and General Safety training for all employees and students. Always remember that you are not only responsible for your own safety, but also the safety of your fellow colleagues and students.

Appendix 1

Sample Study Plan for Ph.D. Students in the Graduate Group in Immunology

Year 1	Class Code	Classes	Units	Other events
Fall	IMM201 IMM201L IMM296 IMM291 PMI298	Introductory Immunology (Core) Laboratory Rotations (Core) Non-Participatory Seminar (Adv. Topics in Immunology) Participatory Seminar 1 (Seminar in Immunology) Participatory Seminar 2 (Breakfast Club); required	4 4 1 2 1	GGI Bootcamp GGI Orientation TA Orientation Meet your Adviser Complete Rotations & Identify a Major Professor
Winter	IMM202L IMM293 Variable	Laboratory Rotations (Core) Current Concepts in Immunology (Core) MMI 200D (elective)***	5 4 3	Annual Research Retreat & GGI Recruitment
Spring	IMM 203 IMM 204 BIM 209 Variable	Cancer Immunology (Selective)**** Innate Immunity (Selective)**** Science Integrity (recommended elective) *** 299 Research Units	2 2 2 6	Required Student Progress Assessment (due 6/30)
Summer		Students do not register in the summer		Laboratory Research Develop Study Plan
Year 2				
Fall	Variable PMI 203 Variable Variable	Elective*** or Selective**** Experimental Design & Data Analysis (recommended elective) *** 299 Research Units Non-participatory Seminar	Variable 2 Variable Variable	GGI Chair-Student Town Hall meeting
Winter	RAL209 Variable	RAL209 (required selective – 2nd year) 299 Research Units	3 Variable	Annual Research Retreat & GGI Recruitment (prepare first poster) Meet with Adviser – identify potential QE committee members
Spring	Variable PMI298 IMM 297 Variable	299 Research Units Participatory Seminar (Required Breakfast Club/QE Prep) Mucosal Immunology**** Additional Elective	Variable 1 2	Required Student Progress Assessment (due 6/30)
Summer		Students do not register in the summer		Pass QE & Advance to Candidacy Identify Dissertation Committee Laboratory Research

GGI Ph.D. Study Plan

All Ph.D. students must take 2-3 seminar units per year, one participatory and one non-participatory, until they advancement to candidacy.
*When a Designated Emphasis (for example Biotechnology or Vector-Borne Diseases) is pursued, all required class work (for the DE) must be completed **in addition** to the required class work for Immunology before sitting the qualifying examination (QE). 1 – 2 classes can still be ongoing in the quarter in which the QE is held. In that case, advancing to candidacy will occur only after classes are completed.
** Each quarter (FWS) enrollment has to be for a minimum of 12 units
*** Elective courses to be chosen in discussion with mentor and student academic adviser. A minimum of 8 units is required. These can include additional selectives, statistics, scientific writing, or other classes that provide the student with additional research tools and skill sets. Should be upper division undergrad (100 series) or grad courses (200 series).
**** Selective Course Offerings:

Selective Course	Quarter Offered
IMM 203	Spring Quarter, alternate years (2024, 2026, 2028 etc.).
IMM 204	Spring Quarter, alternate years (2024, 2026, 2028 etc.).
IMM 210	Winter Quarter, alternate years (2023, 2025, 2027, etc.).
IMM 294	Winter Quarter, alternate years (2024, 2026, 2028 etc.).
IMM 297	Spring Quarter, alternate years (2023, 2025, 2027 etc.).
ETX 260	Fall Quarter, offering determined by department.
RAL 209	Winter Quarter, every year.
NUT 251	Winter Quarter, offering determined by department.

Class offerings & availability subject to change without notice.

Appendix 2

Sample Ph.D. Study Plan for Dual-Degree (M.D./Ph.D. or D.V.M./Ph.D.) students in the Graduate Group in Immunology

Dual Degree students should identify a lab/PI prior to beginning graduate school

Year 1	Class Code	Classes	Units	Other events
Fall	IMM201 IMM201L IMM296 IMM291 PMI298	Introductory Immunology (Core) Work in Progress (Core) Non-Participatory Seminar (Adv. Topics in Immunology) Participatory Seminar 1 (Seminar in Immunology) Participatory Seminar 2 (Breakfast Club); required	4 4 1 2 1	Identify Major Professor before the start of Fall GGI Bootcamp GGI Orientation TA Orientation Meet your Adviser
Winter	IMM293 RAL 209 Variable Variable	Current Concepts in Immunology (Core) RAL209 (required Selective 1) Outside area courses*** 299 Research Units	5 4 Variable Variable	Annual Research Retreat & GGI Recruitment
Spring	Variable Variable Variable Variable	Selective 2 Outside area courses*** 299 Research Units Participatory Seminar (Breakfast Club); required	Variable Variable Variable 1	QE Committee due to Graduate Administrator (6/1) Required Student Progress Assessment (due 6/30) Schedule QE (Summer – Fall) QE Prep
Summer		Students do not register in the summer		Pass QE & Advance to Candidacy Identify Dissertation Committee Laboratory Research
Year 2 to Completion	Variable Variable	299 Research Units Seminars	12/quarter**	GGI Chair-Student Town Hall meeting Experimental Work Annual Research Retreat & GGI Recruitment (poster presentation required) Meet with Dissertation Committee Required Student Progress Assessment

GGI Ph.D. (dual degree) Study Plan

IMM 202L and elective courses are waived for Dual-Degree Ph.D. students.

All Ph.D. students must take 2-3 seminar units per year, one participatory and one non-participatory, until they advancement to candidacy.

*When a Designated Emphasis (for example Biotechnology or Vector-Borne Diseases) is pursued, all required class work (for the DE) must be completed **in addition** to the required class work for Immunology before sitting the qualifying examination (QE). 1 – 2 classes can still be ongoing in the quarter in which the QE is held. In that case, advancing to candidacy will occur only after classes are completed.

** Each quarter (FWS) enrollment has to be for a minimum of 12 units.

*** Elective courses are not a requirement for dual-degree Ph.D. students. However, an outside area of study must be defended in the QE and enrollment in additional classes is recommended. Courses to fulfill DE requirements (if applicable) can satisfy "outside area courses."

**** Dual-Degree Ph.D. students are required to take 2 Selective Course offerings, for a minimum of 4-7 units. The quarter selectives courses are offered can be found in Appendix 1. ***Class offerings & availability subject to change without notice***.

Appendix 3

Sample M.S. Plan I Study Plan for students in the Graduate Group in Immunology

Year 1	Class code	Class Title**	Units*	Other events
Fall	IMM201 IMM 201L IMM296 IMM291 PMI298	Introductory Immunology (Core) Work in Progress (Core) Non-Participatory Seminar (Adv. Topics in Immunology) Participatory Seminar 1 (Seminar in Immunology) Participatory Seminar 2 (Breakfast Club); required	4 4 1 2 1	GGI Bootcamp GGI Orientation Meet your Adviser Develop research plan with mentor
Winter	IMM293 RAL209 Variable	Current Concepts in Immunology Selective 1 (RAL209) Elective 1 299 Research Units	4 3 Variable Variable	Annual Research Retreat & GGI Recruitment
Spring	Variable Variable Variable	Selective 2 Elective 2*** 299 Research Units	Variable Variable Variable Variable	Form Thesis Committee & Advance to Candidacy Required Student Progress Assessment (due 6/30)
Summer		Research		Meet with Thesis Committee
Year 2		299 Research Units Non-Participatory Seminar Participatory Seminar Selective 3 & Electives***	12/qtr	GGI Chair-Student Town Hall meeting Experimental Work Meet at least once per year with Thesis Committee Prepare poster for annual retreat Write and submit thesis

GGI Ph.D. M.S. Plan I Study Plan

M.S. Plan I students are required to take one participatory seminar and one non-participatory seminar for each year of enrollment (i.e. 2-3 units/year), three selective courses (6-10 units, and 4-8 units of elective coursework, such as additional GGI selective courses, statistics, scientific writing or other classes that provide the M.S. degree students with additional research tools and skill sets. Should be upper division undergrad (100 series) or grad courses (200 series).

* Each quarter (FWS) enrollment has to be for a minimum of 12 units

**Please note that for each laboratory unit (299 research units), 3 hours of laboratory research time are expected/week. A minimum of 12 units is required for completion of the M.S. degree. Course registration numbers (CRN) are unique for each Major Professor.

*** The quarter selectives courses are offered can be found in Appendix 1. ***Class offerings & availability subject to change without notice***.

Updated by Erin Kent October 2024