Research Experience for Undergraduates

The Hows, Whys, and Inside Scoop

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Outline

• What is a REU Program?
• Why should I participate in a REU program?
• How do I select an appropriate REU program?
• The application process.
• Application dos and don’ts.
• What should I expect from an REU program?
• How to be a stellar REU student.
What is a REU Program?

• REU = Research Experience for Undergraduates

• REU programs are summer or academic year programs to provide research opportunities for undergraduate science and engineering students.

• Summer REU programs are paid eight to 10 week summer internship programs designed to provide students with a research experience at an institution other than their own.

• Summer REU programs serve as a recruiting tool for the host university.

• REU participants work on an individual research project under the direction of a faculty or staff member.

• REU programs are designed to simulate the graduate school experience and prepare participants for graduate study in the sciences or engineering.
Why should I participate in a REU program?

• It is better than flipping burgers for the summer.
  – Most REU programs pay a stipend of between $3000 - $4500 a summer.
  – Housing and travel to and from the institution is usually included.

• REU programs are an excellent opportunity for students to explore their research interests and gain valuable research experience.

• Helps you to decide if you are graduate school material.

• Provides and opportunity to learn about a possible graduate school of interest.

• Expands your list of professors to serve as references for future employment or grad school applications.
How do I select an appropriate REU program?

- Search for programs in your areas of interest. There will be a program on any topic you can think of, many of the programs are centered around a central theme.
  - [http://www.webguru.neu.edu/programs/browse_programs/](http://www.webguru.neu.edu/programs/browse_programs/)
- REU programs are very competitive pick between 10 – 15 programs to apply to, most have a similar application with no application fee.
- Pick a wide variety of REU locations. The most desirable geographic locations (Santa Barbara and NYC) are usually the most competitive.
The Application process.

• Applications will consist of an application form, transcripts, and two to three letters of reference. There will be no application fee.
• Most REU programs require a minimum GPA of 3.0. If you have under a 3.0 you application will not be considered.
• Give you references about a month’s notice when asking for a letter of reference.
• Many schools offer an online application that requires uploading your materials and letters of reference.
• Most applications are available from early December until early to mid February.
• Decisions are usually made in early to mid March.
• You will have approximately 2 weeks to accept an offer.
Application Dos and Don’ts

- DO apply to universities all throughout the country.
- DON’T apply to your own college or university REU program.
- DO start your applications early.
- DO write an excellent personal statement be sure to mention your interest in graduate study.
- DON’T state you want to go to attend med school or law school in your personal statement.
- DO get references from professors in the field you are applying to for your REU program.
- DON’T use non academic references.
- DO talk to your university REU directors.
- DON’T accept more than one offer.
- DO accept or decline an offer in a timely fashion.
What should I expect from my REU program?

- You will be assigned a research mentor, usually a faculty member.
  - You may be sent papers to read before you arrive to campus. READ THEM!! READ THEM TWICE!!!
  - Good faculty mentors will assign you your own project.
- In most cases you will not be working with your faculty mentor on a daily basis.
  - You will work directly with a graduate student or post doc.
- You are expected to become a full member of the lab for the summer.
  - Attend all lab functions.
What should I expect from my REU program? (cont.)

• Your REU program will have special seminars just for the REUs. Attend all of them!!
  – Research Seminars
  – Graduate School Preparation Seminars
• You will be required to prepare a poster and/or talk summarizing your results from your research which you will present this in a public forum.
  – Great practice for graduate school!!
• Good REU programs will have social a few social activities.
How to be a stellar REU student.

• Be prepared to work hard!!
  – Put yourself on a schedule and follow it.
  – You may have to work some nights and weekends.
• Ask questions when needed, but be prepared to work independently.
• Become part of the lab.
  – Talk to the graduate students and post docs.
  – Get to know your faculty advisor
• Be enthusiastic about your work.
• Remember you are representing your entire university, act appropriately.
• Get to know your fellow REU students and their projects.
• Most of all have fun!!
After the REU experience.

• Keep in contact with your REU advisor, graduate/post doc mentor through out the upcoming year.
• Send a formal thank you to your advisor and mentor.
• When the time comes ask your faculty advisor for a reference to graduate school.
• Present you work at your home institution.
• Use what your learned in your own undergraduate research.