# THE JENKINS GRADUATE PROGRAM IN BIOPHYSICS

Last Updated: August 20, 2024

# 2024 - 2025 Student Handbook

# **CONTENTS**

Welcome to Johns Hopkins!	
Biophysics Graduate Student Milestones by Year	
Year One	
Fall Semester	
Intersession	
Spring Semester	
Summer	
Year Two	
Fall Semester	4
Spring Semester	4
Summer	
Year Three to graduation	5
Fall Semester	
Spring Semester	
Summer	
Final Year	
Final Semester	
Program Requirements	6
Overview and General Expectations	<i>6</i>
Core Courses	
Policy on Grades	
Academic Integrity and Student Conduct	
Teaching Assistantship Requirements	
Laboratory Rotations	
Rotation Evaluations	
Responsible Conduct of Research	Ç
Participation In Scientific Meetings	
Faculty Research Interests	
Seminar Series	
Graduate Board Preliminary Oral Examination	
Leave of Absence	
Returning from Leave of Absence	
Probation and Dismissal from the Program	
Thesis Requirements	14
Thesis Advisor	14
Overview of Thesis Reviews	
Annual Thesis Reviews	
Third Var Saminar & Thacis Raviow	

Final Oral Examination and Thesis requirement	16
Thesis Approval	
Thesis Seminar	
Granting of Degree	
Administration	18
Administrative Structure	18
School and Departmental Affiliation	18
Summer Registration	18
University Computer Policy	18
Student Service Resources	19
Academic Advising	19
Program Director	19
Academic Program Administrator	19
Department Administrator	19
General Resources for Graduate Students	20
KSAS Graduate & Postdoctoral Affairs Offices	
Graduate Representative Organization (GRO)	
Office of International Services	
Student Health & Wellness Center	
Mental Health Services	
Crisis Information	
Office of Institutional Equity	
Sexual Assault Response & Prevention	
JHU Life Design Lab: Career Services Center for Language Education	
PhD Student Employee Union & Collective Bargaining Agreemen	ıt22
PhD Student Employee Union	
CBA Summary	
Compensation	
Benefits	
Time Off/Vacation/Leaves	
Work Hours	
Union Representation	24

# WELCOME TO JOHNS HOPKINS!

We are excited to have you join a remarkably strong group of students and become part of the Biophysics Department at Johns Hopkins University. Our mission is to do great science and cultivate great scientists.

This Handbook describes requirements and expectations of our program. Our Program aims to strengthen your foundation in biophysical and biochemical techniques and principles. Combined with hard work and perseverance, your engagement in graduate school will positively shape your trajectory in science. We look forward to working with you and sharing in the beauty and thrill of discovery.

# BIOPHYSICS GRADUATE STUDENT MILESTONES BY YEAR

#### **YEAR ONE**

FALL SEMESTER	
Schoolwide Orientation (online on Canvas)	
Library Orientation	Aug 16
Schoolwide Orientation BBQ/Welcome Bag Pick Up	Aug 16
Program Orientation	Aug 22
Online Safety Course (MyLearning)	Aug 22 – 25
Online "Avoiding Plagiarism" Course (MyLearning)	Aug 22 – 25
Faculty Research Forums	Aug 23
Institute for Biophysical Research Retreat	Sept 5
AS.250.649 - Introduction to Computing in Biology	Aug 26 – Sept 26
AS.250.623 - Macromolecular Simulation	TBD
AS.250.622 - Statistics and Data Analysis	TBD
AS.250.640 - How to be an Effective STEM JEDI	Aug 26 – Dec 6
AS.250.685 - Proteins & Nucleic Acids	Aug 26 - Dec 6 (Final exam TBA)
AS.250.601 - Biophysics Seminar	Aug 26 – Dec 6
AS.250.821 - Teaching Assistantship	Aug 26 – Dec 6
Student Evening Series	Sep – Dec
Chalk It Up – Vince Hilser (On SOM Campus)	Oct 29
Chalk It Up – Sean Prigge (On HW Campus)	Nov 18
INTERSESS	SION
AS.250.620 - Optical Spectroscopy	Jan 6 – 10

**SPRING SEMESTER** 

Jan 13 - 17

# Jenkins Biophysics Ph.D. Student Handbook

AS.250.624 - NMR Spectroscopy

AS.250.625 - Single Molecule Measurements	TBD
AS.250.621 - Cryo-EM Module	TBD
AS.250.689 - Physical Chem of Bio Macro	Jan 21 - Apr 28
AS.250.601 - Biophysics Seminar	Jan 21 – Apr 28
AS.250.821 - Teaching Assistantship	Jan 21 – Apr 28
AS.250.820 (02) - Laboratory Rotation (Spring I)	Jan 21 – Mar 14
Chalk It Up – Dominique Frueh (On HW Campus)	Mar 10
Spring I Rotation Talks	Mar 14
AS.250.820 (03) - Laboratory Rotation (Spring II)	Mar 24 – May 16
Chalk It Up - Maggie Johnson (On SOM Campus)	Apr 8
Spring II Rotation Talks	May 16
Deadline to Join Thesis Laboratory	May 19
Student Evening Series	Jan – May
Practice GBO Exams	Last 2 Weeks of May

# **SUMMER**

# **YEAR TWO**

# FALL SEMESTER

AS.250.601 - Biophysics Seminar	Aug – Dec
AS.250.801 - Dissertation Research	Aug – Dec
AS.250.821 - Teaching Assistantship	Aug – Dec
XX.XXX.XXX - Elective*	Aug – Dec*
Student Evening Series	Sept – Dec

<sup>\*</sup>Elective course can be taken in either the Fall or Spring semester of Year  $2\,$ 

# **SPRING SEMESTER**

AS.250.801 - Dissertation Research	Jan - May
AS.250.601 - Biophysics Seminar	Jan - May
AS.250.615 - Biophysics Writing Workshop	Jan – Feb
AS.250.610 - Savvy Science Seminars I	Jan – Feb
AS.250.821 - Teaching Assistantship	Jan – May
XX.XXX.XXX - Elective*	Jan - May*
RCR Refresher Workshop	April
Student Evening Series	Jan – May
Graduate Board Oral Examination	April

<sup>\*</sup>Elective course can be taken in either the Fall or Spring semester of Year 2  $\,$ 

#### **SUMMER**

AS.250.801 - Dissertation Research May – Aug

AS.250.611 - Savvy Science Seminars II Aug

#### YEAR THREE TO GRADUATION

#### **FALL SEMESTER**

 $\begin{array}{lll} AS.250.601 - Biophysics Seminar & Aug - Dec \\ AS.250.801 - Dissertation Research & Aug - Dec \\ Thesis Proposal Seminar^1 & Nov - Dec \\ Thesis Advisory Committee Meeting & Oct - Dec \\ \end{array}$ 

<sup>1</sup>Year 3 Only.

#### **SPRING SEMESTER**

 $AS.250.801 - Dissertation Research & Jan - May \\ AS.250.601 - Biophysics Seminar & Jan - May \\ RCR Refresher Workshop & April \\ Thesis Advisory Committee Meeting^1 & Oct - Dec$ 

<sup>1</sup>Year 5 and beyond. Not required in Year 3 or 4.

#### **SUMMER**

AS.250.801 - Dissertation Research May – Aug

#### **FINAL YEAR**

# FINAL SEMESTER

Private thesis defense to thesis committee Submission of final dissertation to library via ETD Thesis Seminar (after submission of corrected thesis to ETD)

# PROGRAM REQUIREMENTS

#### OVERVIEW AND GENERAL EXPECTATIONS

In their first year, students are expected to dedicate their time to three main program activities: coursework, rotation laboratory work, and teaching. The program is structured such that students complete two core courses, Introduction to Computing (September only) and Proteins and Nucleic Acids, in their First-Year Fall semester, and a third core course, Physical Chemistry of Macromolecules, in their First-Year Spring semester. The fourth "core course" is made up of a collection of week-long mini-courses, or Modules, that take place across the first year. The Biophysics Modules cover topics including Statistics, Optical Spectroscopy, NMR Spectroscopy, Cryo-Electron Microscopy, Single Molecule Measurements, and Macromolecular Simulation.

All Jenkins students serve as Teaching Assistants (TAs) for the Fall and Spring semesters of their first two years. Students need to master the material for the course for which they are a TA, so that they can grade assignments and provide useful feedback to undergraduates. We expect all Jenkins students to strive to be outstanding TAs.

In the Spring semester of their first year, each student will take part in two 8-week laboratory rotations where they will work on a project in the lab group of a Jenkins faculty member. The goal of the rotation is for students to find the lab/advisor that will be the best fit for carrying out their thesis research. The most important decision that a student makes during their first year is selecting a Thesis Advisor who will guide them throughout their PhD, so paying attention to rotation work is particularly important.

At the end of the Spring semester of their first year, each student will have to complete a Practice Graduate Board Oral (GBO) exam. This practice exam is not graded (there is no pass or fail), and is given so that students can experience what an oral examination is like. The intent of this Practice GBO is to help the students gauge how to prepare for the required GBO exam which all students must pass at the end of their second year to continue in the program.

The first summer, between first and second year, is normally devoted entirely to thesis research. If the two Spring rotations are insufficient for finding a Thesis Advisor, a third rotation during the Summer is allowed, with the requirement that each student joins a lab before the end of September.

In April of their second year, each student will take their official GBO exam. This is an oral exam given by five faculty members. Successful completion of the GBO is required to obtain a Ph.D. at Johns Hopkins University. Students who do not pass their GBO exam may be given a second chance to retake the exam, at the discretion of the exam committee.

In the Fall semester of the third year, each student will give a formal, 25-minute presentation of their thesis work. This presentation should clearly describe the key questions being pursued, as well as preliminary data and immediate plans for future work. This public seminar will be followed by a private thesis review with the advisor and two other faculty members.

During your time in the program, prompt communication with departmental and program leadership is critical. Therefore, all students are expected to respond to emails from the Jenkins Program or the Biophysics Department within two days of receiving them.

In addition to program-specific expectations, Johns Hopkins University has defined a set of responsibilities that all graduate students are expected to adhere to. These responsibilities, as well as rights given to all graduate students, are described in detail here:

https://e-catalogue.jhu.edu/ksas-wse/graduate-policies/

#### CORE COURSES

The following courses are required of all Jenkins students:

- Mandatory Online Safety Course (*MyLearning*)
- Mandatory Responsible Conduct of Research Course (Bosch)
- AS.250.601 Biophysics Seminar (Woodson)
- AS.250.610 Savvy Science Seminars I
- AS.250.611 Savvy Science Seminars II
- AS.250.615 Biophysics Writing Workshop
- AS.250.620 Optical Spectroscopy (Lecomte & Tripp)
- AS.250.621 Cryo-EM Module (*Bailey/Twomey*)
- AS.250.622 Statistics and Data (Barrick)
- AS.250.623 Macromolecular Simulation (*Lau*)
- AS.250.624 NMR Spectroscopy (Majumdar)
- AS.250.625 Single Molecule Measurements (Xiao/Wu)
- AS.250.689 Physical Chem of Biological Macromolecules (García-Moreno)
- AS.250.685 Proteins & Nucleic Acids (Woodson/Bowman)
- AS.250.649 Introduction to Computing in Biology (Bowman)
- AS.250.820 Laboratory Rotation (Bowman)
- AS.250.821 Teaching Assistantship (Bowman)
- XX.XXX.XXX Elective Course\*

All students are expected to attend every lecture and turn in assignments on time. Failure to attend classes could result in a grade of F for the course, or a probation period.

#### POLICY ON GRADES

The goal of our courses is to help students establish and reinforce the core concepts of biophysics, which are essential for independent research. Grades are a straight-forward metric for demonstrating that you understand and will be able to apply the material learned in class in the lab. We therefore have these policies on grades:

- Students must receive a grade of B- or higher in all required courses. Students must repeat any course in which they receive a grade below B-.
  - Repeating a required course and failing to receive a grade of B- or higher for a second time is grounds for termination from the PhD program.
- Failure to receive a grade of B- or higher in two required courses is grounds for termination from the program.

Each semester, students must keep a grade point average of 3.0 (B) or above. Falling below a 3.0 GPA for one semester is grounds for a warning. Falling below a 3.0 GPA for two semesters is grounds for termination from the program (see Probation and Dismissal from the Program below).

<sup>\*</sup>Graduate-level science-based course, chosen by the student and approved by the student's Thesis Advisor and the DGS

This requirement is not intended to discourage students from taking advanced courses in other disciplines, such as chemistry, physics or mathematics. Please discuss the possibility of taking courses outside your expertise with the Academic Advisors.

#### ACADEMIC INTEGRITY AND STUDENT CONDUCT

Students are expected to know and abide by university policies governing student conduct and academic integrity. Those who impair the university's mission are subject to expulsion.

• Academic Integrity: In all aspects of their work, students assume an obligation to conduct themselves in a manner appropriate to the Johns Hopkins University's mission as an institution of higher education. A student must refrain from acts they know, or under the circumstances has reason to know, that may impair the University's academic integrity. Violations of academic integrity include, but are not limited to: cheating; plagiarism; submitting another's work as one's own; knowingly submitting false information to any university personnel for inclusion in the academic records; dishonesty in discharging teaching assistant duties; falsification; and forgery. Violations of academic integrity are taken seriously and may be grounds for dismissal from the program.

You can find the KSAS and WSE Graduate <u>Academic Misconduct Policy here</u>. Additionally, you can find the <u>University Research Integrity Policy here</u>.

• **Student Conduct:** The University expects all students to respect the rights of others, and to refrain from behavior that impairs the University's mission of teaching, research/scholarship, and outreach to the local, national, and international community. Violations of appropriate student conduct may include, but are not limited to: harassment behavior (physical or verbal); intimidation or verbal abuse; actions that are a danger to one's own personal safety or that may harm others; and actions that destroy, impair, or wrongfully appropriate property. Inappropriate behavior will not be tolerated and may result in dismissal from the program.

The procedures for handling various allegations of misconduct, academic or otherwise, by full-time and part-time JHU Homewood Graduate Students can be found here: <u>Graduate Student Policies</u>.

# TEACHING ASSISTANTSHIP REQUIREMENTS

As part of your training, you will serve as a teaching assistant (TA) during the Fall and Spring semesters of your first two years in the program. Science requires constant learning, and a central component of demonstrating mastery of a topic is the ability to effectively convey the information to others. As such, serving as a TA gives our students the opportunity to develop teaching and communication skills, while also solidifying their own scientific understanding of a topic.

The Program Director will assign each Jenkins student to TA for an undergraduate-level course offered by the Biophysics Department. Courses available for TA-ships include AS.250.205 - Introduction to Computing, and AS.250.253 - Protein Engineering and Biochemistry Lab.

Students are expected to attend the lectures/laboratory sessions of the courses for which they TA. In addition, duties include grading weekly assignments and exams, in-class help for undergraduate students, holding weekly office hours to review class material, assisting with course logistics, and other activities to assist the lead instructors.

During semesters in which students serve as TAs, they will enroll in AS.250.821 – Teaching Assistantship. This is a required course for the program for which students will be evaluated, and receive a grade, as they would in any other. A grade below B- may result in probation, and repeated unsatisfactory grades may result in termination from the program.

#### LABORATORY ROTATIONS

Rather than successful completion of a particular project, the primary intent of a rotation is to give students experience within a specific research setting, and to get a feel for a laboratory. Each student must complete two 8-week laboratory rotations in the Spring of their first year. **Without exception, these rotations must be completed with a member of the <u>Jenkins Training Faculty</u>.** 

At the end of each rotation period, students will present a 10-minute talk in front of the Rotation Advisors and other 1st-year students. All other biophysics faculty and students are invited to attend. The two Spring 2025 rotations are scheduled for Jan 21st – Mar 14th, and Mar 24th – May 16th, with the rotation talks on March 14th and May 16th.

Students are expected to select their advisor and lab, and begin their thesis research by the **Monday immediately following the Spring II Rotation Talks.** Students may choose to do a third rotation, but they must receive approval from the Program Director to do so.

Occasionally, incoming students spend part of the Summer before their first year working in the laboratory of a faculty member. In such cases, students are permitted to do one of their rotations in this same laboratory during the Spring semester.

#### ROTATION EVALUATIONS

At the end of each rotation, the Rotation Advisor will be asked to complete a form evaluating the student's effort, interest, comprehension, and skill. This form will become part of the student's departmental academic file. The <u>Jenkins Rotation Evaluation Form</u> is linked here.

It is expected that students will work diligently during each rotation, regardless of their choice of thesis laboratory. An evaluation with unsatisfactory rankings is grounds for a warning letter, and a second rotation with unsatisfactory rankings may be grounds for dismissal (see Probation and Dismissal from the Program below).

# RESPONSIBLE CONDUCT OF RESEARCH

The university mandates that all graduate students receive training in the Responsible Conduct of Research (RCR). In the Summer semester after their first year, Jenkins students are required to take AS.360.625 - Responsible Conduct of Research, offered on the Homewood campus.

In addition to the course above, from their second year through their completion of the program, all Jenkins students are required attend an annual RCR refresher session, organized by the Program in Molecular Biophysics (PMB). This session typically takes place in April.

Failure to attend this **mandatory** refresher session may be grounds for academic probation.

#### PARTICIPATION IN SCIENTIFIC MEETINGS

Each year, the Institute for Biophysical Research (IBR) sponsors a local meeting that brings together IBR laboratories from departments throughout the Schools of Arts & Sciences, Engineering, Medicine, and Public Health. The retreat gives faculty and students within the Institute the opportunity to hear about current research in other laboratories. Attendance is **required** for all lenkins students.

There are many other regional and national/international scientific meetings on a wide range of topics. Students are encouraged to discuss opportunities to participate in relevant meetings with their mentors. Participation conditions vary by laboratory and depend on research funds.

#### FACULTY RESEARCH INTERESTS

It is important that students have an opportunity to learn about faculty's research interests before committing to a lab for rotation. All students are encouraged to contact faculty about research interests. Program faculty are always happy to talk to interested students individually about their work. Additionally, in the Fall semester, the Jenkins Biophysics faculty hold an annual presentation to the new first year students to give them a full picture of the research taking place in the T.C. Jenkins laboratories, and a chance to think about rotation possibilities.

#### SEMINAR SERIES

Attending seminars, both in the area of biophysics and other areas, is an essential part of the educational process for students. Students are required to attend the following during their entire tenure in the program:

- All named lectures and seminars.
- *AS.250.601 Biophysics Seminar -* The required course *Biophysics Seminar* comprises the Thomas C. Jenkins Department of Biophysics seminar series. These seminars are held on Mondays at noon. Jenkins students are required to register for this course every semester and attend all seminars.
- Chalk it up to Biophysics seminars are held four to five times per year, as part of the Jenkins
  Department of Biophysics seminar series, and as part of the Department of Biophysics &
  Biophysical Chemistry Series. They are presented by faculty from many biophysics-related
  departments and emphasize the conceptual basis behind the work of an individual laboratory.
  Attendance is mandatory for first and second-year students. Students past their second year are
  expected to attend.

Repeated absences from either of the above will result in a failing grade for the seminar course.

Students are also encouraged to attend:

- Biophysics Student Evening Series This student-led event is a monthly meeting where students get experience and feedback presenting their research in front of others. It is a friendly environment where students help each other with public speaking and presentation of ideas.
- Other departmental seminars on the Homewood and Medical School campuses that may be of interest include the departments of Biology (Homewood, Thursdays 4pm), Chemical and Biomolecular Engineering (Homewood, Thursdays 10:30am), Biophysics and Biophysical Chemistry (School of Medicine, Tuesdays 11am), Mechanical Engineering (Homewood, Thursdays 3pm), and Chemistry (Homewood, Tuesdays 4:15pm).

#### GRADUATE BOARD PRELIMINARY ORAL EXAMINATION

• **Oral exam requirements:** The Graduate Board of Johns Hopkins University requires all Ph.D. programs to administer an oral examination to their students. For Jenkins students, this is a preliminary examination to be taken towards the end of the second year.

The Program Director will determine the faculty on the GBO committee for each student. The committee will consist of five primary members, and two alternates. The Graduate Board requires that two members of the examining committee and one alternate be from outside the student's department.

The student's Faculty Advisor cannot be a member of the examining committee, and cannot be present during the examination. The Advisor will give a brief statement to the examining committee prior to the examination, without the student present.

- **Scope of the exam:** The GBO is designed to test reasoning abilities and the breadth and depth of the student's knowledge. While the topics covered in the GBO can be quite broad, the Jenkins GBO focuses first and foremost on core concepts in Biophysics. The materials that students have encountered in their first-year curriculum are central to the examination, specifically, the biomolecular structure, function, physical chemistry, and methods of inquiry related to these topics. The exam need not focus extensively on the student's thesis research area; however, students are expected to have a solid understanding of the literature and methodology related to their thesis work. For the first ~5 minutes of the exam, students may provide a brief description of their project to provide some background.
- **Setting up the oral exam:** Students will be notified of when they are scheduled to appear by the Academic Program Administrator.
- **Outcome of the oral exam:** The Graduate Board requires that the GBO examining committee report the results of the examination in written form. The reporting form allows for a "pass", "conditional pass", or "fail." An option to retake may also be offered, at the discretion of the committee. If the decision is a "conditional pass," the conditions (nature of the work, deadline, etc.) will be stipulated by the committee at the end of the examination.

#### LEAVE OF ABSENCE

Graduate students may apply for a leave of absence when medical conditions, compulsory military service, or personal or family hardship prevent them from continuing their graduate studies. Financial difficulty alone does not warrant a leave. The leave of absence may extend for up to four semesters (not including the Summer term).

To apply for a leave of absence, students must inform the Program Director and Program Administrator of their specific situation in writing, and fill out a Leave of Absence (LOA) form found here on the Homewood Grad Affairs website.

Students must provide the proper documentation for their given situation:

- Medical Condition: a letter from a physician (this may be a letter from a doctor at the Student Health and Wellness Center), the Counseling Center, or the Office of Student Disability Services
- Military Duty: a letter or verification from the Armed Forces

• Personal or Family Hardship: a letter from the applicant explaining the hardship

A leave of absence will be granted for a specific period of time, not to exceed a total of two years. When approved for a leave of absence, the Chair of the Homewood Graduate Board will notify the student. During the leave period, a student may not be enrolled at another university. Before applying for leave, the student should consult their department for information regarding funding for when they return from their LOA. Prior to requesting the LOA, it is also highly recommended that the student contact the Health Insurance Coordinator in the Registrar's Office for information on how the LOA will affect their health insurance coverage. When on an approved LOA, there is no tuition charge; the period of leave is simply regarded as an interruption of the degree program.

#### The regular stipend will be suspended while the student is on leave.

In addition, a student on leave is not to make use of any University services or facilities (e.g., counseling center, health center, library, athletic facilities, etc.). A student on a leave of absence who wishes to continue working at the University is not eligible to be paid through the Student Payroll Office. Therefore, he or she must be hired through the Human Resources division of the department employing them. No exceptions can be made.

The Program Director may decline to approve a student's request for a leave of absence. In this case, the student may appeal the decision to the Graduate Board or the Dean of Graduate Education.

#### RETURNING FROM LEAVE OF ABSENCE

Return from a leave of absence can only occur at the start of an academic period. For example, if a student takes a leave of absence just a few weeks into the Fall semester, they cannot be reinstated again until the start of the Spring term. When returning from Leave of Absence, a graduate student must complete and submit the <u>Application to Return from Leave of Absence</u> before registering for classes. The form must be accompanied by a letter (from one of the sources below) for their given situation that explains what progress has taken place in the student's absence that would enable him/her to be successful upon return to the program.

- Medical Condition: a letter from a physician (including the Student Health and Wellness Center), the Counseling Center, or Office of Student Disability Services
- Military Duty: a letter or verification from the Armed Forces
- Personal or Family Hardship: a personal letter

Any additional letters of support (e.g. from an advisor, department chair, etc.) are welcome. When approved for returning from a Leave of Absence, the Chair of the Homewood Graduate Board will notify the student.

#### PROBATION AND DISMISSAL FROM THE PROGRAM

The Jenkins faculty and Program Director will make every effort to support students to be successful in the program. If a student is struggling, they will be given the tools, guidance, and opportunity to improve. However, if a student continues to not meet expectations of the program, the Director and the student's Thesis Advisory Committee may place the student on probation, and may subsequently dismiss a student from the program in accordance with the <a href="Graduate Student Probation">Graduate Student Probation</a>, Funding Withdrawal, and Dismissal Policy.

Per this policy, failure to meet performance requirements in (1) coursework, (2) research, and/or (3) teaching assistantships may result in probation and eventual termination from the program.

In addition, per the <a href="PhD Advisor/Good Standing Policy">PhD Advisor/Good Standing Policy</a>, each student must have a thesis advisor from the list of approved training faculty to remain in the Jenkins program. For first year students, the deadline to join a thesis laboratory is at the end of the second spring rotation. Students may wish to do a summer rotation, but must have a thesis lab within four months of the May deadline or will be terminated from the program. Likewise, if an older student leaves their thesis group, they have four months to find a new advisor. In accordance with university policies, students without a thesis advisor for longer than four months may be terminated from the program.

# THESIS REQUIREMENTS

#### THESIS ADVISOR

Students should choose a Thesis Advisor from among the Jenkins Faculty at the conclusion of the Spring II Rotation. This is a critical choice for both the student and advisor, and should be made with care. If a mutually agreed upon match is not found between a student and advisor by the Deadline to Join Thesis Laboratory, on a case-by-case basis, the Director may authorize a third rotation. Faculty are not required to accept all students interested in their laboratories.

#### OVERVIEW OF THESIS REVIEWS

From the end of their first year and onwards, students are expected to spend a significant amount of time in the laboratory conducting research. This expectation is set to help students start to establish the foundations of their thesis topic. These foundations are built upon throughout the student's second year, and in the Fall semester of their third year, they will deliver a proposal seminar on their thesis topic. From their third year are onwards, students should expect to have at least one annual Thesis Review in the Fall.

#### ANNUAL THESIS REVIEWS

From their third year through their completion of the program, students are required to have an annual thesis review each Fall semester. The annual reviews, in year four and beyond, will be ~50 minutes, and consist of a 15-minute presentation followed by a 35-minute question and answer period. The review in year three comes as part of the Third Year Thesis Proposal Seminar and has a different structure and requirements (see 3rd Year Seminar section below for details).

For these reviews, students must distribute a <u>one-page research summary</u> to their committee members <u>at least one week in advance</u>. The thesis committee will consist of the student's Thesis Advisor, plus two additional faculty members. These additional members are selected by the advisor and the student.

Prior to each year's review, students must complete the following:

- <u>myIDP</u>: This is a self-reflective Individualized Development Plan, designed to help students think about what professional skills and expertise to work on improving.
- <u>Jenkins Student–Advisor Report</u>: This is a form students fill out reflecting on how their research has progressed since the last meeting, where they would like it to go, and where they hope it will take them professionally.

Once both forms have been completed, students should email them to their Thesis Advisor and set a time to meet with them. By the time of the meeting, the advisor should have the 'Advisor Feedback' portion of Student–Advisor Report completed. Advisors and students should discuss the feedback sign the form. The student then sends the signed form to the Academic Program Advisor.

It is the responsibility of the student to schedule these annual review meetings with their Thesis Advisory Committee (TAC). The student will reach out to the committee members to determine a

date that all are available. Once a date has been decided **the student will send a calendar invite for this meeting to all members of the Committee and the Academic Program Administrator.** 

Within 2 weeks of the conclusion of each thesis review, the Committee Chair, appointed by the Program Director, will complete a <u>Jenkins Thesis Advisory Committee Meeting Form</u>, summarizing the committee discussion and any recommendations or requirements they have for the student. Such requirements may include that the student provide periodic written reports or have an additional thesis review during the year. **The Chair will sign the completed form, and send it to the Academic Program Administrator.** The Program Administrator will send it to the student's Advisor for signature, before sending it to the student for signature as well.

All students enrolled in the program must have a yearly thesis review. Starting in their 5th year, thesis reviews are required every six months, to ensure that students have a clear timeline for finishing the requirements for their degree. The Thesis Review Committee can make exceptions to this requirement. The Thesis Review Committee and student will agree on an outline of the thesis. If a student is less than six months from defending their thesis, then a thesis review can be waived, at the discretion of the thesis review committee. Writing of the dissertation is monitored by the advisor.

#### THIRD YEAR SEMINAR & THESIS REVIEW

The Third Year Seminar & Thesis Review is the first review of a student's research progress, and typically takes place in the Fall of their third year. The review begins with each student giving a formal 25-minute seminar in a public forum. The seminar provides the context, background, and rationale for their thesis work. It also gives the student an opportunity to discuss their preliminary results.

After their public presentation (ideally the same afternoon, but not necessarily), the student will have their first Thesis Review, which will last approximately 30 minutes. This will be a private review in which the student's committee will ask them questions based on the data and background presented in the seminar. Rather than the one-page summary that is standard for typical Thesis Reviews, for their third-year review, students must submit a six-page written research proposal to their review committee **one week prior** to their Seminar.

To guide and prepare students for both the oral seminar, and the written proposal, students take two specially designed courses in the Spring of their second year: Savvy Science Seminars (250.610) and Biophysics Writing Workshop (250.615).

Savvy Science Seminars instructs students on how to deliver effective oral presentations. Students prepare and give practice talks to their peers and receive feedback on how to improve their presentation style. Biophysics Writing Workshop guides students on how to formulate written research proposals. They write drafts of proposals and receive direct critique on areas of improvement.

During the Summer and Fall that follow these two courses, students are expected to continue working on and refining their seminar presentations and research proposals with guidance from their peers and advisors. Through this preparation, students are able to have fully formulated ideas and experimental plans by the time of their 3<sup>rd</sup> Year Thesis Review.

Aside from the difference in the length of the review, the oral Seminar, and the six page Proposal instead of the summary, all other Thesis Reviews requirements discussed above remain the same.

## FINAL ORAL EXAMINATION AND THESIS REQUIREMENT

The final oral examination committee must consist of five (5) faculty members and one (1) alternate. The committee should be composed of:

- The student's Thesis Review Committee, for continuity (3 members)
- Two additional faculty (2 members)
- One alternate faculty member

Members of the committee must appear on the list of faculty approved to serve on GBO committees by the Homewood Graduate Board.

To ensure balance, the committee composition must be approved by the Program Director. The Program Director will choose the Committee Chair. Once the committee is approved and the advisor agrees that the thesis is ready to be distributed, the student may schedule the exam.

It is the student's responsibility to contact the faculty members on the exam committee and to schedule the date, time and place of the exam.

At least 2 weeks prior to the defense date, the student must send a calendar invite for the event, <u>with their thesis attached</u>, to all committee members, the alternate, and the Academic Program Administrator.

The final oral exam serves three purposes:

- To evaluate the quality of the dissertation (if approved, the 1<sup>st</sup> and 2<sup>nd</sup> readers would sign a letter of acceptance addressed to the Graduate Board);
- To determine that the student's knowledge in the immediate scientific area of his/her dissertation is sufficient; and
- To authorize the student to go forward with presenting the thesis seminar.

If the exam committee concludes that the student's knowledge is insufficient or the dissertation needs additional work, the student can be asked to return for a re-examination. The student's final exam committee has the authority to ask for substantial changes to the thesis.

The student should be prepared to make a presentation during the final oral exam which highlights the major findings of the dissertation, approximately 30-40 minutes in length. The presentation should not be the same as the one-hour thesis seminar (see below). The exam committee is expected to interrupt throughout the presentation to discuss various points and again, in this regard, the defense presentation differs from the public thesis seminar. These guidelines are not fixed – the committee chair and Thesis Advisor may determine a different format as long as they communicate the format to the student in advance. In general, this oral examination will last 2 hours.

It is the intention of the Jenkins Faculty that the examining faculty conduct a rigorous assessment of the student's scientific knowledge and evaluate the dissertation research in a substantive manner. Therefore, to allow time for any thesis revisions the committee may require, there is a mandatory one-month period between the final oral exam and the thesis seminar.

#### THESIS APPROVAL

The final thesis must be approved, in a form specified by the Graduate Board, by two thesis readers, one of whom is normally the advisor. The student and advisor decide on the faculty member most suited to serve as 2<sup>nd</sup> reader. If the final oral examination committee approves the student's dissertation, the two readers will sign the letter accepting the thesis at that time. This letter is then submitted to the Graduate Board. There are many detailed requirements about the format and submission of the thesis. Guidelines are available on the IHU Library's website.

#### THESIS SEMINAR

After the student has passed the final oral exam and the readers' letter accepting the thesis has been submitted to the Graduate Board, the student is required to present a seminar on the work contained within it. The seminar will be scheduled after the thesis has been approved and announced by the department granting the degree. The thesis seminar should be scheduled at a time when a majority of the faculty from the oral examination committee can be present.

#### **GRANTING OF DEGREE**

The Chair of the T. C. Jenkins Department of Biophysics will consider that a student has fulfilled the requirements for the Ph.D. and sign the Certificate of Completion granting the degree only after the following conditions have been met:

- The first requirement is that the student has passed the final oral examination. (Note: This examination is a program requirement, not a Graduate Board requirement. Each student satisfies the Graduate Board Oral requirement by passing the preliminary oral exam taken at the end of the second year.)
- The second requirement is the submission to the Graduate Board of an approval letter signed by two readers accepting the thesis as partial fulfillment of the requirements for the Ph.D.
- The third requirement is the submission of the student's final thesis to the library in time to meet the Graduate Board deadline.
- The fourth requirement is the presentation of the student's thesis seminar.

# **ADMINISTRATION**

#### ADMINISTRATIVE STRUCTURE

Dr. Gregory Bowman is the Director of the Jenkins Graduate Program in Biophysics. Policy questions and serious issues concerning the status of individual students are addressed by the Director in consultation with the T.C. Jenkins Faculty.

# SCHOOL AND DEPARTMENTAL AFFILIATION

All students in the program are affiliated with the Thomas C. Jenkins Department of Biophysics in the Krieger School of Arts & Sciences on the Homewood Campus.

#### SUMMER REGISTRATION

In order to maintain full-time student status (for tax and undergraduate loan deferment purposes) students **must** register for research credits during the Summer session (See "Summer" sections of Biophysics Graduate Student Milestones by Year above).

#### UNIVERSITY COMPUTER POLICY

The University's policy for student use of shared information technology resources is available online. This policy has been officially adopted by the Schools of Arts & Sciences, Engineering, and Public Health. Similar criteria apply to **all** students affiliated with Hopkins graduate programs. Consult the following website for additional detail: <u>Johns Hopkins Information Technology Policies.</u>

#### ACADEMIC ADVISING

All students are encouraged to discuss any questions about the program, academic problems, and other issues that may arise with the Academic Program Administrator, or the Director of the Jenkins Graduate Program, Dr. Gregory Bowman.

During the first year of your program, the Academic Program Administrator, will officially be assigned as your Academic Advisor in JHU's Student Information System (SIS). After students match with a Research Advisor at the end of their first year, that individual will be assigned as the student's Academic Advisor in SIS. The Academic Program Administrator will also remain assigned to the student as an 'Other Advisor' in SIS to be able to assist as needed.

#### PROGRAM DIRECTOR

Dr. Gregory Bowman, Director Thomas C. Jenkins Department of Biophysics 302 Jenkins Hall School of Arts & Sciences

Phone: 410-516-7850 Fax: 410-516-4118

Email: gdbowman@jhu.edu

#### ACADEMIC PROGRAM ADMINISTRATOR

**TBD** 

Thomas C. Jenkins Department of Biophysics

201 Jenkins Hall

School of Arts & Sciences Phone: 410-516-5197 Fax: 410-516-4118

Email: bweinstein@jhu.edu

#### DEPARTMENT ADMINISTRATOR

Jessica Appel
Thomas C. Jenkins Department of Biophysics
101 Jenkins Hall
School of Arts & Sciences

Phone: 410-516-7243 Fax: 410-516-4118 Fmail: jappel@jhu.edu

# GENERAL RESOURCES FOR GRADUATE STUDENTS

#### KSAS GRADUATE & POSTDOCTORAL AFFAIRS OFFICES

The <u>KSAS Graduate & Postdoctoral Affairs Offices</u> addresses the needs and concerns of KSAS graduate students and helps develop policies with the KSAS Dean's Office. Renee Eastwood is the KSAS Assistant Dean for Graduate and Postdoctoral Academic and Student Affairs, rseitz5@jhu.edu.

# GRADUATE REPRESENTATIVE ORGANIZATION (GRO)

The <u>Graduate Representative Organization</u> (GRO) is an organization that represents the Homewood graduate students. The GRO coordinates graduate student orientation, advocates for student concerns, organizes social events and sports tournaments, etc. Email: <u>GRO@jhu.edu</u>

# OFFICE OF INTERNATIONAL SERVICES

The <u>Office of International Services</u> (OIS) is a useful resource for non-US citizens. Their website provides advice for visas, legal and tax information, and links for getting adjusted to life in Baltimore.

#### STUDENT HEALTH & WELLNESS CENTER

The <u>Student Health and Wellness Center</u> provides confidential health care to the Homewood campus community. The clinic is located at 1 East 31st Street, Suite N200. The health care staff consists of board certified/eligible physicians, nationally certified nurse practitioners, a licensed nurse, medical assistants/technologists, and a nurse mid-wife. The center is open Monday through Friday from 8:30 AM to 5:00 PM. During the academic year, it is also open on Saturdays from 9:00 AM to noon.

### MENTAL HEALTH SERVICES

Mental Health Services at Homewood offers individual and group counseling, consultation and referral services, and help with career decision-making. Services are confidential and free of charge. Mental Health Services is located at 3003 N. Charles Street, Suite S200 and open Monday through Friday from 8:30 AM to 5:00 PM.

#### **Homewood Students:**

Schedule an appointment by calling: 410-516-8278

#### **Med School Students:**

Schedule an appointment by calling: 410-955-1892

#### CRISIS INFORMATION

## **MEDICAL EMERGENCIES**

Call 911 or go to your closest emergency room.

#### MENTAL HEALTH EMERGENCIES

- Call 988 or go to your closest emergency room.
- For the National Suicide Prevention Lifeline, call 800-273-8255.
- To reach the Crisis Text Line, text "HOME" to 741741 for help.
- To reach the Johns Hopkins University <u>Behavioral Health Crisis Support Team</u> (BHCST), call 410-516-9355. This team is available 24 hours a day, year round.
- To reach Johns Hopkins Public Safety for all campuses, call 667-208-1200.

# OFFICE OF INSTITUTIONAL EQUITY

The <u>Office of Institutional Equity</u> oversees concerns relating to sexual harassment, discrimination/compliance, and disability services. Located in the Wyman Park Building, Suite 515.

General Inquiry E-mail: oie@jhu.edu

Disability Services and Accommodations E-mail: oiedisability@jhu.edu

# SEXUAL ASSAULT RESPONSE & PREVENTION

Johns Hopkins University is committed to promoting a safe and supportive environment for each and every member of our community. The <u>OIE Sexual Misconduct page</u> provides clear and consolidated information on sexual assault policies, and available services and support in the event of an incident of sexual assault. See the following resources:

- Get Confidential Help
- Sexual Misconduct Policy and Procedures ("SMPP")
- Sexual Misconduct FAQs
- Retaliation

To file a sexual misconduct report, contact the Office of Institutional Equity at 410-516-8075, email oie@jhu.edu, or submit an online report to OIE.

#### IHU LIFE DESIGN LAB: CAREER SERVICES

The JHU Life Design Lab serves all full-time students (freshmen through PhD candidates) on the Homewood Campus. The Assistant Director of Life Design for Graduate Programming is:

Heather Braun: hbraun4@jhu.edu

# CENTER FOR LANGUAGE EDUCATION

All students in the Jenkins Program are expected to be able to communicate in English, both verbally and through writing. Students for whom English is not their native language should take a three-week intensive course, ESL Workshop for International TAs, offered by the <a href="Center for Language Education">Center for Language Education</a> at Johns Hopkins. Classes are held daily (Mon-Fri) from 9am-4pm, from the first week in August up to the start of regular classes. Students should arrive by late July or very early August to participate in this course.

Students that feel they still need more language help should also consider a <u>semester-long course</u> for improving English proficiency.

# PHD STUDENT EMPLOYEE UNION & COLLECTIVE BARGAINING AGREEMENT

#### PHD STUDENT EMPLOYEE UNION

Information about the TRU-JHU PhD Student Union and the Collective Bargaining Agreement (CBA) can be found on this website: <a href="https://provost.jhu.edu/education/graduate-and-professional-education/phd-union/">https://provost.jhu.edu/education/graduate-and-professional-education/phd-union/</a>.

- PhD students in the Jenkins Biophysics PhD Program who receive work appointments and/or health insurance premium subsidy through Johns Hopkins University are under the Collective Bargaining Agreement dated March 29, 2024-June 30, 2027.
- This agreement has established wages, work hours, benefits, and conditions of appointment, many of these are described below.
- Eligible PhD students will be contacted by the Union and may elect to join the union and pay dues or pay agency fees. All eligible PhD students are under the CBA, regardless of Union membership.
- This agreement only covers work, which is limited to 20 hours per week on average for base funding. A PhD Student Employee may voluntarily elect to participate in supplemental-funded activities beyond the 20 hours per week on average.
- Academic policies are defined elsewhere in the handbook/catalogue/program materials.

#### **CBA SUMMARY**

The following is a summary, not the actual terms of the CBA. To review the actual terms of the CBA please click on this <u>link</u>). Not all elements of the agreement are summarized below; please reach out to the Program Director with questions.

#### **COMPENSATION**

- Stipend for the 2024-2025 academic year: \$47,000 effective July 1, 2024
- For work outside the primary appointment, the hourly rate is \$25.41/hour.
- Five years of funding are guaranteed for all PhD student employees in the Whiting School of Engineering, the Krieger School of Arts and Sciences, and the School of Medicine.
- PhD student employees with external awards paid through the University will have their compensation increased to the minimum rate during a period of guaranteed funding.

#### **BENEFITS**

- Enrollment information will be available through <u>HR Benefits</u>, and communications will be sent in advance of benefits election periods.
- The following benefits are paid by the University:

- The University will pay the premiums for University Student Health Benefits Plan (SHBP), including dental and vision coverage, employee coverage for employees in full-time resident status during the terms of full appointments.
- PhD student employees will receive subsidies of \$4,500 per child per year for eligible children under 6 years and \$3,000 per child aged 6-18 years or adult dependent, with a maximum of \$12,000 per family per year, in installments throughout the year.
- Reimbursed by University/Departments
  - The University will pay the cost of the health insurance premiums for eligible dependent children and spouses unable to work in the US, including dental and vision. Reimbursement procedures will be available on the HR Benefits website.
  - International students will be eligible to apply to a yearly fund to cover required visa fees.
  - Students will be eligible for reimbursement for MTA All Access College Transit
    Passes or DC U-Passes. Registration and enrollment information will be available on
    the HR Benefits website.

# TIME OFF/VACATION/LEAVES

- All University holidays are recognized.
- PhD student employees have 15 vacation days per year. Additional time can be given by a supervisor.
- PhD student employees receive 15 sick days per year with an additional 5 days per dependent. Student employees should report their absence as soon as possible to their work supervisor.
- PhD student employees receive 5 days of bereavement leave for the passing of immediate and extended family members and close friends, with 1 additional day for those needing international travel.
- International PhD student employees who are required to travel out of the country in order to maintain their immigration status necessary to be able to continue their program at the University are eligible for up to fourteen (14) days off with pay during the period of such travel.
- Parents are eligible for 8 weeks of paid leave following birth or adoption, with an additional 4 weeks for parents who have just given birth. New Child Accommodation applies to the academic, not work, PhD student experience.
- Employees will make a written request for vacation days in advance to the designated supervisor and receive written approval, which will not be unreasonably withheld.
- Employees with instructional responsibilities should not use vacation days in a way that would result in the diminution of those duties.
- Leaves of absence, including family leave, medical leave, and personal leave, are governed by the <u>University leave policy</u>.

#### **WORK HOURS**

• No PhD student employee shall be required to perform work for more than 20 hours/week on average. Work includes activities outside of academic requirements.

- Teaching appointments are included in the 20 hours of work that may be assigned.
   Academic coursework, exams, and academic research are in addition to this assigned 20 hours of work.
- There are no restrictions on work external to Hopkins except when decreed by funding source or visa status.
- All work appointments (baseline funding or supplemental funding) require an appointment letter. Appointment letters will define the expectations and requirements of the teaching, research, or other University activity appointment. Students should contact their department administrator with any questions.

#### **UNION REPRESENTATION**

- All directory information will be sent to the Union unless restricted. Supplemental information will require a FERPA consent form available on SIS self-service.
- Union Representatives are current PhD Student Employees who are elected/selected to help their fellow PhD Student Employees navigate work-related disciplines, grievances, and other procedural/policy issues. Contact TRU-JHU with questions about specific Union Representatives.
- TRU-JHU Contact Information

o Website: <a href="https://trujhu.org/">https://trujhu.org/</a>

o Phone: 443-281-9462

o Address: TRU-UE Local 197, PO Box 41149, Baltimore, MD 21203

o Email: trujhu@gmail.com

<u>Disclaimer</u>: **This is not a legal document**. This booklet presents current guidelines and practices for the Jenkins Biophysics Program. The Program Director and Faculty reserve the right to modify requirements, create new ones, and otherwise alter graduate program practices without advance notice.