# Table of Contents

- Introduction .................................................................................................................. 4
- Scope & Objectives ......................................................................................................... 4
- Research .......................................................................................................................... 4
- Career Opportunities ....................................................................................................... 4
- Financial Support and Funding ....................................................................................... 4
  - Academic Apprentice Personnel ............................................................................... 5
  - Requirements for Fee Remissions ............................................................................. 5
- Academic Information ..................................................................................................... 7
  - Admissions Requirements ......................................................................................... 7
  - Standards and Procedures for Graduate Study at UCLA ......................................... 7
- Doctoral Degree Program Requirements ....................................................................... 8
  - Requirements for 1\(^{st}\) Year Students ................................................................... 8
  - Requirements for 2\(^{nd}\) Year Students .................................................................... 9
  - Requirements for 3\(^{rd}\), 4\(^{th}\), & 5\(^{th}\) Year Students ............................................... 9
    - Molecular Toxicology Internal Seminar Series (Mol Tox 211 A-C) ........................ 9
  - Research Credits ......................................................................................................... 10
  - Representative Electives .............................................................................................. 10
  - Written and Oral Qualifying Exams .......................................................................... 10
  - Nomination of Doctoral Committee ........................................................................... 11
  - Oral Qualifying Exam ................................................................................................. 12
    - Advancement to Candidacy ...................................................................................... 12
    - Final Oral Examination ............................................................................................ 12
    - Required Forms & Timing ......................................................................................... 12
- Student Affairs ............................................................................................................... 13
  - Student Services/Advising .......................................................................................... 13
  - Official Materials from the University ....................................................................... 14
  - Academic Course Load ............................................................................................... 14
  - Registration ................................................................................................................. 14
  - Paying Fees ................................................................................................................ 15
  - Filing Fee ..................................................................................................................... 15
  - Enrollment/MyUCLA ................................................................................................. 16
  - Enrollment Deadlines ................................................................................................ 16
  - Study List .................................................................................................................... 16
  - Normal Progress/Full-time Graduate Program .......................................................... 16
  - Leave of Absence ....................................................................................................... 17
  - Establishing California Residency ............................................................................ 17
  - Data sheet ................................................................................................................... 18
  - Grading ....................................................................................................................... 18
  - English as a Second Language ................................................................................. 18
  - Academic Probation ................................................................................................. 19

2
Student Complaints and Academic Grievances ........................................ 19
Academic Dishonesty .............................................................................. 19
Ordering Transcripts ............................................................................. 19
Change of Name or Address ................................................................. 20
Student Life & Resources ...................................................................... 20
2014-15 Academic Calendar ................................................................. 20
BruinCard (Student ID) ......................................................................... 21
International Students ........................................................................... 22
Student Mailboxes .................................................................................. 22
Arthur Ashe Student Health and Wellness Center .................................. 22
Medical Insurance Requirement ......................................................... 22
Waiving SHIP ......................................................................................... 22
UCLA Counseling and Psychological Services .................................... 23
Graduate Writing Center ....................................................................... 23
FSPH Career Services Office .............................................................. 23
UCLA Career Center ............................................................................. 23
Bruin OnLine (BOL) ............................................................................ 23
BruinTech .............................................................................................. 24
Borrowing a CLICC Laptop ................................................................. 24
Office for Students with Disabilities (OSD) .......................................... 24
Transportation & Shuttle Services ...................................................... 24
Molecular Toxicology IDP Course Descriptions ............................... 25
Molecular Toxicology IDP Faculty Research Interests ....................... 28
Introduction:
The thirty Faculty members of our interdepartmental program come from sixteen different departments in the School of Medicine, the School of Public Health and the College of Letters and Science at UCLA. Members of our faculty also participate in the activities of the UCLA Jonsson Comprehensive Cancer Center, and the newly established California Nanosystems Institute. A major advantage of UCLA is that the above entities are all in close proximity to one another on campus, providing our students with a wide range of educational and research opportunities. Our students also participate in many of the activities of the other biomedical science doctoral programs at UCLA. Areas of particular strength in our program include chemical carcinogenesis, repair of DNA damage, air pollution toxicology, nanotoxicology, and the environmental causation of Parkinson's disease. The program is supported by a training grant from the National Institute of Environmental Health Sciences (NIEHS). Our program is now in its twelfth year. Students from our first nine years (2001-2009) have all graduated.

Scope & Objectives:
The mission of the UCLA Molecular Toxicology Interdepartmental Program is to train doctoral students to perform cutting edge research on the mechanisms whereby exogenous chemical and physical agents cause disease.

Research: Please see our website, http://www.ph.ucla.edu/moltox/faculty.php for information about research activities of our faculty, and other relevant information.

Career Opportunities:
All Molecular Toxicology students admitted in 2001 to 2009 have graduated, attesting to the effectiveness of our program at graduating students in a timely fashion. One of our graduates is an Assistant Professor at a major research university (Northwestern), twelve are pursuing postdoctoral studies, eight are scientists in major biotechnology companies, and one works for the US FDA.

Financial Support and Funding:
The Molecular Toxicology IDP is responsible for providing the stipend and fees for all incoming students for the first nine months of their first year. Students will receive a stipend agreed upon by all UCLA ACCESS participating departments (currently $31,000/year) plus fees. The Molecular Toxicology IDP payments for the first nine months will come from Graduate Division funds, the NIEHS training grant, and certain other funds. From month 10 onwards, the stipend and fees for each student are the responsibility of the student’s thesis mentor, and will be obtained from training grants, teaching assistantships, grants to the mentor, and other sources.
If during the first nine months, a student does not receive his/her monthly stipend, he/she should pursue the following process in an attempt to get the problem resolved.

(i) He/she should first speak to the Mol Tox SAO (Rebecca Greenberg) to ascertain whether a lack of payment is due to an administrative glitch.

(ii) If this does not solve the problem he/she should discuss the matter with the Molecular Toxicology Graduate Student Advisor (currently Professor. Michael Collins) and/or the Chair of Mol Tox (Professor Oliver Hankinson).

(iii) If this does not solve the problem, he/she should go to the Chair of EHS (Professor Richard Jackson).

Academic Apprentice Personnel:
“Academic apprentice personnel” are academic student employees (Readers, Tutors, and Teaching Assistants) and Graduate Student Researchers (GSRs). These apprenticeships are intended to provide qualified students with relevant training experience for academic and academic-related careers in teaching and research and to augment limited resources from within the University for graduate student support. As a matter of University policy, academic apprentice personnel are considered primarily as students being professionally trained, and graduate student status takes precedence over University employment.

Many students obtain part time academic personnel positions as Special Readers, Teaching Assistants or Graduate Student Researchers with faculty either at the Fielding School of Public Health or elsewhere on campus. Students who are appointed to academic personnel positions for at least 25% time and enrolled in a minimum of 12 units are eligible to receive fee remissions.

Academic apprentice appointees are eligible for fee deferrals, medical insurance, fee remissions, and TA Advance Loan checks. For details on these benefits and policies on employment, consult the Academic Apprentice Personnel Manual.

Requirements for Fee Remissions:
1. The following standards must be met in order for students to receive apprentice fee remissions: Students must register and enroll by the third week of the quarter (registration and enrollment must also be maintained throughout the quarter)
2. Appointment(s) must total 25% time or more for the quarter
3. Students must work hours equivalent to 25% time in apprentice titles in a given quarter (usually 106-110 hours)
4. Students are expected to enroll in at least 12 units to receive health insurance and fee remissions.
5. Students must maintain a 3.0 GPA to be appointed as an apprentice and may not work more than 12 quarters as a TA or more than 18 quarters in all apprentice titles combined.
Graduate Students are allowed have a maximum of a 50% appointment on any given quarter. Students receiving Special Graduate Division Fellowship Funding may have different restrictions. Please check your award letter for restrictions.

*Working over 50% time:*
Graduate Students must have approval from the Department to work over 50% time. Students will need to coordinate with the Department Student Affairs Officer to file the appropriate paperwork. A letter of support from the Faculty Advisor is required to work over 65% time. Approval from the Graduate Division is required to work over 75% time.

*How to Find Appointments:*
1. Information on anticipated student employee openings by department: [www.gdnet.ucla.edu/gss/ase/opportunities.pdf](http://www.gdnet.ucla.edu/gss/ase/opportunities.pdf)
2. Summer teaching assistant opportunities are available through Summer Sessions: [www.summer.ucla.edu/planning/ase.htm](http://www.summer.ucla.edu/planning/ase.htm)
3. Additional academic year and summer tutor opportunities are available through the College: [www.college.ucla.edu/ase](http://www.college.ucla.edu/ase)
4. Graduate Student Researchers (GSRs): Begin inquiries about appointments well before the beginning of the quarter. Ask faculty or staff about research projects that may need GSRs.

**It is the student’s responsibility to inform the Department of any campus positions that they have accepted and any funding that they are receiving. You must provide this information to the Department’s Student Affairs Officer**

*Please click on links below for specific information:*
- **Support for Continuing Students**
  Brochure & application forms.
- **ASE Appointment Opportunities**
  Anticipated student employee openings & union agreement.
- **Summer Research Mentorship**
  Summer support for doctoral students in the humanities & social sciences.
- **Funding Opportunities**
  Extramural support, online funding databases, & proposal consultants.
- **Academic Apprentice Personnel**
  Student manual & salary scales.
- **Graduate Work-Study Program**
  Support for academic research projects.
- **Bruin Direct Deposit**
  Authorization form for direct deposit of stipend payments.
- **Tax Information & Forms**
  UCLA tax information and forms for fellowship recipients.
Academic Information:

Admissions Requirements:
Applicants should have an excellent record, perform satisfactorily on the Graduate Record Examination (GRE), have completed a minimum of a four-unit undergraduate course in statistics, and be acceptable to the admissions committee. Students who have not completed a statistics course may do so after being admitted.

The ideal preparatory training is either a major in chemistry or biology and a solid background in both of these disciplines. Courses of value for toxicologists include the following: calculus, statistics, cell biology, genetics, physiology, microbiology, molecular biology, inorganic chemistry, organic chemistry, biochemistry, and physical chemistry. However, excellent students from all disciplines are considered for admission.

In addition to the University's minimum requirements and those listed above, all applicants are expected to submit the departmental application through the Schools of Public Health Application Service (SOPHAS).

A master's degree is not a prerequisite for admission.

For application materials, go to the Fielding School of Public Health Student Affairs website at: http://ph.ucla.edu/prospective-students.

All application materials for the School’s graduate programs are available online for electronic submission at www.gdnet.ucla.edu and at www.sophas.org. Students are admitted in the Fall Quarter only.

Standards and Procedures for Graduate Study at UCLA:
General regulations concerning graduate courses, standards of scholarship, disqualifications, appeals, leaves of absence, normal progress toward degree, withdrawals and other matters can be found at: http://www.gdnet.ucla.edu/gasaa/library/spintro.htm
The site also provides detailed information and sets forth general policies regarding
completion of degree requirements, master's and doctoral committees, examinations and foreign language requirement.

**Doctoral Degree Program Requirements:**
Please refer to the [UCLA General Catalog](#) and the [Graduate Division website](#) for more detailed information regarding the degree requirements for the Ph.D. in Molecular Toxicology.

*Time-to-Degree:*
The normative time for the degree is 15 quarters (five years). It is expected that required coursework is completed within five quarters and the written and oral qualifying examinations are completed within six quarters (two years). Students who fail to complete the dissertation within 18 quarters are placed on probation within the program.

*Foreign Language Requirement:* There is no foreign language requirement.

*Teaching Experience:*
All students obtain instruction in teaching skills by serving as teaching assistants or readers for one quarter, typically one quarter during the second or third year. Exceptions to the timing of teaching are considered by the program's Steering Committee.

*Course Requirements:*

**Requirements for 1st Year Students:**

*Fall & Winter:* First year Molecular Toxicology students can either take:

- Biological Chemistry 254A & 254B in the fall and Biological Chemistry 254C & 254D in the winter

  **OR**

- Molecular and Medical Pharmacology M252A & M252B (fall) and Molecular, Cellular and Integrative Physiology M262A & M262B (winter). Students should select between these two series in consultation with their graduate advisor.

*Spring:* First year Molecular Toxicology students take Environmental Health Sciences (EHS) C240 and Microbiology, Immunology and Molecular Genetics (MIMG) C234 in the spring quarter.
In all quarters of the first year students take a six-unit laboratory rotation (Molecular Toxicology 596) with their Faculty sponsor. The basis of grading for this course (letter grade or S/U) is determined by the advisor and should be discussed prior to enrolling.

In addition all Molecular Toxicology students enroll in the internal seminar series (Mol Tox A, B, & C) every quarter. Your grade is these courses will not be available until you have completed the last course in the series (211C) in the spring quarter.

Requirements for 2nd Year Students:
In the second year students take Molecular & Medical Pharmacology 237 in the fall quarter and Environmental Health Sciences M242 in the winter (this course can be taken in the third year if it is not offered in the second).

Starting with the second year, students spend most of their time on dissertation research. In addition to the course requirements listed here, students are expected to complete Molecular Toxicology 596, and/or 597 during quarters in which research (596) or study for written or oral examinations (597) is part of the program. Molecular Toxicology 596 is for students who have not passed their oral examinations; 599 is for those who have passed their oral examinations and advanced to candidacy.

Requirements for 3rd, 4th & 5th Year Students:
Students take the Mol Tox 211 series, Mol Tox 296 (with their advisor), and Mol Tox 599 (after they have advanced to candidacy) each quarter during their third, fourth and fifth year. If the student has not advanced yet, then they should enroll in 596.

Molecular Toxicology Internal Seminar Series- Mol Tox 211A-C:
Students enroll in the Molecular Toxicology 211 (A-C) seminar series every year. 211A is offered each fall, 211B in the winter, and 211C in the spring. Each student must give a seminar to present their research once a year as part of the 211 requirements. Your grade is these courses will not be available until you have completed the last course in the series (211C) in the spring quarter.

Students must attain a grade of B- or better in all core courses and a B average overall and must pass all core courses (excluding courses offered every other year) within two years of entering the program, unless there are mitigating circumstances that prevent this; such cases are reviewed by the Faculty Advisory Committee.
Research Credits:
The student enrolls in Mol Tox 596 for research before the Written Qualifying Examination under the Advisor during quarters acceptable to both student and Advisor. After the student has come into doctoral candidacy, the appropriate course for credit is Mol Tox 599.

The conduct of the research must meet the current UCLA regulations relative to human subjects, animal experimentation, radioactivity, and chemicals/physical/biological hazards as appropriate. Interdisciplinary research is encouraged.

Representative Electives:
*Neuroscience M201: Cell, Developmental, and Molecular Neurobiology (6):* (Same as Molecular, Cell, and Developmental Biology M220 and Neurobiology M200B.) Lecture, six hours. Fundamental topics concerning cellular, developmental, and molecular neurobiology, including intracellular signaling, cell-cell communication, neurogenesis and migration, synapse formation and elimination, programmed neuronal death, and neurotropic factors. Letter grading.

*Epidemiology 100: Principles of Epidemiology (4)*
Lecture, two hours; discussion, four hours. Preparation: one full biological sciences course. Not open for credit to students with credit for course 200A, 200B, or 200C. Introduction to epidemiology, including factors governing health and disease in populations. Letter grading.


Written and Oral Qualifying Examinations: Academic Senate regulations require all doctoral students to complete and pass University written and oral qualifying examinations prior to doctoral advancement to candidacy. Also, under Senate regulations the University oral qualifying examination is open only to the student and appointed members of the doctoral committee. What follows in this section is how students are required to fulfill all of these requirements for the Molecular Toxicology doctoral program.

Written Qualifying Exam:
This examination will usually typically be taken towards the end of the student's second year at UCLA. Both a written and oral qualifying examination is required. The format for the written qualifying examination will consist of a NIH-style research proposal on a topic which is approved by members of the Thesis Committee. The Thesis Committee will consist of four faculty members including the student's advisor, who will serve as the Chair.
The written proposal will be an original research proposal consisting at a minimum of the following sections:

1. Statement of the Proposal: A concise statement should be given regarding the aims and goals of the proposal. This will provide the committee with a clear understanding of the proposed studies and rationale (approximately 1 page).
2. Background and Significance: This section will cover the background and significance of the research topic. This should not be a comprehensive review of the research area. It should, however, provide enough background on the subject to allow the committee to evaluate the relevance and novelty of the proposal. Key references should be included (approximately 4 pages).
3. Methods: In this section, the student should state the specific questions being asked and describe experimentally how these questions will be addressed. Sufficient experimental detail should be provided such that the committee can evaluate the student's understanding of the techniques. A brief discussion of the legitimacy and appropriateness of the proposed methods (versus others) should be provided, and the merits and limitations of the methods are should be discussed (this may not be necessary for routine or widely utilized techniques). This section should also include a discussion of the interpretation of the possible results of the proposed experiments (approximately 5 pages).

Conclusion: A brief discussion of how the results of the proposed studies may further the field of Molecular Toxicology should be provided (approximately 1 page).

Nomination of Doctoral Committee:
A doctoral committee, consisting of at least four faculty members who hold professorial appointments at UCLA, is nominated when students are ready to take the University Oral Qualifying Examination. The student's adviser serves as the chair. At least two of the faculty must be tenured. Three of the four must hold appointments in the Molecular Toxicology IDP; one must be an outside member. After passing the University Oral Qualifying Examination, students may be advanced to candidacy and commence work on a dissertation in the principal field of study. The doctoral committee supervises the progress toward completion of the dissertation.

Specific Regulations for IDP Committees:

1. The three committee members from the student's "department" must be selected from a list of faculty members who actively participate in the program. This list will be prepared by the Chair of the Interdepartmental Degree Committee and submitted to the Graduate Division at the beginning of each fall term.
2. The one "outside" member will be selected from eligible UCLA faculty whose names do not appear on the list of faculty members who actively participate in the interdepartmental program.

3. Two different departmental affiliations must be represented among the four members of the doctoral committee.

**Oral Qualifying Exam:**
The oral examination of the written proposal will allow the Thesis Committee to fully evaluate the ability of the student to discuss the subject matter in a scholarly fashion. The student must be able to defend the validity and importance of the proposed research as well as the experimental approaches taken. The oral qualifying examination also provides the Thesis Committee the opportunity to specifically address perceived weaknesses in the student's educational background as well as evaluate the student's communication skills. Thus, it is expected that students will be able to both write about and verbally discuss his/her research proposal and experiments in a manner commensurate with someone receiving a Ph.D. in Molecular Toxicology.

**Advancement to Candidacy:**
After successful completion of coursework and written and oral examination requirements, students are advanced to candidacy and begin work on a dissertation based on original research.

**Final Oral Examination (Defense of Dissertation):**
A final oral examination is required of all candidates.

**Required Forms and Timing:**

<table>
<thead>
<tr>
<th>Action</th>
<th>Form to File With Student Affairs Officer</th>
<th>When to File Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report on Written Qualifying Exam &amp; Completion of PhD Coursework</td>
<td>• <strong>Mol Tox- Form 1</strong></td>
<td>Notify SAO of date of exam and it will be provided to your Committee.</td>
</tr>
<tr>
<td>Nomination of Doctoral Committee</td>
<td>• <strong>Nomination of Doctoral Committee</strong></td>
<td>Minimum of 4 weeks before oral qualifying exam</td>
</tr>
</tbody>
</table>
Report on Oral Qualifying Exam & Advancement to Candidacy

- See Department SAO

Request from SAO prior to exam. Submitted by SAO after completion of exam

Report on Final Oral Examination

- See Department SAO

1 week prior to final oral defense

File Dissertation

- See Graduate Division Website (www.gdnet.ucla.edu/gasaa/library/degreeinfo.htm)

By June 2 to participate in Commencement

---

**Student Affairs:**

**Student Services/Advising:**

An academic adviser is assigned to each new student by the Associate Director of Student Affairs of the Molecular Toxicology IDP. The adviser meets with the student each quarter to discuss academic progress. Once the student is accepted into the laboratory of one of the participating faculty within the program, that faculty member then becomes the student's adviser.

- **Molecular Toxicology IDP:** Rebecca Greenberg is the Student Affairs Officer for the Molecular Toxicology IDP. Her contact information is as follows:

  Office: 56-085 CHS  
  Phone: (310) 206-1619  
  Email: rgreenberg@ph.ucla.edu
- **The Fielding School of Public Health Student Affairs Office** provides oversight and guidance of school-wide and departmental graduate program affairs, including admissions processing, degree processing, class scheduling, funding, orientation and graduation preparations, and general counseling to prospective, new and continuing students.

  Location: A1-269 CHS  
  Hours: Monday, Tuesday, Thursday and Friday 10am-3pm (closed Wed)  
  Phone Number: (310) 825-5524

- **Faculty Advisor**: Dr. Michael Collins is the Faculty Advisor for those students who have not been assigned to a lab.

**Official Materials from the University:**
You will receive many documents from the University stating deadlines, offering opportunities, etc. It is your responsibility to observe the deadlines, and take any action that is required. This is especially important for work-study, financial aid, traineeships, filing deadlines, etc. For the most current deadlines, go to the online schedule and calendar at [http://www.registrar.ucla.edu/calendar/](http://www.registrar.ucla.edu/calendar/).

**Academic Course Load:**
A normal load is 12 units per quarter; a minimum of 8 and maximum of 17.5 units are permitted. Only graded courses (i.e., not Pass/Fail or Satisfactory/Unsatisfactory) can be counted toward the degree requirements. Students must petition to take additional units above the quarterly maximum allowed. A blue petition (available in the Student Affairs Office) must be signed first by the student’s advisor, then by the Chair/Vice Chair before it is filed in the Student Affairs Office. Students must maintain an average of no less than 3.0 (B) in all courses required or elected during graduate residence at the University of California.

**Registration:**
Registration consists of paying fees and enrolling in classes.

1. Registration fees and other University charges are due the 20th of each month. BAR (Billing and Receivable) accounts can be viewed through [www.my.ucla.edu](http://www.my.ucla.edu).

2. Enrollment in classes is completed via MyUCLA at [www.my.ucla.edu](http://www.my.ucla.edu). Students must complete both processes by the established deadlines to be officially registered and enrolled for the term.

Graduate students must be either registered & enrolled or on an official leave of absence every term until their degrees are awarded. As an exception, certain graduate students may be eligible to pay the filing fee (see below). Failure to register or be on an official leave of absence for any term constitutes withdrawal from UCLA.
Paying Fees:
Your registration fees (and non-resident tuition, if applicable) are due via your BAR account by September 20 (Fall quarter), December 20 (Winter quarter) and March 20 (Spring quarter). Credit card payments may be made online using MyUCLA online. If registration fees are not paid in full by the payment deadline, a $50 late registration fee is assessed and classes are dropped in accordance with the drop class deadline. If you enroll in classes and pay registration fees after Friday of the second week of classes, both the $50 late registration fee and a $50 late Study List fee are assessed.

Details on fee payment, enrollment procedures, and deadlines are in the Schedule of Classes at http://www.registrar.ucla.edu/schedule/.

Miscellaneous Fees: For information on miscellaneous fee charges, such as BruinCard replacement, collection fees, late changes to courses/study lists, etc., visit: http://www.registrar.ucla.edu/fees/miscfee.htm.

eBill
BAR accounts are administered electronically (eBill) through MyUCLA. Monthly financial activity is displayed for the current month as well as past account activity for the last 24 months. MyUCLA also includes a link to the Student Accounts website where students can find important communications from the University regarding registration and University policies. Students can pay their BAR account electronically using Visa, MasterCard, PULSE, NYSE, STAR, Discover, or American Express. Students can also print a remittance document from the eBill webpage and mail payments with a check or money order. UCLA converts checks into electronic payments.

Filing Fee:
If a student has completed, while registered, all requirements for a degree except the filing of the thesis or dissertation and/or the final examination (master’s comprehensive or doctoral final oral examination), the student may be eligible to pay a Filing Fee during the quarter in which the degree is to be awarded, instead of registering. The current cost for the filing fee is $162.00. Students must petition and be granted approval to pay the filing fee. The filing fee application must be submitted by the end of the second week of the quarter.

- Filing Fee Application

Doctoral students may only pay the filing fee once. If they do not file their dissertation during the quarter in which they paid the filing fee, then they must be readmitted and pay full registration fees in order to file their dissertation.
MyUCLA:
MyUCLA is a customized portal web page where students can access real-time class schedules, grades, campus appointments, traffic and weather information, check their UCLA e-mail account and link to campus events and resources. www.my.ucla.edu

Enrollment/ MyUCLA:
Students enroll in classes through MyUCLA, which is accessed at http://www.my.ucla.edu. MyUCLA gives students real-time access to their University academic, personal and financial records. Enrollment-related tasks, such as adding, dropping, or exchanging classes, signing onto the wait list for a class, checking waitlist status, or changing the grading basis for a class can also be done through MyUCLA.

Enrollment Deadlines:
The deadlines are always on Friday of the following weeks of every quarter:

Week 2: Enrollment in all coursework.
Week 3: Fee charged for changes regarding adds, drops, and grading basis.
Week 10: Additional fee charged for adds and for drops and grading basis changes.

After week 10, requesting retroactive add or drop any courses is a long and complicated procedure with NO guarantee of approval.

Study List:
UCLA refers to your class schedule as a “study list”. All UCLA students are required to have a “study list on file”, which mean that you must be enrolled in at least one unit by the end of the 2nd week of classes. Any student who is not enrolled in at least one unit by the end of the 2nd week of classes will be assessed a $50 late study list fee when they attempt to enroll. Please be aware that this fee will be charged even if you paid the $50 late registration fee. After the 2nd week of classes, your student record will be “locked” out of enrollment, and you will have to (1) go to the Student Affairs Office to pick up a form, (2) get written instructors’ permission to enroll in each class at this late date and (3) submit the from, in person, to the Registrar’s Office in Murphy Hall. You will not be able to process any enrollment activities until your student record is unlocked. You can go to MyUCLA online to view your study list. Note: you can print your study list to provide proof of enrollment in class. You should check your study list each quarter to make sure that you are enrolled in classes.

Normal Progress/Full-time Graduate Program:
Three courses (or 12 units) per term are considered the normal enrollment for graduate students and are required for a student not in doctoral candidacy to be counted for full-time status in the University’s official enrollment.
Therefore, a student is directed by the department to enroll full time whenever possible. Teaching assistants (TAs) and graduate student researchers (GSRs) are required to be registered and enrolled in at least twelve quarter units throughout their appointments. Those assistants who take a leave of absence or withdraw terminate their appointments. Course 375 for teaching assistants, and independent studies at the 500-level for graduate student researchers, may be included in reaching the eight or twelve-unit load. Graduate students holding special fellowships must be enrolled in at least twelve units, both before and after advancement to candidacy. The twelve units required per quarter may include, among others, courses in the 500 series (individual study or research).

**Leave of Absence:**
Continuing graduate students in good standing (3.0 GPA or above) who have completed at least one term of UCLA graduate work may, with the support of the Molecular Toxicology IDP and the approval of the Graduate Division, be eligible for leaves of absence. Graduate students are allowed a maximum of six quarters of official leave of absence.

Federal policy governing students on F-1 and J-1 visas restricts leaves of absence to certain conditions. Therefore, the Dashew Center for International Students and Scholars, in consultation with the Graduate Division, individually evaluates each international graduate student request for a leave of absence to determine that it meets federal (and University) eligibility criteria.

Students on approved leave of absence are not permitted to use faculty time or make use of University facilities for more than 12 hours since their last registration and are not eligible for apprentice personnel employment or other services normally available to registered students. There is no need to apply for readmission, since the approved leave is for readmission to a specific term. The Registrar’s Office notifies students about registration information for the returning term.

To petition for a leave of absence, students must fill out a “Leave of Absence Request” form, obtain the appropriate signatures, and submit it to the FSPH Student Affairs Office. For more details on the University’s Leave of Absence policy, visit: [http://www.gdnet.ucla.edu/gasaa/library/loa.htm](http://www.gdnet.ucla.edu/gasaa/library/loa.htm)

**Establishing California Residency (US Citizens & Permanent Residents only):**
Domestic students who are not California residents will need to establish residency to avoid assessment of nonresident tuition. In order to establish residency, certain requirements must be met. Please refer to the Registrar's web page [http://www.registrar.ucla.edu/faq/residencefaq.htm](http://www.registrar.ucla.edu/faq/residencefaq.htm) or call the Residence Deputy at (310) 825-1091, option 5, for complete details on establishing California Residency. This is very important. Otherwise, you may have to pay non-resident tuition during your second year.
Data sheet:

The School of Public Health requires that a data sheet is completed quarterly. The FSPH Student Affairs Office will send reminders out regarding this. Failure to complete this in a timely manner may result in an academic hold being placed on your record.

Grading:
UCLA grades for graduate students, are A, B, C, F, and I. Grade point averages are computed on the basis of 4 points for an “A”, 3 points for a “B”, 2 points for a “C”, and 0 points for an “F”. Only courses in which a grade of C- or better is received may be applied toward the requirements for a master's degree. Students must maintain an average of no less than 3.0 (B) in all courses required or elected during graduate residence at the University of California. Failure to do so will result in the student being placed on academic probation. If you are on probation for two consecutive quarters, you are subject to dismissal from the University.

The grade “I” (Incomplete) may be assigned if you did not complete all of the course material and the material completed was of passing quality. The “I” must be arranged before the end of the course with the instructor. You should have a written agreement with the instructor detailing what is needed to complete the course. A passing grade is added to the transcript provided students satisfactorily complete the course work by the end of the next full term in academic residence. If the work is not completed by the next full term in residence the “I” grade automatically lapses to an “F” or “U” (unsatisfactory) as appropriate.

English as a Second Language:
All non-native speakers of English new to UCLA are required to fulfill UCLA ESL requirements by taking the English as a Second Language Placement Exam (ESLPE). Based upon performance on this examination, students may be exempt from enrolling in UCLA ESL classes, or may be required to complete one or more courses in the English 33 series. Please do not delay as failure to sit for the ESLPE results in a hold on student records. ESL course(s) are designed and intended to facilitate your studies here at UCLA. If you do not fulfill your ESL requirement, you will not be permitted to graduate. Students may only take the exam twice. Graduate students wishing to take a second exam must wait at least one quarter before retaking the placement exam. Retakes during the same quarter will not be recognized and the second of the two scores will be used for placement decision. Graduate students, who plan to work as teaching assistants (TAs) and are nonnative English speaking international students, are required to take the Test of Oral Proficiency (TOP), which is administered by the Office of Instructional Development.

Please refer to http://www.wp.ucla.edu/ for more information.
Students who hold a bachelor’s or higher degree from a university located in the United States or in another country in which English is both the spoken language and the medium of instruction, or who have completed at least two years of full-time study at such an institution, are exempted from the ESLPE.

Academic Probation:
A graduate student may be disqualified from continuing in the graduate program for a variety of reasons. The most common is failure to maintain the minimum cumulative grade point average (3.0) required by the Academic Senate to remain in good standing (note that some programs require a higher grade point average). Other examples include failure of examinations, lack of progress toward the degree, poor performance in core courses, etc. Probationary students (those with cumulative grade point averages below 3.0) are subject to immediate dismissal upon the recommendation of their department. Check the Standards and Procedures for Grad Study at UCLA for more information.

Student Complaints and Academic Grievances:
A grade may be appealed, on any reasonable grounds, to the instructor, the chair of the department, and the dean of the division or school.

If the student believes that the instructor has violated the Faculty Code of Conduct by assigning the grade on any basis other than academic grounds, the matter should first be taken up with the instructor. If the matter is not resolved, the student may go for counsel to the Office of Ombuds Services or may follow the procedures for the formal filing of charges (see Faculty Code of Conduct earlier in the Appendix). If a charge is sustained by the Academic Senate Committees on Charges and on Privilege and Tenure, an ad hoc committee is appointed within two weeks to review the disputed grade, and any warranted change is made within four weeks.

Academic Dishonesty:
Academic dishonesty is a serious crime that is very easily overlooked by people pursuing academia. It is a disturbing issue that both faculty and students must handle seriously and legitimately. In order to protect the integrity of the University and to prevent academic fraud, students and researchers must refrain from academic dishonesty. Please visit our university’s Academic Dishonesty website listed below for more information.
http://www.oid.ucla.edu/publications/teachersguide/policies/dishonesty/dishonest

Ordering Transcripts:
Academic and verification transcripts can be ordered through MyUCLA, in person at 1113 Murphy Hall, or by sending a request to UCLA Registrar’s Office, Attn: [Academic or Verification] Transcripts, 1105 Murphy Hall, Box 951429, Los Angeles, CA 90095-1429. Unofficial transcripts can be obtained through Department Student Affairs Officer.

Requests should include the student’s
1. Name under which he or she was registered at UCLA
2. Dates of attendance at UCLA
3. Date of birth
4. 9-digit student ID number, if available
5. Complete address and telephone number
6. Number of copies requested
7. Mailing instructions including all details and any special handling
8. Full signature

Transcript request forms containing this information are available in the Murphy Hall northwest lobby or at [http://www.registrar.ucla.edu/forms/](http://www.registrar.ucla.edu/forms/).

For UCLA Extension courses, order transcripts from UCLA Extension, P.O. Box 24901, Department K, Los Angeles, CA 90024-0910.

Requests are not processed if students have outstanding financial, academic, or administrative obligations (holds) to the University. Transcripts of work completed elsewhere must be requested directly from the campus or institution concerned.

More information on ordering transcripts is available by calling (310) 825-1091 or by contacting transcripts@registrar.ucla.edu.

Change of Name or Address:
Students who wish to change their name on official University records should fill out a UCLA Name Change or Correction form (available in the Murphy Hall northwest lobby) and submit it with documentation supporting the name change to Enrollment and Degree Services, 1113 Murphy Hall. All name changes are recorded on the transcript. If students change their address, they should update their address through MyUCLA.

**Student Life & Resources:**

2014-15 Academic Calendar:

<table>
<thead>
<tr>
<th>Fall Quarter 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter begins</td>
</tr>
<tr>
<td>Instruction begins</td>
</tr>
<tr>
<td>Study List deadline (becomes official)</td>
</tr>
<tr>
<td>Veterans Day holiday</td>
</tr>
<tr>
<td>Thanksgiving holiday</td>
</tr>
<tr>
<td>Instruction ends</td>
</tr>
<tr>
<td>Common final exams</td>
</tr>
<tr>
<td>Event</td>
</tr>
<tr>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Final examinations</td>
</tr>
<tr>
<td>Quarter ends</td>
</tr>
<tr>
<td>Christmas holiday</td>
</tr>
<tr>
<td>New Year’s holiday</td>
</tr>
<tr>
<td>Winter campus closure (tentative)</td>
</tr>
</tbody>
</table>

**Winter Quarter 2015**

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter begins</td>
<td>Monday, January 5</td>
</tr>
<tr>
<td>Instruction begins</td>
<td>Monday, January 5</td>
</tr>
<tr>
<td>Study List deadline (becomes official)</td>
<td>Friday, January 16</td>
</tr>
<tr>
<td>Martin Luther King, Jr, holiday</td>
<td>Monday, January 19</td>
</tr>
<tr>
<td>Presidents’ Day holiday</td>
<td>Monday, February 16</td>
</tr>
<tr>
<td>Instruction ends</td>
<td>Friday, March 13</td>
</tr>
<tr>
<td>Common final exams</td>
<td>Saturday-Sunday, March 14-15</td>
</tr>
<tr>
<td>Final examinations</td>
<td>Monday-Friday, March 16-20</td>
</tr>
<tr>
<td>Quarter ends</td>
<td>Friday, March 20</td>
</tr>
</tbody>
</table>

**Spring Quarter 2015**

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter begins</td>
<td>Wednesday, March 25</td>
</tr>
<tr>
<td>Cesar Chavez holiday</td>
<td>Friday, March 27</td>
</tr>
<tr>
<td>Instruction begins</td>
<td>Monday, March 30</td>
</tr>
<tr>
<td>Study List deadline (becomes official)</td>
<td>Friday, April 10</td>
</tr>
<tr>
<td>Memorial Day holiday</td>
<td>Monday, May 25</td>
</tr>
<tr>
<td>Instruction ends</td>
<td>Friday, June 5</td>
</tr>
<tr>
<td>Common final exams</td>
<td>Saturday-Sunday, June 6-7</td>
</tr>
<tr>
<td>Final examinations</td>
<td>Monday-Friday, June 8-12</td>
</tr>
<tr>
<td>Quarter ends</td>
<td>Friday, June 12</td>
</tr>
</tbody>
</table>

BruinCard (Student ID):
BruinCard is the official campus identification for UCLA, and is required for all students, faculty, and staff. Your BruinCard also serves as your library card, recreation card, door access card, and much, much more!  ([www.bruincard.ucla.edu](http://www.bruincard.ucla.edu))
International Students:
Federal regulations governing policy and procedure of visa issuance and maintenance for international students and scholars make it especially important for these individuals to maintain contact with international student and scholar counselors and advisers following their arrival on campus. UCLA students, postdoctoral fellows, and visiting scholars from abroad are encouraged to visit the UCLA International Center (http://www.internationalcenter.ucla.edu), which houses the Dashew Center for International Students and Scholars. The UCLA International Center can be found in the Tom Bradley International Hall, located at the central western entrance to UCLA. The Dashew Center for International Students and Scholars provides a mandatory orientation program that helps international students and scholars pursue their goals while UCLA Graduate Student Orientation Handbook 15at UCLA.

The Dashew Center also provides specialized services, counseling, and programs for all international students and scholars, from the time of their arrival to their departure. They offer services such as orientation for new students, help in locating affordable housing, English conversation classes, and programs for the families of international scholars, assistance with questions regarding immigration issues, employment, financial aid, tax matters, and cultural adjustment, as well as a number of other topics.

Student Mailboxes:
Each student has their own mailbox in the EHS Student Room (56-081). This is to be used only for educational and University purposes only.

Arthur Ashe Student Health and Wellness Center:
All registered graduate students may use the Arthur Ashe Student Health and Wellness Center, an outpatient clinic geared to the special needs of students at UCLA. The Ashe Center offers a full range of clinical and support services, most of which are prepaid by student registration fees. The clinical staff is comprised of highly qualified doctors, nurse practitioners, and nurses. For more information, visit: www.studenthealth.ucla.edu

Medical Insurance Requirement:
As a condition of registration, the University requires that all graduate and professional students, including international students on non-immigrant visas, have medical insurance coverage that meets the University’s minimum requirements. Contact the Insurance Office on the fourth floor of the Arthur Ashe Student Health and Wellness Center for details regarding the campus Student Health Insurance Plan (SHIP) or regarding the campus minimum requirements.

Waiving SHIP:
Please visit the Arthur Ashe Health Center Website for more information regarding waiving SHIP. http://www.studenthealth.ucla.edu/default.aspx
UCLA Counseling and Psychological Services:
CAPS professionals provide a safe, confidential place to discuss concerns or problems interfering with personal growth and academic achievement. They offer a range of counseling and clinical services designed to meet students’ varied mental health needs throughout the year. For more information, visit: http://www.counseling.ucla.edu/.

Graduate Writing Center:
The Graduate Writing Center offers free writing consultation to graduate and professional school students at all levels and in all disciplines, as well as writing workshops on a variety of topics. Meet with a trained and experienced writing consultant to work on writing issues ranging from style and argumentation to grammar and syntax. The graduate writing consultants will work with you to develop your writing confidence and your writing skills.
Student Activities Center, Suit B11  (310) 267-4805
http://gsrc.ucla.edu/gwc/

FSPH Career Services Office:
The mission of the Career Services Office is to facilitate the career development process for School of Public Health students through individual counseling sessions, workshops, employer presentations, career fairs and online job postings. For more information, visit their website at: http://www.ph.ucla.edu/students_careers_serv.html or contact:

Arlecia Powell-Halley, M.S.
Career Services Office
UCLA School of Public Health
Box 951772
Los Angeles, CA 90095-1772
Phone: 310-206-7158
Fax: 310-825-0472
Email: aphalley@ph.ucla.edu

UCLA Career Center:
The UCLA Career Center provides a wide range of programs and services exclusively for UCLA students. Your academic studies are based upon the career you want to develop, so discussing options when you arrive will give you the edge in the competitive job market. The Career Center provides services such as: individual career counseling, workshops, and online resume critique. For more information, visit: http://career.ucla.edu.

Bruin OnLine (BOL):
Bruin OnLine (BOL) is a collection of services that provides UCLA students, faculty, and staff with e-mail, web hosting services, network connectivity (including wireless), and free software and support. For more information, visit: www.bol.ucla.edu
Walk-in Consulting: Kerckhoff Hall, Suite 124
Telephone Technical Support: (310) 267-HELP (4357) option 1

BruinTech:
The purpose of BruinTech is to help faculty, students, and staff navigate the diversity of UCLA information technology (IT) services and organizations. The web site reflects the dynamic nature of IT on campus by spotlighting current views and events. In addition, BruinTech publishes a newsletter and offers seminars on relevant IT topics approximately four times a year.

Borrowing a CLICC Laptop:
Currently enrolled UCLA Students, currently employed UCLA Faculty and Staff Members, may checkout a laptop using their valid UCLA Logon and Password. Laptop borrowing privileges may be revoked or suspended based on violations of policies at the discretion of Library Administration. Please visit http://www.clicc.ucla.edu/tiki-index.php?page=Borrow+a+Laptop for CLICC laptop lending locations.

Office for Students with Disabilities (OSD):
To register with OSD, please call (310) 825-1501, and they will make an appointment for you to meet with a disability specialist. If you are unsure if you qualify, they will explore with you what the issues are and make recommendations. All services provided by the OSD are free of charge, and information is kept strictly confidential. In order to register with the OSD, students fill out a general information form and provide current documentation of their disability/medical condition. For more information, visit: http://www.osd.ucla.edu/.

Office Hours and Locations
Main Office - A255 Murphy Hall
Hours: Monday - Friday, 8am - 5pm
(310) 825-1501
(310) 206-6083 (telephone device for the deaf)
(310) 825-9656 (fax)
(310) 825-2263 (van service)

Transportation & Shuttle Services:

Campus Shuttles
The campus shuttle system incorporates the use of buses and vans that are clean, wheelchair accessible and well-equipped with air-conditioning and comfortable seating.

Campus Express
The Campus Express shuttle travels in a counter-clockwise direction providing round-trip service from: Weyburn Terrace and Lot 36 in the southwest corner of campus, through
Westwood and the University to Macgowan Hall turnaround in the northeast region of campus. The schedule is as follows:

- Monday to Friday (excluding Holidays) 7 a.m. to 7 p.m.
  - Stops approximately every 8 - 10 minutes
- Reduced Hours: Summer, Winter, & Spring Breaks: 7:30 a.m. to 6 p.m.

New Wilshire Center Route
The Wilshire Center shuttle travels in a counter-clockwise direction providing round-trip service from: Wilshire Center through Westwood Village, up Hilgard Avenue with stops at Parking Structure 2 (in front of Molecular Sciences), Gonda Research Facility, 100 Medical Plaza, completing the loop at the Wilshire Center. The schedule is as follows:

- Schedule: Monday to Friday (excluding Holidays) 7:30 a.m. to 5:30 p.m.
  - Stops approximately every 8-10 minutes

Northwest Campus
The Northwest Campus shuttle travels in a counter-clockwise direction providing round-trip van service across the northern region of campus traveling on Charles Young Drive between: Macgowan Hall, Kreiger (Bellagio) Child Care Center, Southern Regional Library and Hedrick Hall. The schedule is as follows:

- Schedule: Monday to Friday (excluding Holidays) 11:30 a.m. to 2 p.m.
  - Stops at MacGowan Hall at every half hour mark

Public Transportation
Refer to the website below to obtain more information regarding the ways to get around UCLA. [http://map.ais.ucla.edu/go/1000216](http://map.ais.ucla.edu/go/1000216)

Molecular Toxicology IDP Course Descriptions:

**2014-15 Molecular Toxicology IDP Schedule of Classes:**
This schedule is subject to change. Please visit the on-line Schedule of Classes for the most up to date course offerings:
[http://www.registrar.ucla.edu/schedule/schedulehome.aspx](http://www.registrar.ucla.edu/schedule/schedulehome.aspx)

**Biological Chemistry 254A: Concepts in Molecular Biosciences (3)**
Lecture, three hours; discussion, two hours. Five-week course covering four basic experimental approaches of biochemistry and molecular biology in context of various specific topics, including (1) structural biology, with protein and nucleic acid structure and molecular recognition, (2) use of cell-free and purified in vitro systems to dissect reaction mechanisms, (3) biochemical approaches to dissecting complex
reactions/pathways in cells, and (4) enzymology and protein chemistry. Letter grading.

**Biological Chemistry 254B: Concepts in Molecular Biosciences (3)**
Five-week course. Lecture, three hours; discussion, two hours. Enforced requisite: course 254A. Important biological problems that have been genetically analyzed in different organisms or small number of related problems. Major genetic approaches used in relevant organisms, including both forward and reverse genetic approaches, genetic interactions between genes (genetic enhancers and suppressors), transgenic technology, and systematic genomic strategies. Letter grading.

**Biological Chemistry 254C: Concepts in Molecular Biosciences (3)**
Five-week course. Lecture, three hours; discussion, two hours. Enforced requisites: courses 254A, 254B. Molecular mechanisms underlying complex problems in cell biology. Experimental approaches used to define mechanisms involved in protein targeting, cell structure and subcellular organization, cell communication, and intracellular signaling. Analysis of pathways that connect these cellular processes. Letter grading.

**Biological Chemistry 254D: Concepts in Molecular Biosciences (3)**
Five-week course. Lecture, three hours; discussion, two hours. Enforced requisites: courses 254A, 254B, 254C. Application of biochemical, molecular biological, genetic, and cell biological approaches to understand specialized topics in life and biomedical sciences, including developmental disease, stem cell biology, synaptic transmission in nervous system, cancer, and heart disease. Letter grading.

**Environmental Health Sciences C240: Fundamentals of Toxicology. (4)**
Lecture, four hours. Essential aspects of toxicology with emphasis on the human species; absorption, distribution, excretion, biotransformation as well as basic toxicological process and organ systems will be discussed. Letter grading. Microbiology, Immunology and Molecular Genetics CM234: Ethics and Accountability in Biomedical Research (2)
The course focuses on situations arising in the laboratory that may present ethical dilemmas for graduate students. (Students may take this course any time in their first two years of study.)

**Environmental Health Sciences M242: Toxicodynamics (2)**
(Same as Molecular Toxicology M242.) Lecture, one hour; discussion, one hour. Preparation: undergraduate biology and chemistry courses. Requisite: course C240. Examination of recent literature on mechanisms of toxicity or toxicodynamics. Student presentation of papers selected by instructor on various aspects of toxic mechanisms, including free radical mechanisms, mechanisms of cell death, metal toxicity/ion homeostasis, intracellular pH and calcium regulation, stress and adaptive pathways, DNA repair/mutagenesis, carcinogenesis, and teratogenesis. Discussion of various papers. S/U or letter grading.
Microbiology, Immunology, and Molecular Genetics C234: Ethics and Accountability in Biomedical Research (2)
Seminar, two hours. Designed for graduate students and undergraduates who have credit for life sciences or biomedical individual studies 199 course. Responsibilities and ethical conduct of investigators in research, data management, mentorship, grant applications, and publications. Responsibilities to peers, sponsoring institutions, and society. Conflicts of interest, disclosure, animal subject welfare, human subject protection, and areas in which investigational goals and certain societal values may conflict. Concurrently scheduled with course C134. S/U grading.

Molecular and Medical Pharmacology 237: Research Frontiers in Cellular and Molecular Pharmacology (6)
Lecture, six hours; laboratory, five hours total. Detailed examination of principles of pharmacology and mechanisms of drug action at organismal, tissue, cellular, and molecular levels, with emphasis on receptors, receptor/effector coupling, neurotransmitters, cardiovascular pharmacology, autonomic and central nervous system pharmacology. Letter grading.

Molecular and Medical Pharmacology M252A: Molecular Mechanisms of Human Diseases I (4)
(Same as Molecular, Cellular, and Integrative Physiology M252A.) Lecture, four hours. Preparation: prior satisfactory molecular biology coursework. Corequisite: course M252B. Fundamental concepts and methodologies in modern biology, with emphasis on implications and relevance to human disease and integration of biology with mechanisms underlying disease development and applications in therapy as they apply to cancer biology, infectious disease, and modern biological approaches. Letter grading.

Molecular and Medical Pharmacology M252B. Seminar: Molecular Mechanisms of Human Diseases I (2)
(Same as Molecular, Cellular, and Integrative Physiology M252B.) Seminar, two hours. Corequisite: course M252A. Reading, review, and discussion of primary research literature addressing fundamental concepts and methodologies in modern biology, with particular emphasis on implications and relevance to human diseases of topics presented in course M252A. Letter grading.

Molecular, Cellular, and Integrative Physiology M262A. Molecular Mechanisms of Human Diseases II (4)
(Same as Pharmacology M262A.) Lecture, four hours. Preparation: prior satisfactory molecular biology coursework. Corequisite: course M262B. Fundamental concepts and methodologies in modern biology, with emphasis on implications and relevance to human disease and integration of biology with mechanisms underlying disease development and applications in therapy as they apply to neurological, cardiovascular, and metabolic diseases. Letter grading.
Molecular, Cellular, and Integrative Physiology

M262B. Seminar: Molecular Mechanisms of Human Diseases II (2)
(Same as Pharmacology M262B.) Seminar, two hours. Corequisite: course M262A.
Reading, review, and discussion of primary research literature addressing fundamental concepts and methodologies in modern biology, with particular emphasis on implications and relevance to human diseases of topics presented in course M262A. Letter grading.

Molecular Toxicology 211A-C: Molecular Toxicology Seminar (1)
All Molecular Toxicology students will be required to attend two toxicology seminar series, each of which will meet once per month during the academic year. The first series consists of presentations by outstanding toxicological researchers from outside UCLA. Collectively, the Molecular Toxicology graduate students are responsible for selecting and inviting one "Graduate Students - Invited Lecturer" each year.

The second series consists of internal seminars presented by toxicology students and postdoctoral fellows. Trainees will be required to both attend this seminar, and give a presentation. Since we anticipate a total of about 18 Molecular Toxicology pre- and postdoctoral students, each trainee will present about once every two years in this series.

Molecular Toxicology 296A-E: Research Topics in Molecular Toxicology (2)
One of sections A to E is chosen. These are research group meetings. Students give presentations to their research group members on their current research. This provides an opportunity for the students to acquire skills presentation skills in a supportive environment, and to receive expert input into the progress of their research. Research group meetings occur weekly for about 1.5 hours. S/U grading:

296A. Chemical Toxicology
296B. Molecular Carcinogenesis
296C. Teratogenesis
296D. Molecular Topics in Boron Biology
296E. Germ Cell Cytogenetic/Genetic Biomarkers
296F. Genetic Toxicology
296G. Laboratory Analysis

Molecular Toxicology IDP Faculty Research Interests:

Patrick Allard, Ph.D.
Society and Genetics, Environmental Health Sciences - Full Biography
In the Allard laboratory, we are using the nematode C. elegans to uncover mechanisms of germ cell maintenance and differentiation. By developing and applying novel genetic, cellular and molecular tools in the nematode, we attempt to gain fast mechanistic insight on germline genes and pathways that are disrupted during environmental exposure. We are also interested in exploring environmental influence on other aspects of cellular
differentiation and function. For example, we are examining the effect of environmental chemicals on the deregulation of fat homeostasis, in particular exposures to compounds leading to fat accumulation ("obesogens").

**Anne M. Andrews, Ph.D.**
Psychology and Biobehavioral Science - [Full Biography]
Dr. Andrews' research is centered on the investigation of therapeutics, drugs of abuse, neurotoxins, and environmental factors to probe the molecular basis of serotonin system function associated with the etiology and treatment of mood and anxiety disorders.

**Jesus A. Araujo, MD, Ph.D.**
Medicine, Environmental Cardiology - [Full Biography] - In The News: [Article 1]
Dr. Araujo's research program focuses on the study of genetic and environmental factors involved in vascular oxidative stress and atherosclerosis, including the dissection of molecular mechanisms responsible for the cardiovascular toxicity of air pollutants.

**Jeff Bronstein, M.D., Ph.D.**
Neurology - [Full Biography]
Jeff Bronstein received his bachelor's degree from the University of California, Berkeley and M.D. and Ph.D. from UCLA as a recipient of the Medical Scientist Training Program Award. He completed a residency in Neurology and fellowship training in Movement Disorders at UCLA and at Queens Square in London. Dr. Bronstein also completed a postdoctoral fellowship in molecular biology before being appointed an Assistant Professor of Neurology in 1994 and Director of the Movement Disorders Program in 1996 at UCLA. His clinical interests include the management of Parkinson's disease (PD) and other movement disorders, surgical treatment of PD, and developing new therapies for patients. Dr. Bronstein's research interests include the study of the causes of PD (environmental and genetic) using cell and zebrafish models as well as population-based studies. His research is supported by the NIH, Veteran Administration, and private foundations. Dr. Bronstein is the Principle Investigator of one of 6 National Parkinson's Disease Centers (PADRECC) at the Veterans Administration Medical Center, is a project PI of the UCLA Collaborative Center for Parkinson's Disease Environmental Research (CCPDER) funded by the NIEHS and is an Investigator in the UCLA Udall Center.

**Gautam Chaudhuri, M.D.**
OB/GYN and Pharmacology - [Full Biography]
Dr. Chaudhuri's research focuses on the mechanism by which estradiol and nitric oxide modulate various physiological functions and the signal transduction pathways involved.

**Marie-Francoise Chesselet, Ph.D.**
Chair-Neurobiology; Charles H. Markham Professor, Neurology - [Full Biography]
Dr. Chesselet's laboratory explores molecular mechanisms leading to neurodegenerative diseases of the basal ganglia, such as Huntington's disease and Parkinson's disease. She is interested in the mechanisms by which environmental toxins, specifically agricultural
pesticides, may interact with genetic risk factors to cause increased risks of Parkinson's disease. This work is primarily conducted in mouse models of Parkinson's disease but also involves neuronal cultures.

**Catherine Clarke, Ph.D.**
Chemistry and Biochemistry - [Full Biography](#)
Coenzyme Q (also known as ubiquinone or Q) is a lipid component of cellular membranes that plays an essential role in the respiratory electron transport chain. Dr. Clarke studies the biosynthesis, regulation, and function of Q in the yeast Saccharomyces cerevisiae.

**Michael Collins, Ph.D.**
Environmental Health Sciences - [Full Biography](#)
Research in Dr. Collins' laboratory is concerned with aspects of developmental toxicology or teratology.

**Curtis Eckhert, Ph.D.**
Environmental Health Sciences - [Full Biography](#)
Dr. Eckhert's research program is concerned with elucidating the molecular basis of boron essentiality and toxicity in humans and animals.

**Richard Gatti, Ph.D.**
Pathology and Laboratory Medicine - [Full Biography](#)
Dr. Gatti's research focuses on ataxia-telangiectasia and other chromosomal instability disorders. The lab specializes in diagnostic assays, mutation screening and identification, genetic mechanisms of disease, and functional assays for ATM and related proteins, including cellular responses to ionizing radiation. Another project identifies therapeutic approaches to ATM based on specific groups of mutations.

**Ben J. Glasgow, M.D.**
Department of Pathology and Laboratory Medicine/Ophthalmology
Dr. Glasgow's research focuses on Molecular and Cytogenetic Studies of Ocular Melanoma

**Hilary Godwin, Ph.D.**
Environmental Health Sciences - [Full Biography](#)
Dr. Godwin's research focuses on the basic chemical and biological mechanisms by which toxic metal ions affect neurological signaling and development and the mechanisms by which nanoparticles enter living systems and impact biological processes.

**Oliver Hankinson, Ph.D.**
Molecular Toxicology Ph.D. Program Director, and Department of Pathology and Laboratory Medicine - [Full Biography](#)
Dr. Hankinson's research focuses on the mechanism of carcinogenesis by polycyclic
aromatic hydrocarbons (found in cigarette smoke and smog) and dioxin (a widespread pollutant and related compounds, using molecular biology, cell culture and animal model systems.

**Louis J. Ignarro, Ph.D.**  
Molecular and Medical Pharmacology - [Full Biography](#)  
Dr. Ignarro's research is directed toward elucidating mechanisms of regulation of nitric oxide (NO) production and cytotoxicity in macrophages, vascular cells, and tumor cells.

**David Krantz, Ph.D.**  
Psychiatry and Biobehavioral Sciences - [Full Biography](#)  
Dr. Krantz uses Drosophila to study how changes in the function of neurotransmitter transporters may influence synaptic transmission and behavior.

**Shaily Mahendra, Ph.D.**  
Civil and Environmental Engineering  
Research interests lie in the area of microbial interactions with chemical contaminants and nanoparticles for applications ranging from ecotoxicology to biodegradation to disinfection.

**William McBride, Ph.D.**  
Radiation Oncology - [Full Biography](#)  
Dr. McBride's research focuses on degradation of proteins through the proteasome system and the inhibitory effects of exposure to radiation, and other agents.

**William Melega, Ph.D.**  
Molecular and Medical Pharmacology - [Full Biography](#)  
Dr. Melega studies the molecular mechanisms of neurodegenerative diseases and drug addiction.

**Sabeeha Merchant, Ph.D.**  
Chemistry and Biochemistry - [Full Biography](#)  
Dr. Merchant studies the biochemistry and molecular genetics of metal metabolism.

**Jeffrey H. Miller, Ph.D.**  
MIMG - [Full Biography](#)  
Dr. Miller's group is interested in understanding how mutations occur in cells of bacteria, and how cells avoid mutagenesis with different repair strategies. We are also interested in understanding repair systems in humans, and how defects in these systems lead to cancer.

**Andre Nel, MD, Ph.D.**  
Medicine - [Full Biography](#) - In The News: [Article 1](#)  
Dr. Nel's research focuses on the adverse effects of particulate pollutants, including manufactured nanoparticles and diesel exhaust particles, to the lung.
**Suzanne E. Paulson, Ph.D.**
Atmospheric Sciences - [Full Biography]
Dr. Paulson's group is investigating generation of reactive oxygen species by ambient particulate matter, mapping air pollution in urban microenvironments, and investigating aerosol optical properties.

**Srinivasa Reddy, Ph.D.**
Medicine and Molecular and Medical Pharmacology- [Full Biography]
My laboratory is interested in understanding the expression and regulation of enzymes involved in arachidonic acid (lipid) metabolism, and their role in the development of cardiovascular diseases.

**Virender Rehan, M.D.**
Department of Pediatrics, Harbor-UCLA Medical Center
Research interests include neonatal lung injury/repair with a special emphasis on lung injury repair following exposure to insults such as hyperoxia, infection, and nicotine.

**Beate Ritz, MD., Ph.D.**
Epidemiology and Environmental Health - [Full Biography] - In The News: [Article 1]
Dr. Ritz's primary research interests are the effects of occupational and environmental toxins such as pesticides, ionizing radiation, and air pollution on chronic diseases including neurodegenerative disorders (Parkinson's disease), cancer, and adverse birth outcomes.

**Wendie Robbins, Ph.D.**
Nursing/ Environmental Health Sciences - [Full Biography]
Dr. Robbins' research focuses on the molecular mechanisms of environmentally induced germ cell genetic damage and the development of biomarkers to detect and measure this damage in human sperm cells.

**Michael Roth, M.D.**
Medicine - [Full Biography]
Dr. Roth's research focuses on the toxicology of inhaled substance abuse.

**Robert Schiestl, Ph.D.**
Pathology/ Environmental Health Sciences - [Full Biography]
Dr. Schiestl's work centers mostly on basic mechanisms, genetic control, and inducibility by environmental carcinogens and nanoparticles of homologous and illegitimate recombination, which are molecular events involved in carcinogenesis.
Ram Raj Singh, M.D.
Medicine-Rheumatology
Dr. Singh’s clinical interests include SLE, scleroderma, vasculitis, rheumatoid arthritis, ankylosing spondylitis, and myositis. His research interests include SLE, myositis, scleroderma and autoimmune disease.

Joan S. Valentine, Ph.D.
Chemistry and Biochemistry - Full Biography
Dr. Valentine's research focuses on copper-zinc superoxide dismutase and Lou Gehrig's disease and on yeast studies of oxidative stress and antioxidants.

Xia Yang, Ph.D.
Integrative Biology and Physiology - Full Biography
Dr. Yang's research focuses on identifying key regulatory genes and gene networks that mediate the effect of genetic and environmental perturbations on metabolic diseases using high-throughput genomic and computational approaches. Dr. Yang is also interested in applying similar approaches to pharmacogenomic and toxicogenomic studies to understand the genomic architecture of drug metabolism, drug response, and toxicity.

Zuo-Feng Zhang, Ph.D.
Epidemiology - Full Biography
Dr. Zhang's research interests focus on molecular genetic epidemiology of cancers of the lung, bladder, prostate, esophagus, stomach, liver, head and neck cancer, cervix, and AIDS-related malignancies. His research team is working on the role of mutations, methylations, and polymorphisms of genes in the development of cancer. The major focus of his research group is to evaluate the main effects of these genes on the risk of cancers and to assess potential gene-environment interactions. Dr. Zhang is also interested in risk and protective factors for major cancers such as cancers of the lung, esophagus, stomach, and liver in Chinese population, nutrition and cancer, epidemiology of second primary cancers, methodological issues in the use of tumor markers in cancer epidemiology, and the application of tumor markers in progression and survival of cancer.