

# Getting Involved in Research

Whether you plan on continuing your education in graduate or professional school, or plan to enter the job market, performing independent research can help get you there. Getting involved in research gives you the opportunity to learn valuable data collection and analysis skills, gain experience guiding your own work, and contribute to a larger project. Just like working for a large company, when performing research your work might have an impact on the success of an entire laboratory.

Not only is performing research valuable as a way to prepare you for your future career, but it also demonstrates that you possess skills valued by both universities and employers. The fact that you have performed independent research indicates that you are self-motivated, organized and focused. More importantly, you have developed skills in problem identification and shown the initiative to get involved in finding a solution.

## Finding a Research Position

Like trying to find the right job or internship, it is important to find a research position that is truly a good fit for you. This means finding a project that sparks your interest, finding a laboratory that fits your personality, and finding a professor who fits your needs. What will your role be? Will the position allow you to develop particular skills that are important for your future? Are you someone who prefers more supervision or would you rather have a supervisor who allows you to work independently with little guidance? Is your research supervisor able to act as a mentor? Will you need to travel off campus to perform research in the surrounding area? These are some of the questions you need to consider when trying to find an opportunity that suits your needs and interests.

Below is a list of resources that may assist you in finding a research position. *Keep in mind that contacting professors directly is often the best strategy for finding a position.* Spend time browsing department and faculty websites for research topics that interest you, then go straight to the source. Most faculty members are not actively searching for another research assistant, but they are usually open to the possibility.

Start your search by talking to upper-classmen and graduate students you know who are conducting research. They may be able to give you names of professors who use

undergraduates in their lab. Speak with the director of undergraduate studies in your department and your advisor. They will be familiar with their colleagues' research and may be able to refer you.

### ***Online Resources***

- *Department and Faculty Websites* On department homepages, there are links to individual faculty members. These websites typically have contact information, descriptions of research projects, and links to recent publications. If you find a project that interests you, contact the professor and make an appointment to discuss the research.
- *J-Connect*. Your J-Connect account can help you find research opportunities in several ways. Housed in J-Connect is an up-to-date internship database containing over 11,000 internship opportunities, many of which are research related. Unlike other databases, your J-Connect account gives you access to research opportunities outside of the Hopkins community, all over the United States and even in other countries. In addition to the internships database, opportunities can often be found through the Career Center's On-Campus Recruiting program.
- *Arts and Sciences*: [www.krieger.jhu.edu](http://www.krieger.jhu.edu) By clicking on "Research Opportunities", you will find links to information on specific research programs and funding including fellowships, grants, and scholarships for the Zanvyl Krieger School of Arts & Sciences.
- *Engineering*: [engineering.jhu.edu/research](http://engineering.jhu.edu/research) Here you will find links to databases for research opportunities in several different engineering fields, links to research initiatives and departments, and links to several centers in the area that also offer opportunities to students in the Whiting School of Engineering.

### ***Meeting with Faculty about Research***

When you meet with a faculty member, you will discuss his/ her research and where the project is headed. Familiarize yourself in advance with the faculty member's research interests and spend some time thinking about qualities that you possess, such as computer programming languages or laboratory skills, which may be useful for the project. Remember to bring a resume and any supplemental materials just in case the professor would like to know more about your qualifications. Be prepared to discuss the amount of you can devote to research. It's important to faculty that you are able to consistently complete your work throughout the semester. Have some questions ready in your mind. Use the library's resources at [www.library.jhu.edu](http://www.library.jhu.edu) to find and download some of the

researcher's recent publications.

If you are still interested in the project after your discussion and think the supervisor is a good fit for your needs, ask if there are any open spaces in the lab. If the professor does not have any openings, ask him/her if he/she can recommend any colleagues and continue on with your search.

### How the Career Center Can Help

The Career Center offers a vast range of workshops, as well as staff and resources that can get you started on the right path to getting the research position of your choice.

- **Resumes** It is a good idea to have a resume with you in case the professor / researcher asks about your qualifications. Whether you're writing a resume for the first time, or you just want to make it better, the Career Center can help. We offer resume workshops throughout the semester, a library with several resume resources, and peer assistants and career counselors who are also available to review your resume.
- **Interviews** Some of the positions you find may require a formal interview while others are a more casual meeting with a professor on campus. In either case the Career Center has a wide range of resources to help you make the best impression. The Career Center Library has books on interviewing tips and common questions. Additionally, we offer workshops throughout the semester.
- **Decisions** You may discover more than one opportunity you are interested in, or might get accepted into two or more opportunities. If you're not sure which one is best for you, make an appointment with one of the career counselors, and she can help you focus on what's important to help you make the right decision.

### How to Make the Most of Your Research Experience

Your success in finding a research position that fits your needs is just the beginning. Once you've started your research, it is extremely important that you take advantage of everything this opportunity has to offer you. The first step to a valuable research experience is spending enough time in the lab to make sure that your project is completed on time. Professors know how busy most students are, but the more time you spend in the lab, the more the professor will notice your dedication to the project. If you are successful with your project, the professor may consider involving you in larger projects that could lead to publication.

- Not only is dedication a necessary part of success, but it will also give you the opportunity to get more acquainted with the professor. While you are in the lab, make an effort to keep the professor updated on your progress, continue to ask questions as you learn more about the overall goals of the lab, and spend some time trying to get to know the professor on a personal level. Make a point to talk to other undergraduate and graduate students in the lab that might be able to help you with your project or help you develop skills. Finally, networking is key! Make every effort to meet as many people in the department as you can.

## FINDING A RESEARCH POSITION - CHECKLIST

### **Decide whether or not to conduct research**

- Talk to upperclassmen, graduate students, and professors to find out more about what conducting research entails.
- Review your schedule to determine if you have free time to conduct research; take into consideration the time you spend with your schoolwork and extracurricular activities.
- Begin to think about the logistics of getting involved in research such as whether or not you will be able to leave campus, will it be for pay or for credit, etc.

### **Determine your interests**

- Think about what topics in your department interest you; consider classes you have taken that you found intriguing and the possible research topics that supplement those classes.

### **Search for positions**

- Use the search engines and databases listed to get a sense of the kinds of positions that are available.
- Use the departmental websites to develop a general list of faculty whose research projects seem interesting and have potential.
- Before applying to any programs or contacting any professors, learn more about their projects by reading their research summaries and abstracts of their recent publications.

### **Apply for positions**

- Prepare your resume. The Career Center has library books, handouts with information about resumes, workshops, and career counselors and peer assistants who can review your resume.
- Prepare for your interview. Whether it is a formal interview or a casual meeting with a professor you always want to be prepared. The Career Center has numerous

resources as well as workshops and mock interviews that can help you hone your skills. Think over possible questions that might come up during your meeting and be sure to bring any supporting documents that might be helpful (i.e. transcripts, written reports, etc.)

### **Decide on a position**

- When offered a position, you may accept right away or ask for time to consider the offer. If you are having trouble deciding, make an appointment with a career counselor who can help you decide which opportunity is the most appropriate to your interests, skills, and goals.