GETTING STARTED IN RESEARCH

PHARMACEUTICAL SCIENCES
WHY RESEARCH?

• Drawing Conclusion, Critical Analysis, and Problem Solving Skills
• Developing communication skills and working independently
• Understanding and applying research methods, ethics, and conduct rules
• Understanding the link between academics and other careers
• Using technology and computer programs
• Learning to think in innovative and creative ways
• Developing communication skills and working independently
• Working successfully with a diverse group of people
• Expand knowledge of the subject matter
THE STEPS TO STARTING RESEARCH

Identifying your research interests

Finding your Principal Investigator

Contacting your Principal Investigator
IDENTIFYING YOUR RESEARCH INTERESTS
QUESTIONS TO CONSIDER

Ask yourself the following questions:

What field(s) in the sciences appeal to you?
- Pharmaceutical Sciences
- Biological Sciences
- Chemistry

Do you have a specific project you’d like to work on?
- Nanomedicine
- Cardiology
- Anti-aging Drugs

What type of environment would you like to work in?
- Clinical Based
- Lab based
- Outdoor (ecology)

What skills or knowledge do you have or would like to develop?
- Analytical and Critical Thinking
- Communication
- Graduate School

You’re P.I. is expecting you to work in the lab for at least a year! Find a project that you’ll enjoy!
FINDING YOUR PRINCIPAL INVESTIGATOR
**FINDING AVAILABLE RESEARCH LABS**

- **WebReg** is a great tool for finding available research positions on campus.
- Use the Schedule of Classes to explore available 199 research positions in your chosen department.

Each 199 section will specify:
- The field of research
- The amount of units a student can enroll in
- The P.I. of the lab
LEARN MORE ABOUT YOUR POTENTIAL P.I.

- UCI’s Faculty Profile System is useful for learning more about your P.I. research interests
- Information of a professor’s academic and professional background
- Access to an abstract of the laboratory’s research goals and published work
- www.faculty.uci.edu
- Research is a learning experience! Don’t worry if you don’t understand the articles
LEARN ABOUT THEIR RESEARCH!

• Use PubMed or other sites to look up free copies of research papers
  • http://www.ncbi.nlm.nih.gov/pubmed/

• For some articles you will need to be linked into UCI’s Library VPN
  • http://www.lib.uci.edu/
  • “connect from off campus”
  • “web VPN”

• Search a key term from the title and the Professor of Interest’s last name

• Once you found the article read the abstract and take some notes

• YOU WILL NOT UNDERSTAND PROBABLY MORE THAN 30-40% OF THE ARTICLE!

• Make sure to write down some key terms or questions you have regarding the article so that you can ask when you meet with the professor
CONTACTING YOUR PRINCIPAL INVESTIGATOR
EMAILING FACULTY

**Academics**
- Your major(s) and minor(s)
- Your academic year
- Dean's List
- Honors/Awards
- Your GPA (if a 3.5 or above)

**Personal Goals**
- How will getting involved in research affect your career goals?
- Graduate school (Pharm.D; M.D.)
- Exploring a career option
- Knowledge

**Extracurricular Activities**
- Have you participated in any clubs or organizations related to your research interests?
- Community Service projects or volunteer work
- Honors Fraternity/Sorority
UROP SYMPOSIUM

- [Link](http://www.urop.uci.edu/symposium.html)
- Poster or Oral Presentations
- Present your work in research to many other undergraduate students and professors
- Opportunity to have your work published in a journal!
RESEARCH OFF CAMPUS

• http://www.urop.uci.edu/opportunities.html
• Search for an opportunity that fits your interests!
  • Biomedical Science
• Great opportunities to build relationships with Biotech and Pharmaceutical Companies while also participating in research!
UCI LEADS

• Designed to identify educationally or economically disadvantaged undergraduates pursuing courses of study in science, technology or engineering who are likely to succeed in graduate school.

• Contact: Daniel Fabrega
  • dfabrega@uci.edu

• 2 year commitment (final 2 years of undergraduate)
• 2 summer research experiences
  • 1 at UCI
  • 1 at another UC campus
• Faculty mentored
• $3000 summer research stipend
• Annual system-wide research symposium
• Apply by February 27, 2012