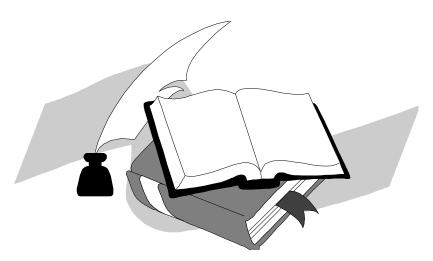
# **Graduate Student Handbook**

# Molecular and Cellular Biology Program

**Oregon State University** 

2017-2018



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#### INTRODUCTION

This handbook was prepared to assist graduate students who are entering the Molecular and Cellular Biology Program at Oregon State University. Here you will find information on services and facilities that are available to you, requirements for the degree programs, and program policies pertaining to graduate students. This handbook is not an official document of the University and students are advised to refer to the Oregon State University Graduate School web page for more information.

- For information on university-level rules and regulations, refer to the policies governing all graduate programs in the OSU Graduate Catalog online (<a href="http://catalog.oregonstate.edu/Default.aspx?section=Graduate">http://catalog.oregonstate.edu/Default.aspx?section=Graduate</a>).
- Additional degree specific information is provided in the policies governing Doctoral programs (http://catalog.oregonstate.edu/ChapterDetail.aspx?key=40).
- A concise form of the regulations and other relevant information is found in the online Academic Progress section of the Graduate School webpage (http://gradschool.oregonstate.edu/progress).
- The Graduate School also offers information on general resources that may be of interest in a "New Student Graduate Guide" (<a href="http://gradschool.oregonstate.edu/file/new-graduate-student-guide">http://gradschool.oregonstate.edu/file/new-graduate-student-guide</a>)

The interdepartmental Molecular and Cellular Biology (MCB) Program coordinates graduate education related to molecular, cellular and computational biology. Molecular and cellular approaches to studying life sciences have opened up all areas of contemporary biological research. Recognizing this fact, many of the approximately ninety OSU biological sciences faculty have designed this curriculum to bring students into contact with a broad range of disciplines and experimental approaches that are essential to help students remain competitive for a lifetime.

#### **GENERAL INFORMATION**

The Molecular and Cellular Biology Program (MCB) consists of approximately 90 active faculty members and about 30 Ph.D. graduate students. The faculty represents a broad spectrum of research and teaching interests. For a listing of the MCB faculty and their research, go to the web site <a href="http://gradschool.oregonstate.edu/molecular-and-cellular-biology-graduate-program/faculty">http://gradschool.oregonstate.edu/molecular-and-cellular-biology-graduate-program/faculty</a>

Visit the Graduate School website <a href="http://gradschool.oregonstate.edu">http://gradschool.oregonstate.edu</a> to explore all the resources available for OSU graduate students. Specifically, download the Graduate Schools document "New Student Graduate Guide" (<a href="http://gradschool.oregonstate.edu/file/new-graduate-student-guide">http://gradschool.oregonstate.edu/file/new-graduate-student-guide</a>) which contains up-to-date information on registration, housing, OSU ID, email, computer access, student success, parking, health insurance, financial aid, and much more.

# Registration

All graduate assistants are required to be enrolled in a minimum of 12 credit hours each term of their appointment during the academic year and a maximum of 16 credit hours each term (check with your major professor's department regarding summer credit), and to be making satisfactory progress toward an advanced degree. Please note, audit registrations and enrollment in OSU Extended Campus courses may not be used to satisfy enrollment requirements for graduate assistant salary/stipend, tuition remission, or health insurance benefits.

You can check the general catalog and schedule of classes website for subject descriptions before you register for classes. To know when registration starts for each term

- go to MyOSU.
- Click on Student tab and under Registration Tools, select 'View Priority Registration Status'. Graduate students will be able to register at the beginning of priority registration.
- Registration status will be available approximately one week before registration begins.
- You can add/ drop courses till the priority registration end period. Check the academic calendar for more information.

Using the online schedule of classes, you can search course listings in several ways.

- Login to MyOSU.
- Click on OSU Online Services
   In the Main Menu, click on Registrations Click on Select Term
- Select the term you want to enroll for Click on Registration/Add/Drop Classes
- Find "Add Class Worksheet". Click on Class Search to search for your classes.
- Select the courses you want to enroll and click add to worksheet. Then select submit under the worksheet section to register.

### **Research Facilities**

A key part of the Center is the CGRB Core Facilities that provide services, technical expertise, collaborative functions and share-use equipment for molecular bioscience research at Oregon State University. The Core Facilities are a fully staffed facility that serves as a focal point for acquisition and development of new instrumentation and technologies. For more information visit their website: <a href="http://cgrb.oregonstate.edu/core">http://cgrb.oregonstate.edu/core</a>

# **Biocomputing Services**

The CGRB provides bioinformatics research and analysis consulting. Custom bioinformatics can be one-on-one training, experimental design discussion, software assistance, custom programming, or the whole analysis from start to finish. The CGRB bioinformatics staff has expertise in a wide range of bioinformatics specializations. For more information visit their website: <a href="http://cgrb.oregonstate.edu/core">http://cgrb.oregonstate.edu/core</a>

#### Seminars

CGRB Seminars are usually on every other Wednesday at 3:30 pm in ALS 4001; Biochemistry Seminars are usually on every other Wednesday and Fridays at 3:30 pm in ALS 4001; Zoology Seminars are usually at 3:30 on Mondays in ALS 4001; Botany and Plant Pathology Seminars are usually on Thursdays at 4:00 pm in ALS 4001; Linus Pauling Institute Seminars are usually at 2:00 pm on Thursdays. If you are interested in getting on the mailing list to find out specific times and days for any of these seminars, please see the appropriate department.

### **CGRB** Conference

Each year, the Center for Genome Research and Biocomputing holds a conference for faculty and graduate students. The conference is held in September at the CH2M Hill Alumni Center at OSU. Go to the website <a href="http://conference.cgrb.oregonstate.edu/">http://conference.cgrb.oregonstate.edu/</a> for more information.

#### **ONID Email Account**

OSU Network Identification (ONID) is a universal computer account available to all OSU students. Your ONID username and password gives you access to university technology services, the wireless network, ResNet, IS computer labs, and the Interlibrary Loan. ONID also gives you an OSU Gmail account. OSU requires you communicate via your ONID email. Sign up for your ONID account here: <a href="https://secure.onid.oregonstate.edu/cgibin/newacct?type=want\_auth">https://secure.onid.oregonstate.edu/cgibin/newacct?type=want\_auth</a>

You need your OSU ID number to sign up for your ONID account.

### **OSU Google account**

Students' ONID mailboxes are hosted at Google Apps for OSU, and all email sent to your ONID email address (username@oregonstate.edu) is delivered to Google Mail. Use Google Apps for OSU login portal to access your ONID email and other Google services like Google Drive.

# **Computer**

Graduate students have access to computers in 3003 Cordley.

#### **MCB Listsery**

Graduate students should sign up for MCB listserv at: <a href="http://lists.oregonstate.edu/mailman/listinfo/mcb-grads">http://lists.oregonstate.edu/mailman/listinfo/mcb-grads</a>

#### **Forms**

Graduate school forms can be found online at <a href="http://gradschool.oregonstate.edu/forms">http://gradschool.oregonstate.edu/forms</a>
MCB specific forms are located online at: <a href="http://gradschool.oregonstate.edu/molecular-and-cellular-biology-graduate-program/degree-documents">http://gradschool.oregonstate.edu/molecular-and-cellular-biology-graduate-program/degree-documents</a>

# **Social Security Number**

International students must go to the International Education Office (Snell Hall 444) to get forms *before* going to the Social Security Office in Albany.

### **OSU Picture ID Card**

Go to the ID Center in the Memorial Union Room 103, or upload a photo online (requires your ONID account) and have your card waiting for you. You will need photo ID (valid driver's license, state ID card, military ID, passport or resident alien card) to pick up your OSU ID card. Your first ID card is \$20, charged to your student account; replacement cards are \$25.

Memorial Union Room 103 Monday – Friday 8:30 a.m.-4:30 p.m. 541- 737-2493

#### **Health Insurance**

Information is available online at: <a href="http://studenthealth.oregonstate.edu/insurance">http://studenthealth.oregonstate.edu/insurance</a> and from the Student Health Services office located in the Plageman Student Health Center.

Student Health Services, Main Clinic 201 Plageman Building Monday to Friday 9 a.m.-5 p.m. Saturday 10 a.m.-3 p.m. (urgent care only) 541-737-9355

Student Health Services-Tebeau Hall same-day clinic Monday to Friday 9 a.m.-4:30 p.m.

Students with a graduate assistantship of an FTE of .2 to .49 are required to enroll in PacificSource insurance or file a waiver form with comparable insurance coverage to the Student Health Services Insurance Office. Check their website for deadlines and more information.

International students are required to enroll in the OSU insurance plan. OSU requires that all non-resident international students and their dependents (living in the United States) be covered by health insurance.

# **Payroll Information**

Go to the web site <a href="https://oscar.oregonstate.edu">https://oscar.oregonstate.edu</a>, click on Downloadable Forms, then fill out the W4, Pay Delivery Authorization, I-9, and the Personal Demographic information forms as best you can. Bring them with you to the MCB office along with either your original passport or your driver's license and social security card AS SOON AS YOU ARRIVE so you can be set up for payroll. International students also need to fill out the CO-NRA form

and go to the International Education office with a copy of your offer letter and you will receive a letter from them that you will take to the Social Security office.

# **Coalition of Graduate Employees**

The Coalition of Graduate Employees (CGE) represents the interests and rights of Oregon State University's graduate employees (Graduate Teaching and Research Assistants) through the bargaining and maintenance of a fair working contract. CGE strives to create a community of graduate employees empowered to advocate for collective issues. This is a democratically run, member-driven organization that values collective action, self or collective advocacy and social justice and equity. Learn more on their website: <a href="http://cge6069.org">http://cge6069.org</a>

### **Student Health**

The <u>Student Health Center</u> located in the Plageman Building (across from Weniger Hall) has MD and LPN services, pharmacy, etc. Phone 737-9355 (well) for more information.

<u>The Benton County Health Department</u> (766-6835) is located at 530 NW 27th Street, and provides a number of services (including required vaccinations) on a sliding scale fee basis. Call for appointments.

### **Counseling**

A number of University counseling services are available to students and their families. These include the Counseling Center (Phone 737-2131) for personal, educational-vocational, and marriage counseling. An appointment is necessary and there is a nominal fee after the first six visits. There are also Student Legal Counselors (free) in the MU Student Activities Center, who can help, especially in landlord-tenant disputes. The Women's Center located in the Women's Center Building (737-3186) offers support for both men and women students.

### **Valley Library Research Services**

The library has document retrieval services. You can view their services on the web page <a href="http://osulibrary.oregonstate.edu/index2.html">http://osulibrary.oregonstate.edu/index2.html</a>.

Interlibrary Loan is offered to OSU faculty, staff and students, obtaining materials from other libraries in the state and around the world. Call 737-4488 for more information.

**Student Multimedia Services** http://oregonstate.edu/is/mediaservices/sms/

**Graduate Writing Center** 541-737-5640 http://writingcenter.oregonstate.edu/gwc

OSU Graduate School <a href="http://gradschool.oregonstate.edu">http://gradschool.oregonstate.edu</a>

### GRADUATE ADVISORS AND THE GRADUATE PROGRAM COMMITTEE

#### **Graduate Advisor**

This individual will guide your research efforts to completion and oversee all aspects of your graduate studies. The graduate advisor-student relationship, which is based on mutual agreement, should be established when the student enters the program. Students may have as many as two advisors (co-advisors) that act together to oversee the graduate studies of the student. Please take note of the Graduate Advisor's home department as they will have their own policies that students must adhere to.

# **Graduate Committee**

Your Graduate Committee is composed of faculty who can provide both breadth and depth of experience and knowledge in assisting you in your graduate studies. The members of the committee are chosen in consultation between you and your graduate advisor. The committee functions to establish a course of study for the degree program, to give advice and suggestions on the thesis proposal, to conduct the oral examination, and to review the thesis and conduct the final examination.

For doctoral students, the Graduate Committee consists of a minimum of five members of the graduate faculty; the graduate advisor, the Graduate Council Representative, and three other members of the graduate faculty. Your graduate advisor and at least one other **committee** members must be MCB Faculty. The MCB program can nominate faculty to MCB graduate faculty status. Please send OSU grad faculty nominations to Kirstin Carroll

**Off-campus faculty:** Students can consider participation by appropriate faculty from off-campus. However, *any such individuals need to be appointed to the OSU graduate faculty*, if they are not already members. Please send OSU grad faculty nominations to Kirstin Carroll.

Graduate Council Representatives serve on both masters and doctoral degree committees. Their function is to ensure that you are treated fairly during your required committee meetings and that all University regulations are followed. Upon request, the Graduate School office will provide you with a list of candidates from which you choose your Graduate Council Representative. You are allowed to ask for a second or third list if you decide to choose none of the candidates on the previous lists.

### UNIVERSITY GRADUATE PROGRAM REQUIRMENTS

The Graduate School has a flow chart for your path to a PhD. Please see <a href="http://gradschool.oregonstate.edu/sites/gradschool.oregonstate.edu/files/imce/phd\_flowchart.">http://gradschool.oregonstate.edu/sites/gradschool.oregonstate.edu/files/imce/phd\_flowchart.</a> pdf

The three basic requirements are as follows:

- 1. **Graduate Program of Study Meeting** (PhD only), when your graduate courses are decided and Program of Study is signed (see below for timing). Not required to formally schedule with the Graduate School.
- 2. **Preliminary Exam Meeting**, when you undergo your oral exam (PhD students only), to be the end of your 3<sup>rd</sup> year.
- 3. Final Exam Meeting, when you present and defend your thesis

These three requirements involve formal meetings with your Graduate Committee. You need to notify the Graduate School of the Preliminary Exam meeting and the Final Exam meeting so that the proper paperwork is available for the meetings. The deadlines for notification are 2 weeks in advance for doctoral degrees. The Event Scheduling form is available online from the Graduate School website

(<u>http://oregonstate.edu/dept/grad\_school/current/forms.html#program</u>). Please note, there are restrictions on when various committee meetings may be held, so be sure to check the Graduate School regulations prior to scheduling a meeting.

# Remote participation in committee meetings

The following is Graduate School policy: "Students are no longer required to submit a form to the Graduate School when someone is to participate remotely. However, requirements for remote participation are still in effect. It is generally expected that all members of graduate committees should be physically present at all required graduate committee meetings (i.e., program meetings, preliminary examinations, and final examinations). However, it is permissible for the student, and/or committee members to participate from a remote location provided all conditions listed here are met:

http://gradschool.oregonstate.edu/success/graduate-committee.

# MCB GRADUATE PROGRAM REQUIREMENTS

# 1. Graduate Program of Study

A formal Program of Study is designed in consultation with your major advisor and Graduate Committee. The intent of this program is to define the minimal set of formal courses, seminars, thesis credits, etc., required for satisfaction of the degree requirements. The Program of Study form is available online from the Graduate School website (http://oregonstate.edu/dept/grad\_school/current/forms.html#program). All your committee members and the MCB Director must sign the form before it is returned to the Graduate School. A Program of Study is due at the Graduate School *at least 6 weeks prior* to the preliminary oral exam.

The Graduate School requires that doctoral candidates complete 108 credits. 36 credits will be the MCB Core curriculum as listed below.

Core courses (MCB 554, 555)	8 units
Techniques in Molecular & Cellular Biology (MCB 525)	3 units
Bioinformatics courses	3 units
Statistics course	3 units
Scientific Skills and Ethics (MCB 557)	3 units
Electives*	16 units
Total	36 units

<sup>\*</sup>Elective course work is custom-tailored by the program committee.

If a minor is declared, at least 18 credits must come from the minor field of study. A minimum of 36 credits must be thesis (MCB 603), a minimum of 6 but no more than 15 credits should be blanket seminar or research courses (MCB 601). Of the 108 credits, 50% or 54 credits should be stand-alone graduate courses (i.e., not "slash" 400/500 courses). The remaining credits can be the 500-component of slash courses (see figure below).

# Grade Requirement

A GPA of 3.0 must be maintained for all courses taken as part of the graduate degree. Grades below 2.0, or a "C", constitute unsatisfactory performance and are not accepted for credit. Students earning less than a B grade in any MCB course would not be considered to be in good standing in the program. In cases where a student received a grade below a B in an MCB course, to restore eligibility for advancement to Ph.D. candidacy, the student would need to do one of the following:

1. With the permission of the course instructor/coordinator, the student may undertake additional work or exams to demonstrate a level of achievement

- judged to be equivalent to a B grade. The course grade would still remain and would count in the grade average requirement of the graduate school.
- 2. The student may re-take the course or challenge the exam the next time it is offered. Under the new academic rules, the second grade is now recorded, but no additional units are given.

### 2. Presenting Public Lectures

Ph.D. candidates are required to give three seminars or other public presentations during their doctoral work. This requirement may be satisfied by participation in seminar courses (such as MCB 557), selected topics course, or journal clubs in which a presentation of greater than 30 minutes is given by the student and more than five individuals are in attendance. Journal clubs provide opportunities for seminar presentations. A presentation of more than 15 minutes at a national meeting will also satisfy the requirement. At least two faculty members must be in attendance (with the exception of national meetings). The student will be responsible for turning in a 'Seminar' form with the signatures from the attending faculty to document public presentations.

# 3. Attending Public Lectures

Attendance at public lectures is an important part of academic life and contributes to intellectual development beyond the bounds of narrowly defined fields of interest. MCB students are expected to attend CGRB seminars, and prominent public lectures such as the Knudsen Lectures, the Biology Colloquium and the annual CGRB Conference.

### 4. Ethics Instruction

Presenting seminars is an integral part of a scientific career and MCB 557 or an equivalent course should provide instruction in seminar presentation. Attendance at the CGRB seminars or other seminars on campus does not quality for ethics instruction credit. NIH now requires that ethics instruction relative to scientists be included for recipients of training grants, and the MCB program faculty strongly support this concept. MCB dissertation committees are encouraged to incorporate ethics into their examinations.

### 5. Teaching Requirement

Learning to teach is an essential skill for an academic. Therefore, all doctoral candidates must have *a minimum of 2 quarters of teaching experience* before receiving their degree. The courses may be offered by any OSU department or program in which MCB faculty participates. To qualify, the assignment must include in-class teaching experience.

# 6. Preliminary Oral Examination

The Preliminary Oral Examination is conducted by the student's Graduate Committee and determines whether the student will formally enter candidacy for the PhD (note that written exams are not required. The oral examination is required by the end of the 3<sup>rd</sup> academic year, and at least one quarter before your dissertation defense. You must notify the Graduate School when the exam is scheduled so that they can send the appropriate paperwork (notification due two weeks ahead of the meeting). The exam cannot be taken in the summer unless all the committee members approve. The Event Scheduling form is available online from the Graduate School website

(http://oregonstate.edu/dept/grad school/current/forms.html#program).

The preliminary examination will consist of two portions:

1) A written research proposal, limited in length to ten pages, double-spaced, and submitted two weeks in advance of the scheduled oral exam. The subject of the proposal is chosen by the student and may not be closely related to their thesis topic. A one-page abstract/outline on the topic should be submitted to the program committee for approval before the proposal is written. Upon approval of the written research proposal by the program committee, the student may proceed with the oral exam.

There is no formal requirement for the format of the proposal but you should consult with your advisor and your committee before you write the proposal. Format options might include writing the proposal in the form of a NSF or NIH proposal. The proposal should include an Introduction and a Proposed Methods section. It is particularly important that you state clearly the questions to be asked and formulate specific hypotheses and predictions to be tested. These should be covered in the Introduction, where you should also review pertinent literature and give a clear indication of why the problem is an important one to study. This exercise should help you crystallize your thoughts concerning your research goals. The Proposed Methods section is extremely important for recognizing any constraints you may face in the design of your project. The proposal can contain preliminary results if they help with comprehension, but this should not be the main focus of the proposal and is, in no way, required.

- 2) An oral defense of no less than two hours, which should be divided into two parts:
  - a) A one-hour defense of the proposal
- b) A general oral examination covering subjects beyond the scope of the proposal

The abilities of the students to make use of information resources, think and write creatively, and articulate their ideas are major determinants of scholarly success. This examination should test the student's ability to develop, research, and defend an original research idea. The originality of the proposal, the scholarly quality of the literature review, and the technical feasibility of the approach should be evaluated.

In addition, the student should demonstrate a capacity for critical thinking and a broad command of their general and more specific field. Committee members are encouraged to incorporate ethics into the examination. If committee members find that it is appropriate, two retests of the exam will be allowed.

During the examination itself, the Graduate Advisor chairs the examination meeting. The Graduate Council Representative oversees the final evaluation of the student's performance. A negative vote by one member of the committee is allowed. If more than one negative vote is cast, the student will have failed the oral exam. No more than two re-examinations are allowed by the MCB Program and the Graduate School. If the third exam results in failure, the student will be terminated from the program.

# 7. Annual Review and Satisfactory Progress

The MCB Program reviews the progress of all graduate students annually at the end of the

spring term. Our goal with these reviews is to make sure everyone is making adequate progress towards their degrees. It is also an opportunity to tell us how you're doing and alert us to any problems you may be experiencing. Students and Faculty will be sent a qualtrics survey to complete. Completed surveys will be kept on file for each student.

MCB graduate students are expected to make continued satisfactory progress towards the completion of their degree. As stated in the OSU Graduate Catalog, a student may be dismissed for failing to make satisfactory progress as determined by the major department or the graduate school. Graduate student annual reviews are reviewed by the Director of the MCB. The Director will provide written notice to students at the end of the academic year as to whether they are making satisfactory progress. If a student appears not to be making satisfactory progress, the MCB Director will consult with both the faculty supervisor and student to address the situation, assist the student and decide on a future course of action.

In addition to the general academic requirements established by the Graduate School, the MCB program defines satisfactory progress using the following criteria: Students must earn a B grade or better in any MCB course or course taken to fulfill their Program of Study. To be eligible for advancement to Ph.D. candidacy, the student would need to do one of the following:

- 1. With the permission of the course instructor/coordinator, the student may undertake additional work or exams to demonstrate a level of achievement judged to be equivalent to a B grade. The course grade would still remain and would count in the grade average requirement of the graduate school.
  - a. The student may re-take the course or challenge the exam the next time it is offered. Under the new academic rules, the second grade is now recorded, but no additional units are given.
  - b. Students without a completed master's degree are required to have selected a major professor, established their Ph.D program committee and filed their Ph.D Program of Study by the end of the fifth term of enrollment.
- 2. Students are expected to complete the Preliminary written examination and pass their Oral qualifying examination by the end of their third year according to the format described in the MCB Graduate Student Handbook.
- 3. Students are expected to make progress on their thesis research during years 3-5 as substantiated by their major professor
- 4. Before graduation, students are expected to complete two terms as a teaching assistant and to have given three public presentations or seminars as described in the MCB Graduate Student Handbook.

#### 8. Thesis and Final Examination

**Thesis.** Each candidate for the doctoral degree must submit a thesis that describes the results of research and gives evidence of originality and ability for independent investigation. In addition, a final examination of the thesis is required. Please plan ahead and consult the Policies Governing Doctoral Degree Programs

(http://catalog.oregonstate.edu/ChapterDetail.aspx?key=40) for specific requirements of the Graduate School regarding format of the thesis and scheduling of the final examination.

The MCB Program encourages you to write chapters of your thesis in a form that allows easy submission for publication in refereed journals. This will help ensure rapid publication of your research findings in the open literature. If you decide on this option, the thesis must include a general Introduction and a concluding Discussion in which the relationship of the chapters to each other is made clear. You must provide a copy of the thesis to your Graduate Program Committee *at least two weeks* prior to the final examination.

**Final Examination.** Once the thesis is written and the final oral examination is scheduled (The Event Scheduling form

http://oregonstate.edu/dept/grad\_school/current/forms.html#program), the candidate must present a seminar that is open to the public so that the thesis research may be viewed. Please contact Kirstin Carroll with your thesis defense date and title so the MCB community can be notified of your upcoming defense. After the seminar, the Graduate Committee questions the candidate in private over their thesis research. At the end of the questioning, the committee will vote to pass or fail the student, and the results will be recorded by the Graduate Council Representative. More than one negative vote will result in failure of the examination. No more than one re-examination is allowed by the MCB Program. Again, please consult the Graduate Catalog concerning deadlines for thesis submission and scheduling of your final examination.

All thesis requires a signature by the MCB Director. Check the Graduate School's Thesis Guide section of their website for details on electronic submission.

Check with Student Multimedia Services as two copies of the thesis are printed at no charge. http://is.oregonstate.edu/academic-technology/sms

### GRADUATE STUDENT SUPPORT

#### GRA or GTA

A limited number of Graduate Teaching Assistantship in the IB department are available through the MCB Program each quarter. The MCB Program will solicit names for the GTAs each quarter through the grad listserv. A GTA is typically appointed at 0.40 FTE (i.e. you are expected to work *16 hours per week* on your GTA duties). The GTA appointment includes a tuition waiver if your appointment is at least 0.30 FTE.

Graduate students and Graduate Advisors can also seek additional GTA positions through the student's advisors home Department.

Graduate Research Assistantships, GRAs, are available only through grants to individual faculty members. Appointments for summer term are negotiated between the student, the advisors home Department, and the Graduate Advisor.

Teaching Assistants are responsible for conducting laboratory and/or recitation sections, and for grading papers and exams. Normally about one-half of the workload is devoted to grading papers, making solutions, setting up labs and consulting with students enrolled in the course. GTAs are evaluated each term by the students and the faculty member for whom the GTA assisted. The evaluation emphasizes overall attitude, conscientiousness, reliability, and effectiveness. The evaluations will be considered in your Annual Review.

# **External fellowships**

Students are encouraged to apply for pre-doctoral fellowships or other dissertation research support. Such support can be used in lieu of GTAs or GRAs, thus freeing time for your independent study and research. The tuition waiver associated with the GTA or GRA will be lost but for some students with predoctoral fellowships, OSU makes available the Oregon Laurels tuition waiver (see http://gradschool.oregonstate.edu/finance/university-graduate-laurels-block- grant-program for more information).

Remember to plan ahead for the financial transitions to and from fellowships. Depending on payroll dates, paychecks can be spread out during transition.

# **University fellowships**

Many university-wide fellowships and grants can be applied for during the year. Most of these require that the MCB Program nominate only a single or limited number of students. Therefore, to be considered for a nomination, the student's graduate advisor must submit an application for nomination to the Graduate Studies Committee on a timeline consistent with the nomination deadline for each award (announced in advance). Applications should include a CV of the student (including GPA and GRE scores) and a short letter from the advisor describing why the student would be a good choice for nomination. An MCB committee then ranks the students on the basis of likelihood of getting the award. Nominated students then work with their advisors and the MCB Program to compile the appropriate paperwork to be submitted to the Graduate School by the deadline.

# **Double dipping**

Students may not be paid on more than one of the following: GTA, GRA or fellowship at one time.

### **Financial Aid**

Financial aid is based on the premise that the student and parents are primarily responsible for providing for their education expenses and is intended to supplement student and family contributions toward educational costs. Financial aid comes from many sources, including federal and state governments, private organizations, and Oregon State University's institutional funds. These funds consist of grants, scholarships, federal work study, subsidized loans, unsubsidized loans, and parent loans.

Please see the financial aid website for more details on types of aid:

http://oregonstate.edu/financialaid/what-financial-aid-who-eligible-amp-types-aid Satisfactory Academic Progress http://oregonstate.edu/financialaid/satisfactory-academic-progress

Financial aid recipients are expected to make reasonable academic progress to obtain a degree or certificate as a condition to be eligible for federal, state and institutional financial aid funding. A student's entire academic history as recorded on their academic record with OSU is reviewed as a requirement of timely progression toward graduation, regardless of having received financial aid or not in the past for that course work.

Satisfactory Academic Progress requires financial aid recipients to meet the following 3 components:

- A. Meet minimum cumulative OSU grade point averages (GPA)
- B. Satisfactorily complete at least 67% of cumulative credit hours attempted (Pace)
- C. Complete a degree/certificate program within the maximum time frame of credit hours allowed (MTF).

Students that withdraw from all classes or do not complete at least one (1) credit satisfactorily for two terms in an academic year will be considered ineligible for further aid, but may file an appeal. Students that are suspended then reinstated at any time by the University are required to file a written SAP appeal. Eligibility to enroll for classes does not mean that Satisfactory Academic Progress requirements have been met.

### 2. Course Loads for Assistants

Graduate assistants (GTA or GRA) must register for and complete 16 credit hours each academic term. Use Thesis (MCB 603) or Research (MCB 601) course numbers to fill-out your quarterly program. In the summer, students on GTAs or GRAs must register for and complete 3 credit hours of Thesis or Research credits (MCB 603 or MCB 601, respectively).

Until further notice, the university allows E-Campus courses to satisfy the 12-credit enrollment requirement. Only the tuition portion will be remitted through the tuition

remission process. You will continue to be responsible for payment of fees, including the Distance Education fee and other applicable fees.

# 3. Health Insurance:

**Note**: if you will not be on an assistantship over the summer, you will not get health insurance coverage *unless* you fill out a form. You must request this summer coverage by the beginning of the spring quarter – see your home department for details.

### **REGISTRATION REQUIREMENTS**

# 1. Minimum Registration

Full time graduate student status at OSU is defined as 9 credits but not more than 16 credits. All GTAs and GRAs with a MCB major professor are required to register for 16 credits during the academic year and 3 credits of MCB thesis/research during the summer (see above). Please check with your advisor and your advisor's home department on the summer policy to verify your registration requirement.

Students are responsible for being properly registered prior to the start of class each term. If the registration deadline is missed, students are responsible for paying their own late fees. Failure to be properly registered may jeopardize graduate appointments.

The Graduate Catalog also states that: "Unless on approved leave of absence, all graduate students in graduate degree programs must register continuously for a minimum of 3 graduate credits until their degree is granted or until their status as a credential-seeking graduate student is terminated. This includes students who are taking only preliminary comprehensive or final examinations or presenting terminal projects. Students must register for a minimum of 3 credits and pay fees if they will be using university resources (e.g. facilities, equipment, computing and library services, or faculty or staff time) during any given term, regardless of the student's location. If degree requirements are completed between terms, the student must have been registered during the preceding term."

Please consult the Catalog for more detail on registration requirements.

# 2. Leave of Absence

Graduate students may apply to the Graduate School for a Leave of Absence in cases where they want to suspend their program of study and tuition fees for a good cause. The student must work with their Graduate Advisor, the MCB Program Director, and the Graduate School to obtain a leave of absence. We highly recommend consulting the Catalog (http://catalog.oregonstate.edu/ChapterDetail.aspx?key=38) for the requirements to apply for a leave of absence. Note that a graduate student who takes an unauthorized break in registration by failing to maintain continuous enrollment or by failing to obtain Regular or Planned Leave of Absence will relinquish his or her graduate standing in the university. Students understand that while on leave they will not use university resources.

# **GRIEVANCE PROCEDURES**

It is hoped that disagreements can be resolved in an amicable manner. However, if a student disagrees with a decision made by the Graduate Advisor, and/or the MCB Director, he/she can file a grievance using the procedures outlined in the Graduate Catalog (http://oregonstate.edu/dept/grad\_school/current/grievance.html).

### EXPECTED TIMETABLE OF GRADUATE STUDENT PROGRESS

The following outline provides a general outline of the MCB training program. Detailed programs are tailored to the needs of individual students.

### Year 1-2

- Take MCB 525, 554, 555 and other courses as appropriate
- In collaboration with Graduate Advisor, select Graduate Program Committee
- Hold Committee Meeting and file Program of Study

# **Year 2-3**

- Finish required Graduate Courses
- Complete Preliminary Written Examination
- Pass Oral Qualifying Examination (the Oral Qualifying Examination must be scheduled through the Graduate School at least one week prior to the examination time)
- Initiate Ph.D. Thesis Research Project
- Teaching Assistant Experience
- Seminars/Symposia/Journal Clubs

#### Year 3-5

- Thesis Research
- Graduate Courses in Emphasis Area (if necessary)
- Scientific Meetings: Attend and Present
- Seminars/Symposia/Journal Clubs
- Formal Seminar Presentation(s)

Prepare and Defend Ph.D. Thesis (the Doctoral Examination meeting must be scheduled through the Graduate School at least two weeks prior to the examination time)

# PRESENTATION OF PUBLIC LECTURES BY MCB STUDENTS

MCB students are required to give three seminars or other public presentations during their doctoral work. This requirement may be satisfied by participation in seminar courses (such as MCB 557), selected topics courses, or journal clubs in which a presentation of greater than 30 minutes is given by the student and more than five individuals are in attendance. The Molecular and Cellular Biology and related journal clubs (e.g. *Plant Molecular Biology*, *Animal Science*) provide opportunities for seminar presentations. A presentation of more than 15 minutes at a national meeting will also satisfy the requirement. At least two faculty members must be in attendance (with the exception of national meetings). Student will be responsible for turning in the "Seminar Form" with the signatures from attending faculty to document public presentation. Your thesis defense does not qualify for a presentation.

Your name:
Venue and title:
(e.g. Journal Club: Molecular and Cellular Biology; National Meeting: American Society of Microbiologists; Course: Special Topics in Plant Molecular Biology)
Title of your presentation:
Date of your presentation:
Length of your presentation:
Approximate number in attendance:
*Signatures of two faculty members in attendance:

\*By my signature, I certify that the above presentation was completed and that the quality of the presentation was adequate. Faculty members are encouraged to discuss the presentation with the student and offer constructive criticisms where appropriate.

#### **SAFETY GUIDELINES**

The University attempts to maintain a safe working environment. There are several steps which you can follow that will help to ensure a safe workplace.

- 1. Know the safety rules for the department you are working in.
- 2. <u>Use protective devices</u> such as eye shields, rubber gloves, plastic aprons, etc.
- 3. <u>Do not eat or drink</u> when you are working in the laboratory.
- 4. Your major professor should have a Material Safety Data Sheet (MSDS) on file for each chemical that you use. You are required, by University Policy, to read the MSDS so you will know the hazards and how to handle the chemical safely. If you cannot locate a particular MSDS, see the department safety officer. The Merck Index, 9th ed. (1976) is also a good source of information about chemicals.
- 5. <u>Know the first-aid</u> that might become necessary. Also, <u>know the location of first-aid</u> <u>kits</u> in your laboratory.
- 6. <u>Know how to dispose of chemicals and biologicals safely</u>. The University's Office of Environmental Health and Safety (737-2276) can also answer questions.

Any accident resulting in injury must be reported to the State Accident Industrial Fund (SAIF) within 24 hours; in the case of injuries requiring admission to a hospital, the report must be made within 8 hours. Notify your supervisor immediately after any accident and see the department administrative assistant for necessary forms.