HANDBOOK FOR MASTER'S DEGREE PROGRAMS

Department of Molecular Biology + Biochemistry

Mei Kong and Suzanne Bohlson, Graduate Advisor

2024-2025 ACADEMIC YEAR

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SCHOOL OF BIOLOGICAL SCIENCES
DEPARTMENT OF MOLECULAR BIOLOGY & BIOCHEMISTRY

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This handbook is designed for students who enter the Department of Molecular Biology and Biochemistry (MBB) to complete studies for the **MS degree**. As described on page **6**, there are several distinct MS degree programs available in the department. The specific regulations are described for each curriculum individually. *Although there are similarities between programs, please make certain that you refer to the appropriate pages for classwork and requirements that are specific to your program.*

We warmly welcome those who are just joining the Department and hope you will find the handbook a source of practical information that will help you in your academic and research endeavors.

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MBB Graduate Advisor

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Please introduce yourself to any of these people when you join the Department if you have not already met them in other ways.

The Laboratory: Your research advisor's laboratory is under his or her direction. Common to all laboratories is the need to familiarize yourself with handling hazardous and toxic materials, and to receive *formal training and certification* in general laboratory safety, handling and disposal of hazardous and radioactive waste, chemical safety, blood borne pathogens and viral vectors (as required) if you have not yet done so.

Responsible conduct of research: UCI researchers (including all graduate students) must be trained to evaluate their research for the following possible complications: conflicts of interest; policies regarding human and vertebrate animal subjects; safe laboratory practices; mentor and mentee responsibilities; data acquisition, sharing and ownership; research misconduct and policies for handling transgressions such as plagiarism or forgery. Students must complete online training through the UC Learning Center (http://www.uclc.uci.edu/) by October 1 of the first year in the program. Log in using your UCInetID and search for RCR. When you have completed the training, documentation will be recorded within the system. Your certificate of completion must be forwarded by email to the Student Affairs Coordinator.

Emergencies: You have access to fire, rescue, and police at the 911 emergency number. The non-emergency number for campus police is 824-5223 (4-5223 from campus phones).

Facilities: Many common facilities and pieces of equipment are available to your laboratory, and you should familiarize yourself with them as you need them, beginning with training in their use. Please be sure to get permission or sign up for equipment; leave it clean; report any problems; and respect the needs of others. In addition, the MBB Department Office has a Fax machine that you may use for legitimate business. Please ask the staff to instruct you in its use. The photocopier in the MBB office is for faculty only. There are other machines available in the Biosciences buildings and library for general copying.

Enrollment: You must enroll in your courses full time (**minimum 12 units**) each quarter though Webreg: (https://www.reg.uci.edu/registrar/soc/webreg.html). Please enroll as early as possible. This is your responsibility each quarter. *A late fee of $50, increasing to $100, is assessed if you have not enrolled by the SECOND week of the quarter*. Lissette Umanzor can help you with enrollment problems and records. For US citizens who are non-residents of California, you should act to become legal residents of the state such that you are a legal CA resident by the beginning of the second year. This reduces tuition fees considerably. The change of residency must be recorded in the Registrar's Office BEFORE the fee payment deadline in Fall quarter of your second year. Documentation will be required, and you may call the Registrar's Office at 4-6124 for details.

UCI Individual Development Plans (IDPs): are a formalized planning process that identifies the student's general research goals, professional development, and career objectives. It can also serve as a communication tool between students and their faculty mentors. It is not required for master's degree students but may be useful as a means of prioritizing your training goals. Information on IDPs can be found at:

http://www.grad.uci.edu/academics/mentoring/index.html.
http://myidp.sciencecareers.org/.

Research syllabus: A syllabus should be completed with your PI each quarter that you are engaged in research. The document will be initiated in the MBB office.

Academic progress: All *required* courses must be passed by a grade of **B or better**, or by an **S** (satisfactory). You must register for research for a letter grade. Grades of P or S will not be

accepted. You are permitted to receive one B- grade in an *elective course* without an academic caution. If you receive lower than a B- in any course, you will be placed on conditional academic status and will receive a cautionary letter from the graduate advisor. *You are not allowed to TA during the quarter that you are remediating conditional academic status.* If you fail to correct the circumstances of this provisional status, Graduate Division and the Associate Dean will initiate a request to disqualify you from the program.

List of Approved Elective Courses: Please be aware that CMB classes are capped at 15 and doctoral students have enrollment priority. A list of approved electives can be found here. *Additional courses not provided on the approved electives list may be taken if they are first approved by the Program Director.*

Note: You may only take **1 Public Health or Epidemiology class** from the approved list as an elective

Note: *Certain courses may not be offered each year, and the quarter may vary. Enrolling in two 2-credit workshops/journal clubs is not equal to an elective.*

If a course you desire to take is not on this list, it must be approved by the Program Director.
To make a case for approval of **a course that is not listed as an elective**, please send the program director an email with the following information:

a. Course number
b. Course instructor(s)
c. Course content (attach a syllabus if available)
d. A brief justification of why this course is best suited to your graduate studies.

RIP Talks: MBB students in the PhD degree program give a 30-minute research in progress talk annually, beginning in their second year. *MS students in the direct admission pathway may give a RIP talk in spring quarter of their second year.* RIP talks are are scheduled Tuesdays at 12:00 -1:00. *Even if you do not present, you should attend as many talks as possible as this will give you exposure to research projects and techniques that are being carried out by MBB research labs.* Some master's degree programs suggest that students enroll in Mol Bio 229 (Research in Progress) as a journal club class. Check the requirements for your specific program.

Graduate Division Resources: UCI offers resources for graduate students through graduate division: https://grad.uci.edu/current-students/student-resources/. Areas of assistance include funding and mentoring advice as well as health and wellness support. The Graduate Division Counselor can provide specific one-on-one assistance in areas such as time management, communication skills, and referrals to campus or community resources. The office is located in Aldrich Hall, room 120. Appointments can be made by calling (949) 824-0246.

The Department of Molecular Biology and Biochemistry (MBB) at the University of California, Irvine (UCI) administers several types of master's degree programs. *Master's degree programs generally require two years of academic study.* This handbook is intended to serve as a guide to the rules and regulations for each of these programs.

1. **The Master of Science degree in Biotechnology.** This program trains students for careers in the biotechnology industry, academic laboratories, and doctoral programs. The program emphasizes formal methods training and participation in basic research. In the

first-year students participate in core technical laboratories and in the second-year they participate in individual faculty research projects.

2. **The Master of Science Degree in Biotechnology Management.** MBB and the Paul Merage School of Business offer a Master of Science Program in Biotechnology Management (MSBTM). This program combines essential elements of the Biotechnology MS Program with training from the Master's degree in Business Administration (MBA) program. Students receive advanced training in biotechnology through coursework, a teaching laboratory, and two quarters of independent research in a faculty laboratory. They participate in business school classes to explore product development challenges through consulting projects and business plan development.

3. **JD-MS Law and Biotechnology Studies Affiliate Program.** Matriculated law students interested in the intersection of biotechnology and law (such as those wishing to practice patent or intellectual property law) may elect to initiate combined studies leading to a JD-MS joint degree. *This program also allows Biotechnology and MSBTM students to enroll in appropriate law classes pending the approval of the School of Law*.

4. **The Master's Degree Program in Biological Sciences - (direct admission).** Students who wish to obtain research experience and/or to complete additional classwork after earning a B.S. in a related discipline may apply to be sponsored by a faculty member in MBB. The direct admit program requires coursework and research in the laboratory of the sponsor. *Importantly, the student's departmental affiliation for this degree is contingent upon research mentorship by the sponsoring faculty member for the duration of the studies*.

5. **Master's Degree Completion for Doctoral students in Molecular Biology and Biochemistry.** MBB faculty sponsor graduate students from gateway programs such as the Cell and Molecular Biology (CMB) and Interdepartmental Neuroscience Program (INP). After the advancement to candidacy exam (ATC), students may complete paperwork for a master's degree. Students who pass the ATC exam and continue in studies for doctoral degrees are subsequently considered "doctoral" or "dissertation status" students (regardless of whether they formally file for the master's degree). Those students who do not pass the ATC or decide not to continue in the program may receive "terminal" master's degrees if approved by an exam committee.

Application and Admissions

1. The Master of Science degree in Biotechnology: Students with prior training in science such as classes in calculus, physics, chemistry, genetics, biochemistry, molecular biology, microbiology, immunology, and virology are most competitive for this program. Laboratory courses and research experience in those fields is strongly encouraged. Successful candidates typically possess a BS degree in the biological sciences, or an allied field obtained with an acceptable level of scholarship from an institution of recognized standing.

Applications are evaluated on the basis of:

1. Grades (minimum 3.0 GPA)
2. Three recommendation letters
3. Statement of purpose and essay(s)
4. Foreign students are required to submit a TOEFL score (minimum score of 80)

Applicants will be holistically evaluated on their academic record and their potential for success in graduate school as demonstrated in the application materials and in some cases, interviews.

Application Deadline: **March 1**, for admission the following fall. Decisions are made by **mid-April**, after which acceptance letters will be sent. Once an acceptance letter is sent, the prospective student has approximately one month to respond. Failure to respond within this timeframe will result in revocation of the acceptance. Additional application information can be found on the UCI Graduate Division website (https://www.grad.uci.edu/academics/degree-programs/index.php) or candidates may contact Lissette Umanzor, Program Administrator, at lumanzor@uci.edu for more information.

Time to Degree Completion for MSBT: 2 years of full-time study (6 quarters).

2. The Master of Science Degree in Biotechnology Management: The academic requirements for the scientific portion of the MSBTM are similar to those for the master's degree in Biotechnology (see above) however student's participate in fewer technical labs and perform less research. MSBTM candidates will be evaluated holistically by an MB&B admissions committee, and also be interviewed and evaluated by admissions counselors from the Paul Merage School of Business. Applicants will be evaluated on their prior academic record and work experience that supports their potential for success in graduate school as demonstrated in the submitted application materials. Additional information can be obtained from Lissette Umanzor, Program Administrator, at lumanzor@uci.edu or found on the UCI Graduate Division website (https://www.grad.uci.edu/academics/degree-programs/index.php).

Application Deadline: The priority deadline for fall applications is **January 15**. After that date, completed applications are processed on a rolling admissions basis (evaluated as they are received). Decisions are made by **mid-April**, after which acceptance letters will be sent. Once an acceptance letter is sent, the prospective student has approximately one month to respond. Failure to respond within this timeframe will result in revocation of the acceptance.

Time to Degree Completion for MSBTM: 2 years of full-time study (6 quarters plus recommended summer internship).

3. JD-MS Biotechnology and Law and Graduate Studies Affiliate Program: Students who have matriculated in the UCI School of Law may elect to integrate this program with studies in the

MSBT program to earn a JD-MS joint degree. *MSBT and MSBTM students may also enroll in selected law classes pending the approval of the School of Law*.

4. The Master's Degree Program in MBB (direct admission): Students who wish to obtain research experience and/or to complete additional classwork may apply to be sponsored by a faculty member in MBB. This program generally requires coursework and two years of research in the laboratory of the MBB sponsor. *The student's departmental affiliation for this degree is contingent upon mentorship by the sponsoring faculty member for the duration of the studies*.

Admission Requirements: A bachelor's degree in Biological Sciences or comparable field and appropriate coursework in Biology, Chemistry, Physics and Mathematics with an undergraduate GPA of 3.0 or greater. GRE scores or other relevant test scores such as TOEFL may be required by graduate division. The applicant should submit a letter of support from a proposed MBB faculty advisor and two additional letters of recommendation.

Admission Process: The departmental graduate advisor will evaluate student applications and offer admission based on consultation with the student's faculty advisor and other departmental faculty. *The faculty advisor must submit a letter of support stating that they will accept mentoring responsibility for the student for the two-year duration of the degree work.* The graduate advisor will develop a recommended curriculum that will meet the degree requirements.

5. Master's Degree Completion for Doctoral students in MBB: MBB faculty sponsor graduate students who have entered a doctoral degree program. After the advancement to candidacy exam (ATC), students may complete paperwork for a master's degree. Details on relevant gateway programs are available on the UCI Graduate Division website (https://www.grad.uci.edu/academics/degree-programs/index.php).

Policies and Guidelines for Serving as a Teaching Assistant:

Students in MBB Master's degree programs are responsible for fees, tuition, and all other expenses. MS students are eligible for employment as teaching assistants or graders; however, the availability of this employment is subject to the teaching needs of the department and the academic performance of the student. TA appointments are by availability; the classes you are assigned are not always your choice. The University limits employment of enrolled graduate students to 50% time (20 hours per week). All TA appointments are 50% time and must not interfere with coursework or research.

You must complete **TA training** if you want to serve as a TA; this training is offered prior to the beginning of fall quarter (TAPDP is typically held on the Tuesday and Wednesday of "Welcome Week"). See http://dtei.uci.edu/ta-professional-development-program/. Lissette Umanzor can answer questions about attending this program.

The ability to communicate effectively in English is critically important to the success of graduate students in all aspects of their academic program. All graduate applicants, except those who have earned an undergraduate degree from an institution at which English was the sole language of instruction according to the World Higher Education Database, are required to demonstrate English proficiency for admissions consideration. The English language proficiency requirement for Teaching Assistants is described https://grad.uci.edu/funding/teaching-assistantships/.

English Proficiency Tests Accepted for Graduate Admissions

TOEFL: The TOEFL is administered by the Educational Testing Service (ETS).

Please select institution code 4859 to have your official score sent to UCI.
We do not accept MyBest scores; you must submit all individual test scores.
Results of institutional (non-ETS) administrations of the TOEFL are not acceptable.
We will accept the TOEFL iBT Special Home Edition test. The same minimum score applies. However, we will NOT accept the TOEFL ITP Plus test for China.
Test results that are two years old or older are not acceptable.
A minimum score of 80 is required on the TOEFL iBT.

IELTS: As an alternative to the TOEFL, you may submit scores from the Academic Modules of the International English Language Testing System (IELTS).

An institutional code is NOT required. Please contact the test center directly where you took the IELTS test and request that your test scores be sent electronically using the IELTS system. All IELTS test centers worldwide are able to send scores electronically to our institution.
UC Irvine Graduate Division only accepts scores submitted electronically by the IELTS test center. No paper Test Report Forms will be accepted.
We will accept the IELTS Indicator test. The same minimum score applies.
Test results that are two years old or older are not acceptable.
IELTS Score Requirements for Admission Consideration: An overall minimum score of 7 for admission, with a score of no less than 6 on any individual module.

Limitations and Remediation

If the head of a unit or appropriate delegate finds sufficient grounds to believe that any graduate student does not have English proficiency adequate for the student to maintain satisfactory academic progress, they must require the student to undertake a remediation process, in

consultation with the Program in Global Languages & Communication and approved by the student's academic unit, in order to maintain satisfactory academic progress. Such a determination should be made on the grounds of inadequate proficiency alone (as indicated in student evaluations, faculty observations, faculty evaluations or the like). This remediation process will be required regardless of how the student was initially certified for English proficiency (that is, regardless of earning an undergraduate degree at an institution where English was the sole language of instruction or by achieving a passing score on one of the tests noted above).

The graduate program requesting consultation regarding a remediation process for a student who is believed to not have spoken English proficiency adequate to maintain satisfactory academic progress will email TOEP@uci.edu with the following information: (1) the student's information (name, UCI ID number, email address), and (2) the contact information (email) of the delegate from the student's home department who is requesting the consultation and/or overseeing the remediation process for the student. The staff in the Program in Global Languages and Communication will contact the student to set up an appointment during which the student will meet with an Academic Coordinator in the GLC Program who will review, discuss, and/or assess the student's oral English proficiency. After meeting with the student, the GLC Program will provide a recommendation for a remediation plan to the delegate from the department.

A condition of all fellowships and Teaching Assistant/Associate and Graduate Student Researcher appointments is that the student maintain satisfactory academic progress, be continuously enrolled as a full-time graduate student, and meet all other university criteria (including but not limited to adequate English language competency for Teaching Assistant or Teaching Associate appointments) to receive campus-based funding. Continued employment is also contingent upon satisfactory performance as a Teaching Assistant/Associate or Graduate Student Researcher.

Expectations for TA Service:

1. Graduate Students are required to complete TA training (TAPDP) and meet requirements for language and GPA in order to be eligible to serve as a TA.
2. Graduate Students are expected to check for **scheduling conflicts** before they sign the teaching contract and are expected to attend all class lectures and proctor all student exams unless explicitly directed otherwise by a specific instructor. *There should not be any conflict between the timing of multiple TA assignments, or between a TA assignment and an enrolled graduate course, lab meeting or other regularly scheduled event.* In cases of an unavoidable conflict, the TA coordinator and/or graduate advisor may be able to help you swap assignments to resolve the conflict.
3. *TAs may not miss lectures or exams for scientific meetings or other travel without the express permission of the instructor prior to the beginning of the course*. Remember, you are being paid for your service as a teaching assistant. As with any job, you cannot simply miss work. Your job as a TA begins the first day of class and ends with the final submission of grades at the end of the quarter.
4. TA assignments do not always coincide with courses where you have specific expertise. It is expected that you will attend lecture, read the textbook and speak with the instructor as needed to carry out your duties in office hours, grading, labs and discussion sections.
5. Although the amount of work may vary week to week, the maximum time devoted to teaching should average out to 10 hours per week per class **(20 hours per week for a 50% TA assignment**) for the 10 weeks of the quarter. If the class that you TA for has multiple instructors, you and the instructors should arrange your service to ensure that each portion of the class has equal TA support.

6. Students are expected to complete grading for the course and other routine work in a timely fashion. Students are not expected to grade the exams or other assignments in the absence of an exam key or rubric provided by the instructor. Graduate student TAs may be asked to suggest questions and provide feedback for exams but are not expected to write the full exam.

Summer Participation in Research Laboratories: Summer stipends may be paid to students who elect to work in their research labs. *Students are not required to work in laboratories in the summer in the absence of a stipend or research credit*. However, if students choose to continue their research projects during the summer on a voluntary basis, the research mentor will need to complete paperwork formalizing this status. The MBB MSO (Bessy Varela) can direct you to the correct forms.

Overview of the MS Biotechnology program: This program exposes students to core technical training and independent research along with academic classwork to prepare them for employment in the biotechnology industry or for application to doctoral programs. It emphasizes formal methods training and immediate participation in basic research. First-year students participate in core technical laboratories in protein isolation and characterization, animal and microbial cell culture and recombinant DNA methodology. Students also participate in individual faculty research projects.

Recommended Standard Curriculum: *Revised 2020.*

FALL	WINTER	SPRING
First Year		
Mol Bio 204 4 units "Protein Structure and Function"	Mol Bio 203 4 units "Nucleic Acid Structure and Function"	Approved elective or independent research 4 units*
Mol Bio 250L (lab) 8 units "Biotechnology Laboratory: Nucleic Acids"	Mol Bio 251L (lab) 8 units "Biotechnology Laboratory: Proteins and Proteomics"	Approved elective 4 units*
Mol Bio 250 2 units "Advanced Topics in Biotechnology: Nucleic Acids"	Mol Bio 251 2 units "Advanced Topics in Biotechnology: and Proteomics"	Mol Bio 221L 4 units "Advanced Immunology Laboratory"
Second Year		
Mol Bio 200: 8-12 units Independent research	Mol Bio 200: 8-12 units Independent research	Mol Bio 200: 8-12 units Independent research
Approved elective 4-units*	Approved elective 4-units*	Approved elective 4 units*
**Elective from approved list or as approved by Professor Bohlson*		

Electives: Select these from the approved list or by consent of the program Director. Please obtain approval prior to enrolling in alternative classes to ensure that you obtain credit for coursework. *Electives must be regular, lecture (or lecture plus presentation) courses. Journal Clubs and Tutorials (201, 202 sequence) are not accepted for this category*.

Graduate Program in Biotechnology Academic Progress:

- ✓ Students must pass each required course with **a grade of B or better**.
- ✓ One grade of B- in an elective is permitted. *All required courses with grades of B- or below must be repeated and passed with a grade of B or better*.
- ✓ The Biotech labs Mol Bio 250L and Mol Bio 251L may not be repeated. The Mol Bio 221L lab may be repeated only in exceptional cases with the Director's approval.
- ✓ If you are not in good standing (all the above requirements met) at the end of spring quarter in year 2, you cannot receive your degree.
- ✓ Academic progress is monitored carefully. If you get a B- in any course you may receive a conditional academic status warning letter. If you receive lower than a B- in any course, or a second B-, you will be placed on conditional academic status. When on conditional academic status you cannot TA. If you fail to remediate the circumstances of this provisional status, Graduate Division and the Associate Dean will initiate a request to disqualify you from the program.

Independent Research:

1. In the first year, research is strongly discouraged until spring quarter. It is good idea to begin thinking about what lab(s) you might be interested in during the winter and spring quarters. All Biotech students are invited to the MBB retreat. This is a good place to learn about research in our department. The Research in Progress (RIP) seminar series presented by current graduate students (Tuesdays, 12:00-1:00 PM, with pizza) is also a good way to learn about departmental research.
2. It is the student's responsibility to find a research lab. This should be done as early as possible, but certainly you should have found a lab by the beginning of the second year. The lab should be in MBB (preferably), but if not must be with a PI associated with the CMB or an established Graduate Program affiliated with Bio Sci.
3. Students generally enroll in a minimum of 8 units of research per quarter (200A, B, C with your PI). That is a minimum of 32 hours per week and is taken very seriously.
4. Research progress is carefully monitored. Graduate mentors must fill out written evaluations of the student's progress each quarter during the second year, and students must complete research syllabi with mentors each quarter.
5. At the end of the spring quarter, and before graduation, all students must present a seminar on their research to the public and submit a research paper describing their work for evaluation by the mentor and Program Director.

Internships: Local companies have interest in hiring our students as interns. Towards the end of spring quarter or as appropriate, Lissette Umanzor and others will provide information regarding internships. Occasionally, a company likes a student so much that they offer a part-time job during the second year. *We very strongly discourage this type of work because the second year of the program is intensive and requires a commitment to original research in an MBB laboratory*.

Employment and Support: The program may not be attempted on a part-time basis. Students must be enrolled in a minimum of **12 units** each quarter to be considered full-time. This program does not provide support other than limited awarded fellowships. TA positions are awarded starting spring quarter of year 1 to qualified students based on availability. You must have taken TA training if you want to TA. International students must pass a test of spoken English, with certain exceptions (see page 10 for requirements).

TA appointments are by availability; the classes you are assigned are not always your choice. You are not free to arrange TA slots with other departments unless given permission to do so. The University limits employment of enrolled graduate students to 50% time (20 hours per week). All TA appointments are 50% time and must not interfere with coursework or research. *Please refer to the expectations for TA service statement on page 12.*

Students may not be paid as Research Assistants in any UCI lab during the year. Summer and/or December break stipends *may* be paid to students who elect to work in their research labs. Part-time employment within or outside the University is strongly discouraged *because the program is intensive and requires a commitment to original research in an MBB laboratory*.

Overview of the MSBTM program: MBB collaborates with the Paul Merage School of Business to offer a Master of Science Program in Biotechnology Management (MSBTM). This program combines essential elements of the Biotechnology Master's Program with training from the Master's degree in Business Administration (MBA) program. MSBTM students receive training in biotechnology through coursework, a teaching laboratory, and two to three quarters of independent research in a faculty laboratory. They participate in business school classes to explore product development through consulting projects and business plan development.

Curriculum: A full-time program consists of 17 courses; 9 courses (36 units) from business, 7 courses/labs (36 units) from Biological Sciences/Biomedical Engineering, a proseminar sequence in year one, and a jointly taught course in the spring of year 2.

September of year 1: Orientation with Merage and Biological Sciences Schools. MBA 200: Management of Innovative Organizations (4 units).

FALL	WINTER	SPRING	Summer
First Year			
Mol Bio 204 4 units "Protein Structure and Function"	Mol Bio 203 4 units "Nucleic Acid Structure and Function"	Mol Bio 252L Teaching Lab 8 units	Internship (strongly recommended)
Business Required (4 units)	Business Required (4 units)		
Business Restricted Elective (4 units)	Business Restricted Elective (4 units)	Business Required (4 units)	
MBA 211 Proseminar Course (0 units)	MBA 211 Proseminar Course (0 units)	MBA 211 Proseminar Course (0 units)	
Second Year			
Biotech approved elective 4-units* **	Mol Bio 200: 4 units** Independent research	Mol Bio 200: 8 units** Independent research	
Business (4 units)	Biotech elective 4 units*		
MBA 298A Experiential Learning (4 units)	MBA 213/214 Business Plan Course (4 units)	MB253/MBA 293 Biotechnology Management (5 units)	
**Elective from approved list or as approved by the Program Directors (Bohlson)* ***Redistribution of research units will be offered and discussed at orientation*			

Research: MSBTM students participate in a minimum of 12 units of independent research in a faculty laboratory during their second year.

Internships: The Paul Merage School of Business has a dedicated career advisor and programs in place to facilitate networking with appropriate companies. MSBTM internship placement is coordinated through their resources.

Overview of the JD-MS Biotechnology and Law Graduate Studies Affiliate Program: Students interested in the intersection of biotechnology and law (such as those wishing to practice patent or intellectual property law) may elect to initiate combined studies leading to a JD-MS joint degree. The JD-MS program is available to students who have already matriculated in the School of Law and is offered on an individual basis. This program aims to provide students with foundational experience in biotechnology as well as law training for work in intellectual property law or other areas of overlap.

Curriculum: Students exclusively study law their first year. In the second year, they will focus on mastering foundational classwork and standard laboratory methodologies. They may select a summer biotechnology internship or participate in independent research over the summer and will complete biotechnology coursework in fall quarter of their third year.

<table>
<tr><th>FALL</th><th>WINTER</th><th>SPRING</th></tr>
<tr><td colspan="3">Concurrent Program Year 2 - Biotechnology</td></tr>
<tr><td>Mol Bio 204 4 units
“Protein Structure and Function”</td><td>Mol Bio 203 4 units
“Structure and Biosynthesis of Nucleic Acids”</td><td>Approved elective 4 units*</td></tr>
<tr><td>Mol Bio 250L (lab) 8 units
“Recombinant DNA Techniques”</td><td>Mol Bio 251L (lab) 8 units
“Protein Isolation & Characterization”</td><td>Approved elective 4 units*</td></tr>
<tr><td>Mol Bio 250 2 units
“Recombinant DNA Theory”</td><td>Mol Bio 251 2 units
“Protein Isolation Theory”</td><td>Mol Bio 221L 4 units “Advanced Immunology Laboratory”</td></tr>
<tr><td></td><td><u>Option</u>: Approved elective 4 units*</td><td><u>Option</u>: Mol Bio 200 Independent Research 4 units</td></tr>
<tr><td colspan="3">Summer: Formal Internship and/or Mol Bio 200-Independent Research, 4-8 units
Concurrent Program Year 3: Biotechnology (Fall) and Law (Spring)</td></tr>
<tr><td>Mol Bio 200: Independent research 8 units</td><td></td><td rowspan="2"><u>Option (if necessary)</u>: Approved elective 4 units* <u>or</u> Mol Bio 200 Independent Research 4-8 Units</td></tr>
<tr><td>Approved elective 4 units*</td><td></td></tr>
<tr><td>Approved elective 4 units*</td><td></td><td>Law coursework</td></tr>
<tr><td colspan="3">Summer: Independent Research if necessary</td></tr>
<tr><td colspan="3">*Elective from approved list or as approved by the Program Director (Bohlson)</td></tr>
</table>

Research: JD-MS students participate in one or two quarters of independent research in a faculty laboratory during spring quarter of the first year and fall quarter of the second year.

Internships: The JD-MS program is newly created. MBB faculty coordinating its administration will work with the UCI School of Law to facilitate internship placement.

Overview of the direct admission master's degree program: Students who wish to obtain independent research experience and/or to complete additional classwork prior to applying to medical school or doctoral programs may apply to be sponsored by a faculty member in MBB. This program generally requires coursework and two years of research in the laboratory of the sponsor. *Importantly, the student's departmental affiliation for this degree is contingent upon mentorship by the sponsoring faculty member for the duration of the studies.*

Mechanism for direct admission applications: Students who apply to study for a direct admission cannot use a prior unsuccessful application to a structured program (e.g., MSBT or CMB) as their application. To apply, the student should review their undergraduate transcript and other information (e.g., research experience) and if appropriate, the future mentor may request that the MBB graduate advisor work with the student in the process according to current policy and procedures. Applicants should meet Graduate Division requirements, such as a GPA equal or greater than 3.0. For otherwise strong applicants with a lower GPA and compelling explanation, the graduate advisor may petition for an exemption. Research is carried out in the laboratory of the faculty sponsor and *students may not change laboratory group affiliation during this training*.

MBB Direct Admission MS degrees require a minimum of 36 units of credit. For adequate independent research, normative time to degree is two years and students enroll in **12 units per quarter** for required full-time status. This must encompass at least 16 units of didactic classwork (4 classes); 8-12 units of other coursework (electives, seminars, journal clubs, tutorials); and 12 units of research (more as time permits with classes and teaching to complete required research project). The degree may be completed by submission of a thesis (plan I) or by a comprehensive examination (plan II). Most students complete the plan II program.

- ☐ **Plan I:** (Thesis Plan) The student completes coursework, engages in research with a faculty advisor, and submits a written thesis to a committee of at least three MBB faculty members for evaluation. The final examination is an oral defense of the thesis for a thesis committee. The thesis committee will approve the thesis with signatures on the signature page of the dissertation and MS degree completion paperwork, with the thesis filed according to UCI policy.

  To complete the conditions for a degree, Plan I students are required to earn *at least*:
  - ✓ 16 units in didactic graduate level biology classes (e.g. Mol Bio 203)
  - ✓ 8 units in elective biology classes
  - ✓ 12 units in research
  - ✓ *pass a final exam consisting of preparation and oral defense of a written thesis*.

- ☐ **Plan II:** (Comprehensive Examination Plan). The student completes coursework, engages in research with a faculty advisor, and presents a comprehensive exam to a committee of at least three MBB faculty members. The examination format consists of an oral presentation of research or a **capstone project**.

  To complete the conditions for a degree, Plan II students are required to earn *at least*:
  - ✓ 16 units in didactic graduate level biology classes (e.g. Mol Bio 203)
  - ✓ 8 units in elective biology classes
  - ✓ 12 units in research
  - ✓ *complete a comprehensive exam based on their research or a capstone project.*

Required Didactic courses: Four graduate level didactic courses offered by the School of Biological Sciences. A list of departmental or school graduate courses that will be available to the

student will be identified by the graduate advisor at the time of admission. Examples of appropriate 4-unit classes are:

Mol Bio 204 "Protein Structure and Function"
Mol Bio 203 "Structure and Biosynthesis of Nucleic Acids"

Elective Coursework (at least 8 units): Additional graduate coursework or upper division undergraduate courses offered by the School of Biological Sciences: upper division undergraduate coursework may not exceed 4 units, and the Associate Dean and departmental graduate advisor must approve enrollment in any undergraduate class. Master's degree students are expected to enroll in graduate seminars and journal clubs that are required of doctoral students in MBB:

Mol Bio 229 Research in Progress (1 unit, sign in)
Mol Bio 201A Seminar in Molecular Biology (Departmental seminars, 2 units, sign in)
Mol Bio 202A Tutorial (lab meetings, mentor-student meetings; 2 units)

Research: Independent Laboratory Research (Mol Bio 200) 4-12 units/quarter.

Sample schedule:

FALL	WINTER	SPRING
First Year		
Mol Bio 204 4 units "Protein Structure and Function" (D)	Mol Bio 203 4 units "Nucleic Acid Structure and Function" (D)	Approved elective 4 units* Elective (E)
Mol Bio 200 4-12 units Independent research (R)	Mol Bio 200 4-12 units Independent research (R)	Mol Bio 200 4-12 units Independent research (R)
Mol Bio 201 MBB Seminars (E 2) Mol Bio 202 Tutorial (E 2) Mol Bio 229 RIP talks (E 1)	Mol Bio 201 MBB Seminars (E 2) Mol Bio 202 Tutorial (E 2) Mol Bio 229 RIP talks (E 1)	Mol Bio 201 MBB Seminars (E 2) Mol Bio 202 Tutorial (E 2) Mol Bio 229 RIP talks (E 1)
Second Year		
Approved course 4 units* (D)	Approved course 4 units* (D)	Approved elective 4 units* (E)
Mol Bio 200 8-12 units Independent research (R)	Mol Bio 200 8-12 units Independent research (R)	Mol Bio 200 8-12 units Independent research (R)
Mol Bio 201 MBB Seminars (E 2) Mol Bio 202 Tutorial (E 2) Mol Bio 229 RIP talks (E 1)	Mol Bio 201 MBB Seminars (E 2) Mol Bio 202 Tutorial (E 2) Mol Bio 229 RIP talks (E 1)	Mol Bio 201 MBB Seminars (E 2) Mol Bio 202 Tutorial (E 2) Mol Bio 229 RIP talks (E 1)
Consult with the MBB graduate advisor and your mentor to develop a specific plan of study. D = didactic; E = elective; R = research		

Advancement to Candidacy: Advancement to candidacy for the MS degree is based on completion of required coursework (no exam). *The advancement to candidacy paperwork is generally submitted one quarter prior to the thesis defense*.

Financial Support: Students are not guaranteed financial support and are responsible for fees, tuition, and all other expenses. MS students are eligible for employment as teaching assistants; however, the availability of TA employment is subject to the teaching needs of the department and the academic performance of the student (see page 11). Summer stipends may be paid to students who elect to work in their research labs. *Students are not required to work in laboratories in the summer in the absence of a stipend or research credit*.

Overview of the Master's Degree Completion for Doctoral students in Molecular Biology and Biochemistry: MBB faculty sponsor graduate students from year-long gateway programs such as the Cell and Molecular Biology (CMB) and Integrated Neuroscience Program (INP). Students are expected to complete the advancement to candidacy exam (ATC) by the end of their third year in graduate school. This exam incorporates preliminary data collected in the sponsoring laboratory to propose experiments for a thesis project.

Doctoral students who complete the advancement to candidacy exam (ATC) have met the requirements for the plan II Master's degree (see previous page). These students have already completed the necessary coursework and the ATC exam is considered successful completion of the plan II comprehensive exam.

Students who pass the ATC exam: Students who pass the ATC exam and continue with their graduate studies are subsequently considered "doctoral" or "dissertation status" students (regardless of whether they formally file for the master's degree). *It is not necessary to file for a formal master's degree to complete work for a doctorate in MBB.*

Students who wish to leave the program early or who fail the ATC exam: Those students who do not pass the ATC or decide not to continue in the doctoral program may receive "terminal" Master's degrees if approved by an exam committee.

Although most graduate students complete their research under the supervision of a mentor without significant misunderstandings or disputes, serious disagreements can arise if you and your advisor do not effectively communicate. There are several strategies to use to proactively ensure that you and your advisor have well-defined and consistent expectations for your research. While individual student-mentor styles vary, here is some information that you should keep in mind to minimize misunderstandings. A good rule of thumb is that the more transparent and organized you are, the less likely you are to encounter misunderstandings with your mentor.

1. Time away from lab: Keep in mind that your role as a master's degree student may encompass both paid **employment** (as a teaching assistant) *and* **scholarship** (classes, work at the bench, data analysis, lab meetings). These roles intersect but are not always completely overlapping: *your scholarship is expected to extend beyond the effort of your employment*. A graduate stipend is payment for *employment* as a teaching assistant. Just as you couldn't miss a shift at Starbucks or not show up to your job as a lifeguard, you must demonstrate that you are working on research and teaching for the hours that you are paid. For example, a 50% TA assignment means that you can have a reasonable expectation of spending ~20 hours a week on these duties and spend the remainder of your time attending classes and doing research. During the week and working hours, it is a good idea to make certain that your advisor and lab-mates knows where you are if you are away from the lab because of illness, teaching or seminars.

The UC academic personnel manual rules stipulate that graduate students do not accrue vacation time or sick leave during intervals when the university pays them. Work with your advisor and the class instructors for reasonable accommodations.

- **Serious illness:** While no one would insist that someone who is *gravely ill* needs to complete scheduled teaching or research duties, *these hours need to be covered*. If you can't complete your TA assignment, you must arrange with the class instructor and other class TAs so that the work is covered. It is also important to repay any time served by another TA by subbing for that TA later in the quarter so the net hours for you and the other TA balance out. You should also make certain that one of your lab-mates stabilizes any on-going samples in the lab and make up lost time once you are recovered.
- **Scientific meetings:** If you are supported by a TA-ship, you must not miss lectures or exams for scientific meetings or other academic travel without the express permission of the course instructor. Given that your stipend is provided by your employment as a TA, you should not expect that the instructor can always organize an accommodation for your proposed absence. If you are teaching a lab or discussion section that can potentially be traded with other class TAs, you can attempt to organize this with the other TAs. Make certain that the course instructor knows of your plans and approves of them before your organize your travel to a meeting.
- **Vacation time:** The university is officially closed for a long holiday in December; other university holidays occur throughout the year and are listed on the registrar's calendar. On these days, UC offices are closed. On holidays, you may choose to do a complicated experiment in the lab (since there are no scheduled classes or seminars), work on data analysis, reading, writing, or grading (possibly at home) or take a day off to give your brain a break and do laundry or visit with friends or family. *Since experimental organisms and cells need to be maintained at all time, labs never completely shut down during holidays.* All times when the university is open, you are expected to be at work. Any leave when the university is open must be negotiated with your advisor on a case-by-case basis.

2. Weekly updates on research progress: It is often helpful for you to take the time to briefly record the following information at the beginning of each week in a 1-2 page word document.

1. What did you do last week?

[*I did a western blot on cell lysates from kinase inhibitor-treated and control samples, stained other samples for flow cytometry and digested 20 minipreps to identify three plasmids which had my insert in the correct orientatio*n.]

[*I set up crystallization trays with purified wild type and mutant protein samples, ran an enzyme assay with candidate inhibitors and worked on phasing other diffraction data.*]

2. What worked and what is your conclusion from this data?

[*My western blot data indicates that treatment with the kinase inhibitor does not reduce protein phosphorylation, although I would like to repeat this experiment.*]

[*One of the candidate inhibitors appears to block accumulation of product in my enzyme assays. I need to repeat this to confirm and try other inhibitor concentrations.*]

3. What didn't work and what will you try next?

[*My antibody staining didn't work; my positive control was negative so I will try a longer incubation with a fresh set of samples to make certain that the antibody works*.]

[*I haven't been able to phase my diffraction data with molecular replacement; I think I need to introduce heavy atoms into my crystal*.]

4. What papers have you read and what interesting information have you learned?

[*A 2017 study by Smith shows that the kinase inhibitor is not effective in CHO cells*.]

[*A 2005 mass spectrometry paper by Jones identifies my protein as binding to a novel chaperone complex*.]

Importantly, this weekly document is distinct from your detailed research notebook and provides an on-going narrative and summary of your efforts. You may wish to email this document to your advisor or print it out for one-on-one meetings. By filing these reports in sequence, you have a clear record of your research activity over time. This is useful for gathering data for papers or deciding that an approach or reagent is not going to work as planned.

3. Difficulties communicating with your mentor:

You may begin by talking with the **MBB graduate advisor** (Mei Kong, Suzanne Bohlson), the Biological Sciences **Associate Dean for Graduate Studies** (Craig Walsh) or the **Graduate Division counselor** (Phong Luong) to plan how to approach resolving your specific problem. Problems that require higher level mediation may involve the assistance of the offices of the Ombudsman and/or OEOD at UC Irvine. The **Office of the Ombudsman** is a confidential, impartial, informal, and independent resource to talk about concerns, explore options, and make informed decisions to reach equitable and fair resolutions. The **UCI Office of Equal Opportunity and Diversity** (OEOD) is responsible for compliance with federal and state laws and University policies and procedures regarding discrimination, retaliation, sexual harassment, and sex offenses. OEOD works to promote and integrate the principles of equal opportunity, affirmative action, nondiscrimination, and inclusive excellence at UCI.

Program Learning Outcomes for Direct Admit and Biotechnology M.S.

PLO1: Core Knowledge

- Demonstrate a basic knowledge of central concepts in the biological sciences
- Understand the current concepts in molecular biology, biochemistry, and biomedical sciences
- Demonstrate specialized knowledge of cellular and molecular biology sufficient to carry out substantive independent research

PLO2: Research Methods and Analysis

- Read and critically evaluate the scientific literature
- Formulate hypotheses based on current concepts in the field
- Design (when appropriate), conduct, and interpret their own research projects
- Understand the range of tools appropriate for research in their sub-field
- Understand and follow research ethics

PLO3: Pedagogy:

- Communicate effectively to large and small groups in pedagogical settings including teaching (for those students who TA), research seminars, and other formats
- For those students who TA, identify and effectively deploy suitable technologies for use in all aspects of instruction

PLO4: Scholarly Communication:

- Review and discuss relevant literature and its significance
- Publish research results in peer-reviewed publications if appropriate
- Communicate research results effectively through oral presentations at lab meetings, scientific seminars, conferences (if appropriate), and other venues
- Make clear and cogent oral presentations, including effective use of technology
- Present second-year research to an audience of colleagues and faculty, including the program director and PI mentor

PLO5: Professionalism

- Career Development: Work with Career Center and MSBTM counselors to develop professional skills including resume preparation, interview techniques, presentation methods, and interpersonal skills
- Participate in summer internship in the private sector, or summer research in a faculty laboratory
- When appropriate, write abstracts describing their research for consideration at research conferences
- Prepare oral presentations suitable for presentation at a research conference
- Make effective contributions to research teams and learning seminars
- Present second-year research to an audience of colleagues and faculty, including the program director and PI mentor

PLO6: Independent Research

- Develop or contribute to research projects that meet high standards of theoretical and methodological rigor
- Produce scholarship that is comparable in scope and format to articles that appear in leading peer-reviewed journals in molecular and biomedical sciences

Program Learning Outcomes Biotechnology Management M.S.

PLO1: Core Knowledge

- Demonstrate a basic knowledge of central concepts in the biological sciences.
- Understand current concepts in molecular biology, biochemistry, and biomedical sciences.
- Demonstrate specialized knowledge of cellular and molecular biology sufficient to carry out substantive independent research.

PLO2: Research Methods and Analysis

- Read and critically evaluate the scientific literature.
- Formulate hypotheses based on current concepts in the field.
- Conduct and interpret their own research projects.
- Understand the range of tools appropriate for research in their sub-field.
- Understand and follow research ethics.

PLO3: Pedagogy:

- Communicate effectively to large and small groups in pedagogical settings.

PLO4: Scholarly Communication:

- Review and discuss relevant literature and its significance.
- Publish research results in peer-reviewed publications if appropriate.
- Communicate research results effectively through oral presentations at lab meetings, scientific seminars, conferences (if appropriate), and other venues.
- Make clear and cogent oral presentations, including effective use of technology.

PLO5: Professionalism

- Participate in summer internship in the private sector in either biotech or business.
- When appropriate, write abstracts describing research for research conferences.
- Make effective contributions to research teams and learning seminars. This includes participating in a team conducting technology evaluation of a biotechnology startup (part of Capstone course)
- Develop a career development plan in consultation with the Program's Career Services Counselor

PLO6: Independent Research

- Develop or contribute to research projects that meet high standards of theoretical and methodological rigor.
- Produce scholarship that is comparable in scope and format to articles that appear in leading peer-reviewed journals in molecular and biomedical sciences.

PLO7: Business/Management

- Analytical decision making
- Impact of information technology
- Strategic innovation
- Knowledge integration within and/or across disciplines
- Oral and written communication skills
- An ability to work collaboratively
- A global business perspective
- Knowledge of ethical and socially responsible business principles

MBB Master's degree student checklist

Year 1

- ☐ Master's Degree students must complete Responsible Conduct of Research training. Check with your specific graduate program advisor to clarify how this training will be administered. It is possible to complete online training through the UC Learning Center (http://www.uclc.uci.edu/). Log in using your UCInetID and search for RCR. When you have completed the training, documentation will be recorded within the system.

- ☐ If eligible to TA, complete UCI TA training so that you are approved to TA for MBB (training is once a year prior to fall quarter instruction). You are not required to TA to satisfy requirements of any of the master's degree programs but may be given the opportunity to do so which can provide tuition and fellowship support.

- ☐ Enroll in classes to complete academic requirements needed for MBB or sign up for a relevant elective class(es) after consultation with your advisor. You must have a minimum of 12 credits per quarter to be enrolled full time (required).

- ☐ Attend MBB research in progress (RIP) talks Tuesdays at 12:00 -1:00 (with pizza).

- ☐ Consider attending specialized journal clubs and MBB-sponsored seminars (Fridays at 12:00-1:00).

Year 2

- ☐ Enroll in classes to complete requirements needed for MBB or sign up for a relevant elective class(es) after consultation with your advisor. Electives should be relevant to your graduate research.

- ☐ Participate in presenting and attending MBB research in progress (RIP) talks Tuesdays at 12:00 -1:00.

- ☐ Complete a capstone or research presentation to a faculty committee during your last quarter, as needed to complete the requirements of your program.

- ☐ File required paperwork with Lissette Umanzor in a timely fashion to complete your degree.

UC Irvine Charlie Dunlop School of Biological Sciences

Statement of Professional Conduct

Revised July 2, 2018; updated April 26, 2022, updated September 18, 2024

This document is intended to outline the standards of professional conduct expected of all students, staff, and faculty in the Charlie Dunlop School of Biological Sciences at UC Irvine.

Adherence to these principles of conduct — together with good academic standing — maintains a student's "good standing" status in the School.

As a community, we respect the dignity, individuality, and freedom of each member. At the same time, we strive to be a place where individuals and groups learn with and from each other. Although we acknowledge the difficulties inherent in creating a community of individuals who are different from each other, we remain unwavering in our commitment to both diversity and community in a context of academic excellence. We seek to enable all members of our community to pursue their educational, scholarly, and career interests in an environment that recognizes both the distinctiveness of each person's experience and the common humanity that unites us all, in order to take full educational advantage of the variety of talents, backgrounds, and perspectives of those who live and work here.

In all activities, members of the School are expected to be respectful of the rights and interests of the community and of the others in the community and to be personally honest. They are expected to conduct themselves in a manner compatible with the University's function as an educational institution, and with the rights of all members of the University community to attend, make use of, and enjoy the facilities and benefits of the University without undue interruption or disruption. With their professional conduct, all members of the School are expected to contribute to a School climate in which all community members feel personally safe, listened to, valued, and treated fairly and with respect.

The key principles of professional conduct include:

1. **Professional Competence and Responsibility:** As scholars, we strive to maintain the highest level of competence in our work. Members of the UCI academic community are committed to engage in teaching, learning, research, and community service. This includes communicating in a manner that is respectful and that does not discriminate against or harass others, and treats the ideas, scholarship, and interests of others with respect.
2. **Integrity:** UCI is an institution of learning, research, and scholarship. As members of the academic community, we are responsible for maintaining academic integrity and must accept individual responsibility for their work and actions. Violations of academic integrity will not be tolerated because they devalue the teaching and learning experience for the entire community. Observing basic honesty in one's work, words, ideas, and actions is a principle to which all members of the community are required to subscribe. https://aisc.uci.edu/students/academic-integrity/index.php

3. **Respect for People's Rights and Dignity:** Respect for the rights, privileges, and sensibilities of each member are essential to our academic community. Actions that make the atmosphere intimidating, threatening or hostile to individuals are regarded as serious offenses. Free speech and peaceful assembly are basic requirements of the University as a center of free inquiry and the search of knowledge and insight. These rights involve a concurrent obligation on the part of all members of the University, guests, and visitors to maintain on the campus an atmosphere conducive to scholarly pursuits and to respect the rights of all individuals.
   https://freespeech.uci.edu/

4. **Respect for Diversity:** UCI seeks to promote full inclusion of all members and groups in every aspect of University life. Diversity — on the basis of race, color, national origin, religion, sex, gender, gender expression, gender identity, gender transition status, pregnancy, physical or mental disability, medical condition (cancer-related or genetic characteristics), genetic information (including family medical history), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services — is a source of strength for UCI. All participants, visitors, staff, students, faculty, and vendors are to be treated with respect and consideration, valuing a diversity of views and opinions. We do not tolerate any discriminatory and/or harassing behavior based on protected characteristics, and will take immediate action to end and remedy the effects of any hostile environment on affected members of campus community. If a member of the UCI community has concerns of discrimination and/or harassment based on the protected bases, please contact the Office of Equal Opportunity and Diversity (oeod.uci.edu).

5. **Appropriate Sexual Conduct:** UCI does not tolerate sexual violence (dating violence, domestic violence, stalking, and sexual assault, policy linked here) and sexual harassment and has strong policies against this Prohibited Conduct. Pursuant to the Policies linked here, the University has procedures for investigating and resolving allegations of sexual harassment and sexual violence. Additionally, the Office of Equal Opportunity and Diversity can provide an individual who experienced such sexual violence and/or sexual harassment with supportive **measures, such as changes to housing or classes, academic assistance, withdrawals and extensions, financial aid assistance, Visa assistance, safety escorts to walk with on campus, workplace accommodations, and more.** If you have any concerns or questions, please contact the Office of Equal Opportunity and Diversity. Additionally, graduate students are required to complete annual Sexual Violence and Sexual Harassment training within six weeks of their enrollment. If an accommodation for this training is needed, please contact the Office of Equal Opportunity and Diversity (oeod@uci.edu).

6. **Appropriate Use of Electronic Media:** When acting as representatives of the School or interacting on official UCI platforms, students must be responsible in their use of social media and should not violate our professional and academic standards in their social media activities.

Accountability

The School will maintain and publicize a clear structure to address complaints involving professional conduct of graduate students, staff or faculty. Allegations of improper behavior will be treated seriously and promptly. All members of the community are entitled to know what is expected of them, and to a timely, fair, and meaningful evaluation of their contributions. Proper training and orientation will be available to all members of the community.

Observance of University Policies

No set of rules can possibly address all situations that may arise. The School reserves the right to find that other conduct not specified in this Code or UCI policies constitutes a violation of good academic or professional standing. If situations arise that seem ambiguous, please consult with departmental graduate advisors, chairs, the Graduate Office, or the Associate Dean.

The UCI Student Code of Conduct, link here defines behavior expected of all UCI students. It is each student's responsibility to know and comply with the university's Student Code of Conduct. In addition, the violation of the laws of any jurisdiction, whether local, state, federal, or foreign, may subject an individual to disciplinary action.

Responsible Conduct of Research

The Dunlop School of Biological Sciences requires that all doctoral and Master's students complete training in the Responsible Conduct of Research. Students in gateway programs (CMB, INP, MCSB) are required to take MMG 250 Conduct of Research, which prepares scientists for biomedical research and is compliant with the NIH requirements. In addition, any student that is directly admitted Developmental and Cell Biology, Molecular Biology and Biochemistry or Neurobiology and Behavior must complete MMG 250.

The Office of Research Administration offers a Responsible Conduct of Research training module through the UC Learning Center web site (http://www.uclc.uci.edu). The IRC- RA-RCR-2011 module is NSF compliant and is required for NSF GRFP pre-doctoral fellows and graduate students and post-docs conducting research on NSF grants. This training is suitable for graduate students that are not funded by the NIH.

In order to insure compliance with federal and campus training requirement for the Responsible Conduct of Research, the School will adopt the following policies for graduate student training.

1. All doctoral students entering gateway graduate programs (CMB, INP, MCSB) or departments (DCB, MBB, and NBB) will take MMG 250 during the first year of graduate study. In addition, MMG 250 will be required of any EEB student funded by a NIH research grant (RO1) or appointed to an NIH Training Grant (T-32).
2. All doctoral students in EEB will complete the NSF on line RCR training, or take MMG 250 as needed.

3. All M.S. students in the M.S. Biotechnology and M.S. Biotechnology Management will take the UC Learning Center module in the Responsible Conduct of Research during the first year of graduate study.
4. All other M.S. students enrolled in departmental programs must complete the UC Learning Center training module, or MMG 250 (contingent on instructor's approval).

Certification:

I, _____, have read and understand the Statement of Professional Conduct, which outlines the standards of professional conduct expected of graduate students in the Dunlop School of Biological Sciences at UCI.

_____

[signature] [date]

Useful Contacts:

1. Bio Sci Equity Advisor: Monica Daley, (949) 824-6654, madaley@uci.edu
2. UCI Office of Equal Opportunity and Diversity: (949) 824-5594, oeod@uci.edu
3. Associate Dean for Graduate Education: Craig M. Walsh, 949-824-8487, cwalsh@uci.edu
4. UCI Graduate Division: 949-824-4611
5. UCI Office of the Ombudsman: 949-824-7256
6. UC Learning Center for Responsible Conduct of Research training navigate to: https://uc.sumtotal.host/Core/search
7. Campus Assault Resources and Education (CARE) is a primary, confidential source for information, crisis intervention and follow-up support regarding sexual harassment, sexual assault, dating and domestic violence and stalking on the UC Irvine campus. CARE, in collaboration with Waymakers, coordinates accompaniment services for student victims to the police, evidentiary exams and the court system. In addition, individual and group counseling is available to students who are survivors of sexual violence. CARE is available Monday through Friday, 8am to 5pm. Address: G320 Student Center, Irvine, CA 92697 Phone: (949)-824-7273.
8. UC Irvine Police provides a timely response for students, staff, faculty, and members of the community experiencing crimes, including hate crimes and sexual violence. For sex crimes, the police can arrange for medical evidentiary examinations in order to provide admissible evidence when the person reporting the sex offense desires prosecution through the criminal justice system. The UC Irvine Police Department encourages the University community, including students, to immediately contact them by dialing 911 or (949) 824-5223 to report crimes. UCIPD investigations into hate incidents and sex offenses can be coordinated with an OEOD investigation. *Please note that UCIPD can assist in referrals to other police departments in Orange County and can take courtesy reports for other police stations.* The UC Irvine Police Department is available twenty-four hours a day, seven days a week Address: 410 E. Peltason Dr. Irvine, CA 92697 Phone: (949) 824-5223 or 911. http://www.police.uci.edu/

9. Counseling Center offers free and confidential short-term and crisis counseling by licensed mental health providers to all UC Irvine students on an urgent basis, or by appointment. The Counseling Center also offers certain free and confidential psychiatric services. Referrals to off- campus psychotherapeutic and psychiatric providers are also available through the Counseling Center. The Counseling Center is available Monday through Friday, 8am to 5pm. Address: 203 Student Services 1, Irvine, CA, 92697 Phone: (949) 824-6457. For afterhours counseling: For urgent matters, call the main telephone number at (949)824-6457 and select option 2.