

Overview: Getting involved in biology-related research

This overview of getting involved in biology-related research at the University of Pittsburgh covers:

1. [Find independent research projects](#)
2. [Contact possible research mentors](#)
3. [Signing up for research for credit](#)

1. **Find independent research that interests you**

- a. **First Experiences in Research (FE-R) matching program.** Students can choose from a list of researchers looking for undergraduate research assistants and try to get matched. Applications are in the fall only; research begins in the spring (this also includes enrollment in a 1 credit course that discusses research and culminates in a poster session). This program is not limited to biology, but includes the natural sciences, social sciences, and humanities.
- b. **Network.** Talk to your instructors, TAs, UTAs, friends, neighbors, cousins and see if anyone:
 - i. is involved in research and then → ask how they got started
 - ii. knows of any labs that are looking for undergrad researchers and then → reach out (see #2)
 - iii. knows of any labs doing research that interests you and then → reach out (see #2)
- c. **Search for research that interests you!**
 - i. Think about which areas in biology are most interesting to you. You can think about your favorite topics from a class, an interesting article you read, or a personal connection from your own life.
 - ii. Look for research that matches your interest – you can check research departments at Pitt that overlap with your topic area or just search for key words.
 - a) **Check departmental websites** to find interesting projects and then email PIs (see #2 below)
 - [Department of Biological Sciences](#)
 - [Center for Neuroscience](#)
 - [Department of Microbiology & Molecular Genetics \(SoM\)](#)
 - [Department of Developmental Biology \(SoM\)](#)
 - [Computational and Systems Biology \(SoM\)](#)
 - [Department of Cell Biology \(SoM\)](#)
 - [Division of Infectious Diseases \(SoM\)](#)
 - [School of Medicine list of all departments](#)
 - [Magee Women's Research Institute list of researchers](#)
 - [Human Genetics Department in Public Health](#)
 - [Epidemiology in Public Health](#)
 - [Human genetics in Public Health](#)
 - b) **Search on the internet!** You can use google or an organized research database such as pivot (<https://pivot.proquest.com/profiles/main>) that lists all faculty doing research across Pitt and UPMC
- d. **Look for paid research positions.** Pitt's Talent Center lists student research assistant positions. These are often prep positions (and not so much independent research), but they usually require little-to-no research experience and can be a great way to get your foot into the door and build experience. Use these steps as a guide:
 1. Go to www.join.pitt.edu/
 2. Click on "Find Positions" and then on "Students".
 3. Browse through job postings or enter keywords such as "Research" or "Lab".
 4. Apply for the job directly.

2. Reach out to potential research mentors

For most professors, the best way to contact them is by e-mail. Professors get many emails from students looking to join their labs. You want to make sure that your email is personalized and succinct. We suggest you include:

- a. Who you are (major, year, career interests)
- b. **Why you are interested in this specific research** project (what's your connection?)
- c. Your availability – weekly (hours/week) and long-term (how many more semesters you have); remember that most labs would expect students to invest at least 5-10 hr/week, and that large chunks of time (e.g., 2-3 hours in 1 day) are more conducive to research than going into the lab 1 hour per day
- d. An attached, updated, proofread resume (or be sure to say that you can send if requested)
- e. Ask if the professor would be interested in meeting to talk about the possibility of you working in their lab

** Note that professors can get many requests for research positions**

- If you do not hear back from one particular lab, do not be discouraged
- Read the professor's lab web site(s) before contacting them. Some may even have guidance for how to contact them regarding research positions (Professors will often have both department profile web sites as well as personal lab web sites; useful information is more likely on the latter)
- We recommend that you start by contacting 6-8 labs to increase your chances of matching
- Plan ahead: If you would like to start research in the fall semester, do not wait until the fall to contact professors; instead, start making contacts in the spring or summer for these positions
- See email examples on last page of this document

3. Signing up for bio research for credit

Students can do research as a paid job, for credits, or occasionally on a volunteer-basis. This section describes signing up for research for BIOSC credit. These credits require departmental consent and thus require that the student complete a contract with their mentor(s) before being enrolled. Research credits are for S/NC credit only and do not count toward meeting requirements of any Department of Biological Sciences major.

All forms are available as fillable PDFs here: <https://www.biology.pitt.edu/undergraduate/forms>

More info can be found here: <https://www.biology.pitt.edu/undergraduate/undergraduate-research-internships>

- a. Choosing the correct enrollment form:
 - i. **BIOSC 1901: Independent Study.** For students choosing to do a biology-related volunteer internships at a company or just beginning research in a lab where they will be learning the techniques and the project. This form can be used for working on projects inside or outside the Department of Biological Sciences.
 - ii. **BIOSC 1903: Undergraduate Research.** For students volunteering in a research lab and participating in an independent project. Students complete different forms for doing research inside the bio department (INTERNAL) or in a lab outside of the bio department (EXTERNAL).
 - iii. **BIOSC 1904: Undergraduate Honors Research.** Only for students who have been accepted into the BIOSC Departmental honors program.
- b. Co-sponsorship: for research in a lab outside of the department of Biological Sciences (EXTERNAL), students will need a faculty member from the Department of Biological Sciences to oversee their research and assign their S/NC grade at the end of the term. Students may choose any BIOSC faculty member for this role and it is recommended that students use this as an opportunity to build a relationship with one of their instructors.
- c. Submit the enrollment form: once you have completed the correct form and have all required signatures, you need to submit this form to the biology advisors who will enroll you in the credits. Forms must be submitted before the end of the add/drop period.

Be sure to get your forms completed and turned in before the end of add/drop

Sample emails to professors...good, bad, & ugly examples

THE GOOD:

Subject line: Inquiry – undergrad research for [Fall/Spring] semester

Dear Dr. _____,

My name is Chappell Roan, and I am interested in joining your research lab as volunteer for the [Fall/Spring] semester. I am a sophomore Biological Sciences major and am considering a career in [fill in the blank].

After learning about your work on [mention a specific project, topic, or area of interest related to the professor's research], I became especially interested in the opportunity to contribute and learn more about [mention a relevant skill, technique, or concept you hope to gain experience with]. I am particularly drawn to [briefly explain what aspect of the research excites you and why it aligns with your interests, career goals, or academic pursuits].

I would love the opportunity to discuss the possibility of volunteering in your lab and learn more about your current projects. I anticipate being available about [XX] hours per week during [Fall/Spring] semester. My resume is attached. Please let me know if you would be available to meet or if there are any application materials I should prepare. Thank you for your time and consideration. I look forward to hearing from you.

Thank you,
Chappell Roan

THE BAD:

Subject: <research>

Dear Dr. _____,

I am interested in working in your lab. I am a sophomore Biological Sciences major who is excited to get involved in research. As a future doctor, I realize that learning how to do research is an essential step to understanding how diseases work. I look forward to hearing from you.

Thank you,
Chappell Roan

THE UGLY:

Subject: <no subject>

Hey,

I'm a Pitt student and I'm tryna get some lab experience next semester. Plz send me info about your research. Or, can meet u tomorrow between 10-11. I really need this so I can apply to my graduate program.

Chappell