

Preparing Yourself for Undergraduate Research!



- **Don't rush into it – You have lots of time to get involved.**

Wait until you find your passion

Concentrate on your course work in the early years. Good grades will help you get into a lab!

Take appropriate classes so you know the theory behind the work done in the laboratory

Wait until you have enough time in your schedule to spend 10-15 hours a week on your project.

- **Talk to lots of people and listen to their advice:**

Faculty advisor and student advisors

Professors in classes

Grad and Undergrad TA's

Other students who do research-including many of the student advisors in the BioCenter

Check at the BioCenter for research notebooks

- **Do some research and generate a list of professors whose work you are interested in.**

Consider waiting until you have a few defined interests to follow. Comments like "I am interested in molecular biology" or "I want to do clinical research" won't get you too far. They are way too general. The faculty here are interested in one thing-what they work on! They will be thrilled to talk to you about that topic if you have some passion and enthusiasm about it.

Get on the web at www.biology.cornell.edu or visit the BioCenter and check out the research interests of the faculty. Read or at least look at a reference from their lab. Look at their web pages.

Find out what it is like to work in the lab. Check the BioCenter and your friends for undergrad comments about the lab. Ask the professor to let you visit the lab or get email addresses of undergrads that work with her/him.

- **Contact the professors on your list**

Many labs are popular places (labs in Biotech building, Neurobiology and Behavior) so start early. In many cases you should contact the professor the semester before you want to do research.

In most cases, send the professors an email telling them something about yourself and why their research is interesting to you. If your grades are excellent-tell them that. If you are thinking about graduate school, tell them that. If you have lab or field experience in their area - tell them that. You have to sell yourself to the faculty and encourage them to talk to you.

- **Ask to make an appointment to talk with them about their research.**

If you don't hear from the faculty member in 3-5 days (not including the weekend), give them a phone call and politely tell them that you are the student that sent the email and that you are VERY interested in talking to them.

Be politely persistent! It will show that you have the commitment and energy to work hard on their research

- **Options to Consider:**

What are you doing with your summer vacations?

Think about doing research here at Cornell (Hughes Program) or at another research institution (See BioCenter Summer Opportunities Notebook)

Do you want to volunteer in the lab, or get some academic credit (BioG299/BioG499)?

How do you get honors in biology?

- **Things to Keep in Mind**

Research takes time. Don't get involved until you comfortably can spend 10-15 hours a week in the lab. Many senior students spend over 20 hours a week doing their work.

Research experience will not make up for poor grades when you apply to medical school or graduate school. Research is essential if you are applying for graduate schools, but again you will need good grades to be considered. Research is not **required** for medical or veterinary school, despite the rumors that you hear! It will be helpful and will give you something to talk about in your interview, but only if you can talk intelligently about your project..

You will need three letters of recommendation to apply to medical, veterinary, or graduate school. Doing a good job with your research will help provide you with some of these letters.

The term "independent research" is confusing to both students and faculty. At Cornell, the term independent means that a student has their own project to work on and think about in collaboration with a faculty member, graduate student, post-doc, technician, or other undergraduates. It does not mean that you have to have an idea in mind to approach a faculty member.

Few undergraduates at Cornell get paid to do research. In most cases, paid positions are assistant or lab support positions. There is nothing wrong with starting there and moving up into your own project, but don't expect to find a lot of jobs doing research.

If you need any help, come to the BioCenter!

Most of the biologists at Cornell are listed in the following places

Animal Science	http://www.ansci.cornell.edu/
Chemistry	http://www.chem.cornell.edu/faculty/index.asp
Office of Undergraduate Biology	http://www.biology.cornell.edu
Entomology	http://www.entomology.cornell.edu/Faculty_Staff/
Food Science	http://foodscience.cornell.edu/faclist.htm
Nutritional Sciences	http://www.nutrition.cornell.edu/dns7_facultybyprogram.html
Psychology	http://comp9.psych.cornell.edu/Research
Veterinary College	http://www.vet.cornell.edu/OGE/cbs/facultyresearch.htm
IRRIS	http://irris.cs.cornell.edu