The Chemistry-Biology Interface Graduate Program

At Johns Hopkins University, our nation’s first research university, there is a long tradition of scientists conducting research at the interface of chemistry and biology. This tradition was formalized in 2005 with the establishment of the Chemistry-Biology Interface (CBI) Program. Our program is one of the few in the United States that confers a Ph.D. in Chemical Biology. We are also one of about 20 CBI Programs nation-wide that are supported by a National Institutes of Health (T32) Chemical Biology Training Grant.

“...I was drawn to the interdisciplinary research and study of the CBI program because I think the solutions to fundamental problems are not found within one discipline; instead, an interdisciplinary approach allows for multiple perspectives to unite under the common banner of scientific inquiry.” — JOSH MONTS, entered 2016

Contact
Chemistry-Biology Interface Graduate Program
Department of Chemistry
Johns Hopkins University
3400 N. Charles Street
Baltimore, MD 21218

Director
Professor Steven Rokita
Department of Chemistry
Phone: 410-516-5793
Fax: 410-516-8420
rokita@jhu.edu

Academic Administrator
Cassandra Steward
Phone: 410-516-7427
Fax: 410-516-8420
csiaadmissions@jhu.edu

Chemistry-Biology Interface (CBI) Graduate Program

www.cbi.jhu.edu
The CBI Curriculum

The CBI curriculum enables students to individu-
alize their programs to enjoy the desired balance 
of chemistry, biology and biophysics. CBI grad-
uates are trained to address diverse questions 
in chemistry and biology using a broad array of 
experimental methods. Coursework ensures that 
students have a strong foundation in chemistry 
in addition to ample knowledge of the biological 
sciences. The breadth of faculty research and 
teaching interests enables students to explore 
many aspects of the Chemistry-Biology Interface. 
Our curriculum, including writing an original re-
search proposal, is designed to help students de-
velop their analytical skills and the ability to think 
independently. Peer support and learning are also 
integral to the educational experience.

Choosing an Advisor

The CBI Program consists of 32 faculty mentors 
who hold primary appointments in one of 7 de-
partments distributed throughout the 4 Schools 
of Arts & Sciences, Engineering, Public Health 
and Medicine at Johns Hopkins. Students carry out 3 
research rotations during their first year to expand 
their research base and assist their selection of a 
thesis research advisor. Each research rotation is 10 weeks long. CBI students choose an advisor and 
begun thesis research in May of their first year.

Research Areas Include:

- Enzyme mechanisms, inhibitors, and metabolic pathways
- Synthetic methods and medicinal chemistry
- DNA replication, damage, and repair
- Molecular probes for interrogating biological processes
- Signal transduction and gene regulation
- RNA and protein folding
- Chemical tools for biotechnology
- Synthetic modeling of metalloenzymes
- Macromolecular structure determination by NMR and X-ray crystallography
- Protein engineering

Admissions

To apply to the CBI Program you will need to submit:

- an online application (http://grad.jhu.edu/apply/)
- undergraduate transcript(s)
- three (3) letters of recommendation
- official GRE scores for the General test

In addition, one of the following Subject Tests is 
strongly recommended: Biochemistry, Cell and 
Molecular Biology, Biology, or Chemistry.

Selected applicants will be invited to visit Johns 
Hopkins University for an interview at the pro-
gram’s expense. The CBI Program will arrange for 
meetings with faculty and students, as well as plan 
for time to explore the campus and Baltimore.

The CBI Program is committed to sustaining 
excellence by fostering a diverse community 
including underrepresented minority students 
and students from underserved backgrounds. 
The program particularly welcomes minority 
applicants and applicants with disabilities.

Financial Aid

Graduate students are guaranteed full tuition 
remission, a yearly stipend, and are provided with 
health insurance. The CBI stipend for 2019-2020 is $32,470 per year.

Want To Know More?

If you are interested in learning more about the 
CBI Program at Johns Hopkins University, 
please visit www.cbi.jhu.edu or contact us. The 
CBI contact information is provided on the back 
of this pamphlet.

About JHU

Johns Hopkins University was the first American 
institution to offer and emphasize graduate 
education. Throughout the years, the name 
Johns Hopkins has become world renowned and 
synonymous with scholarly excellence and cutting 
edge scientific research. Johns Hopkins has 
consistently ranked among the top universities 
by U.S. News and World Report.

CBI Curriculum

The CBI curriculum allows students to individu-
alize their programs to enjoy the desired balance 
of chemistry, biology and biophysics. CBI grad-
uates are trained to address diverse questions 
in chemistry and biology using a broad array of 
experimental methods. Coursework ensures that 
students have a strong foundation in chemistry 
in addition to ample knowledge of the biological 
sciences. The breadth of faculty research and 
teaching interests enables students to explore 
many aspects of the Chemistry-Biology Interface. 
Our curriculum, including writing an original re-
search proposal, is designed to help students de-
velop their analytical skills and the ability to think 
independently. Peer support and learning are also 
integral to the educational experience.

Choosing an Advisor

The CBI Program consists of 32 faculty mentors 
who hold primary appointments in one of 7 de-
partments distributed throughout the 4 Schools 
of Arts & Sciences, Engineering, Public Health 
and Medicine at Johns Hopkins. Students carry out 3 
research rotations during their first year to expand 
their research base and assist their selection of a 
thesis research advisor. Each research rotation is 10 weeks long. CBI students choose an advisor and 
begun thesis research in May of their first year.

Research Areas Include:

- Enzyme mechanisms, inhibitors, and metabolic pathways
- Synthetic methods and medicinal chemistry
- DNA replication, damage, and repair
- Molecular probes for interrogating biological processes
- Signal transduction and gene regulation
- RNA and protein folding
- Chemical tools for biotechnology
- Synthetic modeling of metalloenzymes
- Macromolecular structure determination by NMR and X-ray crystallography
- Protein engineering

Admissions

To apply to the CBI Program you will need to submit:

- an online application (http://grad.jhu.edu/apply/)
- undergraduate transcript(s)
- three (3) letters of recommendation
- official GRE scores for the General test

In addition, one of the following Subject Tests is 
strongly recommended: Biochemistry, Cell and 
Molecular Biology, Biology, or Chemistry.

Selected applicants will be invited to visit Johns 
Hopkins University for an interview at the pro-
gram’s expense. The CBI Program will arrange for 
meetings with faculty and students, as well as plan 
for time to explore the campus and Baltimore.

The CBI Program is committed to sustaining 
excellence by fostering a diverse community 
including underrepresented minority students 
and students from underserved backgrounds. 
The program particularly welcomes minority 
applicants and applicants with disabilities.

Financial Aid

Graduate students are guaranteed full tuition 
remission, a yearly stipend, and are provided with 
health insurance. The CBI stipend for 2019-2020 is $32,470 per year.

Want To Know More?

If you are interested in learning more about the 
CBI Program at Johns Hopkins University, 
please visit www.cbi.jhu.edu or contact us. The 
CBI contact information is provided on the back 
of this pamphlet.

About JHU

Johns Hopkins University was the first American 
institution to offer and emphasize graduate 
education. Throughout the years, the name 
Johns Hopkins has become world renowned and 
synonymous with scholarly excellence and cutting 
edge scientific research. Johns Hopkins has 
consistently ranked among the top universities 
by U.S. News and World Report.

Choosing an Advisor

The CBI Program consists of 32 faculty mentors 
who hold primary appointments in one of 7 de-
partments distributed throughout the 4 Schools 
of Arts & Sciences, Engineering, Public Health 
and Medicine at Johns Hopkins. Students carry out 3 
research rotations during their first year to expand 
their research base and assist their selection of a 
thesis research advisor. Each research rotation is 10 weeks long. CBI students choose an advisor and 
begun thesis research in May of their first year.

Research Areas Include:

- Enzyme mechanisms, inhibitors, and metabolic pathways
- Synthetic methods and medicinal chemistry
- DNA replication, damage, and repair
- Molecular probes for interrogating biological processes
- Signal transduction and gene regulation
- RNA and protein folding
- Chemical tools for biotechnology
- Synthetic modeling of metalloenzymes
- Macromolecular structure determination by NMR and X-ray crystallography
- Protein engineering

Admissions

To apply to the CBI Program you will need to submit:

- an online application (http://grad.jhu.edu/apply/)
- undergraduate transcript(s)
- three (3) letters of recommendation
- official GRE scores for the General test

In addition, one of the following Subject Tests is 
strongly recommended: Biochemistry, Cell and 
Molecular Biology, Biology, or Chemistry.

Selected applicants will be invited to visit Johns 
Hopkins University for an interview at the pro-
gram’s expense. The CBI Program will arrange for 
meetings with faculty and students, as well as plan 
for time to explore the campus and Baltimore.

The CBI Program is committed to sustaining 
excellence by fostering a diverse community 
including underrepresented minority students 
and students from underserved backgrounds. 
The program particularly welcomes minority 
applicants and applicants with disabilities.

Financial Aid

Graduate students are guaranteed full tuition 
remission, a yearly stipend, and are provided with 
health insurance. The CBI stipend for 2019-2020 is $32,470 per year.

Want To Know More?

If you are interested in learning more about the 
CBI Program at Johns Hopkins University, 
please visit www.cbi.jhu.edu or contact us. The 
CBI contact information is provided on the back 
of this pamphlet.

About JHU

Johns Hopkins University was the first American 
institution to offer and emphasize graduate 
education. Throughout the years, the name 
Johns Hopkins has become world renowned and 
synonymous with scholarly excellence and cutting 
edge scientific research. Johns Hopkins has 
consistently ranked among the top universities 
by U.S. News and World Report.