The OSBP Student Handbook

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Financial Aid

OSBP is committed to providing financial support for its PhD students. In the first year, each student admitted to the PhD program receives a graduate appointment that carries a stipend and waiver of tuition and general fees. The financial support is provided by the OSBP administration. After the first year, students are financially supported by an institutional training grant (trainee), and individual fellowship (fellow), or their research advisor, and the nature of the appointment (either a Research Associate or Teaching Associate) is the decision of the advisor. Students may expect continued support from their research advisor as long as they meet the following criteria:

- Fellows/Trainees before passing the Candidacy Examination must carry a total of at least 12 graduate credits each semester and 6 credits in summer session.
- Graduate Research Associates (GRA) and Graduate Teaching Associates (GTA) before passing the Candidacy Examination must carry a minimum of 8 graduate credits each semester and a minimum of 4 credits in summer session.
- After passing the Candidacy Examination: ALL STUDENTS regardless of appointment should register for 3 graduate credit hours, including summer session. Additional credit hour enrollment requires permission of the advisor.
- Students must remain in good academic standing by maintaining a grade point average of at least 3.0.
- Students must be making satisfactory progress toward their degree, as determined by the Graduate Studies Committee and/or their research advisor. (See Appendix A for guidelines regarding "satisfactory progress")
- Students who do not meet the above criteria may no longer be eligible for support, and their continued registration in the program may be in jeopardy.
- It is every student's responsibility to frequently check the Graduate School website for the most current rules, regulations, and deadlines.

Academic Standards

The Graduate School Handbook describes the academic standards for all graduate students, regardless of which program they attend. Students are expected to follow the Graduate School standards as well as the OSBP guidelines. Copies of the Graduate School Handbook can be accessed by going to the OSU Graduate School web page at http://gradsch.ohio-state.edu.

Advising

The Program Director acts as a temporary advisor for each of the new students until they have completed the required amount of lab rotations and selected a permanent research advisor, which is normally done before the end of the second semester. During the student's first year each individual will meet with the Program Director at least once throughout the academic year to discuss his/her progress. Each student is required to take the core courses in the first year. Each student's undergraduate course work is reviewed and individualized programs are arranged for any student with deficiencies. Also, students who have completed the Master's Degree at an accredited U.S. university may be eligible to receive transfer credit for some of the core courses based on a review of the courses by the OSBP Curriculum and Graduate Studies Committees. While all students are expected to take the core courses, the elective courses are chosen by the student to correspond to the student's area of interest and expertise.

Curriculum

To fulfill the PhD course requirements, students take:

- Core Courses covering the areas of molecular biology, protein and nucleic acid structure and function, enzymes, membranes, and lipids in the first year. Students may not drop any of the core courses unless permission of the Director is obtained.
- A minimum of 6 biochemistry elective credits (only 3 credits of which may be for lab coursework) at the 6000 level or above. These must be graded courses. Students may choose from the list of approved electives provided by OSBP and updated frequently on the OSBP website. Students wishing to count electives, which are not on the approved list, towards their required elective credits must submit the proposed elective course description with an explanation from the student/advisor as to why the course is necessary towards coursework completion of the PhD degree to the OSBP Director (Michael Ibba) for approval by the OSBP curriculum committee. Students are allowed and encouraged to take additional electives, which contribute to their research projects (i.e. statistics, etc.) that are not approved for the required elective credits.
- 1 credit of Student Seminar during autumn and spring semesters of the 1st and 2nd years.
- 1 credit of Program Colloquium: Advanced Biochemistry Topics during autumn and spring semesters of the 1st and 2nd years in the program.

- 1 credit of 1st Year Orientation Seminar This is a special mentoring seminar course given by the faculty of OSBP and partner graduate programs. It is required for all first year students and it is held in autumn semester only.
- A minimum of 80 graduate credit semester hours is required to graduate with a PhD

Selection of the Research Advisor

Students are required to participate in a formal process developed to expose them to the wide variety of research being carried out by the OSBP faculty. In an effort to match students' interests with those of the faculty advisor, students are required to complete 3 laboratory rotations with potential faculty advisors and this process involves the following activities:

- 1st year, Autumn Semester: Students are to register for OSBP 7193 and complete two 7-week rotations.
- 1st year, Spring Semester: Students are required to register for OSBP 7193 and complete a third 7-week rotation. Students are encouraged to join labs during Spring Semester. A 4th rotation is possible if a suitable laboratory match is not identified after 3 rotations.
- Rotation contracts between students and advisors are to be prepared at the beginning
 of each rotation and turned into the OSBP office upon completion of each
 rotation.
- Summer Session: Students work full-time in the laboratory of their new advisors.
- Note: Students may not choose faculty members outside the program for rotations unless they participate in a special training program that requires such rotations. The three rotations must be completed with three different OSBP faculty members.

Student-Advisor Separations

Student-Initiated Separation:

• If a student wishes to terminate the relationship with his/her advisor they must request a meeting with the Program Director, or, if this represents a conflict of interest, another member of the Graduate Studies Committee. This meeting will be held in confidence. If the student so desires, the Director (or another member of the Graduate Studies Committee) will arbitrate differences between the student and the advisor. If the student does not wish to confront his/her advisor they will be allowed to leave the advisor with no stated reason. However, all research materials, complete copies of notebooks and any supplies provided by the advisor must remain with the advisor. The student must transfer to a new advisor within the program during the academic semester of separation. The program bears no responsibility for financial support of the student during the separation. If a student does not identify a new advisor affiliated with the program within the academic term of the separation, the student must leave the program.

Advisor-Initiated Separation:

- If an advisor wishes to terminate the relationship with a student, he/she must follow the rules of the Graduate School and the rules of the Ohio State Biochemistry Program.
- **Graduate School** rules state that GRA and GTA appointments may not be terminated prior to the end of the appointment period without approval from the Graduate School. The appointment period is determined by the contract signed between student and advisor kept with the hiring department, and may be set for a specific academic term or annually, as defined by their appointment letter. Students may only be terminated for reasons listed in Section IX.2 of the Graduate School Handbook without written permission of the Graduate School. Terminations at the end of the appointment period do not require permission of the Graduate School.
- OSBP requires that the advisor must document dissatisfaction with a student's performance/progress in a written letter to the student, with a copy sent to the Program Director. If unsatisfactory progress in research is an issue, this must be documented by a "U" in the advisor's dissertation research course under which the student is registered. A meeting of the student's Advisory Committee should be held to allow the student the opportunity to present his/her progress. In the event that two "U's" in the thesis/dissertation research are given, a special meeting of the Graduate Studies Committee will be conducted to determine whether the student should be asked to leave the program or allowed to transfer to a new advisor.

Student Advisory Committee

In the summer session, after the advisor assignments are made, students consult with their new advisors to select an Advisory Committee. The purpose of the Advisory Committee is to assist in advising the student of appropriate elective courses to take in order to complete the Ph.D. program; to provide advice on scholarly matters throughout the student's tenure at the university, and to review the annual progress report prepared by the students. Students should meet with their Advisory Committee once a year for this purpose. The Student Advisory Committee also serves as the Candidacy Oral Examination Committee, the Dissertation Reading Committee, and the Final Oral Exam Committee.

The four person committee consists of the student's advisor and three other faculty members. One member of the committee may be a non-OSBP faculty member. Students submit their choices to the OSBP Graduate Studies Committee Chair (Program Director) for review by the end of Autumn Semester of the 2nd year. After the review, the OSBP Graduate Studies Committee provides confirmation of the committee members to the student and advisor. The student will make the Graduate School aware of his/her committee members when the student is ready to schedule their candidacy exam. You may find the forms at the Graduate School website under 'Forms, Guidelines, and Publications' for scheduling candidacy exams.

The following post-candidacy progress reporting policy applies to all students with post-

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candidacy status in the program. Please check the OSBP website for periodic updates.

Students that have completed their candidacy exam are required to meet with their Advisory Committee at least once per year to complete and submit the OSBP Post-Candidacy Progress Report based on the findings of each meeting. These reports are due in mid-June. If the report indicates that unsatisfactory or unreasonable progress is being made towards timely degree completion upon review by the Program Director and a student receives unsatisfactory grades in his/her research course(s), then action will be taken by the program in accordance with the Statement on Satisfactory or Reasonable Progress as outlined in Appendix A. Students should contact the OSBP office for a copy of this report to complete if the post-candidacy progress reporting policy applies to them.

Qualifying Policy

After completing the core courses, each student's record is evaluated by the Graduate Studies Committee. Students are normally expected to complete the core courses by the end of Spring Semester of the first year. In order to remain in good standing and to be eligible to take the Candidacy Examination, students must have a grade point average of 3.0 in the core courses as well as a 3.0 cumulative average, i.e., the student cannot be on academic probation. Students who have not completed the core courses or students who do not have a 3.0 grade point average will not be allowed to take the Candidacy Examination.

Candidacy Examination

The following policy applies to students entering OSBP in Autumn 2012 and later. Students entering in Autumn 2011 still have until the end of the first semester of their third year to complete the candidacy exam due to the changes in core and elective course requirements. Please check the OSBP website for periodic updates.

In Spring semester of the second year, students in good academic standing who have completed their core and elective courses must complete their Candidacy Examination. There are two portions of the exam: written and oral. The evaluation of the examination is made on the combined written and oral portions. The written portion of the examination will be an actual predoctoral application, which may later be submitted for funding.

Written Portion:

• The written portion of the exam will be 8-10 pages and should follow the guidelines found in a predoctoral application for either the NIH, NSF, AHA or an alternative governmental and/or private provider of pre-doctoral fellowships, focusing on the dissertation problem*. The proposal should include three Specific Aims, and at least one of these aims must be a novel and creative aim developed by the student that is not assigned by the advisor or present in the

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advisor's grants (i.e. independent of the advisor). The page listing all three specific aims, in particular the aim developed by the student, should be submitted to the exam committee for their approval. Once the committee approves the specific aims, the student may begin writing the proposal. The final written proposal will also be submitted to the committee, and will be evaluated within 2 weeks of submission. The Advisory Committee will examine the proposal, as well as the Advisor's current and pending grant proposals, to ensure that the proposal is in the student's own words and that at least one aim is original and creative. The committee may choose one of these options when evaluating the final written proposal:

- Major rewrite
- o Revise; changes within the document but not a major rewrite
- Approve as submitted

Once the committee approves the final version of the written proposal, the student may schedule the Oral Examination. Note that the 'Notification of Doctoral Candidacy Exam' form is due to the Graduate School 2 weeks prior to the scheduled oral exam.

* While the intent of the Graduate Studies Committee is to encourage students to subsequently submit these predoctoral applications, we understand that some agencies do not allow international students to apply.

Oral Portion:

• The student and his/her advisor schedule the oral portion of the Candidacy Examination by completing the appropriate paperwork through the Graduate School. At the oral examination the student presents the research proposal and is questioned by the Oral Examination Committee. The Graduate School will appoint an outside representative for the exam if a second attempt at the oral exam is required. General questions on biochemistry can be included in the oral examination. Students have until the end of the summer after their 2nd year to complete the Oral Examination, although in the majority of cases, the entire process should be completed by the end of Spring semester.

Committee Membership for the Candidacy Exam - Advisor and members of the Student Advisory Committee

• The committee for the exam will be chaired by the advisor but the advisor is cautioned not to aid the student either by answering questions or giving hints.

Dissertation Research

Once both portions of the Candidacy Examination are completed successfully, students will continue working on their original research project(s), which will be the basis of the dissertation. The work must be deemed by the Dissertation Committee to be a scholarly contribution to knowledge in biochemistry. The Faculty Research Advisor (preceptor)

and the Student Advisory Committee act as the Dissertation Committee.

Publication Requirement

- OSBP students must have 1 or more publications before applying for graduation
 with a PhD. At least one of the student's publications must list the student as first
 author. By "publication" we mean the paper must be published, in press, or
 accepted. Submitted manuscripts, manuscripts "in preparation," and theses or
 abstracts may not be counted toward the publication requirement.
- Students may not apply to defend their Doctoral Dissertation and the Director of the Program may not sign the application to graduate unless the Requirement for Publication is met, meaning that a 1st author primary literature manuscript is published, in press, or unconditionally accepted. It is the Faculty Research Advisor's responsibility to ensure that this policy is followed.
- Adherence to this policy is included in the Contract (Preceptor Agreement) signed by OSBP Faculty.
- This policy shall apply to Graduate Students in the entering Class of 2001 and all subsequent classes.

Timeline of Events

Year 1: Autumn – Summer

- Complete core courses and attend OSBP seminars
- Give one presentation in Student Seminar
- Complete two 7 week laboratory rotations in Autumn Semester and one seven week laboratory rotation during Spring Semester
- Choose faculty research advisor and begin working on dissertation research during Spring Semester

Year 2: Autumn – Summer

- Select Student Advisory Committee members
- Complete elective courses and attend OSBP seminars
- Give one presentation in Student Seminar
- Complete written and oral sections of General Exam by the end of Spring Semester
- Submit annual report

Year 3: Autumn – Summer

- Enroll in a seminar series and present
- Continue research
- Submit annual report in mid-January and post-candidacy progress report in mid-June

Year 4 (and subsequent years if necessary)

- Enroll in a seminar series and present
- Continue research
- Submit annual report in mid-January and post-candidacy progress report in mid-June

Dissertation Year (Year 5)

- Enroll in seminars.
- Give one formal dissertation presentation
- Submit annual report in mid-January and post-candidacy progress report in mid-June
- Publish one first-authored publication before requesting permission to graduate.

For your dissertation:

Obtain approvals of the written portion of your dissertation from your committee members.

Make changes as requested by your committee members and/or advisor. Schedule your dissertation defense with the Graduate School. Obtain necessary paperwork from the Graduate School

Appendices

Appendix A - Statement on Satisfactory or Reasonable Progress

Students are considered to be making satisfactory or reasonable progress toward their degree if they follow the curriculum prescribed in the preceding Timeline of Events (unless alterations are approved by the Graduate Studies Committee). Attendance at program seminars (OSBP 7890), required student seminars (OSBP 7600 and 7700) and program events such as the annual IGP Symposium are important parts of satisfactory and reasonable progress. Two unsatisfactory grades in any of these courses is considered lack of reasonable progress and will be reported to the Graduate School and a warning will be issued (Graduate School Handbook section V. V.4). Further unsatisfactory grades may result in denial of registration (Graduate School Handbook section V. V.5).

Satisfactory and reasonable progress toward Doctoral Research must be maintained by satisfactory grades (S) in departmental based research courses. Two unsatisfactory grades (U) in thesis/dissertation research courses could lead to dismissal from the graduate program. Any student who receives two unsatisfactory grades in thesis/dissertation research will be requested to appear before their Advisory Committee and/or the Graduate Studies Committee to discuss the reasons for the unsatisfactory progress.