Summer Research and Internship Opportunities

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Today’s Overview

- To inspire you
- To point you to resources and support units
- To help you appreciate that you need to plan
- To give guidance
What is Undergraduate Research?

- working on a faculty-initiated research
  - Undergrad Research Portal – Definition
  - Do/bio - Definition
Why doing Undergraduate Research?

- learn how to formulate a significant questions
- determine the experimental approach for solving the question
- learn to analyze data
- contribute to the generation of new knowledge
- participate in the creative endeavor of a research university or research institution
Why Doing Research….cont.? 

… find out if you like research

… challenge yourself in new ways

… distinguish yourself

…. getting to know faculty, grad students, post-docs
Research During the Academic Year

- Non-credit: volunteer
- For credit:
  - BISP 199
  - AIP 197
What is a Research Internship?

- research in a non-academic setting (industry research) – applied/translational research

- research at a research institute or at another university without receiving academic credit (typically in the summer)
Why doing a(n) (Research) Internship in Industry?

- understand the bench-to-the-bed-site cycle (translational biology)
- gain team-working experience (individual contribution vs. shared responsibilities)
- learn about the business aspect of science
- hone research skills
Internship Opportunities

Key Campus Resources:

- Academic Internship Program
- Career Services Internship Supersite
- UCSD School of Medicine Student Apprenticeship Program (SAP)
- Undergrad Research Portal
Internship Opportunities
cont...

- Biotech-Bay
- Biotech – Beach
- Indeed.com
Why Doing a Research Internship in the Summer in an Academic Setting?

… immerse yourself into research/internship – full-time

… take advantage of national and international opportunities

… compete for a scholarship….

… leave your comfort zone

… set yourself apart
How to Get Started?

*Be traditional: stay on campus*

- **BISP 199** – via Summer School
- **Undergrad Research Portal**
- **AEP-Summer Research**
- **CAL-CAP Biofuel Internships**
- **Calit2 Summer Research Program** – note: info for 2014 not yet available!
- **Medical Scientist Training Program** (MSTP) – note: info for 2014 not yet available!

→ More opportunities will become available later in the year!

→ Sign up for the **Bio Bulletin**
How to Get started?

*Get outside your box: Summer Research Opportunities off campus*

- **Career Service Center Internship Supersite**, especially:
  - Summer Research Internships
- **PRIME**
- **Professional Societies**
  - APS
- **National Science Foundation (NSF)**
- **Howard Hughes Medical Institute (HHMI)**
- **Pathways to Science**
- **Join websites that allow to search: Community of Science**
- **Set up Google alerts** — keywords: "summer research" or "undergraduate fellowship"
Industry Internship

- **Eli Lilly**
- **Genentech**
- **Life Technology**
Internships … Government

- Always keep an eye on the NIH website:
  - esp: Training Programs in Biomed Sciences
- Regulatory Affairs: Internships
- Always keep an eye on the Government websites:
  - Food and Drug Administration: Internships
  - Environmental Protection Agency: Internships
  - National Science Foundation: Internships
International Internships

- UCSD Career Center
- UCSD International Center: Intern Abroad
- A few specific examples:
  - Germany
  - Think Swiss
  - Paris Pasteur Institute
- And... check out: Vanderbilt International Office
Global and International Internship Opportunities

- **Work, work, travel, learn…:**
  http://www.backdoorjobs.com/

- **Volunteer to work with scientists:**
  http://www.earthwatch.org/
What do You Need to Do?

- Don’t put all your eggs in one basket: apply to more than one opportunity
- Just showing up is not enough: Summer Research/Internship Opportunities are competitive; you need to put together a competitive application
- Be an early bird so that you will get the worm: review opportunities now – deadlines are as early as mid-December
What is a Competitive Application?

Before you submit an application, determine:

- Am I eligible?
- Can I fulfill the requirements?
- What are the specifics of the award?

Submit a complete and valid application:

- Know the deadline
- Submit all required documents
  - Transcript
  - Letter of recommendation
What is a Competitive Application?

Example: **Amgen Scholars Program**:

- 15 UCSD undergraduates and 15 college students from across the United States in life science majors
- eight week, residential program
- Amgen scholars will receive stipend support, on-campus
- housing and a boarding allowance
- conduct research for 30 hours a week
- participate in a GRE preparation program
- present their at a mid-summer national gathering of Amgen scholars and at the UCSD Summer Research Conference

For more information and to apply online: [https://students.ucsd.edu/academics/research/amgen/index.html](https://students.ucsd.edu/academics/research/amgen/index.html)
What if funding is not available?

- UCSD Undergraduate Research Scholarships – academicworks.com
- EAP:
  - UC Education Abroad Program
- A resource to find funds for training in the sciences and undergraduate science education: Grantspace.org
Key Dates

- **UCSD Research Scholarship Info Sessions (academicworks.com):**
  - November 18; 12:30 – 1:30 pm; NSB Auditorium; (G. Wienhausen)
  - November (week 8) Academic Enrichment Program
  - January 2014

- **Workshop: Writing a Competitive Research Scholarship Application:**
  - Nov. 20 at 6:00 pm; Writing Center Conference Room; Madeleine Picciotto
graduate with the right education

... recent grads about what helped them to prepare for finding employment or for obtaining admission to professional and graduate school:

- Research
- Community Service
- Internship/ practicum/ field experience/ or field studies
- Campus Employment/ Work Study
- Study Abroad
- Greek Life
- NCAA Division II Athletics

→ survey
What is your excuse for not even trying?

Questions????