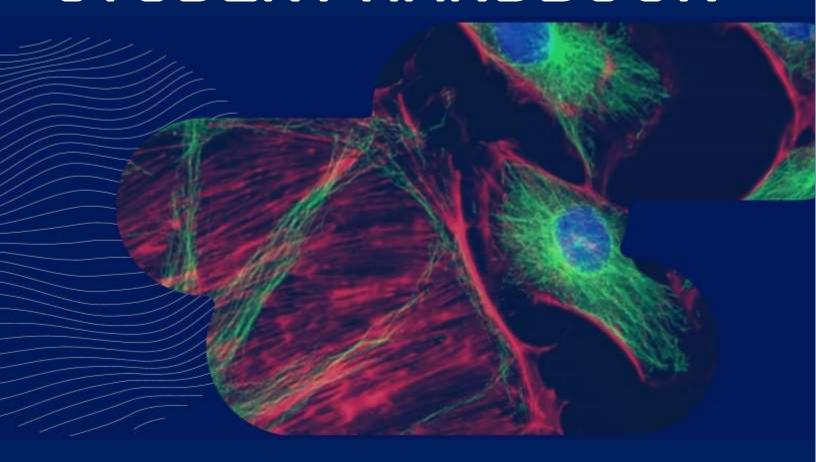


Department of Developmental & Cell Biology

M.S. GRADUATE STUDENT HANDBOOK



Christine Suetterlin, Graduate Advisor

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949-824-7140

GENERAL INFORMATION

ADMISSION PROCESS INTO THE DCB MS 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 DCB. This program generally requires coursework and two years of research in the laboratory of the sponsor.

APPLICATION PROCESS

The student should review their undergraduate transcript and other information (e.g., research experience) and if appropriate, the future faculty mentor may request that the DCB graduate advisor and the program mentor 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/program mentor 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*.

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. 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.

DEPARTMENTAL OFFICE AND ADMINISTRATION

Key faculty and administrative personnel relevant to graduate students:

- Craig Walsh. Associate Dean of Graduate Studies. (949)824-848, cwalsh@uci.edu
- Prof. Kavita Arora, Chair, 4215 McGaugh Hall, x4-1087, karora@uci.edu
- Prof. Lee Bardwell, Vice Chair, 2208 Natural Sciences I, x4-6902, bardwell@uci.edu
- Prof. Christine Suetterlin, Graduate Advisor, 4221 McGaugh Hall, x4-7140, suetterc@uci.edu
- Andrea Wiley, Department Manager 2104 Bio Sci 3, x4-4706 wileya@uci.edu
- Mayra Rubio, Graduate Coordinator, 2108 Bio Sci 3, x4-1969, mrubio3@uci.edu

DEPARTMENTAL RESOURCES

- For copying services in the libraries, you will need a copy card.
- Parking/Escort services are available 24/7, 365 days a year on campus, University Apartments and University Center. Call 824-SAFE (7233).

THE GRADUATE ADVISOR

The role of the Graduate Advisor, Dr. Suetterlin, is to help you to maneuver graduate school successfully. She works closely with the Associate Dean of Graduate Studies in the School, Dr. Craig Walsh, to answer questions about the process, such as *when to do what*. Together with the Graduate Coordinator, Ms. Mayra Rubio, Dr. Suetterlin will make sure that you will meet all departmental requirements in a timely fashion. She will also provide you with advice and mentorship if you have questions about the process, your progress in graduate school, if you would like an additional opinion or if there are issues with your PI or committee. Please do not hesitate to contact Grad Advisor or the Graduate Coordinator with questions (big or small). They are happy to

help!!! The Graduate Coordinator's door is always open to you.....

Please keep Grad Advisor and Graduate Coordinator informed about your progress and successes (e.g. fellowships that you have received, papers that you have published, talks that you have given etc.). This information will help them when they are asked to select students for department and school-wide awards. Please also keep them informed about issues that could limit your ability to make satisfactory progress.

OTHER GENERAL INFORMATION

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). Please note that a 911 call will go to the Irvine PD, not the campus police.

LABORATORY USE: Your research advisor's laboratory is under his/her direction. You need to receive formal training and certification in the use and disposal of toxic and radioactive waste. Other safety courses may be required as well, e.g., blood-borne pathogens. If a laboratory accident occurs, it must be immediately reported to EH&S (4-6200). See web information at: https://ehs.uci.edu/forms/report-injury/index.php

CONTACT INFORMATION & CAMPUS RESOURCES

- Department website: https://devcell.bio.uci.edu/
- Graduate Division website: www.grad.uci.edu
- Office of Research website: www.research.uci.edu
- Bio Sci Equity Advisor: Dr. Monica A Daley, (949) 824-6654, madaley@uci.edu
- UCI Office of Equal Opportunity and Diversity (OEOD): (949) 824-5594, oeod@uci.edu
- UCI Office of the Ombudsman: (949) 824-7256, https://ombuds.uci.edu
- International Center, (949) 824-7249, https://ic.uci.edu
- LGBT Resource Center, (949) 824-3277, https://lgbtrc.uci.edu
- Dream Center, (949) 824-6390, https://dream.uci.edu
- UC Learning Center: http://www.uclc.uci.edu; for Responsible Conduct of Research training navigate to: https://uc.sumtotal.host/Core/search
- Graduate Counselors (Graduate Division):
 - o Phong Luong: pbluong@uci.edu, (949) 824-0246

PROGRAM OVERVIEW

The department of Developmental and Cell Biology offers three different plans for obtaining a <u>Master's</u> in Biological Sciences

- 1) M.S. plan I: Thesis-based and course work-focused
- 2) M.S. plan II: Comprehensive examination-based and research-focused.
- 3) MS 4 +1 Plan: Comprehensive examination-based and research-focused

SUMMARY OF REQUIREMENTS:

- A minimum of **36 units of credit** is required
 - <u>16 units of graduate level courses</u>. <u>Examples</u> of appropriate 4-unit classes are: Mol Bio 204 "Protein Structure and Function" Mol Bio 203 "Structure and Biosynthesis of Nucleic Acids", D231 Cell Biology etc.
 - <u>8-12 units of other coursework</u> (electives, seminars, journal clubs, tutorials) e.g.,
 Dev Bio 290 "Departmental Seminar" or DevBio206 (Dev Bio JC)
 - 12 units of research (more as time permits with classes and teaching to complete required research project). Independent Laboratory Research (Dev Bio 200, 4-12 units/guarter
- 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.

Please note: **A minimum of 12 units/quarter** are required to maintain full-time student status. Also, students in the MS program may be employed as teaching assistants.

	MS Plan I	MS Plan II	4+1
Focus	Course work and research	research-focused	research-focused
Total units	At least 36 units	At least 36 units	At least 36 units
Normative time to degree	2 years	2 years	1 year
Mode of evaluation	written thesis and oral exam	comprehensive oral exam only	comprehensive oral exam only
Didactic course work	Grad level courses: at least 16 units (4 courses) Electives: at least 8 units, of which only 4 can be upper division undergrad courses	Grad level courses: at least 16 units (4 courses) Electives: at least 8 units, of which only 4 can be upper division undergrad courses	Grad level courses: at least 16 units (4 courses) Electives: at least 8 units, of which only 4 can be upper division undergrad courses
Research Course work (Independent research, 200 A/B/C)	At least 12 units	At least 12 units	At least 12 units
Committee	Typically 3 DCB members, but outside member is possible	Typically 3 DCB members, but outside member is possible	3 DCB members
Advancement to Candidacy	Upon completion of didactic and research course work, typically 1 quarter before graduation	Upon completion of didactic and research course work, typically 1 quarter before graduation	Winter quarter of grad year

Table I: Comparison of the three M.S. programs offered by DCB

1) M.S. BY PLAN I (THESIS OPTION)

The student completes coursework, engages in research with a faculty advisor, and submits a written thesis to a committee of three DCB faculty members for evaluation.

The final examination is an oral defense of the thesis work in front of the thesis committee.

- 1. Course work (minimum of 36 units of didactic and research coursework)
 - → 28 units must be obtained through approved courses. Of these, at least 20 units must be earned in 200 series graduate-level courses (credit given for thesis research and preparation does not count).
- Required Coursework (at least 16 units): Graduate level didactic courses offered by the School
 of Biological Sciences. These courses are typically core courses taken by doctoral students in
 the school. A list of departmental graduate courses will be identified by the supervising PI and
 the Graduate Advisor at the time of acceptance.
- Research Coursework (Independent Laboratory Research (up to 12 units: Dev Bio 200 A/B/C).
- Elective Coursework (at least 8 units):
 - o Departmental seminars and journal clubs.
 - Additional graduate coursework or upper division undergraduate courses offered by the School of Biological Sciences. Upper division undergraduate coursework may not exceed 4 units. Approval of the Associate Dean for Graduate Studies and departmental Graduate Advisor is required.
- 2. <u>Thesis Committee</u>: At least three faculty (faculty mentor and two other members of the DCB faculty please note that the majority of the committee has to be from DCB, an outside member is possible but not necessary
- 3. <u>Committee meetings</u>: Annual committee meetings with your thesis committee are highly recommended!
- 4. <u>Advancement to Candidacy</u>: **Advancement to candidacy for the MS degree is based on completion of required coursework**. The advancement to candidacy paperwork is generally submitted one quarter prior to the thesis defense.
- 5. <u>Dissertation</u>: The student will submit the MS thesis to the thesis committee and give an oral defense to the committee. The thesis committee will approve the thesis with signatures on the signature page of the dissertation and the MS degree completion paperwork. The thesis will be filed according to UCI policy.
- 6. Normative time to degree: 2 years

2) M.S. BY PLAN II (COMPREHENSIVE EXAMINATION)

The student completes coursework, engages in research with a faculty advisor, and presents a comprehensive exam to a committee of at least three DCB faculty members. The examination format consists of an oral presentation of the research project.

- 1. Course work (minimum of 36 units of didactic and research coursework)
 - → 28 units must be obtained through approved courses. Of these, at least 20 units must be earned in 200 series graduate-level courses (credit given for thesis research and preparation does not count).
- Required Coursework (at least 16 units): Graduate level didactic courses offered by the School
 of Biological Sciences. These courses are typically core courses taken by doctoral students in
 the school. A list of departmental graduate courses will be identified by the supervising PI and
 the Graduate Advisor at the time of acceptance.
- Research Coursework (Independent Laboratory Research (up to 12 units: Dev Bio 200 A/B/C).
- Elective Coursework (at least 8 units):
 - Departmental seminars and journal clubs.
 - Additional graduate coursework or upper division undergraduate courses offered by the School of Biological Sciences. Upper division undergraduate coursework may not exceed 4 units. Approval of the Associate Dean for Graduate Studies and departmental Graduate Advisor is required.
- 2. <u>Thesis Committee</u>: At least three faculty (faculty mentor and two other members of the DCB faculty please note that the majority of the committee has to be from DCB, an outside member is possible but not necessary
- 3. <u>Advancement to Candidacy</u>: Advancement to candidacy for the plan II MS degree is **based on completion of required coursework**. The advancement to candidacy paperwork is generally submitted at the end of the second quarter of study, and the student should be on track to complete all requirements in the following quarter.
- 4. <u>Committee meetings</u>: Annual committee meetings with your thesis committee are highly recommended!
- 5. <u>Comprehensive Exam</u>: The department will administer a comprehensive exam, which will be administered by a committee of at least three departmental faculty, and may include written and oral sections. The recommended comprehensive exam format will include a research presentation, including background, specific aims, results, discussion, conclusion as well as a short section on follow-up experiments. A short, written component is optional and can be requested by the committee.
- 6. Normative time to degree: 2 years

3) 4 + 1 M.S. PLAN (COMPREHENSIVE EXAMINATION)

The student completes coursework, engages in research with a faculty advisor, and presents a comprehensive exam to a committee of at least three DCB faculty members. The examination format consists of an oral presentation of the research project.

- 1. Course work (minimum of 36 units of didactic and research coursework)
 - → 28 units must be obtained through approved courses. Of these, at least 20 units must be earned in 200 series graduate-level courses (credit given for thesis research and preparation does not count).
- Required Coursework (at least 16 units): Graduate level didactic courses offered by the School
 of Biological Sciences. These courses are typically core courses taken by doctoral students in
 the school. A list of departmental graduate courses will be identified by the supervising PI and
 the Graduate Advisor at the time of acceptance.
- Research Coursework (Independent Laboratory Research (up to 12 units: Dev Bio 200 A/B/C).
- Elective Coursework (at least 8 units):
 - Departmental seminars and journal clubs.
 - Additional graduate coursework or upper division undergraduate courses offered by the School of Biological Sciences. Upper division undergraduate coursework may not exceed 4 units. Approval of the Associate Dean for Graduate Studies and departmental Graduate Advisor is required.
- 2. <u>Thesis Committee</u>: Form your committee by the end of the fall quarter of your MS year. Committee members must be faculty in the same department.
- 3. <u>Committee Meetings</u>: You should hold a committee meeting before the end of the Winter quarter, this meeting will serve as your **Advancement to Candidacy**.
- 4. <u>Advancement to Candidacy</u>: Advancement to candidacy for the 4+1 plan II MS degree is **based on completion of required coursework.** The advancement to candidacy paperwork is generally submitted 1 quarter prior to the completion of the program, the student should be on track to complete all requirements in the following quarter.
- 5. <u>Comprehensive Exam</u>: The department will administer a comprehensive exam, which will be administered by a committee of at least three departmental faculty, and may include written and oral sections. The recommended comprehensive exam format will include a research presentation, including background, specific aims, results, discussion, conclusion as well as a short section on follow-up experiments. A short, written component is optional and can be requested by the committee.
- 6. Normative time to degree: 1 year

FORMS:

All graduate student forms are available online. The Graduate Coordinator for the unit will initiate the forms for you and the system will automatically route for signature.

Please contact the Graduate Coordinator Mayra Rubio or the MSO Andrea Wiley for help with of the following actions:

- a. Filing Fee Petition
- b. Readmission Petition
- c. General Petition
- d. Leave of Absence
- e. Change of Degree Level
- f. Summer Filling Fee
- g. Master's Thesis Submission Fee
- h. Master's Advancement to Candidacy Comprehensive Exam Option
- i. Master's Advancement to Candidacy Thesis Option
- j. Final Degree Paperwork for the Master's Degree/Comprehensive Exam
- k. Final Degree Paperwork for the Master's/Thesis

UC Irvine Charlie Dunlop School of Biological Sciences

