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**Program Policies**

**Graduate Program in Cellular and Molecular Physiology**

**The Johns Hopkins University School of Medicine**

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## **1) Mission Statement**

The Cellular and Molecular Physiology Graduate Program (CMP) awarded its first PhD in 1954. The mission of the Cellular and Molecular Physiology Graduate Program is to provide advanced and rigorous research training in cellular and molecular physiology and to prepare students for leadership roles.

## **2) Application and Admissions**

The CMP accepts students for graduate study leading to the degree of Doctor of Philosophy. Candidates for the degree of Master of Arts in Physiology are not accepted, although an MA degree can, in some circumstances, be awarded to students who do not complete their PhD studies. The goal with the application and admissions process is to identify those applicants with the best potential to make important contributions to the discipline of physiology, and to become leaders in their fields. The number of students admitted each year is determined by the Chair of the Department of Physiology.

### Program/Application Requirements

Applicants must have a bachelor's degree or equivalent in a science or engineering discipline, and are expected to have at least chemistry through biochemistry, a year of physics, mathematics through calculus and significant course work in one or more areas related to the biological sciences. Physical chemistry is also recommended. Significant research experience is also highly recommended. Scores from the general GRE or the MCAT tests and three letters of recommendation are also required for application. We recognize that some students may have unusual backgrounds, such as training abroad which is not directly comparable to most US applicants, and thus exceptions can be made for students who are judged to have exceptional potential.

### Application

The CMP program uses an online application form and process shared by graduate programs operated by the Graduate Student Affairs office. Fees from applications to the CMP program go to the Graduate Student Affairs Office to offset their costs for running the program. The application deadline for the CMP program is generally in early January every year.

### Admission Review Process

The program will typically have far more applicants than there are positions in the program – in recent years there have been more than 80 applicants for 2-4 positions. Thus, there is an initial “triage” review by the CMP Program Director to eliminate applicants who are not competitive. Following this triage all applications are reviewed by the admissions committee, occasionally with input from other faculty with regard to specific students. As funds permit, the most promising applicants are brought to campus for interviews. Students not brought to campus are interviewed by telephone or video conferencing. From the combination of reviewing academic records and input from faculty from the interviews, the admissions committee produces a rank ordered list of applicants in accordance with the goals of the program. The maximum number of students admitted each year is determined by the Chair of the Department of Physiology. Offers are made to students on a rolling basis, and in accordance with the Council of Graduate Schools policies to which Johns Hopkins is party.

### Transfer Students

CMP does not encourage transfers, and students can only transfer into CMP from another institution as part of the normal admission process. These students must satisfy all the requirements of the program including rotations. At the discretion of the Program Director, significant earlier research experience may be used to waive one rotation (as with students with a Masters Degree) and earlier course work may be used to waive CMP course requirements. An exception to the requirement that transfers occur as part of the normal admissions process is for students who move to Johns Hopkins with their advisors. In that case, admission may occur at any time during the year, although students must still meet admissions requirements for the CMP program.

Under very special circumstances and with the approval of the Program Director, students at Johns Hopkins may transfer research training to a mentor within the CMP program and can be considered for admission to the program. The student must still satisfy all CMP requirements, although some accommodation for variations in early course work may be appropriate.

### Matriculation

Students will matriculate in the fall of each academic year, the exact date being set by the School of Medicine Calendar (last week in August). However, with the Program Director's approval, incoming CMP students may chose to matriculate early to work in a faculty member's lab during the summer prior to the start of their first

academic year. Early matriculants must identify an available mentor for their summer research, and the mentor must pay the student's stipend and health insurance. A summer research effort of this type will make the student eligible to waive their normal spring rotation, and enter a thesis laboratory early.

#### Diversity

The CMP program values students from all types of background and strives to maintain a diverse student body.

### **3) Leadership and faculty**

#### Leadership

CMP is a small program with a small faculty, and it thus has a compact organizational structure. However, the program is run in an open fashion with ongoing consultations and discussions among the faculty on program related issues. The primary responsibility for operation of the program lies with the Program Director, who is appointed by the Chair of the Department of Physiology. The Admissions Committee consists of the Program Director and at least two additional faculty in the department. The Policy Committee meets as needed to oversee major policy initiatives such as curriculum and qualifying exam changes.

**Program Director:** Dr. Steven M. Claypool  
**Department Chair:** Dr. William B. Guggino  
**Academic Administrator:** Madeline McLaughlin

**Admissions Committee:** Drs. Steven Claypool, Jennifer Pluznick, Zhaozhu Qiu

**Policy Committee:** Drs. Steven Claypool, William Wong, and Svetlana Lutsenko

#### Faculty

The CMP faculty is composed of all faculty at the Johns Hopkins University who have a primary, secondary or joint appointment in the Department of Physiology, and who have suitable research activities for training PhD students. Changes to the faculty must be approved by the Chair of the Department of Physiology.

### **4) Financial Support for Students**

#### Student Financial Support

It is the goal of the program that students shall receive full financial support throughout their graduate studies. The program provides stipend, tuition and health and dental insurance for students through their first year of study (August – June). Normally, students will enter their thesis laboratories in early June, at which time the preceptor assumes the costs for the student. Tuition is covered by the School of Medicine.

Faculty may encounter funding difficulties that prevent them from paying the student's stipend for an extended period of time. In this case, students who have not yet completed three years of study will normally be transferred to other thesis laboratories. Students who are further along in their training may be permitted to transfer, although it is the goal of the program for them to complete their degrees in their current laboratories. In the case where a student stays with the current laboratory, the mentor must first request support for the student from their primary department's Chair. If funds are not available from the primary department, the CMP program will make every effort to support the student.

#### External Fellowships

It is JHU School of Medicine Policy that students receiving an external fellowship are eligible for a one-time stipend supplement (currently \$3,000). The current criteria are the fellowships must be merit based (scientific), nationally competitive, written and submitted by the applicant and greater than \$10,000. Eligible fellowships are determined by the Dean for Graduate Student Affairs, but include for example NSF, individual NRSA, Ford, UNCF/Merck, Soros, Samsung, ACS, CFF.

## 5) Program Requirements

### Overview of Program Requirements

#### Year One

- Seven Core (BCMB) Courses
- Organ Systems Physiology
- Research Ethics Course
- Current Physiology
- Primary Source Readings and Analysis (Journal Club with Pharmacology students)
- Research
- Research Seminars
- Physiology Journal Clubs
- Three Laboratory Rotations (Research)

#### Year Two

- Graduate Board Examination (Between Jan 1 and March 31<sup>st</sup>)
- Research
- Research Seminars
- Physiology Journal Clubs
- Have first Thesis Committee Meeting by August 15<sup>th</sup>.

#### Years Three and Higher

- Annual thesis Committee Meetings (done on a yearly basis)
- Four Electives (to be completed before graduation)
- Student Individual Development Plans
- Research
- Participation in Research Seminars
- Physiology Journal Clubs
- Research Ethics
- Dissertation and Thesis Seminar

### Year One Requirements

The goal of the first year CMP curriculum is two-fold. First, it is designed to provide students with a broad and up-to-date knowledge base in the cellular and molecular underpinnings of modern physiology. Second, students should acquire a broad understanding of human organ level physiology and be able to integrate advanced cellular and molecular biology concepts.

#### Courses:

##### **Biochemical and Biophysical Principles**

The physical and chemical principles underlying biological processes are presented and discussed. Topics include thermodynamics, chemical equilibrium, chemical and enzymatic kinetics, electrochemistry, physical chemistry of solutions, and structure and properties of water. Elementary concepts of statistical thermodynamics will be introduced as a way of correlating macroscopic and microscopic properties.

##### **Macromolecular Structure and Analysis**

The structure and properties of biological macromolecules will be presented. Experimental and computational methods used to study macromolecular structure including X-ray crystallography, magnetic resonance, spectroscopy, microscopy, and mass spectrometry will also be covered.

##### **Molecular Biology and Genomics**

This course module covers the Molecular Biology and Genomics of both prokaryotes (using E. coli as the model organism) and eukaryotes, with a focus on "model organisms" including yeast, flies, worms, mice, and humans. Both the Molecular Biology (reductionist) perspective and the Genomics (systems biology) perspective will be provided on each topic, and there will be heavy emphasis on mechanism and regulation of fundamental processes in biological information transfer DNA->RNA-> protein. This lecture module will cover genes and genomes, transcription and RNA, replication, chromosome structure and function, and genome instability.

## **Bioinformatics**

This short course is a survey of quantitative methods in modern biology and the computational concepts that are developing to analyze large data sets. Topics range from a review of statistics to problems in sequence analysis to the modeling of complex systems. The goal of the course is to familiarize students with the concepts of computational biology rather than to achieve a deep understanding of any one topic

## **Genetics**

Genetics covers fundamental principles of genetics, focusing primarily on yeast, the fruit fly, and the mouse. Problem sets are an integral learning tool in this course.

## **Pathways and Regulation**

This course will cover the principles of membrane transport, bioenergetics, metabolic pathways, cell cycle and cell death with particular emphasis on regulatory mechanisms including receptor-mediated signaling, small GTPases, lipid molecules, kinases and phosphatases.

## **Cell Structure and Dynamics**

The objective of this course is to provide the basics of cell biology, including the structure, function and biogenesis of cellular organelles. Also covered are essential concepts on the cytoskeleton, cell-cell and cell-extracellular matrix interactions, cell motility, chaperones, and protein turnover.

## **Organ Physiology**

The course provides a basic understanding of the many different aspects of the internal structure and function of the body. It aims to present a comprehensive survey of the complex interrelationships that exist between the structure and function of cells and organs.

## **Additional Requirements**

### **Current Physiology** (every other Wednesday from 12-1pm)

Students are required to attend all Physiology Department Seminars, which will be posted throughout the department. Also, students are required to attend 12 luncheons with seminar speakers. For six of the seminars, the students will be required to read a relevant paper from the speaker's lab prior to the seminar (a relevant paper can be found by searching the web). After the seminar, students will write a 300-500 word summary of the talk (including 5 or more references) and submit to Madeline the Tuesday after the seminar. These will be graded and discussed with the student by the faculty hosting the seminar. Grades will be based upon attendance (50%) and the summaries (50%).

### **Research Ethics Course**

Students must complete the Research Ethics Course coordinated by the Graduate Student Affairs Office. This is a two part course combining lectures and small group discussions to provide practical information on the ethical issues involved in research protocol, development and implementation of human research subjects.

### **Primary Source Reading and Analysis**

Students will receive articles in their inbox, which they should read prior to the group meeting. Students should be prepared to discuss the information and also present an article at a scheduled date.

### **Research Seminars** (Every other Friday from 12-1pm; alternating weeks with Physiology Journal Clubs.)

Speakers are faculty, postdocs, and graduate students within the Department of Physiology. First year students will do a presentation based on work done during lab rotations.

### **Physiology Journal Clubs** (Every other Friday from 12-1pm; alternating weeks with Research Seminars.)

CMP students are required to attend the student run journal club. Articles are provided for discussion and students and postdocs will lead discussion on a rotating basis.

## **Grading**

Students who receive one or two grades of C, must re-take the course/s the following year and receive a "B-" or higher grade. Students who receive more than two grades of C or one D (or below) will be reviewed by the Admissions Committee and are subject to dismissal from the program. First year students receiving a C or lower in a first year elective have the option of repeating the same course or enrolling in a different first year elective course the following year.

If a first year student receives three or more "C" grades or below in the Core Courses and first year electives, they will be counseled by the Director of the Cellular and Molecular Physiology Graduate Program, at which time, the status of the student's enrollment in the program will be discussed.

## **Lab Rotations:**

Research represents the core of the training experience in the CMP program, and has two phases – the laboratory rotations and the dissertation research. Research in the first year is in the form of three research rotations in different laboratories. The purpose of the research rotations are, in order, to allow students and mentors to identify a good match for subsequent thesis research, to provide the student with technical and scientific skills in several specialized areas of physiology, to strengthen social interactions within the program and its member laboratories.

**Eligible Faculty for Lab Rotations.** Two rotations must be done with a faculty member with a primary appointment in Physiology. With the approval of the Program Director, the student may choose to do one rotation with a secondary or joint faculty member in good standing with the Program. Faculty members of other departments who do not hold a secondary or joint appointment in Physiology are not eligible as mentors for CMP students. An updated list of faculty can be obtained from the Academic Administrator.

**Students will do three laboratory rotations.** These will engage the student in different research projects in three different laboratories working in different areas.

**Familiarity with the research of the faculty.** At the start of the semester, the office will arrange appointments of 30-60 minutes between the students and each faculty member to give the student an opportunity to learn about the research goals of that laboratory and to discuss possible rotation projects.

**Prior to each rotation cycle, faculty will be asked to indicate whether or not their lab is available in the next rotation.** Acceptance of a rotation student implies that the student will be considered for thesis work in that lab. A student may rotate in a lab to gain experience in a specific technique even though that lab is not open for thesis work, as long as this is made explicit prior to the rotation. The Program Director will assign students to rotations, and if unusual circumstances arise will consult the faculty. No more than one CMP student may rotate in any lab at the same time.

**First rotation.** After meeting with all faculty, the student will submit the names of three faculty members with whom they would like to do a rotation to the Program Director. The student may include a brief statement of why they desire a rotation in a particular lab.

**Second rotation.** The student will submit a rank-ordered list of three faculty with whom they would like to do a rotation, with the highest preference listed first. The student must speak with each faculty member on the list before submitting a name. The student may include a brief statement of why they desire a rotation in a particular lab.

**Third rotation.** The student is free to choose any laboratory (primary, secondary, or joint). The Director must be informed of the students' choice one week before the beginning of the third rotation.

**Exceptions to three rotations.** Students with a thesis Master's degree may request that one rotation be waived, and with the approval of the Program Director, that student may do two rotations according to the guidelines for "second" and "third" rotations as described above. Students whose Master's thesis research is counted as one rotation will do their two required rotations with primary faculty. They may then do a third rotation, or not. In cases where a thesis laboratory for some reason cannot be identified in three rotations, a fourth rotation is permitted (with the approval of the Program Director).

**Duration of rotations.** The rotations cumulatively last approximately 10 months. All rotations together should not exceed 12 months, i.e., the student must select a lab for thesis work before the beginning of the second year of the program.

**Rotation Presentations.** Students will present results from each of their rotations at the Friday Seminar series, as scheduled by the program.

**Research Credits.** Students will register for Research in Physiology. Grades will be assigned by the Program Director with input from the faculty

**Lack of progress.** A student who fails to enter a thesis laboratory before the start of their second academic year is not making adequate progress, and may be dismissed from the program.

**Evaluations.** The mentor will provide a written evaluation of the student's progress to the Program Director at the end of each rotation.

**Lab Selection.** At the end of the third rotation, students are asked to select a laboratory for their thesis. In rare occasions, and with the permission of the Program Director, students may be allowed to do a fourth rotation.

### **Student Advisor During the First Year**

During the first year, the CMP Program Director serves as the student's advisor.

### **Year Two Requirements**

#### **Graduate Board Examination:**

It is University policy that all students successfully pass a Qualifying Oral Examination (GBO). CMP students shall schedule and take this examination between January 1<sup>st</sup> and March 31<sup>st</sup> of their second year. Students should arrange at least one mock GBO as a requirement before their actual GBO Oral Exam; students should arrange it themselves. At the beginning of the exam, students should be prepared to give a short (5-10 minutes is standard) overview of their proposed thesis research. The exam typically takes two hours, but students should allow three hours, when scheduling.

The goals of the exam are to test the depth and breadth of knowledge as covered in the first-year coursework and to examine the student's ability to design and interpret experiments.

#### **Structure of the Oral Exam Committee**

The Graduate Board Oral Examination is conducted by five faculty members. The committee consists of three "inside" members who must be a part of the Cellular and Molecular Physiology (CMP) Graduate Program, and two outside members who are not affiliated with the program. Faculty holding joint and secondary appointments with the Department of Physiology are considered as "inside" the department. Two alternates must also be selected, one from inside and one from outside the Program. At least one examiner from outside the department must be an Associate or Full Professor, and the senior outside faculty member will serve as Chair of the Oral Exam Committee (as determined by the Graduate Board). The advisor may not be included on this committee.

#### **Selection of the Oral Exam Committee**

Students may, with input from their preceptor, suggest the members for this committee to the Program Director by submitting a list of prospective names prior to scheduling the exam. Since the mandate of the committee is to test the breadth and depth of the students' knowledge, there should be a diversity of expertise on the committee. Faculty members whose research spans disciplines may fill the requirement of any of their areas of expertise. If you propose an Oral Exam Committee which the Program Director feels is too narrowly focused, you may be asked to broaden the scope by suggesting alternate members on your list and resubmitting. Alternatively, the Program Director may select other members. While the student is allowed input into the selection of the committee, the final composition of the committee is determined by the Program Director.

#### **Outcomes for the Exam**

The result of the examination will be either Unconditional Pass, Conditional Pass, or Fail. An Unconditional Pass is self-explanatory. A Conditional Pass means that the committee noted a deficiency that needs to be addressed to ensure the student has the necessary foundation for success. A Fail does not mean immediate dismissal. Instead, the student is typically given an opportunity to retake the exam with the same or a new committee. Other conditions will be stated on the Oral Examination form. A second Fail will result in dismissal from the program.

#### **Dissertation Research:**

The goal of the dissertation research is to provide the student with mentored training in how to perform advanced research in physiology. Through this training the student should develop the skills and knowledge that will allow them to become a successful independent scientist. This includes being able to understand difficult problems, pose well stated hypotheses, design experiments to test specific hypotheses, perform and interpret experiments, present findings orally and in written form, communicate with other scientists, collaborate with other scientists, evaluate science productively and critically, and other skills expected of a PhD.

Students will generally be assigned to a laboratory after their third rotation, based on mutual agreement with the head of the lab. Research toward a PhD thesis will be performed under the guidance and direction of a program faculty member. Together, they will define the focus and direction of the proposed dissertation research.



## **Research Seminars**

There are currently two seminar series in the Department, a Wednesday seminar normally given by prominent scientists from outside the department and a Friday seminar given by faculty, students and postdoctoral fellows associated with the Department of Physiology. Beginning in the first year, and continuing throughout their education CMP students are expected to attend both of these regularly. Students are also expected to present progress on their research during the Friday seminar at least every other year.

## **Physiology Journal Clubs**

CMP students are expected to participate in the student run journal club that is held on alternating Fridays.

## **Thesis Committee:**

The thesis committee consists of the advisor and a minimum of three additional faculty (full-time Johns Hopkins faculty that are assistant professors or above) who are knowledgeable in the relevant field of study and whose expertise may be beneficial to the students project. There are no other restrictions on the composition of the committee, but it must be approved by the student's advisor. The first thesis meeting should take place as soon as practical after successfully completing your Oral Exam and required courses, but not later than August 15th at the end of the second year. Prior to the first thesis meeting, a thesis proposal, typically in the format of an NIH fellowship application, is prepared and distributed to the thesis committee 1 week before the actual meeting. If the student has previously written a fellowship in the format of a different funding agency, this may be used in lieu of the NIH format (max length 6-7 pages).

## **Years Three and Up Requirements**

### **Thesis Committee:**

For every thesis committee meeting after the first one, a brief description of progress made in the year since the last thesis committee meeting will be prepared and distributed to all Thesis Committee members at least 1 week in advance of the meeting. Meetings must be held once per year following the initial meeting. A thesis committee form that outlines progress of a student should be completed at each meeting and turned into the Program Director.

### **Electives:**

Four (4) electives must be completed as a part of the degree requirements. These 4 electives must be completed by the end of Year 5. Courses must be germane to the student's studies in physiology, as determined by the Program Director. One elective credit is 12-24 classroom hours, or equivalent. Up to one required elective can be satisfied by a course taken outside of Johns Hopkins. For a course to satisfy an elective requirement it must be relevant to the student's course of study, of high educational quality and substantive in terms of effort (such as summer courses offered by MBL and CSHL). Credit will be granted if a student receives a grade of B- or higher or a Pass.

### **Student Individual Development Plans:**

The NIH has implemented a new process to make sure that each trainee supported by NIH funds has an individual development plan (IDP). This process includes a mentoring meeting between the student and the advisor that must occur annually before the thesis committee meeting. To facilitate the discussion, the two parties complete the mentoring form separately, discuss their notes at the meeting and create an action plan. The advisor and the student should keep a record of the forms and the action plan.

The thesis committee meeting form has a box to check to ensure that the mentoring meeting has been held. Additionally, at the end of the thesis committee meeting, the advisor must leave the room so that the student can talk alone with the committee members.

### **Dissertation:**

Usually in year four or five, the student's thesis committee agrees that the student is nearing completion of his/her research. When a student receives a "**final phase**" check at the thesis committee meeting, they are expected to complete any remaining experiments, write their thesis, and get approval from their PI and reader (in the form of a signed readers' letter) within 6 months. The student's research is usually published in one or more scholarly journals prior to the dissertation being written. The institution requires that the dissertation is a "publishable body of work."

Writing the Thesis. The dissertation research culminates in the writing of a PhD thesis. Approval to begin writing a dissertation is given by the thesis advisor, in consultation with the thesis committee. The Thesis shall

be prepared in accordance with institutional guidelines. Per institutional requirements, the final dissertation must be approved by two faculty members.

Thesis Seminar. Following completion of the dissertation, the student will present their work at an open seminar. With approval of the Program Director, this seminar may under some circumstances be given prior to the final submission of the dissertation.

## **6) Students of Faculty Who Leave the School of Medicine**

Students whose thesis advisors have left the institution may continue their project at Hopkins under the supervision of a new CMP mentor. Students who have chosen a mentor, but have not completed their orals, are expected to transfer to the new institution if they intend to follow their mentor. In some instances, students who have chosen a mentor and completed their orals and two full years at JHU may remain in the CMP program while carrying out research with their mentor at another institution. They are expected to return for yearly thesis committee meetings as well as to return to present the formal thesis seminar.

## **7) Other Activities**

### Teaching Skills

Students interested in gaining teaching experience may request this of the Program Director. With the approval of the student's mentor, teaching duties will be provided as available.

### HIPPA Training and other Institutional Requirements

The Johns Hopkins School of Medicine requires a number of courses, depending on the type of research a person is engaged in. This includes courses on the privacy of health care information (HIPPA), safety rules for various types of research, etc. Students shall complete these courses as required for their specific area of research.

## **8) Other Policies**

The CMP adheres to all institutional policies set forth by the relevant governance structure, including the Johns Hopkins University Doctoral Board, the School of Medicine MA-PhD Committee. These include:

### Vacation Policy

Currently, beyond the official University holidays and breaks, students may take two weeks of vacation during the first year and three weeks vacation during years two through seven. Additional time off may be granted by mentor. In addition, it is CMP policy that students must notify their preceptors at least 4 weeks in advance when they plan a vacation of 5 weekdays or more. It is also the students' responsibility to schedule any vacations in a way that they continue to make satisfactory progress in their research. Further, unused holidays cannot be accrued and later used as vacation or time off without approval of the mentor prior to the holiday in question. Likewise, unused vacation cannot be accrued to later years without prior approval of the mentor.

### Leave of Absence (Sick, Parental, Terminal Leave)

Students may take 15 calendar days of sick leave per year that can be applied to pregnancy and childbirth. Under special circumstances, this period may be extended by the training program director or the sponsor. Sick leave is not accrued. For medical leave of absence, health insurance will be paid for by the program or sponsor for up to one year. Parental leave of 30 calendar days per year can be used for the adoption or birth of a child. A period of terminal leave is not permitted and payment may not be made from grant funds for leave not taken.

### Abuse and Misconduct

The CMP shall provide a training environment that is free of abuse and misconduct. Allegations of abuse and or misconduct will be investigated by the Program Director, and referred to the appropriate institutional office as needed. In the case where the Program Director is conflicted, the Chair of the Department shall be responsible for the initial investigation.

Attachments: Honor Code  
Statement of the Rights and Responsibilities of PhD Students at Johns Hopkins University  
CMP Record of Annual Thesis Committee Meeting  
Annual Progress Evaluation and Mentoring Session

## Appendix A: Honor Code

### GRADUATE STUDENT HONOR CODE THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE

Recent incidents in the scientific community have emphasized the importance of scientific integrity. The Hopkins name has always been associated with excellence in science and medicine. It is the responsibility of the graduate programs to maintain this excellence and uphold our current system of peer review.

The graduate students have written an honor code to reinforce the existing honor system among students and underscore the importance of ethics in our development as scientists. This honor code outlines the School of Medicine's expectations regarding the manner in which students should conduct themselves and requires that each student acknowledge these expectations in a formal declaration of personal honor.

As a student at The Johns Hopkins University School of Medicine, I pledge to be honest in

- 1) course work including exams and all assignments;
- 2) the reporting and presentation of research data with proper attribution and citation;
- 3) professional interactions with all members of the scientific community.

By signing, I acknowledge having read the honor code and recognize the principles therein as expectations of the School of Medicine.

Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

*DRAFT: October 3, 2011*

## Statement of the Rights and Responsibilities of Ph.D. Students at Johns Hopkins University

**Preamble:** Ph.D. education is fundamental to the University's teaching and research mission. For an intellectual community of scholars to flourish, it is important to acknowledge the principles that underlie the compact between Ph.D. students, the faculty, and other members of the University community.

It is in this spirit that the Doctor of Philosophy Board, in collaboration with faculty and students from across the University, has articulated a statement of rights and responsibilities for doctoral students at Johns Hopkins. The principles described in this document are to be realized in policies established by the various Schools of the University; the Schools will also develop mechanisms to monitor and enforce such policies.

### RIGHTS

1. **Ph.D. students have the right to education, supervision and training.** This includes access to the classroom, laboratory and teaching opportunities necessary for completion of degree requirements, appropriate and regular faculty supervision consistent with the norms of the discipline, as well as appropriate research and/or clinical experiences.
2. **Ph.D. students have the right to full and regular access to information about the requirements for the degree.** This includes information regarding program requirements, assignment/selection/change of advisor, expected time to completion, graduation rates, and conditions of financial support.
3. **Ph.D. students have the right to conditions of learning, teaching and research that are appropriate and reasonable for their discipline.** This includes the right to information and ongoing consultation regarding their expected effort and specific duties, as well as clearly stated criteria for participation in collaborative work and/or research.
4. **Ph.D. students have the right to be treated in a respectful and professional manner by all members of the University community.** This includes freedom from discrimination and harassment as well as assurance of reasonable confidentiality in their communications, as governed by university policy.

5. **Ph.D. students have the right to receive, on a regular basis, written evaluation of their progress and to be informed of the criteria upon which the evaluation is based.**  
Students should also be provided with opportunities to discuss such evaluations with their advisor. Each program should make available their policies concerning academic probation, funding withdrawal, and dismissal; reasonable warning should be provided in advance of dismissal based on failure to make satisfactory academic progress.
6. **Ph.D. students have the right to appropriate recognition for their contributions to research and scholarship.** This will require discussion between the student, advisor and other relevant parties regarding expectations for student contributions and the nature of the recognition.
7. **Ph.D. students have the right to academic freedom.** This includes the right to express, without reprisal, independent opinions about scholarly issues (such as opinions regarding theoretical and methodological debates in their disciplines), opinions regarding matters of institutional policy, concerns about suspected research misconduct and personal opinions on public matters.
8. **Ph.D. students have the right to have their views represented in the development of policies that govern the Ph.D.** Student ideas and perspectives should be solicited and considered if substantive changes in the structure of a Ph.D. program are anticipated.
9. **Ph.D. students have the right to clearly defined policies regarding benefits and non-academic issues pertinent to their student status.** These policies should cover (but not be limited to) such things as the provision of health care, recognition of family responsibilities, leave, vacation and other absences. These policies should acknowledge that students can, without reprisal, form clubs, associations or organizations around common interests, as long as these are consistent with general non-discrimination policies of the University.
10. **Ph.D. students have the right to accessible procedures for redress of their grievances.** Each School within the University must provide mechanisms to ensure that grievance procedures are fair and without reprisal. These procedures should include Ph.D. student representation, as appropriate.

## RESPONSIBILITIES

1. **Ph.D. students have the responsibility to inform themselves of the requirements of their programs.**
2. **Ph.D. students have the responsibility to dedicate appropriate effort and time to meeting the requirements of their programs.**
3. **Ph.D. students have the responsibility to uphold the ethical responsibilities of their profession and discipline.** This includes honesty in academic coursework and scholarship, integrity in the use of grant and fellowship funds, and the upholding of ethical norms in the conduct and reporting of research methods and results.
4. **Ph.D. students have the responsibility to treat all members of the University community in a respectful and professional manner.**
5. **Ph.D. students have the responsibility to contribute to the intellectual life of the University and to the advancement of education and scholarship.**
6. **Ph.D. students have the responsibility to understand and fulfill their role in developing and maintaining a professional relationship with their faculty advisor(s).** This includes the responsibility for communicating regularly with advisors, maintaining a mutually agreed-upon schedule of meetings, and informing advisors of such things as: the current status of their degree work; any expected deviations from the agreed upon program of studies; and any unanticipated absences.
7. **Ph.D. students have the responsibility to recognize the contributions to their research and scholarly publications made by their advisors and other colleagues.** This will require communication and consultation with these individuals about the nature of the recognition.
8. **Ph.D. students have the responsibility to fulfill their teaching, research and/or clinical commitments and duties in a responsible manner.** This includes the responsibility to inform themselves of the requirements of these positions, to maintain the established ethical standards of interaction with students, faculty, patients and/or research participants, and to respect the privacy of information shared with them.
9. **Ph.D. students have the responsibility for the appropriate use of university resources and equipment.**
10. **Ph.D. Students have the responsibility to abide by the established rules and policies of their program, school and the University.**





**Please return to Madeline McLaughlin (217 Hunterian) after each meeting.**

## Annual Progress Evaluation and Mentoring Session

Student Name: \_\_\_\_\_

Mentor Name: \_\_\_\_\_

Arrival date in the lab: \_\_\_\_\_

Date of Meeting: \_\_\_\_\_

Year of Study: \_\_\_\_\_

Prepared by: \_\_\_\_\_

***To students:*** Please read and answer the following questions in a few sentences before coming to your annual progress evaluation and mentoring session.

***To mentors:*** Please answer the relevant sections below (indicated by an asterisk), from your perspective, before the annual progress evaluation and mentoring session with your student.

**Be honest and forthright; this document is to be used for exchange of suggestions and advice, and this information will be treated as confidential. Please discuss your answers, review the progress made in the last year, compare the answers on last year's form and develop an action plan for the future. Please keep copies of the original forms and your final action plan for your records.**

### **A. Your Project**

\*What is the long-term goal of your project? How does it fit into the overall goals of the lab?

\*Describe experimental and professional accomplishments from past year.

\*What are your experimental goals for the next twelve months? How will you accomplish these goals? Are there new techniques would you need to learn to accomplished these goals?

What do you need to achieve these goals?

What are your plans for publications?

Have you applied for pre-doctoral fellowships?

### **B. Mentoring**

Are you satisfied with the feedback you are getting from me? Are there any changes that you would like to see in the frequency or the format in which I give you feedback?

\*Name two things that I, as your mentor, could do better that would help you.

\*Name two things that you as a trainee could do better.

### **C. The Lab Environment**

\*Describe your view of the lab's future direction(s).

\*Do you have concerns about the lab? Do you have any suggestions for how the lab could run better or more smoothly?

### **D: Long Term Career Goals.**

Have you completed your course requirements?

When do you hope to graduate? If you are close to graduation, what do you need to accomplish to graduate?

Have you used the website myIDP (<http://myidp.sciencecareers.org/>) or other similar site? Have you found that helpful? Is there anything that you have learned from that exercise that you wish to discuss?

What are your long-term career goals?

In addition to carrying out your project, what are your professional goals for the next twelve months? For example, are you planning on attending a scientific meeting or taking a professional development course, (see opportunities at <http://www.jhu.edu/~pdo/> and <http://bci.jhmi.edu>)?

Have you thought about which two people you will request reference letters from (for postdoc, job, fellowships) in addition to your advisor?

Do you plan to apply for internships?

Do you plan to apply for postdoctoral fellowships?