<u>Popular Research Opportunities for PharmSci</u> <u>Students</u>

- School of Biological Sciences
 - BioSci 198/199
 - Packet A/B
- Department of Pharmaceutical Sciences
 - o PharmSci 198/199
- School of Physical Sciences
 - o Chem 180/199
- School of Social Ecology

(https://ps.soceco.uci.edu/pages/research-opportunities)

- PSYCH 199 (https://ps.soceco.uci.edu/faculty)
- Program in Public Health
 - PubHealth 199

General Research Class Distinctions

- 198 Individual/group participation in research-related activities performed under the direction of a faculty member
 - Mostly P/NP
- 199 Students perform research individually in the laboratory of their Principle Investigator (PI). They have the opportunity to pursue their own projects under the discretion of their PI and present their findings at research conferences like the annual UCI Undergraduate Research Symposium.
 - Letter grade
 - Required for participation in the Excellence in Research Program.
 - o Required to complete a quarterly report of the work they've completed

General Research Requirements

- BioSci 198/199 (from
 - https://www.bio.uci.edu/undergraduates/research/general-requirements/)
 - o Good academic standing, major and cumulative GPA of 2.0 or higher.
 - o Bio Sci 94: Organisms to Ecosystems AND Bio Sci 194S: Safety & Ethics
 - Completion of the relevant packet and sent to the Biological Sciences
 Student Affairs office by the end of the 2nd week of classes the quarter they plan on joining

(https://www.bio.uci.edu/undergraduates/research/199-packetsrequired-paperwork/)

- Packet A (Basic Science Laboratory)
- Packet B (Clinical Packet) https://www.bio.uci.edu/wp-content/uploads/2012/12/Undergrads_r esearch_Bio-199-B.pdf
- PharmSci 199
 - Approval from PI??
- Chem 180/199
 - Contact faculty advisor for permission to enroll in Chem 180/199 and forward the email approval to the Chemistry Undergraduate
 Office(undergrad@chem.uci.edu)
- PubHealth 199

(http://publichealth.uci.edu/ph/ undergraduate/ug research#policies)

- Completion of lower-division writing, upper-division standing, and good academic standing (2.0 GPA and not on academic probation)
- Submit a research application to phpracticum@uci.edu that includes:
 - CV or Resume
 - Statement of Research Interest (or abstract) on why you want to do this work (not to exceed 1-page)
 - Name of the instructor with whom you want to do your research
 - Quarter you want to start your research (usually 1 quarter in advance)

Faculty Lists

- School of Biological Sciences
 - https://apps.bio.uci.edu/bio199/faculty/list
- Department of Pharmaceutical Sciences
 - http://pharmsci.uci.edu/faculty/
- School of Physical Sciences
 - https://www.chem.uci.edu/research/traditional-research-divisions
- School of Social Ecology
 - https://ps.soceco.uci.edu/pages/research-opportunities under "Research Areas"
- Program in Public Health
 - http://publichealth.uci.edu/ph/ faculty

General Outline on Applying to Research

1. Try to find out your research interests

- a. Favorite classes/topics
- b. Clinical or lab-based research?
- c. Talk with a UROP Research Counselor if you're unsurehttps://urop.due.uci.edu/urop/interest/interest_submission_page1.asp?orig in=page0&temp_id=95405
- 2. Pick professors that align with your research interests
 - a. Look up a faculty lists
- 3. Narrow down a list of 5- 10 professors you plan on working with
 - a. The easiest way to understand the work that they do is to read their lab website instead of reading scientific papers
- 4. Complete the research requirements for the school you are planning to get research units in
 - a. For example, if your professor is listed under PharmSci faculty you would have to complete the requirements for PharmSci 199
- 5. Contact the professor
 - a. Office hours if you're in their class
 - b. Email them use template below
- 6. Follow up with the professor and send a thank-you email after meeting with them
- 7. Enroll in research units after completing any last minute stuff

Research Email Template

Dear [Dr. Prof full name or lab contact person]:

My name is **[Your name]**, and I am very interested in becoming involved in research on **[research topic]**. I am currently a **[year level]** majoring in Pharmaceutical Sciences, at UCI. I am interested in a **[Bio 199/PharmSci 199]** undergraduate research position in your lab.

I am interested in this lab because I would like to learn more about the [particular aspect of the lab]. I've read about this lab on the [Bio 199 website/lab website], and I was intrigued at what your lab studies. After reading more about the research at this lab, I was fascinated by the [something you found interesting about the research you are able to speak about]. I would appreciate a chance to meet with you and learn more about the research at this lab. I would also like to inquire about possible undergraduate research opportunities in this lab for this [fall/winter/spring] quarter.

[Relate research to your major or your passion] Something that I feel that has been missing from my education, is applying concepts that I have learned from real life. Participating in research appeals to me because it would allow me to gain new knowledge and experience.

I would be able to dedicate [N] hours a week to your lab for [fall/winter/spring] quarter and commit up to [N] years

I have attached my resume and unofficial transcript. Please let me know if I can provide any other information. I look forward to hearing from you. Thank you in advance for your consideration.

Sincerely, Name Student ID Phone Number Email

ATTACH RESUME AND UNOFFICAL TRANSCRIPT TO EMAIL!!!!!

Research Email Template - Sample

My name is M, and I am very interested in becoming involved in research on the treatment of neurological and psychiatric disorders. I am currently a senior majoring in Pharmaceutical Sciences, at UCI. I am interested in a Bio 199 undergraduate research position in your lab.

I am interested in this lab because I would like to learn more about the progression and diagnosis of psychiatric disorders. I've read about this lab on the Bio 199 website, and I was intrigued at what your lab studies. After reading more about the research at this lab, I was fascinated by the aspect of characterizing modulatory sites on novel receptors to be a target for the treatment of neurological diseases. From what I recall from my pharmacology class, there are drugs that act as allosteric modulators that target specific subunits of GABA receptors. I've always found it interesting that binding different subunits have different effects. For example, benzodiazepines bind to the gamma subunit which allows the ion channel to open more frequently whereas barbiturates bind to the beta subunits which increases the duration of the ion channel opening. I would like to learn more in-depth about how these allosteric sites so that better drug treatments could be developed. I would appreciate a chance to meet with you and learn more about the research at this lab. I would also like to inquire about possible undergraduate research opportunities in this lab for this fall quarter.

I've studied the etiology and pharmacological treatments of psychiatric disorders such as schizophrenia and depression in my molecular pharmacology class (PharmSci 170A/170B). My fascination with understanding the pathophysiology of diseases and how drug treatment helps the patient is one of the biggest reasons why I wanted to study pharmaceutical sciences in the first place. Something that I feel that has been missing from my education, is applying concepts that I have learned from real life. Doing research appeals to me because it would allow me to do that while gaining new knowledge.

I would be able to dedicate 10-12 hours a week to your lab and commit up to two years because I am taking a gap year after I graduate.

I have attached my resume and unofficial transcript. Please let me know if I can provide any other information. I look forward to hearing from you. Thank you in advance for your consideration.

Sincerely, M 12345678 123-456-7890 Email