

## Finding an Undergraduate Research Experience: A Stepping Stone to a Career in Science

One of the lessons you will quickly learn is that to be successful in undergraduate research, you must know much more than a large body of scientific facts. You will need a variety of both technical and non-technical skills including:

- first-class research techniques to produce accurate and precise measurements worthy of data analysis and interpretation;
- good team building skills as science today is usually accomplished by teams of experts rather than individual investigators working independently;
- excellent time management skills to balance the many competing demands for your time including courses, part-time jobs, undergraduate research, and social activities; and
- strong communications skills - both oral and written - in order to communicate your science clearly and persuasively to your peers, the greater scientific community, and the public.

### Find out about the Opportunities Available to You!!

- Government and private agencies and colleges provide funding for students to pursue undergraduate research jobs in the summer
- **The average position for the National Science Foundation Research Experience for Undergraduates provides \$800 per week in salary/stipend plus housing, often meals and travel are part of the package**
- Similar programs are supported by the Department of Homeland Security, National Institutes of Health, Department of Energy, Environmental Protection Agency and others...

### How do you find a research position?

#### ◆ Research your options

To find a program or a fellowship that matches your interests and goals, plan on doing some serious work. The money won't necessarily come to you – you have to go to it (or at least tell them how to find you...).

- Do an Internet Search (start with <http://www.igert.org/reus.asp>, [www.science.gov/internships](http://www.science.gov/internships) and [www.students.gov](http://www.students.gov))
- Check resources on your campus, talk to Career Services, Faculty, Staff, Students and the bulletin boards!
- Let faculty and students know the kind of position you are looking for!
- Look at the campuses and field stations in the geographic areas where you want to spend the summer (if you want to be close to home visit the programs during your breaks, check their websites)

## How to get selected:

- the same characteristics that will ultimately make you attractive as a job applicant
  - evidence demonstrating that you are responsible, interested, and willing to learn.
  - future career plans related to the area of research
  - related course work (if you have a weak academic record, address this, if you have a strong academic record, highlight it!)
  - work experience that is relevant, if you have it- don't forget volunteer work or club memberships, etc.
  - select 2-3 faculty members to write a letter of recommendation for you, make sure they know you and have the information about you to write a strong letter in advance of your deadlines for applying

### Highly Effective Applicants:

#### Get Organized! Set up a file system!

##### ◆ Pay attention to the guidelines (especially deadlines!)

Essential elements of the application missing (letters, transcripts, etc.) is a no-no.

##### ◆ Demonstrate strong writing skills

Show proficiency with the English language. Get friends, professors, mentors to proof your work.

#### Tips for a successful application:

##### ◆ Your professional goals are in line with program guidelines

##### ◆ Your application reflects your and interest in the field of research

##### ◆ You have the ability to achieve academically and to learn to do research

As shown through coursework, letters

##### ◆ Your application reflects care

Attention to detail, editing, completeness

##### ◆ Strong letters of reference (make sure to contact references early and provide them with your information)

References attest to research ability: are thoughtful and well written by supportive faculty and/or mentor

##### ◆ Focused personal statement

Personal statement that reveals deep interest in and motivation toward research

##### ◆ Pay attention to the restrictions

Some programs put a limit on the number of credit hours, coursework or language skills

##### ◆ Follow directions

Although this may seem obvious, follow the directions in the application packet to the letter.

##### ◆ The name thing...

When applying for fellowships, you should be consistent in how you report your name. The name on your SS card, your graduate school admissions application, and your application should be identical. Make sure your contact information is clear and consistent (email, phone)

##### ◆ Supporting documents matter

Letters of Reference and Statements of Purpose can make a difference in the selection process.

##### ◆ Keep trying—Apply to several programs!

\*drawn from GEM Consortium Partner