



BIOLOGICAL SCIENCES GRADUATE PROGRAM

The Biological Sciences Graduate Program
Application Guide

THE BISI GRADUATE PROGRAM

The BISI program is an interdepartmental, interdisciplinary training program leading to a Ph.D. in Biological Sciences. If you have any questions or concerns, please contact us at:

bisi@umd.edu | 301-405-6905

Overview of the Biological Sciences Graduate Program

The Biological Sciences Graduate Program (BISI) is an interdepartmental and interdisciplinary doctoral program that was established in 2009 and includes four areas of concentration:

[Behavior, Ecology, Evolution, and Systematics \(BEES\)](#)

- Behavioral Ecology
- Neuroethology
- Multidisciplinary ecology
- Genomics

[Computational Biology, Bioinformatics, and Genomics \(CBBG\)](#)

- Integration and analysis of complex data
- Genome assembly
- Proteomics
- Interaction networks

[Molecular and Cellular Biology \(MOCB\)](#)

- Molecular Genetics
- Cell Biology
- Pathogen Interactions
- Virology

[Physiological Systems \(PSYS\)](#)

- Biomechanics
- Endocrinology
- Biophysics
- Plant physiology

BISI is the primary graduate program for the Department of Biology (BIOL) and the Department of Cell Biology & Molecular Genetics (CBMG). If you are interested in working with faculty in these departments it is recommended you apply through BISI.

Admissions Guidelines & Criteria

The admissions committee will review your entire application to assess how your academic background, research experiences, and interests fit with the opportunities provided by our program.

In general, successful applicants have:

- Earned a Baccalaureate degree from an accredited college or university with at least a 3.0 grade point average (on a 4.0 scale)
- At least one year of research experience
- TOEFL scores of 100 or greater (international applicants only)
- Strong letters of recommendation from people that can speak of their academic and research strengths
- GRE scores in the 70th percentile or higher and analytical scores of at least 4.0
- A demonstrated academic focus in a relevant or related scientific field

These characteristics describe many successful BISI applicants, however they are not fixed metrics.

Applying to BISI: **DEADLINE - DECEMBER 1ST**

All materials are due by **December 1st** and application reviews begin promptly following the deadline.

Our Admissions Timeline:

- *December - January:* Committee reviews applications
- *Mid-January - Early February:* Applicant Interviews

- *March - April 15th: Admission Decisions*

Applications are submitted through the online UMD [Graduate Application](#); the BISI application consists of:

- 2 Short Essays ([Statement of Purpose](#) and [Supplemental Research Statement](#))
- CV/Resume
- Unofficial transcripts
- 3 Letters of Recommendation
- Test Scores (*UMD Code: 5814*)
 - GRE Scores (general)
 - TOEFL/IELTS scores (international applicants)
- Identification of Areas of Interest.
- Identification of 3 to 5 BISI faculty whose research is of interest to you and with whom you would like to work.
- Listing of Presentations and Publications.
- Non-refundable application fee (\$75)

Please do not contact the BISI program office asking if you will be invited to interview or requesting an update on your decision during the review period.

Funding

Financial Support: Full support for all students accepted into the BISI program is available for up to 5 years (as long as the student maintains satisfactory progress in the program) through a combination of teaching/research assistantships and fellowships. Support includes tuition remission for up to 10 credits, access to health benefits, and a competitive stipend.

BISI students are assigned to Teaching or Research Graduate Assistantships based on availability and funding needs. Students may also apply for other Graduate Assistantships on campus, but are not expected to find their own position.

During the admissions process all applicants are automatically considered for the Flagship and Dean's [fellowships](#) awarded by the Graduate School and the BISI program. These are extremely competitive awards and are not available to all admitted students.

Visit the [Office of Student Financial Aid's website](#) for information on other sources of funding and the Graduate School's [Financial Literacy](#) website for guidance on managing your finances.

Faculty of Interest

Once a student is accepted to the BISI program they begin the process of identifying an advisor and joining their research lab. Each concentration area has a specific process for choosing your advisor.

Applicants to **BEES and PSYS are expected to reach out to faculty** they wish to work with during the application process and to indicate on their application which individuals they have spoken to.

Applicants to **CBBG and MOCB should not contact faculty members directly** during the application process.

All BISI faculty are members of a department; once a student joins a research lab, the student becomes a member of their advisor's department while simultaneously staying part of the BISI Graduate Program.

Applicants are expected to indicate faculty of interest on their application. The options for research and advising if you are accepted are not limited to the faculty you identify on the application; however, they help the admissions committee evaluate how your interests fit with research areas that are recruiting new students.

Off Campus Connections

The University of Maryland has strong connections with many local institutions and some students take advantage of these connections to do rotations with them or to join an off-campus research lab. If a student chooses to join an off-campus lab they will choose an on-campus advisor to work with them and their off-campus PI will be considered their co-advisor.

In the BEES concentration area students have worked with researchers at the Smithsonian Institutes including the National Zoo, the Smithsonian Conservation Biology Institute, and the National Museum of Natural History. Students can also take advantage of our connections with SESYNC and UMCES.

Students from CBBG, MOCB, and PSYS have all worked with researchers at the National Institutes of Health, we currently have connections to National Cancer Institute (NCI), National Institute of Child Health and Human Development (NICHD), National Institute of Neurological Disorders and Strokes (NINDS), National Institute of Allergy and Infectious Diseases (NIAID) and National Institute of Mental Health (NIMH). Students have also worked with researchers at the FDA and USDA.

Information for International Applicants

The University of Maryland is dedicated to maintaining a vibrant international graduate student community. The office of [International Students and Scholars Services \(ISSS\)](#) is a valuable resource of information and assistance for prospective and current international students. International applicants are encouraged to explore the services they offer and contact them with related questions.

Admitted international students must provide any additional documentation requested by ISSS in order to apply for the appropriate visa approvals for study at the University of Maryland. Please see the [Graduate Admissions Process for International applicants](#) for more information.

The Biological Sciences Graduate Program does not participate in the provisional program for applicants in need of intensive English education. For information on the language proficiency requirement visit the [Graduate School Language Proficiency website](#).