

Biomedical Graduate Study FAQs

How do I begin the program?

Once you're accepted in our graduate programs, the real fun begins. During the first year, you will do lab rotations with research faculty to help you choose a research mentor and the PhD program that fits you best. Most PhD students begin in July so they can complete a research rotation before classes begin.

In the fall, most BSTP students take the Coordinated Curriculum in Cell and Molecular Biology (C3MB). Students with strong quantitative skills in physics or math but limited biology exposure may be guided instead to Cell Physiology courses (including PHOL 432, PHOL 456). Students in other programs will have specific coursework in those areas.

In the BSTP, you'll complete a minimum of three rotations of 4-6 weeks, while students in other admissions programs have different rotation requirements. During each research rotation, you'll spend at least 20 hours per week in the lab, acquiring new techniques, learning about the lab's research areas, and interacting with the other members of the lab. You'll also do everything a student in the lab would do, including attending journal clubs, research seminars, and lab meetings. This allows you to find the research and environment that best suits your interests.

How do you budget your time in the first semester?

The first semester is intense, because you'll be taking courses, doing research rotations, and choosing an advisor. We give you lots of support to help you through the process. You'll have a faculty advisor who is a director of one of our graduate programs. You'll also build a network of first year students and get to know senior students through the BGSO and MGSO.

How do I choose a PI?

The most important factor is finding a lab that's doing the science that excites you. You'll also want to make sure you can communicate with PI; some students like frequent help and others like to be more independent. You will also need to look at the dynamics of the lab because you'll learn a lot and collaborate with other students, postdocs, and research assistants in the lab. Your rotations will give you information about these issues and you'll have lots of advice from your faculty advisor.

To learn about the faculty's research, you can use the Faculty page on the BSTP web site or check the Programs page on the Graduate Education site. You can also read the faculty's publications, starting with PubMed. This will get you off to a great start.

When you join a PhD program

After you've completed rotations, you'll choose a PI and join a PhD program. Our PhD programs have lots of people to welcome students and orient them to the program, including Graduate Program Directors, the Graduate Studies Administrative Coordinators, and more senior graduate students. They will help you understand the course requirements, exams and other activities in the program, and help you learn your way around.

Do graduate students work as teaching assistants? How do I gain teaching experience?

The biomedical PhD programs do not require that you teach (except for BME). If you want to gain teaching experience, you can volunteer as a TA in the Biology Department once your doctoral work is well underway.

How many years does it take to finish a PhD?

On average, it requires ~5.5 years to complete a degree. Most of the time is spent completing the thesis, so working hard and efficiently will help you graduate on time. Scholarly peer-reviewed publications are required for graduation. Our recent graduates average 5.5 publications, with about 3 papers as first author.

How competitive is the environment?

CWRU consistently ranks in the top twenty-five research medical schools, which places us with some very accomplished peers. We are proud to have earned dozens of training grants that fund our pre- and post-doctoral trainees.

What careers are ahead?

A majority of PhD earners go into a postdoctoral position at top research institutions (or complete a residency, if they are MSTP) and then look for permanent positions after that. Our alumni work as faculty members at medical schools and liberal arts colleges, in biotech, in government positions, as science writers and other careers that require a PhD.

How do I learn professional skills?

During graduate school, you will learn a variety of research skills, acquire a fund of knowledge in a specialized area, and develop professional communication skills. Go to meetings, publish, give journal clubs,

You'll write an NIH-like grant proposal as your qualifying examination. This gives you practice in formulating a research project and writing a compelling research proposal.

You should plan to apply for a graduate fellowship from an outside granting agency. Seminars about graduate fellowships are offered several times a year, and samples are available in the Graduate Education Office and in specific programs.

Programs that provide information about careers in undergraduate colleges, small biotech/industry, large pharmaceutical companies, and other areas are offered several times a year through individual programs, the BGSO, and the Graduate Education Office. Many additional competencies (please see the National Postdoc Competencies) are addressed in the monthly Professional Skills Program designed for postdocs, that is also open to graduate students.

What are the resources for student support?

There are lots of resources to help graduate students. Before you choose a lab, your academic advisor and the head of graduate program are invaluable sources of advice. For

coursework issues, you can talk to instructors and we can arrange tutoring sessions with senior graduate students. After you choose a lab, you'll learn from your thesis advisor, other members of the lab, other students in your program, and the graduate program director. The university also has lots of resources to help students. The ESS office provides support with study skills and the Counseling Service is available 24/7 for help with psychological issues.

What about diversity in Cleveland and at CWRU?

Cleveland's neighborhoods (and restaurants) reflect the people from many countries and cultures who settled in the city, including Indian, Arabic, Chinese, Puerto Rican, and Russian, to name a few. Please see http://www.cleveland.com/goingout/index.ssf/2009/02/clevelands_cultural_diversity.html

International students make up 10-15% of the students in our biomedical graduate programs and 12% of our PhD students come from underrepresented minority groups. Many students participate in the community and activities in the Minority Graduate Student Organization in the School of Medicine.

How much is the stipend and how far does it go in Cleveland?

Students receive \$25,000 per year, which allows you to live comfortably in Cleveland. There are many discounts available through CWRU Access Services (like bus passes, discounted cable service, etc). The program also pays for your health insurance.

The cost of living in Cleveland is low. Rent depends on how close you are to campus and the area in which you want to live. There are rents for one bedroom apartments range from \$300 to \$900/month and rents for two bedrooms are \$500-\$1400.

Where do students live?

Many grad students live in the Coventry neighborhood of Cleveland Heights, which is a 20 minute walk from campus. This neighborhood has a supermarket as well as many restaurants and bars. Another popular neighborhood is Little Italy (10 minute walk from campus). Some students live in Shaker Square, which is a 10 minute bus ride from campus.

What about public transportation?

The University runs shuttle buses (free for students) that have regular routes around campus. The Cleveland's public transport system (RTA) includes a rapid transit train that stops on campus, providing easy access to many popular destinations (i.e. airport, downtown, West Side Market). RTA also has a bus system that serves the city and suburbs.

What's the weather like in Cleveland?

Cleveland is typical of much of the central United States, with pleasant summers and snowy winters. July is the warmest month (average high of 82°), and January is the coldest (average high of 34°). Warm clothing is a must for getting through the winter. Many find the cool, colorful fall season one of their favorite times of the year.