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Bioinformatics Contact Information

Director
• Dr. Xinshu (Grace) Xiao
  E: gxxiao@ucla.edu  P: (310) 206-6522

Faculty Graduate Advisor
  Dr. Matteo Pellegrini
  E: matteop@mcdb.ucla.edu  P: (310) 825-0012

Student Affairs Officers (SAOs)
  Gene Gray, M.F.A. (Advisor of Ph.D. Program)
  E: gene@lifesci.ucla.edu  P: (310) 825-0068

  Greg Pancho, M.A. (Advisor of M.S. Program)
  E: grpancho@lifesci.ucla.edu  P: (310) 825-4340

The SAOs handles matters related to admissions, recruitment, alumni, Cota Robles fellowships, Graduate Dean’s Scholar awards, and the onboarding process for first-year students. Also, he manages processes related to funding, courses, TAships, nominating and reconstituting committees, student seminar series, Dissertation Year Fellowship awards, oral qualifying exams, and defenses.

Introduction to the Bioinformatics M.S. and PhD Programs

The Bioinformatics M.S. Program and the Ph.D. Program (Ph.D. program is one of ten disciplinary “Home Areas” within the UCLA Biosciences) consist of faculty and students with shared interest in research areas and approaches. These programs provide in depth, cutting-edge training, and offer access to research with exceptional faculty mentors.

The Bioinformatics Ph.D. Program offers masters and doctoral training for students interested in undertaking research at the interface of computer science, mathematics, biology and biomedicine to address the fundamental challenges of contemporary data-rich research in biosciences. Our M.S. and Ph.D. program consists of an integrated one-year core curriculum, over 50 elective courses, research rotations, and an intensive research experience with one of over 45 faculty mentors from more than 12 departments.

Students within the Bioinformatics M.S. and Ph.D. programs will engage in a M.S. or Ph.D. project focused on understanding the inherent structure of biological information. Examples of M.S. and Ph.D. topics for students in the program include:

1) Research into the genetic determinants of complex human disease, including psychiatric diseases and cancer.
2) The development of computational methods for the analysis of expression data and the epigenome.
3) The development of computational methods to reverse engineer gene networks in order to understand or model regulatory control of cellular functions
4) The analysis of mass spectrometry data to, for example, understand the connection between protein phosphorylation or metabolism and cancer
5) The study of population genetics and evolution
First Year Lab Rotations (PhD Students Only)
During your first year, you will rotate with 3 different faculty members (one each quarter). These rotations will provide you with the opportunity to explore labs and research mentors. During these rotations you will act as a member of the lab. You will attend lab meetings and work on one project during that quarter. We will send you the lab rotation list and the details provided on each PI’s lab. You will email the SAO your proposed rotation for the Fall Quarter and include a brief statement on why you wish to rotate within that particular lab. This proposal must be submitted during the month of August. The advising committee will review your proposal, note any comments/suggestions/concerns and notify you of the decision. If approved, you may contact the faculty member to finalize the Fall rotation. You will do this for each quarter.

Advising
All academic affairs for graduate students in the program are directed by the program's faculty graduate adviser, who is assisted by staff in the Graduate Student Affairs Office. Upon matriculation, students are assigned a three-faculty guidance committee by the faculty graduate adviser. The chair of the guidance committee acts as the provisional adviser until a permanent adviser is selected. Provisional advisers are not committed to supervise examination or thesis work and students are not committed to the provisional adviser. Students select a permanent adviser before establishing a comprehensive examination or thesis committee.

In addition to the formal advising procedures outlined above, students are encouraged to seek advice on career development from faculty members in the Bioinformatics community at UCLA. An annual retreat serves to allow informal and organized contacts between faculty and students, providing further opportunity for advising.

Need Help?
Counseling and Advising
If you do have any problem at UCLA whatsoever, please do feel free to come to the Director’s office (TLSB 2000E; phone 310-206-6522) or the Faculty Graduate Advisor’s office (4312 Life Sciences; phone 310-825-7636). Members of the entry advising committee are open to talk with you anytime. The advising committee is open at any time as individuals or as group to hear complaints, thoughts or concerns of individuals or groups. Check our website for current committee members.

Graduate Division has put together a helpful list of further help that the campus organizes called "Campus Resources".

Another important resource is UCLA Counseling and Psychological Services (CAPS).

Diversity and Discrimination
UCLA and the Bioinformatics IDP are committed to maintaining an equal learning and working environment. If you have, or believe to have, witnessed an act of discrimination, please either contact the IDP Director or advising committee or the Equity Office at 310-794-1232.

Office of students with disabilities can help you get learning help, more time on tests and give advice if you need wheelchair access etc.
Ombuds Services gives confidential advice and makes sure your complaint is heard and followed up on.

The Title IX office provides individual consultations and information about campus policies regarding sexual harassment.

The office of Equity, Diversity and Inclusion is dedicated to help us all in creating a campus that is equitable, fair and transparent. If this does not describe the campus you know, please get in touch with them and discuss your concerns.

Master of Science in Bioinformatics Degree (direct admits and CASB DSP Undergraduate Majors only)

Areas of Study
This field of study provides exposure primarily to biological and algorithmic advances in genomics, proteomics, and other related fields. Study consists of a core curriculum, computer science, mathematics, and statistics. Students majoring in Computational & Systems Biology can enroll in this Field to receive their Master’s degree.

Foreign Language Requirement
None.

Course Requirements

<table>
<thead>
<tr>
<th>Field</th>
<th>Number of required courses</th>
<th>Number of required units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioinformatics</td>
<td>9</td>
<td>36</td>
</tr>
</tbody>
</table>

Field: Bioinformatics
Students must complete all of the following: (1) Bioinformatics M229S: Current Topics in Bioinformatics; (2) Bioinformatics M223: Statistical Methods in Bioinformatics; (3) Bioinformatics M275A and B: Applied Bioinformatics; (4) Two electives from the Program’s list of approved elective courses. These two electives require the approval of the student’s PI/faculty mentor. Please note: other elective courses outside of the Program’s list can be taken with the agreement of the Home Area Director and the student’s PI/faculty mentor. (5) enrollment in Bioinformatics 201 is expected throughout study for the master’s degree; (6) enrollment in Bioinformatics 596 research units, although no more than two courses (eight units) of 596 may be applied toward the requirements for a master’s degree. Up to eight units (two courses) of upper division electives can be applied toward the requirements for a master’s degree.

Teaching & Field Experience
Not required.

Capstone Plan
The master's capstone is an individual project in the format of a written report resulting from a research project. The report should describe the results of the student's investigation of a problem in the area of bioinformatics under the supervision of a faculty member in the program, who approves the subject and plan of the project, as well as reading and approving the completed report. While the problem may be one of only limited scope, the report must exhibit a satisfactory style, organization, and depth of understanding of the subject. A student should normally start to plan the project at least one quarter before the award of the M.S. degree is expected. The advisory committee evaluates and grades the written report as not pass or M.S. pass and forwards the results to the faculty graduate adviser.
The capstone plan is available for students pursuing the Bioinformatics field and the Medical Informatics field. However, students in Computational & Systems Biology major are required to follow the Thesis Plan only.

**Thesis Plan**

_Every master's degree thesis plan requires the completion of an approved thesis that demonstrates the student's ability to perform original, independent research._

Students must choose a permanent faculty adviser and submit a thesis proposal by the end of the third quarter of study. The proposal must be approved by the permanent adviser who served as the thesis adviser. The thesis is evaluated by a three-person committee that is nominated by the program and appointed by the Division of Graduate Education. Students must present the thesis in a public seminar.

**Time-to-Degree**

Normative time-to-degree for all fields is five quarters.

<table>
<thead>
<tr>
<th>DEGREE</th>
<th>NORMATIVE TIME TO ATC (Quarters)</th>
<th>NORMATIVE TTD</th>
<th>MAXIMUM TTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.S.</td>
<td>3</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

**EXAMPLE ENROLLMENT**

**M.S. in Bioinformatics first year enrollment (this is an example schedule and could be subject to change):**

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOINFO 201 (2 units)</td>
<td>BIOINFO 201 (2 units)</td>
<td>BIOINFO M223 (4 units)</td>
</tr>
<tr>
<td>BIOINFO 275A &amp; 275B (4-units)</td>
<td>BIOINFO M229S (4 units)</td>
<td>BIOINFO 596 (6-8 units of your PI’s section)</td>
</tr>
<tr>
<td>BIOINFO 596 (6 units of your PI’s section)</td>
<td>BIOINFO 596 (6 units of your PI’s section)</td>
<td>Elective (4 units) if needed</td>
</tr>
<tr>
<td>Elective (4 units) if needed</td>
<td>Elective (4 units) if needed</td>
<td></td>
</tr>
</tbody>
</table>

**M.S. in Bioinformatics second year enrollment (this is an example schedule and could be subject to change):**

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOINFO 597 or 598 (6-12 units of your PI’s section)</td>
<td>BIOINFO 597 or 598 (6-12 units of your PI’s section)</td>
<td>BIOINFO 597 or 598 (12 units of your PI’s section)</td>
</tr>
<tr>
<td>Elective, if needed (4 units)</td>
<td>Elective, if needed (4 units)</td>
<td></td>
</tr>
</tbody>
</table>
PhD Program Requirements

Course Requirements
Students are required to enroll full-time in a minimum of 12 units each quarter. In addition to basic course requirements, all students are required to enroll in Bioinformatics 596 or 599 each quarter. Students who have gaps in their previous training may take, with their thesis adviser's approval, appropriate undergraduate courses. For example, students without statistical background are recommended to take STATS 100B (Introduction to Mathematics Statistics) in their 1st year. Students without a Computer Science background are recommended to take COM SCI 180 (Introduction to Algorithms and Complexity), COM SCI 145 (Introduction to Data Mining), COM SCI 146 (Introduction to Machine Learning), or COM SCI 148 (Introduction to Data Science). However, these courses may not be applied toward the required course work for the doctoral degree.

Students must complete all of the following: (1) Bioinformatics M229S: Current Topics in Bioinformatics; (2) Bioinformatics M223: Statistical Methods in Bioinformatics; (3) Bioinformatics M275A and B: Applied Bioinformatics; (4) one of the Data Science course chosen from the Program’s list of approved elective courses; This course requires the approval of the student’s PI/faculty mentor; (5) two additional Data Science or other elective courses chosen from the Program’s approved list elective courses shall be completed before the oral qualifying exam. These two elective courses require the approval of the student’s PI/faculty mentor. Please note: other elective courses can be taken with the agreement of the Home Area Director and the student’s PI/faculty mentor; (6) MIMG C234; (7) enrollment in Bioinformatics 201 is expected throughout the first two years; (8) Bioinformatics 202 in the Fall of the first year and the Spring of the first and second years; (9) three laboratory rotations (enrolling in six units of Bioinformatics 596 during each rotation); and (10) Bioinformatics 596 or 599 in each quarter after the first year. Courses must be taken for a letter grade, unless offered on S/U grading basis only.

First-year students
*Bioinformatics first year enrollment (this is an example schedule and could be subject to change):

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOINFO 201 (2 units)</td>
<td>BIOINFO 201 (2 units)</td>
<td>BIOINFO 202 (4 units)</td>
</tr>
<tr>
<td>BIOINFO 202 (4 units)</td>
<td>BIOINFO M229S (4 units)</td>
<td>BIOINFO M223 (4 units)</td>
</tr>
<tr>
<td>BIOINFO 275A &amp; 275B (4-units)</td>
<td>BIOINFO 596 (at least 6 units of the lab you’re rotating)</td>
<td>MIMG C234 (2 units)</td>
</tr>
<tr>
<td>BIOINFO 596 (at least 6 units of the lab you’re rotating)</td>
<td>Elective (4 units) if needed</td>
<td>BIOINFO 596 (at least 6 units of the lab you’re rotating)</td>
</tr>
<tr>
<td>Elective (4 units) if needed</td>
<td>Elective (4 units) if needed</td>
<td>Elective (4 units) if needed</td>
</tr>
</tbody>
</table>

*Please note there is no enrollment during summer quarters*
Written Qualifying Exam

The University requires that Ph.D. students complete a Written Qualifying Examination (WQE). The Bioinformatics WQE takes place during the summer after the student’s first year in the program. Each student independently selects the topic, and develops an original research proposal and pilot study for a data analysis project. The topic for each student’s study requires advance approval by an ad hoc committee of the IDP.

Abstract of the WQE

The topic for each student’s WQE requires advanced approval by an ad hoc committee of the IDP. To receive approval, students need to submit a ~1-page abstract to propose the WQE topic. This section explains faculty’s expectations for this abstract.

The abstract should contain a title and the following content:

Background and Significance: Include a brief background to motivate the project, describe its significance, and include a summary of existing literature and a clear description of what has been done and what has not. Highlight the gaps in knowledge that you will attempt to address in your work.

Proposed Method: Clearly and concisely explain your proposed method; state what is new in your method and how it differs from existing literature.

Proposed Data Analysis: The method should be applied to simulated data and actual data (if relevant). If applicable, performance of your method should be compared to that of one or more existing methods. Describe clearly the data sets you propose to use, justify your choice of data sets and methods to compare to, as applicable.

Expected Timeline: Implementation and data analysis may take longer than you expect. Try to give an estimate of time needed to finish each part, such that the scale of your project should be appropriate for a 1-month period. Do not forget to leave enough time for writing. You should include a bibliography for the abstract, which does not count toward the page limit. Based on this abstract, the faculty will provide feedback on your project. It is in your best interest to submit an abstract that has been carefully crafted. This will allow you to obtain the most useful feedback on your project.

Written Qualifying Examination Guidelines

Purpose:
For the WQE, you must demonstrate your ability to formulate a testable research question and answer it, by carrying out a small, well-defined and focused project over a fixed one-month period. It must include the development of novel bioinformatics methodology. This tests four skills:

• Your ability to get "up to speed" on a research area of your choosing, so that you are able to understand what has already been done;
• Your ability to identify a solvable research problem within this area. That means spotting an opportunity to ask a different question or to propose a better answer to an existing question;
• Your ability to implement and test your idea
• Your ability to convincingly present each of these aspects in writing.

The WQE differs from publication-quality research primarily in scale:
You must choose a small enough problem that you can complete it in one month -- which is much less than the length of a typical published research project. Therefore you must choose a more focused, less ambitious scope for your WQE. Be realistic.

The WQE must be your own ideas and work exclusively.

For this reason, the topic of the WQE research proposal may not be a project from a previous course, a rotation project, a project related to the student’s prior research experience, an anticipated dissertation research topic, or an active or anticipated research project in the laboratory of your mentor.

Your thesis advisor may neither be consulted, nor otherwise involved in the preparation or write-up of the WQE project.

Detailed instructions on the WQE will be sent to first year students in the Spring quarter.

**Second-year students**

*Bioinformatics second year enrollment (this is an example schedule and could be subject to change):

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOINFO 201 (2 units)</td>
<td>BIOINFO 201 (2 units)</td>
<td>BIOINFO 202 (4 units)</td>
</tr>
<tr>
<td>BIOINFO 596 (between 6-10 units of your PI’s section, if not taking any other courses)</td>
<td>BIOINFO 596 (between 6-10 units of your PI’s section, if not taking any other courses)</td>
<td>BIOINFO 596 (at least 6 units of your PI’s section if not taking any other courses)</td>
</tr>
<tr>
<td>Possible elective(s)</td>
<td>Possible elective(s)</td>
<td>Possible elective(s)</td>
</tr>
</tbody>
</table>

*Please note there is no enrollment during summer quarters

**Nominating Your Doctoral Committee**
Select a doctoral committee of four faculty members following UCLA Graduate Division rules. All committee nominations and reconstitutions must adhere to the Minimum Standards for Doctoral Committee Constitution.

- In the Bioinformatics IDP, your PI can be on the four-member doctoral committee and can serve as chair.
- A list of faculty members within the Bioinformatics Program is available on the Bioinformatics website.
- All doctoral committees require a minimum of four members among whom a minimum of three members must hold current UCLA Academic Senate faculty appointments limited to Professor (any rank), Professor or Associate Professor Emeritus, Professor in Residence (any rank), or Acting Professor or Acting Associate Professor.
- Two of the three doctoral committee members from UCLA must hold the rank of professor or associate professor (regular or in-residence series).
- If certified and approved by the Committee on Degree Programs (CDP), one Adjunct
Professor (any rank) or Professor of Clinical X (any rank) may serve in place of the required three UCLA Senate faculty members listed in #1 above. Only one such substitution is allowed per doctoral committee. (GC Am. 12/15/2017)

☐ The Chair always must hold a current UCLA Academic Senate faculty appointment per #1 above in the same department or IDP as the graduate student. If a committee has co-chairs, at least one must be from the student’s major department or IDP at UCLA.

For additional requirements, please refer to: https://grad.ucla.edu/academics/doctoral-studies/minimum-standards-for-doctoral-committee-constitution-effective-2016-fall/

Once you have gotten four appropriate professors agree to be on your doctoral committee, fill out the Nomination of Doctoral Committee form (https://grad.ucla.edu/gasaa/library/docnomin.pdf)

Once you fill out the form, you will print it and have your committee members sign off on it.

Bring the SAO the signed form and he/she will get the form signed by the Director or Faculty Graduate Advisor and make a copy for our records.

Submit the form to Graduate Division for approval at 1255 Murphy Hall. Please hand it to a person rather than dropping it off in the box and email me the name of who you gave the form to. This will help us relocate the form should Graduate Division misplace it.

Within a few weeks you will be notified if your doctoral committee was approved. Once approved, move to completing the OQE.

Third-year students

*Bioinformatics third year enrollment:

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOINFO 596 (12 units of your PI’s section, if not taking any other courses)</td>
<td>**BIOINFO 596 or 599 (12 units of your PI’s section, if not taking any other courses)</td>
<td>**BIOINFO 596 or 599 (12 units of your PI’s section, if not taking any other courses)</td>
</tr>
</tbody>
</table>

*Please note there is no enrollment during summer quarters

**If student advanced to candidacy during Fall Quarter of 3rd year, student can begin to register for Bioinfo 599 in Winter Quarter of 3rd year.

***If student advanced to candidacy during Winter Quarter of 3rd year, student can begin to register for Bioinfo 599 in Spring Quarter of 3rd year.

Oral Qualifying Exam

The students are expected to pass the oral qualifying examination by the end of Fall quarter of the third year. Decide on a day and time that all the faculty on your doctoral committee can gather for your OQE and let the SAO know so he or she can reserve a room at that time. If you can provide a second time that works, this could make finding an appropriate room easier, but if there is no second time that would work, that’s fine. Using doodle.com is an easy way to find times that work for everyone.
Submit the dissertation proposal to your committee at least 10 days before the oral exam is scheduled: details on how to write the dissertation proposal as well as whom to refer to for guidance is listed below.

Stop by the room reserved for your OQE at least a few days before your OQE is scheduled to be sure your laptop properly functions with the projector and you have no trouble displaying your slides.

Below are the details of the OQE requirements, as described in our Program Requirements page (https://grad.ucla.edu/programs/life-sciences/bioinformatics/)

The University Oral Qualifying Examination must be completed and passed by the end of the fall quarter of the third year. Students prepare a written description of the scientific background of their proposed dissertation research project, the specific aims of the project, preliminary findings, and proposed bioinformatic approaches for addressing the specific aims. This dissertation proposal must be written following an NIH research grant application format and be at least six pages, single spaced and excluding references, and is submitted to the students' doctoral committee at least 10 days in advance of the examination. Exclusive of their doctoral committee members, students are free to consult with their dissertation adviser, or other individuals in formulating the proposed research. The examination consists of an oral presentation of the proposal by the student to the committee. The student's oral presentation and examination are expected to demonstrate: (1) a scholarly understanding of the background of the research proposal; (2) well-designed and testable aims; (3) a critical understanding of the bioinformatic, mathematical or statistical methodologies to be employed in the proposed research; and (4) an understanding of potential bioinformatic outcomes and their interpretation. This examination is graded Pass, Conditional Pass, or Fail. If the doctoral committee decides that the examination reflects performance below the expected mastery of graduate-level content, the committee may vote to give the student a Conditional Pass. A student who receives a Conditional Pass will be required to modify or re-write their research proposal, so as to bring it up to required standard. In the case of a Conditional Pass, the student will be permitted to seek the advice of their committee in modifying or re-writing the proposal. Any required re-write or modification will be submitted to, and reviewed by the doctoral committee. A second oral presentation is not necessary unless the doctoral committee requires so. The signed Report on the Oral Qualifying Examination & Request for Advancement to Candidacy will be retained in the Graduate Student Affairs Office until the student has satisfied the doctoral committee's request for revision or re-write. Students are allowed only one chance to revise or re-write their proposal.

**Advancement to Candidacy (ATC)**

Students are advanced to candidacy upon successful completion of the written and oral qualifying examinations.

They are officially advanced to candidacy on the date the completed application for candidacy form is received in Graduate Admissions/Student and Academic Affairs, provided the information on the form is correct and complete and the examination was conducted in accordance with Graduate Council regulations.

**Important:** The $90.00 advancement to candidacy fee appears on the next UCLA Billing Statement. Your PI's are responsible for paying the ATC fee. Students are expected to advance to candidacy no later than Winter Quarter of the third year of graduate school.

Nonresident students qualify for a 100% reduction in the cost of NRT the quarter after they
advance to doctoral candidacy for a maximum of nine academic quarters (Summers are not counted).

**Fourth-year students**

*Bioinformatics fourth year enrollment:*

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOINFO 599 (12 units of your PI’s section)</td>
<td>BIOINFO 599 (12 units of your PI’s section)</td>
<td>BIOINFO 599 (12 units of your PI’s section)</td>
</tr>
</tbody>
</table>

*Please note there is no enrollment during summer quarters*

**Fifth-year students**

*Bioinformatics fifth year enrollment:*

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
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</thead>
<tbody>
<tr>
<td>BIOINFO 599 (12 units of your PI’s section)</td>
<td>BIOINFO 599 (12 units of your PI’s section)</td>
<td>BIOINFO 599 (12 units of your PI’s section)</td>
</tr>
</tbody>
</table>

*Please note there is no enrollment during summer quarters*

**Dissertation Defense**

**Defense:** Oral presentation of your research

**Filing your dissertation:** Submitting your thesis online (last step)

Every doctoral program requires the completion of an approved dissertation that demonstrates the student’s ability to perform original, independent research and constitutes a distinct contribution to knowledge in the principal field of study. The choice of subject must be approved by the doctoral committee, which usually reviews and approves the dissertation prospectus at the time of the oral qualifying examination. Subsequently, the doctoral committee guides progress toward completion of the dissertation.

**Defense**

In general, the format for the defense is as follows: The candidate should be prepared to make a 40 to 45 minutes oral presentation to the committee and a general open audience. The presentation is followed by a question-and-answer period. Once the questioning period is complete, the candidate and non-committee members leave and the examination committee discusses the merits of both the dissertation and the defense.

The candidate may be asked to make major or minor revisions before receiving final approval by the examination committee. There is, of course, a possibility that the dissertation is not accepted, in which case the candidate and dissertation committee meet together to decide how to proceed. Because revisions may well be required, the candidate should leave enough time between the defense date and the final date for submitting the completed draft to the Graduate
Process
1. Notify your SAO that you are intending to file
2. Review the thesis and dissertation filing requirements
   https://grad.ucla.edu/gasaa/etd/filingrequirements.pdf:
   a. Video tutorial
   b. Filing requirements
   c. Filing deadlines and workshop dates
   d. FAQs
   e. Remote Participation Notification & Exception

3. Email your SAO 10 days before your defense, providing the following*:
   i. Date
   ii. Time
   iii. Location
   iv. Title of defense
   v. Headshot
   *Please make sure to reserve a room as early as possible.

4. At least 10 days before your defense, send your dissertation to your committee so they can review it, and cc: the SAO**:
   a. Your committee can email you comments or wait until your defense to give you suggestions
   b. Following your defense, revise your dissertation based on the feedback you receive from your committee
   c. When you have made all necessary changes, and you are sure all of your committee members approve, submit it to the University (links above)
   d. After submitting, your committee will receive email instructions regarding how to officially approve your dissertation (online)
   **The process of submitting your dissertation is not complete until all committee members have officially approved it

5. If you are filing in a quarter in which you are NOT registered (summer), then a filing fee form is required. You must be on filing fee prior to defending.
   a. Make sure to check the important dates pertaining to the filing fee process
   b. There are instances in which a mentor will prefer a student not register for a quarter if the student is filing close to the beginning of the quarter (see “Paying Registration Fees vs. Paying a Filing Fee” below)
   c. Once you submit your filing fee application, email your SAO to let them know

Post-Defense

Dissertation Filing
Paying Registration Fees vs. Paying a Filing Fee

- For students filing in fall, winter or spring, there is the option to not register, and therefore the PI does not pay registration fees (about $5,000/quarter) Instead, they can pay the $201 filing fee.

- In order to qualify for this, you must have completed all degree requirements, while registered, with the exception of your defense and dissertation filing.
• You must also have been registered the previous quarter. Examples below:
  
  o If the last quarter you registered is spring, you have the option of the filing fee for fall (or summer)
  
  o If the last quarter you registered is fall, you have the option of the filing fee for winter.
  
  o If the last quarter you registered is winter, you have the option of the filing fee for spring (but not summer)

If you are employed (GSR/TA), you must speak with your payroll representative to end your appointment prior to filing your dissertation or submitting your filing fee application.

Please indicate your Non-Attendance on MyUCLA for the quarter following your defense. This will prevent fee assessment and billing for that quarter. If you are on filing fee, declare non-attendance for the quarter in which you are on filing fee.

Important Insurance Information: If you are graduating at the end of the quarter, please note that your health insurance will end at quarter’s end. There are options available for dependents and eligible UC SHIP students not returning to school (filing fee status or graduated) to be able to purchase a Non-Registered Student Voluntary UC SHIP Policy. Please contact Wells Fargo Insurance Services at (800) 853-5899 for the enrollment application, fee payments, and benefits details. For those students no longer eligible for UC SHIP, please refer to the Alternate Insurance Resources handout available on the Student Health website www.studenthealth.ucla.edu.

Note: If you are registered in Spring quarter, you are covered through the summer months, until the beginning of Fall quarter.

The ETD Submission Instructions are available online at Thesis and Dissertation Formatting and Filing Guide.

If conducting research for the purpose of fulfilling the requirements for a doctoral degree, students should be aware that if the research will entail the use of human subjects (medical procedures, questionnaires, interviews, etc.), in addition to receiving the approval of the doctoral committee, students must also seek the approval of the appropriate Human Subject Protection Committee (HSPC) at UCLA, prior to the initiation of the research project. Additional information regarding application procedures may be obtained from the HSPC - School of Medicine, (310) 825-5344; HSPC - General Campus, (310) 825-7122.

IMPORTANT LINKS:
  
  • Division of Graduate Education Dissertation Meetings Schedule (Information on University regulations governing Manuscript preparation and completion of degree requirements)
  
  • Division of Graduate Education Policies and Procedures for Thesis and Dissertation Preparation and Filing
  
  • UCLA electronic thesis & dissertation (ETD) filing formatting guidelines presentation
  
  • Doctoral Hooding Ceremony - Commencement
### All Students

#### PhD Graduate Student Timeline:

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
<th>Summer Quarter</th>
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<tbody>
<tr>
<td>1st year</td>
<td>-Courses -Rotations -Seminars (BIOINFO 201, 202)</td>
<td>-Courses -Rotations -Seminars (BIOINFO 201)</td>
<td>-Courses -Rotations -Seminar (BIOINFO 202) -Choose dissertation lab</td>
<td>-Begin dissertation research in lab -Written Qualifying Exam</td>
</tr>
<tr>
<td>2nd year</td>
<td>-Dissertation research in lab -Seminar (BIOINFO 201) -Courses (if still needed)</td>
<td>-Dissertation research in lab -Seminar (BIOINFO 201) -Courses (if still needed)</td>
<td>-Dissertation research in lab -Seminar (BIOINFO 202) -Courses (if still needed)</td>
<td>-Dissertation research in lab Choose Committee (must be done before Oct. of 3rd year) -Plan/Complete Oral Qualifying Exam</td>
</tr>
<tr>
<td>3rd year</td>
<td>-Dissertation research in lab -Oral Qualifying Exam must be completed by end of quarter</td>
<td>-Dissertation research in lab</td>
<td>-Dissertation research in lab</td>
<td>-Dissertation research in lab</td>
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<tr>
<td>4th year</td>
<td>-Dissertation research in lab</td>
<td>-Dissertation research in lab</td>
<td>-Dissertation research in lab</td>
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<tr>
<td>5th year</td>
<td>-Dissertation research in lab</td>
<td>-Dissertation research in lab</td>
<td>-Dissertation research in lab -Complete Dissertation -Final Dissertation Defense</td>
<td>-Complete Alumni datasheet -Keep in touch</td>
</tr>
</tbody>
</table>

### Financial Support

Bioinformatics students making timely progress to degree receive full financial support in the form of a competitive stipend, tuition, health insurance, and non-resident supplemental tuition (NRST) as applicable. It is a general policy of the Bioinformatics that doctoral students be supported for five years.

In a public university setting, the Bioinformatics is obligated to coordinate effective distribution of a variety of sources of financial support for students pursing the Ph.D. under the guidance of member faculty. This support is derived from a number of individual or combined sources: stipend from Departmental, University, or Extramural fellowships, or from institutional or individual training grants; salary from academic apprentice employment, such as academically required Teaching Assistantships and Graduate Student Researcher (GSR) appointments. Because foreign students are not eligible for support from Federal training grants, resources available to support foreign students are limited. For Information on university fellowships for continuing students, consult [Graduate Student Support for Continuing Students](#).

All prospective graduate students are urged to apply for any extramural predoctoral fellowships for which they may be eligible. In addition to those that are administered by the University, these
include the National Science Foundation Graduate Research Fellowship Program (NSF GRFP) and Howard Hughes Medical Institute, among others. The Graduate Program Coordinator receives notifications of funding opportunities from the Division of Graduate Education on a daily basis. These notices are posted online and may be viewed on the Graduate Division GRAPES database. Most funding organizations require that you contact them directly for detailed information and an application. When “1252 Murphy Hall” appears in a listing, applications for it are available for pickup in the Graduate Fellowships and Financial Services office. For more information on funding opportunities, and to view archived announcements, visit the Division of Graduate Education Financial Support webpage.

Fees
Tuition and Fees
- Tuition (at 12 units) is fully covered by the Bioinformatics through assistantships, traineeships, fellowships, or grants. Tuition and fees are paid directly to the University. These payments will show up on OneBill on the fee payment deadline.

- The estimated breakdown of UCLA Graduate Student Tuition is available upon the Division of Graduate Education webpage. It is subject to change without notice.

- A $100 document fee is required for all incoming students. This is paid for by the Graduate Programs in Bioscience.

Health Insurance Requirements/Payments
Health Insurance is mandatory for all UCLA registered students and is a condition of enrollment. The UC Student Health Insurance Plan (UC SHIP) is a comprehensive medical insurance program offered to UCLA students. All students are automatically enrolled in UC SHIP, but if you have a comparable insurance and you do not want to keep UC SHIP as dual coverage, you must submit a request to waive enrollment by the specified deadlines. The cost of your student health insurance (UC SHIP) premium is part of fees/tuition, and will therefore be paid for you. For more information, please contact student health insurance: (310) 825-4073, option 4.

Standards & Procedures
Academic Disqualification and Appeal of Disqualification
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.

Regulation 904 of the Academic Senate states that “Disqualification of graduate students is at the discretion of the Dean of the Graduate Education concerned.” This means that the Graduate Dean has final authority over this decision and that an appeal can go no higher. If a student wishes to appeal (i.e., ask for reconsideration of) the decision, the Academic Senate has established criteria (Senate Appendix VI, Part III) for the appeal:
• The record for any student who is subject to disqualification for reasons other than failure to maintain a grade-point average greater than 3.0 will be reviewed by the Division of Graduate Education, in consultation with the student’s graduate adviser. Unless there are indications of procedural error or other substantive mitigating factors to explain the student’s record, the student will then be disqualified from further registration in graduate status at UCLA, and will be notified in writing of this action.

• A student who is subject to disqualification or who has been disqualified may submit a written appeal for reconsideration for cause to the Dean of the Graduate Education within 30 calendar days after the date of the notice of disqualification. Such appeals will be considered only if based upon appropriate cause such as:
  ○ Procedural error
  ○ Judgments based upon non-academic criteria
  ○ Personal bias
  ○ Specific mitigating circumstances contributing to performance
  ○ Discrimination on the basis of race, sex, or handicap not pertaining to required academic performance

Disagreements over evaluation of academic quality will not be considered as an appropriate basis for such appeals. In cases of appropriate cause, the Dean of the Graduate Education will refer the appeal to the Graduate Council Committee on Degree Programs. In all cases of student appeals, so referred, the student must submit a written statement of the basis for the appeal and is entitled to a personal appearance before the Committee on Degree Programs.

• This committee, after consultation with the department, will make a recommendation to the Dean as to the disposition of the case, and the Dean of the Graduate Education will make a final decision. Every reasonable effort will be made to transmit a final decision to the student by the end of the regularly scheduled term following the one in which the original appeal for reconsideration has been submitted. In reporting the final decision of the Dean to the student, the basis for the decision, its effective date, and the nature of the recommendations of the Committee on Degree Programs will be included.

• If the student is seeking the J.D., S.J.D., L.L.M., M.D., or D.D.S. degrees, the disqualification and appeals process will be according to the written procedures adopted by the Schools of Law, Medicine, and Dentistry respectively.

**Student Appeal Process**

• Within 30 days after the date of the notice of disqualification from the Division of Graduate Education, the formal written appeal should be submitted to the chair of the department or program, with a corresponding copy to the Division of Graduate Education.

• The appeal should state specific reasons the student believes the decision should be overturned.

• Note the definition of cause stated above. For example, if the student believes there was procedural error, the student must specifically outline this, e.g., the department did not follow its own published regulations for the number of times an examination could be taken. It is always preferable to be specific and succinct in all statements.
• The chair of the department or program is responsible for providing the student with a written response to the appeal within 30 days of receiving it, with a copy to the Division of Graduate Education.

• If the student is not satisfied with the response, the student may request in writing that the Division of Graduate Education review the decision.

• The Division of Graduate Education will refer the appeal to the Committee on Degree Programs for a recommendation only in instances where it is determined that appropriate cause exists. The Graduate Dean retains final authority on the decision.

**GSR Termination**
A. For academic reasons: Academic apprentice appointees shall be terminated from their positions at the discretion of the Dean of the Graduate Education at any time the student withdraws from student status, does not register, is placed on academic probation, or otherwise fails to maintain satisfactory academic progress.

B. For another good cause: Academic apprentice appointees may be terminated for such cause as incompetence or incapacitation, misconduct resulting in disciplinary action, and budgetary or programmatic considerations. Authority to terminate rests with the dean of the school or college. Termination may take place only after the appointee has been given written notice of the intention to terminate, with reasons and appropriate documentation, and after the appointee has been given an opportunity to appear before the school or divisional dean with a representative.

Termination may not take effect until at least 30 days after written notice. When the dean determines that there is reasonable cause to believe that an appointee’s continued assignment would endanger people or property, or would impair the integrity of the academic program, the student may be placed on full or partial interim suspension with pay until termination.

**GSR Appeal Procedure**
Copies of the grievance procedures for non-Senate academic appointees, including those in apprentice titles, can be obtained from the Office of Campus Counsel (https://www.apo.ucla.edu/forms/complaint/non-senate-complaint-form).

**Leave of Absence**
For graduate students on official leave of absence, a percentage of registration fees paid are refunded to the source from which they were paid, according to the calendar date on which the official Request for Leave of Absence is submitted to the Division of Graduate Education.

Graduate students are allowed three quarters of leave of absence depending on the circumstances that warrant the leave. For example, students are allowed to take leave of absence for the following reasons: outside employment, medical leave, parental obligations, other family obligations, military, emergency, and financial hardship. When students are approved for a leave of absence they are not permitted to work on any pending degree requirements such as coursework, research, or manuscript writing. Leave of absence requests must be approved by the student’s department, doctoral Committee Chair (if applicable), Dashew Center (if applicable), Fellowships and Financial Services, and are then submitted to Academic Services in the Division of Graduate Education for final approval. You can also find more information regarding the leave of absence policy for graduate students by reviewing Standards and
Procedures for Graduate Study at UCLA, specifically pages 33-35.

Academic Integrity

From the Student Guide to Academic Integrity
http://www.deanofstudents.ucla.edu/integrity.html

To All UCLA Students: As a student and member of the University community, you are here to get an education and are, therefore, expected to demonstrate integrity in all of your academic endeavors. You are evaluated on your own merits, so be proud of your accomplishments, and protect academic integrity at UCLA.

Forms of Academic dishonesty
As specified by University policy, violations or attempted violations of academic dishonesty include, but are not limited to: cheating, fabrication, plagiarism, multiple submissions, or facilitating academic dishonesty (See University of California Policies Applying to Campus Activities, Organizations, and Students, 102.01).

Cheating
Cheating is the failure to observe the expressed procedures of an academic exercise, including but not limited to:
- Unauthorized acquisition of knowledge of an examination or part of an examination
- Allowing another person to take a quiz, exam, or similar evaluation for you
- Using unauthorized materials, information, or study aids in any academic exercise or examination – textbook, notes, formula list, calculator, etc.
- Unauthorized collaboration in providing or requesting assistance, such as sharing information on an academic exercise
- Unauthorized use of another person’s data in completing a computer exercise
- Altering a graded exam or assignment and requesting that it be re-graded

Fabrication
Fabrication is falsification or invention of any information in an academic exercise, including but not limited to:
- Altering data to support research
- Presenting results from research that was not performed
- Crediting source material that was not used for research

Plagiarism
Plagiarism is the presentation of another’s words or ideas as if they were one’s own, including but not limited to:
- Submitting, as your own, through purchase or otherwise, part of or an entire work produced verbatim by someone else
- Paraphrasing ideas, data, or writing without properly acknowledging the source
- Unauthorized transfer and use of another person’s computer file as your own
- Unauthorized use of another person’s data in completing a computer exercise

Multiple Submissions
Multiple Submissions involve the resubmission of a work that has already received credit with identical or similar content in another course without consent of the present instructor or submission of work with identical or similar content in concurrent courses without consent of
instructors.

Facilitating Academic Dishonesty

Facilitating Academic Dishonesty is participating in any action that compromises the integrity of the academic standards of the University; assisting another to commit an act of academic dishonesty, including but not limited to:

◆ Taking a quiz, exam, or similar evaluation in place of another person
◆ Allowing another student to copy from you
◆ Providing material or other information to another student with knowledge that such assistance could be used in any of the violations stated above (e.g., giving test information to students in other discussion sections of the same course)

 Procedures When Academic Dishonesty is Suspected

When a student is suspected to be involved in academic dishonesty, the Academic Senate requires that the instructor report the allegation to the Dean of Students’ Office. The instructor will file a report and provide supporting evidence such as a copy of the exam or paper in question.

If it is alleged that you engaged in academic dishonesty, don’t panic! Read the allegations carefully. You may consider talking with your professor to clarify the situation and/or pursue clarification during your interview(s) with the Dean.

If you admit culpability, and if the Dean concludes that there is sufficient evidence to sustain a finding of culpability, the Dean may impose, or impose and suspend, one or more of the sanctions listed in the UCLA Student Conduct Code. Sanctions for violation of University policies regarding academic dishonesty include suspension or dismissal. If the matter cannot be resolved between the Dean and the student, the Dean may refer the case to the Student Conduct Committee for a hearing.

Promoting Academic Integrity: Proactive Strategies

◆ Take the time to produce quality work that you can be proud of, and be thoroughly prepared for examinations.
◆ During an exam, don’t sit next to someone with whom you studied, in case your exams end up looking “too similar.”
◆ Discourage academic misconduct among other students.
◆ During examinations, focus on your work, and do not look in the direction of other students. Take the initiative to shield your work to prevent other students from copying.
◆ Do not allow others to use your computer, user ID, or password
◆ Resist the temptation to share rough drafts and participate in peer editing without the consent of your instructor
◆ When using class notes for an assignment, ask yourself: Did this information come from me? Always document where and from whom you got your information (e.g., other students, professor, class text, web site).
◆ What can you do if you are unsure whether it is unauthorized collaboration or whether it is okay to work together? When in doubt, ASK! Check your course syllabus or speak with your instructor.

If you would like more information regarding academic integrity/dishonesty issues or concerns, please visit the Dean of Students’ Office in 1206 Murphy Hall, (310) 825-3871, www.deanofstudents.ucla.edu/