# **Chemistry-Biology Interface Program**

Graduate Student Handbook

2023 - 2024

Johns Hopkins University Baltimore, Maryland 21218 www.cbi.jhu.edu



The Johns Hopkins University admits students of any race, color, gender, religion, age, national or ethnic origin, disability, marital or veteran status to all of the rights, privileges, programs, benefits and activities generally accorded or made available to students at the university. It does not discriminate on the basis of race, color, gender, religion, age, sexual orientation, national or ethnic origin, disability, marital or veteran status in any program or activity, including the administration of its educational policies, admission policies, scholarship and loan programs, and athletic and other university administered programs or in employment. Accordingly, the university does not take into consideration personal factors that are irrelevant to the program involved. Questions regarding access to programs following Title VI, Title IX and Section 504 should be referred to the Office of Equal Opportunity and Affirmative Action Programs, N-710 Wyman Park Building, Homewood Campus, 410-516-8075, TTY 410-516-6225.

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# **CBI IMPORTANT DATES FOR THE 2023 – 2024 ACADEMIC YEAR**

# **Orientation Activities**

| Times                           | Event   | Location   |
|---------------------------------|---|--|
| Aug. 18,<br>11:30 AM-2:00 PM    | New Grad Student Welcome (KSAS)   | Homewood Beach   |
| Aug. 22,<br>10:00 AM-12:00 noon | Welcome, Overview and tips for success  Presented by the CBI Director and a panel of CBI students         | Remsen 140   |
| Aug. 23,<br>5:00 PM-7:00 PM     | ChemDNA Social <a href="mailto:chemdnaboard@live.johnshopkins.edu">chemdnaboard@live.johnshopkins.edu</a> | Remsen Breezeway   |
| Aug. 24,<br>1:00 PM – 4:00 PM   | TA Training (General Safety & Waste<br>Management) *For 2 <sup>nd</sup> year students                     | UTL 288  |
| Aug, 24,<br>1:00 PM-4:00 PM     | CBI Advising Meeting – Individual Appointments  | Remsen 140   |
| Aug 24, all day                 | TA Training Institute Q&A Session  *Recommended (but not required) for 2 <sup>nd</sup> year students      | Online:<br>https://ctei.jhu.edu/teaching-<br>academy/ta-orientation/fall |
| Aug. 25,<br>9:00 AM – 12:00     | TA Training  **Required for AS.030.103 TAs  | UTL 288  |
| Aug. 25,<br>1:00 PM – 4:00 PM   | TA Training  **Required for AS.030.103 TAs  | UTL 288  |
| Aug, 25,<br>5:00 PM – 7:00 PM   | Chemistry & CBI Welcome BBQ   | Remsen Breezeway   |

# **Rotation Schedule**

| Date              | Rotation Information     |
|-------------------|--------------------------|
| August 28, 2023   | Rotation 1 Choices Due   |
| August 31, 2023   | Rotation 1 Begins        |
| November 16, 2023 | Rotation 1 Abstracts Due |
| November 17, 2023 | Rotation 1 Talks         |
| November 17, 2023 | Rotation 2 Choices Due   |
| November 27, 2023 | Rotation 2 Begins        |
| February 9, 2024  | Rotation 2 Abstracts Due |

| Date              | Rotation Information     |
|-------------------|--------------------------|
| February 9, 2024  | Rotation 3 Choices Due   |
| February 12, 2024 | Rotation 2 Talks         |
| February 14, 2024 | Rotation 3 Begins        |
| May 10, 2024      | Rotation 3 Abstracts Due |
| May 13, 2024      | Rotation 3 Talks         |
| May 15, 2024      | Advisor Choice Due       |

# Academic Calendar 2023 – 2024

| Date   | Event   |
|--|---|
| Monday, August 28                              | Classes begin, all campuses   |
| Monday, September 4                            | Labor Day, classes suspended  |
| Thursday/Friday, October 19/20                 | Fall Break, classes suspended, Homewood                                   |
| Tuesday, October 24                            | Last day of classes (1st term), Homewood, SOM, SPH                        |
| Wednesday, October 25                          | First day of classes (2 <sup>nd</sup> quarter), SOM                       |
| Wednesday, October 26                          | First day of classes (2 <sup>nd</sup> term), Homewood, SPH                |
| Monday, November 20 – Friday, November 24      | Fall break, Homewood, SOM   |
| Friday, December 8                             | Last day of classes (semester), Homewood                                  |
| Monday, December 11 – Tuesday, December 12     | Reading Period, Homewood  |
| Wednesday, December 13 – Thursday, December 21 | Final Exam Period, Homewood   |
| Friday, December 22                            | Last day of classes (2 <sup>nd</sup> quarter/term), SOM, SPH              |
| Saturday, December 23 – Monday, January 1      | Winter break, Homewood, SOM   |
| Tuesday, January 2                             | First day of classes, SOM   |
| Tuesday, January 2                             | First day of intersession classes, Homewood                               |
| Monday, January 15                             | Martin Luther King, Jr. Day, classes suspended                            |
| Friday, January 10                             | Last day of classes, Homewood, SPH  |
| Monday, January 22                             | First day of spring classes, Homewood, SPH                                |
| Friday, March 15                               | Last day of classes (3 <sup>rd</sup> quarter/term), Homewood,<br>SOM, SPH |
| Monday, March 18 – Friday, March 22            | Spring break, Homewood, SOM, SPH  |
| Monday, March 25                               | First day of classes (4 <sup>th</sup> term/quarter), Homewood, SOM, SPH   |
| Friday, April 26                               | Last day of classes (semester), Homewood                                  |
| Monday, April 29 - Tuesday, May 3              | Reading Period (Homewood)   |
| Monday, May 6 - Tuesday, May 14                | Final Exam Period (Homewood)  |
| Sunday, May 19                                 | Last day of classes (4 <sup>th</sup> term/quarter), Homewood, SOM, SPH    |
| Thursday, May 23                               | University Commencement   |

SOM (School of Medicine); SPH (School of Public Health)

## **HEALTH AND SAFETY**

#### I. SAFETY TRAINING

Compliance to University and Departmental safety policies and procedures is mandatory. All incoming graduate students, as well as postdoctoral appointments and staff, are required to complete an online safety module and knowledge assessment. **This is a mandatory requirement for first year graduate students.** 

Utilizing Canvas, there are several modules in the course. All questions in each module must be answered correctly before the next module opens. All first-year graduate students must complete the course by September 29, 2023 and preferably before starting rotation 1. All students assigned TA positions in a laboratory course must complete the TA Safety Course and Knowledge Assessment as well by September 29, 2023. Graduate students may also be required to complete specialized safety training dependent upon their research group affiliation.

Access: The course login is located at <u>canvas.jhu.edu</u>. You will be able to sign in with your assigned JHED ID and password. For first time users, please create your password my going to <u>my.jh.edu</u>. Staff are available for questions by contacting <u>chem-admin@lists.johnshopkins.edu</u> and/or cbi-admin@jh.edu.

## **Radiation Training**

Radiation safety training courses are offered at the Homewood Campus every fall. Also, monthly Radiation Safety Training is available at the JHMI (East Campus), along with several online courses. These classes are available to all members of the Johns Hopkins Community. Attending these training lectures will indicate that you have completed the minimum Radiation Safety Training to use radioactive materials. Please contact Mina Razavi in our Homewood campus office for more information.

Radiation Control Unit 2024 East Monument Street, Suite B-200 Baltimore, Maryland 21205-2223 Office: 410-955-3710

Office: 410-516-7278

Homewood Campus – Radiation Safety Office Mudd Hall Mina Razavi (mina@ihu.edu)

## II. ANNUAL REVIEW OF SAFETY STANDARD OPERATING PROCEDURES

The CBI Program is committed to providing a safe environment for staff and students to perform the necessary laboratory procedures for completion of their research and education. A basic part of providing this environment is to ensure that everyone in the laboratory follows standard operating procedures (SOP) when working with specific chemical hazard classes. Please check the department website for updates throughout the year.

The link below will direct you to a PDF document outlining standard operating procedures developed by the Johns Hopkins University Safety Office. **All graduate students, postdocs and lab staff are required to review these documents on an ANNUAL basis:** 

https://krieger.jhu.edu/cbi/wp-content/uploads/sites/74/2022/08/b29RPQIH-5.pdf

To ensure compliance, once these documents have been reviewed, graduate students, postdocs and lab staff are required to submit an "acknowledgement form" by submitting the form found at: <a href="https://chemistry.jhu.edu/health-safety/">https://chemistry.jhu.edu/health-safety/</a>

Research laboratories should also have lab-specific SOPs and these should also be reviewed on an annual basis.

Johns Hopkins Safety Policies: <a href="https://hpo.johnshopkins.edu/hse">https://hpo.johnshopkins.edu/hse</a>

## III. EMERGENCY HEALTH CARE AND EMERGENCY INCIDENT REPORTING

If you are injured at work, please notify your supervisor immediately and contact the Homewood Office of Occupational Services at 410-516-0450. If an injury should occur on a night shift or weekend, please seek the appropriate medical treatment and follow-up with the Department of Occupational Health Services the next business day. Students should also contact the Chemistry Department Office, Remsen 138 ext. 6-7429. Transportation will be made available during working hours.

If you are injured at work due to an occupational injury, please notify your supervisor immediately and contact the Injury Clinic Office in the Johns Hopkins Hospital at 410-955-6433. For more information, click here to visit the Injury Clinic Office.

Employee Incident Report Form and the Occupational Health Services Employee Information Form are available at the Health and Safety Forms website https://www.hopkinsmedicine.org/hse/forms/forms.html

## **Occupational Health Services – Homewood**

1101 East 33<sup>rd</sup> Street C-160 Eastern H.S. Building Phone: 443- 997-1700

Fax: 443-997-1701

Monday-Friday 7:30 AM to 4:00 PM

## Johns Hopkins Occupational Injury Clinic – East Campus

Location: Blalock 139 Baltimore, MD 21205 Phone: 410-955-6433

Monday - Friday 7:30 am - 4:00 pm

If you observe conditions or practices you consider unsafe, contact the professor in charge of the laboratory course or research laboratory. Hazardous situations outside of a specific laboratory should be brought to the attention of the Facilities Manager, the Safety Officer and/or the Department Chair.

| Issue<br>FIRE                | Action Homewood: Set off fire alarm (red box in corridor; note location) From a phone outside the fire area, call 9-1-1 E. Baltimore Campus: Pull alarm and then call 410-955-5585 |
|------------------------------|--|
| THEFT                        | Call Security (6-7777)  For emergencies, Homewood: dial 6-4600  E. Baltimore Campus: Call Security (410-955-5585)  |
| SERIOUS INJURY/<br>AMBULANCE | Homewood: Call Security at 6-7777 or call 9-1-1  E. Baltimore Campus: Call the Emergency Number (410-955-4444) or 9-1-1  |
| EYE INJURY                   | Homewood: Use Eye Wash Foundations and call Security (6-7777)  E. Baltimore Campus: Call the Emergency Number (410-955-4444) or 9-1-1  |

| Issue                             | Action Ask for an Ambulance with eye wash service   |
|-----------------------------------|---|
| POISONING                         | <b>Homewood:</b> Call Security (6-7777) and the Maryland Poison Control 410-528-7701 <b>E. Baltimore Campus:</b> Call the Emergency Number (410-955-4444) or 9-1-1  |
| RADIOACTIVITY                     | <b>Homewood:</b> Call Mina Razavi (6-7278; office days only), Homewood Radiation Safety Officer (6-7308) or Homewood Security (6-7777) <b>E. Baltimore Campus:</b> Call the Emergency Number (410-955-4444), Radiation Safety Officer (410-955-3712) or Security (5-5585) |
| HOOD SHUTDOWN<br>FLOOD ODOR SPILL | Homewood: Call the Facilities Manager (410-516-7458) or Homewood Security (6-7777)  E. Baltimore Campus: Call Maintenance (5-3329), Security (5-5585) or the Emergency Number (5-4444)  |

## Important Phone Numbers (Homewood and East Campus):

https://www.jhu.edu/life/security/emergency-contact-information/

## What is an emergency?

An incident that threatens the safety of JHU students, faculty and staff or interferes significantly with the ability to provide educational and support services should be considered an emergency or crisis that requires immediate action by school administrators.

## **General rules of response**

There are two simple guidelines to follow in the event of an emergency:

- IF DANGER IS OUTSIDE, STAY IN THE BUILDING
- IF THE DANGER IS INSIDE, LEAVE THE BUILDING IMMEDIATELY In the event of an urgent life-threatening emergency (e.g. fire, explosion), all persons should immediately evacuate the premises. If possible, call Campus Security (6-7777), sound a fire alarm and warn fellow workers, students and others

## **General emergencies**

Contact: Campus Security Office (6-7777)

- The Security Office will assist with the emergency
- The Security Office will call 9-1-1, if appropriate
- The Deans will notify appropriate persons within the schools

The Deans will determine if notification further up the chain of command is necessary (i.e. CRT, News and Information, General Counsel). The Deans will complete an Incident Report and notify Occupational Health, if necessary.

## **Compliance Hotline**

To help support a culture of ethical behavior, a toll-free, 24-hour/seven-days-a-week compliance hotline has been established. If you or a colleague has a serious concern, you can make a report by calling **1-844-SPEAK2US** (**1-844-773-2528**) or <u>submitting a report online</u>.

Please make a report if you suspect:

- Non-compliance with laws and regulations
- Fraud, waste or other abuse
- Workplace violence
- Faculty, student or staff misconduct
- Policy violations
- Criminal behavior

- Conflicts of interest
- Any other ethical or legal concerns

## LiveSafe App

The LiveSafe app is free to the JHU community and can be downloaded to mobile devices from either the App Store or Google Play. It offers a quick way to connect with Homewood Security in an emergency without stopping to dial a phone number and it reduces response times by providing location data. Beyond the emergency options, the app has features intended to help the Homewood community report problems – including sending a text message, photo or audio file – and find safety and security resources.

## **Sexual Misconduct**

The Johns Hopkins University is committed to providing a safe and non-discriminatory educational and working environment for its students, trainees, faculty, staff, postdoctoral fellows, residents and other members of the University community. In particular, the University will not tolerate and is committed to providing members of its community with an environment that is free from sexual harassment, sexual assault, relationship violence and stalking (collectively, "sexual misconduct"). This conduct is disruptive of the learning and working environment of the University's community and deprives students, employees and other community members of equal access to the University's programs and activities. To that end, the University embraces its responsibility to increase awareness of sexual misconduct, prevent its occurrence, support victims, deal fairly and firmly with offenses, diligently investigate complaints of such misconduct and retaliation and comply with Title IX of of Higher Education Amendments of 1972 ("Title IX") and the Campus SaVE Act. The Johns Hopkins University Sexual Misconduct Policy and Procedures (the "Policy" and these "Procedures") implement the University's commitment to investigate and resolve cases involving sexual misconduct and retaliation promptly, fairly, equitably, impartially and in compliance with the law.

## **IV. SAFETY PROCEDURES**

A safety manual published by the American Chemical Society is available to all students. Additionally, the University Safety Manual is available in each lab and should be reviewed for pertinent information. You should review relevant portions of the manual before undertaking teaching assistant duties in undergraduate laboratories or working in a research lab. The University Safety Manual is also available online at: https://hpo.johnshopkins.edu/hse/

## **Proper Attire for Individuals in Labs**

It is the policy of Johns Hopkins that all employees, faculty, students and visitors wear appropriate attire in all laboratory areas to minimize or eliminate skin contact with hazardous materials. Shorts, miniskirts or any apparel that does not cover the skin above the knee when seated shall NOT be worn in the laboratory without appropriate over protection (e.g. a buttoned laboratory coat or closed front gown). Open-toed shoes, sandals or shoes made of loosely woven material shall not be worn in the laboratory. Gloves shall be worn whenever there is potential exposure of the hands to hazardous materials. The gloves must afford the necessary resistance to the hazardous material being used. Gloves should be removed before leaving the laboratory. Specialized protective clothing shall be worn when using hazardous materials that are extremely hazardous upon contact with skin. Health, Safety and Environment should be consulted for these materials. **Homewood:** 6-8798; **E. Baltimore:** 410-955-5918

## V. HAZARDOUS CHEMICAL STORAGE

#### **Homewood Campus**

Access to the Hazardous Chemical Storage Facility in Macaulay Hall is by J-Card only. You must have a valid J-Card issued by the J-Card Office (Levering Hall, Suite 04B. South Wing). To receive access privileges, you must complete a tour of the facility. The Facilities Manager will code you into the system after the tour is completed.

## E. Baltimore Campus

For more information regarding Hazardous Chemical Storage Facilities available at the School of Medicine and the School of Public Health, please speak with your rotation or research faculty advisor.

#### **VI. COVID-19 SAFETY GUIDELINES**

The university's academic divisions are making independent decisions on how to conduct instructional activities, guided by a <u>set of principles and values</u> articulated by the university and by JHU's own experts in public health and medicine. The health and safety of all students, faculty and staff remains our foremost concern.

The COVID-19 outbreak may be stressful, particularly for those with family and friends affected. Students experiencing stress or anxiety can find resources for support at <u>wellness.jhu.edu</u> or contact their school's student affairs office.

Other resources include:

• Counseling Center: 410-516-8278

Office of Multicultural Affairs: 410-516-8730

• Religious and Spiritual Life: 410-516-1880

For more information, please visit Hopkins COVID FAQ page: <a href="https://covidinfo.jhu.edu/fag/">https://covidinfo.jhu.edu/fag/</a>

## **GENERAL ACADEMIC INFORMATION**

## I. GRADUATE BOARD DEADLINES

Thesis Defenses may be held throughout the academic year. The defense must be completed and the program certification, readers letter and dissertation must be submitted by the following deadline for the student to go before the Graduate Board for approval. **Within the academic term indicated, no materials will be accepted or considered complete after the date indicated.** 

## **Summer Conferral Schedule:**

**July 19, 2023** - All materials must be submitted to Graduate Board by 4:00 pm Dissertations must be submitted electronically to the Library by 4:00 pm

August 11, 2023 - Deadlines for summer masters degrees

August 25, 2023 - Conferral date

## **Fall Conferral Schedule:**

**August 25, 2023 –** Pre-semester completer deadline for fall dissertations

October 25, 2023 – Grace period deadline for fall dissertations

October 25, 2023 – Dissertations must be submitted electronically to the Library by 12:00 pm.

## **Spring Conferral Schedule (tentative):**

**January 21, 2024 –** Pre-semester completer deadline for spring dissertations

**February 14, 2024 –** Grace period deadline for spring dissertations

March 27, 2024 - Dissertations must be submitted electronically to the Library by 12:00 pm.

**Please note** – When a student's degree requirement materials are received after the deadlines listed above, that student will be put on the next semester's degree completion list. The deadlines are also posted on the Graduate Board website (<a href="https://homewoodgrad.jhu.edu/academics/graduate-board/deadlines/">https://homewoodgrad.jhu.edu/academics/graduate-board/deadlines/</a>). Students requiring confirmation that degree requirement have been completed (for employment or postdoctoral appointments) should contact the Graduate Board Office. Students should be prepared to provide contact and address information as the confirmation will be sent

directly from the Graduate Board Office to establish authenticity. Requests can be emailed to Renee Eastwood (<u>rseitz5@jhu.edu</u>).

## **II. COURSES**

Brief descriptions of advanced courses in all departments are given in the graduate and undergraduate catalog. Introductory courses are also described in the undergraduate catalog, which is available from the Registrar, Wyman Park Building, 2<sup>nd</sup> floor and online at <a href="https://e-catalog.jhu.edu/departments-program-requirements-and-courses/">https://e-catalog.jhu.edu/departments-program-requirements-and-courses/</a>. See also <a href="https://e-catalog.jhu.edu/course-descriptions/">https://e-catalogue.jhu.edu/course-descriptions/</a>

Brief descriptions of advanced courses at the Johns Hopkins Bloomberg School of Public Health are provided in the academic catalog, which is available at <a href="https://www.jhsph.edu/courses">https://www.jhsph.edu/courses</a>

These catalogs are sometimes out of date. The Registrar also maintains a list of course offerings. The Homewood campus bookstore in Barnes and Noble, located at 1830 E. Monument Street, maintains a list of required texts for all courses.

**Summer Independent Research**: To avoid FICA during the Summer term, students should register for the section of AS.030.800 – Summer Independent Research associated with CBI (AS.030.800, section (21), Summer Independent Research). Deadlines for registration can be found on the Student Affairs website. Failure to register by the listed deadline may result in FICA deductions and/or a late registration fee of up to \$300.

## **III. COLLOQUIA AND SEMINARS**

The Chemistry, Biology, Biochemistry & Molecular Biology, Pharmacology & Molecular Sciences, Biophysics, Biomolecular & Chemical Engineering, Molecular Microbiology & Immunology and Biophysics & Biophysical Chemistry departments organize seminars and colloquium series. These series include talks by visitors from other universities and industry, as well as our own faculty. They cover a broad range of current interest topics in chemistry at the biological interface and all graduate students are expected to attend the appropriate presentations. An updated list of all upcoming seminars is posted on the CBI website.

## **IV. FINANCIAL SUPPORT**

Graduate students are guaranteed full tuition remission and are provided with health insurance (if needed). CBI students are supported at a monthly rate equivalent to \$35,500 per year.

Upon completion of their Teaching Assistantships, students in their third and subsequent years normally receive 12-month support in the form of research assistantships, provided good progress is made towards a degree. Good progress is defined as meeting course requirements and grade expectations as well as establishing a research assistantship with a faculty research group and timely submission of annual IDP reports.

**Health insurance:** As a full-time student, you must either participate in the University plan or sign a waiver indicating you have health insurance coverage comparable to the University plan. Details about the student health plan offered by the University can be found on the University website: <a href="https://studentaffairs.jhu.edu/registrar/students/student-health-benefits/">https://studentaffairs.jhu.edu/registrar/students/student-health-benefits/</a>

**Extramural graduate fellowships have been awarded to students from the National Science Foundation, the American Association of University Women and other sources:** Students may be eligible for NRSA training awards. Students are encouraged to consult with their advisors about applying for these awards. Graduate students also have access to <u>GrantForward</u>, a database that allows both students and faculty to search for external funding. An account can be set up with a valid Hopkins email address. Yin Jiang, Remsen 333, <u>yjiang32@jhu.edu</u> is available to assist in identifying extramural support.

#### V. PAYROLL INFORMATION

All students receiving financial support from the program must follow certain procedures to ensure that payment is made appropriately and in a timely manner. Students should review the guidelines below and direct any specific questions to Robert Bishop (Rbishop@jhu.edu) or Yin Jiang (yjiang32@jhu.edu).

## **Payment Schedule**

CBI Graduate students are paid on a semi-monthly basis. Adjustments to payroll can take 3 to 4 weeks depending upon university processing deadlines.

#### **Taxes**

For advanced CBI students, taxes will be withheld from salaries and wages included in your paycheck based on the number of personal exemptions or allowances you declared on withholding forms (federal form W-4 for federal taxes and form MW507 for Maryland taxes if you are living in Maryland). Under current Internal Revenue Service regulations, members of the University community who anticipate no income tax liability for any given calendar year MUST file new federal and state withholding exemption certificates with the University to take effect February 15 of that given year. To be eligible for exemption from income tax withholding, faculty, staff and students must certify that they incurred no tax liability for the prior year and that they anticipate no tax liability for the current year. Additionally, anyone claimed as a dependent on another's tax return cannot claim federal exemption if their income includes non-wage income and exceeds \$650.00.

Federal form W-4 and the relevant state withholding certificate must be submitted to the Chemistry Administrative Office prior to January 31<sup>st</sup> of the year in question in order to avoid tax withholding. Non-resident aliens claiming benefits of a treaty exemption in a given year need to re-file Form 8233 or Form 1001. For additional information, please visit the website for the Johns Hopkins University Tax Office, <a href="https://finance.ihu.edu/depts/tax/about\_tax.html">https://finance.ihu.edu/depts/tax/about\_tax.html</a>

Graduate Students on Grants or Fellowship Funding (This includes all first year CBI students!)

The University does not withhold taxes on scholarship/fellowship payments provided as a stipend. The student is responsible for making Federal and Maryland (or your home state) estimated tax payment, Scholarship or fellowship grant payments made to U.S. citizens and resident aliens are not reported on form W-2 or Form 1099. Please visit the Controller's Office website for further information: <a href="https://www.controller.jhu.edu/depts/tax/about\_tax.html">https://www.controller.jhu.edu/depts/tax/about\_tax.html</a>

#### **CBI Payment Forms**

# In order to receive financial support, students must complete the following forms:

- Form I-9
- Federal Tax Forms
- Maryland (or home state) Tax Forms

Completing the Form I-9: Federal law requires that all newly hired and rehired faculty, staff and student employees working in the United States complete a Form I-9 within three (3) business days of their first day of work for pay. To begin the process, you will need to (a) select your employee classification (new, returning, current with an update); and (b) enter your hire date (this will be 9/1/2023 for students that matriculate) and your home zip code in appropriate fields location on the JHU I-9 Compliance website: <a href="https://hr.jhu.edu/i9">https://hr.jhu.edu/i9</a>. You will then be directed to complete Section 1 of the Form I-9 electronically. Once you have completed Section 1, you can schedule an appointment to have Section 2 of the Form I-9 completed in-person.

Students must complete these forms **BEFORE** beginning any work. To ensure that your information is processed in a timely and proficient manner, all forms must be totally complete. Please allow approximately 2 weeks processing time before you receive your first paycheck. All payroll changes or adjustments must be provided in writing to Robert Bishop (<u>Rbishop@jhu.edu</u>) or Yin Jiang (<u>yjiang32@jhu.edu</u>).

## **OFFICES RELATING TO GRADUATE STUDENTS**

#### I. CAMPUS GRADUATE ADMISSIONS AND ENROLLMENT OFFICE

https://grad.jhu.edu/

Applications for graduate study are processed through this office in conjunction with the program involved. Acceptance decisions are made by the department/program Admissions Committee

#### II. GRADUATE BOARD

https://homewoodgrad.jhu.edu/academics/graduate-board/

This office approves and coordinates Graduate Board Oral Examinations and assembles materials for Graduate Board Meetings including the required information on each student who is a candidate for a graduate degree

## **III. OFFICE OF FINANCIAL AID**

https://finaid.jhu.edu/graduate-aid/

University fellowships and loans for graduate students are handled by this office. The work-study program is also administered by this office

#### IV. CAREER PLANNING & DEVELOPMENT

This office offers services to graduate students who will be seeking employment in academic institutions, with the government or with business and industry after receiving their degrees. All graduate students are eligible to use the services of this office

## **PHutures (Homewood)**

https://imagine.jhu.edu/channels/phutures/

As a part of the Office of the Provost, this career hub focuses on creating equitable and scalable opportunities for doctoral students and postdoctoral fellows including coaching, workshops and more.

# JHM Professional Development and Career Office (E. Baltimore Campus)

https://pdco.med.jhmi.edu/

This office provides professional development training and career services, including one-on-one career coaching appointments, grant writing workshops, employer visits and treks, CV/resume advice, mentorship programs, alumni panels, mock interviews, and more.

## V. REGISTRAR'S OFFICE

https://studentaffairs.jhu.edu/registrar/

Registration, classification of students, permanent records of all graduate students, transcripts, etc. (ext. 6-7088)

Veteran's Benefits and Selective Service matters: <a href="https://studentaffairs.jhu.edu/registrar/veterans/">https://studentaffairs.jhu.edu/registrar/veterans/</a>

## **VI. OFFICE OF INTERNATIONAL SERVICES**

https://ois.jhu.edu

## STANDING COMMITTEES OF THE CHEMISTRY-BIOLOGY INTERFACE PROGRAM (FOR AY 23-24)

## I. Academic Advising Committee

Craig Townsend (Chair) Ronald Schnaar Marc Ostermeier

## **II. Admissions Committee**

Jennifer Kavran (Chair) Heng Zhu Sarah Woodson

#### **III. Curriculum Committee**

Anthony Leung (Chair) James Barrow Xiongyi Huang

## IV. Leadership

## **Program Director**

Steve Rokita (Homewood)

## **Program Associate Director**

Anthony Leung (East Campus)

## **Steering Committee**

Steve Rokita (Chair)
Anthony Leung (ex officio)
Val Culotta
Caren Freel Meyers
Craig Townsend
Netz Arroyo
Rebecca Schulman
Haley Tarbox (Homewood Student Rep.)
Elysse Ornelas (E. Baltimore Student Rep.)

## **Retreat Advisor**

Jungsan Sohn

## REQUIREMENTS FOR CHEMISTRY-BIOLOGY INTERFACE PROGRAM GRADUATE STUDENTS

Students should pay particular attention to the information and policies given in the following pages. Final interpretation of the rules as they affect a student's standing is the responsibility of the Steering Committee, the Program Director and the Associate Program Director.

Presented below are links to policies and procedures pertaining to students in the Krieger School of Arts and Sciences. These documents are dynamic and subject to change, yet ignorance of a policy or procedure is not an acceptable excuse for non-compliance. CBI students are encouraged to consult these resources on a regular basis as warranted by their activities.

## All applicable policies and procedures of the Graduate Board

https://homewoodgrad.jhu.edu/academics/graduate-board

#### **Graduate Student Policies**

https://homewoodgrad.jhu.edu/academics/policies/

## **Mentorship Policies for Students and Faculty**

https://provost.jhu.edu/wp-content/uploads/2019/08/JHU-Mentorship-Commitments-of-Faculty-Advisors-and-PhD-Students.pdf

## **University Policies**

https://www.jhu.edu/university-policies/

## **Information Technology Policies**

https://krieger.jhu.edu/it/policies/

#### **Sexual Harassment Prevention and Resolution**

https://sexualassault.jhu.edu/policies-laws/

Additionally, the CBI Program supports and proactively complies with the Family Educational Rights and Privacy Act (FERPA). Students accepted into the program are asked to sign a form waiving the right to inspect and review letters and statements of recommendation, letters regarding application for employment and/or letters regarding the receipt of an honor on honorary recognition. The value of these letters or statements lies in the writer believing the student will not be privy to their content. All requests for academic records and transcripts should be directed to the Office of the Registrar.

#### I. ADVISING

First-year students will be assigned to a faculty mentor and peer mentor in preparation of their matriculation. These mentors should be consulted throughout the first year of the program. A selection of courses for the first semester will be created in consultation with the Academic Advising Committee in person during meetings scheduled for the orientation week. Courses for the second semester may be selected after another in person meeting or through email with the Advising Committee. The thesis advisor and thesis committee will serve as the primary source of advising in subsequent years.

## **II. COURSE REQUIREMENTS**

The course requirements are as follows:

• <u>Minimum Course Requirements:</u> Student matriculating before 2023 must take and pass eight one-semester courses. The courses taken must be at the 400-level or above. The course schedules for the student's first two semesters are determined in consultation with the Academic Advising Committee (discussed in I. above). Thereafter, the course schedule must be approved by the student's advisor. It is the responsibility of the student and research advisor to plan a schedule of courses that will best prepare the student both for oral examination and for research.

All students are required to take Chemical Biology I and II (030.619 and 030.620) in their first year. Director permission is required to take these beyond the first year. In addition, students must take two of the CBI Foundation Courses listed below. A wide range of courses, offered in many different departments throughout the Johns Hopkins University, can be taken to satisfy the remaining four graduate level courses for those matriculating before 2023. Two of the eight graduate courses must be offered in departments outside of the Chemistry Department. CBI students matriculating before 2023 can earn a maximum of ½ course credit for one literature/seminar course during their career. Students matriculating in 2023 and beyond are required to complete a total of 6 full courses including Chemical Biology I and II, two CBI Foundational Courses and two electives outside of the Chemistry Department. Additionally, an introduction to data analysis and experimental rigor is required and can be satisfied by either AS.250.622 or PH.140.615 and a course entitled "Reading, Writing, Proposing Science" (AS.030.624) is required in the 3<sup>rd</sup> semester.

#### **CBI Foundation Courses**

| 030.449 | Chem. Inorg. Compounds                              |
|---------|---|
| 030.453 | Intermediate Quantum Chemistry                      |
| 030.601 | Statistical Mechanics                               |
| 030.625 | Adv. Mech. Org. Chem I                              |
| 030.626 | Adv. Mech. Org. Chem II                             |
| 030.677 | Adv. Org. Synthesis I                               |
| 030.678 | Adv. Org. Synthesis II                              |
| 250.685 | Proteins and Nucleic Acids                          |
| 250.689 | The Physical Chemistry of Biological Macromolecules |

- All CBI students are required to enroll and participate in the CBI Program Forum (030.613 and
  030.614) every semester during their graduate career. The CBI Forum does not count towards
  the required courses, but attendance is expected at each meeting. An update Forum schedule
  will be distributed via email. Previous forum schedules are posted on the <u>CBI website</u>.
- All CBI students are required to complete a course in The Responsible Conduct of Research (see III below)

## INSTRUCTION IN THE RESPONSIBLE CONDUCT OF RESEARCH AND SAFETY

Johns Hopkins University is committed to maintaining the highest standards of scientific integrity and safety for our trainees. All CBI students must enroll in the Responsible Conduct of Research course (AS.030.625) during their first year in residence and are urged to complete this during the January intersession term. This course ensures students gain a fundamental understanding of the issues pertaining to responsible conduct of research. Topics include data misconduct, conflict of interest and guidelines of professional conduct. Additional coverage of RCR is included in the annual CBI Retreat and monthly CBI Forum. A full description of the course and the policy is posted here: https://homewoodgrad.jhu.edu/professional-development/#rcr

#### III. CHOOSING A RESEARCH ADVISOR

The choice of research supervisor is probably the most important decision made during graduate school. Students in the CBI program choose an advisor in May of their first year, after carrying out 3 research rotations. Each research rotation is ~10 weeks induration. Research rotations must be carried out in at least two different departments and on both campuses (Homewood and E. Baltimore). The thesis advisor that students select need <u>not</u> be one with whom they have done a rotation. In addition, no more than one CBI student may carry out a rotation in a research group during the same period without special permission by the program director.

The choice of a supervisor is a mutual one on the part of the student and the professor. For various reasons (including planned sabbatical leaves, financial pressures, etc.) a professor may wish to limit the number of students accepted. Students should investigate this possibility with any professor whose research group they might want to join prior to carrying out a rotation in the research group. When a professor has agreed to accept a student into the research group, both the professor and student must sign the CBI Advisor Agreement Form and submit it to the CBI Director for final approval.

Although the initial choice of a supervisor is expected to be permanent, changes can be (and have been) made. All parties concerned should be consulted.

## IV. ANNUAL REVIEWS AND INDIVIDUAL DEVELOPMENT PLAN (IDP)

All enrolled and active graduate students (including non-residents, those with external funding and students on internships) will be evaluated annually starting with their first year in the program. **See the appropriate form in the back of this handbook for the CBI Annual Review Guidelines.** 

The review will allow for discussion about the student's professional development goals and ways to develop strategies to achieve those goals. This review will also include the opportunity for the student to offer self-evaluation. Students who fail to attain a program's minimum level of performance may be placed on academic probation or dismissed using the procedures outlined in the Homewood School's Policy for Graduate Student Probation, Dismissal and Funding Withdrawal. In making this decision, particularly that of dismissal, the program will take into consideration extenuating circumstances beyond the student's control: <a href="https://homewoodgrad.jhu.edu/academics/policies">https://homewoodgrad.jhu.edu/academics/policies</a>

## V. GRADUATE BOARD ORAL (GBO) EXAM

All Johns Hopkins University graduate students must successfully complete the Graduate Board Oral Exam. For students matriculating before 2023, the Graduate Board Orals should be taken before the end of the fourth semester and are encouraged to complete this early in the semester (see Time

Limits section). For students matriculating in 2023 and beyond, the Graduate Board Orals should be taken before the end of February of the second year.

The major part of the Graduate Board Oral is concerned with the student's knowledge of chemistry and biology. Students are required to provide a two-page summary of their thesis research. This brief write-up should contain a clear statement of the research goal, an outline of how the goal will be achieved and a brief description of research progress. The appropriate literature documentation should be cited when relevant. The reference section is not included in the two-page limit. This summary should be distributed to the members of the examining committee and alternate members at least one week before the oral examination.

The examining committee on the Graduate Board Oral consists of five faculty members. The purpose of the Graduate Board Orals is to ensure that the student has a comprehensive understanding of both their major and "minor" subjects. The Board Committee may impose a range of requirements (e.g. additional course work or re-examination in specific or general subject areas) if it finds deficiencies in the student's preparation. During the GBO, the student is asked to present a 10-15 minute overview of research accomplishments. There are three submission dates for submitting Graduate Board Oral's paperwork to the Graduate Board (see Graduate Boards section).

## **VI. GRADUATE ORAL BOARD MEMBERS**

Members of the Graduate Board Oral Examination Committee are approved by the Program Director and forwarded to the Graduate Board. Although consultation with candidates and their faculty advisors regarding possible exam committee members is appropriate, graduate students are not permitted to seek out, contact or select committee members. For more information, please visit: <a href="https://homewoodgrad.jhu.edu/academics/graduate-board/graduate-board-oral-exams/">https://homewoodgrad.jhu.edu/academics/graduate-board/graduate-board-oral-exams/</a>

Graduate students, together with their research supervisor, must submit the names of eight professors (4 internal/4 external to CBI) as possible examiners to the CBI administrator (cbi-admin@jh.edu) at least eight weeks in advance of the proposed time and date of the exam. The names should be submitted along with a research abstract and at least three proposed dates. It is very helpful to have faculty whose course you have taken and performed well.

University rules require that an "outside" member of the committee serve as the chair (<u>not</u> a CBI faculty member). Hence, the chair must hold the rank of Associate, Full or Emeritus Professor. Please note that the Graduate Board did not specify which campus "outside" members reside.

A CBI graduate student whose thesis advisor holds a primary appointment in the Krieger School of Arts & Sciences or Whiting School of Engineering will have a GBO committee with the following composition:

 2 CBI Homewood preceptors (including advisor), 2 CBI SOM/SPH preceptors, 1 non-CBI affiliated preceptor (either campus)

or

• 3 CBI Homewood preceptors (including advisor), 1 CBI SOM/SPH preceptor, 1 non-CBI affiliated preceptor (either campus)

A CBI graduate student whose thesis advisor holds a primary appointment in the School of Medicine or Public Health will have a GBO committee with the following composition:

• 2 CBI SOM/SPH preceptors (including advisor), 2 CBI Homewood preceptors, 1 non-CBI affiliated preceptor (either campus)

or

• 3 CBI SOM/SPH preceptors (including advisor), 1 CBI Homewood preceptor, 1 non-CBI affiliated preceptor (either campus)

In addition to the 5 members, each GBO committee will also include 2 alternates – 1 inside alternate as well as 1 outside alternate. The faculty member assigned as the inside alternate will be from the same campus as the student's research group. The faculty member assigned as the outside alternate will not be a CBI faculty member. Since the outside alternate may need to serve as a chair, this faculty must hold the rank of Associate, Full or Emeritus Professor.

Permission of the Program Director is necessary to postpone taking the oral examination beyond the fourth semester after matriculation. See back of handbook for the Oral Exam Deferral Form.

## VII. ORIGINAL RESEARCH PROPOSAL

**For CBI students matriculating before 2023,** an original **Research Proposal** will be written and defended during their third year in residence. The research proposal will involve an area that is unrelated to the topics pursued by student's research group. For instance, someone in the Greenberg group cannot submit a proposal on DNA damage and repair. The proposal will be presented to CBI students and faculty in the CBI Forum. The written proposal and presentation will be evaluated by a committee of two faculty.

Writing the research proposal will help you develop the critical reading, grant proposal writing and presentation skills that will enhance your success as a research scientist. The proposal is meant to be suitable for submission as part of a postdoctoral fellowship application. Students should take this into consideration when determining the scope of the project (what can be accomplished in a three-year postdoctoral position).

The title and a short abstract including specific aims and experimental approaches of the proposal should be submitted to the CBI administrator (cbi-admin@jh.edu) for approval by the Program Director prior to writing the proposal. This should be submitted no later than 6 weeks prior to the scheduled presentation. Completed research proposals are due to the CBI administrator (cbi-admin@jh.edu) 1 week prior to the presentation. Copies of the proposal are distributed to the committee members.

The proposal is graded as Pass, Conditional Pass or Redo. Only two attempts to complete this requirement successfully will be permitted. If the initial result is a Conditional Pass, the committee will ask the student to submit a written revision of the proposal. Guidelines and instructions for the revisions will be set by the committee. In some cases, the committee may also require an oral defense of the revised proposal. A Redo means a new proposal must be developed and defended per instructions from the faculty committee.

## **Proposal Format:**

The proposal (Background and Significance and Research Design and Methods) should be no more than 10 pages, including tables, figures, etc. References should be included at the end of the research plan, are unlimited and are not included in the 10 pages. Article titles should be included in the references.

- <u>Type size:</u> Use 12-point Times New Roman, 11-point Helvetica or 11-point Arial. A 10-point Times New roman or 9-point Arial font type may be used for figures, legends and tables
- Single-spaced text is required
- Margins: The margins of your text should be one inch all around
- Pages should be numbered

The proposal should be organized in the following way:

- <u>Specific Aims:</u> List the objectives and goal of the research proposed and describe the specific aims briefly in order of priority. This section should not be longer than 1 page and is NOT included in the 10-page limit noted above.
- <u>Background and Significance:</u> concisely summarize and critically evaluate related work by
  others and specifically state how the successful completion of the work proposed in the
  specific aims of the application will advance scientific knowledge or aspects of clinical practice.

- This section should not be more than 4 pages long
- Research Design and Methods: Describe your proposed methods and procedures in sufficient detail to permit evaluation by other scientists. Discuss potential difficulties, limitations of the methods and procedures and provide alternative approaches

**For students matriculating in 2023 and beyond**, the required course entitled "Reading, Writing, Proposing Science" (AS.030.624) will substitute for the independent research proposal and provide an alternative approach to learning critical reading, grant proposal writing and presentation skills. This course will be offered to CBI students in their 3<sup>rd</sup> semester.

## VIII. THESIS COMMITTEE

Students will assemble a thesis committee during their fourth semester in residence. The responsibility of the committee will be to review the progress made by the student towards completion of the thesis and the status of the student's IDP. The committee will meet yearly beginning in the summer of the second year (before the end of July) and semi-annually in the fifth year and beyond. Composition of the committee will include at least two CBI preceptors and the research advisor. The senior CBI preceptor serving on the committee who is not the mentor will act as the chair of the committee. The committee may consist of up to two additional faculty members. The additional faculty members are not required to be members of the CBI program. The composition of the committee should be made in consultation with the advisor and requires approval by the Steering Committee.

Students will provide a brief written summary (1-2 pages) of their research progress and goals to the committee at least 5 days before the meeting. Students should also prepare a brief oral presentation (30 – 40 min) for the committee. The meeting will begin with a brief update by the research advisor in the absence of the student (5 min) and then the student will be asked to join and provide the oral presentation. The remaining time will discuss research progress, experimental hurdles, future strategies and professional development. Finally, the research advisor will be excused so that the committee can meet alone with the student. The chair of the committee will complete the evaluation form in consultation with the other members and distribute the final copy to all faculty, the student and the CBI staff. Please refer to the rubric and evaluation forms at the end of this handbook.

## **IX. RESEARCH UPDATES**

During the 4<sup>th</sup> year in residence, CBI students will present research updates in CBI Forum. These should be short presentations (~30 minutes) designed to enable students, postdoctoral associates and faculty to comprehend the goals of the project and progress made towards those goals.

#### X. DISSERTATION AND SEMINAR

By mutual agreement between the research advisor and student, an assessment that the new and original results and interpretations are sufficient to constitute a Ph.D. dissertation. The thesis committee should also be consulted on this decision. The student then undertakes the organization of the material and writing of the dissertation. This document must be read and approved by the supervisor and a second referee; both must declare that the work is publishable. A timeline for the dissertation should be developed with the thesis committee by the beginning of the 5<sup>th</sup> year in residence with an expectation for graduation before the start of the 6<sup>th</sup> year.

The Dissertation Seminar will be presented on a date selected by the student and advisor. At the Dissertation Seminar, the student presents and defends the results of the thesis research in an hourlong seminar. The seminar must be advertised at least one week in advance (email and posted announcements on both campuses) and is open to everyone. The seminar is official if attended by the research supervisor, second reader and one representative from outside the Program or from within the Program but outside the major area of the candidate. The second reader must be a CBI faculty member. The third representative must be approved by the Program Director. Once the faculty members have been selected and approved, students must email the CBI administrator (cbiadmin@jh.edu) the names as well as the date of the seminar. **Please note that a copy of the thesis** 

# must be provided to all three committee members no less than 10 days prior to the defense date.

There are special regulations concerning the preparation of dissertations. Information regarding the electronic thesis and dissertation (ETD) program, as well as submission workflow and requirements, can be found on the <u>Library's website</u>.

For students looking for resources for writing and finishing their dissertation, the Center for Leadership Education offers an excellent workshop geared towards exactly that aim. They also offer a variety of graduate courses geared towards professional development.

## **XI. ACADEMIC STANDING**

The Director, Associate Director and Program Staff have the responsibility of monitoring students' records to determine their academic standing. In all cases of unsatisfactory performance, recommendations of the Director will be discussed and perhaps modified at a meeting with the Steering Committee before implementation. If there are no other deficiencies, an average grade of B is considered satisfactory. Students must receive a grade of B or higher in Chemical Biology I and II as well as all Foundation Courses. Every student still engaged in coursework will receive a letter each semester summarizing the student's academic standing.

In case academic standards have not been met, this letter will state the conditions which must be satisfied to avoid dismissal at the end of the semester. Instances of major deficiencies may result in immediate dismissal including but not limited to:

- A specified minimum grade average in a program approved by the Steering Committee
- A specific date by which a student must pass the Graduate Board Oral Examination
- The need for satisfactory progress in research

Once the student has completed coursework and advanced to the Graduate Board Oral, the research mentor with the help of the thesis committee will be responsible to monitor the student's progress towards the Ph.D. degree. Faculty members use different means to accomplish this and may include periodic written reports, oral presentations or informal discussion of research results. A student can expect the mentor to provide an evaluation of the student's scientific development as well as progress toward completion of the dissertation work, in part through annual discussion of the student's IDP. From the beginning of year 2 onward a student must have a thesis advisor in order to be in good academic standing.

## **XII. TIME LIMITS**

There are time constraints at three points in a student's graduate career: the beginning of research, the taking of the Graduate Board Oral Examination, and the completion of graduate work. The following time limits will be administered with sensitivity to the differences in backgrounds and circumstances of our students:

- Written permission is necessary to postpone the selection of a research supervisor later than August 1<sup>st</sup> of a student's first year
- Written permission is necessary to postpone taking the Graduate Board Oral Examination beyond the end of the second academic year. Students requesting an extension (personal reasons, remedial course work, academic/research progress) must do so in writing to the Director using the form provided at the end of this handbook.
- Written permission is necessary to register after the sixth year. The "permission" can be granted by the Steering Committee

## XIII. REQUIREMENTS FOR THE M.S. DEGREE

The program does not usually accept into our graduate program students who are solely interested in a master's degree. For those special cases in which admission for master's study is granted, entrance standards and requirements are the same as for Ph.D. candidates. The M.S. degree can be obtained as an intermediate degree on the way to the Ph.D. or as a terminal degree by students who

begin our Ph.D. program and find that they do not wish to complete a full Ph.D.-level dissertation project. An intermediate M.S. degree is awarded after the successful completion of the Graduate Board Oral Examination (GBO).

## **Terminal M.S. Degree**

- Course requirements for the M.S. are the same as for the Ph.D. program. The Associate Director will monitor students' performance in formal courses to determine academic standing and make appropriate recommendations to the full faculty, as is done for Ph.D. students
- Satisfactory performance is required on the GBO. The organization and administration of the GBO exam is described in the section "Graduate Board Oral Exam". The oral exam can cover materials from courses that the student has taken, as well as independent research carried out by the student. Research experience is considered an integral part of the M.S. degree. The result of the oral examination should be given in writing to the Director by a designated member of the examining committee
- Students leaving the program before the completion of a Ph.D. dissertation must provide to their faculty advisors complete information and documentation on the research that they have carried out

## XIV. TEACHING REQUIREMENTS FOR GRADUATE STUDENTS

All CBI students are required to participate in the teaching of undergraduates during their second year. All second-year students are required to attend the school's online TA orientation/training session held the week of Monday, August 21<sup>nd</sup>, 2023 (via Canvas) and in person (optional) Thursday August 24th: https://ctei.jhu.edu/teaching-academy/ta-orientation/fall)

The Chemistry Department Administrator will query students on their teaching preferences and availability prior to the start of the semester. Every effort will be made to satisfy the requests but the complexity of scheduling does not guarantee that all requests can be fulfilled. Assignments of teaching duties are made in late August of each year for the Fall semester and in mid-January for the Spring semester.

CBI students will spend approximately fifteen hours of instruction or its equivalent per week on the Homewood Campus. The fifteen hours include preparation as well as contact.

#### XV. VACATIONS FOR CBI GRADUATE STUDENTS

The following policy applies to all students in residence who are receiving support from either a teaching or research assistantship:

In all cases, students must clear any vacation plans with their course instructor or research supervisor well in advance. Students may take up to two calendar weeks' vacation per year exclusive of days devoted to job interview trips or other professionally related activities with the approval of the research supervisor. The two-week total need not be taken at one time but can be spread throughout the year. Vacation time cannot be accumulated from one year to the next and students should not contemplate absences near the terminal stages of their dissertation work. In special circumstances, longer vacations can be approved by individual research supervisors but periods over three weeks could result in leave without pay. It should be noted that it is unusual (and unwise) for someone to use their vacation time prior to signing up with an advisor. Time off has to be approved by the instructor for their TA assignment. It is hoped that students will be prudent and establish themselves in assistantship prior to utilizing all their vacation time.

## **XVI. LEAVE OF ABSENCE**

A leave of absence refers to and is limited to students who, while in good standing, are forced to withdraw temporarily from graduate work due to reasons beyond their control such as: illness, military service, financial exigency or pressing personal reasons justifying an interruption of the degree program. The period is regarded as an approved break in study. Students can find the leave of

absence request form online: <a href="https://homewoodgrad.jhu.edu/academics/graduate-board/enrollment-status-change-forms/">https://homewoodgrad.jhu.edu/academics/graduate-board/enrollment-status-change-forms/</a>

When returning from leave of absence, a graduate student must complete and submit the Application to Return from Leave of Absence before registering for classes (this form can be found at: <a href="https://homewoodgrad.jhu.edu/academics/graduate-board/enrollment-status-change-forms/">https://homewoodgrad.jhu.edu/academics/graduate-board/enrollment-status-change-forms/</a>). The form must be accompanied by a letter that explains what progress has taken place in the student's absence that would enable him/her/them to be successful upon return. Please see the application for further instructions.

**Important** – when returning from leave, the failure of a student to register without obtaining an approved leave of absence or non-resident status will result in the student status being "withdrawn". Students considered to be withdrawn must be formally readmitted before resuming a program of study.

#### **Parental Leave**

Johns Hopkins University recognizes the importance of balancing the family and academic responsibilities faced by new parents and promoting the well-being of their families. The University is supportive of accommodating eligible full-time graduate students who are expecting a new child (either through birth, adoption or legal guardianship). Consistent with grant funding policies that place a limit of 8 weeks for parental leave, all eligible full-time graduate students shall receive no less than 8 weeks of new child accommodations. (fully paid for those students/fellows with full funding at the time of the accommodation). Please visit the official university policy for more information on eligibility and details.

CBI students should contact Assistant Dean Renee Eastwood (KSAS) (<a href="resetted:

Family Recourses for Students: <a href="https://homewoodgrad.jhu.edu/student-services/family-resources-for-students-and-postdoctoral-fellows/">https://homewoodgrad.jhu.edu/student-services/family-resources-for-students-and-postdoctoral-fellows/</a>

## **XVII. CONFLICT RESOLUTION**

Many resources are available to help in conflict resolution beginning with consultation with peers and/or your research mentor or academic advisor. Your thesis committee is another resource that can help with scientific and professional conflict. Additionally, two faculty on the Homewood campus (Drs. Rokita & Schulman) and two faculty on the East Campus (Drs. Leung and Meyers) are designated as general mentors with an open-door policy accepting visits from any student in the program to check in, voice concerns, seek advice and act as a sounding board.

If problems persist and cannot be resolved locally, consultation with Renee Eastwood (Assistant Dean for Graduate and Postdoctoral Academic and Student Affairs, <a href="mailto:rseitz5@jhu.edu">rseitz5@jhu.edu</a>) is recommended.

Another excellent resource is the JHU Ombuds Office (<a href="https://www.jhu.edu/ombuds-office">https://www.jhu.edu/ombuds-office</a>/) (410-218-6669). The Ombuds serves to listen, acts as a strategic thought partner, helps to identify and evaluate different options, plans for difficult conversations, provides information about university policies and resources, assists with informal conflict resolution and problem solving and offers upward feedback on problematic trends or systemic issues. No matter what the issue is, the Ombuds Office provides support that is independent, confidential, impartial, and informal.

## Grievance

The relationship between a graduate student and research supervisor, other faculty, as well as other graduate and undergraduate students, carries many expectations and responsibilities for all parties concerned and requires attention to norms of professional behavior. Occasionally, errors or abuses occur that compromise the integrity and successful functioning of these relationships. These

occurrences are generally rare, but it is essential when they arise that the persons involved take the responsibility to talk with each other early and openly to identify and resolve the situation. Prompt resolution at this level is clearly the most desirable outcome. However, should this effort fail, the next step should be to seek the advice and help of the CBI Director. Finally, should satisfactory resolution of a problem prove unattainable within the Krieger School, a student may turn to the Dean of Research and Graduate Education:

https://provost.jhu.edu/education/academic-grievance-policy-students-and-postdoctoral-fellows/

## **XVIII. PROBATION AND DISMISSAL**

If it is determined that a graduate student has failed to meet minimum academic or graduate assistant (research assistant or teaching assistant) requirements, he/she/they may be placed on probation. The student will be notified of all academic or graduate assistant shortcomings, the corrective measure necessary to remain in the program and the length of the probationary period. At the conclusion of the probationary period, the program has the following options: (a) remove the student from probation, (b) extend the probationary period or (c) dismiss the student. Please note that a student may be dismissed without a formal probation period under certain circumstances.

For the most up to date policy on probation and dismissal, please visit the Graduate Affairs website: <a href="https://homewoodgrad.jhu.edu/academics/policies/">https://homewoodgrad.jhu.edu/academics/policies/</a>

## XIX. IMMUNIZATION (University Policy)

All graduate students, postdoctoral fellows, visiting students and visiting scholars are required to meet the University's pre-entrance health requirements and provide proof of immunity to certain communicable diseases prior to registration. Before arriving at Johns Hopkins University, students will need to download, print and send the Student Health & Wellness Center a paper copy of immunization information signed by a health care provider **AND** enter the information into an electronic health record using the <a href="Student Health and Wellness Center">Student Health and Wellness Center</a> web portal. This portal also contains detailed information and instructions.

The due date for submitting all forms is **JULY 15** and anyone who fails to comply with these requirements will not be eligible to register for classes or use the on-campus Student Health & Wellness Center. If it is determined that any vaccines or screening tests are necessary, they can be administered at the Student Health & Wellness Center. A fee of a \$100 plus the costs(s) of each vaccine administered or any antibody testing needed to determine immune status will be charged. Those who have the university insurance plan can receive the needed vaccines paid for by the insurance company, but antibody testing is not covered by the plan. Please direct any questions regarding these pre-entrance health requirements to the <u>Student Health & Wellness Center</u> at 410-516-8270.

For graduate students who have pre-registered, the clinic will check a list of students supplied to them by the Registrar's Office against their records. Accordingly, the clinic will send each non-immunized student a follow-up letter and add an alert to their SIS account (which will prohibit add/drop classes and future class registration) and if that is unsuccessful, will then submit a list of non-compliant individuals to the Dean.

## **XX. HEALTH INSURANCE**

The cost of individual health insurance FOR ACADEMIC YEAR 2023-2024 will be paid in full by the University.

Information can be found at the <u>Registrar's Office</u>. Students also have the option of signing a waiver form if they are covered by other insurance. Copies of the health insurance coverage must accompany the waiver form.

If you have any questions in reference to the insurance requirement, feel free to contact the Office of the Registrar: 410-526-808 or submit an inquiry via SEAM (<a href="https://seam.jhu.edu">https://seam.jhu.edu</a>).

#### XXI. ORGANIZATIONS

## **Graduate Representative Organization (GRO)**

Website: <a href="https://studentaffairs.jhu.edu/gro/">https://studentaffairs.jhu.edu/gro/</a>

Office: Levering Hall 115-C

E-mail: gro@jhu.edu

The GRO is composed of graduate student representatives who work on issues pertaining to graduate student activities and concerns. This organization also provides funding for various student initiatives and offers a forum for graduate students to express their views and implement policies regarding their welfare and goals of Johns Hopkins University.

The GRO recognizes a number of student groups whose missions benefit or service Homewood graduate students. For a list of groups, please visit their website: <a href="https://studentaffairs.jhu.edu/gro/">https://studentaffairs.jhu.edu/gro/</a>

## **Chemistry Student Liaison Committee**

The Chemistry Student Liaison Committee is a group of Chemistry and CBI graduate students that helps to organize events that will foster the growth of social networking/interactions within the Chemistry Department, CBI and the Johns Hopkins Community. These events include but are not limited to monthly social hours (happy hours) and hosting the Roseman Graduate Student Symposium. The committee also provides assistance in organizing events such as the graduate student recruitment weekend. If you would like to participate in these activities, please contact the Student Liaison Committee (ChemSLC@jhu.edu).

## **Student Safety Committee**

The Chemistry Student Safety Committee (ChemSSC) was created to promote a culture of safety in our Chemistry Department as well as to address known safety issues occurring in the laboratories. ChemSSC has subcommittees dedicated to specific goals including raising awareness of the student safety committee and specific safety issues to the rest of the Chemistry department, identifying potential improvements in the physical foundation of the chemistry department, scheduling and overseeing peer lab walk-through and maintaining the <u>safety committee website</u>.

## **ChemDNA**

ChemDNA (Chemistry Diversity Networking and Advancement) was created to foster an inclusive environment among students. ChemDNA is an organization promoting a well-functioning, respectful and inclusive learning and work environment. ChemDNA seeks to provide a space where students, faculty and staff are represented and supported to succeed regardless of race, gender, ethnicity, orientation and/or initiating and informing conversation, mentorship both vertically and horizontally among career levels and outreach to the greater community broadening diversity in STEM while providing exposure to JHU. Through these efforts to promote diversity, ChemDNA strives to improve the environments in which all members of our community live and work.

Contact: <a href="mailto:chemdnaboard@live.johnshopkins.edu">chemdnaboard@live.johnshopkins.edu</a>

#### **NOBCChE**

The National Organization for the Professional Advancement of Black Chemist and Chemical Engineers (NOBCChE) is an interdisciplinary graduate student organization comprised of science, technology, engineering and mathematics (STEM) majors. NOBCChE at JHU strives to enhance the scholarly and professional development of graduate students, as well as postdoctoral fellows, through networking, seminars, forums, workshops and other social events. The primary goal of the organization is to enable and assist minorities in realizing their full potential as leaders and pioneers in STEM fields.

Email: <a href="mailto:nobcche@jhu.edu">nobcche@jhu.edu</a>
Instagram: <a href="mailto:nobche\_jhu">nobbche\_jhu</a>

#### XXII. JHED

JHED is the University's web directory. All faculty, staff and students are included in the directory. However, individuals can determine which data elements may be accessible on both the Intranet and Internet levels. Members of the Hopkins community are granted secure access to the directory via their user IDs and passwords. All JHU students are encouraged to use this directory and to provide members of the Hopkins community with current and complete address data, including preferred email addresses at the intranet level. All notices sent from the Chemistry Department and CBI Program will be sent to your JHED address. Students preferring their mail delivered to a different POP3 mail client are responsible for setting up a "forward" from JHED.

## XXIII. JOB SEARCH AND EMPLOYMENT ASSISTANCE

The University offers services through the Phutures office on the Homewood Campus and the PDCO on East Campus to current students and alumni up to two years after graduation from the CBI program. Alumni after two years of graduating may still use selected services.

#### **Career Center -- Homewood**

113 W University Parkway, Baltimore, MD 21218

Email: Phutures@jhu.edu

Websites: <a href="https://imagine.jhu.edu/channels/phutures/">https://imagine.jhu.edu/channels/phutures/</a>

Call or email to schedule individual advising by appointment.

## JHM Professional Development and Career Office –East Campus

Website: <a href="https://pdco.med.jhmi.edu">https://pdco.med.jhmi.edu</a>

Address: 1830 E. Monument Street, Suite 2-106

Phone: 410-502-2804

#### Handshake

Create and keep an updated profile in <u>Handshake</u> to get access to events, resources, jobs, employers and appointments. Take the time to fill out your profile and select your post-grad career plans and career interests that will allow employers who are hiring students with advanced degrees to find you.

#### **Center for Teaching Excellence**

Students seeking guidance and opportunities to develop as educators are recommended to connect with the various program offered through the Center for Educational Resources: https://cer.jhu.edu/

## **Alumni Directory**

OneHop allows you to both re-connect with old classmates as well as enable you to utilize the trusted Johns Hopkins University environment to expand your professional network

## **DEPARTMENT FACILITIES AND ACCESS**

#### I. OFFICE

## **Keys (Homewood Campus, Chemistry Department)**

Address: Remsen 138 Phone: 410-516-7429

Hours: 9:00AM - 5:00PM, Monday through Friday

## **Keys**

New students may pick up keys in Remsen SB27 which will give them access to the outside and mailroom doors in Remsen and the New Chemistry Building. Also, the keys will allow access to shipping/ice maker SB21 and the graduate student lounge Remsen 313. The lounge has a refrigerator with an ice maker, microwave, lounge chairs, coat racks, study space that includes a computer with internet access. Other keys will be issued when faculty approval is presented in writing or by email to

the Facilities Manager in Remsen SB27.

For information regarding keys at for other buildings, please speak with your lab rotation or research advisor.

## **Mail (Homewood Campus, Chemistry Department)**

Mail and packages sent via courier services are delivered to the Remsen stockroom SB30; packages are normally ready for pickup by 2 pm daily. All items will be placed in Remsen SB20 (Dry Ice Room) once received. You will receive an email notification of what items have arrived daily. Students should arrange to have personal mail, magazines, and newspapers sent to their home address.

**Homewood Campus** 

Departmental Offices --

• Biology: Mudd 144

• Biophysics: Jenkins 110

• Chemical and Biochemical Engineering: Maryland Hall 230

Material Sciences: Maryland Hall 204

## **East Baltimore Campus**

Departmental offices -

- Pharmacology: SOM, WBSB 302
- Biochemistry & Molecular Biology: SPH, W8041
- Biophysics & Biophysical Chemistry: SOM, WBSB 608D
- Molecular Microbiology & Immunology: SPH, 615 N. Wolfe Street

#### Mail

CBI students will not have assigned mailboxes at the E. Baltimore Campus. Some students may have mailboxes in their lab, but this is dependent on the individual lab group.

## **Keys/Identification Badges**

As a rotation student, the only badge that CBI students need is the blue Hopkins ID that they receive from the Homewood campus. This ID will also give them permission to enter the buildings on the East Baltimore campus after hours. Keys are specific for a lab and are obtained from the lab at the time of rotation or joining the lab. Once a student decides to join a lab on the east Baltimore campus, then a JHMI ID badge will be necessary. Students will obtain an ID badge which will need to be renewed every year on March 31st. To obtain this ID badge, the student's advisor needs to write a letter to the East Campus Registrar stating that the student will be working in the lab for the remainder of the time at Hopkins. The student then submits this letter to the registrar's office located on the second floor of the Broadway Research Building, suite 147. Students will have their ID verified and issued a card to bring to the JHMI ID office which is located in the Nelson Building, room 108. Remember, this process needs to be repeated every year since students are only issued a temporary badge.

# UNIVERSITY KEYS MUST NEVER BE DUPLICATED AND SHOULD BE RETURNED UPON THE COMPLETION OF YOUR DEGREE!

## **Poster Printing**

The Chemistry Department has a 36" poster printer available in the main office in Remsen. If you would like to have a poster printed, please email a PDF with the correct dimensions to <a href="mailto:chem-admin@lists.johnshopkins.edu">chem-admin@lists.johnshopkins.edu</a>. Since the printer paper is 36" wide, one of the dimensions of your poster must be 36". If the poster is for instructional purposes, please provide the instructor's name and course number in your request. If the poster is for research purposes, please provide your group name and research purpose.

#### II. STOCKROOM

## **Chemistry – Homewood Campus**

The stockroom is in the sub-basement of Remsen Hall in room SB30. It carries research supplies and some computer, electronic parts and office supplies. Adjacent related rooms include a gas cylinder storage room (SB22), shipping and receiving room (SB21). The stockroom is open weekdays from 8:30 AM to 5:00 PM, Monday through Friday. Students will need a stockroom account (obtained from the department's Financial Manager) to make purchases. Purchases can be made remotely through the "open request" link on the Chemistry Department home page: <a href="https://chemistry.jhu.edu/">https://chemistry.jhu.edu/</a>.

Supplies may be charged to a faculty member, grant, contract, or course account only when the stockroom has received written authorization from the appropriate faculty member through authorization for access to the department's core facility management software.

## **Biology – Homewood Campus**

The Mudd Hall Supply Store is in the basement of Mudd Hall. The hours of operation are from 9:00 AM - 4:30 PM, Monday through Friday. The store stocks laboratory items as well as office supplies. For a list of supplies maintained by the Mudd Hall Supply Store check their catalog. Gary Cartwright is the Manager of the Supply Store. Laboratory supplies can be charged at the Supply Store with the authorization of the research supervisor. Please check with your advisor regarding the laboratory count at the Supply Store. Students can contact the store on ext. 6-7028 for more information.

## **E. Baltimore Campus**

For more information regarding the stockrooms available at the School of Medicine and the School of Public Health, please speak with your lab rotation or research advisor.

#### III. SHOPS

## **Homewood Campus:**

**Machine Shop**: Machining can be carried out by staff in the Physical Sciences Machine Shop, located in Bloomberg Hall, room 037. The shop manager is Steve Smee (6-7097; smee1@jhu.edu).

**Student Shop**: This shop is in Room B29 in the basement of Remsen Hall. This is the only shop in which students may use the equipment. Students must complete machine shop training provided by staff of the Physical Sciences Machine Shop. For training and scheduling, contact the Department of Chemistry for the training course sign up.

Use of the Student Machine shop is monitored by a committee chaired by Ben Bilik. For access, please contact Ben at bbilik1@jhu.edu

#### **E. Baltimore Campus:**

For more information regarding the shops available at the School of Medicine and the School of Public Health, please speak with your lab rotation or research advisor.

## **IV. INSTRUMENTS**

#### **Homewood Campus**

There are several instrumentation specialists who supervise and/or operate the departmental instruments in the Department of Chemistry:

- Dr. Jonathan Catazaro (Remsen B24, NMR spectrometers and miscellaneous instruments)
- Dr. Maxime Siegler (NCB 240, X-ray diffraction)
- Dr. Phil Mortimer (Remsen room B13; mass spectrometry)

Prospective users should contact them for instructions and/or to be added to the list of authorized users.

## Chemistry Department Instruments: <a href="https://chemistry.jhu.edu/about/facilities/">https://chemistry.jhu.edu/about/facilities/</a>

Scheduling instrumentation time is managed by a web-based scheduler and reservation check-in/check-out application called Applied Tech. Users must be set up with an account to use the system. To establish an account, please contact Yin Jiang (yjiang32@jhu.edu).

## **Biomolecular NMR Facility**

A nuclear magnetic facility is located below ground between the New Chemistry Building (NCB) and Mudd Hall. This facility is under the management of Dr. Ananya Majumdar (ext. 6-8670), who is responsible for training and supervising users and arranging scheduling of instrument time. All three spectrometers are fully equipped to perform state-of-the-art biomolecular NMR.

Currently available instruments include:

- Varian 800 MHZ FT-NMR Spectrometer, NCB 152 (NMR facility)
- Bruker 600 MHZ FT-NMR Spectrometer (2), NCB 153 (NMR facility)
- Varian 500 MHZ FT-NMR Spectrometer, Remsen B23

## Integrated Imaging Center (Dunning Hall, https://sites.krieger.jhu.edu/iic/)

Basic and advanced light and electron microscopy (LM/EM), including 3-D and 4-D imaging, FRET, FRAP, and FCS, among others instruments

## Center for Molecular Biophysics (Jenkins Hall, https://sites.krieger.jhu.edu/cmb/instrumentation/)

Access to and training for a Beckman XL-I analytical ultracentrifuge, two Microcal differential scanning calorimeters, an isothermal titration calorimeter, circular dichroism spectrometer, and spectrofluorometer

## **E. Baltimore Campus**

For more information regarding the instruments available at the School of Medicine and the School of Public Health, please speak with your lab rotation or research advisor. See also: https://johnshopkins.corefacilities.org/landing/42

#### **UNIVERSITY FACILITIES**

#### I. HOUSING

The Off-Campus Housing office provides information to members of the Johns Hopkins community looking for a place to live near the Homewood, Peabody, and East campuses. They assist faculty, staff, and students who are not required to reside in University Housing and provide a list of private residential and commercial properties in the area that offer leases of various lengths, including short-term. In addition to their website, the office is equipped with computers, phones, and informational brochures for you to utilize during your search for off-campus housing.

Please feel free to stop by and visit the housing office, which is open Monday through Friday, 8:30 AM-5:00 PM, or email them at: <a href="mailto:offcampus@jhu.edu">offcampus@jhu.edu</a> with further questions or concerns. They are in Wolman Hall room 103 on the Homewood campus: (https://studentaffairs.jhu.edu/community-living/offcampus/)

Incoming students are also encouraged to use the new Off-Campus Housing Listing Website: <a href="https://offcampushousing.jhu.edu">https://offcampushousing.jhu.edu</a>. This site offers a new roommate and message board sections for our affiliates. The site is JHED authenticated which means you can only login with your JHED ID.

#### II. ATHLETIC CENTER

The University Athletic Center may be used by graduate students and their spouses. This Homewood facilities includes two swimming pools, squash courts, tennis courts, ping-pong tables, sauna, and several gymnasia and outdoor fields. Further information may be obtained <u>online</u> or by calling ext. 6-4434.

#### III. WRITING CENTER

The Writing Center offers undergraduate and graduate students free, individual conferences with experienced tutors. The Writing Center welcomes all Johns Hopkins students in the CBI program. Please visit their website for more information: https://krieger.jhu.edu/writingcenter/

## IV. STUDENT HEALTH (NON-EMERGENCY)

**The Student Health Clinic** (ext. 6-8270)

Address: 1 E. 31st Street, Suite N200

Website: https://studentaffairs.jhu.edu/student-health/

Academic Year Hours of Operation: 8:30 AM-4:45 PM, Monday-Friday (opens at 1:00 PM on

Wednesdays)

## **Thanksgiving Holiday Week:**

Monday & Tuesday: 8:30 AM-4:45 PM (closed 12 noon-1:00 PM) Wednesday: 8:30 AM-3:00 PM (closed 12 noon-1:00 PM) Closed Thursday & Friday

## **Summer, Intersession & Spring Break Hours:**

Monday & Friday: 8:30 AM-4:45 PM

Tuesday, Wednesday & Thursday: 1:00 PM-4:45 PM

(Closed 12 noon-1:00 PM each day)

This clinic does **NOT** have Saturday hours during the summer (last day of finals through Freshman Orientation), during January Intersession (from mid-December through the beginning of the spring term in late January) and for the week of Spring Break in March.

If you have a non-life-threatening medical concern or health problem that cannot wait until the next time the Center is open, the Student Health & Wellness Center has contracted with Sirona Health, a nationally certified and accredited on-call nurse advice service. If you call the main number (410-516-8270) anytime the SH&WC is closed, after the recording, you will automatically be transferred to Sirona Health. Sirona Health can advise you on how to proceed with your problem. They do not have access to the JHU SH&WC records to verify appointments or answer other administrative questions, so for these types of problems, you will need to call back during normal hours of operation.

There are also urgent care facilities within driving distance of the JHU campus:

## **Patient First Primary and Urgent Care – Lutherville**

Green Spring Station 10755 Falls Road #160 Timonium, MD 21093

Phone: 410-583-2777

Hours: 8:00 AM – 10:00 PM, Monday – Sunday

## **Medstar Health: Urgent Care**

Annelise Shopping Center 6317 York Road Govans, MD 21212

Phone: 855-910-3278

Hours: 8:00 AM – 8:00 PM, Monday – Sunday

#### V. STUDENT DISABILITY SERVICES

Federal law and the university define a "disability" as a physical or mental impairment that substantially limits or restricts the condition, manner, or duration under which an average person in the population can perform a major life activity, such as walking, seeing, hearing, speaking, breathing, learning, working, or taking care of oneself. The university is required by Section 504 of the Rehabilitation Act and The Americans with Disabilities Act to provide effective auxiliary aids and services for qualified students with documented disabilities if such aids are needed to provide equitable access to the university's programs and services.

All admitted students who wish to receive accommodations for a disability must initiate the registration process by submitting professional documentation, completing the Intake Questionnaire and participating in an interview. Additional information regarding the student disability services can be found at <a href="https://studentaffairs.jhu.edu/disabilities/">https://studentaffairs.jhu.edu/disabilities/</a>

## **VI. COUNSELING CENTER**

The Johns Hopkins University Counseling Center serves all CBI students. Students are encouraged to utilize the services offered by the Counseling Center. All services are confidential and free of charge. 3003 N. Charles Street, Suite S-200

(Near 30<sup>th</sup> Street in the Homewood Apartments)

**Phone:** 410-516-8278

https://studentaffairs.jhu.edu/counselingcenter/

Being a graduate student can be stressful, but it can also be a time of growth and exploration. The <u>Graduate Student Process Group</u> at the JHU Counseling Center provides a weekly meeting where group members support each other through life's challenges, while also encouraging one another to grow. Group members provide feedback and engage in dialogue to learn about their interpersonal "styles" and how these styles both help and hinder the path to their goals. Topics discussed in the group may include developing more satisfying relationships, coping with the demands of academic life, adjusting to life transitions, and topics related to self-identity.

Students who are interested in joining the group should contact Dr. Shemika Brooks (6-8278) for more information and to learn how to schedule a group screening.

#### **VII. LGBTQ+ LIFE & GENDER ISSUES**

LGBTQ Life serves the lesbian, gay, bisexual, transgender, queer, and allied community at Johns Hopkins. We provide a central home for information about gender identity and sexual orientation across the Hopkins community. (https://studentaffairs.jhu.edu/lgbtg/)

For support and advising on issues relating to gender and the achievement of women students, please visit: <a href="https://studentaffairs.jhu.edu/women-resources/">https://studentaffairs.jhu.edu/women-resources/</a>

## **VIII. OFFICE OF SUSTAINABILITY**

The Office of Sustainability's mission is to provide tools and strategies to the Johns Hopkins community so that the institution is more sustainable and remains strong and vibrant. The Office of Sustainability works across all university departments and campuses and is housed at the Keswick Building near the Homewood campus. (https://sustainability.jhu.edu/)

#### IX. FOOD SERVICES

The residential locations, Hopkins Café (formally Fresh Food Café) and Nolan's on 33rd, will introduce new station concepts including Passport (international cuisine), Hot off the Press (made-to-order paninis) & more. Additionally, retail locations such as Charles Street Market will introduce new concepts including freshly rolled sushi by Bento Sushi and Village Deli.

For additional information about on-campus dining, please visit: <a href="https://studentaffairs.jhu.edu/dining/where-to-eat/">https://studentaffairs.jhu.edu/dining/where-to-eat/</a>

While there are some dining options on-campus, there are several off-campus options near both Homewood and East Baltimore Campus:

## **HOMEWOOD CAMPUS**

## **Homeslyce**

3333 N. Charles Street

## **Honeygrow**

3212 St. Paul Street

#### **Tambers**

3327 St. Paul Street

#### **THB**

3208 St. Paul Street

## **BOZ's Burger Bistro**

3101 St. Paul Street

#### **R** House

301 W. 29th Street

#### **EAST BALTIMORE CAMPUS**

## **The Helmand**

855 N. Wolfe St. Baltimore, MD 21205

## **GROCERY STORES & FRESH PRODUCE**

## 32<sup>nd</sup>Street Farmer's Market

Corner of 32<sup>nd</sup> and Barclay Streets Open Saturdays 7am-12pm all year Fresh local produce - Local meat/dairy/poultry - Prepared food & baked goods

## **Giant**

601 E. 33<sup>rd</sup> Street Fresh produce/meat/seafood – Bakery - Pharmacy

## **Streets Market**

3117 St. Paul Street Fresh produce & meat - Deli takeout - Outdoor seating

## **Safeway**

2401 N. Charles Street Fresh produce/meat/seafood – Bakery - Pharmacy

# **MOM's Organic Market**

711 W. 40<sup>th</sup> Street, Baltimore, MD 21211 Fresh produce/meat/seafood - Organic/specialty items

#### X. PARKING

## **Homewood Campus**

Parking is available for graduate students on the Homewood campus at any available lot (<a href="https://ts.jhu.edu/Parking/Students/">https://ts.jhu.edu/Parking/Students/</a>). Generally, this includes the San Martin and the surface lots. Graduate students receiving a paycheck from the university are eligible for payroll deduction to pay for parking. Please direct all parking related questions to the Parking Office, 410-516-PARK or <a href="mailto:parking@jhu.edu">parking@jhu.edu</a>.

## San Martin Garage

Located conveniently at San Martin Drive on Homewood campus, San Martin Garage is within walking distance to Remsen Hall and the New Chemistry Building. Swipe card access 24 hours a day.

## **Homewood Surface Lot Parking**

The Wyman East, Wyman West, Stony Run, Muller Deck, 115 West University and Homewood Field lots are surface lots at the periphery of campus. These lots provide reasonably convenient Homewood parking, close to or on the edge of campus, at a lower cost per day than is available in garages. Swipe card access 24 hours a day.

## **East Baltimore Campus**

Based upon availability, CBI students are eligible for offsite parking on the East Baltimore Campus. The parking areas are located at the Monument Street Lot (drop off and pickup point located on the corner of Monument St. & Rutland Ave.) and the Fallsway Lot, 545 High Street (drop off and pickup point is located on Wolfe Street near to the main entrance of the hospital). Frequent shuttle service between the SOM and parking lots is provided. Students must apply in the School of Medicine Office of Financial Affairs located in the Broadway Research Building, Suite 131. You must present your student ID to obtain a parking permit.

## XI. FREE BUS SERVICE

## **Transportation between Homewood and the Medical Institutions**

A shuttle bus operates between the Homewood campus and the medical institutions Monday through Sunday. The bus leaves from the Interfaith Center (IFC) at University Parkway between N. Charles and St. Paul Streets with its final stop at Broadway and Monument Street. The schedules can be viewed on the web at: https://ts.jhu.edu/Shuttles/

## **Blue Jay Shuttle**

The Blue Jay Shuttle service operates on a combination of request-only Night Ride and ride-anytime fixed-routes in an area proximate to the Homewood campus from 6:00 PM to 2:00 AM nightly, seven days per week, excluding University holidays and other dates as determined by the University. The service also operates at the Peabody Institute from 6:00 PM until 2:00 AM. Shuttles are equipped with TransLoc, a GPS-based real-time transit information system available online or through a mobile device. To view the Blue Jay Shuttle routes and to track the vans, go to <a href="https://jhu.transloc.com">http://jhu.transloc.com</a> on either a computer or a smartphone. TransLoc's free app is available at <a href="https://transloc.com/app/">https://transloc.com/app/</a>.

The Homewood route includes marked "flag stops" – safe passenger loading zones – at selected university-owned buildings, off-campus residence halls and commercial/retail locations. Passengers must be at a designated flag stop and use their J-Card to "flag the shuttle" in order to board route vans. Drivers do not deviate from their fixed route except in the case of emergency but may drop off at other safe locations along the route upon request. All Johns Hopkins affiliates with a valid J-card can use the Blue Jay Shuttle. Passengers are expected to carry all personal items, backpacks, grocery bags, etc. on and off the shuttle in one trip so as not to delay the shuttle.

After 11:30 PM, the fixed-route service makes its final departure. The Brody Shuffle continues to depart from the Brody Learning Center (BLC) every ten minutes until midnight, then every quarter-hour from midnight until 3:30 AM. Passengers notify the driver of their destination, and the driver

will coordinate drop-offs in an efficient manner. Night Ride continues service until 3:45am. Use the TransLoc app to request a ride or call 410-516-8700 to request a Night Ride and the dispatcher will provide passenger(s) with an estimated time of arrival.

Night Ride does not offer pickups from Brody Learning Commons or adjacent locations. Passengers needing rides from these locations should simply board the "Brody Shuffle" service at one of over 40 departure times between 5:40 PM and 3:30 AM. Visit the Night Ride page for a more complete explanation.

#### XII. LIBRARY CARRELS

The library has dedicated works stations available to graduate students on MSEL B and D levels, near the public elevator. To reserve one, apply at the Support Services office on MSEL A level. They are assigned on a first-come, first-served basis and must be renewed each semester. You can apply for one at any time of the year.

## **XIII. JHU TECHNOLOGY STORE**

The Technology Store (Sherwood Room, Levering Hall) offers Hopkins students, faculty and staff convenient access to specially configured and priced academic computing hardware and expert service and support. <a href="https://studentaffairs.jhu.edu/computing/hopkins-technology-store/">https://studentaffairs.jhu.edu/computing/hopkins-technology-store/</a>

Hopkins Technology Center now offers Out of Warranty repairs for all Johns Hopkins Students, Faculty, and Employees. This offer is only for personal computers only. Contact the store 9:00AM-4:30 PM, Monday-Friday at 410-516-0448. Or you can email them at <a href="techstore@jhu.edu">techstore@jhu.edu</a> for more details.

#### **XIV. E-MAIL ACCOUNTS**

Students are required to apply for a free JHU academic email account. This can be done by logging into JHED (<a href="https://my.jh.edu">https://my.jh.edu</a>) and clicking on request e-mail account or dialing HITS at 6-HELP. Departmental administrative broadcast messages will be sent to the student's free academic account (JHEM or JHU alias). Students utilizing external e-mail accounts (Gmail, Hotmail, Yahoo, etc.) are required to forward mail from their JHU student account to these external accounts as they will be responsible for all information communicated via their JHU academic account. The department will not send e-mail to an external account.

## **XVI. BOOKSTORES**

Homewood Campus – Barnes & Noble Johns Hopkins Bookstore

3330 St. Paul Street Baltimore, MD 21218 **Phone:** 410-662-5850

Hours: 9:00 AM-9:00 PM, Monday-Saturday 10:00 AM-9:00 PM, Sunday

## **XVII. OTHER FACILITIES**

Campus Ministries: 410-516-1880 (https://studentaffairs.jhu.edu/religious-spiritual-life/)

Johns Hopkins Museums: <a href="https://museums.jhu.edu/">https://museums.jhu.edu/</a>

JHU Credit Union: Charles Commons

410-534-4500 or 1-800-JHFCU-70 https://www.jhfcu.org

# **PERSONNEL**

# I. CBI FACULTY

| Name                 | Department       | Email                   | Office Phone | Office Address     |
|----------------------|------------------|-------------------------|--------------|--------------------|
| Arroyo, Netz         | Pharmacology     | netzarroyo@jhmi.edu     | 443-287-4798 | Hunterian 316      |
| Bailey, Scott        | ВМВ              | scott.bailey@jhu.edu    | 443-756-6791 | 615 N. Wolfe St.   |
|                      |                  |                         |              | W8308              |
| Barrow, James        | Pharmacology     | jbarrow@jhmi.edu        | 410-955-0894 | 855 N. Wolfe St.   |
|                      |                  |                         |              | Rangos 336         |
| Berger, James        | Biophysics &     | jmberger@jhmi.edu       | 410-955-7163 | WBSB 608-D         |
|                      | Biophysical Chem |                         |              |                    |
| Bowman, Greg         | Biophysics       | gdbowman@jhu.edu        | 410-516-7850 | Jenkins Hall 302   |
|                      |                  |                         |              |                    |
| Culotta, Valeria     | ВМВ              | vculott1@jhu.edu        | 410-955-3029 | 615 N. Wolfe St.   |
|                      |                  |                         |              | W8116              |
| Fried, Stephen       | Chemistry        | sdfried@jhu.edu         | 410-516-7835 | Remsen 121         |
| Frueh, Dominique     | Biophysics &     | dfrueh1@jhmi.edu        | 410-614-4719 | WBSB 608-D         |
| ·                    | Biophysical Chem |                         |              |                    |
| Powell Gray, Bethany | Pharmacology     | bethany.gray@jhmi.edu   | 410-502-0844 | Hunterian 313      |
| Greenberg, Marc      | Chemistry        | mgreenberg@jhu.edu      | 410-516-8095 | NCB 313            |
| Hilser, Vincent      | Biology          | hilser@jhu.edu          | 410-516-6072 | Mudd Hall 123      |
| Hristova, Kalina     | Mat. Sci. & Eng. | kalina.hristova@jhu.edu | 410-516-8939 | Shaffer Hall 204-B |
| Huang, Xiongyi       | Chemistry        | xiongyi@jhu.edu         | 410-516-1181 | Remsen 155         |
| Kavran, Jennifer     | ВМВ              | jkavran@jhu.edu         | 410-955-3671 | 615 N. Wolfe St.   |
|                      |                  |                         |              | W3116              |
| Leung, Anthony       | ВМВ              | aleung6@jhu.edu         | 410-502-8939 | 615 N. Wolfe St.   |
|                      |                  |                         |              | E8647              |
| Liu, Jun             | Pharmacology     | joliu@jhu.edu           | 410-955-4619 | 725 N. Wolfe St.   |
|                      |                  |                         |              | Hunterian Building |
| Freel Meyers, Caren  | Pharmacology     | cmeyers@jhmi.edu        | 410-502-4807 | WBSB 307-A         |
| Ostermeier, Marc     | ChemBE           | osterm@jhu.edu          | 410-516-7144 | Croft Hall B26     |
| Paul, Bindu          | BCMB             | bpaul8@jhmi.edu         | 443-287-4821 | Hunterian 307      |
| Prigge, Sean         | Mol. Microbio. & | sprigge2@jhu.edu        | 443-287-4822 | 615 N. Wolfe St.   |
|                      | Immunology       |                         |              | E4628              |
| Rokita, Steve        | Chemistry        | <u>rokita@jhu.edu</u>   | 410-516-5793 | Remsen 124         |
| Schnaar, Ron         | Pharmacology     | schnaar@jhu.edu         | 410-955-8392 | WBSB 318           |
|                      |                  |                         |              |                    |
| Schulman, Rebecca    | ChemBE           | rschulm3@jhu.edu        | 410-516-8457 | Shaffer Hall       |
|                      |                  | <u></u>                 |              | 200-B              |
| Sohn, Jungsan        | Biophysics &     | jsohn@jhmi.edu          | 410-614-6134 | WBSB 615           |
|                      | Biophysical Chem |                         |              |                    |
| Spangler, Jamie      | ChemBE           | jamie.spangler@jhu.edu  | 443-287-1708 | 400 N. Broadway    |
|                      |                  |                         |              | Smith 5011         |
| Toscano, John        | Chemistry        | jtoscano@jhu.edu        | 410-516-8215 | NCB 115            |
| Townsend, Craig      | Chemistry        | ctownsend@jhu.edu       | 410-516-7444 | Remsen 252         |

| Wolberger, Cynthia | Biophysics &     | cwolberg@jhmi.edu | 410-955-0728 | WBSB 614         |
|--------------------|------------------|-------------------|--------------|------------------|
|                    | Biophysical Chem |                   |              |                  |
| Woodson, Sarah     | Biophysics       | swoodson@jhu.edu  | 410-516-2015 | Jenkins Hall 402 |
| Zhu, Heng          | Pharmacology     | hzhu4@bs.jhmi.edu | 410-502-0878 | 733 N. Broadway  |
|                    |                  |                   |              |                  |

## **II. CBI RESEARCH AREAS**

- <u>Netz Arroyo</u>- development of biology-inspired electrochemical sensors to enable 1) direct detection of disease markers and drugs in biological fluids for decentralized health monitoring and 2) continuous, real-time measurements of molecules in situ in the body
- Scott Bailey structure/Function studies of genome integrity
- <u>James Barrow</u>- medicinal chemistry and drug discovery, especially for diseases of the central nervous system
- <u>James Berger</u> structural and catalytic mechanisms of nucleic-acid machines and assemblies; control of DNA replication and chromosome superstructure; small-molecule and biological regulatory mechanisms
- <u>Greg Bowman</u> coupling biochemistry and structural biology (crystallography/cryoEM) to reveal mechanisms by which ATP-dependent remodeling enzymes and transcription factors alter nucleosome structure and dynamics
- <u>Valeria Culotta</u> cellular transport and trafficking of heavy metals, antioxidant enzymes
- <u>Stephen Fried</u> folding and assembly of proteins and molecular machines in vivo; crosslinking mass spectrometry; ancient proteins and the origins of life; synthetic biology and directed evolution
- <u>Dominique Frueh</u> applying NMR spectroscopy to the study of protein motions in large molecules
- <u>Bethany Powell Gray</u> Nucleic acid chemistry and biology in order to create safer drugs and tunable imaging agents for disease detection
- Marc Greenberg chemical, biochemical, and biological studies on nucleic acid damage and DNA repair in free DNA and nucleosomes, design of radiosensitizing agents, inhibitors of DNA repair enzymes and molecules that enable the spatiotemporal control of nucleic acid structure
- <u>Vincent Hilser</u> Structural and dynamic basis for molecular recognition, catalysis, and allostery
- <u>Kalina Hristova</u> Chemistry at biological interfaces, cell signaling, biochemistry of membrane proteins, quantitative fluorescence microscopy
- <u>Xiongyi Huang</u> harnessing the power of directed evolution to develop new enzymes to solve outstanding problems at the frontiers of chemistry and biology
- <u>Jennifer Kavran</u> structural and biochemical studies of the molecular mechanisms of signaling pathways
- Anthony Leung biology behind poly(ADP-ribose) (PAR)—the third polynucleotide besides DNA and RNA. Research includes (1) developing new chemical and proteomics tools to study PAR, (2) identifying predictive biomarkers for cancer therapy with PAR polymerase (PARP) inhibitors, and (3) discovering novel roles of PAR in non-coding RNA biology and non-membranous cellular structures
- <u>Jun Liu</u> use of small molecules as probes to elucidate mechanisms of signal transduction; angiogenesis and cell proliferation.
- <u>Caren Freel Meyers</u> drug delivery mechanisms in bacteria; development of antibiotic prodrug strategies; study of bacterial isoprenoid biosynthesis; combinatorial biosynthesis
- Marc Ostermeier protein engineering, directed evolution, allostery
- Bindu Paul Redox signaling during aging and neurodegeneration
- <u>Sean Prigge</u> structural biology and parasitology studies in essential nutrients and metabolic pathways in malaria parasites
- <u>Steven Rokita</u> sequence and conformation specific reactions of nucleic acids; enzymemediated activation of substrates and coenzymes for dehalogenation

- <u>Ron Schnaar</u> cell surface molecular interactions (cell-cell recognition) and the control of cell behaviors in the nervous system (axon regeneration) and immune system (inflammation); glycobiology
- Rebecca Schulman in vitro synthetic biology for the design synthetic devices, materials and cells using ideas from DNA nanotechnology and systems chemistry
- <u>Jungsan Sohn</u> mechanistic enzymology and X-ray crystallography; structure and function of allosterically regulated biological stress-sensors
- <u>Jamie Spangler</u> engineering new proteins that modulate the immune response for targeted disease therapy
- <u>John Toscano</u> new precursors to NO and HNO, NO-releasing materials, the potential role of HNO in the treatment of heart failure
- <u>Craig Townsend</u> natural product chemistry, enzymology and molecular biology, fatty acid synthase inhibitors for cancer, tuberculosis and obesity
- <u>Cynthia Wolberger</u> biochemical, biophysical and structural studies on enzymes involved in ubiquitin signaling and transcription regulation
- <u>Sarah Woodson</u> RNA folding and catalysis; dynamics of small regulatory RNAs; mechanism of 30S ribosome assembly by time resolved footprinting
- <u>Heng Zhu</u> develops and applies protein chip technology to investigate important biological questions and to help clinical research. Research focus includes networks and pathways of protein posttranslational modifications, gene transcription regulatory networks, pathogen-host interaction networks, and biomarker discovery

## **III. ADMINISTRATIVE STAFF**

**Chemistry (Homewood)** 

| Name              | Title                    | Phone        | Email               |
|-------------------|--------------------------|--------------|---------------------|
| Meghan Carter     | Administrator            | 410-516-4676 | mcarter@jhu.edu     |
| John Kidwell      | Academic Program         | 410-516-7791 | jkidwel3@jhu.edu    |
|                   | Administrator            |              |                     |
| tba               | Administrative           | 410-516-7429 | i                   |
|                   | Coordinator              |              |                     |
| Jess Grant        | Academic Program         | 410-516-2826 | cbi-admin@jh.edu    |
|                   | Coordinator (CBI)        |              |                     |
| Clare Bindel      | Administrative           | 410-516-7427 | cbindel@jhu.edu     |
|                   | Coordinator              |              |                     |
| Yin Jiang         | Finance Manager          | 410-516-7684 | yjiang32@jhu.edu    |
| Kim Kutchins      | Sr. Grants and Contracts | 410-516-0246 | kimkutchins@jhu.edu |
|                   | Analyst                  |              |                     |
| Robert Bishop     | Sr. Grants and Contracts | 410-516-1208 | rbishop@jhu.edu     |
|                   | Analyst                  |              |                     |
| Dan Beren         | Sr. Grants and Contracts | 410-516-7435 | dberen@jhu.edu      |
|                   | Analyst                  |              |                     |
| Sabrina Ingleton  | Sr. Grants and Contracts |              | singlet1@jhmi.edu   |
|                   | Analyst                  |              |                     |
| Joe Russell       | Purchasing Coordinator   | 410-516-7453 | joe.russell@jhu.edu |
| Dennis Kidd       | IT Manager               | 410-516-6004 | dennis@jhu.edu      |
| Phil Mortimer     | Manager, Mass            | 410-516-5552 | mass.spec@jhu.edu   |
|                   | Spectrometry Facility    |              |                     |
| Maxime Siegler    | X-Ray Crystallographer   | 410-516-8569 | xray@jhu.edu        |
| Jonathan Catazaro | NMR Facility Director    |              | jcataza@jhu.edu     |
| Ananya Majumdar   | Director, Biophysical    | 410-516-8670 | ananya@jhu.edu      |

| Name                  | Title                   | Phone        | Email            |
|-----------------------|-------------------------|--------------|------------------|
|                       | NMR Center              |              |                  |
| Nicholette Stachowiak | Laboratory Coordinator  | 410-516-7434 | nstacho1@jhu.edu |
| Julia Wittkamper      | Lab/Trainer Coordinator |              | jwittka2@jhu.edu |

Biology

| Name           | Title                | Phone        | Email           |
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| Donna Schriver | Administrator        | 410-516-4604 | donnas@jhu.edu  |
| Barbara Birsit | Academic Coordinator | 410-516-4693 | bbirsit@jhu.edu |

**Biophysics** 

| Name                   | Title                  | Phone        | Email              |
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| Jessica Appel          | Administrative Manager | 410-516-7243 | jappel@jhu.edu     |
| <b>Brett Weinstein</b> | Graduate Program       | 410-516-5197 | bweinstein@jhu.edu |
|                        | Coordinator            |              |                    |

**Chemical and Biomolecular Engineering (Homewood)** 

| Name              | Title                            | Phone        | Email              |
|-------------------|----------------------------------|--------------|--------------------|
| Renee Nathaniel   | Senior Administrative<br>Manager | 410-516-8294 | rnathaniel@jhu.edu |
| Marcellas Preston | Academic Program Administrator   |              | MPrest16@jhu.edu   |

**Material Science and Engineering (Homewood)** 

| Name                  | Title                             | Phone        | Email            |
|-----------------------|-----------------------------------|--------------|------------------|
| tba                   | Administrative Manager            |              |                  |
| Lauren Modica Rodgers | Academic Program<br>Administrator | 410-516-8760 | lmodica1@jhu.edu |

Pharmacology (SOM)

| Name            | Title                  | Phone        | Email             |
|-----------------|------------------------|--------------|-------------------|
| Brenda Figueroa | Administrative Manager | 410-955-3569 | bfiguero@jhmi.edu |
| Amy Paronto     | Academic Program       | 410-955-1457 | aparont1@jhmi.edu |
|                 | Administrator          |              |                   |

**Biophysics & Biophysical Chemistry (SOM)** 

| biophysics & biophysical chemistry (50m) |                                   |              |                   |  |
|--|-----------------------------------|--------------|-------------------|--|
| Name                                     | Title                             | Phone        | Email             |  |
| Teresa Pennington                        | Administrator                     | 410-955-5032 | tpenning@jhmi.edu |  |
| Shannon Millard                          | Sr. Administrative<br>Coordinator | 410-502-5629 | smillar4@jh.edu   |  |

**Biochemistry & Molecular Biology (SPH)** 

| Name            | Title             | Phone        | Email             |
|-----------------|-------------------|--------------|-------------------|
| Kear Wright     | Administrator     | 410-955-2926 | kwright@jhu.edu   |
| Morgan Backhaus | Sr. Administrator | 410-955-2926 | mbackha1@jhmi.edu |
|                 | Coordinator       |              |                   |

Molecular Microbiology & Immunology (SPH)

| merecular mareculeregy of minimum energy (e. m.) |  |              |                 |
|--|--|--------------|-----------------|
| Name   | Title                                      | Phone        | Email           |
|  | Central Administration Office of the Chair | 410-955-3457 |                 |
| Alex Kim   | Academic Program Administrator             | 410-614-4232 | akim55@jhmi.edu |

## **ACTIVITY RUBRICS**

#### I. GBO PROTOCOL

**Introduction:** The Graduate Board Oral (GBO) Exam is a mandatory requirement for all Johns Hopkins University graduate students. The primary objective of the GBO is to assess the student's comprehensive understanding of their major and minor subjects in Chemistry and Biology and their ability to design, analyze, and effectively communicate research with an integrated understanding of safety and rigor.

**Exam Timing:** The GBO will be conducted in January or February of the student's 2<sup>nd</sup> year.

**Exam Content:** The GBO committee consists of five faculty members. Two members will ask course-related questions, two will focus on the thesis and related research, and one will ask broad questions.

**Thesis Research Summary:** One week before the exam, students must submit a two-page summary of their thesis research that includes the research goal, methodology, progress made, and relevant literature documentation. References are not included in the two-page limit.

#### **Exam Procedure:**

- The student leaves the room while the advisor reviews their progress and confirms completion of relevant requirements. The chair coordinates with the committee to determine the order of questioning.
- The student returns to the room and presents a 15-minute oral overview of the thesis research.
- Committee members take turns asking questions for 10-15 minutes each.
- During the questions, the committee will evaluate the student with the following rubric:
  - o Insufficient foundational knowledge
  - o Basic fluency in field and critical understanding of research
  - o Great extrapolation and interpretation of research and course material.
- If time permits, the committee members may ask additional questions.
- The student leaves the room and the committee completes the evaluation form, votes on the outcome and develops recommendations by consensus and discussion.
- After the student returns to the room, the Chair communicates the results and any conditions or recommendations.

#### **Exam Outcomes:**

- Unconditional Pass: The student proceeds with dissertation work and forms a Thesis Committee, meeting before June in their second year and schedules a first meeting to be held no later than July of the second year.
- Conditional Pass: The committee imposes specific conditions that must be fulfilled within a specified time period (typically around three months). If conditions are not met, the student must retake the exam.
- Fail: The committee recommends a course of action, such as dismissal from the program, re-examination by the same or a new committee, or re-examination in written form.

## More details on Conditional Pass:

Any conditions should indicate:

- The substantive gap that needs to be filled,
- The specific requirements to be completed to fill that gap,
- Who will be responsible for ensuring the student meets the specific requirements,
- The deadline for completing the condition.

Appropriate conditions include items, but not limited to:

- Completing a specific course,
- Completing a set of directed readings on a specific topic and writing a summary of the readings and their connection to the student's research area,
- Writing a short literature review,
- Meeting with specific faculty members to discuss specific topics or methods,
- Presenting their work to a specific audience, such as a lab group, working group, or departmental seminar.

#### **Oral Board Member Selection:**

The student in consultation with the research supervisor must submit the names of ten potential examiners (6 internal and 4 external to CBI) to the CBI administrator at least six weeks in advance of the proposed exam date. The list should be accompanied by a research abstract and the targeted 1-2 weeks as possible dates of exam. The Chair will be assigned by Krieger School of Arts and Sciences.

For more information, visit: <a href="https://homewoodgrad.jhu.edu/academics/graduate-board/graduate-board-oral-exams/">https://homewoodgrad.jhu.edu/academics/graduate-board/graduate-board-oral-exams/</a>

## The role of GBO Chair:

- Pre-exam Preparation:
  - o The Chair reviews the paperwork from the CBI administrator in advance and, after the exam, emails the results to the CBI administrator and directors (see below).
  - The Chair should discuss with the exam committee who will be responsible for questions on course (2 members), thesis research (2 members) and broad question (1 member)
- Exam Management: The Chair manages the exam, including the schedule, determining the order of questioning and keeping track of time.
- Focusing on the Bigger Picture: The Chair brings questions back to broader issues.
- Outcome Discussion Guidance: The Chair leads the discussion regarding conditions or failure and communicates the results and conditions to the student. The Chair should fill out the CBI GBO evaluation form in consultation with the committee members.
- Overseeing Conditions: The Chair oversees any formal conditions placed on the student as a result of the exam.

## **CBI Office Communication**

Director: Steve Rokita (srokita1@jhu.edu)

Associate Director: Anthony Leung (anthony.leung@jhu.edu)

CBI Administrator: cbi-admin@jh.edu

#### II. THESIS COMMITTEE MEETING

## Introduction:

CBI recommends that all students complete their PhD in 5.5 years, given the median time to degree in the US for biomedical science fields. To achieve this goal, regular thesis committee meetings are essential for monitoring progress and providing valuable feedback.

## **Initial Thesis Committee Meeting:**

- Schedule the first meeting in the Spring of the 2nd year (the latest by July).
- Set the meeting date at least two months in advance.
- Provide a written summary (two pages) to the committee members one week before the meeting.
- Send meeting reminders and confirm attendance at least one week prior.

## Annual or 6-month meetings:

- Schedule thesis committee meetings yearly after the initial meeting.
- For students in their 5th year and beyond, meetings should occur every 6 months to ensure timely graduation.

#### **Committee Members:**

- provide guidance and feedback on the student's research.
- provide guidance and feedback on mentor-student relationship.
- assess progress and discuss a schedule and milestones to ensure timely graduation (especially for students in their 4<sup>th</sup> year and above).

#### **Committee Chair:**

- The chair of the committee should be designated as the most senior member of the committee who is a CBI preceptor and not the research mentor.
- The chair is responsible for completing the CBI thesis meeting form and providing a written summary of the meeting discussion, feedback, and action items.

## **Clear Timeline and Milestones:**

- Establish a clear timeline and milestones for the student's PhD progress in collaboration with the mentor and committee to monitor progress and ensure aligned expectations.
- If the student is in the 4th year or beyond, discuss an action plan for graduation and present it to the committee.

## Meeting Structure: (~1 h)

- 1. First 5 minutes:
  - The student steps out.
  - The mentor discusses the mentor-student relationship with the committee and raises any issues if needed.
- 2. Next 30-40 minutes:
  - The student presents research progress accomplished since the last meeting.
  - Focus on discussing ongoing projects rather than presenting published data.
  - Use this time to seek input and advice from the committee.
- 3. Following 10-20 minutes:
  - · The committee asks questions and provides additional feedback.
  - The committee chair will complete the meeting progress form with other members, ensuring that the IDP and career path have been discussed between mentor and student.

- Together with the student and mentor, they will determine the timeline, milestone and the next meeting date.
- 4. Final 5 minutes:
  - · The mentor steps out.
  - The student discusses the mentor-student relationship with the committee and raises any issues if needed.

## **Post-Meeting Follow-up:**

- After each meeting, the chair should provide a written progress report, which contains the summary of the discussion, feedback, and agreed-upon action items for the student, mentor, and committee members.
- This summary will help keep everyone on the same page and ensure accountability for progress and follow-through on action items.
- A copy of the progress report should be sent to the CBI administrator (cbi-admin@jh.edu) and cc Anthony Leung <a href="mailto:anthony.leung@jhu.edu">anthony.leung@jhu.edu</a>; Steven Rokita <a href="mailto:srokita1@jhu.edu">srokita1@jhu.edu</a>

# **CBI FORMS**

# I. CBI CHECKLIST AND TIMELINE

| Check | Item to Complete                           | Timeline                                       |
|-------|--|--|
|       | Select Research Advisor                    | End of 1 <sup>st</sup> Year                    |
|       | Complete Course Requirements               | End of 2 <sup>nd</sup> Year                    |
|       | Graduate Board Oral (GBO)                  | Before the end of the 4 <sup>th</sup> semester |
|       | Research Proposal                          | Fall of 3 <sup>rd</sup> Year                   |
|       | Thesis Committee Selection                 | By end of 4 <sup>th</sup> semester             |
|       | Thesis Committee Meeting Year 2            | Summer of 2 <sup>nd</sup> year                 |
|       | Thesis Committee Meeting Year 3            | Spring of 3 <sup>rd</sup> Year                 |
|       | Research Update to the CBI program (Forum) | Spring of 4 <sup>th</sup> Year                 |
|       | Thesis Committee Meeting Year 4            | Spring of 4 <sup>th</sup> Year                 |
|       | Thesis Committee Meeting Year 5            | Spring of 5 <sup>th</sup> Year                 |
|       | Thesis Committee Meeting Year 5.5          | End of 5 <sup>th</sup> Year                    |
|       | Dissertation and Seminar                   | Before 6 <sup>th</sup> year                    |

# **II. SKILLS DEVELOPMENT (ANNUAL)**

# Self Evaluation – CBI, JHU

|                    | Name |              |  |
|--------------------|------|--------------|--|
| Matriculation date |      | Current date |  |

| Competency                     | Example                          | Definition  | Confidence (circle) |
|--------------------------------|----------------------------------|---|---------------------|
|                                | Problem solving                  | Define research problems from a coherent analysis of gaps in existing knowledge base.   | Low High 1 2 3 4 5  |
| Research skills and techniques | Original critical thinking       | Formulate hypotheses and research questions for the purpose of designing a research project   | Low High 1 2 3 4 5  |
|                                | Using disciplinary methodologies | Discuss and prioritize a range of methodologies to address a research question.   | Low High 1 2 3 4 5  |
| Research<br>environment        | Health and safety                | Competent in working with any relevant health and safety requirement  | Low High 1 2 3 4 5  |
| Research<br>management         | Bibliography<br>skills           | Demonstrate an excellent awareness of potential sources of relevant information for subject area.   | Low High 1 2 3 4 5  |
| Personal                       | Open-mindedness                  | Analyze the strengths and weaknesses of your own approach   | Low High 1 2345     |
| effectiveness                  | Self-discipline                  | Work at a professional level without supervision, with high accuracy, organization and attention to detail  | Low High 1 2 3 4 5  |
| Communication                  | Academic writing                 | Produce a well-structured and well written report of substantial length.  | Low High 1 2 3 4 5  |
| skills                         | Oral presentation                | Present a research project at a seminar with fluency and competency   | Low High 1 2 3 4 5  |
| Teamwork                       | Collaborative skills             | Work productively in teams on complex projects and solve teamworking problems as they arise.  | Low High 1 2 3 4 5  |
| Career<br>management           | Transferable skills              | Aware of potential career paths<br>and the general skills developed<br>during the PhD including research<br>techniques, project planning and<br>communication skills. | Low High 1 2 3 4 5  |

# **III. EVAULATION FOR ROTATION AND RESEARCH PROGRESS PRESENTATIONS**

| Name of Presenter:   |                     |               |              | Date: _    |                |          |
|--|---------------------|---------------|--------------|------------|----------------|----------|
| Please indicate your status:                                 | Faculty             | Post-doctoral | Stude        | nt         | Other          |          |
| Please provide specific exar<br>form to the CBI Administrato |                     |               | areas whenev | ver possib | ole. Please re | turn the |
| Content  |                     | Excellent     | Very Good    | Good       | Fair           | Poor     |
| Articulation of the topic/ex                                 | perimental goal     |               |              |            |                |          |
| Comments:  |                     |               |              |            |                |          |
| Introduction and backgrour                                   | nd                  |               |              |            |                |          |
| Comments:  |                     |               |              |            |                |          |
|  |                     |               |              |            | _              | _        |
| Description of the experime                                  | ental approach      |               |              |            |                |          |
| Comments:  |                     |               |              |            |                |          |
|  |                     |               |              |            |                |          |
| Clarity/interpretation of da                                 | ta                  |               |              |            |                |          |
| Rationale for future directic                                | ons (if annlicable) | p. 1          |              |            |                |          |
| Comments:  | ons (ii applicable) |               |              |            |                |          |
|  |                     |               |              |            |                |          |
| Presentation   |                     | Excellent     | Very Good    | Good       | Fair           | Poor     |
| Overall organization   |                     |               |              |            |                |          |
| Comments:  |                     |               |              |            |                |          |
| Quality of slides  |                     |               |              |            |                | Ī        |
| Comments:  |                     |               |              |            |                |          |
|  |                     |               |              |            |                |          |
| Oral presentation  |                     |               |              |            |                |          |
| Comments:  |                     |               |              |            |                |          |
| Overall Evaluation:  | Excellent           | Very Good     | Good         | F          | air            | Poor     |

# IV. EVALUATION OF ROTATION RESEARCH

## **CBI First Year Graduate Student Rotation Evaluation Form**

| STUDENT:               |          |     |     |     |
|------------------------|----------|-----|-----|-----|
| FACULTY:               |          |     |     | _   |
| CIRCLE AS APPROPRIATE: | Rotation | 1st | 2nd | 3rd |
| DATE OF ACCECCMENT.    |          |     |     |     |

DATE OF ASSESSMENT:

|                             | Range from 1 = | : below | 3 = meets | 3 = meets 5 = exceeds |   |  |
|-----------------------------|----------------|---------|-----------|-----------------------|---|--|
| Research activity           | 1              | 2       | 3         | 4                     | 5 |  |
| Time and effort             | 1              | 2       | 3         | 4                     | 5 |  |
| Interest                    | 1              | 2       | 3         | 4                     | 5 |  |
| Technical skill             | 1              | 2       | 3         | 4                     | 5 |  |
| Authentication of materials | 1              | 2       | 3         | 4                     | 5 |  |
| Rigorous data analysis      | 1              | 2       | 3         | 4                     | 5 |  |
| Adhered to safe practices   | 1              | 2       | 3         | 4                     | 5 |  |
| Command of research goal    | 1              | 2       | 3         | 4                     | 5 |  |
| Comprehension of significan | nce 1          | 2       | 3         | 4                     | 5 |  |
| Independent thought         | 1              | 2       | 3         | 4                     | 5 |  |
| Notebook, data storage      | 1              | 2       | 3         | 4                     | 5 |  |
| Rotation talk               |                |         |           |                       |   |  |
| organization                | 1              | 2       | 3         | 4                     | 5 |  |
| visuals                     | 1              | 2       | 3         | 4                     | 5 |  |
| clarity                     | 1              | 2       | 3         | 4                     | 5 |  |
| perspective                 | 1              | 2       | 3         | 4                     | 5 |  |

**Comments to rotator:** 

Comments to CBI Director/trainee file:

(If desired, not distributed to rotator)

## **V. ADVISOR SELECTION**

# **Chemistry-Biology Interface Program**

Department of Chemistry Zanvyl Krieger School of Arts and Sciences Remsen Hall and New Chemistry Building 3400 N. Charles Street Baltimore, MD 21218-2685 (410) 516-7429 / FAX (410) 516-8420

| Student:                 |  |                                   |
|--------------------------|--|-----------------------------------|
| Date:                    |  |                                   |
| Research Rotations:      |  |                                   |
| l                        | Date:  |                                   |
| •                        | Date:  |                                   |
| •                        | Date:  |                                   |
| ·                        | Date:  |                                   |
|                          |  |                                   |
|                          | Date:<br>essor   |                                   |
| if you have a CBI stu    | Information: The 2023-2024 CBI stipend water in your group who is not supported e responsible for the student's health insur | by the training grant or teaching |
| Approved by:<br>Director | Date:  |                                   |

Please return this form to the CBI Administrator (cbi-admin@jh.edu)

## **VI. IDP FOR FIRST YEAR CBI STUDENTS**

# CBI Program Annual Review Process: Directions and Guidelines for Advisors and First Year Students

## **Timeline**

June 30 – All student annual reviews and thesis committee meetings to be completed by June 30. All reports to be completed and submitted by June 30 to remain in good standing.

## **Annual Review Guidelines for First Year Graduate Students**

Fall and Spring Letters from the Director:

- All first years will receive a letter regarding coursework at the end of both the Fall and Spring semesters.
- Fall letters (sent out in January):
  - o Fall letter to focus on courses completed and the number of courses left to fulfill program requirement.
  - o Fall letter to include rotation selections and performance
- Spring letters (sent out in June):
  - o Spring letters to include courses completed and the number of courses left to fulfill the program requirement; or confirm that course requirement has been completed
  - o Spring letter to include rotation selections and performance
  - o Spring letter to include the selection and confirmation of an advisor.

## Student Responsibilities:

- Individual Development Plan (IDP) Student Report All students will complete the IDP First Year Student Report by the end of the Spring semester
- The IDP First Year Student Report will include a self-evaluation. This evaluation should include (but not limited to) the following:
  - A summary of courses completed in the past year. If the course requirement has not yet been met, the student will list the courses they plan to take during the upcoming academic year
  - o A summary of rotation selections in the past year
  - A discussion of research interests. Now that student has selected an advisor, he/she will provide any research interests they have and/or would like to explore
  - A discussion of objectives/goals for the upcoming academic year (e.g. improve a certain skill set, attend and participate in group meetings, discuss research project with advisor, take any additional courses)

## Advisor Responsibilities:

Meet with students individually to discuss and sign the IDP First Year Student Report.

## **Submission/Completion Requirements:**

- The completed IDP report must be submitted to the CBI administrator (<a href="mailto:cbi-admin@jh.edu">cbi-admin@jh.edu</a>) to keep on file and upload to SIS
- All forms Fall and Spring letters and the IDP First Year Student Report will be uploaded to SIS before the start of the next academic year

# Individual Development Plan – First Year Student Report

| Student Name:  | Year in Program:  |  |  |  |  |  |
|--|---|--|--|--|--|--|
| Advisor Name:  |   |  |  |  |  |  |
| All first-year students in the CBI program are required to com-<br>submit all required documents by June 30 <sup>th</sup> to   |   |  |  |  |  |  |
| <ol> <li>Complete this report</li> <li>Meet with your advisor and discuss this report. During the acknowledgement of your annual review</li> <li>The completed IDP First Year Student Report must be sub admin@jh.edu) to keep on file and upload to SIS</li> </ol>  |   |  |  |  |  |  |
| Please use the space below to provide a self-evaluation of document goals for next year. This evaluation should inclusummary of courses complete in the past year. If the course the courses you plan to take during the upcoming academ experiences in the past year; (3) A discussion of research in advisor, provide any research interests you have and/or wobjectives/goals for the upcoming academic year (e.g. imparticipate in group meetings, discuss research project with | ude (but not limited to) the following: (1) A<br>se requirement has not yet been met, list<br>nic year; (2) A summary of rotation<br>nterests. Now that you have selected an<br>rould like to explore; (4) A discussion of<br>prove a certain skill set, attend and |  |  |  |  |  |
| ☐ My annual self-evaluation is below   |   |  |  |  |  |  |
| ☐ I have met with my advisor to review my sacademic goals for the upcoming year  | self-evaluation and to discuss research and   |  |  |  |  |  |
| We certify that we have met to discuss the attached report, includ document is not meant to be used as a measure of grading. It is g of the student and the relationship of the student and advisor.   |   |  |  |  |  |  |
| Signed:(Student)   | Date:   |  |  |  |  |  |
| Signed:(Advisor)   | Date:   |  |  |  |  |  |

# **Individual Development Plan – First Year Student Report**

Student Annual Self-Evaluation (please type your responses in the space provided. Additional pages may be used if desired):

#### VII. IDP FOR CBI STUDENTS BEYOND THEIR FIRST YEAR

# CBI Program Annual Review Process: Directions and Guidelines for Advisors and Students 2<sup>nd</sup> Year and Beyond

#### **Timeline**

June 1 – All student annual reviews and thesis committee meetings to be completed by June 1. All reports to be completed and submitted by June 1. Failure to complete may result in a delay of degree conferral. Note – first year students complete a different form

#### **Annual Review Guidelines for Second Year Students**

Student Responsibilities:

- Go to myIDP and fill out the self-evaluation sections as a first-time user
- Meet with your mentor and discuss your IDP self-evaluation. During the meeting, complete the relevant sections of the IDP Advanced Student Report
  - o During the meeting, students and mentors will sign the IDP report as acknowledgement and completion of the annual review
  - It is highly desirable for the meeting to take place prior to the GBO
- Go back to myIDP and send the certificate of completion to the CBI administrator (cbi-admin@jh.edu)

#### Advisor Responsibilities:

- Meet with all students individually and discuss the student's IDP self-evaluation. During the meeting, complete the relevant sections of the IDP Advanced Student Report
  - O During the meeting, students and mentors will sign the IDP report to acknowledge completion of the annual review

## Degree Completion Letters from the Director:

- All students will receive a letter if course requirements have not yet been met. The letter will include the number of
  courses that need to be fulfilled, as well as a timeline for completion
  - o A copy of the letter will be sent to the advisor

#### **Annual Review Guidelines for Third Year Students and Beyond**

Student Responsibilities:

- Go to myIDP and update your self-evaluation
- Meet with your mentor and discuss your IDP self-evaluation. During the meeting, complete the relevant sections of the IDP Advanced Student Report
  - o During the meeting, students and mentors will sign the IDP report as acknowledgement and completion of the annual review
  - o This meeting will take place prior to the thesis committee meeting
- Go back to myIDP and send the certificate of completion to the CBI administrator (cbi-admin@jh.edu)
- Meet with your thesis committee. The student and his/her thesis committee will meet yearly beginning in the spring semester of the third year. The committee will complete a form summarizing the student's progress towards the Ph.D.
  - o Bring a copy of your completed IDP Advanced Student Report to the thesis committee meeting

#### Advisor Responsibilities:

- Meet with all students individually and discuss the student's IDP self-evaluation. During the meeting, complete the relevant sections of the IDP Advanced Student Report
  - o During the meeting, students and mentors will sign the IDP report to acknowledge completion of the annual review
- Discuss the completed IDP Advanced Student Report at the thesis committee meeting

#### Submission/Completion Requirements:

- The completed IDP report must be submitted to the CBI administrator to keep on file and upload to SIS
- All forms The IDP Advanced Student Report, course completion letter (if applicable) and the thesis committee form (third years and beyond), will be uploaded to SIS before the start of the next academic year

# Individual Development Plan – Advanced Student Report

| Stude | dent Name:   | Year in Program:  |  |  |  |  |  |
|-------|--|---|--|--|--|--|--|
| Advis | visor Name:  |   |  |  |  |  |  |
|       | ll students in the CBI Program are required to complete an Individual Develo<br>documents by June 1st of each year. IMPORTANT – Failure to complete may re   |   |  |  |  |  |  |
| (1)   | Trainee: If you are a first-time user, create an account on myIDP ( <a href="http://http.myIDP">http://myIDP</a> and fill out the self-evaluation sections (first-time users), or upon mentor and discuss your IDP self-evaluation. During the meeting, fill to type your responses). 3) Go back to myIDP and send the certificate of (cbi-admin@jh.edu). 4) Bring this completed form to the thesis comm must be submitted to the CBI administrator to keep on file and upload. | date your entries. 2) Meet with your the relevant sections of this form (please completion to the CBI administrator littee meeting. This completed form |  |  |  |  |  |
|       | <b>Mentor:</b> Meet with your trainee before the thesis committee meeting  | to complete this form.  |  |  |  |  |  |
| (II)  | <ul><li>(II) With respect to thesis project and general professional developm<br/>following inquiries using just a few sentences for each</li><li>(A) Trainee:</li></ul>   | ent, please respond to the  |  |  |  |  |  |
|       | Your Project What is the long-term goal of your project?   |   |  |  |  |  |  |
|       | Briefly describe the most significant scientific and professional accom  | plishment(s) completed this year.   |  |  |  |  |  |
|       | What are your professional and research goals for the next year?   |   |  |  |  |  |  |
|       | How will you achieve these goals and what resources are necessary fo   | or success?   |  |  |  |  |  |

# Individual Development Plan – Advanced Student Report

| Performance Identify an activity in which you need to improve and an activity in which you excel.   |
|---|
| Is there a way that CBI can help you (or could have helped you) strengthen those areas?   |
| ☐ I understand that my thesis committee is available to discuss my research goals and progress, as well as any problems or concerns (third year and beyond) |
| (B) Mentor:   |
| Research How do the research goals of the trainee fit into the theme of our laboratory?   |
| Identify an activity in which the trainee excels.   |
| Identify an activity in which the trainee should improve.   |
| ☐ The student's IDP self-evaluation (from <a href="http://myidp.sciencecareers.org">http://myidp.sciencecareers.org</a> ) was reviewed and discussed.       |

# Individual Development Plan – Advanced Student Report

| Additional Comments:  |       |
|---|-------|
| Student Comments –  |       |
| Advisor Comments —  |       |
| We certify that we have met to discuss the above statements. This document is not measure for grading. It is a guide of reference to assist in the development of the of the student and advisor. |       |
| Signed:(Student)  | Date: |
| Signed:(Advisor)  | Date: |

## **VIII. GBO EVALUATION**

## Homewood Graduate Board Oral Examination for the Ph.D. Degree

To Be Completed by the Chair in consultation with the committee:

| Range from 1 = below, 3 = meet                             | s, 5 =  | exceed | s expec | tations; | NA=n | ot assessed |  |
|--|---|--------|---------|----------|------|-------------|--|
| Thesis Proposal and related research                       |   |        |         |          |      |             |  |
| Organization and clarity of written research proposal      | 1   | 2      | 3       | 4        | 5    | NA          |  |
| Described experiments to test hypotheses                   | 1   | 2      | 3       | 4        | 5    | NA          |  |
| Cognizant of safety protocols and material authentication  | 1   | 2      | 3       | 4        | 5    | NA          |  |
| Experimental strategy (e.g., proper control, alternatives) | 1   | 2      | 3       | 4        | 5    | NA          |  |
| Critical evaluation of the literature                      | 1   | 2      | 3       | 4        | 5    | NA          |  |
| Course materials and broader scientific knowledge          | Course materials and broader scientific knowledge |        |         |          |      |             |  |
| Chemical knowledge   | 1   | 2      | 3       | 4        | 5    | NA          |  |
| Molecular Biology/Biochemistry knowledge                   | 1   | 2      | 3       | 4        | 5    | NA          |  |
| Chemical Biology knowledge and application                 | 1   | 2      | 3       | 4        | 5    | NA          |  |
| Analyze complex question and hypothetical situation        | 1   | 2      | 3       | 4        | 5    | NA          |  |
| Breadth of scientific knowledge                            | 1   | 2      | 3       | 4        | 5    | NA          |  |

Please provide a brief summary of the student's performance as agreed upon by the committee.

List the areas/topics covered during the oral exam.

Strengths of GBO presentation and subsequent discussion

Weakness of GBO presentation and subsequent discussion

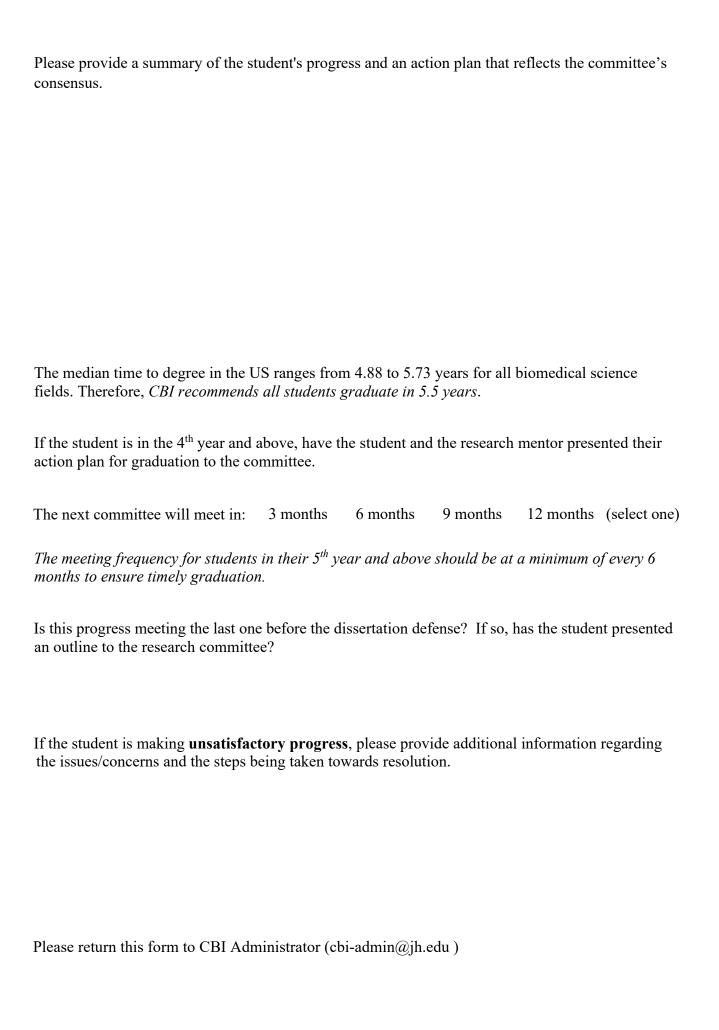
Recommendations (if any)



Chemistry-Biology Interface Program
Department of Chemistry
Zanvyl Krieger School of Arts and Sciences
3400 N. Charles Street
Baltimore MD 21218-2685

## **CBI THESIS COMMITTEE MEETING**

| Student: Date: _   |           |     |     |              |           |     | _   |     |      |     |  |
|--|-----------|-----|-----|--------------|-----------|-----|-----|-----|------|-----|--|
| Committee Members Present (please provide signatures)  |           |     |     |              |           |     |     |     |      |     |  |
| 1  |           |     |     |              |           |     |     |     |      |     |  |
| 2  |           |     |     |              |           |     |     |     |      |     |  |
| 3  |           |     |     |              |           |     |     |     |      |     |  |
| 4  |           |     |     |              |           |     |     |     |      |     |  |
| 5  |           |     |     |              |           |     |     |     |      |     |  |
| The student is making satisfactory / unsatisfactory  (confirm with ✓) The student's IDP self-evaluation  (confirm with ✓) The student has discussed career processed to the Committee Chair:  Range from: 1 (needs improvement) 3 (magestates) | n and rep | ort | was | disc<br>viso | usse<br>r | ed. | out | sta | ndiı | ng) |  |
| Clarity of research progress description   |           |     | 2   |              |           |     |     |     |      |     |  |
| Quality of figures, tables, schemes etc  |           | 1   |     | _            |           | 3   |     | 4   |      |     |  |
| Articulates current research goals   | 1         | 1   | 2   | 2            | 3         | 3   | 4   | 4   | 5    | 5   |  |
| Describes experimental/theoretical approach, design and con  | ntrols 1  | 1   | 2   | 2            | 3         | 3   | 4   | 4   | 5    | 5   |  |
| Plans for rigorous data collection and treatment   | 1         | 1   | 2   | 2            | 3         | 3   | 4   | 4   | 5    | 5   |  |
| Authenticates research materials   | 1         | 1   | 2   | 2            | 3         | 3   | 4   | 4   | 5    | 5   |  |
| Recognizes potential difficulties  | 1         | 1   | 2   | 2            | 3         | 3   | 4   | 4   | 5    | 5   |  |
| Considers alternative approaches   | 1         | 1   | 2   | 2            | 3         | 3   | 4   | 4   | 5    | 5   |  |
|  |           |     |     |              |           |     |     |     |      |     |  |



# X. PEER REVIEW OF RESEARCH PROPOSAL (prior to 2023 matriculation)

# **Chemistry-Biology Interface Program – Research Proposal Evaluation**

| Name of Presenter:  | _            |           | Date:     |               |          |
|---|--------------|-----------|-----------|---------------|----------|
| Please indicate your status: Faculty Po   | ost-doctoral | Stude     | ent       | Other         |          |
| Please provide specific examples and suggestions ito the CBI administrator (cbi-admin@jh.edu and/or |              |           | possible. | Please return | the comp |
| Content   | Excellent    | Very Good | Good      | Fair          | Poor     |
| Articulation of the topic/experimental goal   |              |           |           |               |          |
| Comments:   |              |           |           |               |          |
| Introduction and background   |              |           |           |               |          |
| Comments:   |              |           |           |               |          |
| Description of the experimental approach  |              |           |           |               |          |
| Comments:   |              |           |           |               |          |
| Clarity/interpretation of data  |              |           |           |               |          |
| Comments:   |              |           |           |               |          |
| Rationale for future directions (if applicable)   |              |           |           |               |          |
| Comments:   |              |           |           |               |          |
| Presentation  | Excellent    | Very Good | Good      | Fair          | Poor     |
| Overall organization  |              |           |           |               |          |
| Comments:   |              |           |           |               |          |
| Quality of slides   |              |           |           |               |          |
| Comments:   |              |           |           |               |          |
| Comments.   |              |           |           |               |          |
| Oral presentation   |              |           |           |               |          |

**Very Good** 

Good

Fair

Excellent

**Overall Evaluation:** 

**Poor** 

# XI. REQUEST FOR EXTENSION

| То:              | Dr. Steve Rokita<br>Director                              |         |
|------------------|---|---------|
| From:            | :   |         |
| Date:            |   |         |
| Subjec           | ct: Request for Extension – Graduate Board Oral Examinat  | tion    |
| Due to<br>limit: | o the following reason, I will not complete this academic |         |
|                  |   |         |
|                  |   |         |
|                  |   |         |
| l am re          | requesting an extension until of<br>semester year         |         |
| Endor            | rsed by:  |         |
|                  |   |         |
| Stude            | ent   | Advisor |
|                  |   |         |
| Appro            | oved by:  |         |
| Steve            | Rokita  |         |
| Requi            | irement Completed:<br>Date                                |         |
|                  | Date  |         |

# **XII. DEFENSE CHECKLIST**

Please return this form to the CBI administrator (<a href="mailto:cbi-admin@jh.edu">cbi-admin@jh.edu</a>)

## **DEFENSE CHECKLIST**

Chemistry-Biology Interface Program

| Check-in with your advisor and the CBI administrator (cbi-admin@jh.edu) to discuss conferral and financial implications and deadlines. Deadlines for degree completion and tuition grace periods are posted on the <a href="mailto:Graduate Affairs">Graduate Affairs</a> website.   |
|--|
| Form your committee  Your defense committee must include your advisor, a 2 <sup>nd</sup> reader who is a CBI faculty member, and an outside representative who is not a CBI faculty. The third representative could also be a CBI faculty but outside the major area of the candidate. The third member must be approved by the Program Director   |
| Set a date and time Provide the names of your committee members and date/time to the CBI administrator (cbi-admin@jh.edu)  |
| Complete the Application for Graduation online in SIS  |
| Complete the <u>Tuition Deferral Form</u> (if applicable)  |
| Your last day For payroll purposes, please notify the CBI administrator ( <a href="mailto:cbi-admin@jh.edu">cbi-admin@jh.edu</a> ) of your last day  |
| Reader's Letter and Department Form  Following your defense, your advisor writes the reader's letter and signs it along with the 2 <sup>nd</sup> reader. The department form is an internal form that we collect and keep in your academic file. Please provide copies of both to <a href="mailto:cbi-admin@jh.edu">cbi-admin@jh.edu</a> and the CBI administrator in Remsen 137)  |
| Submit in your thesis <u>electronically to the library</u> .   |
| Email the department and graduate board.  Graduate students are required to send an email to the CBI administrator and cc: Renee Eastwood (rseitz5@jhu.edu) with the following items:  • The email from the library confirming your dissertation has been approved  • The title of your dissertation typed in the body of the email with correct spelling and punctuation. Do not use all uppercase letters  • Include your exact degree, department, and expected conferral semester in the body of the email Students will not be placed on the degree candidate's listing for approval by the Graduate Board and President of the University until the email has been received by the appropriate Graduate Board deadline |
| Post-employment Provide the CBI administrator ( <a href="mailto:cbi-admin@jh.edu">cbi-admin@jh.edu</a> ) with your new employment and contact information  |
| PhD Hooding Ceremony  Mark your calendars for the PhD Hooding Ceremony. Information will be sent to all graduates prior to the event   |
| Program Evaluation (see last page of student handbook)   |

# **XII. PROGRAM EVALUATION**

# Chemistry-Biology Interface Program

| STUDENT:  |
|---|
| Year entering CBI Program:  |
| Thesis defense date:  |
| Please rate the CBI Program in the following areas. Use ratings $1-5$ (1 = strongly disagree, 5 = strongly agree).  |
| Your ratings should take into account how useful, applicable or appropriate you found each particular aspect of the CB program. Please comment where appropriate. |
| 1. The courses I took provided me with a strong foundation.   |
| 2. The CBI Program was rigorous.  |
| 3. The CBI Program provided suitable opportunities for me to learn about science at the chemistry-biology interface.  |
| 4. The CBI community was a supportive environment.  |
| 5. The CBI Program supported my professional development and prepared me for my future career.  |
| Additional Comments (feel free to use additional pages)   |