

PhD Student Handbook Biological Sciences

August 15, 2024

The guidelines in this document apply to PhD students who enrolled in Fall 2024, and were approved by vote of the Biological Sciences Graduate faculty

Table of Contents

Purpose of Student Handbook	3
Overview of PhD Program	3
Degree Requirements in Biological Sciences	3
Research Expectations	4
Progress Towards the Degree	4
Training for the Profession	8
Advising and Mentoring	9
Student Responsibilities	10
Equity, Diversity, & Inclusion (EDI) Statement	10
Other Resources	10

PURPOSE OF STUDENT HANDBOOK

The purpose of the PhD in Biological Sciences Student Handbook is to help guide students as they progress through the PhD program. Because the PhD program is conferred and governed by the academic requirements established by the Vanderbilt University (VU) Graduate School, students should also be familiar with the policies and procedures in the Vanderbilt University Student Handbook and Vanderbilt University Graduate School Catalog. For questions about information in the handbook, students should contact their advisor, the Program Manager, or the Director of Graduate Studies (DGS).

OVERVIEW OF PHD PROGRAM

The Graduate Program in Biological Sciences educates graduate students on the foundational areas of molecular, cellular, and organismal biology and provides in-depth training with faculty while engaging in state-of-the-art scholarly research. Our program prepares students for a variety of careers in science, which include academic research and teaching, as well as working in governmental agencies and the biotechnology sector. Training begins with coursework, seminars, and professional development activities and culminates with published research that is incorporated into a formal thesis. The Biological Sciences Graduate Program also values and provides training in teaching and mentorship. By the time of graduation, students in the Program will have developed critical thinking skills and technical expertise while making novel discoveries through their dissertation research.

The research interests of the faculty in the Department of Biological Sciences are inherently diverse, ranging from molecules and cells to organisms and ecosystems. Specifically, the faculty have primary research interests in the areas of biological clocks, computational biology, evolution, genomics, genome maintenance, protein trafficking, vector biology, entomology, symbiosis, speciation, microbiology and microbiomes, immunology, mitochondrial function, small RNAs, synapse formation and plasticity, and development and regeneration of visual and olfactory sensory systems. Therefore, students are immersed in a collaborative, diverse, and inclusive environment while conducting disciplinary and interdisciplinary research.

Students enroll in the PhD Program in Biological Sciences via direct admission or through the Interdisciplinary Graduate Program (IGP) in Biological and Biomedical Sciences, the Quantitative and Chemical Biology (QCB) program, and the Medical Scientist Training Program.

DEGREE REQUIREMENTS

Degree Requirements Overview

The Ph.D. degree requires 72 hours of credit for graduation, including at least 24 credit hours of formal, didactic coursework, with the remainder earned through dissertation research. Credit hours earned in the first-year IGP or QCB programs are counted toward the required 24 hours of formal, didactic coursework. Because of our thematic diversity, the coursework requirements are highly flexible, which allows students and their faculty mentors to design paths that maximize the growth of each student. Therefore, only BSCI 6320 (Graduate Seminar in Biological Sciences) and BSCI 7390 (Special Topics and Advanced Techniques in Biological Sciences) are required of every student; the remaining courses are selected after consultation between the student, the Director of Graduate Studies, and the faculty mentor. Eligible courses are those with a course number of 5000 or above, but they must be either (i) courses sponsored by the Department of Biological Sciences or (ii) courses sponsored by other departments that cover topics relevant to the projected dissertation research. The Biological Sciences Graduate Program also values teaching, and for that reason, all students are required to serve as a teaching assistant for one semester (usually in year one or year two). Candidates for the Ph.D. must demonstrate critical thinking, research skills, and proficiency in their discipline. To earn a Ph.D., students must have completed training in Responsible Conduct of Research, finalized an Individual Development Plan, and have at least one 1st author manuscript accepted for publication in a peer-reviewed scientific journal that results from dissertation research. The Ph.D. committee must consist of five Graduate Faculty, three from within the program and at least one from outside the program, and one from a topic outside of the specific discipline. Committees are expected to meet at least once a year after entering Ph.D. candidacy. The Biological Sciences program will accept up to six credit hours in non-Vanderbilt graduate courses with a B or better as transfer credits, with approval from the program's Director of Graduate Studies and the Graduate School. These transfer credits count toward the 24 hours of formal, didactic coursework.

Degree Requirements Summary

- Coursework Requirements: because the breadth of interests within the Program in Biological Sciences is diverse, our program is highly flexible. Students must complete 24 credits of didactic courses, with the specific courses taken determined by the student in consultation with their advisor and the Director of Graduate Studies.
 - BSCI 6320 (Graduate Seminar in Biological Sciences) must be taken Fall and Spring semesters of the second year, and direct entry students also enroll in this course during Fall and Spring semesters of the first year. BSCI 6320 may be taken for credit a maximum of 4 times, with all 4 credits counting toward the 25 didactic credit graduation requirement.
 - SSCI 7390 (Special Topics and Advanced Techniques in Biological Sciences) must be taken in the summer semester of the first year, for 2 credits. With written approval from the DGS, this course may instead be taken in the fall semester of the second year, for 2 credits. BSCI 7390 may also be taken in the fall and/or spring semester of the first year, for 1 credit each time. A maximum of 4 credits of BSCI 7390 may be used to satisfy the 24 didactic credit requirement.
 - BSCI 8999 (Non-candidate Research) and BSCI 9999 (Ph.D. Dissertation Research) are taken in conjunction with the research being conducted in the research laboratory. These courses are graded using a Satisfactory, Low Pass, and Unsatisfactory scale. If a student receives three Unsatisfactory grades, then that student is terminated from the Biological Sciences Ph.D. program.
- Professional Development: students participate in a series of professional development activities, including the yearly construction and discussion of an individual development plan.
- Qualifying Examination: the qualifying exam is taken in the third year of graduate training after the completion of
 didactic courses. The qualifying exam is comprised of written and oral components and is designed to assess the
 student's knowledge as well as evaluate the student's ability to formulate hypotheses and design experiments to
 test those hypotheses. The qualifying exam also provides constructive feedback on the student's thesis project.
 Under extenuating circumstances, the DGS may approve delaying the qualifying exam until the fourth year of
 graduate training.
- Annual Committee Meetings: following successful passage of the qualifying exam, students participate in annual
 or biannual meetings with their Ph.D. committee. These meetings are designed to enhance each student's growth
 in research and the profession.
- Dissertation: a Ph.D. in Biological Sciences is completed after the successful written and oral defense of a thesis that details the student's research accomplishments and how these novel findings advance their field of research.
- Timeline: the Ph.D. in Biological Sciences is designed to be completed within five to six years, but actual completion time varies.

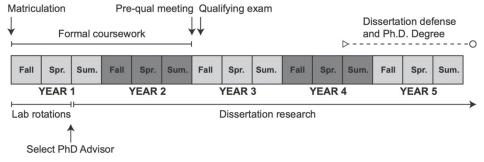
RESEARCH EXPECTATIONS

The focus and topic for Ph.D. dissertation should be chosen by the student with guidance from their thesis advisor. Students are expected to conduct full-time research under the mentorship of the thesis advisor, with oversight from the PhD committee.

Doctoral candidates are required to have at least one first author manuscript accepted for publication that is derived from original research performed in the Biological Sciences Graduate Program as a prerequisite for defending the dissertation and completing the degree. Note that this is a minimal requirement and that additional evidence of successful completion of the Ph.D. may be required by the respective Ph.D. committees, where such requirements are subject to a majority vote.

PROGRESS TOWARDS THE DEGREE

Idealized timeline of graduate studies in Biological Sciences



Selecting the Thesis Advisor

Incoming students will conduct laboratory rotations under the mentorship of Biological Sciences faculty, with each rotation lasting between 4 and 10 weeks, using a uniform schedule with two rotations in the fall semester and two in the spring semester. After the second rotation, the student can either select a thesis advisor or continue to rotate.

First-year graduate students are expected to select a thesis advisor by June 1, but no later than August 15 of the year following matriculation. First year graduate students who enter the Biological Sciences graduate program in the spring semester must select a thesis advisor by January 15 of the following year. The selection must be by mutual agreement of the student and the faculty mentor and must be approved in writing by the DGS. Students who fail to meet this requirement will, barring extenuating circumstances and written approval from the DGS, be terminated from the Biological Sciences Graduate Program. Formalizing the thesis advisor is done using the Graduate School's "Request to appoint or change adviser" form.

Students that have selected and formalized an advisor but wish to switch to a different advisor should contact the DGS in writing to detail these wishes and formulate a plan.

Qualifying Exam – Timeline, Goals and Overview

The qualifying exam is taken after a student fulfills the departmental course requirements and reaches a minimum of 24 didactic credits in good standing (cumulative GPA of 3.0 or above). All requirements must be completed before October 15 of the third year unless a delay has been granted by written approval from the DGS. The overall goals of the qualifying exam are to:

- Assess the student's ability to formulate hypotheses and design specific aims to test these hypotheses
- Test the student's knowledge in scientific literature relevant to the Ph.D. dissertation
- Assess the student's general knowledge
- Provide training and feedback in the grant writing process
- Form a thesis committee to foster and monitor the student's continued development

The Ph.D Committee

The Ph.D. Committee will consist of five members of the university graduate faculty. A minimum of three members of the committee must be faculty in the Department of Biological Sciences, and at least one member must be from outside the department. Additionally, one member must represent a field of research outside of the focus of the proposal. The chair of the examining committee must be a tenured faculty of the Department of Biological Sciences. The student's advisor serves in the Ph.D. committee but does not actively serve on the examining committee. Nevertheless, the student's advisor must attend both the pre-examination meeting and the qualifying exam (see below). The committee members, including the advisor, vote for a pass/fail on the qualifying exam. The examining committee should be appointed as early as possible in the second year but no later than the end of the spring semester of the second year. The student and mentor will submit a list of potential committee members to the DGS and indicate a potential chair for the committee. Students should consult with potential members prior to submitting their names. Formalizing the thesis committee is done using the Graduate School's Kuali Workflow online platform.

Preparation of the Qualifying Examination Specific Aims Page

The student will write the specific aims page of their qualifying exam research proposal at no more than one page. This document should describe the hypotheses to be tested and list the specific aims constructed to test these hypotheses. The general experimental approaches and methodologies to be utilized should be briefly described. The student should discuss the research topic and experimental details with the mentor prior to writing this aims page. The mentor (or other scientists) should read and critique the specific aims page prior to it being distributed to the Ph.D. committee. However, the final product must be written by, and represent the intellectual input of, the student. The specific aims page must be submitted to each member of the examination committee by email at least one week prior to the scheduled preexamination meeting. Failure to meet this deadline will require rescheduling of the meeting.

The Pre-Examination Meeting

A pre-examination meeting will be held not later than September 1 of the third year unless a delay has been granted by written approval from the DGS. Students will inform the Graduate Program Administrator of the time and place of the meeting at least two weeks prior to the meeting.

The goal of this meeting is to confirm that the student has met the academic requirements for taking the qualifying exam and to determine whether the student's anticipated research proposal (based on the specifics aims page; see

above) will be "defendable" in a qualifying exam. This meeting is not an exam. The meeting will last no more than one hour and will consist of the following sections:

- In the student's absence, the committee will review the student's academic progress. The committee chair will
 obtain the student's file and transcript from the Graduate Program Administrator prior to the meeting. The mentor
 will be invited to comment on the student's progress, including specific strengths and weaknesses.
- The student will give a ten-minute chalk talk (no pre-prepared visuals) that includes a summary of the background and an outline of the proposed thesis work. Questions and discussion from the committee will focus on the proposed aims of the project, including feasibility and scope.
- At the end of the presentation/discussion, the student will be asked to leave the room and the committee chair will poll each committee member as to the suitability of the proposed research plan. Possible outcomes are as follows: approval, approval with revisions, or significant revision of the specific aims page necessitating a second pre-examination meeting. A timeline for completion of any requirements will be established. A brief description of the outcome of the meeting and any suggestions for changes to the specific aims page will be written by the committee chair and distributed by email to the student, the committee, and the Graduate Program Administrator within one week of the pre-examination meeting.

The Qualifying Exam

The qualifying exam must occur before October 15 of the third year unless a delay has been granted by written approval from the DGS. Formalizing the date, time and location of the qualifying exam is done using the Graduate School's Kuali Workflow online platform. This form must be submitted to the Graduate School at least two weeks prior to the qualifying exam. The qualifying exam comprises two components: written and oral.

Written component of the qualifying exam: The written component of the qualifying exam must be submitted to the members of the examination committee at least two weeks prior to the scheduled examination (the student should contact committee members about whether electronic and/or hard copies are preferred). Failure to meet this deadline will require rescheduling of the exam. The written component is in the form of a grant proposal that is ten single-spaced pages, including the specific aims page, background and significance, preliminary data (if available) and research plan. The tenpage limit, excluding references but including any figures, is strictly enforced. The student should design a project that can be completed in three to four years, and that is realistic given the available resources. The student is responsible for all scientific aspects of the proposal (including background information, approach, experimental design, and methodology for all experiments) but should consult others—including the thesis advisor—during the development of these ideas. A student may ask his or her advisor, other students, or postdoctoral fellows to critique the content, format, and style of the proposal. However, the examination committee members may not be asked for specific feedback on the written document during the time between the pre-examination meeting and the qualifying exam.

Oral component of the qualifying exam: The qualifying exam meeting should last approximately two hours, including the oral exam and closed discussions. At the beginning of the meeting, the student will be asked to leave the room while the committee discusses whether the written proposal is satisfactory. The mentor will be asked to give an evaluation of the extent of their contribution to the design and editing of the document. The committee will then assess whether the report is hypothesis-based, scientifically sound, and logical; includes sufficient background/review of field; the aims are sufficiently independent; includes explanation of expected outcomes; considers alternative approaches; is well-organized and clearly written; and utilizes proper grammar/spelling. The committee chair will then poll the mentor and each member of the committee to reach a consensus as to whether the written proposal is acceptable or requires revision. The student will then be asked to return to the room and the oral defense will begin.

In preparation for the oral component of the qualifying exam, the student will construct a PowerPoint presentation that contains no more than ten slides, covering the background and significance of the project (four slides) and the specific aims (six slides). The spirit of the 10-slide rule will be enforced; text and objects should be easily readable in terms of size, and slide animations cannot not be used to subvert the spirit of the 10-slide rule. Once the oral exam begins, questions from the committee will probe the student's ability to pose a scientific question, state a hypothesis, develop reasonable strategies and alternatives to test the hypothesis, anticipate possible outcomes, and interpret these possible outcomes. The first 30-60 minutes of the exam will be used to probe the student's knowledge of the background area as well as knowledge in their field of specialization. The remainder of the exam will focus on the specific aims of the proposal. Committee members will prepare for the meeting by reading the proposal and identifying several lines of questioning on both the proposal and the general background. All committee members except the thesis advisor should actively participate in questioning the student. The student's thesis advisor must remain silent during the oral exam unless specifically addressed by the committee or granted permission by the committee chair to speak briefly.

Although a wide variety of questions are appropriate during the oral exam, the committee's focus should be to ascertain whether the student has established the critical knowledge that is essential for understanding their research project and achieving success as they progress through graduate training. It is the chair's responsibility to keep everyone "on track" (in terms of time, lines of questioning, and overall direction) during the oral exam. Upon conclusion of the oral exam, the student will be asked to leave the room and the committee will discuss the student's performance. The mentor will be given an opportunity to offer their opinion of the student's performance. The pass/fail decision will be based upon a majority vote among the examining committee members, including the thesis advisor. To achieve a "pass," both the student's written proposal and performance during the oral exam must be deemed satisfactory with no remediation required.

Disapproval of the proposal and/or inadequate performance by the student in the oral exam (either in defense of the proposal or in general knowledge) is grounds for failure and will necessitate rewriting the proposal. A second oral exam and/or additional remediation must be completed within 90 days. In such cases, it is the chair's responsibility to delineate (with input from the committee) what remedial steps are most appropriate for a particular student and how the committee will evaluate the student a second time. Both the Graduate School and the Department of Biological Sciences allow a student to retake the qualifying exam once. The outcome of the qualifying exam must be recorded using the Graduate School's "Results of Qualifying Examination" form, which is signed by all committee members.

Exam Outcome, Report and Subsequent Committee Meeting

After the qualifying exam, the committee chair will prepare a brief letter summarizing the student's performance and outcome of the exam. The committee chair will ask for input from all committee members and email the letter to the student, Ph.D. committee (including the thesis advisor), DGS, and Graduate Program Coordinator.

If the student passes the qualifying exam, the report must indicate the time frame for scheduling the student's next committee meeting (typically 12 months but can be sooner). It is the student's responsibility to schedule the next committee meeting within the time frame recommended by the committee.

If the student fails the qualifying exam, the letter must indicate a specific plan for remediation and a timeframe for scheduling a retake. Students who fail the remediation or retake are terminated from the Biological Sciences Graduate Program.

Students are encouraged to meet in private with their Ph.D. committee chair prior to a committee meeting if there is any concern about the lab, thesis advisor or research project.

Policy on Food in Qualifying Exams and Committee Meetings

The Department of Biological Sciences has abolished the option of students bringing food and beverage to share at committee meetings, qualifying exams, or any other formal meeting with a member or members of the Ph.D. committee. This move was made to eliminate an unnecessary source of potential stress and financial burden. When preparing for a meeting, students should focus exclusively on their science and career progression.

Dissertation Research and Annual Evaluation

A bound notebook is the preferred method for daily entry and recording of laboratory experiments and results. Notebooks should contain enough information to enable others to reconstruct experiments. It is important to note that research notebooks are the property of Vanderbilt University and should remain in the laboratory in which you conducted your dissertation research.

Several variables affect the time for degree completion, including the relative difficulty of the project, the motivation of the student, and the expectations of the mentor and Ph.D. committee. Graduate school regulations limit Ph.D. candidacy to four years from the date of successful completion of the qualifying examination. Thus, the combination of departmental and Graduate School regulations limits the total time to no more than six years. Extension of this time limit requires a petition to the graduate school by the student and the DGS. To ensure satisfactory and timely progress, committee meetings must be held annually, or more often if needed. It is the responsibility of the student to schedule the annual meetings, and it is the responsibility of the committee chair to document the outcome of these meetings. In preparation for each committee meeting, a student must prepare a short report (3-5 pages) and a 15-20-minute talk to update the committee on progress and/or problems in the following format:

- Introduction and significance
- Current and original specific aims
- Progress and/or problems (including data)

• Short- and long-term goals

The chair of the Ph.D. committee will submit to the Graduate Program Administrator a written summary of all committee meetings using the Biological Sciences "BioSci Committee form". The form must include a summary of the work presented by the student and a statement on whether satisfactory progress is being made in the various aspects of scientific training, including knowledge in the field of research, the ability to present data both in oral and written form, critical and independent thinking skills, evaluation of results, and design and implementation of experiments. Attention should be given to delineating any perceived problems or deficiencies, and clearly outlining recommendations and goals. The committee chair must submit the form to the Graduate Program Coordinator. The summary written by the committee chair must be sent to the student and thesis committee.

The Dissertation and Final Defense

Prior to formally beginning the writing of a dissertation and scheduling the thesis defense, a penultimate committee meeting must be held. At this meeting, the student presents a brief outline (1-2 pages) of the proposed dissertation and, upon committee request, reviews and discusses any pertinent data and conclusions. The purpose of this meeting is to ensure that sufficient scientific discoveries have been made to support a complete dissertation. At this meeting, the thesis advisor and other committee members should provide the student with the expectations for the dissertation's content. In cases of disagreement, permission to proceed with the writing of the dissertation and scheduling of the defense will be determined by a majority vote of the committee (including the thesis advisor).

The committee chair must outline in writing the outcome of the penultimate dissertation committee meeting, and this letter is sent to the student, the committee, and the Graduate Program Coordinator. If granted permission to defend, the student formalizes the date, time and location of the dissertation defense using the Graduate School's Kuali Workflow online platform. This form must be submitted to the Graduate School at least two weeks prior to the dissertation defense.

Ph.D. dissertations in Biological Sciences should be closely tied to peer-reviewed research articles. To this end, doctoral candidates are required to have at least one first author manuscript accepted for publication that is derived from research performed in the Biological Sciences Graduate Program as a prerequisite for completing the degree. Note that this is a minimal requirement and that additional evidence of successful completion of the Ph.D. may be required by the committee and subject to a majority vote.

A suggested format for dissertations that include manuscripts is as follows:

- Introduction: the introductory chapter should contain a rigorous review of the literature and set the context of the dissertation research (background and significance), introduce the major questions addressed, and explain the relationship of the chapters to one another.
- Chapters: chapters presenting the main body of the dissertation research can be directly derived from submitted
 and/or published manuscripts. Material that is not intended for publication can be written in the same format.
 Additional details concerning the materials and methods and supplementary data may be included in the chapters
 or included as appendices. Formatting of these chapters must conform to the Graduate School's requirements.
- Conclusion: in addition to summarizing the conclusions of the dissertation, this chapter should discuss matters not addressed in the preceding chapters. These could include future directions, or studies that failed to produce interpretable data or are incomplete.

Students should check with the Graduate School concerning specific format requirements for the dissertation; the suggested dissertation outline presented above must conform to Graduate School stipulations. Thesis advisors must read and approve the dissertation before it is submitted to the committee. A complete dissertation must be submitted to the committee at least two weeks before the final defense.

The Thesis Defense is comprised of a 1-hour public presentation followed by an ~1-hour private examination with the Ph.D. committee. At the beginning of the private defense, the student will be asked to leave the room so the Ph.D. committee can discuss the written thesis and the oral presentation. The student will then be asked to re-enter the room and the Ph.D. committee will ask multiple questions about the project, its impact on the field, and its direction. At the conclusion of the meeting, the student will be asked to leave the room so that the committee can discuss the outcome and any recommendations. The committee chair, with input from the committee members, will also complete paperwork that is required as part of the University's accreditation process. Once the evaluation has been completed the student will be invited to re-enter the room and notified of the outcome.

Importantly, students should not assume that they will be able to leave town for a new position immediately after the thesis defense. The thesis committee may require substantial edits to the dissertation. In those cases, students will have to make the necessary changes to ensure the document meets committee and departmental standards. For this, the chair and other committee members may need to re-read the revised thesis, and this process can take several weeks.

Once the revised dissertation has been approved by the Ph.D. committee, the student should follow the Graduate School guidelines that explain how to submit the dissertation. The outcome of the dissertation defense is recorded using the Graduate School's "Results of dissertation defense" form, which is signed by all committee members.

TRAINING FOR THE PROFESSION

Teaching

Students are required to serve as teaching assistants (TA) for at least one semester; this experience improves communication skills and marketability. Typically, this entails a TA assignment in the fall or spring semester in years 1, 2 and/or 3 for direct entry students or years 2 and/or 3 for students that enter through the IGP or QCB. It is expected that students TA in years when they are supported by the College of Arts & Science, although students supported by any means must TA for at least one semester.

Responsible Conduct of Research

Students are required to complete training in responsible conduct of research, also known as RCR. This training entails completion of the Collaborative Institutional Training Initiative (<u>CITI</u>) training and either (i) the course sequence RCRG-6303, RCRG-6304, RCRG-6305, RCRG-6306, RCRG-6307, or (ii) the course IGP-8004.

Career Development ASPIRE Program (optional)

Students are encouraged to participate in career and professional development services and enrichment activities through the Biomedical Research Education and Training's (BRET) ASPIRE program.

Certificate in College Teaching (optional)

Students interested in pursuing a career that involves teaching or education are encouraged to pursue the Certificate in College Teaching, co-sponsored by the Center for Teaching (CFT) and the Graduate School. According to the CFT website, "The purpose of the Certificate in College Teaching, co-sponsored by the Center for Teaching and the Graduate School, is to assist Vanderbilt graduate students and post doctoral fellows who wish to gain a clearer, deeper, more active approach to teaching and learning in higher education. The certificate focuses on the research on learning and best teaching practices, and supports the university's pursuit of excellence in teaching and learning. The certificate is ideal for graduate students whose goals are to become more effective educators and who want to prepare for future careers in higher education teaching".

ADVISING AND MENTORING

Selecting the thesis advisor and changing advisors

The thesis advisor is selected after the student completes rotations with Biological Sciences faculty as outlined in the "progress towards the degree" section of this document.

Students that have selected an advisor but wish to switch to a different advisor should contact the DGS in writing to detail these wishes and begin to formulate a plan.

Individual Development Plan

The Individual Development Plan (IDP) is a planning tool that helps Ph.D. students identify annual progress, professional development needs, and career objectives. The IDP also serves as a communication tool between Ph.D. students, their thesis advisor, and the Ph.D. committee. The IDP will be completed annually by the student, signed by the individuals described below, and placed on the student's departmental file.

- The first IDP will be completed, signed, and submitted no later than June 1 of the first year. After selecting an advisor, the student will complete the IDP form and discuss responses with the thesis advisor. Both the student and thesis advisor will sign the IDP, and thereafter submit it to the Graduate Program Coordinator. Signature of the thesis committee chair is not required because at this time a committee has not been formalized.
- Following the first year, the IDP will be incorporated into discussions of student progress, development, and goals at the annual committee meeting. In preparation, the student will complete the IDP and discuss it with the

research mentor before sending the completed IDP to the Ph.D. committee members one week prior to the scheduled meeting. For second year students, the IDP will be discussed at the pre-examination meeting. In subsequent years, this discussion will occur at the annual committee meeting. The IDP must be signed by the student, mentor, and the committee chair, and then submitted to the Graduate Program Coordinator.

Grievances

The following protocol is recommended for addressing student/mentor grievances:

- The student should first address a grievance directly with the mentor in an attempt to find a viable solution.
- If this approach also fails, the student should submit the grievance in writing to the DGS. The DGS will convene a joint meeting with the student, the DGS, and their dissertation committee chair (or the Associate DGS if a dissertation committee chair has not been appointed).
- If this approach fails, the department chair will be consulted, and the chair will work with the DGS to resolve the problem.
- If this approach also fails, the student should refer to the graduate student handbook for avenues of further action.

STUDENT RESPONSIBILITIES

- Enroll every semester. The DGS and Graduate Program Coordinator will provide guidance.
- Ensure that total registration does not surpass 72 credits. When 72 credits are reached, students should register
 each term (fall, spring, summer) for 0 credits of the appropriate research course under the section number of their
 advisor. Students should check with the Graduate Program Coordinator if they are uncertain about how many
 credits they require.
- Verify at the end of each semester that a grade has been received for all didactic and research courses. If not, this omission should be brought to the attention of the Graduate Program Coordinator.
- Attend the Department's weekly seminar. The schedule can be found on the department website and attendance is mandatory for graduate students.
- Participate in all lab meetings or other group meetings required by the thesis advisor.
- Attend the department retreat.
- Respond promptly to all emails from the DGS or the Graduate Program Coordinator.
- Schedule meetings well in advance (i.e., 1.5-2 months). Once the meeting date, time, and location of a meeting
 has been determined (the BSCI Administrative Office can help schedule a room), the information must be sent to
 the Graduate Program Coordinator. The Graduate Program Coordinator must be notified of any change in
 meeting date or time.
- Read the Ph.D. committee chair's reports, and refer to them periodically to monitor progress and reach out to the chair if anything is unclear.

Graduate students receiving Vanderbilt University financial support or services must devote full-time effort to graduate study. Students cannot accept jobs for pay within or outside the University unless prior approval is given by their thesis advisor, the DGS, and the Chair. Exceptions to this rule include part-time internships and activities that contribute to career development and that do not exceed the time commitment outlined by the National Institutes of Health or National Science Foundation (but these need to be approved by the advisor and DGS), service as course associates at Vanderbilt, and occasional and temporary part-time pursuits (e.g. house sitting). Engagement in outside employment without obtaining approval may result in loss of financial support, including stipend.

EQUITY, DIVERSITY, & INCLUSION (EDI) STATEMENT

The Department of Biological Sciences is committed to promoting diversity and inclusion among its faculty, students, and staff. We believe that our intellectual environment is improved by incorporating perspectives that derive from a range of ethnicities, races, genders, sexual orientations, political and religious beliefs, abilities, and life experiences. To support this vision, we stand against discrimination and harassment, and we strive to create an environment where all individuals are respected and appreciated for their unique identities.

The Department of Biological Sciences actively works to create, support, and participate in initiatives that reflect our values. For example, we support the <u>Inclusivity in the BioSciences Association</u> (IBA). The IBA includes faculty, students, and staff from the Department of Biological Sciences department as well as other groups. The goal of the IBA is to organize and participate in initiatives that promote inclusivity and education outreach.

We hold all members of our community accountable to our values. If you are experiencing discrimination, harassment, and/or sexual misconduct:

- If you are a Vanderbilt student, or the incident involves a Vanderbilt student, report the incident to <u>The Office of Student Accountability</u>, Community Standards, & Academic Integrity.
- If you experience or witness an incident of discrimination and/or harassment, report the incident to Vanderbilt's Equal Opportunity and Access Office.
- If you experience or witness an incident of sexual misconduct or discrimination, report the incident to the <u>Office of Title IX</u>. You can also contact <u>Project Safe</u> for emergency services and support related to gender and sexual harassment, sexual assault, and intimate partner violence.

OTHER RESOURCES

Graduate Student Association

Biological Sciences <u>Graduate Student Association</u> (GSA): The GSA increases camaraderie between all graduate students in biological sciences by holding social events throughout the school year, aiding in recruiting graduate students to the program, and helping graduate students through their qualifying exams and other phases of their graduate career.

Mosig Travel Funds

Upon selecting a Ph.D. thesis advisor, a limited account will be set up for the student as part of the <u>Gisela Mosig Travel Fund</u>, which was endowed through the generosity of Dr. Gisela Mosig, a beloved former member of this department. During the student's tenure in the department, requests from the fund can be made—with approval from the thesis advisor—for any reasonable and documentable travel related to meetings, workshops, offsite courses or training. Each year the student and the thesis advisor will be notified of the balance of the fund. The procedure for using the Gisela Mosig Travel Fund is as follows:

- Obtain authorization from the thesis advisor to travel.
- Request funding from the Graduate School prior to requesting Mosig funds (see section below). That is, Mosig
 funds can only be used after Graduate School funds for that year have been exhausted.
- Contact the Graduate Program Coordinator and provide details of the trip.
- Keep all itemized receipts, including those for meals. Reimbursement of travel expenses using Mosig Funds requires itemized receipts.
- The Mosig Fund will pay for the following: hotel, airfare, taxi or shuttle, registration, parking fees and reasonable meal expenses for the student. The Mosig Fund will not pay for: movies, entertainment activities, upgraded flights, unreasonable or unrealistic charges, or charges not incurred for the student.
- Student presentations and posters at meetings supported by the Gisela Mosig Travel Fund should acknowledge the support received by the fund.

Graduate School Travel Funds

The Graduate School also offers <u>travel funds</u> for graduate students. Students must apply for these funds to make their Mosig fund go further. This fund covers travel expenses related to attending academic conferences, symposia or workshops, when the student is presenting their research. After completing at least one academic year at Vanderbilt, students may apply for this travel grant for up to \$1,000 per budget year (July 1-June 30). Students may receive up to three travel grants during their tenure at Vanderbilt.

Additional Resources

The Department of Biological Sciences wants to ensure that students always feel safe and are treated in a professional manner. Below are resources should a student be concerned about their safety or well-being while at Vanderbilt, or the safety or well-being of others. Please understand that for legal reasons discussions cannot always be kept confidential. The level of confidentiality depends on the resource.

- There are multiple resources that are available to students should they ever have a concern. These resources
 include the Director and Associate Director of Graduate Studies, the Ph.D. committee chair or other committee
 members, the department chair and vice-chair, the BRET office and its leadership, and the <u>University Student</u>
 Care Network.
- The Student Care Network encompasses multiple resources that address several potential areas of concern including the <u>University Counseling Center (UCC)</u>.
- The Office of Student Care Coordination.
- The Graduate and Postdoc Academic Success Program.

- If a student is unsure about which resource is appropriate, they should contact the <u>University Student Care Network</u>. They will connect the student with the right place or person.
- The Department of Biological Sciences does not tolerate sexual misconduct. All allegations of misconduct will be reported to the University's <u>Title IX</u> office for their investigation. More information can be found in Vanderbilt's Student Handbook, <u>chapter 7</u>.

Vanderbilt University offers a wide array of student support resources for health, wellness, student life and identity, academic support, funding, professional development, and administrative assistance. Please visit Vanderbilt's Graduate School website at https://gradschool.vanderbilt.edu/ where you can find resources for support units such as the University Counseling Center (UCC), International Student & Scholar Support (ISSS), Center for Teaching (CFT), Career Center, and many others.