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**Introduction**

The Department of Biological Sciences has prepared this statement of policies and procedures to help answer questions that students may have as they enter the Ph.D. program. This document specifies the departmental requirements that must be fulfilled in order to be a student in good standing; failure to meet any of these requirements may result in loss of financial support or dismissal from the department.

The members of the faculty and the Biological Sciences Graduate Programs Office provide ongoing guidance and assistance to students throughout the course of their graduate careers, and any questions or concerns may be discussed with the Department Head, Asst. Department Head for Graduate Affairs, or the Graduate Programs Manager at any time. The University Graduate Student Handbook, which details university-wide policies, is available upon request from the Biological Sciences Graduate Programs Office.

**University Policies & Expectations**

It is the responsibility of each member of the Carnegie Mellon community to be familiar with university policies and guidelines. In addition to this departmental graduate student handbook the following resources are available to assist you in understanding community expectations:

- Academic Integrity Website: [www.cmu.edu/academic-integrity](http://www.cmu.edu/academic-integrity)
- University Policies Website: [www.cmu.edu/policies/](http://www.cmu.edu/policies/)
- Graduate Education Website: [www.cmu.edu/graduate/policies/index.html](http://www.cmu.edu/graduate/policies/index.html)

**Carnegie Mellon University Statement of Assurance**

Carnegie Mellon University does not discriminate in admission, employment, or administration of its programs or activities on the basis of race, color, national origin, sex, handicap or disability, age, sexual orientation, gender identity, religion, creed, ancestry, belief, veteran status, or genetic information.

Furthermore, Carnegie Mellon University does not discriminate and is required not to discriminate in violation of federal, state, or local laws or executive orders. Inquiries concerning the application of and compliance with this statement should be directed to the vice president for campus affairs, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-2056.

The Carnegie Mellon Code

Students at Carnegie Mellon, because they are members of an academic community dedicated to the achievement of excellence, are expected to meet the highest standards of personal, ethical and moral conduct possible.

These standards require personal integrity, a commitment to honesty without compromise, as well as truth without equivocation and a willingness to place the good of the community above the good of the self. Obligations once undertaken must be met, commitments kept.

As members of the Carnegie Mellon community, individuals are expected to uphold the standards of the community in addition to holding others accountable for said standards. It is rare that the life of a student in an academic community can be so private that it will not affect the community as a whole or that the above standards do not apply.

The discovery, advancement and communication of knowledge are not possible without a commitment to these standards. Creativity cannot exist without acknowledgment of the creativity of others. New knowledge cannot be developed without credit for prior knowledge. Without the ability to trust that these principles will be observed, an academic community cannot exist.

The commitment of its faculty, staff and students to these standards contributes to the high respect in which the Carnegie Mellon degree is held. Students must not destroy that respect by their failure to meet these standards. Students who cannot meet them should voluntarily withdraw from the university. The Carnegie Mellon Code can also be found on-line at: http://www.cmu.edu/student-affairs/theword/code.html.

Summary of Departmental Requirements

- Satisfactory completion of six lecture courses of which four must be graduate courses from the Graduate Advisory Committee (GAC) proposed Core Elective list during the first year and maintenance of 3.0 QPA (cumulative after the first year, rounded to the nearest tenth)
- Satisfactory completion of laboratory rotations, including oral presentations (first year)
- Satisfactory completion of Thesis Proposal Defense (second year)
- Annual Research Advisory Committee Evaluations (third through last year)
- Annual Journal Club presentations (second through last year)
- Teaching assistantship: 10 points (first through last year)
- Total number of units required for completion of Ph.D. degree is 384 units (fifth year)
- Students finishing their degree early may formally request any of the above mentioned requirements from the department head.
- Satisfactory completion and defense of Ph.D. dissertation (fifth or sixth year)
**Forms for the Ph.D. in Biological Sciences Program**

[www.cmu.edu/bio/resources/forms/](http://www.cmu.edu/bio/resources/forms/)

- Ph.D. Program Acceptance
- Preliminary Thesis Proposal Meeting
- Thesis Defense Proposal
- RAC Report
- Research Advisory Committee Evaluation
- Vacation Request
- Graduate Student Travel Award Application
- Thesis Signature Page

**Forms for Enrollment Services (the HUB)**

[www.cmu.edu/hub](http://www.cmu.edu/hub)

- [Pass/No Pass Approval](http://www.cmu.edu/hub/)
- [Course Audit Approval](http://www.cmu.edu/hub/)
- [Course Add, Switch Section or Change Units Request](http://www.cmu.edu/hub/)
- [Leave of Absence](http://www.cmu.edu/hub/)
- [Return from Leave of Absence](http://www.cmu.edu/hub/)
- [Withdrawal (from Carnegie Mellon)](http://www.cmu.edu/hub/)
- Enrollment Verifications are available from Student Information Online, under the Academic Info tab as “Request Verification.”
### Departmental Contacts

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Office</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department Head</td>
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<td>MI 200B</td>
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<td></td>
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</tr>
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</tr>
</tbody>
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Section 1. Degree Attainment

Courses and Grades

Coursework

To receive the doctoral degree, all students must successfully complete at least six lecture courses, including four graduate level courses and up to two of six can be undergraduate courses.

- All first-year students are required to take at least three lecture courses for credit in each of the first two semesters. Courses taken pass/fail or as an audit do not count toward this requirement. Total units earned for each semester (including credit for doctoral research 03-900) must equal at least 48.

- To remain in good academic standing, students are required to achieve at least a 3.0 QPA (rounded to the nearest tenth) at the end of the first year.

- First-year students must also obtain a B or better grade in each of four courses selected from a list of Core Electives. The GAC will approve this list each year.

- Students with a B- or lower grade may choose to take an oral exam as remediation, with GAC approval. A passing grade in this exam will remediate the failing grade in the core elective, which will be upgraded to a B.

- Students must also meet expectations contained within the Rotation Assessment guidelines, which serve to evaluate research skills and scholarship activities predictive of future success in the lab group. This also includes a final oral presentation at the end of each rotation.

- Students must also find placement with a lab group by the end of third rotation in order to remain in the program. Under special circumstances a fourth rotation may be allowed with approval from the GAC and Department Head.

- Under special circumstances the GAC may determine that a student who has failed to meet any of these requirements of the program will be placed on probation. The specific requirements for remediation of probation will be determined by the GAC and communicated to the student and his/her advisor (if any).

- First-year students register for that are recommended by the GAC. Students will also have access to a comprehensive list of pre-approved electives before each advising meeting in their first year. The departmental course offerings are available at www.cmu.edu/bio/graduate/grad_courses.html and the university’s complete Schedule of Classes can be found at www.cmu.edu/hub/courses.

After the first year, each student’s Research Advisor and the Research Advisory Committee may recommend additional courses to enhance the student’s expertise in a subdiscipline.
Students continue to conduct research throughout the summer and, thus, are registered for Doctoral Thesis Research (03-900; summer section R, 36 units). They do not, however, take other summer courses unless the tuition obligations are met by either their advisor or another source.

**Departmental Seminar**

Each semester, all students are required to register for and attend the weekly departmental Research Seminar (03-750; 1 unit). Graduate students are strongly urged to meet the speakers to broaden their knowledge of cutting-edge biological science, to discuss career paths and strategies, and to make useful contacts; the department often arranges lunch with the seminar speaker, or the faculty host can arrange group meetings for interested students.

**Departmental Journal Club**

Each semester, all students are required to register for and attend the weekly departmental Journal Club (Graduate Research Seminar 03-755; 3 units) during which students and faculty members give 25-minute presentations. Senior students (third through fifth) present their research results; typically, graduate students give at least three research Journal Club presentations during their time in the department. Each succeeding year, those students who speak at the Departmental Retreat or who are graduating by May of their fifth year are not required to present a Journal Club that year.

In lieu of a Journal Club presentation during their first year, students give brief oral presentations describing each rotation project (scheduled after each rotation). Second year students do not present at Journal Club.

**Doctoral Research**

During each semester, including the first year, students register for Doctoral Research (03-900; variable units), which encompasses both the laboratory rotations during the first year and the thesis research during all of the succeeding years.

**Registering for Classes**

Beginning with the first fall semester, students register online for their own classes; information is available at [www.cmu.edu/hub/registration](http://www.cmu.edu/hub/registration). Students register online at [www.cmu.edu/hub/sio](http://www.cmu.edu/hub/sio) with an Andrew ID.

- During year 1, students must carry 48 units each semester.
- During years 2-6, students register for at least 36 units (full-time status) per semester.
- Students who wish to take a course outside of Carnegie Mellon at one of the other Pittsburgh Council on Higher Education (PCHE) institutions must complete the fillable [PCHE Cross Registration Request Form](http://www.cmu.edu/hub/sio) from the HUB, complete and sign, and return it to the Biological Sciences Graduate Programs Office for permission.
and signatures. Only one course outside of Carnegie Mellon is permitted per semester. (see PCHE below for more information)

● Please note that the Graduate Programs Office can only register its own students for its own (i.e., 03-xxx) classes.

Pass/Fail Courses

According to university policy, a graduate student may elect to take a course pass/ fail; the department requires the student to obtain approval from their advisor. Within the registration ADD period during the first two weeks of each semester, the student must fill out the Pass/No Pass Approval Form found at www.cmu.edu/hub/forms.html and receive permission from either the student’s Research Advisor, Chair of the GAC, or the Graduate Programs Manager. Classes taken pass/no pass cannot be used to fulfill graduation requirements. Pass/no pass status is irrevocable.

Transfer Courses

Transfers are not allowed; however, under exceptional circumstances and under the advisement of the GAC and with Department Head approval elective courses can be waived.

PCHE

Cross-registration provides opportunities for enriched educational programs by permitting full-time paying undergraduate and graduate students to cross-register for one course at a Pittsburgh Council on Higher Education (PCHE) Institution. Full-time Carnegie Mellon degree students are eligible. The PCHE course may not count towards full-time status unless the student is enrolled in an inter-university program. There is no additional tuition charge, except for special course or laboratory fees. Carnegie Mellon students do not acquire status at the host institution, but are given library and bookstore privileges. Credit and grades are transferred directly to the home institution. Cross-registration is not applicable during the Summer Session(s) or during intersessions. Please see the Cross-College and University Registration PCHE Guidelines found at www.cmu.edu/policies/student-and-student-life/cross-college-university-registration.html for more information.

Auditing a Course

A graduate student may audit a course by completing the Course Audit Approval Form (found at www.cmu.edu/hub/forms.html) and obtaining permission of both: 1) the instructor or teaching department and 2) either the Research Advisor, Chair of the GAC, or the Graduate Programs Manager. Audited classes cannot be used to fulfill graduation requirements.
Adding a Course

During the early ADD period of each semester, students may add a course by registering online. After the ADD deadline, they may add a course by completing the Course Add, Switch Section or Change Units Request Form (found at www.cmu.edu/hub/forms.html) and obtaining permission of both: 1) the instructor or teaching department and 2) either the Research Advisor, Chair of the GAC, or the Graduate Programs Manager.

Dropping a Course

Students may withdraw from a course online through the DROP deadline toward the end of the semester. After that, in order to withdraw, the student must complete the Course Withdrawal Form, after which the course appears on the student’s transcript as withdrawn (W). The last day to withdraw from a class is the final day of classes. Complete the appropriate form (found at www.cmu.edu/hub/forms.html), obtaining permission of both: 1) the instructor or teaching department and 2) either the Research Advisor, Chair of the GAC, or the Graduate Programs Manager.

Grades

To remain in good academic standing, students are required to achieve at least a 3.0 QPA (rounded to the nearest tenth) at the end of the first year. First-year students must also successfully complete six course of which four must be graduate courses from the GAC proposed Core Elective List and up to two of the six can be undergraduate courses. Failure to meet these requirements is grounds for dismissal from the program. Under special circumstances, however, the Graduate Advisory Committee may determine that a student who has failed to meet any of these requirements of the program will be placed on probation. The specific requirements for remediation of probation will be determined by the Graduate Advisory Committee and communicated to the student and his/her advisor (if any). Final course grades will not be altered as a consequence of any remediation that may occur during the probationary period.

Laboratory Rotations

Laboratory rotations enable first-year students to investigate which laboratory and mentor best match their interests, and allow the faculty to determine whether students have the motivation, talent and background to be successful Ph.D. students in their labs. Additional benefits of rotations include expanding one's knowledge into other subdisciplines of biology and making important connections to the scientific community within the department. Rotations outside of the department allow students exposure to an even broader range of scientific interests and expertise.

- Graduate students are expected to complete three laboratory rotations during the first year.
The first rotation must be within the department.

At least two rotations must be in laboratories of faculty who hold a primary appointment in the Department of Biological Sciences.

Students may also rotate with Carnegie Mellon faculty in departments other than Biological Sciences. In certain cases, students may rotate with faculty at other institutions (e.g., the University of Pittsburgh) provided these faculty members have advising privileges and are associated with a departmentally approved interdisciplinary program.

Under special circumstances, students may complete only two rotations, a situation that is subject to approval by the Graduate Advisory Committee.

In special and rare cases, students may be permitted to carry out a fourth rotation in May, subject to faculty availability and approval by the Department Head. Students who remain without a Research Advisor after the end of the last rotation must withdraw from the program.

Timing

Each of the three rotations lasts 8-12 weeks. If necessary, a fourth rotation may be scheduled during May, subject to approval by the Department Head.

In 2016-2017:

<table>
<thead>
<tr>
<th>Rotation 1</th>
<th>Rotation 2</th>
<th>Rotation 3</th>
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<tbody>
<tr>
<td>Dates</td>
<td>Aug 29 - Nov 4</td>
<td>Nov 14 - Feb 17</td>
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<tr>
<td>Length of Rotation</td>
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<td>9 weeks</td>
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<tr>
<td>Presentations</td>
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<td>Feb 22</td>
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</table>

Students are required to spend substantial time (at least 20 hours/week) in each laboratory rotation. It is strongly recommended that students meet with their mentors and seek feedback about their performance. Any deviation from the assigned schedule or project must be discussed with the faculty rotation mentor.

Choosing Rotations

The “Introduction to Research” talks given by faculty members during the departmental Student Orientation and the annual retreat equip each first-year student to choose their rotations. Students notify the Chair of the Graduate Advisory Committee of their choices for each (three choices in order of priority). Final decisions are approved by the Department Head.

Oral Presentations

During the week following each rotation, students give brief, 7-minute presentations to the entire department that succinctly summarize their rotation projects. Each presentation
includes the background and rationale of the project, the question(s) asked and method(s) employed, the results and their relevance, and future work. As a primer to their rotation presentations, students will meet with Assistant Department Head for Graduate Affairs to go over the format and expectations of these talks.

**Expectations**

Students are expected to perform at a high level of intellectual engagement and physical effort in their projects. Typically, students spend at least 20 hours a week doing research in their rotation labs, including doing benchwork, reading, attending lab meetings, and participating in discussions. Expectations are determined in consultation with each rotation advisor and a Rotation Assessment form will be used. Students are encouraged to actively solicit feedback.

Lack of effort, poor performance or other circumstances during lab rotations may result in the student not finding a laboratory in which to conduct thesis research. A student who remains without a Research Advisor after the end of the last rotation must withdraw from the program.

**The Thesis Proposal Defense**

The Thesis Proposal Defense is intended to evaluate the ability of the students to: (1) identify important unanswered questions in various disciplines, (2) formulate scientific hypotheses or develop methods to solve those problems, (3) design and interpret scientific experiments, and (4) write clearly and persuasively.

Students prepare a **written thesis proposal** outlining the research they will conduct during their graduate work and defend this thesis proposal in an **oral examination**. The proposal should demonstrate understanding of the background material, project rationale, experimental design, methods underlying the proposed project and possible outcomes.

**Preparation**

Students join their labs in mid-May/June 1 and discuss possible projects, committee members, and timing with their advisors.

- A top priority for students during the first summer in the lab is to engage in intensive reading of the relevant literature in order to sharpen understanding of possible projects and their significance in the field.

- In early fall, **by October 1**, students meet with their committees to refine plans for the thesis project and to select a defense date. **One week** in advance of the pre-proposal committee meeting, each student provides a 1 page summary of the proposed project to the committee members. During the meeting, the student makes a 15-minute presentation of the project, using 3-5 slides for illustration.
Timing

The Thesis Proposal Defense takes place in the late fall/early winter of the second year, after students have spent 6-9 months working in the laboratory where they intend to carry out their thesis research.

- The deadline for completion of the written proposal is February 1; however, students are encouraged to schedule the defense as early as possible.
- The Chair of the Graduate Advisory Committee must approve any delays.
- The thesis proposal document should be submitted to the student’s committee at least one week before the oral defense.

Format of Written Proposal

The Thesis Proposal follows the style of an NIH grant proposal with a maximum length of 15 single-spaced pages (11-12 pt. font; page limit includes figures, but excludes Literature Cited).

1. Specific Aims (approximately 1 page)
   State concisely and realistically what your research is intended to accomplish and what hypotheses are to be tested. Write 1-2 general paragraphs introducing the subject and its relevance to biology, and then simply list three or four specific questions to be addressed. This section is critical because it provides a framework for the reader to appreciate the connections between sections of the proposal.

2. Significance (approximately 4-6 pages)
   Briefly sketch the background to the proposal, critically evaluate existing knowledge and specifically identify the gaps that the project is intended to fill, i.e., summarize the general knowledge of the field, and identify where your questions fit in. This important section displays your knowledge and understanding of the field and its current shortcomings. What are the major unanswered questions? Which ones can be answered with available tools? For which questions must new methods be developed?

3. Experimental Design and Methods (approximately 8-10 pages)
   Discuss in detail the experimental design and the procedures to be used to accomplish the specific aims of the project. Include potential difficulties and limitations of the proposed procedures, and alternative approaches to achieving the aims.

4. Literature Cited
   References should be cited within the text by first author and year (Smith et al., 1888; Wilson and Jones, 1919) and listed at the end of the proposal in alphabetical order by first author’s last name. The page limit does not include references.
Guidance

From their advisors, students may seek guidance and feedback about the general scientific directions that they wish to take, the design of experiments, and the clarity of their presentations. The written proposal, however, must be primarily the work of the student.

Proposal Preparation and Peer Review Course (03747, 4 units) is held in the fall of the second year. This mini course is designed to introduce second year students to the structure and preparation of a structured research proposal as well as formalize instruction in professional standards in research ethics, CV preparation, and scientific writing and data presentation. Course material is taken from actual grant proposals and previous years qualifying exam proposals, as well as primary research publications and faculty grant proposals. This course is in addition to other resources available within the department and at the university.

The Research Advisory Committee (RAC)

Each student chooses a Research Advisory Committee (RAC), which comprises the Research Advisor and at least two additional faculty members with relevant expertise in an allied field.

- **At least two members** of the committee must be faculty who hold primary appointments in the Department of Biological Sciences; the Research Advisor may be one of those two members.

- The RAC selects a chairperson (someone other than the Research Advisor) to oversee the Defense and completes the Thesis Proposal Defense form (found at [www.cmu.edu/bio/graduate/forms](http://www.cmu.edu/bio/graduate/forms)).

- The Thesis Proposal is defended in front of the RAC.

Outcomes

Students must achieve a “pass” in order to remain in the program. There are four possible outcomes of the Thesis Proposal Defense:

- “Pass” means that no corrections or only minor corrections are required and can be approved by the Research Advisor.

- “Conditional pass” means that certain sections may need to be rewritten more clearly or designed somewhat differently; changes should be made within one week, and the Research Advisory Committee should decide whether adequate changes have been made before a “pass” can be allowed.

- “Conditional fail” means that there are significant shortcomings that the student should be able to correct within a reasonable amount of time; a second oral defense must occur within one month.

- “Fail” means that the student may not defend again and must withdraw from the program.
Once the thesis defense is completed successfully (full pass), the student is considered All But Dissertation (ABD) and a Ph.D. Candidate.

**The Research Advisor and Committees**

**Selecting a Research Advisor**

To remain in the program, students must have a Research Advisor by the last day of spring semester of the first year. Students submit their first and second choices of advisor to the Chair of the Graduate Advisory Committee and the Department Head identify matches between students and advisors, typically by the first week in May. The final choice of Research Advisor requires approval by the Department Head. Students should be prepared to begin thesis research in their laboratories by mid-May.

Although usually a faculty member with a primary appointment in the Department of Biological Sciences, a Research Advisor may hold a faculty position in another Carnegie Mellon department or, rarely, at another institution, provided they have advising privileges in the Department of Biological Sciences and are associated with a departmentally approved interdisciplinary program such as the CNBC.

**Changing a Research Advisor**

A student may change advisors with the mutual consent of the new advisor and the Department Head. An advisor may request that a student leave the laboratory after verbal and written notification of the problems, which may include lack of effort, lack of research aptitude, failure to obey laboratory policy and procedure, failure to comply with university regulations, or behavior detrimental to the laboratory. Consideration of this action must be brought to the attention of the student, the Research Advisory Committee and the Department Head.

**The Research Advisory Committee**

Each student, together with the Research Advisor, selects and invites a Research Advisory Committee (RAC), which consists of at least three faculty members: the student’s Research Advisor (who serves as the Chair of the RAC) and at least two additional faculty members with relevant expertise in an allied field.

- At least two members of the RAC (including the Research Advisor) must be faculty who hold primary appointments in the Department of Biological Sciences.
- This committee administers the Thesis Proposal Defense and then meets with the student at least once a year to provide guidance and to monitor the overall progress of the research project. It is the shared responsibility of the Research Advisor and the student to schedule these meetings.
- One committee member from another department or institution must be added to the RAC for the Thesis Defense (see below), although students are encouraged to
include local, external members as early as possible to provide broader advice during their graduate career.

When the research work is completed, the student writes the formal dissertation and submits it to the RAC in preparation for the Dissertation Defense. Students should consult their advisors about writing the dissertation.

The Thesis Committee

The Thesis Committee consists of the RAC, with an additional member from outside the department invited to oversee the student’s dissertation defense.

The Research Advisory Committee Evaluation

Timing

Students are required to meet at least once a year with their Research Advisory Committee. To facilitate deeper discussion of research plans, students are encouraged to schedule their RAC meetings within a week after their Journal Club presentations.

Written Report to the Committee

Students are required to complete Parts 1-4 of the RAC Report Form (found at www.cmu.edu/bio/resources/forms) and return it along with their current CV to their respective RAC as well as to the Assistant Department Head for Graduate Affairs at least two days prior to the scheduled meeting. Students are encouraged to respond in brief, bulleted format, unless otherwise directed. Students are expected not to spend more than two hours preparing this document, with the exception of the research progress summary (Question 1 of Part I).

Note that this document will NOT become part of a student’s permanent record in the departmental office. However, the student, advisor, RAC, and the Assistant Department Head for Graduate Affairs may want to save a copy.

Documentation

A Research Advisory Committee Evaluation Form (found at www.cmu.edu/bio/resources/forms) should be completed after each RAC meeting and submitted to the Biological Sciences Graduate Programs Office. Completed forms are kept on file.
The Doctoral Dissertation and Graduation Procedures

As the final step in completing the requirements for the Ph.D. degree, each student must write and publicly defend a Doctoral Dissertation, which should make a significant contribution to science and contain material worthy of publication.

Timing

Before the sixth year of study, the department notifies the student, the Research Advisor and the Department Head that there is one year remaining in which the student must complete all requirements for the Ph.D. degree. A student who is on track to complete the Ph.D. degree on time should make an appointment with the Graduate Programs Manager as early as possible to discuss processes and procedures.

Dissertation

Students consult with their advisors about writing the doctoral dissertation, receiving ample feedback from their advisor and their laboratory group about format, style, and content. Typically, the writing process takes 1-2 months.

The student should distribute their completed dissertation to their thesis committee at least 2 weeks in advance of their dissertation defense.

The Thesis Committee

The Thesis Committee consists of the RAC, with an additional member from outside the department invited to oversee the student’s dissertation defense.

Public Presentation

The final examination consists of a public presentation of the work by the doctoral candidate followed by private questioning by the Thesis Committee to determine the student’s depth of knowledge and competency.

Graduation Materials

To graduate, students who have passed their dissertation defense must submit the following materials to the Biological Sciences Graduate Programs Office:

- PDF file of thesis
- one copy of the abstract and title page
- signed Signature Page of Thesis
- Ph.D. examination card: completed at defense by committee
Dissertation Checklist for Electronic Submission

These documents and forms are typically submitted within two weeks of the dissertation defense.

Graduation Ceremonies

- There are three May graduation ceremonies that pertain to doctoral students. Because there are no August or December commencement ceremonies, we encourage students to participate in the May events. Students who graduate in December should stay in contact with the Biological Sciences Graduate Programs Office for details.

- The Department of Biological Sciences Diploma Ceremony and Reception are usually held on the Saturday afternoon before the university-wide Sunday Commencement. Students who graduated in December, as well as those receiving their degrees in May are eligible and strongly encouraged to participate.

- The Doctoral Candidate Hooding Ceremony occurs on the Saturday evening before the university-wide Sunday Commencement. Doctoral students from all disciplines are individually recognized and hooded on stage. ONLY students who have successfully defended their dissertation before the May graduation date are eligible to be hooded. Any request for an exception should be directed to the Associate Dean for Graduate Affairs in the Mellon College of Science.

- The Carnegie Mellon University Commencement Ceremony is held on Sunday. Students who graduated in December, as well as those receiving their degrees in May or August, are eligible to participate.

Term Limits

Students are supported by the department for six years. This time period is exclusive of any official leave-of-absence that has been granted. It is assumed that the student, the Research Advisor, the Research Advisory Committee and the Biological Sciences Graduate Programs Office cooperate in a responsible manner to monitor the student's individual time limit and the progress required to meet the six-year deadline.

Petition Process

A student who is unable to complete the Ph.D. degree by the deadline may petition the Department Head for a one-semester extension of the six-year limit. To ensure timely consideration by the Head, petitions should be filed early in the first semester of the sixth year. Additional extensions may be requested on a semester-by-semester basis. Extension beyond the normal term limit of six years is granted only under the most extraordinary circumstances (e.g., student illness, adverse conditions for research, advisor-related difficulties, change in laboratory and so forth).

A petition for an additional semester should include the following:
an explanation of the factors causing the delay in completion of the degree

- a plan to resolve the factors causing the delay

- an attached letter from the student's Research Advisory Committee detailing the timetable for the next semester and stating that there is a reasonable expectation that the student will complete the work within the next semester

If the petition is granted, it is expected that the timetable established in the petition will be followed under the guidance of the student’s Research Advisor and Research Advisory Committee. If the petition is denied, the student is no longer a doctoral candidate and must leave the program.

Additional Requirements

Teaching

Students are required to serve as graders and teaching assistants (TAs) during their tenure in the department. Each student must earn a minimum of 10 points in order to graduate. A flexible point system, subject to change, enables an equitable distribution of work; typically, points are awarded according to the following scale: 1 point = 4 to 5 hours/week or 60-75 hours/semester.

The assignments may require the student to assist the faculty instructor in preparing materials for class, grading student work, leading review sessions, holding office hours, and bookkeeping. No student is required to serve as the instructor for a course or have final judgment on course grades. Assignments are made in July and are subject to approval by the Department Head.

In addition, the Mellon College of Science requires that all TAs complete the online Preventing Workplace Harassment training course which is designed to help TAs understand what constitutes harassment, how to avoid engaging in behavior that could be considered harassing, and what to do if you witness or experience harassment. The online training is may be found at www.cmu.edu/hr/learning/eLearning/sha-training.html.

English Language Proficiency

Graduate students are required to have a certain level of fluency in English before they can instruct in Pennsylvania, as required by the English Fluency in Higher Education Act of 1990. Through this Act, all institutions of higher education in the state are required to evaluate and certify the English fluency of all instructional personnel, including teaching assistants and interns. The full university policy can be viewed at (www.cmu.edu/policies/documents/EngFluency.html). All international students whose native language is not English are required by Pennsylvania law to pass an oral International Teaching Assistant test (ITA test) before they can serve as TAs. The Intercultural Communication Center (ICC) administers this test and the results are monitored by the Provost’s Office. The ICC website is www.cmu.edu/icc.
Upon arriving at Carnegie Mellon, the English proficiency of each international student is assessed by the ICC, which then recommends courses and tutoring. Only with the approval of the ICC is a student allowed to take the ITA test, which is scored with the following categories: Pass, Restricted I, Restricted II, and Not Qualified. The ITA Test Scoring Guide explanation may be found at www.cmu.edu/icc/testing/ITA/ITAscoring.shtml. Students who serve as teaching assistants (TAs), but do not attend this required work violate the Carnegie Mellon policy.

Because the Department of Biological Sciences believes that excellent English skills are essential, we strongly recommend that students whose native language is not English achieve a **PASS by the end of their second year.**

**Student Academic Responsibilities**

Student responsibilities include consistent attendance and participation at the following activities:

- The Elizabeth Jones Annual Retreat in its entirety
- The Departmental Seminar (03-750) attendance
- Meetings with the Seminar speaker
- The Departmental Journal Club (03-755) attendance and presentation

**Other Student Responsibilities**

Second-year students are expected to maintain representation in the Graduate Student Assembly and be responsible for the financial records of the graduate students.

**Class Representatives**

The Class Representatives (consisting of a volunteer representative from each Ph.D. and M.S. class) were established to help facilitate the flow of information between the Biology Graduate Programs Office and the graduate students. The Class Representatives, Graduate Programs Manager meet approximately 2-3 times a year to discuss various issues initiated by either the Biology Graduate Programs Office or by the students through their Class Representatives. This system is an efficient and effective way for the student body to voice its concerns and to receive information. In addition, class representatives may at any time contact the Graduate Ombudsperson Assistant Department Head with any concerns they or their peer group might have.

**Honorary Societies**

Graduate students are encouraged to belong to professional societies such as Phi Kappa Phi and Sigma Xi, and are nominated, if qualified, by the department. They are also urged to join the societies specific for their subdiscipline.
Committee Work

To be a good citizen of the department, participation in committees is essential. Students are encouraged to work in one or more of the following committees:

- The Seminar Committee
- Student-Invited Speaker Series (SISS) Committee
- The Graduate Student Host Committee
- The Recruiting Committee
- The MCS Graduate Student Action Committee (GSAC)
- The Graduate Student Assembly

In addition, students may request to provide occasional help ad hoc (e.g., retreat, Virtual Tour, website). Student participation in any of the above is very much appreciated.

Status

Failure to carry out research, training, or teaching assistant responsibilities, an unexcused absence, or other unprofessional behavior is grounds for dismissal from the Ph.D. program. Such cases will be reviewed by the Department Head and the Chair of the Graduate Advising Committee.

First-year students must be registered for at least 48 units during each of the first two semesters to be considered full-time; all other students must be registered for at least 36 units. Any questions about registration should be directed to the Biological Sciences Graduate Programs Office or Enrollment Services (the HUB). Students who need to change their status must speak with their advisor; the Department Head approves all changes.

ABD Status

Students are certified All But Dissertation (ABD) when they have completed their required coursework and passed their Thesis Proposal Defense, typically toward the end of their second year. When notified by the Biological Sciences Graduate Programs Office, they sign the All But Dissertation Status Agreement form.

Study In Absentia

Students who are ABD but are not present at the university while they are writing their dissertation are considered in absentia (ABS) and do not receive financial support from the department. International students on visas may not be in absentia. For more information refer to www.cmu.edu/policies/DSS.html.
Leave of Absence

Students who must delay their studies for personal, medical or academic reasons may do so with a Leave Of Absence (LOA; leaving the university temporarily with a commitment to return). Students must contact their Research Advisor and/or the Chair of Graduate Advisory Committee to discuss their plans and complete the appropriate Leave Of Absence form. The reentry back into the program will require approval from the Department Head. Although the student’s place in the program is held during the time of leave, there is no financial support. For more information refer to www.cmu.edu/policies/documents/StLeave.html.

Withdrawal

Students who need to withdraw from the university (leaving the university with no intention of returning) for personal, medical or academic reasons must contact their Research Advisor and/or the Chair of Graduate Advisory Committee to discuss their plans and fill out the appropriate Withdrawal form. For more information refer to www.cmu.edu/policies/documents/StLeave.html.

If a student is dismissed from a lab, that student may seek another lab with the permission of the Department Head. If the student elects not to do so, or if another lab is not found, then the student is automatically dismissed from the doctoral program. Assistance with transitioning is available; please contact the Chair of Graduate Advisory Committee.

Terminal M.S. Degree

The Department of Biological Sciences does not have a formal program leading to an M.S. in Biological Sciences degree. Students who have been making significant research progress towards their doctorate but are unable to continue in the program may be eligible to receive a M.S. degree if this is deemed appropriate by their Research Advisor and the Department Head. Each case is considered on an individual basis.

Section 2. Resources

Academic Advising

Orientation

There are two orientations for incoming graduate students. Both events take place in the weeks preceding the beginning of the fall semester.

- The University-wide orientation organized by the Graduate Education Office introduces the students to university resources and services.
- The Departmental Orientation introduces them to departmental faculty, research, administration, policies and services. The Biological Sciences Graduate Programs Office arranges for students to receive the necessary information for enrollment, registration and timelines.
Advising for Coursework

Before both the fall and the spring semesters, each first-year student meets individually with the Graduate Advisory Committee to select courses. After the first year, the Research Advisor and the Research Advisory Committee may recommend additional coursework.

Monitoring Progress

The Research Advisory Committee meets with the student at least once a year, providing guidance and monitoring the student’s overall progress. The committee completes a written report (Research Advisory Committee Evaluation Form) after each annual review of the student’s work. The student is encouraged to review this written report and discuss any problems with the Research Advisor. The form is to be returned to the Graduate Programs Office.

Students who have specific concerns about their progress are urged to speak with their Research Advisor and/or members of the Research Advisory Committee. Alternatively, the Chair of Graduate Advisory Committee and the Department Head are available for counsel.

Notification of Inadequate Progress Toward the Degree

If the Research Advisory Committee determines that the student is making inadequate progress, then together the student and the RAC must formulate a plan to correct any deficiencies. Continued failure to make satisfactory progress is grounds for dismissal from the program.

Student Rights in Academic Conflicts

A student wishing to appeal a departmental disciplinary decision should first speak with the faculty member (instructor or Research Advisor) directly involved. If the student is uncomfortable approaching the faculty member, they may speak with the Assistant Department Head for Graduate Affairs who serves as Graduate Ombudsperson for Biological Sciences, who will, at the student’s request, keep all conversations confidential. Students can also speak with one or more members of the Graduate Advisory Committee if they feel the need. If the conflict cannot be resolved on this level, the student is referred to the Department Head who, with the student’s permission, meet with both the student and the faculty member involved. The student may also meet with the MCS Ombudsperson.

A student who is not satisfied with the achieved resolution may file a formal written appeal to both the Associate Dean for Graduate Affairs and the Dean of the Mellon College of Science. The policies and procedures governing this process are explained in detail in the Carnegie Mellon Graduate Student Handbook section entitled “Academic Standards and Actions.” The Mellon College of Science Grievance Procedures are available at www.cmu.edu/mcs/policies/grievance.html.
University Graduate Student Ombudsperson

Any grievance that cannot be resolved at the departmental level should be referred to the Assistant Vice Provost for Graduate Education, Dr. Suzanne Laurich-McIntyre (suzannel@andrew.cmu.edu)

Career and Professional Advising

Career Advising

Students meet with Assistant Department Head for Graduate Affairs at least once a year to discuss their career goals and to define the path best suited for these goals. The objective will be for the students and the Assistant Department Head for Graduate Affairs to use resources from the NIH and other established institutes to generate and maintain a plan, including a timeline, to ensure that the student is in the best position to be placed in a postdoctoral lab or find a job upon graduation. Students are strongly encouraged to use the myIDP tool available for free at http://myidp.sciencecareers.org in order to explore and document suitable career pathways in close relationship to their individual skills and broad interests. As part of this documented meeting with the Assistant Department Head for Graduate Affairs, students will submit an updated CV as well as the RAC form one week in advance. In the months closer to graduation, students are encouraged to meet with the Assistant Department Head for Graduate Affairs for discussing their specific options, and for reviewing their CV, resume, cover letter, and any other application material. Students may also request informational networking with program alumni or potential employers who have departmental connections, as well as practice interviews prior to any on-site job interview.

Scientific Speaking Skills

Students receive formal training in scientific speaking twice during their PhD tenure. First, students get a quick primer on presentations prior to the first rotation talks in the Fall semester of their first year. Second, during the Fall semester of the third year, prior to the first Journal Club research talk, students will enroll in 08748, 3 units course on Scientific Speaking and Peer Review

This course, which is instructed by the Assistant Department Head of Graduate Affairs, covers topics including, but not limited to, data organization, choice of content based on audience, powerpoint and graphic design choices, charts and graphs representation, use of animation, fonts and color schemes, body language, overcoming stage-fear, and compensation for accent. Each student’s upcoming Journal Club talk will be used as an example to find out their strengths and weaknesses in these areas, and constructive feedback will be provided for improvement. Each talk will be recorded on camera and students will get input from the instructor and their peers.

In addition, further training sessions will be arranged as needed or upon request. Students are also encouraged to participate in seminars and workshops provided by various resources on campus, such as Public Communication for Researchers (PCR) and the Global Communication Center (GCC).
Scientific Writing Skills

Students receive formal training in scientific writing during fall semester of their second year. 03-747 – Proposal Preparation and Peer Review is a mini course is designed to introduce second year students to the structure and preparation of a structured research proposal as well as formalize instruction in professional standards in research ethics, CV preparation, and scientific writing and data presentation. Course material is taken from actual grant proposals and previous years’ qualifying exam proposals, as well as primary research publications and faculty grant proposals. The course is highly interactive, and students are required to participate in review of each others’ work throughout the duration of the course. Coursework is expected to form the basis of the Ph.D. qualifying exam proposal in the winter of the second year.

Career and Professional Development Center (CPDC)

The Career and Professional Development Center (CPDC - www.cmu.edu/career) provides students access to campus job fairs, workshops on a variety of topics. In addition on-site career consultants can help students with resumes and mock interviews. Students are encouraged to avail of these services via TartanTRAK.

Training and Support Services

Office of International Education (OIE)

The Office of International Education (OIE - www.cmu.edu/oie) provides many important services to international students, including advice on immigration, social and cultural issues. These services are explained during the University Graduate Student Orientation in August before the fall semester begins.

Intercultural Communication Center (ICC)

The Intercultural Communication Center (ICC - www.cmu.edu/icc) offers non-native English speakers language support and cross-cultural training, and helps TAs develop fluency.

Global Communication Center (GCC)

The Global Communication Center (GCC - www.cmu.edu/gcc) provides support for effective communication to native and non-native speakers. Their expertise includes oral, visual, and written communication.

Libraries

There are three university libraries (www.library.cmu.edu) that provide research support for science students: the Roger Sorrells Engineering and Science Library, the Hunt Library and the Mellon Institute Library. The Mellon Institute Library contains reference materials for
biology, biochemistry, chemistry, environmental sciences and industrial health.

**Teaching Support and Opportunities**

Students wishing to gain additional teaching experience and support may join the Sciences Teaching Club [www.cmu.edu/bio/teaching-club](http://www.cmu.edu/bio/teaching-club). In addition, they should avail themselves of Carnegie Mellon’s Eberly Center for Teaching Excellence ([www.cmu.edu/teaching/eberrycenter](http://www.cmu.edu/teaching/eberrycenter)), which sponsors courses on preparing and presenting course lectures, understanding students, formulating syllabi, writing exams and other topics. The university also sponsors seminars on teaching for TAs and students considering careers in academic settings.

**Computing Services**

Many general computer questions can be resolved quickly by contacting the Help Center (412-268-HELP [8-4357] or advisor@andrew.cmu.edu).

If the Help Center cannot resolve a problem remotely, the departmental System Administrator can provide hands-on technical support for computers, printers and software. To place a service request to the System Administrator, email bio-support@andrew.cmu.edu. For emergencies, call the Systems Administrator directly at 8-4585.

In addition to general technical support, the Systems Administrator can help with computer purchases, software purchases and computer retirement and disposal.

**Enrollment Services (the HUB)**

The HUB provides a range of enrollment services. Information regarding the academic calendar, forms, schedule of classes, online registration, graduation procedures and other issues can be found on the website ([www.cmu.edu/hub](http://www.cmu.edu/hub)). In addition, they are the only University office that can provide an official letter of enrollment, official transcript and enrollment verification. Enrollment verification can be requested online through the HUB at [http://www.cmu.edu/hub/transcripts/verifications/request.html](http://www.cmu.edu/hub/transcripts/verifications/request.html).

**Special Interest Groups**

Various organizations exist to provide support for groups underrepresented in science. Information about these groups can be obtained from the Office of Graduate Education ([www.cmu.edu/graduate](http://www.cmu.edu/graduate)).

**Honorary Societies**

Graduate students are encouraged to belong to professional societies such as Phi Kappa Phi and Sigma Xi, and are nominated, if qualified, by the department. They are also urged to join the societies specific for their subdiscipline.
Student Organizations

Students are encouraged to participate in one or both of the following departmental student-driven organizations:

- The Sciences Teaching Club
- Career Club

Students’ involvement complements their academic development as well as their professionalization.

Graduate Student Lounge (MI 729)

PhD students may use the lounge to spend time between classes, do group projects, or just hang out.

Compliance Issues

Environmental Health and Safety Training

Each graduate student in the Department of Biological Sciences must complete laboratory, chemical and biological safety training that is presented by Environmental Health & Safety (www.cmu.edu/ehs) during the Departmental Graduate Student Orientation prior to beginning regular coursework; students who work with or near radioactive substances must undergo radiation safety training (www.cmu.edu/ehs/radiological/training.html).

Sexual Harassment Training

The Mellon College of Science requires that all graduate students receive sexual harassment training, which can be taken online www.cmu.edu/hr/professional-development/learn/workplace-training.html. The sexual harassment policy is available at www.cmu.edu/policies. To speak to a sexual harassment advisor, please contact the university sexual harassment hotline at 412-268-7445.

Animal Training

Animal training is required for any individual who is listed on an animal protocol. Currently, training is offered through the University of Pittsburgh Institutional Animal Care and Use Committee (IACUC) and must be completed before research studies involving laboratory animals can begin.

IACUC Modules include:

- Purpose Bred Mice and Rats in Research, Testing and Teaching (general)
- Large Animal Research and Training (general)
Species-specific modules: Cat, Dog, Ferret, Rabbit, Ruminant, Swine, Nonhuman Primates, Guinea Pig, and Hamster

Note: Users are required to take the Purpose Bred Mice and Rats in Research, Testing and Teaching (general) module or the Large Animal Research and Training (general) module and All applicable species-specific modules as per protocol.

For more information on training, please contact: IACUC Education and Compliance Office at 412-383-1754 or iacuc@pitt.edu.

Intellectual Property

Students are required to comply with the University Policy on Intellectual Property (www.cmu.edu/policies/documents/IntellProp.html). This policy was developed to encourage and support the generation and dissemination of new knowledge by faculty, staff and students. It applies to patentable inventions, copyrightable material or trade secrets, works of art, and inventions and creations that might be considered proprietary.

Ethics

At all times, students are expected to conform to the highest ethical standards; consequences for academic or scientific misconduct are severe and may include dismissal from the program. The University Policy on Academic Integrity can be found at www.cmu.edu/policies/documents/AcademicIntegrity.html. Carnegie Mellon’s Office of Research Integrity and Compliance is sponsoring a Responsible Conduct of Research (RCR) Seminar Series to provide participants with an introduction to topics typically included in RCR curriculum.

All students are required to take the Biomedical Responsible Conduct of Research Course provided by the Office of Research Integrity and Compliance.

You may use your Andrew ID to login via SOS at https://www.citiprogram.org

Upon completion the certificate should be submitted to Business Manager for documentation. In many instances, grant funding is contingent upon successful completion of RCR training, and consequences for not complying can be severe.
Section 3: Financial Support and Benefits

Residency Requirements
University regulations require at least one year of full-time residency in order to be a candidate for a doctoral degree. Residency means that the student lives in the Pittsburgh area and is engaged in course work and/or research on a full-time basis at Carnegie Mellon.

Period of Support
The department guarantees support for each student who is making satisfactory progress for a maximum of six years. Support from training grants, research grants, fellowships, or departmental funds may require students to participate in additional activities stipulated by the source of funds. Students who are in absentia or on leave of absence are not funded by the university or the department.

Stipend and Tuition
Students supported by the department or from a faculty members’ grant receive a stipend for 12 months throughout the year, payable on the 15th and the last working day of each month. To be eligible for financial support, students are required to make satisfactory academic progress and fulfill any requested teaching, seminar or coursework assignments. All graduate students supported by the department (i.e., students not holding fellowships) receive the same stipend, regardless of year entering the program, teaching responsibilities or laboratory assignment. Differences in tax withholding are not equalized by the department.

Students also receive complete tuition remission for fall and spring semesters ($48,000 in 2016-2017). Payment of tuition for any summer classes, including those audited, is the responsibility of the student or the Research Advisor. Tuition information is available at www.cmu.edu/hub/tuition/graduate/mcs.html.

The tax status of stipends, tuition remissions and book and travel allowances is described in the Carnegie Mellon Graduate Student Handbook. Student stipends are taxable by the federal government, and may depend on student citizenship or residence status. Questions concerning tax matters should be directed to the CMUWorks Service Center at cmu-works@andrew.cmu.edu or 412-268-4600.

Please note that the first paycheck arrives on August 31; thus, each student should bring enough money to pay for all deposits.

Fees
The department pays the Student Activity Fee ($210 in 2016-2017), the Transit Fee ($180 in 2016-2017), and the Technology Fee ($400 in 2016-2017). Fee information is available at www.cmu.edu/hub/tuition/graduate/mcs.html.
Health Insurance and Services

Carnegie Mellon has a Student Health Insurance policy requiring full-time, degree seeking students to carry adequate medical insurance, unless you are enrolled as the dependent, partner/spouse or principal in an employer or government-sponsored insurance plan” (see the Carnegie Mellon University Student Health Insurance Policy at www.cmu.edu/policies/documents/StudentInsurance.htm).

The university offers one level of health plan; the Department of Biological Sciences provides an allowance for health insurance plan for its students, which is disbursed in the monthly paycheck from September through May. It is the responsibility of each student to make arrangements with Student Health Services to either pay for their insurance at the beginning of the semester, or elect a payment plan over the course of the academic year. Optional dental and vision insurance are also offered, although the department does not provide support for these. Questions about the department’s health insurance support can be directed to the Assistant Business Manager. More information is available at the Student Health Services website www.cmu.edu/health-services or by email to shinsure@andrew.cmu.edu.

The Student Health Services Center provides general and some specialized medical care at a discount or free of charge to all full-time Carnegie Mellon students. There are fees for laboratory tests and prescription drugs at the on-site pharmacy. Information can be found at www.studentaffairs.cmu.edu/HealthServices.

Outside Employment

Outside employment or consulting while a graduate student in the Department of Biological Sciences is not permitted.

Summer Employment

Students receive their stipends on a monthly basis, twelve months per year; thus, summer employment is prohibited.

Change in Financial Support

Changes in financial support are conveyed in writing to the student at least four weeks ahead of time. Students requiring a change in tax withholding or local municipality should notify the Assistant Business Manager.

Outside Fellowships

Students are encouraged to obtain their own source of funding through fellowships such as those sponsored by the National Institutes of Health (NIH) or the National Science Foundation (NSF). The university’s Fellowships and Scholarships Office (FSO) maintains a database of financial aid and fellowship information (www.cmu.edu/fsf).
For submission, all applications must go through the Business Manager’s Office, that is, the Business Manager must be notified in advance of the application submission and must receive a full copy of the application when it is completed.

All fellowships are administered by the department and the university. Students whose award amount is lower than the current stipend level receive a supplement to bring their stipend up to the departmental level; students receive the full fellowship amount if it exceeds the departmental stipend level.

Awards

**Departmental**

Graduate students who show extraordinary dedication to teaching are eligible for the *Department of Biological Sciences Annual Graduate Student Teaching Award*. Nominations are solicited from instructors in the early spring; criteria for consideration include: 1) preparation and knowledge of material; 2) dedication and responsiveness to students and instructor; 3) initiative; and 4) general work ethic, including attendance in class and office hours. The award is given during the yearly Graduate and Professional Appreciation Week.

Graduate students who perform extraordinary service to departmental life are eligible for the *Department of Biological Sciences Annual Service Award*. Nominations are solicited from the department in early spring and the award is given during the yearly Graduate and Professional Appreciate Week.

The Semon H. Stupakoff Fellowship began in 2012 and was named after alumnus Semon Stupakoff. The fellowship, intended for research enrichment, is awarded to two Biological Sciences Ph.D. students annually. The awardees will be selected based upon their record of research accomplishment and the projected research impact of their use of the award funds.

**College and University**

Graduate students are eligible for the *Guy C. Berry Research Award*, which is awarded to students demonstrating excellence in research with the MCS. ([www.cmu.edu/mcs/grad](http://www.cmu.edu/mcs/grad))

Graduate student Teaching Assistants are also eligible for teaching awards at both the college and the university level.

- The *Mellon College of Science Hugh D. Young Graduate Student Teaching Award* ([www.cmu.edu/mcs/grad](http://www.cmu.edu/mcs/grad))
- The *Carnegie Mellon Graduate Student Teaching Award* ([www.cmu.edu/graduate/programs-services/](http://www.cmu.edu/graduate/programs-services/))
Attending Conferences

Students who are funded through outside agencies may receive an allowance of travel money for this purpose. The Department of Biological Sciences sponsors two annual competitions for the Dr. Margaret Carver Biological Sciences Graduate Student Travel Award. The two deadlines are May 1 and November 1. For other students, reimbursement of expenses is at the discretion of the Research Advisor.

Students are encouraged to join the scientific societies pertinent to their area of research. Many of these societies have local chapters and student memberships at reduced rates, and may also have funds available to students to defray expenses to attend society meetings.

University Research Funding

The Office of the Assistant Vice Provost for Graduate Education administers two types of professional development funding for graduate students university-wide. The GSA Graduate Student Conference funding and the GradUate Small Project Help (GUSH) are supported by the Graduate Student Assembly (GSA) and the Provost’s Office.

- **Conference Funding Awards**, $500 per student, provide the means for graduate students to 1) make presentations at key conferences/exhibitions in their fields or 2) simply attend conferences and learn about the broader field of study to which they belong.

- **GUSH Research Funding awards**, $750 per student, defray costs incurred in the completion of research required for a graduate degree at Carnegie Mellon.

For more information please see the University Graduate Education website at [http://www.cmu.edu/graduate/professional-development/index.html](http://www.cmu.edu/graduate/professional-development/index.html).

Assistance for Individuals with Disabilities

The Office of Disability Resources at Carnegie Mellon University has a continued mission to provide physical and programmatic campus access to all events and information within the Carnegie Mellon community. We work to ensure that qualified individuals receive reasonable accommodations as guaranteed by the Americans with Disabilities Act (ADA) and Sections 503 and 504 of the Rehabilitation Act of 1973.

Students who would like to receive accommodations must submit a [Voluntary Disclosure of Disability Form](http://www.cmu.edu/graduate/professional-development/index.html) to [access@andrew.cmu.edu](mailto:access@andrew.cmu.edu) to begin the interactive accommodation process.

For more information please see the [Disability Resources website](http://www.cmu.edu/graduate/professional-development/index.html). Students with disabilities are encouraged to self-identify with Equal Opportunity Services by contacting Larry Powell, 412-268-2013, [lpowell@andrew.cmu.edu](mailto:lpowell@andrew.cmu.edu) to access the services available at the university and initiate a request for accommodations.
Safeguarding Educational Equity Policy Against Sexual Harassment and Sexual Assault

Sexual harassment and sexual assault are prohibited by CMU, as is retaliation for having brought forward a concern or allegation in good faith. The policy can be viewed in its entirety at http://www.cmu.edu/policies/administrative-and-governance/sexual-harassment-and-sexual-assault.html. If you believe you have been a victim of sexual harassment or sexual assault, you are encouraged to make contact with any of the following resources:

- Sexual Harassment Advisors, found in appendix A of the Policy Against Sexual Harassment and Sexual Assault
- Survivor Support Network, found in appendix B of the Policy Against Sexual Harassment and Sexual Assault
- Sexual Harassment Process and Title IX Coordinators, found in section II of the Policy Against Sexual Harassment and Sexual Assault
- University Police, 412-268-2323
- University Health Services, 412-268-2157
- Counseling & Psychological Services, 412-268-2922

Student Maternity Accommodation Protocol

Students whose anticipated delivery date is during the course of the semester may consider taking time away from their coursework and/or research responsibilities. All female students who give birth to a child while engaged in coursework or research are eligible to take either a short-term absence or formal leave of absence. Students in coursework should consider either working with their course instructor to receive incomplete grades, or elect to drop to part-time status or to take a semester leave of absence. Students engaged in research must work with their faculty to develop plans for the research for the time they are away.

Students are encouraged to consult with relevant university faculty and staff as soon as possible as they begin making plans regarding time away. Students must contact the Office of the Dean of Student Affairs to register for Student Maternity Accommodations. Student will complete an information form and meet with a member of the Dean's Office staff to determine resources and procedures appropriate for the individual student. Planning for the student's discussion with her academic contact(s) (advisor, associate dean, etc.) will be reviewed during this meeting. To review the Student Maternity Accommodation Protocol in its entirety go to www.cmu.edu/graduate/programs-services/maternity-accommodation-protocol.html.
**Vacations**

Ph.D. students in the department are expected to continue with their research during academic breaks (including summer months) with the exception of official university holidays. Paid time off for personal business or vacations generally is not included as part of a graduate’s financial support. A supported graduate student who wants to take a short break must get approval for that break from their advisor and, if required by the terms of the student’s support package, must make up the work. First-year students constitute a special case and must wait until they are assigned to a laboratory permanently (in May of their first year) to plan a vacation.

Supported graduate students wishing to take longer periods of personal time off must do so without financial support. The advisor notifies the department’s Business Office of any such arrangements so than an appropriate adjustment in the student’s support can be processed.

The timing and length of any time off must be approved in advance by the advisor before travel commitments are made. Before absences, the student must discuss with the supervising faculty member ways to ensure that their progress is satisfactory and that research and teaching responsibilities can be met satisfactorily. Students with TA responsibilities are expected to be on campus to attend any required TA training and at the end of the semester to finish grading or other duties assigned by the department.

**Emergency Loans**

All students regardless of their program are eligible for the Emergency Student Loan, which is an interest-free and emergency base loan repayable within 30 days. It is available through the Office of the Dean of Student Affairs; students may apply for the loan by stopping in the Student Affairs Office or by calling 412-268-2075 for an appointment.

First semester graduate students who receive a stipend are eligible for the Graduate Student Transition Loan. The loan is available to assist with transition costs and may not exceed 75% of the student’s monthly gross stipend (exclusive of tuition). The loan must be requested prior to September 15 of the academic year, and it will be repaid through payroll deductions in the months of September, October, November and December. Students may apply for the loan by stopping at the HUB or by calling 412-268-8268 for an appointment.

**Housing**

Housing Services offers on-campus housing to a limited number of graduate students. All graduate resident applicants must be enrolled as full-time students for the academic year. For more information, see the Community Housing section on the On-Campus Graduate Housing website.

Many graduate students live in off-campus houses and apartments in the many neighborhoods surrounding the university. Housing Services does provide some local area information, resource links, and CMU Off- Housing (a list of apartments posted by area landlords), which can be found the Community Housing section.

The office also offers limited transitional housing for students while searching for an apartment before the beginning of the academic year.
Facilities and Equipment

The department owns and maintains equipment such as centrifuges and autoclaves for departmental members’ use. It is the responsibility of each graduate student to be trained in proper use and maintenance of this equipment. It is also imperative that logs are signed and any problems noted. Individual laboratories are liable for repair and replacement costs if their personnel misuse equipment.

Phone use

Phone use in the department is restricted to business calls only. Occasional local personal calls are permitted, but personal long-distance and international calls are strictly prohibited.
Appendix A: University-wide Resources

Key Offices for Graduate Student Support

Office of the Assistant Vice Provost for Graduate Education
www.cmu.edu/graduate; grad-ed@cmu.edu

The Office of the Assistant Vice Provost for Graduate Education, AVPGE, directed by Suzie Laurich-McIntyre, Ph.D., Assistant Vice Provost for Graduate Education, provides central support for graduate students in a number of roles. These include: being an ombudsperson and resource person for graduate students as an informal advisor; resolving formal and informal graduate student appeals; informing and assisting in forming policy and procedures relevant to graduate students; and working with departments on issues related to graduate students and implementation of programs in support of graduate student development.

The Office of the AVPGE often partners with the division of Student Affairs to assist graduate students with their Carnegie Mellon experience. Senior members of the student affairs staff are assigned to each college (college liaisons) and are often consulted by the Assistant Vice Provost for Graduate Education and departments on an individual basis to respond to graduate student needs.

The Office of the Assistant Vice Provost for Graduate Education (AVPGE) offers a robust schedule of professional development opportunities. Some are geared towards a specific population (master’s students, PhD students at the beginning of their program, graduate students seeking tenure track positions, etc.) and others are open to all graduate students (time management, balancing, staying healthy). A full schedule of programs can be found at: http://www.cmu.edu/graduate/.

The Office of the AVPGE also coordinates several funding programs, and academically focused seminars and workshops that advise, empower and help retain all graduate students, particularly graduate students of color and women in the science and technical fields. The fundamental goals of our programs have been constant: first, to support, advise and guide individual graduate students as they work to complete their degrees; second, to contribute to the greatest degree possible to the diversification of the academy. Visit the Graduate Education website for information about:

- Conference Funding Grants
- Graduate Small Project Help (GuSH) Research Funding
- Graduate Student Professional Development: seminars, workshops and resources
  - Graduate Women Gatherings (GWG)
- Inter-university Graduate Students of Color Series (SOC)

Office of the Dean of Student Affairs
www.cmu.edu/student-affairs/index.html

The Office of the Dean provides central leadership of the metacurricular experience at Carnegie Mellon. The offices that fall under the division of Student Affairs led by Vice President and Dean of Student Affairs Gina Casalegno, include (not an exhaustive list):
Graduate students will find the enrollment information for Domestic Partner Registration and Maternity Accommodations in the Office of the Dean of Student Affairs and on the website. The Office of the Dean of Student Affairs also manages the Emergency Student Loan (ESLs) process. The Emergency Student Loan service is made available through the generous gifts of alumni and friends of the university. The Emergency Student Loan is an interest-free, emergency-based loan repayable within 30 days. Loans are available to enrolled students for academic supplies, medication, food or other expenses not able to be met due to unforeseeable circumstances. The Office of Integrity and Community Standards also provides consultation, support, resources and follow-up on questions and issues of Academic Integrity: www.cmu.edu/academic-integrity.

Assistance for Individuals with Disabilities
www.cmu.edu/hr/eos/disability/

Students with disabilities are encouraged to self-identify with Equal Opportunity Services by contacting Larry Powell, 412-268-2013, lpowell@andrew.cmu.edu to access the services available at the university and initiate a request for accommodations.

Eberly Center for Teaching Excellence & Educational Innovation
www.cmu.edu/teaching

Support for graduate students who are or will be teaching is provided in many departments and centrally by the Eberly Center for Teaching Excellence & Educational Innovation. The Eberly Center offers activities for current and prospective teaching assistants as well as any graduate students who wish to prepare for the teaching component of an academic career. The Center also assists departments in creating and conducting programs to meet the specific needs of students in their programs. Specific information about Eberly Center support for graduate students can be found at: www.cmu.edu/teaching/graduatestudentsupport/index.html.

Carnegie Mellon Ethics Hotline

The health, safety and well-being of the university community are top priorities at Carnegie Mellon University. CMU provides a hotline that all members of the university community should use to confidentially report suspected unethical activity relating to financial matters, academic and student life, human relations, health and campus safety or research.

Students, faculty and staff can anonymously file a report by calling 877-700-7050 or visiting www.reportit.net (user name: tartans; password: plaid). All submissions will be
reported to appropriate university personnel.

The hotline is NOT an emergency service. For emergencies, call University Police at 412-268-2323.

**Graduate Student Assembly**
[www.cmu.edu/stugov/gsa/index.html](http://www.cmu.edu/stugov/gsa/index.html)

The Carnegie Mellon Student Government consists of an Executive Branch and a Legislative Branch. This is the core of traditional student government, as governed by the Student Body Constitution. The Executive Branch serves the entire student body, graduate and undergraduate, and consists of one president and four vice-presidents. The Legislative Branch for graduate students, The Graduate Student Assembly (GSA) passes legislation, allocates student activities funding, advocates for legislative action locally and in Washington D.C. on behalf of graduate student issues and needs, and otherwise acts on behalf of all graduate student interests. GSA also contributes a significant amount of funding for conferences and research, available to graduate students through application processes managed by the Office of the Assistant Vice Provost for Graduate Education. GSA also plans various social opportunities for graduate students and maintains a website of graduate student resources on and off-campus, www.cmu.edu/stugov/gsa/Resources. Each department has representation on GSA and receives funding directly from GSA’s use of the student activities fee for departmental activities for graduate students. The department rep(s) is the main avenue of graduate student representation of and information back to the graduate students in the department.

**Intercultural Communication Center (ICC)**
[www.cmu.edu/icc/](http://www.cmu.edu/icc/)

The Intercultural Communication Center (ICC) is a support service offering both credit and non-credit classes, workshops, and individual appointments designed to equip nonnative English speakers (international students as well as international students who attended high school and/or undergraduate programs in the U.S.) with the skills needed to succeed in academic programs at Carnegie Mellon. In addition to developing academic literacy skills such as speaking, reading and writing, students can learn more about the culture and customs of the U.S. classroom. The ICC also helps international teaching assistants (ITAs) who are non-native English speakers develop fluency and cultural understanding to teach successfully at Carnegie Mellon and provides ITA testing, required testing indicating a nonnative speaking student has a language proficiency required before being allowed to work with undergraduates in classes, labs or individual meetings.

**Office of International Education (OIE)**
[www.studentaffairs.cmu.edu/oie/](http://www.studentaffairs.cmu.edu/oie/)

Carnegie Mellon hosts international graduate and undergraduate students who come from more than 90 countries. Office of International Education (OIE) is the liaison to the University for all non-immigrant students and scholars. OIE provides many services including: advising on personal, immigration, academic, social and acculturation issues;
presenting programs of interest such as international career workshops, tax workshops, and cross-cultural and immigration workshops; supporting international and cultural student groups such as the International Student Union and the International Spouses and Partners Organization; maintaining a resource library that includes information on cultural adjustment, international education and statistics on international students in the United States; posting pertinent information to students through email and the OIE website, and conducting orientation programs.

Veterans and Military Community
http://www.cmu.edu/veterans/

Military veterans are a vital part of the Carnegie Mellon University community. Graduate students can find information on applying veteran education benefits, campus services, veteran’s groups at CMU, non-educational resources and international military service information through the Veterans and Military Community website. There are also links and connections to veteran resource in the Pittsburgh community. The Naval ROTC and Veteran Affairs Offices are located at 4615 Forbes Avenue, uro-vaedbenefits@andrew.cmu.edu, 412- 268-8747.

Key Offices for Academic & Research Support

Computing and Information Resources
www.cmu.edu/computing

Computing Services provides a comprehensive computing environment at Carnegie Mellon. Graduate students should seek Computing Services for information and assistance with your Andrew account, network access, computing off-campus, campus licensed software, email, calendar, mobile devices, computer security, cluster services and printing. Computing Services can be reached at it-help@cmu.edu.

The Carnegie Mellon Computing Policy establishes guidelines and expectations for the use of computing, telephone and information resources on campus. The policy is supported by a number of guidelines graduate students should know. The policy and guidelines are available at: www.cmu.edu/computing/guideline/index.html.

Research at CMU
www.cmu.edu/research/index.shtml

The primary purpose of research at the university is the advancement of knowledge in all fields in which the university is active. Research is regarded as one of the university’s major contributions to society and as an essential element in education, particularly at the graduate level and in faculty development. Research activities are governed by several university policies. Guidance and more general information is found by visiting the Research at Carnegie Mellon website.
Office of Research Integrity & Compliance  
www.cmu.edu/research-compliance/index.html

The Office of Research Integrity & Compliance (ORIC) is designed to support research at Carnegie Mellon University. The staff work with researchers to ensure research is conducted with integrity and in accordance with federal and Pennsylvania regulation. ORIC assists researchers with human subject research, conflicts of interest, responsible conduct of research, export controls, intellectual property rights and regulations, and institutional animal care & use. ORIC also consults on, advises about and handles allegations of research misconduct.

Key Offices for Health, Wellness & Safety

Counseling & Psychological Services  
www.studentaffairs.cmu.edu/counseling

Counseling & Psychological Services (CAPS) affords the opportunity for students to talk privately about issues that are significant for them in a safe, confidential setting. Students sometimes feel confused about why they are feeling upset and perhaps confused about how to deal with it. An initial consultation with a CAPS therapist will clarify options and provide a recommendation to the appropriate mental health resource at Carnegie Mellon or the larger Pittsburgh community. CAPS services are provided at no cost. Appointments can be made in person or by telephone, 412-268-2922.

Health Services  
www.cmu.edu/HealthServices/

University Health Services (UHS) is staffed by physicians, advanced practice clinicians and registered nurses who provide general medical care, allergy injections, first aid, gynecological care and contraception as well as on-site pharmaceuticals. The CMU student insurance plan covers most visit fees to see the physicians and advanced practice clinicians & nurse visits. Fees for prescription medications, laboratory tests, diagnostic procedures and referral to the emergency room or specialists are the student’s responsibility and students should review the UHS website and their insurance plan for detailed information about the university health insurance requirement and fees. UHS also has a registered dietician and health promotion specialists on staff to assist students in addressing nutrition, drug and alcohol and other healthy lifestyle issues. In addition to providing direct health care, UHS administers the Student Health Insurance Program. The Student Health Insurance plan offers a high level of coverage in a wide network of health care providers and hospitals. Graduate students should contact UHS to discuss options for health insurance for spouses, domestic partners and dependents. Appointments can be made by visiting UHS’s website or by telephone, 412-268-2157.
University Police  
http://www.cmu.edu/police/  

412-268-2323 (emergency only), 412-268-6232 (non-emergency)  

The University Police Department is located at 300 South Craig Street, Room 199 (entrance is on Filmore Street). The department’s services include police patrols and call response, criminal investigations, shuttle and escort services, fixed officer and foot officer patrols, event security, and crime prevention and education programming. Visit the department’s website for additional information about the staff, escort and shuttle, emergency phone locations, crime prevention, lost and found, finger print services, and annual statistic reports.  

Shuttle and Escort Services  
University Police coordinates the Shuttle Service and Escort Service provided for CMU students, faculty, and community. Full information about these services, stops, routes, tracking and schedules can be found online at:  
http://www.cmu.edu/police/shuttleandescort/  

Carnegie Mellon University publishes an annual campus security and fire safety report describing the university’s security, alcohol and drug, sexual assault, and fire safety policies and containing statistics about the number and type of crimes committed on the campus and the number and cause of fires in campus residence facilities during the preceding three years. Graduate students can obtain a copy by contacting the University Police Department at 412-268-6232. The annual security and fire safety report is also available online at www.cmu.edu/police/annualreports.  

The WORD  
http://www.cmu.edu/student-affairs/theword/  

The WORD is Carnegie Mellon University’s student on-line handbook and is considered a supplement to the department (and sometimes college) handbook. The WORD contains campus resources and opportunities, academic policy information and resources, community standards information and resources. It is designed to provide all students with the tools, guidance, and insights to help you achieve your full potential as a member of the Carnegie Mellon community. Information about the following is included in The WORD (not an exhaustive list) and graduate students are encouraged to bookmark this site and refer to it often. University policies can also be found in full text at:  
http://www.cmu.edu/policies/.  

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