UNDERGRADUATE STEM SUMMER RESEARCH POSITIONS

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Undergraduate Research Coordinator
Website:  ugr.ucsc.edu
Why do Summer Research?

- Experience in another academic community (UCSC or another institution)
- Engage in the practice of your discipline
- Create knowledge, not just consume
- Complement coursework
- Help getting into graduate school or a job
- Career exploration
- And…stipend, travel costs, housing, presentation opportunities, new friends, great reference letter
Interests & Practical Issues

- What classes/topics inspire you?
- Are there summer programs on that topic?
- What practical issues are there?
  - Are you willing to travel?
  - Does your family situation let you travel and be gone for 8-10 weeks?
  - Do you need a paid position or credits?
  - Do the dates conflict with the UCSC quarter system?
  - Do you meet the eligibility requirements?
Finding a Research Opportunity

- Networking
  - Friends, TAs, professors, etc.
  - Student groups
  - Academic advisers
  - Staff: Nancy, ACE staff, Malika Bell, Hugo Mora-Torres

- Web resources
  - Career Center
  - Professional organizations
  - Lists by various groups
  - Databases
  - UCSC Undergraduate Research Opportunities website and database

- Online information is often subjective
## Application Dates

**October**
- Frank and Sara McKnight Awards in Molecular Sciences due 10/1
- DOE SULI Internship application due for spring 2014, 10/1
- NIH Visit and Interviews for Seniors due 10/5
- Arts Division Irwin Project Grant due 10/17

## Events

- **Joel Oppenheim, Ph.D.: Fall 2013 Undergraduate Professional Development Lunchtime Workshop Series**
  Monday, October 7, 2013 12:30 PM to 1:45 PM
- **April Goral: Graduate School Admission Process**
  Tuesday, October 8, 2013 2:00 PM to 3:00 PM

## Student Profiles

NEW PROFILE!

Eric Curiel (EEB) was recently quoted in the *Science Careers* article, “Think Globally, Act Locally” on the importance of student groups and attending conferences, like the *Society of Chicanos/Hispanics of American Indians* National Conference.
Physical and Biological Sciences Division

Undergraduate Research in Physical and Biological Sciences

Select one of the topics below:
- Preparing for Undergraduate Research
- Finding a Research Opportunity
- Join a Lab or Research Group
- Funding Your Research
- Presentation Opportunities—where and when
- Communicating Your Results—posters and papers
- Student Organizations

Finding a Research Opportunity
Finding a research opportunity is a process that will take a considerable amount of time and commitment. The suggestions below may help.

http://uar.ucsc.edu/PbSci
Undergraduate Research Opportunities Database

Programs at UCSC, in the region, in the federal government and selected national programs.

For additional opportunities:
- Pathways to Science (database for all disciplines)
- Federal Science Internships
- Pathways for Students and Recent Graduates to Federal Careers

Filter by Program Name

Filter by Description, Keyword, or Contact

Major(s)
- Anthropology
- Applied Physics
- Art
- Biochemistry and Molecular Biology
- Bioengineering
- Bioinformatics
- Biology
- Business Management
- Economics

Hold shift (PC) or command (Mac) to select multiple majors. If no major is selected, opportunities in all majors will be displayed.
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http://ugr.ucsc.edu/database
For Undergraduate Students

PROGRAMS AND SCHOLARSHIPS

☀ Over 650 Paid summer research and internships for undergraduates

📸 Portable scholarships for undergraduates

🎓 Post-Baccalaureate programs

⏰ Short term opportunities (travel funds, summer institutes, etc.)

☀ Even more internships and co-ops!

http://www.pathwaystoscience.org/Undergrads.asp
Summer Research Opportunity

Search Summer Research programs, below, by institution and disciplinary categories, or by geography!
Or, visit the basic programs search or the advanced programs search.

1. Browse all Summer Research programs

2. Browse by Institution, Usergroup, Start Date, and/or Discipline

Usergroup/Level of Study

Undergraduate Students

Program Start Date - programs starting on or after:
*please leave blank if you do not want to eliminate programs with no start date on record
Month  Day  Year

Institution (Choose one or leave blank to search all institutions)

Abisko Scientific Research Station (ANS)
Agnes Scott College
Alabama A&M University
Albany State University
Albuquerque Technical Vocational Institute

http://www.pathwaystoscience.org/programs.asp descriptorhub=SummerResearch_Summer%20Research%20Opportunity
LAMAT Summer Program for Undergraduate Computational Astrophysics Research

View this Opportunity's Website

**Program Info**

**Academic Level:** Undergraduate Students

**Description:** LAMAT is an 8 week program designed to introduce students to astrophysical research methods and tools through original projects in computational astrophysics.

The program targets science and engineering undergraduates currently enrolled in California community colleges. We welcome applications from students in other 2 year institutions. Selected interns work closely with UCSC faculty and PhD students from the Physics, Earth and Planetary Sciences, and Astronomy Departments. A stipend and housing will be provided for LAMAT students.

Priority will be given to those who apply by November 15th, 2013. After November 15th, applications will be considered on a space availability basis. Finalists will be notified by December 2nd, 2013. The Lamat Summer Program is funded by the National Science Foundation REU program.

**Application Deadline:** 11/15/2013

*Note: Most programs maintain a similar program cycle (including similar application deadlines) year after year. [Click here to understand dates and deadlines on PathwaysToScience.org.]*

**Program Dates:** 6/22/2014 - 8/15/2014

**Participating Institution(s):**

http://www.pathwaystoscience.org/programhub.asp?sort=SUM-UCaliforniaSantaCruz-LAMAT
Other Research Opportunities

Please note that we cannot guarantee the accuracy of the information on the sites.

Select one of the following topics:
- Databases & Lists that Include UR Positions
- Federal Agency Programs
- Additional Programs (cross-discipline)
- STEM Summer Schools

Databases & Internship Lists

Databases (cross-discipline)
- Pathways to Science
- Opportunities Database from UC Irvine

Lists that include UR positions
- Chisme Special Edition: Professional Opportunities 2014 (includes STEM, social sciences & humanities)
- STEM Binder of summer programs UCSC Career Center
- Internship Resources from the UCSC Career Center
- UCSC STEM Diversity (summer opportunities) webpage

http://ugr.ucsc.edu/oth
Check out...

- National Science Foundation Research Experience for Undergraduates

http://www.nsf.gov/crssprgm/reu/reu_search.jsp
Also Check out…

• In the Undergraduate Research Opportunities Database:
  • Department of Energy
    • Science Undergraduate Laboratory Internship (SULI)
    • Mickey Leland Energy Fellowship (MLEF)
  • National Institutes of Health (NIH)
    • Summer Internship Program (SIP) in Biomedical Research
  • NASA One Stop Shopping Initiative (OSSI)
  • AMGEN Scholars
• Programs at universities in the area you want or need to live
IMPORTANT: When is the application due?

- Deadlines can be November - March
- For summer 2014
  - Look into programs NOW
  - Some are still accepting applications
  - Application preparation takes time
- For summer 2015
  - Take note of interesting programs for next year
  - Become a better applicant
    - Raise your GPA
    - Use campus resources to help: ACE, LSS, RAD study groups, etc.
    - Ask your peers what they did
    - Go to office hours regularly to build relationships with professors so you can get excellent references
    - Ask people to help with your application
Preparing Your Application

• Fill out application completely
  • Curriculum Vitae (CV) or resume
  • A personal statement and/or essays
  • Reference letters from professors, not TAs
  • See Application Tips webpage

• Review by others for grammar, style, relevance, etc.
  • Give reviewers plenty of lead time

• Submit it on time

• If there are issues (like dates) contact the coordinator

• RELAX!!
Application Tips & Deadlines

Application Tips

- Help for every step of the process from Pathways to Science
- How to effectively obtain a letter of recommendation (from UCSC STEM Diversity)
- Getting strong letters of recommendation (from UC Berkeley)
- Writing a Curriculum Vitae (CV) (from UCSC STEM Diversity)
- Writing the Curriculum Vitae (from Purdue Owl Online Writing Lab)
- Writing the Personal Statement (from Purdue Owl Online Writing Lab)
- Writing Your Statement of Purpose (from UCSC CBSE Research Mentoring Institute)
- Summer Research– Applying and Getting in (from UCSC STEM Diversity)

Application Deadlines

December, 2013

- UC Sacramento Center (UCSC) Policy Spring 2014 Internship Priority Deadline due 12/2
- Lawson Student Award in Hydrology, Earth and Planetary Sciences due 12/6
My Contact Information:

• Rebecca Anderson
• E-mail: rlanders@ucsc.edu
• Office: Jack Baskin Engineering 153B
• Join the list-serve on the website
• Make an appointment or come to Office Hours
  • Monday, 3-5 PM
  • Wednesday 12-2 PM
  • Friday 10 AM-12 PM