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

→ Visit the Undergrad Research Portal: URP

→ Visit the Academic Internship Program: AIP
Why Do Undergraduate Research?

- Learn how to formulate a significant question
- Determine the experimental approach for solving the question
- Contributing to the generation of new knowledge
- Participating in the creative endeavor of a research university or research institution
Why Do 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

- For credit: BISP 199
- Non-credit: volunteer
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 — basic research
Why do a Research Internship in Industry?

- Understanding the bench-to-bedside cycle (translational biology)
- Gaining team-working experience (individual contribution vs. shared responsibilities)
- Learning about the business aspect of science
- Honing research skills
Why do Research or an Internship in the Summer?

- Immerse yourself into research/internship – full-time
- Take advantage of national and international opportunities
- Compete for a scholarship
- Leave your comfort zone
How to Get Started?

Stay in San Diego

- BISP 199: Research for Credit
- Undergraduate Research Opportunities: URP
- UC San Diego Summer Research Opportunities: AEP
How to Get started?

Summer Research off campus

- Super Sites
- Government & other agencies
- Colleges and Universities
- Industry
- International

Note: some of the websites we will discuss in following slides have not updated deadlines for Summer 2015. We highly encourage you to revisit these sites after researching the program information.
Super Sites

- Super Sites: Databases for **ALL** Internships
  - UCSD Career Services Center
  - Brown University – summer internship database
  - Undergraduate Research Opportunities Program (UROP: UC Irvine)
Government & other Agencies

- National Sciences Foundation - NSF
  → Research Experiences for Undergraduates

- National Institute of Health – NIH

- Centers for Disease Control and Prevention – CDCP and some with interest in Minority Health

- United States Environmental Protection Agency – EPA

- HHMI Janelia Farm: Undergraduate Scholars Program
Colleges and Universities

- The Privates: East ➔ West Coast and everything in between – Leadership Alliance

- Biomedical and Pre-Med: Research Site

- UC Schools – UC Summer Research

  - a few examples…
    - Berkeley
    - Wellesley
Industry

- **Novartis**: Institutes for Biomedical Research

- **Genentech**

- Special websites:
  - **Biotech Careers**
  - **Indeed**
International

- UCSD Career Center: International Internships
- UCSD International Center: Program Abroad

Country Specific Programs:
- Germany
  - Aachen University
  - Congress-Bundestag Youth Exchange for Young Professionals or CBYX
- Switzer Land
  - Think Swiss
International Internship Programs

- **Ireland**
  National University of Ireland Maynooth, Program for Undergraduate Research Education (PURE)

- **United Kingdom**
  Undergrad Studentship Programme at John Innes Centre & Sainsbury Lab

- **IES** Abroad Internships

- Working with Scientists Abroad: Earth Watch Institute

- Global Volunteer Network: Work, travel and learn
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:
http://www.amgenscholars.com/ or find a host university
What if funding is not available?

- UCSD Undergraduate Research Scholarships – **URS**
  Info Session: Nov. 13 and Nov. 19 (repeat)

- Go to the International Center – **UC-EAP**

- A one-stop resource to find funds for training in the sciences and undergraduate science education:
  - [GrantsNet.org](https://www.grantsnet.org)
  - [Scholarships.com](https://www.scholarships.com)

- Other Fellowships & Awards:
  - [German Academic Exchange](https://www.gaei.de/en)
  - Professional Associations:
    - American Physiological Society (**APS**);
    - American Society for Microbiology (**ASM**);
graduate with the right education

Harvard University labor expert Lawrence Katz:

“… those who have the ability to imagine new services, new opportunities and new ways to recruit work were being retained…”

“.. Vanilla does not cut it anymore…It’s all about what chocolate sauce, whip cream or sherry you can put on top.”
General Real World Skills You Should Graduate With

1. Effective oral and written communication skills
2. Critical Thinking and complex problem solving skills
3. Effective interdisciplinary teamwork and interpersonal skills
4. Effective cross-cultural collaboration in a diverse setting
5. Proactive ability for research (information literacy)
6. Demonstrated integrity and personal responsibility and how to apply in real world setting
7. Demonstrated understanding of global context and issues and their implications for the future
8. Demonstrated ability for self-reflection and self improvement, ability to seek and use feedback
9. Demonstrated local and global civic engagement
10. Leadership: demonstrated initiative, effective decision making, informed risk taking; ability to motivate and inspire others to a shared purpose
What is your excuse for not even trying?

Questions????