



Stony Brook **University**

*The Graduate Program in
Molecular and Cellular Pharmacology*

*Rules and Policies
August 2019*



*Department of Pharmacological Sciences
Health Sciences Center
Basic Sciences Tower 8th Floor, Room 140
Stony Brook University
Stony Brook, New York 11794-8651
Phone: 631-444-33050/3057
Fax: 631-444-9749*

TABLE OF CONTENTS

1. POLICIES OF THE GRADUATE SCHOOL

2. ADMINISTRATION OF THE GRADUATE PROGRAM

3. PROGRAM FACULTY

4. REGISTRATION AND STUDENT STATUS

- **NYS RESIDENCY**

5. REQUIRED COURSE WORK

6. ADDITIONAL PROGRAM ACTIVITIES

7. ROTATIONS AND FINDING A LAB

- **ROTATION REPORTS**
- **CHANGING LABS**

8. EVALUATIONS

9. QUALIFYING EXAM

10. STARTING THESIS RESEARCH

- **FALL RETREAT**
- **STUDENTS' SPRING SYMPOSIUM**

11. RESEARCH ADVISORY COMMITTEES (RACs)

12. ADVANCEMENT TO CANDIDACY

13. APPROACHING THE THESIS DEFENSE

14. ACADEMIC PROBATION

15. VACATION POLICY

16. MASTER'S DEGREE

17. GRIEVANCES

**18. FINANCIAL
CONSIDERATIONS**

- **STUDENT
TRAVEL.**

**19. TEACHING
REQUIREMENTS**

**20. DEGREE
REQUIREMENTS**

21. WHAT TO DO IF YOU ARE HAVING DIFFICULTIES...

APPENDICES

- I. STANDING COMMITTEES
- II. GRADUATE CURRICULUM 2019-2020
- III. MSTP GRADUATE CURRICULUM 2019-2020
- IV. FACULTY of THE TRAINING PROGRAM
- V. ROTATION SCHEDULE 2019-2020

Graduate Training Program in Molecular and Cellular Pharmacology

Rules and Policies 2019-2020

1. Policies of the Graduate School

The Graduate Training Program in Molecular and Cellular Pharmacology (MCP) has its home in the School of Medicine and the Graduate School of Stony Brook University. The MCP Program is subject to all of the regulations of the Graduate School. All regulations and policies of the Graduate School can be found in their Online Policy Manual in at <http://sb.cc.stonybrook.edu/gradbulletin/current/regulations/index.php>

2. Administration of the Graduate Program

The Graduate Program is administered by a Program Director, Prof. Miguel Garcia-Diaz, who serves as Chair of the Steering Committee. The Director is assisted in administration of the Program by an Administrative Assistant, Ms. Odalis Hernandez. The Steering Committee is responsible for all policies of the Program. All decisions regarding admissions, academic standing, curriculum, and student petitions are made by the Steering Committee. The Program Director is empowered to make routine decisions that are consistent with the policies of the Steering Committee. Several of the faculty members on the Committee have defined administrative responsibilities, as noted in the *Appendix I*. At least one member of the Steering Committee is an elected (already advanced to candidacy) student representative. The election of the student representatives is held each year at the students' June monthly meeting.

3. Program faculty

Individuals with Faculty (or equivalent) appointments at Stony Brook University, the Cold Spring Harbor Laboratories or the Brookhaven National Laboratory can serve as members of the graduate program. The Graduate Program Steering Committee decides faculty membership in the program. Faculty who join the program for the first time will receive, regardless of their rank, an initial 3-year appointment. Subsequent appointments will be for a 5-year term. Continued membership will be evaluated at the end of the initial 3-year term. Renewal of the member's appointment will be contingent on the member's active participation in program activities, including attendance to the program retreat and student seminars, serving on qualifier and dissertation committees, serving as mentors for graduate program students, etc. Students joining the lab of a faculty member in their initial 3-year term will require a co-advisor from the program. The first MCP student to join the lab of any Program faculty member will require a coadvisor from the program. Faculty members with a suitable record of mentoring PhD students may petition the Steering Committee for a waiver of the co-advisor requirement.

4. Registration and Student Status

Graduate students are required to register every semester, unless they are on a leave of absence. First year students who do not have an MS degree or extensive graduate course work have G3 status. These students register for 12 graduate credits per semester. Once a student has accumulated 24 graduate credits, she or he will register for 9 credits per semester, with G4

status. After Advancement to Candidacy for the Ph.D. degree (see item 9 below) a student will have G5 status, and will register every semester for the number of credits designated by the Graduate School (currently 9 credits).

NYS Residency

All eligible graduate students receiving support and/or a tuition scholarship are expected to establish NYS residency as soon as possible after arriving at Stony Brook University. Failure to establish residency may result in the student being liable for that portion of tuition above the NYS rate.

5. Required Course Work

The Curriculum of the Graduate Program is described in *Appendix II*. All courses specifically listed are required courses. Students are required to take one elective before graduation.

The Graduate School requires that a student maintain an overall GPA of 3.0 or better. All of the required courses must be passed with a grade of B or higher. All grades of B- or lower are discussed by the Steering Committee. If a student receives two or more B- grades in mandatory courses, the Steering Committee may require that the course(s) be repeated or an additional course be taken. A student has only two opportunities to register for a given course. If a student again receives a failing grade (B- or less) upon repeating a required course, that student is subject to dismissal from the Graduate Program.

The Curriculum changes with time to reflect scientific and educational developments. The Steering Committee also makes allowances for students affected by curriculum changes. Students with significant earlier graduate level course work may petition the Steering Committee for waiver of any individual course. With adequate justification, students can also petition for substitution of an elective for a required course. MSTP students entering the

Pharmacology Graduate program follow an accelerated curriculum, since they will have had earlier and relevant graduate level course work. The curriculum for MSTP students is described in *Appendix III*.

All pharmacology graduate students are expected to attend two seminars per week. First, the Student/Faculty workshop: this is a 1-credit course (**HBH 590**), although students are not graded on questions or presentation. There is a sign-in sheet to monitor attendance at the weekly workshop. Pharmacology graduate students present the results of their research to their committees, program faculty, and fellow students once every academic year. The departmental seminars are held weekly. Graduate students will sometimes be assisting departmental faculty in hosting the seminar speakers. Graduate students will join most departmental speakers for lunch following the seminar to informally discuss their research and possible postdoctoral opportunities at their home institutions. These lunches are mandatory for first-year students.

Journal Club (**HBH 580: Selected Topics in Pharmacology**) is a one-credit course requirement for all first- and second-year students. Topics for student-led presentations and discussions are approved by the course director(s).

In addition to academic coursework, students are required to participate in required Stony Brook training.

6. Additional Program Activities

Clinical Immersion Program

In June of their first year, students can elect to participate in Clinical Immersion. This program consists of a didactic course, "From Pharmacology to Pharmacy: Introduction to Clinical Medicine", that exposes students to different topics including HIPAA compliance, Medical Terminology, Clinical Pharmacology, Medication Safety or the Drug Development process. The course is then followed by clinical

rotations where trainees interact with clinicians interested in basic research. Based on their scientific interests, trainees are matched with clinicians on the basis of their scientific interests. Trainees also spend one day touring the hospital Pharmacy and learn about the role of the Pharmacy during clinical trials. Throughout the clinical experience, trainees meet weekly with the course faculty to present and discuss clinical cases and correlate clinical presentation with the underlying basic science.

Program in Communicating Science

Students are expected to participate in a program developed in partnership with the Alan Alda Center for Communicating Science (AACCS). Students are required to take a fall semester course (*Distill Your Message*).

Introduction to Computational and Quantitative Methods in Biology.

First-year students are required to attend a workshop on computational and quantitative skills. The workshop aims to introduce students to the logic of programming, using the Python programming language. Students learn to write Python code, and use available Python modules for data analysis and plotting.

7. Rotations and Finding a Lab

Students are required to participate in three research rotations with Faculty members of the Training Program. (*Appendix V*). Research rotations serve several purposes. First, they are the principal mechanism for teaching practical laboratory techniques. Students should try to obtain a diverse laboratory experience during their rotations. Second, rotations give students an opportunity to read and discuss the literature in a specific field. It is expected that students will exert a significant effort to assimilate the scientific literature that will allow them to participate productively in decisions regarding experimental design. Third, rotations provide students an opportunity to determine whether a particular faculty member would be a suitable thesis advisor. Rotations also provide the faculty

member a chance to decide whether to accept a particular student as a doctoral trainee. Faculty members generally wait for students to express an interest either in a rotation or in staying to complete a thesis. When students arrange rotations, it is important to explore the likelihood that the faculty member is willing and able to support an additional student. Faculty who anticipate that they will not have extramural funding or space for additional students should not accept rotation students. A student interested in rotating in the lab of a faculty member who is not a member of the Graduate Training Program should obtain explicit permission from the Steering Committee, and should understand that it may not be possible to pursue thesis research in this laboratory unless this outside member is invited to join the Graduate Program. The membership of all Program Faculty is reviewed every five years. **For any student, only one rotation in a lab of a faculty member who is not a member of the Graduate Training Program is allowed.**

A student who is unable to find a laboratory after three rotations can petition the Steering Committee to permit a fourth rotation. If a student is unable to find a thesis laboratory after the fourth rotation, or if a student receives failing grades (below B-) in research rotations, then the student faces dismissal from the doctoral program.

The Steering Committee will consider petitions from students to waive a third rotation, if they have extensive prior research experience and have found a laboratory that will accept them. These petitions must be accompanied by a letter from the faculty director of the laboratory supporting the petition and guaranteeing financial support.

Rotation Reports

All rotation students are required to turn in Rotation Reports two weeks after the end of each rotation. The purpose of these reports is to gain experience in communicating their scientific research in

short and comprehensible written form. One or two faculty members will be assigned each year to go over each student's reports. The guidelines are listed below:

- "abstract-like" format, 5-page limit, 11-pt. arial font, double-spaced
- State the *hypothesis* to be tested. Give the long-term objectives.
- State the *Specific Aim(s)*.
- Describe the *Research Design and Methods*.
- *Results / Discussion*: what they mean/ where to go from here
- *Bibliography*, if applicable (not included in page limit)

A practical note to students: Individual faculty members vary greatly in their expectations of rotation students. Some faculty members provide continuing projects that have been studied previously while others require more initiative on the part of the student. In general, the more initiative a student shows the better. Some faculty require extensive written reports, while others do not. During rotations, students are generally expected to develop a conscientious work ethic that may require them to work long days and to devote time on weekends to their research. Students should remind their faculty advisors when they need additional time to prepare for exams or course projects, as necessary. Rotations are evaluated with a letter grade and a written evaluation following a discussion about the student's performance directly with the faculty advisor. The evaluation is to be signed by both Rotation advisor and student. Students should seek to establish a productive working relationship in a laboratory that provides a comfortable and intellectually challenging environment. The Graduate Program does not have a specific regulation limiting the number of students in a particular lab. Students considering labs for rotations should try to assess whether the faculty member will have sufficient time as well as space and money to facilitate the proposed research.

Changing Labs

Both students and faculty make a considerable investment in a thesis research project. Faculty realize that students devote a significant effort over several years to their research. Students must realize that as of 2013 a commitment of about \$141,000 in salary funds and perhaps \$30,000 to \$65,000 (or more) in supplies will be required to fund years 2 through 5 of a graduate student's education. It sometimes happens that a student-advisor relationship may deteriorate. When this happens at a fairly early stage, it is often a productive solution for the student to change laboratories. The Graduate Program does not assign laboratory rotations or compel students to work in particular labs. Similarly, the Graduate Program cannot compel an individual faculty member to accept or to retain an individual student. However, all students and faculty members should understand that changing laboratories results in a loss of time on the part of the student and a loss of resources for the host laboratory. The student-advisor relationship becomes strained when a student's project is proceeding too slowly or heading in what is perceived to be the wrong direction. Maintaining open communication is vital to surviving such situations and redirecting a project. Neither the student nor the advisor should take lightly the decision to terminate the student-advisor relationship. A senior student interested in leaving a laboratory must petition the Steering Committee for a change in labs. It is the responsibility of a student under these circumstances to find a new lab within the Program. *A senior student without a lab cannot pursue a thesis project and will be placed on academic probation*, under the conditions described below. The Graduate Program is structured such that student support is tied to the funding of the advisor's laboratory. A senior student cannot be supported for any extensive period of time by Program or Departmental funds. Every case of a student without a lab will be followed closely by the Steering Committee and the student will be expected to cooperate with the Steering Committee in efforts to find a

new lab. If a student has been asked to leave a lab, an Academic advisor will be assigned to work with the student and the Administrative Assistant to help find a new laboratory.

8. Evaluations

Students will receive written evaluations for each rotation. They should discuss the evaluation and the letter grade with their faculty advisor. Both the written evaluation and the grade should be offered and accepted as constructive criticism. Students will also receive annual evaluations for their thesis research, although all research courses beyond Advancement to Candidacy are graded on a Satisfactory/ Unsatisfactory scale. Faculty members are specifically instructed to avoid giving automatic A's for research rotations and to bear in mind that a grade of C represents a failing grade in Graduate School. The Steering Committee will investigate every instance of an Unsatisfactory or C grade for research.

9. Qualifying Exam

The Qualifying Exam is administered in the second year. Students must be in good academic standing (i.e., not on probation) to be eligible to take the exam. All required course work must be completed or in progress during the Spring semester. The format for the qualifying exam is described in *Appendix VI* (the dates indicated in *Appendix VI* will vary from year to year with the calendar). Following completion of the Qualifying Exam, the Steering Committee will decide if the student is permitted to prepare for defense of their research proposal. Since the Qualifying exam consists of a written and an oral part, students are expected to pass both parts. Failure to perform satisfactorily in one of the two parts may result in “conditional pass”, which would require rewriting the written part or re-defending the oral part. If a student fails both parts of the Qualifying Exam, whether the student is allowed to retake the exam remains at the discretion of the Steering Committee.

Students are maximally given two chances to re-defend their Qualifying Exam.

10. Starting Thesis Research

After the student has decided on their thesis lab, the pharmacology department requires a signed statement from the selected faculty member in the Program indicating that the student is welcome to pursue thesis research in their laboratory with all necessary financial support to be provided by this host laboratory.

Students begin thesis research during the second year, even before taking the Qualifying Examination. Their first student seminar, during the fifth semester (Fall semester of the third year), typically provides more background and experimental plans than polished data and is independent of defending a proposal based on their Thesis research before their Research Advisory Committee.

Thesis research is intended to provide a strong foundation for a productive career in science. Students are encouraged to focus their research towards answering significant questions that will lead to publication of their research findings. An adequate Ph.D. thesis requires at least one first author publication and typically encompasses several publications in peer-reviewed journals. Students, from their third year and above, are required to present the results of their research in an annual Program Student Seminar and in a poster at the annual Fall retreat.

Annual Department/ Program Fall Retreat

The Annual Retreat is mainly a greeting for incoming students and features short talks by faculty members describing research opportunities in their labs. In addition, all students beyond the second year will present posters on their research. Attendance at the retreat is mandatory for all Pharmacology graduate students. Two annual graduate student awards are presented each year in recognition of the significant contributions of Dr. William van

der Kloot to the development of the Department of Pharmacological Science at Stony Brook. The awards are for excellence in research and for excellence in teaching. The van der Kloot award recipients each receive a \$500 honorarium.

Annual Students' Symposium

The Annual Spring Student Symposium is a student-driven retreat and includes research presentations by the students for their fellow students, and a talk by an outside speaker chosen and invited by the students. The students facilitate all of the arrangements for this day, including public relations, accommodations, travel and schedule for the invited speaker. It usually takes place the first week of June. Attendance is mandatory for all Pharmacology graduate students.

The David L. Williams Memorial Travel Award is presented at the Spring Symposium. This award honors the memory of a respected faculty member who set high standards of science and education for our program, by providing an opportunity for further scientific development for one of our doctoral candidates. (See **16.** for details on award nominations.)

11. Research Advisory Committee (RAC)

In consultation with their advisor, a student selects a Committee of four faculty, including the advisor, to serve as a Research Advisory Committee (RAC). The selection of the committee should take place prior to the Student's first seminar. One faculty member outside the Program must be included in this Committee. In most cases this Committee will become the Thesis Examination Committee. The University requires participation of one faculty member outside of the graduate program in the final thesis defense, with a total of at least four faculty, including the advisor. Changes in Committee membership are always possible, but the University requires advance notification of the composition of the Thesis Examination Committee. The Graduate School and Graduate Council have strongly urged that the outside

faculty member be a true external examiner from another institution. Therefore, the Steering Committee strongly advises that a true outside advisor be on each student's Dissertation Committee for one year prior to the defense. This gives the student more exposure and also gives another "air of legitimacy" to the dissertation. The use of teleconferencing during the committee meeting and defense makes it possible for almost any scientist to be accessed.

The advisor cannot serve as Chair of the RAC. It is important that all exam and advisory committees avoid any potential for conflict of interest. Therefore, the Graduate Program Steering Committee will not approve committees that include the spouse or companion of a student's advisor, unless another faculty member is added to the Committee. In situations where the proposed Committee includes close collaborators that may be co-authors on papers, the Committee may recommend the addition of another faculty member who does not share this close association.

To remain in good academic standing in the Graduate Program, each student must meet at least once a year with the Research Advisory Committee (RAC) and make sure that the chairperson of the committee submits a report of the meeting for his or her file. If a committee report is not filed, the faculty member in charge of Academic Standing will discuss the situation with the Steering Committee. The RAC Committee will include Responsible Conduct of Research topics (authorship, mentorship, data storage, data management) in the meeting agenda.

Any changes in the faculty membership of a student's Research Advisory Committee must be requested in writing to the Graduate Program Office/ Director by the student in advance of the committee meeting. Committee members must be notified in writing after the approval.

12. Advancement to Candidacy

After a student is advanced to candidacy, the only remaining requirement for the Ph.D. is the completion of the Thesis. Advancement to candidacy will require:

1. Completion of 30 credits of graduate level course work, with good academic standing.
2. Completion of all of the courses specifically required by the Steering Committee.
3. Successful defense of the Qualifying Exam. Students are typically not permitted to begin this exam unless items 1-2 above are satisfied.
4. Preparation of a written Thesis Research Proposal (*Appendix VI*), with successful oral defense of the proposal in a meeting of the student's Research Advisory Committee. It is expected that this oral defense should be completed in conjunction with the student's seminar by the end of the Fall semester following the Qualifying Exam. Students should notify the Program Director giving the date for this Research Advisory Committee meeting and listing the faculty who have agreed to serve on the Committee. This notification should be provided prior to the Fall Semester. Any changes in the faculty membership of this committee must be requested in writing by the student in advance of their committee meeting.

The Proposal defines the general scope of experiments that the student, advisor and Committee consider sufficient for a Thesis project. The thesis research advisor is not permitted to participate in the defense of the thesis proposal, but is asked to return for the last 15 minutes of the committee meeting to discuss the critique of the Proposal with the committee members.

It is to be expected that a full thesis project will be sufficiently ambitious to encompass one or more publications in leading journals. In the course of research, a student may find that some

of the original aims were unrealistic, or may uncover a new, more interesting line of experimentation.

A written evaluation of this Proposal defense must be filed with the Graduate Program by the Chair of the Research Advisory Committee. A copy of the evaluation should be provided to the student. For more information on the composition and role of the research advisory committee, see below.

13. Approaching the Thesis Defense

A student making good progress in the graduate program will have met routinely with his/her advisory committee and will have one or more first-author papers submitted or published by the time he/she considers defending the thesis. Research advisory committee meetings should directly consider the question "How much more should be done before the thesis is ready to defend?" Students should have a final meeting with their committee in the months prior to the defense to obtain permission to defend the thesis and discuss post-graduation plans for the student. The written thesis should be reviewed by the student's advisor prior to scheduling the defense, and the advisor should provide an email to the Program Director indicating that the student appears to be on schedule to defend by the stated date. To meet The Graduate School requirements, the student must provide the Program Director with the abstract, date, time and place of the defense four weeks prior to the defense.

Following the successful oral defense of the dissertation, written revisions should be completed within two weeks, so that the final dissertation (electronic document) can be turned into the Graduate School.

14. Academic Probation

The Graduate School automatically places students on Academic Probation when their cumulative GPA falls below 3.0. If this situation is not corrected by the end of the two subsequent semesters, the student will be dismissed from the University. These policies are described on page 16 of the Academic Progress in the Policy Manual of the Graduate School found in http://sb.cc.stonybrook.edu/gradbulletin/current/regulations/academic_probation/index.php

The Graduate Program has additional guidelines for placing a student on Academic Probation. If a student remains on Academic Probation for two consecutive semesters, the Steering Committee may request dismissal from the University.

1. A student will be placed on academic probation if they receive two consecutive Unsatisfactory research evaluations or grades of C in research rotations.
2. A student will be placed on academic probation if they have not successfully defended a research proposal one year after completing the qualifying exam and been advanced to Ph.D. candidacy by the end of the third year of full-time study.
3. A student will be placed on academic probation if they have not had a meeting of their Research Advisory Committee within one month following written notification that they are delinquent in scheduling the annual meeting of their Committee.
4. A student with G4 or G5 status will automatically be placed on probation one month after they voluntarily or involuntarily leave their sponsoring laboratory, if another faculty member has not been identified in the interim to serve as his or her thesis research advisor. A student on probation under these circumstances may continue attempts to find a new advisor and may petition the Steering Committee for continued short term stipend support.

5. At the end of the second year, a student not prepared to begin the qualifying exam due to failure to successfully complete required course work may be placed on academic probation.

15. Vacation Policy

During the first year students are expected to be on campus for their laboratory rotations and the Student symposium from late August through the end of June. Students need to obtain permission from the Graduate Program Director in consultation with the Rotation Advisor to take time away from courses and rotations. Once a student officially joins a research lab, the research advisor is responsible for approving time off. Discuss vacation plans well in advance with your advisor in order to remain in good standing. DO NOT plan vacation between the end of course work in May and starting in your research lab in June. For all Pharmacology Graduate Students, the Steering Committee suggests a minimum of two weeks (10 business days) to a maximum of three weeks (15 business days) vacation each year. However, the vacation time period would be at the discretion of the advisor. If a student wishes to take more time off (e.g., foreign student traveling home for a month), they should take less time off the following year.

16. Master's Degree

A separate MS in Biomedical Sciences with concentration in Molecular and Cellular Pharmacology is available for students.

The PhD Graduate Program does not admit students on a MS degree track. Students who have satisfactorily completed 30 graduate credits including all of the course work required by the Program are eligible to apply for an MS degree. The Program requires a Master's Thesis to be read and approved by a faculty committee. There is no requirement for a Thesis Dissertation Defense for a MS Degree. A terminal MS Degree option is available to students who have not passed the Qualifying Exam. Students on academic probation with a GPA below 3.0 are

not eligible for an MS Degree, according to University regulations. Students who have passed the Qualifying Exam are eligible to apply for an MS Degree, if they so desire, even if they are continuing in the Ph.D. Program. A MS Thesis is required in these cases.

17. Grievances

Grievances with respect to grades, research evaluations or inappropriate professional behavior will be considered by the Grievance Committee of the Graduate Program at the request of the student. Grievances should be filed within a month of the event that needs to be evaluated. As mandated by the Graduate School, the six-member Grievance Committee is comprised of an equal number of students and of faculty selected by the Steering Committee (See *Appendix I*), Grievances that cannot be resolved by the Program Committee will be referred to the Grievance Committee of the Graduate School.

18. Financial Considerations

In its offer of admission to prospective students, the Graduate Program offers support for the students at the current stipend level for the first year. Beyond the first year, all stipend support must come from faculty research grants or individual fellowships. Students that are awarded competitive individual fellowships that are at least half the current stipend will receive a 10% increase in their stipend (up to a current maximum of \$30,000). It is the intention of the Graduate Program that all students in good academic standing should receive full stipend support at current levels throughout their term of study. If a student in good academic standing is working in a lab that loses extramural funding, the Program will work with the advisor, the Department and the Graduate School to try to assure continued stipend support. Students temporarily without a laboratory may petition the Steering Committee for support.

Students, who receive stipends, also receive a full tuition waiver (partially through payment of tuition funds from Department sources) throughout their term of training. Students must register full time and in a timely manner each semester or the Graduate School will revoke or reduce their tuition scholarship. It is the policy of the Graduate School that all out-of-state domestic students establish and file for New York State residency after the first semester to qualify for lower tuition.

Student Travel

All students get a one-time \$300 travel award from either the Training Grant or the Department of Pharmacology. Students must petition the Steering Committee for travel funds to help defray the cost of travel as they present research results at scientific meetings. Requests for funds should include a detailed list of estimated expenses and be accompanied by a copy of the abstract of the research presentation.

All conference and workshop travel should be pre-approved by an email request to the student's PI or grant administrator to certify that the required funds are available. Approval prior to the commencement of the trip is also necessary to ensure that the traveler is covered by Worker's Compensation benefits.

An additional opportunity for a Travel Award for students is provided by the annual *David L. Williams Memorial Scholarship Travel Award*. Eligible to be nominated for this award are graduate students who have been advanced to PhD candidacy in the Program. The purpose of the award, which amounts to \$1,000, is to cover expenses and allow the students to participate in an advanced course (e. g., at Woods Hole, CSHL or an EMBO course) or to present results of their research at either a national or international scientific meeting. Final approval on the use of Williams' Award funds will be only be granted by the graduate program once a specific plan for their use is submitted. In all cases, it is expected

that after returning to Stony Brook, the student to whom an award is made will present results of their experience to fellow students and any other interested individuals.

The Graduate Program does not provide funds for research supplies or for preparation of illustrations or Theses. These costs are the responsibility of the sponsoring laboratory.

19. Teaching Requirements

Students are required to serve as Graduate Assistants for the courses taught in the Undergraduate Program in Pharmacology. This teaching requirement is an academic requirement of the Program and of the Graduate School and does not require appointment as a State Teaching Assistant, i.e., "TA." (See *Appendix VII*). Currently, third year students will serve as GAs after they have successfully completed their second year course in Pharmacology. The timing of the teaching requirement is more flexible for students on the MSTP track, since they enter the PhD program after having completed Medical Pharmacology. Graduate Assistants should register for the 1-credit course "Teaching Practicum in Pharmacology" (HBH 601) in the semester in which they teach. Students who express an interest in obtaining additional teaching experience can participate in an advanced teaching program that involves participation in a pedagogy workshop, coaching by faculty and the development of an individualized teaching plan.

20. Degree Requirements

See *Appendix IX*.

21. What to do if you are having difficulties...

Building a sound foundation for a career in science during graduate school is a difficult and challenging undertaking. It is important to channel the pressure productively to enhance learning and research efficiency. It is not unusual

for a student to feel stress or for the relationship with the lab advisor or other lab coworkers to become strained.

When you feel that academic pressures are excessive, you should speak with your assigned student or faculty advisor or the Program director. The student representative or faculty members of the Steering Committee are also freely available to discuss problems. Keep these lines of communication open! Workshops on stress management and other counseling services are available on campus. The Program Director or Administrative Assistant will be happy to help you arrange to have access to these services.

When you feel you have not been treated fairly, discuss the situation with your advisor, the Program Director and members of the Steering Committee. If the situation cannot be resolved, you have a right to file a grievance with the Program's Grievance Committee (*Appendix I*). It is best to reserve this option for situations that have not been resolved after extensive discussion between the appropriate parties. Filing a grievance prematurely may aggravate, rather than assuage a situation.

Several appeals and grievance procedures are also available in the University and can be found http://sb.cc.stonybrook.edu/gradbulletin/current/regulations/academic_probation/appeals.php. "These policies complement other means to address and resolve concerns of graduate students, such as the Graduate Student Organization, GSEU, the Graduate Student Advocate (GSA), and, for graduate research assistants, the Research Foundation." [Graduate School Policies Manual]

APPENDIX I – STANDING COMMITTEES

Graduate Program in Molecular and Cellular Pharmacology

The composition of the Steering Committee for 2019-2020 is as follows:

Dr. Miguel Garcia-Diaz

Director of the Graduate Program 4-3054. miguel.garcia-diaz@stonybrook.edu

Dr. Michael Frohman

ex officio, Department Chair 4-3050. Michael.Frohman@stonybrook.edu

Dr. Holly Colognato

Associate Director of the Graduate Program and Director of Admissions 4-7815.

Holly.colognato@stonybrook.edu

Dr. Paul Fisher

Department Vice-Chair 4-3067. Paul.fisher@stonybrook.edu

Dr. Styliani-Anna (Stella) Tsirka

Student Advisor /Curriculum 4-3859. styliani-anna.tsirka@stonybrook.edu

Dr. Lori Chan

Curriculum 4-3085 chia-hsin.chan@stonybrook.edu

Dr. Joav Prives

Recruitment 4-3139. Joav.prives@stonybrook.edu

Dr. Bruce Demple

Academic Standing 4-3978. Bruce.demple@stonybrook.edu

Dr. Mark Bowen

Extramural Faculty Representative (Physiology & Biophysics) 4-2536. Mark.Bowen@stonybrook.edu

Gabby Moody

Graduate Student Representative (L. Wollmuth lab). Gabrielle.moody@stonybrook.edu

Odalís Hernández

Program Administrator 4-3027. Odalís.hernandez@stonybrook.edu

Lynda Perdomo-Ayala

ex officio, Dept. Administrator 4-3050. Lynda.Perdomo-Ayala@stonybrook.edu

The composition of the **Grievance Committee for 2019-2020** is as follows:

Faculty

Carlos de los Santos
Marian Evinger
Ken Takemaru

Students

Emilie Bouda
Danielle Cervasio
Alexandros Kokkosis

The composition of the **Admissions Committee for 2019-2020** is as follows:

Dr. Holly Colognato (Chair)

Dr. Bruce Demple

Dr. Lori Chan

Dr. Miguel García-Díaz

Odalís Hernández

Student-elected **Graduate Student Organization (GSO) Senators for 2019-2020** are:

Lara Franceschinis Noele Certain Tyler Lewis (alternate)

Student-elected **RA Union Representative for 2019-2020** is

Emilie Bouda

APPENDIX II
GRADUATE CURRICULUM 2019-2020

GRADUATE PROGRAM IN MOLECULAR AND CELLULAR PHARMACOLOGY
Stony Brook University

FIRST YEAR

R = Required E = Elective

Fall

Course	Credits
CHE 541 (R) Biomolecular Structure and Analysis/Graduate Biochemistry	3
HBY 501 (R) Graduate Physiology	4
HBH 545 (R) Biochemical Lab Techniques (Pharmacology I)	1
HBH 590 (R) Seminars	0-1
HBH 599 (R) Research	0-9
MCB 517 (E) Biomembranes	1
MCB 503 (E) Molecular Genetics	3

Spring

MCB 656 (R) Cell Biology	3-4
HBH 546 (R) Biochemical Lab Techniques (Pharmacology II)	1
GRD/HBH 500 (R) Integrity in Science/ Responsible Conduct in Research	0-1
HBH 631 (R) Graduate Pharmacology I	3
HBH 590 (R) Seminars	0-1
HBH 550 (R) Statistics in Life Sciences	1
HBH 599 (R) Research	0-9
HBH 580 (R) Journal Club	0-1
HBH 655 (E) Neuropharmacology (even yrs)	3

SECOND YEAR

Fall

HBH 632 (R) Graduate Pharmacology II	3
HBH 590 (R) Seminars	0-1
HBH 599 (R) Research	0-9
HBH 560 (R) Research Proposal Designs in Regulatory Biology	2
HBH 580 (R) Journal Club	0-1
JRN 501 (R) Communicating Science: Distilling Your Message	1
HBP 533 (E) Immunology	2
MCB 657 (E) Principles of Development	3

SECOND YEAR

Spring

HBH 580 (R) Journal Club	0-1
HBH 590 (R) Seminars	0-1
HBH 599 (R) Research	0-9
HBH 585 (E) Advanced Struct Biology/ Structural Methods in Drug Discovery	1-2

THIRD YEAR

Fall; Spring

HBH 601 (R) Practicum in Teaching Pharmacology	1
HBH 599 (R) Graduate Research (Thesis Proposal Defense in Fall)	0-9
OR	
HBH 699 (R) Thesis Research (after Advancement to Candidacy)	9
HBH 590 (R) Seminar	0

DOCTORAL CANDIDATES (FOURTH YEAR and UP)

Fall; Spring

HBH 699 (R) Thesis Research (after Advancement to Candidacy)	0-9
HBH 590 (R) Seminar	0
BME 509 (E) Fundamentals in Bioscience Industry	3

APPENDIX III
MSTP GRADUATE CURRICULUM 2019-2020
GRADUATE PROGRAM IN MOLECULAR AND CELLULAR PHARMACOLOGY
Stony Brook University

R = Required E = Elective

First Year Fall

Course	Credits
HBH 545 (R) Biochemical Lab Techniques (Pharmacology I)	1
HBH 590 (R) Seminars	0-1
HBH 599 (R) Research	0-9
HBH 560 (R) Research Proposal Designs in Regulatory Biology	2
HBH 580 (R) Journal Club	0-1
MST 501 (R) Sel Topics in Translation/Rsch and Clncl Pathological Correlations	0-1
MST 502 (R) Clinical Scientist Seminar Series	0-1
JRN 501 (R) Distilling Your Message	1

First Year Spring

MCB 656 (R) Cell Biology	3-4
HBH 546 (R) Biochemical Lab Techniques (Pharmacology II)	1
GRD/HBH 500 (R) Integrity in Science/ Responsible Conduct in Research	0-1
HBH 590 (R) Seminars	0-1
HBH 599 (R) Research	0-9
HBH 580 (R) Journal Club	0-1
MST 501 (R) Sel Topics in Translation/Rsch and Clncl Pathological Correlations	0-1
MST 502 (R) Clinical Scientist Seminar Series	0-1

Second Year Fall

HBH 590 (R) Seminars	0-1
HBH 699 (R) Thesis Research (after Advancement to Candidacy)	0-9
HBH 601 (R) Practicum in Teaching Pharmacology	1
MST 501 (R) Sel Topics in Translation/Rsch and Clncl Pathological Correlations	0-1
MST 502 (R) Clinical Scientist Seminar Series	0-1

Second Year Spring

HBH 590 (R) Seminars	0-1
HBH 699 (R) Thesis Research (after Advancement to Candidacy)	0-9
HBH 601 (R) Practicum in Teaching Pharmacology	1
HBH 550 (R) Statistics in Life Sciences	1
MST 501 (R) Sel Topics in Translation/Rsch and Clncl Pathological Correlations	0-1
MST 502 (R) Clinical Scientist Seminar Series 0-1	0-1

DOCTORAL CANDIDATES (THIRD YEAR and UP)

Fall ; Spring

HBH 699 (R) Thesis Research	9
HBH 590 (R) Seminar	0
MST 501 (R) Sel Topics in Translation/Rsch and Clncl Pathological Correlations	0-1
MST 502 (R) Clinical Scientist Seminar Series	0-1

*MSTP Students do not have to take electives.

APPENDIX IV –
FACULTY OF THE GRADUATE TRAINING PROGRAM
IN
MOLECULAR AND CELLULAR PHARMACOLOGY

Please see Graduate Program in Pharmacology website for an up to date list of the training faculty:

<https://www.stonybrook.edu/commcms/mcp/faculty/index.php#Alphabetical>

Teaching / Advisory Program Members

Carlos de los Santos, Kate Dickman, Moshe Eisenberg, Marian Evinger, Paul A. Fisher,, Francis Johnson, Joav Prives, , Thomas Rosenquist, Steve Vitkun, Robert Watson

**APPENDIX V – ROTATION SCHEDULE 2019-2020
FIRST YEAR STUDENTS**

	SUMMER 19 ROTATION	FALL 19ROTATION	WINTER 20 ROTATION	SPRING 20 ROTATION
	7/1/19- 8/25/2019	8/26/19- 12/01/2019	12/02/19- 3/1/20	3/2/20-5/31/20
DeRosa, Angela	Martin	Sheridan		
Madeira, Miguel				
Pak, Steven				
Zaman, Anika				
Kopcho, Steven	Okeoma	Okeoma	Okeoma	Okeoma
Park, Jennifer	Kim	Kim	Kim	Kim
Chang, Hsing-Ming "Jamie"	Demple	Demple	Demple	Demple
Radin, Daniel (MSTP)	Tsirka	Tsirka	Tsirka	Tsirka
First Years' Faculty Mentors	Miguel Garcia-Diaz, Stella Tsirka			
First Years' Administrative Mentors	Odalis Hernández, Lynda Perdomo-Ayala			

(*Notification of lab selection no later than May 15, 2020)