



**The Stanford Neurosciences Program
Student Handbook
2013-2014**

Contents

Welcome	3
The Neurosciences Program	
History	4
Program Offices and Staff	5
Registration	
Registration Basics	6
TGR status/grading	7
Advising and Tracking of Student Progress	7
Program of Study	
Neurosciences Program requirements	8
Laboratory Rotations	10
Thesis Advisory Committee	10
Qualifying Examination	11
Admission to Candidacy	12
Dissertation and Oral Exam	12
University Oral Examination	13
Master's Degree	15
University Requirements	15
PhD Thesis and Oral Examination	16
Funding	18
Time Table for Advancement to Ph.D.	19
Events	21

Welcome to Stanford!

We expect that your graduate training will be stimulating, your research fruitful, and your overall experience with colleagues and friends at Stanford enjoyable. Although the formal requirements for a PhD degree are few, the administrative paperwork - for properly processing your stipend and tuition payments, and for progressing through the various academic steps such as advancement to candidacy, completion of the oral exam, and submission of the completed dissertation - can be tedious and confusing, to say the least!

Our hope is that this handbook will help you obtain a PhD in the smallest number of steps. It details the requirements and guidelines set by both the University and by the Neurosciences Program, which apply to the entering class of 2013-2014.

Those of you who have been in the program for some time now will also hopefully find the handbook useful, as it indicates which forms need to be submitted when and also speaks to important matters of policy. Sadly, no matter how hard we try to think of everything, the handbook won't be able to answer all of your questions, so please make sure to look to the Program Director, Program Administrator, and your fellow students (especially your elected Student Representatives), to help you with questions as they arise.

Stanford Neurosciences is on the Internet! Check out our recently re-invigorated home page at:

<http://neuroscienceprogram.stanford.edu/>

Additionally, Neuroscience students have their own website, which will be more informative in some areas, and substantially more entertaining in *all* areas. You should check that out, too:

<http://www.stanford.edu/group/neurostudents/cgi-bin/wordpress/>

The Neurosciences Program History

The Neurosciences Program at Stanford is an interdisciplinary training program with a tradition of excellence in teaching and research. It was established in 1962 in order to coordinate the training of PhD candidates in the diverse areas of neuroscience. The Program consists of approximately 90 graduate students who are funded by a National Institute of Mental Health training grant, individual fellowships and research assistantships. There are approximately 100 faculty members with expertise in molecular neurobiology, developmental neuroscience, membrane excitability, cellular neuroscience, systems/behavioral neuroscience and computational neuroscience.

Neurosciences Program faculty are affiliated with 22 departments across campus:

Anesthesia	Neurobiology
Applied Physics	Neurology and Neurological Sciences
Bioengineering	Neurosurgery
Biology	Ophthalmology
Chemical and Systems Biology	Otolaryngology
Comparative Medicine	Pathology
Developmental Biology	Pediatrics
Electrical Engineering	Psychiatry and Behavioral Sciences
Genetics	Psychology
Microbiology and Immunology	Radiology
Molecular and Cellular Physiology	Structural Biology

Each of these departments contributes to the Program by offering courses and sponsoring seminars in the Neurosciences as well as providing the space and intellectual atmosphere for students to carry out their research. The range and quality of faculty expertise offer unique interdisciplinary training and research opportunities. A single campus includes both the Medical Center and also several departments within the School of Humanities and Sciences (Applied Physics, Biology, and Psychology) and facilitates close interactions between students, faculty and postdoctoral fellows.

Program Offices and Staff

The Program's administrative office address is located at:

Neurosciences Program

Stanford University School of Medicine
1215 Welch Road
Modular B, #46
Stanford, CA. 94305-5400

Neurosciences Program Administrative Staff

John Huguenard Alway M-016

Director Mail Code 5122

Phone: 650.725.6666

Fax: 650.723.1080

Email: john.huguenard@stanford.edu

Ross Colvin 1215 Welch Road, Modular B, #46

Administrator Mail Code 5400

Phone: 650.723.9855

Fax: 650.721.6434

Email: larkspur@stanford.edu

Katie Johnson 1215 Welch Road, Modular B, #42

Program Coordinator Mail Code 5400

Phone: 650.721.1939

Fax: 650.721.6434

Email: katiej2@stanford.edu

In addition to the Program Director and Administrator, **the Office of the Registrar, a division of Student Affairs**, oversees your program of study, to ensure that you are progressing in compliance with University requirements. Their website includes the University calendar, final exam schedules, information on registration procedures, payment of fees, and course listings.

<http://studentaffairs.stanford.edu/registrar/students>

The Office of the Registrar provides help to students through the Student Services Center, which is located near Tresidder Memorial Union (on the 2nd floor). The address is:

450 Serra Mall, Stanford, California 94305

Phone: 650.723-2300

<http://www.stanford.edu/group/studentservicescenter/>

Students may also submit a HELPSU ticket (helpsu.stanford.edu/) or consult ask Jane (<http://studentaffairs.stanford.edu/askjane>).

REGISTRATION

Through Axess, you can file your registration commitments, sign up for courses, review your grades, request an official transcript, review your status regarding degree requirements, give the university your correct address, file and amend your study list, apply for housing, etc. Students can reach Axess from the Stanford Home page or through

<https://axess.stanford.edu/>

By far the best source of accurate information about the ins-and-outs of Axess is other neurosciences graduate students!

Graduate students are required by the University to register for Autumn, Winter, and Spring quarters each year until the degree is received. The Neurosciences Program requires students to be registered in Summer quarter as well. Leaves of absence require approval before departure.

During the first three years of the program, students register for 10 units every quarter. In theory, by the Spring of the 4th year most students will have achieved Terminal Graduate Registration (TGR) status, which means that the cost of tuition will drop significantly (find out more about TGR later in this section), which will make your thesis advisor happy.

Registration Basics

Your **Study List** is the list of courses you are taking in a given quarter. You are required to submit your student list officially each quarter via the Axess Courses/Grades function.

Study Lists are due by 11:59 pm on the Sunday after the second week of instruction - make sure to check the current academic calendar for specific date. Late fees are charged for submission thereafter and students will be responsible for paying those fees. Revisions to your study list must be made within the relevant deadlines. Changes after these deadlines are not permitted.

Students will receive a University Bill (available in Axess). Tuition credits are entered on this bill. Other University charges such as rent (if applicable), student fees, late fees, loans, Stanford health insurance, etc. also may appear on this bill. Students receiving a fellowship through Stanford may elect to have these charges deducted from their stipend checks and automatically applied to their bill.

If your bill is incorrect, it is your responsibility to ensure that the bill is corrected and to pay the correct amount by the payment deadline. The deadline for payment of all fees not covered by a Stanford award is the day before the first day of classes.

Bills may be paid at any time prior to this date by mail, in person, or through e-pay. Student Financial Services (<http://studentaffairs.stanford.edu/sfs>) can answer any questions you have relating to your bill. Their office is located within the Student Services Center.

TGR Status

Doctoral students are eligible for TGR status when they have been admitted to candidacy, completed all required coursework, and submitted the Doctoral Dissertation Reading Committee form. Students must complete the residency requirement of 135 units of academic credit before moving to TGR status. Students registered in TGR status must enroll each quarter in the TGR course (802 TGR Dissertation) in the department where they are conducting their research, with their advisor as the instructor.

If TGR students take courses in addition to 802 TGR Dissertation, they may need to pay additional tuition.

TGR Grading

Work on the thesis, dissertation, or other remaining requirements (i.e., TGR Dissertation) must be evaluated each quarter for academic progress and graded as follows: “N” indicating satisfactory progress, “N-” for unsatisfactory progress, “S” for satisfactory completion of final quarter. A hold is placed on the registration of a student who receives an “N-” grade for two consecutive quarters. Further registration is contingent on approval of an agreement for completing degree requirements by the advisor and the Program.

ADVISING AND TRACKING OF STUDENT PROGRESS

It is the responsibility of the student to advance toward the PhD degree in a timely fashion. To help the student achieve this goal, advice and counseling will be provided to the student as follows:

During the **First Year**, each student will be assigned a faculty adviser who will meet with the student at the end of each quarter to discuss course selection and laboratory rotations.

During the **Second Year**, the student will arrange to meet formally with his/her Thesis Advisor at the end of each quarter to review course selection and research progress. A

brief report of each meeting (date and comments) will be sent to the Program Administrator.

Before the end of the Second Year students must convene a meeting of their thesis committee; generally speaking, students will qualify during the summer of their second year.

Beyond the Second Year, advice and guidance will be provided by the Thesis Committee, which will meet annually, as arranged by the student. Brief reports (date, attendees and comments) from these meetings will be recorded on the student intranet by the student.

The Program Director and Program Administrator serve as additional resources for the student. Student progress toward the PhD degree will be tracked by the Program Administrator and assessed annually by the student's Thesis Committee. The Program Committee will review certain students' progress annually.

PROGRAM OF STUDY

NEUROSCIENCES PROGRAM REQUIREMENTS

Two overlapping sets of requirements must be met in order to earn a PhD in Neurosciences at Stanford University: 1) Those set by the Neurosciences Program Committee, which deal with the types of courses students take, the qualifying exam, and procedures for progressing towards the degree; and 2) The requirements set by the University deal, which deal primarily with advancement to candidacy and the final University Oral Exam. The requirements of the Neurosciences Program Committee are considered first.

Formal coursework is designed to provide students with a solid foundation in several areas of neuroscience that can be built upon with more advanced courses. The formal course requirements are minimized to enable students to devote a considerable amount of time to their research, even during the first two years.

All program courses that can be taken for a letter grade must be taken for a letter grade (not pass/fail). Also, students must receive a B or better for the course to count towards their PhD degree; please note that a B- is not considered a passing grade. Students concurrently in the MD program do not receive grades for medical school courses.

A student may place-out of any of these courses by demonstrating to the instructor a command of the material presented in the course.

Each student must complete three basic requirements.

1. A. The Nervous System (NBIO 206)

This course provides an introduction to the structure and function of the nervous system, including neuroanatomy, neurophysiology and neurochemistry. Topics range from the properties of neurons to the mechanisms and organization underlying higher functions. This lecture and laboratory course is designed to present a coherent framework as a preparation for more advanced work in neurobiology. Advanced students may participate as teaching assistants in this course. **8 units, offered Winter Quarter every year**

**Students who wish to have the NBIO 206 requirement waived because they have taken an equivalent course elsewhere should indicate so in writing to the Course Director within the first four weeks of the Autumn Quarter. The course director will act on the student's request. The student may need to demonstrate competence in the subject material by performing adequately on a written examination administered by the director, if there is uncertainty about the applicability of the student's previous course work. Arrangements to take this exam are made on an individual basis, with the director of the course. This examination should be taken prior to the start of the Winter Quarter.

2. B. Professional Development and Integrity in Neuroscience (NBIO 300)

Required of Neurosciences PhD students every quarter through the third year of graduate work (9 quarters total). Develops professional skills in critical assessment and oral presentation of findings from current neuroscience literature, in visual presentation of quantitative data and writing research grants. Additional topics include the role of animals in lab research, fraud in science, responsibility of authors and reviewers, science in a multicultural environment, and the relationship between student and mentor. Student and faculty presentations and discussions. A faculty mentor assists students in preparing for the literature presentations.

1-2 units, offered Autumn, Winter, and Spring Quarters every year

3. Distribution requirements. Each student is required to take five courses within (and at least one course in *each* of) the following three distribution areas:

- 1. Molecular, Cellular and Developmental Neuroscience**
- 2. Systems, Computational, Cognitive and Behavioral Neuroscience**
- 3. Translational Neuroscience**

Courses from outside the neuroscience core can satisfy the elective requirement with the approval of the Program Director and the student's Advisor. Please see the following link for all classes offered at Stanford:

<http://explorecourses.stanford.edu/>

In addition, in consultation with their Thesis Advisor and Thesis Committee, students may take the opportunity to select, from the hundreds of courses available at Stanford, additional courses that meet their specialized needs, which they can audit (if permitted by the course instructor) or take for credit.

LABORATORY ROTATIONS

Laboratory rotations are a requirement of the program. Students will rotate quarterly through at least three laboratories during their first year before making a commitment to a thesis laboratory. Most students will have chosen a thesis laboratory by the end of the Spring quarter of the first year, after rotating in three laboratories. An additional rotation may be arranged with prior consent of the Program Director; rotations are not necessarily limited to faculty participating in the Neurosciences Program.

Research rotations are an important part of the graduate training program. Rotations enable students to make, confirm or modify career decisions based on research experience. Furthermore, rotations allow students to experience the intellectual and laboratory atmosphere of at least three lab groups and become familiar with invaluable experimental approaches and techniques. In addition, students form friendships with faculty members as well as with students and postdocs in their laboratory, who often become lifelong scientific collaborators.

It is the student's responsibility to contact appropriate faculty members about rotation opportunities.

At the end of each quarter, students will meet with the First Year Advisor to discuss rotations for the subsequent quarter. Students must also consult with the First Year Advisor before joining a lab.

Students rotating or carrying out thesis research in a School of Medicine department register for the graduate research course and faculty section number of that department.

LABORATORY SELECTION

Final selection of a laboratory for PhD thesis research will be made only after consultation with the faculty in question and with the Program Director and First Year Advisor no earlier than the end of the Spring quarter of the first year.

As part of the flexible admissions program, students may switch to another PhD program if their interests change in the first year. This will have to be arranged with the prospective Thesis Advisor and Department or Program.

THESIS ADVISORY COMMITTEE

After deciding on a Thesis Advisor the student and Thesis Advisor shall select a Thesis Advisory Committee. We strongly suggest that the Committee be selected by the end of winter quarter of the second year. Under no circumstances shall the Committee be selected later than the end (typically summer quarter) of the second year.

The student and Thesis Advisor will choose three individuals who they consider to be best able to judge the scientific content of the thesis; the Thesis Advisor will chair the Committee for all meetings (with the exception of the Qualifying exam [which will be chaired by another previously selected member of the Committee] and the Oral Examination [which will be chaired by a faculty member outside of the Thesis Advisor's primary department]). Given the interdisciplinary nature of neuroscience research in general and the diverse interests of our faculty, **the Thesis Advisory Committee will be composed of faculty from more than one department, and its composition must be approved by the Program Director.**

These three individuals, together with the student's advisor, shall constitute the Thesis Committee. **The student will arrange an initial meeting of the Thesis Committee by the end of the student's second year** for the Qualifying Examination. After this initial meeting, the Thesis Committee will meet **at least once a year** to monitor the student's progress in research. **It is the responsibility of the student to organize these annual meetings and to record the outcome on the student intranet page.**

The Thesis Committee functions to review the progress of the thesis research, to identify potential problems at an early stage, and help to channel the research in a fruitful direction. In the rare chance that the Thesis Advisor and Thesis Committee find that the student is unable to make sufficient progress towards completion of the thesis, they shall inform the Program Director in writing. Unsatisfactory progress towards completion of the PhD degree will be considered grounds for dismissal.

QUALIFYING EXAMINATION

The goal of the Qualifying Examination is to determine the student's preparedness to pursue research on a thesis topic, explore whether potential problems have been considered, assess the student's ability to think, and the student's familiarity with relevant background information and alternative experimental approaches.

The Qualifying Examination should be taken by the end of the student's second year in the Program. An extension may only be granted by written permission from the Program Director. Exceptions are allowed for combined MD/PhD students. Failure to complete the Qualifying Examination by the end of the third year will be considered grounds for dismissal from the Program.

The Qualifying Examination will consist of an oral examination given by the Thesis Advisory Committee, *and will be chaired by a member of the Committee that is not the Thesis Advisor.* A written version of the thesis proposal must be distributed to the committee members at least two weeks prior to the exam.

The intent of the examination is to ensure that:

1. The student has selected a good thesis topic and is qualified to undertake the study. The student is required to prepare, beforehand, an approximately 10-page thesis proposal in the format of an NRSA proposal.

2. The student is able to discuss topics related to the background information relevant to the proposal. A typical exam begins with a prepared presentation of the thesis proposal. Faculty will frequently interrupt with questions about the work, its interpretation, the methods, and background questions relevant to the proposal; the student should be prepared to speak for about 20-30 minutes, which means 80 slides or less.

Following the exam, the Chair of the Thesis Committee will send a short appraisal of the student's performance on the exam, including the decision of the committee, to the Program Administrator and Program Director.

After successful completion of the Qualifying Examination, the student may apply for admission to candidacy. In the event that the student does not pass the Qualifying Examination, the Thesis Committee will meet together with the Program Director to consider whether extenuating circumstances warrant permitting the student to be examined a second time. If so, the Thesis Committee will decide upon a time and a format for the second examination. If the student is not given an opportunity to take a second examination, or if he or she is given such an opportunity and fails the second examination, he or she will be dismissed from the program.

ADMISSION TO CANDIDACY

Admission to candidacy means that the student has completed the Qualifying Examination and most of the course requirements of the Neurosciences Program and is now ready to begin thesis research leading to a dissertation and University oral exam. Along with the Qualifying Exam Certification form (which can be obtained from the Program Administrator), the Application for Candidacy for Doctoral Degree Form must be filled out and submitted to the Program Administrator:

<http://studentaffairs.stanford.edu/sites/default/files/registrar/files/appcanddoct.pdf>

The schedule may be adjusted to fit the needs of MSTP and MD/PhD students, or students who switch from another program.

DISSERTATION AND ORAL EXAM

Please refer to University Requirements for additional details of process and procedure. It is anticipated that the PhD program will be completed in approximately five years, although it is possible to complete the degree in four years, and it is also recognized that additional time may be necessary in order to complete the degree. At such time as the

student and Thesis Advisor are agreed that the student has carried out research of adequate quality and quantity, it shall be written up, following University regulations, in a dissertation.

The dissertation will be evaluated by the Reading Committee, which must be approved by the Director of the Program. In the Neurosciences Program, the Reading Committee has generally been one and the same with the Thesis Committee, although changes in membership can be made at the desire of the faculty member or student. The Reading Committee shall consist of the Thesis Advisor plus three additional members. At least two of the additional members must be on the Academic Council. If the student is co-mentored, there must be six members on the Thesis Committee (that is, 2 mentors, 3 committee members, and the chairperson).

A Doctoral Dissertation Reading Committee Form must be filed in the Neurosciences Program Office before the oral examination.

http://studentaffairs.stanford.edu/sites/default/files/registrar/files/doc_diss_rdg_ctte.pdf

The student will provide each member of the Reading Committee with a typed draft of the thesis at least 2 weeks in advance. This will not be the student's first draft, but it need not be a polished finished product — the examiners must be able to read it easily and it must have all the figures and tables of the final version. When the Reading Committee is satisfied that the thesis represents an appropriate piece of work, the student and Thesis Advisor shall arrange for presentation of the thesis in an open, announced seminar and for its defense before the Examining Committee in the University Oral Examination. **The University Oral Examination Schedule Form, detailing the composition of the Examination Committee and time of exam, must be submitted to the Administrator of the Program at least three weeks prior to the proposed examination date,** including a one-page abstract of the dissertation proposal.

UNIVERSITY ORAL EXAMINATION

The University oral examination is a requirement of the PhD program. At the time of the exam the student's candidacy must be valid and the student must be registered in the quarter in which the exam is taken. The purpose of the exam is to test the candidate's command of the field of study and to confirm fitness for scholarly pursuits. The exam will be administered according to the following guidelines based on both University and Program requirements:

1. The Examining Committee shall consist of five members: four examiners (three of which must be on the Academic Council) and a Chair, unless the student is co-mentored by two faculty, in which case the committee would consist of six members. The four members of the Thesis Advisory Committee typically constitute the Examining Committee. One of the required examiners may be an individual who is not on the Academic Council, if he or she contributes an area of expertise not readily available from

the faculty and if approved upon petition to the Degree Progress Office. Please check with the Program Administrator about this process.

2. The Chair of the Examining Committee must be an Academic Council member and cannot come from the same primary department as either the student candidate or the principal advisor, but may be a member of the Neurosciences Program.

Departmental affiliation of the Chair and Thesis Advisor includes joint appointments; courtesy appointments do not affect eligibility. The Chair can be from the same department as members of the Examining Committee other than the Thesis Advisor. The ultimate responsibility for appointing a Chair rests with the Thesis Advisor, although the Program Director and Administrator can also advise. The student should make certain that his/her choice of Chair meets the University criteria by double-checking with the Program Administrator or Director. The composition of the Examining Committee must be approved by the Director of the Neurosciences Program.

3. The Program Administrator will provide the Chair with a University Oral Examination schedule, University Guidelines for Oral Examinations Procedures, an abstract of the dissertation, and ballots.

4. Following the public seminar, the Examining Committee will continue the examination of the candidate (in private) on the same day for a period not to exceed two hours.

5. At the end of the examination the Committee members, without the student present, shall vote on the student's performance in a secret ballot. At least 4 votes out of a possible 5 (or 4 out of 6, 5 out of 7, or 6 out of 8) are required for a passing grade.

6. The oral examination results are validated by the Chair and must be reported to the Program Administrator and the Degree Progress Office within five days of the examination.

7. University procedures are followed in communicating with students who do not pass the examination. Copies of this correspondence will continue to be sent to the Degree Progress Office.

The Committee members may wish to make suggestions regarding the dissertation; the student will then incorporate the required alterations into the final version of the dissertation. The Reading Committee will append their signatures to this final version, if it meets with their approval. The dissertation may then be submitted to the University Degree Progress Office. The student must designate a "final reader," who will give his/her approval of the finished draft of the dissertation. Generally, the final reader is the student's thesis advisor but another committee member may also perform the final reading. Please visit the following link for more information on submitting the dissertation:

<http://studentaffairs.stanford.edu/registrar/students/dissertation-thesis>

MASTER'S DEGREE

A Master's Degree in Neurosciences is awarded only as a terminal degree from the Program.

The requirements for completion of a Master's Degree are the following:

1. Satisfy the unit and residency requirements set by the University for a Master's Degree.
2. Complete all of the course requirements for the Ph.D. degree with a grade of B or better.
3. Pass a Master's Examination that consists of the presentation of a five-page research proposal on a topic that the student may or may not intend to pursue. The proposal may be the same as one written in partial fulfillment of a graduate course taken by the student. The quality and scholarship of the proposal and the student's performance in the Graduate Program will be evaluated in an examination to be conducted by 3 members of the Neurosciences Faculty.

UNIVERSITY REQUIREMENTS

The University requirements for the PhD degree are detailed below. These requirements deal primarily with:

1. The minimal number of units of coursework required.
2. Steps that must be taken in order for the student to "advance towards candidacy" for the PhD.
3. The minimal number of quarters at full-tuition that the student is in "residence" at Stanford.
4. The final University Oral Exam.

Unit requirements

Candidates for the PhD degree must satisfactorily complete a program of study that includes 135 units of graduate coursework, reading and/or research. Please see <http://gap.stanford.edu/4-5.html> for rules concerning transfer credit and other such details.

Students in the program will ordinarily register for four quarters each year – autumn, winter, spring, and summer – and will generally take 10 units per quarter.

Advancing to candidacy

Students are expected to be “admitted to candidacy” once they have completed the Program’s qualifying procedures, usually by the end of the second year of doctoral study.

Admission to candidacy is an acknowledgment of the student’s potential to complete the requirements for the PhD successfully.

An “Application for Candidacy” must be filed by the end of Summer quarter of the second year in the Program in order to be admitted to candidacy for a PhD degree by Stanford University.

The information contained on the form is forwarded to the Degree Progress Office of the Registrar’s office and indicates that the student is formally qualified for the PhD degree and is in good standing. It implies that the Program has made a careful review of the student’s progress. The form indicates that the student has completed the qualifying examination and shows that he or she is still required to complete a Dissertation.

Doctoral students are expected to complete their degree requirements in a timely manner. Therefore, candidacy is valid for five years unless terminated by the Program for unsatisfactory progress. The Program expects that generally all graduate students will complete their dissertation research within five years of entrance into the Program.

PhD THESIS AND ORAL EXAMINATION

When the student, Thesis Advisor, and Advisory Committee agree that the student has completed work of sufficient novelty and quality to merit the PhD, the student will write a dissertation. When the dissertation is acceptable to the advisor, it will be presented to the Oral Exam Committee. The student will then defend this dissertation at the University oral examination.

University oral examination

This requirement for the PhD degree was detailed previously. A summary of the paperwork involved is as follows. Once the student and Thesis Advisor have agreed on a Reading Committee, the names of the faculty on this committee shall be submitted to the Neurosciences Program Office on the Doctoral Dissertation Reading Committee Form. The date for the oral examination, which begins with a research seminar, should be scheduled and this information submitted to the Neurosciences Program Office on an Oral Examination Schedule Form. An abstract of the thesis is required at the same time. Both the Doctoral Dissertation Reading Committee Form and the Oral Examination Schedule Form must be received in the Neurosciences Program office at least three

weeks before the scheduled date of the exam. The oral examination results are validated by the Chair and reported to the Program and the Degree Progress Office within five days of the examination.

Doctoral dissertation

The Doctoral dissertation is expected to be an original contribution to scholarship or scientific knowledge, to exemplify the highest standards of the Neurosciences, and to be of lasting value to the intellectual community. Students should refer to the booklet "Directions for Preparing Doctoral Dissertations", available online at:

http://studentaffairs.stanford.edu/sites/default/files/registrar/files/edissertation_2012-13.pdf

These guidelines should be read carefully before final preparation of the manuscript to avoid costly and time-consuming revisions. Previously published dissertations may be consulted but should not be used as a guide to preparation of the manuscript with regard to format as governing guidelines may prove to be outdated. Each member of the Reading Committee must sign the "signature page" of the dissertation to certify that the work is of acceptable scope and quality; the signatures must be in original ink and may not be photocopies. One reading committee member reads the dissertation in its final form and certifies on the Certificate of Final Reading that specifications of the Neurosciences Program and of the University have been met.

If submitting the dissertation electronically, as most students do, it should be noted that the following must be done prior to submitting the dissertation:

- "Application to Graduate" filed online through Axess by the appropriate deadline
- One hard copy of an original signed signature page (acid-free paper) submitted to the Student Services Center, located on the 2nd floor of Tresidder Union
- One hard copy of the dissertation title page submitted to Student Services Center, located on the 2nd floor of Tresidder Union (acid-free paper)
- Confirm the names of all reading committee members in Axess, and designate a Final Reader
- Confirm candidacy as valid through your degree conferral date
- Confirm completion of all required University Milestones
- Review "Copyright Considerations for Authors of Electronic Theses and Dissertations" slides available on Stanford Libraries' web site
- Discuss embargo and other release options with co-authors and adviser before preparing the submission online

Conferral of degrees. Deadlines for submission of dissertations are strictly enforced. Students who submit their dissertations after the deadline in a given quarter may obtain a Statement of Completion from the Degree Progress Office; official degree conferral will occur in the following quarter. You must be registered for the quarter in which the degree is conferred or the immediately preceding quarter. Candidacy must be valid when the degree is conferred.

The Degree Progress Office should be notified in writing when conferral plans change. Students who withdraw their conferral request or who fail to complete degree requirements must file a new Notice of Intention for a subsequent quarter. A new Notice of Intention must be filed for each degree and conferral quarter.

Application to graduate. The Application to Graduate is submitted on-line via Axess. It should be submitted by the deadlines listed in the University Calendar. Requests for conferral are reviewed by the Neurosciences Program Office and the Degree Progress Office to verify completion of degree requirements. In Summer, Autumn, and Winter Quarters degree certificates are sent to students within two weeks of the conferral date.

Spring commencement. Commencement ceremonies are held each June for students who have received degrees in the previous Summer, Autumn, Winter quarters and for students who are graduating in June. Students completing programs in June must submit a Notice of Intention by diploma deadline date to receive a diploma at June Commencement and to have their names appear in the Commencement Bulletin.

Information on Commencement activities and distribution of diplomas is sent by the Registrar's Office in early April to addresses provided on the Notice of Intention. Students who wish to participate in commencement activities in advance of conferral of their degree may obtain a Graduate Student Petition to Walk-Through Commencement Exercises from the Degree Progress Office from May 1 until the day before commencement. A Walk-Through petition should be requested only if there is no possibility of completing degree requirements for June conferral.

FUNDING

Stipends, RAships, and tuition. Students are fully funded for their entire course of study, assuming satisfactory progress toward the PhD degree. Students normally enter the Program on a Neurosciences Program training grant slot or with individual fellowships. Once a student joins a laboratory, he/she becomes the financial responsibility of the Principal Investigator of that laboratory for the duration of the student's PhD research. Occasionally, students are fully funded on entry by a research assistantship (i.e., on a faculty member's research grant) that includes payment of a stipend and tuition. Often, it will be a combination of these sources.

Students are required to apply for predoctoral fellowships from the National Science Foundation and the National Defense Science and Engineering Graduate Fellowship Program (NDSEG) by November of their first year in residence. These

individual fellowships will pay a stipend and tuition for 3-4 years. Applications for both are available in October and due in the first week of November.

Stipends. The stipend for Neurosciences students for the 2013-2014 academic year is \$33,172 regardless of the specific department in which they are rotating or carrying out thesis research. Students may, of course, receive more than this amount if they receive an individual fellowship that is set at a higher level.

Student fees, late fees, etc., are the responsibility of each student, though some fees may be covered through the funding received. Students may receive stipends quarterly (from fellowships and training grants) or salary twice-monthly (from research assistantships).

For those students on fellowships who are paid quarterly, stipend checks are issued the day before classes begin. Checks for students who have not set up direct deposit are sent to the students' local US mailing address listed in Axxess.

Students who are paid semi-monthly through the Stanford University Payroll Office will be paid on the 7th and the 22nd of the month (or on the preceding work day if these dates fall on a weekend or holiday). Semi-monthly paychecks may be direct-deposited in local banks. "Live" checks are sent to the student's campus mailcode (typically the student's thesis lab) entered into Axxess by the Program Administrator. Students may enroll in Payroll Direct Deposit and view semi-monthly pay statements in Axxess.

Tuition. For the 2013-2014 academic year, tuition is \$9,250 per quarter for 8-10 units and \$2,775 per quarter for students who have reached TGR status.

Your tuition award on your University bill will be reflected as a credit based on the tuition that is provided from your fellowship, training grant and/or research assistantship. These credits should take care of the student's tuition needs.

Taxes. Very basic tax questions can be addressed to the Program Administrator for domestic students; specific questions should be directed to a tax professional. International students may consult with the Bechtel International Center.

Time Table for Advancement to Ph.D.

Year One

- Quarterly laboratory rotations/rotation evaluations
- Take courses
- Select laboratory and thesis advisor by end of the first year

Year Two

- Begin thesis research
- Take courses

- Meet quarterly with thesis advisor
- Select thesis advisory committee (three members [in addition to your advisor]) by the end of Winter quarter – this committee must be approved by the Program Director

- Take qualifying examination
- Submit:

1. Qualifying Examination Certification

Please obtain from Program Administrator

2. Application for Candidacy for Doctoral Degree

<https://www.stanford.edu/dept/registrar/pdf/appcanddoct.pdf>

3. Doctoral Dissertation Reading Committee Form

<https://www.stanford.edu/dept/registrar/pdf/docrdngcomm.pdf>

Year Three

- Thesis research
- Take courses
- Meet with thesis committee for annual committee meeting

Year Four

- Thesis research
 - Meet with thesis committee for annual committee meeting
 - Apply for TGR status in Spring (usually)
- <http://www.stanford.edu/dept/registrar/pdf/tgrreq.pdf>

Year Five

- Thesis research
- Oral examination:
University Oral Examination Schedule
<https://www.stanford.edu/dept/registrar/pdf/oralsform.pdf>
- Submit thesis
<http://registrar.stanford.edu/pdf/docdissdir.pdf>
- Apply to graduate in Axxess

EVENTS

Retreats. As a Neurosciences Program student, you will have the opportunity to attend many program-related events. In the Autumn quarter, there is a retreat at Pajaro Dunes hosted by the Stanford Institute for Neuro-Innovation and Translational Neuroscience (SINTN); in the spring, there is a student-run retreat (which has been held at various locations over the years). Retreats such as these allow for interactions with faculty, fellow students, postdocs, and experts in the field of Neuroscience.

Other Program Activities. The program holds monthly senior student talks (aka “Superfriends”) for the double purpose of giving senior students a chance to practice presenting short research talks to an audience and allowing the younger students to learn about research being done in other labs on campus. Additionally, there are happy hours throughout the year along with outings to baseball games and other such activities that allow students to interact with one another in a social atmosphere and to become familiar with the Bay Area.