UCDAVIS

Graduate Group in Comparative Pathology

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THE BASICS

Welcome to UC Davis and to the Graduate Group in Comparative Pathology (GGCP)! Although academic life is not new to you, we would like to help you become familiar with the UC Davis Graduate Education environment.

Where is Davis?

Davis is a centrally located, small northern California city with a small-town feel. It has a population of 65,000, so you are likely to run into someone you know while buying fresh bread, fruits, and vegetables at the twice-weekly farmer’s market, riding your bicycle around town, or participating in one of the numerous intellectual and cultural activities offered by the city and the University. The climate in the central valley is fairly temperate—summers are hot, sunny, and dry; winters are generally mild and rainy, but can occasionally be chilly. Davis is 15 miles from Sacramento, the state capital, an hour and thirty minute drive from the excitement and culture of San Francisco, and two and a half hours from the snow and camping of beautiful Lake Tahoe.

Airport Information

Davis is twenty miles from the Sacramento International Airport (SMF) and ninety miles from the San Francisco International Airport (SFO). It is easier to fly into Sacramento, since transportation into Davis is less expensive and more straightforward. A taxi ride from the Sacramento airport will cost about $50, or you can make arrangements with the less-expensive Davis Airporter Service to have them meet you and take you to the address in Davis that you request. The ride costs $23 (one-way) for one person and $33 for two people. Contact them at least a day in advance before your arrival at (530) 756-6715 or (800) 565-5153.

Even less expensive than the Davis Airporter is the Yolobus service. Yolobus line #42B leaves the Sacramento airport every hour at twenty minutes after the hour between 6 a.m. and 10 p.m. and arrives at the Memorial Union on campus about forty-five minutes later. The ride costs $1.25 per person. Students with a registration card ride free. Graduate students are supposed to pay for this service, but the drivers never check the registration cards closely.

Go to: www.davisairporter.com
      www.yolobus.com

In addition to Sacramento International Airport, there are two additional airports in the Bay Area. Oakland International Airport is located 77 miles from Davis and San Francisco International Airport is located 85 miles from Davis. Less expensive flights may be found into these two airports.
Housing

This can be one of the biggest headaches for a new graduate student who is unfamiliar with Davis or lives far away. However, don’t worry! We’re here to help. The vacancy rate in Davis is extremely low, so competition for the best houses/apartments/duplexes/etc is stiff and housing prices are expensive. The UC Davis Student Housing Office (530) 752-2033 will provide you with on-campus living and married/family student housing information. The Associated Students of UC Davis (ASUCD) maintains a Community Housing Listing database of all off-campus housing for the Davis community. Call them at (530) 752-1990 or check out their website (see below). If you are an international student, be sure to organize housing as soon as possible.

Go to: www.chl.ucdavis.edu

In addition to campus resources, many property management companies in Davis rent out houses, duplexes, condos, and apartments. King Properties (530) 753-0121; Acadian Properties (530) 753-2303; and Tandem Properties (530) 756-5075 are three of the most popular and more can be found in the local phone book or on the web.

Go to:
www.kingproperties.com
www.acadianmanagement.com
www.tandemproperties.com

The local newspaper Craig’s List Sacramento and daviswiki.com are additional housing resources.

Go to:
http://sacramento.craigslist.org/
www.daviswiki.com

Most returning students begin looking in March or April for places to live in the fall. However, don't worry if you don’t decide to come to UC Davis until later in the spring or even the summer. People are always looking for someone to fill a vacancy in a house or apartment or seeking someone with whom to share a house or apartment. Just check the resources above.

Initial Costs

If you have been offered a research or teaching assistantship (TA), you will not get your first paycheck until about five weeks after you begin work (usually November 1; this is because you must work an entire monthly paycheck cycle before being paid, and pay checks are only issued once per month, so you need to budget wisely). If you have been awarded a fellowship which includes a monthly stipend, you will typically not get your first check until November 1 as well.
Tuition and fees (including health insurance) for California residents is approximately $5,513.54 per quarter for 2014-2015 and for non-residents tuition and fees (including health insurance) is approximately $10,547.54 per quarter. These costs are always subject to change by California Legislature. It is recommended to have at least $900 to $1200 per month set aside for monthly living expenses. Credit cards are not accepted by the University cashier’s office for payment of tuition and fees.

Go to: [http://budget.ucdavis.edu/studentfees/current/index.html](http://budget.ucdavis.edu/studentfees/current/index.html) for the most up-to-date information on tuition and fees and a detail of what the student fees cover including mandatory student health insurance (covered in the fees)

### Getting around town

**Bikes, bikes, and more bikes.** They’re everywhere! Davis is sometimes referred to as “The Bicycle Capital of the United States” because of the large numbers of people who use the bicycle as their main form of transportation. The city is ideal for bike riding with its flat terrain and its wide bike lanes which can be found all over town and on campus. Davis has many bicycle shops to buy new bicycles and used bicycles can be found in the local newspaper (the Davis Enterprise) and on bulletin boards on campus and throughout the town. Bicycles are stolen fairly frequently if not locked, so be sure to invest in a good U-lock and try not to leave your bicycle overnight on campus. One more bike tip: buy fenders. They go over the wheels and prevent water on the ground from creating what is known affectionately as the “Freshmen Stripe” on your back. Bicycling is the most efficient and least expensive way to get around campus. If you choose to drive a car to campus you should become familiar with the parking lot restrictions and costs for student parking permits and be prepared to walk from the lots to inner campus.

The other major form of transportation is the bus. **Unitrans** is the student run bus line that runs throughout the city. Buses leave directly from the Memorial Union (MU) or Shields Library on campus and go to most parts of town. Bus schedules can be found at the MU. **Yolobus** serves Yolo County and links Davis to downtown Sacramento and to Woodland.

Go to: [http://unitrans.ucdavis.edu/](http://unitrans.ucdavis.edu/)  
[www.yolobus.com](http://www.yolobus.com)

**Zipcar!** There are multiple places on campus and around Davis where you can pick up a zip car and drop it off. What is zip car? It is an hourly based car rental. It is a great alternative to public transportation if you are going on a short trip or have errands to run around town.

GRADUATE GROUP IN COMPARATIVE PATHOLOGY (GGCP) AND ACADEMIC INFORMATION

Registration (SISWEB)

It is best that you plan out your class schedule as soon as possible and be prepared to register for fall quarter by late August/early September. In addition to the classes offered by the Graduate Group, many elective classes are offered outside of the GGCP as well. The best resource for the variety of classes offered at the University is the course catalog. You may purchase a hard copy from the UCD Bookstore or you may view it online (see links below).

You can register for your classes online using SISWEB. Class registration numbers (CRN) can be obtained through our graduate group coordinator. For other elective classes offered outside of the GGCP, you will need to contact the professor who is teaching the class for permission to add the course and the CRN number. To be registered as a full time student, you MUST sign-up for a minimum of 12 units per quarter.

Go to:  
http://sisweb.ucdavis.edu
http://registrar.ucdavis.edu/UCDWebCatalog/programs.html
http://bookstore.ucdavis.edu/generalcatalog_classschedule.cfm

SmartSite

SmartSite is the online course management and collaboration system at UC Davis. Some of your courses might use SmartSite to post assignments, articles, and announcements. This is the course management system used by main campus.

Go to:  
https://smartsite.ucdavis.edu/portal/site/

CERE

We are in a unique place being housed at the School of Veterinary Medicine; we get access to some of their resources. CERE is the SVM online course management system. Some of our Core instructors are more familiar with CERE than SmartSite so opt to use this system instead.

Go to:  
https://cere.vetmed.ucdavis.edu/

Graduate (Academic) Adviser

A Graduate Adviser will be assigned to you in the GGCP, based on your area of interest and location of lab. Graduate Advisers are available to help you find elective courses and track
your progress throughout the program. Your Graduate Adviser is the first point of contact for any conflict resolution, concerns with your mentor, lab, or funding. If you have any questions about the coursework, electives, examination and thesis/dissertation research contact your Graduate Adviser. Be sure to meet with your Graduate Adviser at least once a quarter for the first few quarters of your graduate program.

**Major Professor (Mentor/PI):**

The role of the major professor is very important. Your major professor is also known as your primary mentor or the principal investigator in your lab. They will guide you throughout the program and into your research project. They will also act as the chair of your dissertation committee and are crucial in securing funding for your dissertation project. Remember, you are interviewing the professor; the professor is not interviewing you. Finding a major professor that fits your needs as soon as possible will ensure that you meet goals within the targeted timeline. Also, do not feel the need to apologize for making an appointment to meet with your major professor or any other professor at UCD. Professors are here to help graduate students with their studies and research.

**Funding**

There are multiple ways to find funding, they include serving as a Teaching Assistant (TA) or Graduate Student Researcher (GSR), being awarded a fellowship, and writing your own grant(s). By far the most common route is the TA/GSR, especially in the first two years. Your major professor is the best resource to use to find a position as a GSR. If you work more than 10 hours per week (called 25% time), your in-state tuition, fees, and student health insurance are covered by your employer/faculty member. The **Office of Graduate Studies** website is an excellent site to visit for more information. Graduate Studies also has a job listings for open TA and GSR positions (link below), past students have also had success with the Department of Molecular and Cellular Biology for TA positions (link below). As these positions are competitive, be sure to apply by June for positions in the fall. In addition, the **Office of Graduate Studies** website contains a list of fellowships offered to new and continuing students every year. Criteria for fellowships vary for each specific fellowship. This is THE place to start looking for fellowships for which applications are due January 15th of each year.

<table>
<thead>
<tr>
<th>Fellowship</th>
<th><a href="http://gradstudies.ucdavis.edu/current-students/financial-support">http://gradstudies.ucdavis.edu/current-students/financial-support</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Listing</td>
<td><a href="http://gradstudies.ucdavis.edu/current-students/employment/job-listings">http://gradstudies.ucdavis.edu/current-students/employment/job-listings</a></td>
</tr>
<tr>
<td>MCB Job App</td>
<td><a href="https://www.mcb.ucdavis.edu/jobs/">https://www.mcb.ucdavis.edu/jobs/</a></td>
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</tbody>
</table>
Course Information

Prerequisites:

In addition to the admission requirements stated above, applicants are expected to have a strong background in Cell Biology and the equivalent of the following UC Davis courses:

- STA 100 Applied Statistics 4 units
- BIS 104 Regulation of Cell Function 3 units

Master's Degree:

The Comparative Pathology Graduate Group follows the MS Plan I. This plan requires 30 units of graduate and upper division courses (the 100 and 200 series only) and, in addition, a thesis or a project in lieu of a thesis. At least 12 of the 30 units must be graduate work in the major field. The student is subject to guidance by their Graduate Adviser regarding the distribution of his or her work. A Master's of Science degree will be awarded upon fulfillment of the degree requirements. The minimum residency requirements for the MS degree is three quarters, but the amount of time spent by most students in this program is six to nine quarters. The thesis fulfills the capstone requirement.

Course Requirements - Core and Electives (17 units)

a) Core Courses (17 units)

- PMI 201 Comparative Pathology Core I 5 units
- PMI 202 Comparative Pathology Core II 4 units
- PMI 203 Experimental Design 2 units
- PMI 270 Advanced Immunology 3 units

(either one of the 2 choices below)
- PLP 298 Ethics in Scientific Research 2 units
- OR
- Research Ethics, RCR Program, UC Davis- attendance at 8 seminars
  http://research.ucdavis.edu/c/cs/rcr

- MPM 408B* Writing Seminar 1 unit

b) Elective Courses (0 units)

Electives should accommodate special interests of the student within the broad field of Comparative Pathology. Examples of fields of specialization in which electives may be taken are virology, infectious disease, immunology, pulmonary biology, environmental disease, neurobiology, developmental and stem cell biology, cancer biology, toxicology, cell biology and molecular pathobiology. There is a wide latitude in the electives that the students may pursue, although the electives must
be consistent with the student’s thesis project and be approved by the student’s graduate adviser. Examples of electives taken by our students include:

- MCB 121 Molecular Biology of Eukaryotic Cells 3 units
- MCB 161 Molecular Genetics 3 units
- MMI 280 Molecular Pathology of Human and Animal Diseases 3 units
- MIC 262 Advanced General and Molecular Virology 2 units
- BIM 189C Clinical Applications for Biomedical Device Design 2 units

Summary

**Plan I.** The student is required to take a minimum of 30 quarter units of upper division and graduate course work and submit a thesis based on original research. The course requirements must be fulfilled by taking 18 units of core coursework and 12 of the 30 units must be graduate work (lab rotations) in the major field as defined by the graduate adviser and the major professor. Electives are chosen with the approval of the graduate adviser. For all students, there are 18 units of required course work. Most of the additional units are obtained by taking research courses (XXX - 299) from the major professor or other collaborating faculty.

Full-time students must enroll for 12 units per quarter including research, academic and seminar units. Per UC regulations, students cannot enroll in more than 12 units of graduate level courses (200) or more than 16 units of combined undergraduate and graduate level (100, 200, 300) courses per quarter. Courses that fulfill any of the program course requirements may not be taken S/U unless the course is normally graded S/U. Once course requirements are completed, students can take additional classes as needed, although the 12 units per quarter are generally fulfilled with research units (299) and perhaps seminars.

**Thesis Requirements:**

Research for the Master’s thesis is to be carried out under the supervision of a faculty member of the group and must represent an original contribution to knowledge in the field. The thesis research must be conducted while the student is enrolled in the program. The thesis must be filed in a quarter in which the student is registered or on filing fee. The thesis is submitted to the thesis committee at least one month before the student plans to make requested revisions. All committee members must approve the thesis and sign the title page before the thesis is submitted to Graduate Studies for final approval.

Should the committee determine that the thesis is unacceptable, a recommendation to disqualify the student will be made to the Dean of Graduate Studies. The group strongly recommends that at least one manuscript derived from the thesis be submitted for publication in a peer-reviewed journal before the thesis is finally approved.

Instructions on preparation of the thesis and a schedule of dates for filing the thesis in final form are available from Graduate Studies; the dates are also printed in the UC
Davis General Catalog and in the Class Schedule and Registration Guide issued each quarter. A student must have a GPA of 3.0 for the M.S. degree to be awarded.

An exit seminar is required. Satisfaction of this requirement should be verified by the Thesis Committee Chair.

**PhD Degree:**

The degree of Doctor of Philosophy is given under dissertation Plan B. An exit seminar is required.

**Course Requirements - Core and Electives (20 units)**

**a) Core Courses (20 units)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>PMI 201</td>
<td>Comparative Pathology Core I</td>
<td>5</td>
</tr>
<tr>
<td>PMI 202</td>
<td>Comparative Pathology Core II</td>
<td>4</td>
</tr>
<tr>
<td>PMI 203</td>
<td>Experimental Design</td>
<td>2</td>
</tr>
<tr>
<td>PMI 270</td>
<td>Advanced Immunology</td>
<td>3</td>
</tr>
</tbody>
</table>

Electics (either one of the 2 choices below)

- PLP 298 Ethics in Scientific Research | 2 units
- OR
- Research Ethics, RCR Program, UC Davis- attendance at 8 seminars
  
  [http://research.ucdavis.edu/c/cs/rcr](http://research.ucdavis.edu/c/cs/rcr)

- MPM 408B* Writing Seminar | 1 unit
- PMI 290 Group-Specific Research Seminar | 1 unit
- Variable Research Seminars (2) | 2 units

**b) Elective Courses (0 units required)**

Electives should accommodate special interests of the student within the broad field of Comparative Pathology. Examples of fields of specialization in which electives may be taken are virology, infectious disease, immunology, pulmonary biology, environmental disease, neurobiology, developmental and stem cell biology, cancer biology, toxicology, cell biology and molecular pathobiology. There is a wide latitude in the electives that the students may pursue, although the electives must be consistent with the student's thesis project and be approved by the student's graduate adviser. Examples of Electives taken by our students include:

- MCB 121 Molecular Biology of Eukaryotic Cells | 3 units
- MCB 161 Molecular Genetics | 3 units
- MMI 280 Molecular Pathology of Human and Animal Diseases | 3 units
- MIC 262 Advanced General and Molecular Virology | 2 units
- BIM 189C Clinical Applications for Biomedical Device Design | 2 units
Summary:
The student is required to take a minimum of 30 quarter units of upper division and graduate course work and submit a thesis based on original research. The course requirements must be fulfilled by taking 20 units of core coursework and 10 of the 30 units must be obtained by taking research courses (XXX - 299) from the major professor or other collaborating faculty. Additional elective courses can be chosen with the approval of the graduate adviser.

Full-time students must enroll for 12 units per quarter including research, academic and seminar units. Per UC regulations, students cannot enroll in more than 12 units of graduate level courses (200) or more than 16 units of combined undergraduate and graduate level (100, 200, 300) courses per quarter. Courses that fulfill any of the program course requirements may not be taken S/U unless the course is normally graded S/U. Once course requirements are completed, students can take additional classes as needed, although the 12 units per quarter are generally fulfilled with a research class (299) and perhaps seminars.

Qualifying Examination and Dissertation requirements:
All students will complete all course requirements before taking their Qualifying Examination (QE). Passing this exam makes the student eligible for advancement to candidacy. The qualifying exam should be taken by the 6th quarter and no later than the end of the 9th quarter after admission to the Ph.D. program.

The primary purpose of the QE is to validate that the student is academically qualified to conceptualize a research topic, undertake scholarly research and successfully produce the dissertation required for a doctoral degree. The QE must evaluate the student’s command of the field, ensuring that the student has both breadth and depth of knowledge, and must not focus solely on the proposed dissertation research. In addition, the QE provides an opportunity for the committee to provide important guidance to the student regarding his/her chosen research topic.

The QE will consist of written and oral examinations.

Dissertation

1. Exit Seminar

The dissertation follows Plan B with a required exit seminar. Satisfaction of this requirement must be verified by the Dissertation Committee Chair. The Exit Seminar is a formal public presentation of the student’s research before the program faculty and students. This presentation can be arranged with the staff of the graduate group or with the staff of the student’s home department. The exit seminar can be scheduled throughout the year. The Dissertation Committee will not sign the Dissertation until after the exit seminar has taken place. Adequate scheduling of the exit seminar is the responsibility of the student.
2. **Dissertation: General Requirements**

Filing of a Ph.D. dissertation with the Office of Graduate Studies is normally the last requirement satisfied by the candidate. The deadlines for completing this requirement are listed each quarter in the campus General Catalog (available online at the website of the Office of the Registrar or from the Bookstore). A candidate must be a registered student or in Filing Fee status at the time of filing a dissertation, with the exception of the summer period between the end of the Spring Quarter and the beginning of Fall Quarter. The PhD. Dissertation will be prepared, submitted and filed according to regulations instituted by the Office of Graduate Studies [http://gradstudies.ucdavis.edu/students/filing.html](http://gradstudies.ucdavis.edu/students/filing.html). Satisfaction of this requirement must be verified by the Dissertation Committee Chair.

**International Students**

Please refer to the Graduate Studies website for all questions related to international student status, passport, visas, etc.

**Go to:** [http://gradstudies.ucdavis.edu/prospective/internat.htm](http://gradstudies.ucdavis.edu/prospective/internat.htm)

In addition, the office of **Services for International Students & Scholars** assists international students in their pre-arrival preparation and provides immigration advice, financial information, general advising and counseling, and a variety of cross-cultural activities.

**Go to:** [http://siss.ucdavis.edu/](http://siss.ucdavis.edu/)

**ADDITIONAL GRADUATE STUDENT RESOURCES AT UC DAVIS**

**Office of Graduate Studies:**

The Office of Graduate Studies, commonly referred to as simply “Grad Studies,” is located at 250 Mrak Hall. Since you’ve already been accepted to UC Davis, you’ve no doubt already visited its website. Grad Studies has a wealth of information on its website. If you have a question about anything and can’t find someone to ask, check out the website. It contains information on fees, funding, living in Davis, deadlines, degree requirements, forms, teaching assistant (TA)/Graduate Student Researcher (GSR) positions, residency status, etc. The GGCP contact in the Office of Graduate Studies is: Laura Young, [leyoung@ucdavis.edu](mailto:leyoung@ucdavis.edu)

**Go to:** [http://gradstudies.ucdavis.edu](http://gradstudies.ucdavis.edu)
Graduate Student Association (GSA)

The UC Davis Graduate Student Association (GSA) is a student-driven representative organization, linking students of the diverse graduate programs. Funded by graduate student fees, GSA provides services to graduate students and protects and promotes their interests at all levels of University administration. Regularly enrolled graduate students, professional students in the Graduate School of Management, and professional students in the teaching credential program are automatically GSA members. The GSA offers coffee and donuts every Friday from 9 am to noon, holds social events throughout the school year, and offers travel awards to graduate students. The GSA office/lounge is located at 253 South Silo.

Go to: http://gsa.ucdavis.edu

Association of Graduate Student Employees

Go to: http://www.uaw2865.org/

Student Health and Wellness Center

Medical Services at the Student Health and Wellness Center
SHCS Medical Services, including Insurance Services, is conveniently located on the West side of campus at the Student Health & Wellness Center (SHWC). The center is located on La Rue Road between Hutchison Drive and Orchard Road, across the street from the Activities and Recreation Center (ARC) and next to the Colleges at La Rue. Access to the closest parking (lot 35) is on Orchard Road.
To make an appointment call - (530)752-2349
To speak with an advise nurse call – (530)752-2949

SHCS Counseling Services at 219 North Hall
SHCS Counseling Services is located in the center of the core campus at North Hall. North Hall faces the east side of the quad and is next to Dutton Hall and South Hall. This part of campus is not accessible by car; however, there is plenty of bicycle parking in front and North Hall is close to the Memorial Union bus stop. The nearest metered and paid/permit parking lots are the North Entry Parking Structure and the VP 5 parking lot.
To speak with someone in counseling services call – (530)752-0871

For students with families (spouses and children), restrictions exist for family members to be included in the graduate student’s health care policy. These restrictions differ for domestic and international students. If you require health care for your family, be sure to get information from SHCS directly regarding this issue.

Go to: http://shcs.ucdavis.edu/
Transportation and Parking Services (TAPS)

Are you going to bring a car to UC Davis and are you going to drive it to campus? Then, you have to buy a parking permit and TAPS is the place to do this. A parking permit costs ~$418 for the entire year (prices are based on the starting date of the permit, so they may vary). The prices could increase at any time. The other main function of TAPS is to issue bicycle licenses. The permits are $8 for a two-year period ($4 to renew), your bike will be registered and, if stolen, you’ll have a much better chance of retrieving it.

Go to: www.taps.ucdavis.edu

CONTACTS

GGCP Chairs

Brian Murphy
Email: bmurphy@ucdavis.du
Phone: 530-752-9011
Office: 4315 VM3A

Patty Pesavento
Email: papesavento@ucdavis.edu
Phone: 530-752-1166
Office: 5322 VM3A

Program Coordinator

Jessica Paisley
Email: jpaisley@ucdavis.edu
Phone: 530-752-3737
Office: 5218 VM3A

2014/2015 Student Executive Committee

President – Angela Courtney
Treasurer – Terza Brostoff
GSA Rep – Dawn Kingsbury
GSA Rep – Chrissy Eckstrand
GSA Rep – Eduardo Vivas