

UNIVERSITY
OF MIAMI



Department of Biology
Graduate Student Handbook
2015-2016

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**University of Miami
Department of Biology**

New Graduate Student Orientation Schedule

Friday, August 21, 2015

New International Student Orientation (International Students Only) 1:00 PM - 3:00 PM
Whitten Learning Center, Room 130

New Graduate Student Welcome Reception 3:30 PM - 5:00 PM
The UM Rathskeller @ Shalala Student Activity Center

Sunday, August 23, 2015

Graduate Student Orientation 12:30 PM - 3:00 PM
Bank United Center (Field House)

President's Picnic 4:00 PM - 6:30 PM
Shalala Student Activity Center (SAC)

For registration: www.miami.edu/index.php/graduate_school

Monday, August 24, 2015

Department of Biology Orientation 1:30 PM - 3:00 PM
Cox Annex Conference Room

Tuesday, August 25, 2015

Library Orientation 10:00 AM – 11:30 AM
Richter Library – Information Literacy Lab 3rd Floor

Friday, August 28, 2015

Biology Welcome Reception 4:00 PM – 5:00 PM
Cox Science Lobby

Veranda 5:00 PM - later
Back veranda of Cox, 2nd floor

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First Year Graduate Student Checklist

- Attend Graduate Student Orientations** See page 3 for Orientation Schedule
- Meet with your advisor/s to form an initial committee**
- Meet with initial committee to discuss course work** See page 19
- Complete IACUC Certification** See page 37 for more information
(All TAs & RAs working with vertebrates)
- Attend Lab Safety Seminar and submit certificate of completion to Biology Department** Required of all research students and all students with teaching assignments.
- SPEAK TEST** The Intensive Language Institute tests the spoken English proficiency of all incoming international teaching assistants for the University of Miami before they are assigned to teach. The SPEAK test, the institutional form of the Test of Spoken English (TSE) is a taped and timed test developed by the Educational Testing Service (ETS) and is used in this assessment. Students who do not successfully pass the SPEAK test are eligible to demonstrate their spoken English through a videotaped teaching demonstration before a panel. They are also eligible to take a spoken English course. This 10-week course is taught each semester, depending on demand, and is designed to improve English oral communication and presentation skills.
(All International Students)
- Online TA Orientation** Must complete by October 4, 2015
- Responsible Conduct of Research** RST-601 Online course must be complete by January 2016. Email course completion certificate to Graduate Program Secretary RST-602 Seminar Training taught March/April 2016. RST-601 must be completed before the seminar. See page for more information.

Quick Reference Contacts

Department of Biology Room 215 Cox Science Center www.bio.miami.edu	305-284-4647 fax: 305-284-3039
Dr. Athula Wikramanayake , Department Chair athula@bio.miami.edu	305-284-3988
Dr. Alex Wilson , Graduate Program Director graddirector@bio.miami.edu	305-284-2003
Dr. John Lu , Associate Graduate Program Director zlu@miami.edu	305-284-5048
TBA , Office Manager	305-284-4644
Aliana Valenzuela , Grad. Program Coordinator & Chair's Admin. Assistant aliana@bio.miami.edu	305-284-5116
Carolina Fernandez , Senior Staff Assistant cfernandez@bio.miami.edu	305-284-5909
Rob Burgess , Network Specialist rob@bio.miami.edu	305-284-1753
Office of Student Accounts Room 158 Ashe Administration Building	305-284-6430 opt. 5
The Graduate School Room 235 Ashe Administration Building	305-284-4154
Ty Henry , Assistant Director, Graduate Programs, Graduate School t.henry1@miami.edu	305-284-4155
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**When using a campus landline, dial 8 and the last 4 digits of the telephone.

Fall 2015 Academic Calendar - Subject to Change
69 Class Days per Semester

Aug 10	Mon	Deadline for Readmission
Aug 10	Mon	Prestigious Awards and Fellowships Due in Honors Program & Office of Academic Enhancement. For specific deadline dates on the various awards see www.miami.edu/oe .
Aug 18	Tues	Housing Available for New Students
Aug 18	Tues	International Student Orientation
Aug 19	Wed	Orientation Begins
Aug 20	Thurs	Housing Available for Continuing Students
Aug 24	Mon	CLASSES BEGIN
Aug 24	Mon	Late Registration Fees in Effect
Sept 2	Wed	Last Day for Registration and to Add a Course
Sept 7	Mon	HOLIDAY (LABOR DAY)
Sept 9	Wed	Last Day to Drop a Course Without a "W"
Sept 9	Wed	Deadline to apply for Inactive Staus
Sept 9	Wed	Deadline to apply for Non-UM programs
Sept 9	Wed	Last Day to Make a Change in Credit-Only Designation
Sept 16	Wed	Application for Graduation Opens
Oct 16	Fri	Last Day to Apply for Graduation for Fall
TBA	TBA	Midterm Reporting
Oct 8- Oct 11	Thurs-Sun	FALL RECESS
Oct 26	Mon	Last Day to Drop a Course
Oct 26	Mon	Registration Appointments Available on CaneLink
Nov 6	Fri	Graduate Students: Last Day to Defend Dissertation/Thesis for Fall 2015
Nov 9	Mon	Registration for Spring 2016* (Begins)
Nov 21 - Nov 29	Sat-Sun	THANKSGIVING RECESS
Dec 8	Tues	CLASSES END (11:00 PM)
Dec 8	Tues	Grade Roster available to Faculty
Dec 9	Wed	Reading Day
Dec 10 - 16	Thurs-Wed	FINAL EXAMS
Dec 16	Wed	Graduate School Deadline for Completion of Dissertation/Thesis
Dec 16	Wed	SEMESTER ENDS (11:00 PM)
Dec 17	Thurs	FALL COMMENCEMENT EXERCISES - All Degrees
Dec 17	Thurs	Housing Closes at NOON for Non-Commencement Participants
Dec 18	Fri	Housing Closes at NOON for Commencement Participants
Dec 21	Mon	Final Grades Released by Faculty in CaneLink by Noon
Dec 23	Wed	Final Grades Available to Students in CaneLink

Most up-to-date calendars available at www.miami.edu/registrar

Spring 2016 Academic Calendar - Subject to Change
69 Class Days per Semester

Dec 28	Mon	Deadline for Readmission
Jan 2- 10	Sat- Sun	InterSession 1 (special tuition, add/drop, dates, & refund policy)
Jan 6	Wed	Housing Available for Students
Jan 6	Wed	International Student Orientation
Jan 7	Thurs	Orientation Begins
Jan 11	Mon	CLASSES BEGIN
Jan 11	Mon	Late Registration Fees in Effect
Jan 18	Mon	HOLIDAY (MARTIN LUTHER KING, JR. DAY)
Jan 20	Wed	Last Day for Registration and to Add a Course
Jan 27	Wed	Last Day to Drop a Course Without a "W"
Jan 27	Wed	Deadline to apply for Inactive Status
Jan 27	Wed	Deadline to apply for Non-UM programs
Jan 27	Wed	Last Day to Make a Change in Credit-Only Designation
TBA	TBA	Midterm reporting
Feb 3	Wed	Application for graduation opens
March 4	Fri	Last Day to Apply for Graduation for Spring and Summer
March 5 - 13	Sat - Sun	SPRING RECESS
March 5 - 13	Sat - Sun	InterSession 2 (special tuition, add/drop, dates, & refund policy)
March 23	Mon	Last Day to Drop a Course
March 24	Tues	Registration Appointments Available on CaneLink
April 1	Fri	Graduate Students: Last Day to Defend Dissertation/Thesis for Spring
April 4	Mon	Registration for Fall Semester 2016 & Summer 2016* (Begins)
April 22	Fri	CLASSES END (11:00 PM)
April 23 - April	Sat - Tues	Reading Days
April 23	Sat	Grade Roster available to Faculty
April 27 - May 4	Wed - Wed	FINAL EXAMS
May 4	Wed	Graduate School Deadline for Completion of Dissertation/Thesis
May 4	Wed	SEMESTER ENDS (11:00 PM)
May 5	Thurs	Honors Day Convocation
May 5	Thurs	SPRING COMMENCEMENT EXERCISES - All Graduate Degrees
May 6	Fri	SPRING COMMENCEMENT EXERCISES - All Undergraduate Degrees
May 6	Fri	Housing Closes at NOON for Non-Commencement Participants
May 7	Sat	Housing Closes at NOON for Commencement Participants
May 9	Mon	Final Grades Released by Faculty in CaneLink by Noon
May 11	Wed	Final Grades Available to Students in CaneLink

Most up-to-date calendars available at www.miami.edu/registrar

Procedures for Graduate Students in Biology

Passed by the faculty on March 19, 2003

(Updated July 2, 2015)

APPLYING FOR ADMISSION

In applying for admission, applicants must select either the Master's or the Ph.D. track.

Students with an appropriate B.S. degree may seek direct entry to either the M.S. track or the Ph.D. track.

Applicants who were admitted on the Master's track, but wish to change to a Ph.D. track without completing the Master's may apply for admission to the Ph.D. program before the end of their second semester. Letters of support from three UM Biology faculty, including a major advisor, should be added to the applicant's file. The file must be current. Such applicants will be judged by the same criteria that are applied to other Ph.D. applicants.

Applicants to the Ph.D. track who were admitted on the Master's track and wish to complete the M.S. degree, should follow the same procedures as all other applicants, but they must include letters of support from three UM Biology faculty. Such applicants will be judged by the same criteria that are applied to other Ph.D. applicants.

Applicants must:

1. Apply online at the UM Graduate School. Application fee of \$65.
2. Send hardcopies of the following to the Coordinator of Graduate Studies in Biology, Department of Biology, 1301 Memorial Drive, Coral Gables, FL 33146 USA.
 - a. Originals of all undergraduate and graduate official transcripts (photocopies are not accepted)
 - b. Official scores from recent Graduate Record Examinations (within five years), including the aptitude portion; the Biology subject matter test also is recommended (photocopies of scores are not accepted)
 - c. International applicants whose native language is not English must additionally submit the TOEFL (Test of English as a Foreign Language) and the TSE (Test of Spoken English) official scores (photocopies of scores are not accepted)
3. Send digital copies of the following to the Coordinator of Graduate Studies in Biology (gradcoord@bio.miami.edu)
 - a. A cover letter that identifies interests, suggests possible research projects, states career goals and identifies a UM Biology faculty sponsor
 - b. Copies of any research papers (e.g., publications, manuscripts, senior reports, etc.)
4. Letters of recommendation from three science instructors/ supervisors that address: nature and duration of relationship to applicant; motivation; ability to conceptualize and deal quantitatively with biological problems, and research potential should be sent by email to the Coordinator of Graduate Studies in Biology at gradcoord@bio.miami.edu

5. Request UM Biology faculty sponsor submit a memo of support by email to the Coordinator of Graduate Studies in Biology (gradcoord@bio.miami.edu). Applicants MUST secure the sponsorship of a faculty member as a condition for admission; the research interests of the applicant and the faculty sponsor should be well-matched; the sponsor will be the major advisor.

A limited number of applicants to the Ph.D. program may be invited to interview at departmental expense in early January of the year of admission.

Materials submitted in support of an application cannot be released for other purposes or returned to the applicant.

APPLYING TO CHANGE BETWEEN GRADUATE TRACKS

Applicants who were admitted on the Master's track, but who wish to change to the Ph.D. track without completing the Master's may apply for admission to the Ph.D. program at the beginning of their second semester. Letters of support from three Biology faculty, including a major advisor, should be added to the applicant's file. The file must be current. Such applicants will be judged by the same criteria that are applied to other Ph.D. applicants.

DEGREE REQUIREMENTS

All students are required to satisfy the general requirements for the appropriate degree that are listed in the UM Graduate Studies Bulletin, whether or not these requirements are listed among the Biology requirements.

The Master of Science degree may be attained by either of the two following routes:

M.S. with thesis (Three Year Program)

Credits: a total of 30 credits are required:

- 24 course credits, including the two-semester departmental core courses for graduate students and at least one graduate course in statistics. Students are encouraged to take courses from more than one conceptual area. They are encouraged to select courses and independent studies that will prepare them for research, as listed under the Ph.D. requirements. No more than nine (9) credits from the independent study series (BIL 675, BIL 678) may be used to fulfill the 24 course credits. At times these course numbers are used by professors to teach a new course or a special topics course, in which case the corresponding credits can be counted as a non-independent study credit. Course selection requires committee approval.
- 6 research credits (BIL 810); no more than six M.S. research credits are allowed.
- The minimum acceptable grade average in all coursework towards the degree is a "B (3.0)" and no grade may be below a "C."

Research Proposal: public presentation and successful defense to the committee of a written research proposal. The public presentation must be given during regular sessions of the Fall or Spring semesters, not during summer sessions, intersessions, reading days or finals weeks.

Admission to candidacy: application is made by recommendation of the committee.

Thesis: A well-written and successfully defended thesis of publishable quality; a defense is successful if all members of the committee sign the grad school form and the signature page of the dissertation.

Other requirements described under "The Master's Degree," including but not limited to:

- A total of at least 30 credits (course credits plus research credits). The Graduate School and the Department concur in requiring at least 24 course credits and exactly six research credits (BIL810) for a thesis M.S.
- Once a student has completed all required credit hours, she/he must enroll in "Research in Residence" (BIL 820) status until the degree is granted. This course carries zero (0) credits, but is considered full-time enrollment. Even though no credit is earned, a tuition charge equivalent to one course credit normally applies to this course.

About the committee:

- A single committee will combine the responsibilities of the supervisory and thesis committees.
- The *supervisory committee* will be determined by the student in consultation with his or her advisor. The committee will consist of a minimum of three faculty, one of whom must be from outside the department, and one of whom must be a member of the graduate faculty. There is no sub-disciplinary representation requirement.
- The *thesis committee* is formed officially when the student is admitted to candidacy. It may comprise the same individuals as the supervisory committee, or it may be formed anew. The student in consultation with the advisor suggests the membership of the committee to the graduate school. The committee will consist of a minimum of three faculty, one of whom must be from outside the department, and one of whom must be a member of the graduate faculty. There is no sub-disciplinary representation requirement.
- The thesis committee is nominated by the department, but it must be approved and appointed by the Dean of the Graduate School. There is a special form that must be filed with the graduate school.
- Committee meetings are required at least once a year (recommended at least once a semester). The student is responsible for arranging meetings. The student should consult with the committee about major changes in research goals and about problems. Memos summarizing each meeting should be in the student's file and emailed to the Graduate Director (graddirector@bio.miami.edu).

The time table:

- A *written thesis proposal* is due no later than the middle of the second semester. Please take note of this deadline. The scope of the M.S. thesis should be in line with the time table.
- *Admission to candidacy* normally occurs after completion of one year or 12 credits of graduate work and successful defense of the thesis proposal.
- Analysis of data and a *polished draft of the thesis* should be completed and in the hands of the committee by the *middle of the sixth semester*. *Please take note of this deadline*. The scope of the M.S. thesis should be in line with the timetable.
- *Defense of the thesis and its submission to the Graduate School* must meet or precede the deadline for graduation immediately *following the sixth semester* unless an extension has been approved by the Graduate Admissions and Advisement Committee (GAAC) upon recommendation of the thesis committee. Notice of the defense must be submitted on a special form to the graduate school in advance of the defense and must be posted publicly in the department.
- The oral defense of the thesis *must* be given during regular sessions of the Fall or Spring semesters, not during summer sessions, intercessions, reading days, or finals weeks.

- *No student may receive the degree in the same semester in which she/he is admitted to candidacy.*
- The indicated dates form *firm deadlines*. A student's committee, however, may submit a written petition to GAAC for an extension of time detailing reasons for the request. *An extension will be granted only under extraordinary circumstances and will be effective upon written approval by GAAC.*
- Proposals to change the schedule for any reason should be preceded by a study of the *graduate bulletin* sections on *leaves of absence, full time student status, and recency of credit hour* and explicitly address how the proposed change of schedule relates to these matters. The memo requesting the change also should address the proposed financial support.
- *Completed SACS evaluation forms are required at two points* during the course of study. One following the research proposal defense and the final following defense of the thesis. The student is responsible for providing blank forms to the committee at each milestone. The graduate advisor is responsible for forwarding completed forms to the Graduate Director. The student is responsible for ensuring the Graduate Director receives these forms.

M.S. without thesis (Two Year Program)

Credits: *A total of 36 course credits are required by the Biology Department*

- 36 course credits, including the two-semester departmental core courses for graduate students and at least one graduate course in statistics. Students are encouraged to take courses from more than one conceptual area, listed under the Ph.D. requirements. No more than 9 credits from the independent study series (BIL 675, BIL 678) may be used to fulfill the 36 course credits. At times these course numbers are used by professors to teach a new course or a special topics course, in which case the corresponding credits can be counted as a non-independent study credit. Course selection requires committee approval.
- The minimum acceptable grade average in all coursework towards the degree is a "B (3.0)" and no grade may be below a "C."

Admission to candidacy: is made by recommendation of the committee.

Qualifying exam: The student must pass a written comprehensive exam given by the committee.

The Committee:

- A single committee will combine the responsibilities of the initial supervisory and the comprehensive examination committees. The committee will be determined by the student in consultation with her/his advisor. The committee will consist of a minimum of three faculty, one of whom must be from outside the department, and one of whom

must be a member of the graduate faculty. There is no sub-disciplinary representation requirement.

- The examination committee is formed officially when the student is admitted to candidacy. It may comprise the same individuals as the supervisory committee, or it may be formed anew. The student in consultation with the advisor suggests the membership of the committee to the graduate school. The committee will consist of a minimum of three faculty including the student's advisor, one of whom must be from outside the department, and one of whom must be a member of the graduate faculty. There is no sub-disciplinary representation requirement.
- The examination committee is nominated by the department, but it must be approved and appointed by the Dean of the Graduate School. There is a special form that must be filed with the graduate school.
- Committee meetings are required at least once a year (recommended at least once a semester); the student is responsible for arranging meetings; the student should keep the committee advised of major changes in the graduate program plan; memos summarizing each meeting should be in the student's file.
- Other requirements described under "The Master's Degree." Note that although the Graduate School requires only 30 credit hours for an M.S. degree, the Department requires 36 course credit hours for a non-thesis M.S.

The time table:

- *Admission to candidacy* normally occurs after completion of one year or 12 credit hours of graduate work.
- The *comprehensive exam* must be passed by the end of the fourth semester.
- *No student may receive the degree in the same semester in which she/he is admitted to candidacy.*
- The indicated dates form *firm deadlines*. A student's committee, however, may submit a written petition to GAAC for an extension of time detailing reasons for the request. *An extension will be granted only under extraordinary circumstances and will be effective upon written approval by GAAC.*
- Proposals to change the schedule for any reason should be preceded by a study of the *graduate bulletin* sections on *leaves of absence, full time student status* and *recency of credit hour* and explicitly address how the proposed change of schedule relates to these matters. The memo requesting the change also should address the *proposed financial support*.
- *Completed SACS evaluation forms are required following the comprehensive exam.* The student is responsible for providing blank forms to the committee. The graduate advisor is responsible for forwarding completed forms to the Graduate Director. The student is responsible for ensuring the Graduate Director receives these form.

Ph.D. DOCTOR OF PHILOSOPHY

1. Credits: a total of 60 credits (including both course and research credits) beyond the Bachelor's degree are required:

- At least 18 course credits that are not from the independent study series, including the two- semester departmental core courses for graduate students and at least one graduate course in statistics. The independent study series is (BIL 675, BIL 678). At times these course numbers are used by professors to teach a new course or a special topics course, however, in which case the corresponding credits can be counted as a non-independent study credit. Course selection requires committee approval.
- At least 12 research credit hours (BIL 830 and/or BIL 840). Once the overall number of required credit hours (see below #8) has been reached, there is no need to take additional research credit hours.
- An additional 30 credit hours from any combination of graduate courses (600 level regular courses and independent study courses) and research credit hours (800 level) to bring the total number of credit hours beyond the Bachelor's Degree to 60 credit hours. (One example: 18 required course credit hours + 12 required research credit hours + 15 additional course credit hours + 15 additional research credit hours = 60 total; another example would be 18 additional course credit hours and only 12 additional dissertation credit hours, etc.)
- Students who already have a Master's Degree in the same field may not need as many course credit hours (consult Graduate School rules on transfer credit hours), but at least 24 credit hours must be taken in residence at UM.
- The committee may decide that students with previous graduate level courses may be exempt from some of the course requirements.
- The minimum acceptable grade average in all coursework towards the degree is a "B (3.0)" and no grade may be below a "C."
- *Conceptual areas*: Students are encouraged to take courses and independent studies from at least 3 main conceptual areas, and are urged to take courses and independent studies that will prepare them for research and for the comprehensive qualifying exam. Students also are encouraged to participate in seminars and study groups and to take special courses in other departments of UM, at our Coalition for Excellence in Tropical Biology partner institutions, from the Organization for Tropical Studies, or other special interdisciplinary courses. Such courses should be appropriate to their course of study and research area as determined by their committee. Conceptual areas offered in our department include: EVOLUTION (graduate level evolution courses are in the 620's series); ECOLOGY (graduate level ecology courses are in the 630's series), BEHAVIOR (graduate level behavior courses are in the 640's series); GENETICS AND MOLECULAR BIOLOGY (graduate level genetics and molecular biology courses are in the 650's series); and PHYSIOLOGY AND CELL BIOLOGY (graduate level physiology courses are in the 660's series). Special concentrations in our department and/or in collaboration with other departments include: Tropical Biology, Mathematical Ecology, Neuroscience, and

Behavior.

2. A comprehensive qualifying exam should be passed by the end of the third semester.

- A single committee (see number 9 below, about committee membership) will advise the student on both comprehensive and research training. To fulfill the *comprehensive function*, the committee will be responsible for ensuring breadth, significant background and depth in at least 3 conceptual areas (examples include but are not limited to the areas listed above).
- To establish intellectual communication between the committee members and students early on, the committee will begin to work with the student in the *first semester*. Faculty will suggest reading lists, courses and/or independent study, as needed, to prepare the student with sufficient background for the comprehensive examination which will include 3 areas, one of which is the research area. The committee and student will interactively define the scope of comprehensive training and thus, the scope of the comprehensive examination in these 3 areas.
- The comprehensive examination will be held in the third semester. The committee will designate a chair to administer the examination. The chair of the comprehensive examination will not be the graduate advisor. The written part of the exam will not be open book and it will be administered on campus for a discrete period of time (up to 4 hours within each of two consecutive days) by the examination chair. All members of the committee will grade all the questions. With committee approval, an alternative is to present to the committee a first-authored, publishable, full-length article manuscript concerning research conducted since matriculation at UM. Before the end of the third semester, the manuscript must be submitted to a journal approved by the committee (refer to the Department of Biology Graduate Student Handbook for additional details concerning the alternative qualifying exam). After the committee has read the written answers or manuscript, about one week later there will be an oral exam for the purpose of further exploring the student's grasp of the subject matter.
- Each committee member will decide on a pass/fail grade based on the total performance (written plus oral). For the student to pass the examination, 3 of the 4 examiners must vote a grade of pass. An oral and written summary of the committee's evaluation must be prepared by the chair of the *examination committee* and given to the student and to GAAC. If the student does not pass the examination, there will be a chance to retake it the following semester. In the case of failure a second time, he/she will be terminated from the program.
- At time of completion of the oral examination the examination committee must provide the Graduate Director with a completed SACS evaluation form, the student is responsible for ensuring the Graduate Director receives this form.

3. Research proposal: Research proposal: public presentation of a research proposal and defense of a written research proposal to the *complete research committee* (see below) should

be completed by the middle of the fourth semester. Students are encouraged to follow the format of a grant proposal to a major funding agency. At the proposal defense, the student will receive either a pass or a fail. A grade of pass will be recorded if no more than one member of the *complete research committee* (see below) votes to fail the student. If the student fails the proposal defense, she/he will be given a *second chance* to defend no later than the *sixth week of the fifth semester*. If the defense is failed a second time, the student will be terminated from the program. At time of completion of the proposal defense the complete research committee must provide the Graduate Director with a completed SACS evaluation form, the student is responsible for ensuring the Graduate Director receives this form.

4. Admission to candidacy: (application is made on a form available in the grad school and in the department). This normally will occur at the end of the fourth semester. The requirements are to pass the comprehensive examination, to successfully defend a written research proposal, and to have complete SACS evaluation forms from both the qualifying exam and the proposal defense on file.

5. Teaching: All students on the Ph. D. track in Biology are required to serve satisfactorily at least one semester as a teaching assistant in one of the courses offered as part of the Department's training program.

6. Grants: Submission of a grant proposal to a major funding agency (e.g., NSF, NIH, National Geographic, World Wildlife Fund, etc.) is required. All students are required to seek outside funding for their research. This must be a research project proposal. Application for an NSF pre-doctoral fellowship does not meet this requirement, but application for an NSF dissertation improvement grant does qualify.

7. Ph.D. Dissertation: A well-written and successfully defended dissertation containing an original contribution to the field and of quality appropriate for publication in a scientific journal; a defense is successful if all members of the committee sign the graduate school form and the signature page of the dissertation. A public dissertation seminar also is presented at the time of the defense. Following the defense the committee is required to provide the Graduate Director with a completed SACS evaluation form.

8. Other requirements described under "Doctor of Philosophy," including but not limited to:

- A total of at least 60 credits (course credits plus research credits).
- Once a student has completed all required credits, he/she must enroll in "Research in Residence" (BIL 850) until the degree is granted. This course carries 0 credits, but is considered full-time enrollment. Even though no credit is earned, a tuition charge equivalent to 1 course credit normally applies to this course.

9. Committee: A single committee will advise the student on both comprehensive and research training. The committee will be responsible for ensuring breadth, significant background and

depth in at least 3 conceptual areas (examples include but are not limited to the areas listed above). The research function of the committee is to advise the student on research, including preparation, training, project choice, project design, implementation and evaluation of the research. The committee will go through several phases and its membership will be determined by the advisor and student together, contingent upon approval of GAAC and/or the Graduate School, as appropriate at each phase:

- The *initial committee* will consist of at least four (4) *faculty*, two (2) appointed to ensure breadth of training (from two areas outside the research area) and two (2) from the research area. It will be formed to help the student choose courses during the first few weeks of the first semester. This committee will decide whether students having a M.S. in biology (botany, zoology, etc.) from another institution can substitute a graduate level course taken elsewhere for a departmental course requirement; it also will decide which additional courses should be taken for both research and breadth. The choice of areas briefly will be outlined in a memo to GAAC.
- The *initial committee of at least four (4) faculty* will be responsible for preparing and administering the comprehensive examination.
- The *complete committee of at least four (4) faculty* including one from outside the department, should be formed by the end of the third semester; all four members should participate in the proposal evaluation which will take place in the fourth semester. The committee will consist of a minimum of four (4) faculty, which includes the committee chair, who must be a member of the Graduate Faculty. Of the remaining members, it is also required that two shall be from the Graduate Faculty.
- The *dissertation committee (of four)* is formed officially when the student is admitted to candidacy. It usually will comprise of the same individuals as the complete research committee, or it may be formed anew. The student and advisor consult on the membership of the committee, and the department nominates the committee to the graduate school. The committee will consist of a minimum of four faculty, which includes the committee chair who is the advisor, who must be a member of the Graduate Faculty. Of the remaining members, it also is required that two shall be from the Graduate Faculty and one from outside the department of concentration. The dissertation committee is nominated by the department, but it must be approved and appointed by the Dean of the Graduate School. There is a special form that must be filed with the graduate school.
- Committee meetings are required at least once a year (recommended at least once a semester in the early phases). The student is responsible for arranging meetings; the student should consult with the committee about any major changes in research goals and any problems; memos summarizing each meeting should be in the student's file.

10. The timetable:

- The written *comprehensive qualifying examination* must be passed by the *end of the third semester*.

- *A polished, written dissertation proposal must be defended to the committee in the fourth semester together with a public presentation of the proposal. This must take place by mid-April of the spring semester or mid-November of the fall semester.*
- *Admission to candidacy normally occurs after the comprehensive qualifying exam and proposal defense are passed upon the recommendation of the committee and the approval of the Graduate School. Application for admission to candidacy is made to the graduate school on a special form.*
- *Analysis of data and a polished draft of the dissertation should be completed and in the hands of the dissertation committee no later than the middle of the tenth semester.*
- *Defense of the dissertation and its submission to the Graduate School must meet or precede the deadline for graduation immediately following the tenth semester unless an extension has been approved by GAAC upon recommendation of the dissertation committee. Notice of the defense and of the public seminar must be submitted on a special form to the graduate school in advance of the defense, and must be posted publicly in the department.*
- *The oral defense of the dissertation must be given during regular sessions of the Fall or Spring semesters, not during summer sessions, inter-sessions, reading days or finals weeks.*
- *No student may receive the degree in the same semester in which she/he is admitted to candidacy.*
- *The indicated dates form firm deadlines. A student's committee, however, may submit a written petition to GAAC for an extension of time detailing reasons for the request. An extension will be granted only under extraordinary circumstances and will be effective upon written approval by GAAC.*
- *Proposals to change the schedule for any reason should be preceded by a study of the graduate bulletin sections on leaves of absence, full time student status, and recency of credit hour. Such a proposal must explicitly address how the proposed change of schedule relates to these matters. The memo requesting the change also should address the proposed financial support of the student beyond the 10 semesters of normal departmental support.*

11. *Public presentations must be during regular semesters. We reiterate that the public presentation associated with the defense of the proposal and the public seminar associated with the defense of the dissertation must be given during regular sessions of Fall or Spring semesters, not during summer sessions, inter-sessions, reading days, or finals weeks.*

12. *Completed SACS evaluation forms are required at three points during the course of study. One following the qualifying exam, one following the proposal defense and the final following defense of the dissertation. The student is responsible for providing blank forms to the committee at each milestone. The graduate advisor is responsible for forwarding completed*

forms to the Graduate Director. The student is responsible for ensuring the Graduate Director receives these forms.

IMPLEMENTATION

All Graduate students will be reviewed each spring semester by GAAC.

1. The advisor will review the student's progress to date.
2. The student will provide updates for a student progress database every February.
3. The student will provide written evidence that the advisor and committee have reviewed her/his progress and plans.
4. Each student will receive a letter summarizing the results of the discussion concerning his/her progress.
5. All graduate students shall have the right to respond to GAAC, and, if necessary, the graduate faculty in matters pertaining to the review.
6. Possible outcomes of the review:
 - a. Student is making satisfactory progress.
 - b. Student is not making satisfactory progress; recommendations are made for improvement.
 - c. Student is not making satisfactory progress; his/her tenure terminated.

FINANCIAL SUPPORT

- The Department intends to support all doctoral students in good standing for up to 10 semesters. *Support beyond 10 semesters is contingent upon GAAC approval.*
- Master's degree students usually are not eligible for departmental stipends or tuition remission.
- Students who do not provide annual updates for the student progress database will be ineligible for continued funding. Students who will be off-campus still are responsible for making sure that GAAC receives their data. Students who choose not to present at the annual departmental graduate student symposium may be considered as not in good standing.
- Students holding full fellowships or research assistantships will not normally be given teaching assignments, nor will students be permitted to hold fellowships and research assistantships simultaneously. Exceptions require GAAC approval.

Required Graduate Core Modules

(A two semester, 6 credit sequence)

BIL612 Graduate Core I

Fall Semester: Graduate Core Course in Genomes to Organisms

This course will provide all incoming graduate students with a strong foundation in how genomes are structured, and how the information encoded in genomes is regulated by intrinsic and extrinsic factors during development and evolution.

A. Major Topics

- (i) Genome Structure
- (ii) Gene Regulation
- (iii) Cells
- (iv) Development
- (v) Physiology
- (vi) Synthesis: EvoDevo

B. Graduate Faculty

James Baker
William Browne*
Akira Chiba
Kevin Collins
Julia Dallman
John Lu*
Jeff Prince
Isaac Skromne*
Leonel Sternberg
Athula Wikramanayake
Alexandra Wilson

(*teaching in Fall 2015)

BIL613 Graduate Core II

Spring Semester: Graduate Core Course in Ecology & Evolutionary Biology

This course will provide all incoming graduate students with a strong background in key ecological and evolutionary theory.

A. Major Topics

- (i) Ecology
 - Population ecology
 - Community ecology
 - Physiological ecology
 - Ecosystem ecology
- (ii) Evolution
 - Principles of natural selection
 - Speciation & biodiversity
 - Population genetics and neutral theory/molecular evolution
 - Phylogenetics, systematics
- (iii) Synthesis – EcoEvoDevo

B. Graduate Faculty

Don DeAngelis
Carol Horvitz
Kevin McCracken*
Kathleen Sealey*
William Searcy
Al Uy
David van Dyken
Barbara Whitlock*

(*teaching Spring 2016)

Doctor of Philosophy Course Requirements Checklist

Requirement:	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	Total
Core (BIL612, BIL613)											6
Statistics											3
Non-independent study											
BIL 830/840 - Research											12
Additional Courses											
Total											60

1. Credits

- a) At least 18 credits (non-independent study), including the two-semester set of Core Modules (6 credits) and at least one graduate course in statistics. The independent study series is BIL 675-678. At times these course numbers are used by professors to teach a new course or a special topics course, however, in which case the corresponding credits can be counted as a non-independent study credit. Please keep notes regarding the topic and faculty of any such courses using a BIL 675-678 number. Course selection requires committee approval.
- b) At least 12 research credits (BIL 840 and/or 830). Once the overall number of required credits (see below) has been reached, there is no need to take additional research credits.

2. An additional 30 credits from any combination of graduate courses (600 and 800 level regular courses and independent study courses) and research credits (800 level) to bring the total number of credits beyond the Bachelor's Degree to 60 credits. (One example: 18 required course credits + 12 required research credits + 15 additional course credits + 15 additional research credits = 60 total; another example would be 18 additional course credits and only 12 additional dissertation credits, etc.).

- a) Students who already have a Master's Degree in the same field may not need as many course credits (consult the Graduate School rules on transfer credits), but at least 24 credits must be taken in residence at UM.
- b) The committee may decide that students with previous graduate level courses may be exempt from some of the course requirements.
- c) The minimum acceptable grade average in all coursework towards the degree is a "B

(3.0)" and no grade may be below a "C."

- d) **Conceptual Areas:** Students are encouraged to take courses and independent studies from at least 3 main conceptual areas, and are used to take courses and independent studies that will prepare them for research and for the comprehensive exam. Students also are encouraged to participate in seminars and study groups and to take special courses in other departments of UM, at our Coalition for Excellence in Tropical Biology partner institutions, from the Organization for Tropical Studies, or other special interdisciplinary courses. Such courses should be appropriate to their course of study and research area as determined by their committees.

Conceptual areas offered in our department:

1. Evolution (620's)
2. Ecology (630's)
3. Behavior (640's)
4. Genetics & Molecular Biology (BMB 509, BIL 630, and 650's)
5. Physiology and Cell Biology (660's)
6. Special concentrations in our department and/or in collaboration with other departments include: Tropical Biology, Mathematical Ecology, Neuroscience and Behavior

3. A comprehensive qualifying exam should be passed by the end of the third semester. See page 17 for further details.

4. Research Proposal: A public presentation of a research proposal and defense of a written research proposal to the complete research committee should be completed by the middle of the fourth semester.

5. Admission to Candidacy: This will normally occur at the end of the fourth semester. Requirements are passing the comprehensive examination and successfully defending a written research proposal.

6. Teaching: All students on the Ph. D. track in Biology are required to serve satisfactorily at least one semester as a teaching assistant in one of the courses offered as part of the Department's training program.

7. Grant submission: Submission of a grant proposal to a major funding agency (e.g., NSF, NIH, National Geographic, World Wildlife Fund, etc.). All students are required to seek outside funding for their research. This must be a research project proposal. Application for an NSF pre-doctoral fellowship does not meet this requirement, but application for an NSF dissertation improvement grant does qualify.

8. Ph. D. Dissertation: A well-written and successfully defended dissertation containing an original contribution to the field and of quality appropriate for publication in a scientific journal; a defense is successful if all members of the committee sign the grad school form and the

signature page of the dissertation. A public dissertation seminar is also presented at the time of the defense.

9. Other requirements described under "Doctor of Philosophy," include but are not limited to:

- a) A total of at least 60 credits (course credits plus research credits).
- b) Once a student has completed all required credits, s/he should enroll in "Research in Residence" (BIL 850) status until the degree is granted. This course carries 0 credits, but is considered full-time enrollment. Even though no credit is earned, a tuition charge equivalent to 1 course credit normally applies to this course.

***For further detailed information regarding any of the above as well as the committee, time table, public presentations & implementation, please refer to **PROCEDURES FOR GRADUATE STUDENTS IN BIOLOGY** or the **UNIVERSITY OF MIAMI BULLETIN** (<http://bulletin.miami.edu>).

Master's with Thesis Course Requirements Checklist

Requirement:	S1	S2	S3	S4	S5	S6	Total
Core (BIL612, BIL613)							6
Statistics							3
Independent study							
BIL 810 - Research							6
Other							
Total =							30

M.S. with thesis (a three year program)

Credits: a total of 30 credits are required:

- 24 course credits, including the two-semester departmental core courses for graduate students and least one graduate course in statistics. Students are encouraged to take courses from more than one conceptual area; they are encouraged to select courses and independent studies that will prepare them for research, as listed under the Ph.D. requirements. No more than nine credits from the independent study series (BIL 675-678) may be used to fulfill the 24 course credits. At times these course numbers are used by professors to teach a new course or a special topics course, in which case the corresponding credits can be counted as a non-independent study credit. Course selection requires committee approval.
- 6 research credits (BIL 810); no more than six M.S. research credits are allowed.
- The minimum acceptable grade average in all coursework towards the degree is a "B (3.0)" and no grade may be below a "C."

Research Proposal: public presentation and successful defense to the committee of a written research proposal. The public presentation must be given during regular sessions of the Fall or Spring semesters, not during summer sessions, intersessions, reading days or finals week.

Admission to candidacy: application is made by recommendation of the committee.

Thesis: A well-written and successfully defended thesis of publishable quality; a defense is successful if all members of the committee sign the grad school form and the signature page of the dissertation.

Other requirements described under "The Master's Degree," including but not limited to:

- a total of at least 30 credits (course credits plus research credits). The Graduate School and the Department concur in requiring at least 24 course credits and exactly six research credits (BIL 810) for a thesis M.S.).
- once a student has completed all required credits, she/he must enroll in "Research in Residence" (BIL 820) status until the degree is granted. This course carries zero credits, but is considered full-time enrollment. Even though no credit is earned, a tuition charge equivalent to one course credit normally applies to this course.

***For further detailed information regarding any of the above as well as the committee, time table, public presentations & implementation, please refer to **PROCEDURES FOR GRADUATE STUDENTS IN BIOLOGY** or the **UNIVERSITY OF MIAMI BULLETIN** (<http://bulletin.miami.edu>).

Master's without Thesis Course Requirements Checklist

Requirement:	S1	S2	S3	S4	Total
Core (BIL612, BIL613)					6
Statistics					3
Independent study					
Other course credits					
				Total =	36

M.S. without thesis (a two year program)

Credits: a total of 36 credits are required:

- 36 course credits, including the two semester departmental core course for graduate students and at least one graduate course in statistics. Students are encouraged to take courses from more than one conceptual area; they are encouraged to select courses and independent studies that will prepare them for research, as listed under the Ph.D. requirements. No more than nine credits from the independent study series (BIL 675-678) may be used to fulfill the 36 course credits. At times these course numbers are used by professors to teach a new course or a special topics course, in which case the corresponding credits can be counted as a non-independent study credit. Course selection requires committee approval.
- The minimum acceptable grade average in all coursework towards the degree is a "B (3.0)" and no grade may be below a "C."

Admission to candidacy: is made by recommendation of the committee.

Passing a written comprehensive exam given by the committee.

***For further detailed information regarding any of the above as well as the committee, time table, public presentations & implementation, please refer to PROCEDURES FOR GRADUATE STUDENTS IN BIOLOGY or the UNIVERSITY OF MIAMI BULLETIN (<http://bulletin.miami.edu>).

Protocol for Change of Advisor or Degree Plan (Ph.D. to M.S.)

The Graduate Admissions and Advisory Committee (GAAC) recognizes that cases occasionally occur in which a graduate student and advisor wish to sever their relationship. This may happen if the advisor leaves the Department of Biology, if the student's interests evolve and no longer are well met by the advisor's expertise, or if the advisor loses confidence in the student, among other reasons.

Because the Department of Biology only admits students who have been endorsed explicitly by faculty advisors willing to engage with them, if that relationship is to be severed for any reason other than the graduate student withdrawing from the University, any request to sever a student's association with a Graduate Advisor or for the student to establish a new mentoring association, must be reviewed and accepted by GAAC. Although prior admission to the Department's graduate program implies that a student is acceptable, GAAC also must determine if a new advisor is suitable for the research program that the student proposes to pursue.

In order to switch advisors, add a co-advisor, switch from the Ph.D. to the M.S. degree plan or sever a student's association with a mentor, a current student or faculty advisor must act in accordance with the following guidelines:

1. The party wishing to initiate a change in the existing mentoring arrangement must meet with the student's committee to plan a course of action.
2. The party wishing to initiate a change in the existing mentoring arrangement must submit a brief written statement to GAAC explaining the rationale for the proposed change and the committee's recommendation.
3. A student wishing to switch advisors also must submit to GAAC a letter of endorsement from any proposed new advisor(s).

The GAAC, faculty advisor and/or student may request that the student or advisor meet with GAAC to respond to questions concerning the proposed changes. Subsequent to such a meeting, GAAC will decide whether to allow the student to continue with the graduate program in association with the new advisor. If the choice of a new advisor is not approved by GAAC, the student must find an alternative advisor or the student cannot continue in the graduate program.

THE ALTERNATIVE Ph.D. QUALIFYING EXAM IN BIOLOGY

This alternative qualifying exam is an option that may be selected by advisors and their students. The alternate qualifying exam requires writing and publishing a full scientific article. The purpose of the alternate exam is to immediately focus students and their graduate advisors on developing the research, analysis and writing skills that are necessary for a successful career.

The authority to determine whether the qualifying exam has been passed resides with the examination committee. When electing the alternate exam, the committee and student still need to determine which areas of breadth each committee member represents, and the student should prepare as for standard written and oral qualifying exams. If the committee approves this option, the student may, in lieu of the regular eight-hour, two-day written examination, submit and orally defend a research manuscript (refer to Ph.D. degree requirements for more details).

The specific requirements are:

1. The research *must have been conducted since matriculation at UM*, under the guidance of the Ph.D. advisor. Research conducted prior to matriculation at UM cannot be the basis for the article. However, a student's supervisory committee may at its discretion approve work that considerably extends previous research (e.g. a M.S. project) and that contains substantial new data generated since matriculation.
2. The student *must be the first author* of the article, and *must play the principal role* in data analysis, writing, submission, and seeing the manuscript through to publication.
3. The target journal should have an impact factor above the median (i.e., top 50%) for journals in its subject area.
4. The publication *must be a full article*: No form of short note (e.g., primer, technical or natural history note), short communication or brief commentary is acceptable. Substance rather than paper length will be the major consideration: e.g, articles in Science and Nature would be short but perfectly acceptable! The exam committee will assess the paper's acceptability.
5. Prior to submission for publication, all members of the supervisory committee must have agreed upon journal selection, served as collegial reviewers of the manuscript, and agreed that the manuscript is suitable for submission. The student is also expected to orally present and defend the research described in the manuscript.
6. Satisfactory completion of this alternate qualifying exam will require *submission* of the manuscript *before the end of the third semester* of graduate study. As is the case for a standard written qualifying exam, satisfactory completion will also require a vote of the supervisory/ examination committee.
7. A memorandum to GAAC by the supervisory/examination committee chair reporting passing the alternate qualifying exam should be accompanied by a copy of the journal's acknowledgment of submission.
8. Any student who has not submitted their approved manuscript by the end of the third semester will be required to take the standard written qualifying exam in the fourth semester of graduate study.
9. The student is encouraged to present the work on which the manuscript is based at the department's annual graduate student symposium.

Fee Memorandum

Funding Policy and Procedure

Extramural grants and fellowships

The Department requires students to submit at least one proposal for external funding. Please note that all proposals must be first evaluated and approved by the Department of Biology office then by the Office of Sponsored Programs. Approval by the Office of Sponsored Programs prior to submission is part of the university's policy in submitting and handling external funding. Please plan your submission with these requirements in mind. At least two months before submission of your proposal you should make contact with the College of Arts and Sciences Sponsored Programs office who will walk you through the submission process, ensure you meet institutional deadlines and successfully submit your proposal.

College of Arts and Sciences Sponsored Programs contacts:

Tracy Ehrlich, Senior Sponsored Programs Manager 305-284-3994

tehrlich@miami.edu

Monica Leon, Sponsored Programs Specialist 305-284-4797

monica.leon@miami.edu

Extramural courses

The Department encourages our students to partake in extramural courses that will benefit your education and completion of your PhD dissertation. *To ensure available departmental funding, course information must be submitted a minimum of 30-days prior to the start date of the course (earlier if possible).* Prior to registration, a concise memo requesting funding for your course and a brief explanation of the education benefit to your dissertation work must be submitted to GAAC (or Program Director). Your request memo should be accompanied by a memo of endorsement from your advisor.

Upon GAAC approval and availability of funding, it is recommended that the department submit payment on your behalf for course registration, flight, and pre-payment of the hotel. If funds are available, the department may cover the costs of your daily meals, ground transportation, and other costs relating to the extramural courses.

Conference Travel

We strongly encourage our students to present talks and posters at conferences and meetings, so the department will do what it can to support each of our students. Funding is for use only when a student is actually on a conference program (i.e. talks or posters). Full funding from the department is not guaranteed; therefore the graduate student should and must consider additional sources of funding, such as Kriloff and GAFAC. Note, please review GAFAC guidelines for application instructions. Be sure to apply for additional funding in a timely manner.

It is important to communicate to the department your intention to attend a conference. After your poster or paper has been accepted, you must submit the following to the Graduate Program Coordinator for GAAC approval:

1. A complete Pre-Travel Authorization Form (form can be found here:

<http://www.bio.miami.edu/departamentalinfo.htm>). The completed form must include a brief statement of purpose for trip (and description of your participation in the meeting e.g. are you invited to talk, contributing a talk, proposing a talk or submitting a poster)

2. A short memo of endorsement from your advising professor
3. Your abstract
4. Conference Information (and agenda if available)
5. Estimated Expenses
6. Acceptance email/letter from Organization hosting the meeting
7. Any other related information related to the particular trip

Once approved, the department will help coordinate your travel arrangements including paying for the hotel, airfare and registration directly. The department is not responsible for extraneous costs from the conference, such as T-shirts, excursions and non conference related travel. *The departmental travel fund is not to be used for field research or summer stipends.*

After your return, you must submit a completed and signed Request for Disbursement of Funds form (<http://www.bio.miami.edu/departamentalinfo.htm>). If the pre-trip requirements were not completed, then the department may not have the available funds to reimburse the expenses. In order to help expedite the process, please be sure to submit receipts from the trip within 30 days of return.

Summer stipends and research/field expenses do not fall into these fundable categories (students and mentors should seek extramural funds for those).

Research & Field Travel

Funding for field travel is available on a case-by-case basis. The Department Travel and Kriloff awards are not available for research & field travel. The College of Arts & Sciences Summer Fellowship, and departmental annual awards (i.e. Kushlan, Curtis, Evoy, etc.) may be applied towards research or field travel. If you do not have any award money, you must seek additional sources of funding, such as GAFAC.

Prior to your travel, you will need to submit to the Graduate Program Secretary:

1. A complete Pre-Travel Authorization Form (<http://www.bio.miami.edu/departamentalinfo.htm>), including a brief statement of purpose for trip
2. Estimated Expenses
3. If driving to/from the destination, estimated mileage and memo stating reason for driving vs. flying to destinations (include estimated costs for each)

On your return, you must submit a Request for Disbursement of Funds form signed by your advisor. If you did not complete the pre-trip requirements, the department may not have the available funds to reimburse the expenses. In order to help expedite the process, submit the receipts from the trip within 30 days of return. Please note, if driving, the department can determine reimbursement to be made either based on mileage or gas/toll receipts.

Please Note: If you are traveling internationally for any graduate study purpose, you must submit your Pre-Travel Authorization form at least 30days prior to your departure date. The Biology Department must inform Risk Management of your travel for insurance purposes.

External Committee Member

Funding for your external dissertation committee member's visit must be approved by GAAC and the department. This only applies if the external committee member is not local to South Florida. The request must be submitted and approved at least 30 days prior to the travel dates of the external committee member. Full funding is not guaranteed. The following must be considered and approved:

1. Communication regarding travel arrangements should be made directly between the Graduate Program Coordinator and the External Committee Member.
2. Airfare: The department may cover the cost of the airfare of your outside committee member. Airfare may be purchased one of two ways: through the department or the outside member may purchase his/her own flight and seek reimbursement with a previously approved cost. Airfare must be approved and purchased no later than 30-days prior to his/her arrival.
3. Lodging/Accommodations: The department will arrange hotel accommodation up to two night's at a hotel of the department's choosing.
4. Expenses: It is not approved for the graduate student to cover the meal expenses of the outside committee member. The committee member may request reimbursement for one dinner and transportation costs to/from their home airport.
5. Seminars: the department encourages the Outside Committee member to present a seminar while they are visiting University of Miami to benefit our community.

Funding sources for Biology Graduate Students

Departmental Funds

Departmental Travel Funding Sources:

Presentation of Poster or Talk at Conference: Up to \$1,500 may be awarded during your graduate tenure. It may be used for up to three different conferences. This source is pending on approval of the Department and available funding (see GAFAC and Kriloff below for more funds that can be used towards conferences).

Outside courses:

Our department offers the possibility for the students to take a training/course outside of UM. The Organization for Tropical Studies (OTS) offers courses that are highly recommended for ecologists. Woods Hole Marine Biology Laboratory (MBL, Massachusetts) is an option for developmental/molecular training. You can also take a course at FIU or other Universities. The department can award funding based on available funds and approval.

Departmental Support Funds:

Below is a list of awards for which you may apply. The Fellowships and Awards Committee will consider applications for all awards together, with an announcement in the Spring semester. You are free to apply for more than one award, for the same project or for two different projects. If you submit applications for multiple projects, you will need to submit the application items separately for each award. Fellowship and Awards Committee members will be recused from evaluative discussions of and decisions regarding their own students. General guidelines follow; the specific amounts awarded vary from year to year, and each spring, the Request for Proposals will include any additional details.

Early-stage awards

William H. Evoy Graduate Research Support Fund (“Evoy Fund”) – funds are intended for graduate students in the early stages of their research, in any area. Preference will be given to doctoral students, but master’s thesis research may also be supported. Awards will be made between \$400 and \$1200.

Jay M. Savage Graduate Research Support Fund (“Savage Fund”) – to graduates students in the early stages of their research; intended for pilot studies in tropical biology. Most awards will be made between \$200 and \$400, although exceptional requests up to \$800 will be considered. This is a one-time award expected to cover expenses related to field research in some tropical locale.

Late-stage awards

Kushlan Graduate Research Support Fund (“Kushlan Fund”) – makes awards to doctoral students in the final stages of their doctoral research, to facilitate the completion of the Ph.D. dissertation. This is a one-time award of up to \$3000, to complete field research (including travel, but not for travel to a scientific meeting) or the final stages of data acquisition and

analysis.

Awards for any stage

J. Gerry Curtis Plant Sciences Scholarships (“Curtis Scholarship”) – small scholarships (up to \$3000) for research in basic or applied plant sciences. These funds are intended to cover research expenses in the field, greenhouse, or laboratory, including the collection of preliminary data to enhance the development of a dissertation proposal. A student may apply for and receive a Curtis award more than once; receipt of a Curtis award more than once depends, however, on evidence of the productive use of the prior award. In your application, please include a statement on the contribution of your study to the advancement of horticulture.

About the application: The Fellowships and Awards Committee expects proposals that address a clearly identified fundamental problem in biology that is logistically feasible and for which your proposed system is appropriate. The Committee asks that applications for support are organized according to the guidelines presented below. Reviewers of external grant applications are influenced by the care taken by the applicant in preparing the material. Our Committee does not differ in this regard. These proposals should be polished, professional, and thoroughly proofread. Standard 1” margins and a font > 11.5 point are required. Your application should include headings I-IX. Sections I-VI must fit within the page limit of the application (two pages). Participation in the graduate symposium will be taken into consideration in awarding these funds. If you have received funds from any of these sources in the past (including the Tropical Biology Fellowship that is no longer offered), you must include in Section VIII a brief report on how funds were spent and what was achieved.

- I. YOUR NAME, TITLE OF THE PROJECT, and the AWARD or AWARDS sought.
- II. OBJECTIVES. A clear statement of the general problem and your specific objectives.
- III. BACKGROUND. Provide the historical and/or logical context of your study. Outline the body of theory relevant to your work in a way that shows what gap you intend to fill, extension you intend to make, or disagreement you intend to resolve – in other words, your rationale.
- IV. PROPOSED WORK AND METHODS. This is the heart of your proposal. What specific issues are you examining? Why in this system? Describe the methods you will use to address the problem, how they will produce the data necessary to answer the question you are asking, and how they will be analyzed to establish your results and form your conclusion.
- V. SIGNIFICANCE. How will your results bear on the basic scientific question you are asking? How does your study relate to past progress made by yourself and others in answering those questions? How will this award contribute to progress toward your degree?
- VI. LITERATURE CITED
- VII. DETAILED BUDGET AND BUDGET JUSTIFICATION. Explain how the funds are to be used and how each of the itemized expenditures supports the research goals. This should be

one page in length.

- VIII. OTHER CURRENT AND PAST SOURCES OF FUNDS (INCLUDING AMOUNTS) AND DETAILS OF THEIR USAGE. If none, state "none." Not to exceed two pages.
- IX. CURRICULUM VITAE. Not to exceed two pages. Please indicate if you participated in the Biology Department graduate symposium.
- X. BRIEF LETTER OF SUPPORT FROM FACULTY ADVISOR. Your application will not be considered without a letter of support from your advisor.

Maximum length for Sections I-VI: Two pages for Evoy, Savage, Kushlan, and Curtis awards.

Sections I-IX should be submitted as a single pdf file by email. The letter of support (sect. X) may be sent separately but needs to arrive by the deadline. All application material must arrive by the announced deadline. Incomplete, incorrectly formatted, or late applications will not be considered.

University Funds

Graduate Activity Fee and Allocation Committee - GAFAC

You are eligible to apply when you pay \$40 per semester for your Activity Fee

http://www.miami.edu/sa/index.php/graduate_activity_fee_allocation_committee_gafac/

- How much? Up to \$350 except for reusable equipment the limit is \$300
- What can be funded? Conferences, equipment, field research, filmmaking, events, performances, exhibitions, & publications.

Max and Peggy Kriloff Graduate Student Travel Scholarship (Arts & Science students only)

<https://www.as.miami.edu/media/college-of-arts-and-sciences/content-assets/college-assets/documents/scholarships/KRILOFF%20Travel%20Scholarship%20Form.pdf>

- How much: Up to \$250
- What can be funded: Travel to scholarly/professional meetings to present research.
- Where to obtain applications: College of Arts and Sciences
Office of Graduate & Administrative Services
Ferre Building, Room 121 (305) 284-3188

College of Arts and Sciences Awards

To be eligible for these awards you must have advanced to candidacy

<http://www.as.miami.edu/academics/graduate-studies/grants-fellowships/>

Summer Awards: \$5000

Dissertation Award: Yearly stipend ~\$20000

External Sources of Funding

Search the web for sources, one outstanding list is that maintained by Dr Scott Keogh at the Australian National University (http://biology-assets.anu.edu.au/hosted_sites/Scott/Resources-and-advice.html). Other links are maintained on our Biology Graduate Student website <http://www.bio.miami.edu/bgsa/resources/funding.html>

Graduate School Forms - Quick Guide

During the course of your graduate career, you will encounter different forms necessary for your completion of your degree. The following list will give a brief description of each. You may find these forms on the Graduate School website or the University of Miami Electronic Theses & Dissertation website (http://www.miami.edu/gs/index.php/graduate_school/current_students/electronic_theses_dissertations/). Also, review the 2015-2016 Electronic Thesis & Dissertation Process (ETD) document for step-by-step instruction.

1. Petition for Transfer of Credits: This form is used to transfer credits from an accredited institution.
2. Application for Admission to Candidacy for the PhD: After passing the comprehensive examination and successfully defending a written research proposal, the Graduate School will appoint your Dissertation Committee after submission of this form. For detailed information regarding the makeup of your committee, please see page 20 of this guide.
3. Defense Announcement/Notice Form: At the time of your Dissertation Defense, a public dissertation seminar must be given during regular sessions of Fall & Spring Semesters. This online form announces the time and date of your dissertation defense to the Graduate School. This should be submitted with ample time before the defense.
4. Ph.D. Final Paperwork/Materials Checklist: This checklist will help you keep track of the final paperwork and materials that must be submitted to the Graduate School AFTER you have completed and uploaded your electronic dissertation or doctoral essay to the ETD database. Each final submission packet should include this document, signed by you.
5. Ph.D. Certificate of Defense Form: This is a certificate of approval of Doctoral Dissertation. Your chair and committee members should sign four certificates at the time of your successful defense. Staple a copy of your abstract to each original certificate, and submit the originals to the Dissertation Editor as part of the complete final submission package. The student is responsible for turning these documents into the Graduate School at the time of the final submission. Do not turn these or any other important documents unless they are part of your final submission. Your department should not submit these certificates on your behalf. Visit http://www.miami.edu/gs/index.php/graduate_school/current_students/electronic_theses_dissertations/ for further information.

Any questions? Please contact Aliana Valenzuela, Graduate Program Secretary, or Tyrone Henry, Assistant Director, Graduate Programs.

Institutional Animal Care & Use Committee (IACUC)

What is IACUC?

“The Institutional Animal Care and Use Committee (IACUC) is a self-regulating entity that, according to U.S. federal law, must be established by institutions that use laboratory animals for research or instructional purposes to oversee and evaluate all aspects of the institution's animal care and use program.” The UM IACUC may inspect teaching and research laboratories that use vertebrates anytime without prior notice. Failure to comply with the IACUC policies and guidelines could result in suspension of teaching and research.

Teaching Assistants:

In order to be eligible for a Teaching Assistantship, you must complete the IACUC animal care course (see <http://www.citiprogram.org> and refer to the instructions below about registering for a CITI account). Once you have completed the 3 modules of the course, you will receive 3 certificates stating that you have completed the course satisfactorily. A copy of the certificates must be placed in your official file, in order for you to be eligible to TA. If these certificates are not in your file, you cannot serve as a TA. These documents demonstrate that you have taken the course.

Teaching Assistants are required to complete the following elements of the UM Lab Animal Welfare Training Program:

1. "Working With the IACUC-- Core Course for Investigators,"
2. "University of Miami Occupational Health & Safety and Standard Operating Procedures for Lab Animal Users,"
3. "Electives for the species most relevant to your research or teaching roles at the University."

The IACUC certification is valid for only four years and must be renewed before the end of the fourth year. Since all graduate students are expected to TA at least once, per the University of Miami Bulletin for Biology PhD, you should complete the course. Not completing the course may delay a Teaching Assistant appointment or result in denial of a Teaching Assistant position.

At the beginning of each semester you are teaching a course that uses vertebrates, you must submit the following information to the Graduate Program Coordinator (gradcoord@bio.miami.edu):

1. Course & Section number
2. Number of each vertebrate species expected to be used

At the end of semester you must inform the Graduate Program Coordinator, the number of each vertebrate species that were actually used.

In addition, you and your faculty instructor are required to give a 15 minute presentation about animal welfare to your students before the start of use of vertebrates at the beginning of each semester. You need to provide date of this presentation to the Graduate Program Coordinator (gradcoord@bio.miami.edu).

This information is essential for the IACUC teaching report, prepared by the Biology faculty representative (currently Dr. John Lu).

Research Assistants:

Research Assistants who use vertebrates in research are required to complete the animal welfare training program every four years. Certificate training must be completed before the start of your work assignment. Completing the three elements above will ensure your compliance with the IACUC. Upon completion of the course, please submit a copy of your completion record to be filed in your student file.

Specialized Species or Model Specific Courses Provided by the CITI (Collaborative Institutional Training Initiative):

- Working with Zebrafish in Research Settings
- Working with Fish in Research Settings
- Post-Procedure Care of Mice and Rats in Research: Reducing Pain and Distress
- Working with Amphibians in a Research Setting
- Working with Mice in Research Settings
- Working with Rats in Research Settings
- Working with Hamsters in Research Settings
- Working with Gerbils in Research Settings
- Working with Guinea Pigs in Research Settings
- Working with Rabbits in Research Settings
- Working with Cats in Research Settings
- Working with Dogs in Research Settings
- Working with the Laboratory Dog CD-ROM: Basic and Advanced Lessons
- Streaming Videotape (Video CD)- Working With the Laboratory Dog
- Working With Swine in Research Settings
- Working With Nonhuman Primates in Research Settings
- Streaming Videotape- Working Safely with Nonhuman Primates

More Information:*Who is IACUC?*

IACUC.ORG is produced by the American Association for Laboratory Animal Science (AALAS). AALAS is an organization committed to serving society through education and the advancement of responsible laboratory animal care and use. One of AALAS' goals is to be a resource for continuing education, training, and knowledge exchange.

Purpose of IACUC.ORG

IACUC.ORG is an information resource for members and staff of institutional animal care and use committees. It is a link archive where online resources are organized by menus and submenus. Many who browse the Internet for IACUC resources may find it overwhelming to randomly sift through the enormity of Websites and their online materials. IACUC.ORG was developed as an organizational tool to quickly point to a topic of interest, such as protocol forms or disaster plans used by different institutions."

What is AAALAC?

"AAALAC stands for the Association for Assessment and Accreditation of Laboratory Animal Care. AAALAC International is a private, nonprofit organization that promotes the humane treatment of animal in science through voluntary accreditation and assessment programs." The UM IACUC is accredited by the AAALAC, and the accreditation must be renewed every three years.

Instructions for Creating a New CITI Account

Go to <http://www.citiprogram.org>

Select "Register" under "Create an Account"

Step 1: Select Your Organization Affiliation

- Search for Florida Puerto Rico Collaboration to Reduce Stroke Disparities (FL-PR CReSD)
- Click Continue to Step 2

Step 2: Enter Your Name and Email Addresses (primary and secondary)

- Provide First and Last Name
- Enter Your Email Address (The system allows for a preferred and a secondary. Please make your work email your preferred and your personal email your secondary if applicable)
- Click Continue to Step 3

Step 3: Create your Username and Password

- Create your own username and password. (You create your own).
- Create a security question
- Click Continue to Step 4

Step 4: Fill in the following information:

- Gender
- Ethnicity
- Race
- Click Continue to Step 5

Step 5: Fill in CEU/CE Information

- Click Continue to Step 6

Step 6: Fill in additional demographic information. Fill out the most information possible, but note that the following information is required:

- Institutional email address
- Department
- Role in Research
- Click Continue to Step 7

Step 7: Select Curriculum

- Select "Healthcare Provider" Option
- Complete Registration

Step 8: Finalize Registration, complete the Integrity Assurance Statement and begin your modules which can be found by clicking on "Biomedical Research - Basic Refresher" - this will prompt you to take the following 4 required modules:

- History and Ethics of Human Subject Research
- Biomed Refresher 2 - HIPAA and Human Subjects Research
- Research with Protected Populations - Vulnerable Subjects: An Overview
- Cultural Competence in Research

If you have already completed these modules as part of a prior Biomedical Research Training curriculum please email your certificate of completion to Maria Ciliberti, Mciliberti@med.miami.edu

Responsible Conduct of Research

Instruction in the Responsible Conduct of Research (RCR) is integral to the preparation of future scientists and engineers, and both the National Institutes of Health (NIH) and the National Science Foundation (NSF) require RCR instruction for students and other trainees. Consistent with these federal mandates, **UM requires that all trainees involved in research funded by the NIH or NSF complete online RCR training courses offered by the Collaborative Institutional Training Initiative (CITI Program).** In addition to this on-line training, **persons who receive NIH funding are also required to complete** a live class, seminar, or other program that addresses ethical issues relevant to the trainee’s discipline as well as broader issues of research integrity.

The minimum standards for RCR training at UM are summarized below:

Funding Source	CITI Online Training	Classroom Training
NIH	Required	Required
NSF	Required	Recommended
Other	Recommended	Recommended

Graduate students in the Department of Biology are required to meet the UM Recommended level of training. For students entering the program in the Fall, completion of both the CITI Online Training and the Classroom training must be done by the end of their first January in the program. For students who enter the program in the Spring, completion of both the CITI Online Training and the Classroom training must be done by the end of their first August in the program.

CITI Online Training

CITI Program online RCR courses are available at the CITI website (link below). Accessing CITI courses requires a CITI user-ID and password, which can be obtained via a registration process the first time you visit the site. If you have used CITI before, and already have a CITI user-ID and password, you will usually still need to update your “profile” to get access to the needed RCR courses.

- Go to the CITI Program site at <http://www.citiprogram.org>. Recommended browsers are Chrome, Firefox, and Internet Explorer (v6 or later).
- *First time using CITI Program?*
 1. Click on the “Register here” link on the home page.
 2. Affiliate with the “University of Miami / Jackson Health System” (drop-down selection) and answer the other required questions. Do not use the “Public Access” affiliation or affiliate with any institution other than UM/JHS, or you may not receive credit for the course(s) you take.
 3. Answer the other registration questions that request information about you. Be sure your registration profile includes a correct C-number**, or you may not receive credit for the course. Your C-number is requested twice for verification.
 4. During the registration process, through responses to a series of questions, you will

indicate that you want to take an RCR course, and also indicate which discipline-focused version of RCR you want to take (choices are: Biomedical, Social/Behavioral, Humanities, Physical Sciences, Engineering). The disciplinary versions are very similar, but your school, college or department will tell you if it has a requirement for this choice.

- *Used CITI Program previously?*

1. Log in using your previous credentials. If you've forgotten your user-ID or password, click on the "Forgot login information" link. A message will be sent to the email address you had previously registered, indicating how to recover your user-ID or password.
2. In most cases, an RCR course is not already listed in your "gradebook" (course menu), so you will need to update your UM/JHS learner profile to add it. To do this, click on the link "Add a course or update your learner groups for University of Miami / Jackson Health System" (look for a blue question-mark "?" icon).
3. Be sure to select the appropriate discipline-focused RCR course (choices: Biomedical, Social/Behavioral, Humanities, Physical Sciences, Engineering). These versions are very similar, but your school, college or department will tell you if it has a required selection.
4. Either before you start the course, or after you complete it, confirm that your CITI user profile has includes a correct C-number**, or you may not receive credit for the course. To access your profile and update it as necessary, click on the link "Update my profile information for University of Miami / Jackson Health System" (another blue "?" icon).

- Complete the assigned RCR course modules as your schedule permits. You can start and stop at any time, completing modules as your schedule allows.
- After completing the course, print a Completion Report and provide a copy of the Completion Report to the Graduate Program Coordinator for inclusion in your file. If you are taking the live class, you will also need to take a copy of this certificate to the class with you. To print the Completion Report: Click on the "Print" link, in the "Completion Report" column next to the course you've completed. A printed Completion Reports is a necessary part of your graduate file.

** Don't remember your C-number? Go to <https://myum.miami.edu> and click on "View UM ID number" in the "Personal and Biographical Info" section (right lower part of screen).

Classroom Training

The UM Institute for Bioethics and Health Policy offers RCR classroom training and other resources to assist in meeting the NIH and NSF requirements. Its classroom training is offered three times per year – once each at the Gables, Medical, and RSMAS campuses. The schedule for 2015 is available at:

http://www.miami.edu/index.php/ethics/projects/rcr/rcr_scheduled_classes/

AY 2015/2016 classes: 08/19/2015 Gables, 08/27/2015 Medical and 01/22/2016 Marine.

Laboratory Safety

Linda White, Biology Dept. Safety Officer at 305 284-2494 or lwhite@miami.edu.

Safety Training:

It is mandatory that you complete the Laboratory Safety seminar and the Biological Safety seminar.

It is mandatory for all personnel working in laboratories to attend training sessions applicable to their work. Applicable training and current training schedules are available here:
http://www.miami.edu/finance/index.php/environmental_health_safety/training-1/

It is also mandatory to read the OSHA Hazard Communication Standard Training located in the middle of the page at the following link:
http://www.miami.edu/finance/index.php/environmental_health_safety/ .

UM Lab safety manual:

http://www.miami.edu/finance/index.php/environmental_health_safety/laboratory_safety/laboratory_safety_manual/

Laboratory Safety Link:

http://www.miami.edu/finance/index.php/environmental_health_safety/laboratory_safety/

Biological Safety Link:

http://www.miami.edu/finance/index.php/environmental_health_safety/biological_safety/

If you have any questions, please contact Environmental Health and Safety at 305 243-3400.


Biomedical/biohazardous waste disposal:

Refer to the guidelines at the following link for biomedical waste guidance.

http://www.miami.edu/finance/index.php/environmental_health_safety/training-1/guidance_for_determining_the_applicability_of_training/biomedical_waste_guidance/

If you have questions, please contact Environmental Health and Safety (EHS) at 305 243-3400 or access their website at:

http://www.miami.edu/finance/index.php/environmental_health_safety/ .

Laboratory waste considered biomedical or biohazard waste must be placed either in a red bag or a biohazard incineration carton marked with a biohazard symbol  for disposal. The bags must be tightly sealed with metal twist tie or cable tie. Sealing with tape is not allowed. Bags must not leak; if applicable, double bag/ double seal. Bags are used for "soft" waste. Incineration cartons are used for contaminated objects like pipets or glass that can potentially puncture a red bag. The inner red bag of the incineration carton is sealed with a metal twist tie or cable tie. The box lid is closed following the manufacturer's directions and taped to the box for disposal. Each lab purchases its own red bags and incineration cartons.

The Biology Department has a fenced and locked area where biohazardous waste is stored for pick up. The waste is picked up for incineration every 30 days or less. The fenced storage area is located behind the Cox generator building. For training and access to the area, contact Linda White, Biology Dept. Safety Officer at 305 284-2494 or lwhite@miami.edu.

Please note:

1. All animal carcasses are considered biomedical waste and therefore must be disposed in a red bag.
2. Chemical waste is not allowed in the red bags. Refer to the section on chemical waste disposal.
3. Within the fenced area allocated for biohazardous waste storage, fill one rolling receptacle before starting another. Do not overfill the rolling receptacles in the fenced area. The lid must close completely for transport to the incineration facility. Read the sign posted on the gate.
4. Keep the gate to the above-mentioned fenced area locked at all times- this is mandatory.
5. Do not leave red bags or incineration boxes on the ground inside or outside the fenced area. All red bags or incineration boxes must be placed in a biohazard waste receptacle inside the fenced area.
6. ALL sharps must be placed in a red puncture- proof sharps container sold for that purpose. It must be sealed shut before being disposed in the biohazard receptacles. THESE CONTAINERS ARE NOT REUSABLE.
7. Do not overfill the red bag or incineration box. It should seal easily.
8. Do not accumulate biohazardous waste in the lab.
9. Only red-colored bags and red-printed incineration boxes are allowed to be used for biohazardous waste at UM.

Chemical waste disposal form and processing:

Chemical waste is stored in a designated Satellite Accumulation Area, which is clearly marked in the laboratory. All containers must be sealed and must be labeled with the contents, fully spelled out- no abbreviations.

For guidelines please see the following link:

http://www.miami.edu/finance/index.php/environmental_health_safety/hazardous_materials-1/

In brief:

1. Complete the UM Chemical Waste Disposal Form, with chemical waste list, waste location and lab contact information, available on the Environmental Health and Safety (EHS) webpage under forms:

http://www.miami.edu/finance/index.php/environmental_health_safety/ehs_forms/

2. Scan the form as a PDF and send it to Vaughan Munro at EHS @vmunro@med.miami.edu.
3. Place a copy of the form with the chemical waste at the time of pick up. (Generally, the Coral Gables campus has chemical waste picked up on Tuesday mornings.)
4. Always retain a copy of all the paperwork for your files as proof that you disposed of laboratory chemical waste properly. Your lab should have a file specifically for these records and they should be easily accessible.

Autoclave safety and use:

The Biology Dept. has 2 autoclaves maintained by the department. To use either autoclave, you must be trained.

1. A Consolidated autoclave located in Cox Science Center, 35 L in the basement of Cox. Contact Linda White at lwhite@miami.edu, 305 284-2494, Cox room 36 H for training.
2. A Tuttnauer autoclave located in the Cox Annex, 211. Contact Dr. James Baker, bakerjd@bio.miami.edu, 305 284-9055, Cox Annex 228 for training.

Microbiology has a Steris autoclave in Cox Science Center 255. It is maintained by the Microbiology department. For permission to use, and for safety and operation training on the unit, contact Roger Williams, Cox 251 A, riwill@miami.edu or 305 284-1797.

When using the autoclaves: If a log is kept, please remember to log in.

If you encounter problems with an autoclave unit, contact Linda White at lwhite@miami.edu or 305 284-2494 and clearly state the problem you are having with the unit. The appropriate service company will be notified.

Cox Science Center Room Booking Procedure

As of June 2010, there is a new system for booking rooms in Cox Science Center. The new system is designed to be user friendly, allow you to view Cox room availability, and request a room to be booked on your behalf. Please book your room at least three (3) weeks in advance. Once your email request has been received, your room will be booked and an email confirmation will be sent to you. If any conflicts arise, you will be notified and can seek alternate room options. If your room reservation is no longer needed, please send an email to bookaroom@bio.miami.edu, and your reservation will be removed from the calendar and that space can be utilized by others.

Currently classes have been inputted up through Fall 2015 semester. When Spring 2016 classes are available, they too will be added to the calendar. *Please consider when making any requests to book a room that classes take precedence over any other type of reservation.*

1. Go to the Biology Underground Page: underground.bio.miami.edu (u.bio.miami.edu)
2. Click on Book a room in Cox Science Center
3. View availability by selecting "Another Users Calendar" to choose different rooms and Month drop box to view the month you want.
4. Email bookaroom@bio.miami.edu and submit a formal request
5. When submitting your request please include the following:
 - a. Name & contact information (phone #)
 - b. Room number
 - c. Time frame
 - d. Reason for reservation (ie. lab meetings, dissertation defense, Beta Beta Beta Meeting etc...)
6. Once your request has been approved and added to the web calendar, an email confirmation will be sent to you.

Should you have any questions about the new system, please contact Aliana Valenzuela, Graduate Program Coordinator, at 8-3988 or via email at bookaroom@bio.miami.edu.

The Cox Science Building is open from 7am to 10pm Monday through Saturday. Events occurring after this time or on weekends will require a Faculty/Staff/Student Advisor to be present for the event.

*Cox Annex Conference room is available to Biology Faculty and Graduate Students for lab meeting, student dissertation/thesis defenses and/or committee meetings.

Please note the Office of the Registrar books the lecture rooms 126 and 145 and Cox Lobby. Please visit www.miami.edu/index.php/registrar/course_curriculum

Do you want the department to purchase your airfare or need a travel advance?

- Yes
No

University of Miami
COLLEGE OF ARTS & SCIENCES-DEPARTMENT OF BIOLOGY
PRE-TRAVEL AUTHORIZATION FORM FOR GRADUATE STUDENTS
to be submitted Prior to Travel to Graduate Program Secretary

Today's Date []

Name of Traveler []

Phone No. []

Account No.** []

Account Title []

Destination []

Dates of Trip [] to []

Purpose of the trip (be specific; include conference titles and reason for attendance, i.e. poster, presentation or talk; persons or organizations visited and why:

Estimated Expenses

Registration []
Airline Tickets []
Other Transportation []
Meals []
OR Per diem []
Lodging []
Other* []
Poster/copies* []
TOTAL []

*explain: []

EXPENSE LIMITATION []

Pre-Travel reimbursement []

Funding Commitments (specify amounts)

External Sources (specify) []
GAFAC []
Max & Peggy Kriloff []
**Grant (acc# [])
Department []
TOTAL []

Travel Authorization

**Signature of Account P.I. [] Date []

Signature of Graduate Program Director [] Date []

Signature of Chairperson [] Date []

**Signature of Sponsored Programs [] Date []

FOR INSURANCE PURPOSES ONLY
Reimbursement will not be requested

The following documentation must be included with this request:

- Short memo of endorsement from advising professor
Your abstract (conference only)
Conference Information (agenda if available, also)
Acceptance email/letter from Organization
Any other related information related to this trip
If driving to/from the destination, estimated mileage and memo stating reason for driving vs. flying (include est. costs for each)

Upon completion of the above described trip, I agree to provide to the University of Miami within 30 days of my return original receipts for all expenses reimbursed to me (with exception of per diem expenses).

Signature of Travel

UM C#

Date

**Travel on sponsored/grant accounts must be approved by the Office of Sponsored Programs.

OFFICE OF RISK MANAGEMENT
MAX OROVITZ BLDG. ROOM #333
LOCATOR CODE: 1437
PHONE NUMBER: 284-3163
FAX NUMBER: 284-3405

TRAVEL FORM

FOR USE BY ADMINISTRATORS & FACULTY
(for insurance purposes only)

DATE

PRINT NAME OF TRAVELER: _____

DEPARTMENT: _____ AO CLASS: _____

DATES OF TRIP: FROM: _____ TO: _____

MODE OF TRANSPORTATION: _____

PURPOSE OF TRIP: _____

SIGNATURE OF TRAVELER

SIGNATURE OF DEPT. HEAD

**Submit this form to the Risk Management Office prior to the traveler's trip*

REQUEST FOR DISBURSEMENT OF FUNDS

BUSINESS EXPENSE SUBSTANTIATION REQUIREMENTS	
1.	There must be a legitimate business purpose with explanation of the expense.
2.	It must be substantiated. <ul style="list-style-type: none"> • Original receipts detailing the date, place, individual(s) or group and amount of expense. • Receipts must not be held more than 30 days for reimbursement.
3.	Cash advance not used must be returned within two weeks of returning from travel.
4.	Airline ticket must be submitted with the reimbursement request.

All eight items (if applicable) must be filled out for processing.

1 Name: _____ **2** Date Submitted: _____

3 Payable To: _____

4 Faculty Approval & Signature Required: _____
(For all graduate student charges.) Signature

5 Please check which type of Reimbursement:

<input type="checkbox"/> Business Reimbursement	<input type="checkbox"/> Consultant	<input type="checkbox"/> Petty Cash Reimbursement
<input type="checkbox"/> Check Requisition	<input type="checkbox"/> Interdepartmental	<input type="checkbox"/> Travel Advance <small>(\$25 or less)</small>

6	Amount	Account(s) #	Object Code	Date(s) of Event/Travel	Place of Event/Travel

7 Purpose of expense (be specific, see above substantiation requirements).

8 Individual(s) or group (attach a list if needed).

Attach a memo if original receipt is lost, damaged, faxed copy, or by credit card that show amount due instead of zero balance. A copy of social security card or W-9 form is needed for seminar speakers and consultants.

UNIVERSITY OF MIAMI GRADUATE SCHOOL

APPLICATION FOR ADMISSION TO CANDIDACY FOR THE Ph.D.

(Please Print or Type)

S.S. # _____

Address _____

City State Zip

HAS SUCCESSFULLY PASSED

(NAME)

THE QUALIFYING EXAMINATION ON _____, HAS
(Date) Month Day Year

FULFILLED ALL DEPARTMENTAL FOREIGN LANGUAGE AND OTHER REQUIREMENTS,
AND IS NOW ELIGIBLE FOR ADMISSION TO CANDIDACY FOR THE Ph.D. WITH A MAJOR
IN _____

DISSERTATION TOPIC: _____

DISSERTATION COMMITTEE:

(CHAIRPERSON) Please Print or Type

(OUTSIDE MEMBER)

Please supply address

(Documentation of Credentials Required for Persons outside of the
University of Miami)

APPROVED: _____

(DEPARTMENT CHAIRPERSON OR GRADUATE ADVISOR)

(DATE)

**Max and Peggy Kriloff Student Travel Scholarship
College of Arts and Sciences
University of Miami**

The Max and Peggy Kriloff endowment fund supports travel expenses for all full-time College of Arts and Sciences students presenting at scholarly/professional meetings. Students are eligible only when actually on a conference program (i.e., presenting a paper, poster, or visual presentation for BFA/MFA students). If several students are co-authors of a paper, only one would usually be supported. If a student and faculty member are co-authors, the student would be supported only if s/he is participating in the presentation. The College will only accept applications from students who have secured departmental funding. The Kriloff travel award will not exceed \$250 or the amount committed by the department, whichever amount is smaller. If departmental funds are available for undergraduate travel support, undergraduate students must also apply for departmental funding. As with all University travel, recipients must elect the most economical flight and lodging options.

APPLICATION:

Last Name	First Name	C- Number	
_____	_____	_____	
Department	Degree sought	Email address	Dates of trip
_____	_____	_____	_____
Name of Conference	Location		
_____	_____		

Total trip expense \$ _____

Funding source:	Amount	Account #	Authorized Signature	Date
PI or grant(s) ^a	\$ _____	_____	_____	_____
Department	\$ _____	_____	_____	_____
GAFAC ^b	\$ _____	_____	_____	_____
Other sources ^b	\$ _____	_____	_____	_____

^aIf the PI does not have any funds available for student travel, his/her signature above represents a formal certification of this fact ^bApplications to GAFAC and other possible funding sources can be completed at a later date and, thus, signatures are not required.

Amount requested from Kriloff Scholarship fund: \$ _____

Signature of student _____ Date _____

Please attach to this completed application: 1. Memorandum from Chair or DGS endorsing student travel and stating the amount of funding committed by the department; 2. Conference program confirmation. 3. Copy of poster and/or abstract is required.

PLEASE NOTE: COMPLETED APPLICATION FOR FUNDING MUST BE SUBMITTED TO OUR OFFICE BEFORE CONFERENCE DATE.

If funding is approved, you will be notified via email by the Office of Graduate and Administrative Services. Scan completed forms to: b.varona@miami.edu or Gylla@miami.edu or fax to 284-4724.