Student Opportunities in PREM Research at U C Santa Barbara

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- Located in Southern California, approximately 100 miles northwest of LA
- Enrollment of ~22,000 students
- Well known for science and engineering
  - Six top ranked science departments
  - 4 science Nobel laureates
  - 11 national centers and institutes
UCSB Materials Research Laboratory

An Interdisciplinary Center Sponsored by the Materials Research Science and Engineering Centers (MRSEC) Program of the National Science Foundation

31 Faculty Participants
7 Campus Departments
  • Materials
  • Chemistry
  • Chemical Engineering
  • Physics
  • Mechanical Engineering
  • Electrical and Computer Engineering
  • Molecular and Cellular Biology
PREM Activities

- Funding to support materials science research in photovoltaics
- Postdoc and graduate student funding
- Travel to facilitate collaborative projects
- Undergraduate internship opportunities at both UTEP and UCSB
UCSB Research Interns in Science and Engineering

- **Summer RISE Program**
  - 10 week summer research experience for undergraduates at UCSB
  - Sponsored by UCSB’s Materials Research Lab
  - Stipend and travel costs are provided
  - Housing in UCSB apartments
  - Interns are recruited from colleges and universities around the country
  - 4 spaces reserved for UTEP students
  - Up to 20 interns per summer participate
  - Program has run since 1993

http://www.mrl.ucsb.edu/RISE
Why do a research internship?

- Experience new research
- Learn about a new field
- Find out what you’re interested in
- Find out what you’re NOT interested in
- Find out if you’re interested in grad school
- Check out a potential grad school
- Have a new experience
RISE Program Components

- Interns are matched with research projects, under the supervision of graduate student or postdoctoral mentors
RISE Program Components

- Weekly intern meetings
- Practice oral and written presentation skills
- Intern seminar series featuring speakers representing a range of fields and careers
- Additional workshops on research ethics, graduate school, graduate applications, etc.
RISE Program Components

- Final results are presented at an end-of-summer poster session and final symposium
- Interns write a final scientific report
Sample Research Projects

Some recent projects:

“Towards an enantioselective aza-piancatelli rearrangement: synthesis of a highly soluble trip catalyst” Read de Alaniz Group

“Electron diffusion studies in ternary blend organic photovoltaic devices” Chabynic Group

“Optimizing cerium in sodium yttrium silicate phosphors for solid state white lighting” Seshadri Group

“New mediator for controlled radical polymerization” Hawker Group

“Organic photovoltaic devices: synthesis of a new electron acceptor” Wudl Group
Eligibility and Application Process

- US citizen or permanent resident
- Undergraduate
- Science major
- Apply through UCSB RISE program (Feb 15 deadline)
  - Application form
  - Resume
  - Unofficial transcript
  - Statement of interest
  - Letter of recommendation

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