Getting Started In UNDERGRADUATE RESEARCH

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About Me

• Undergraduate Researcher
• McNair Scholar
• Research Assistant
• California Department of Public Health, Research Intern
• Peer Research Mentor
• Award-Winning Researcher
What is Research?
Let's Define Research!

Scan the QR Code to Get Started!
What is Research?

Research is a systematic and organized process of investigation that aims to discover new knowledge, expand existing knowledge, or resolve a specific problem. It involves the collection, analysis, interpretation, and evaluation of information in order to answer research questions or test hypotheses.
What is Research?

Research can be conducted in various fields, such as science, social sciences, humanities, technology, art, dance, and more.
Research at CSUDH is for EVERYONE!
What does Research Look Like?

Research can take many forms depending on the field, goals, and methods employed, but generally, it follows a systematic process of inquiry to generate new knowledge or deepen our understanding of a particular subject.

A structured methodology may include identifying a research topic, formulating research questions or hypotheses, designing a study or experiment, collecting and analyzing data, and drawing conclusions based on the findings.
What is Undergraduate Research?

• Undergraduate research refers to the involvement of undergraduate (college or university) students in academic research projects, typically under the guidance and supervision of faculty members or researchers.

• It provides students with an opportunity to actively participate in the process of inquiry and discovery within their field of study.
Benefits of Undergraduate Research:

- Academic and Intellectual Growth
- Hands-on Application of Knowledge
- Skill Development
- Mentorship and Networking
- Resume and Graduate School Applications
- Personal Growth and Confidence
- Contribution to Knowledge and Society
- Exploration of Career Paths
Learning Experience:

Undergraduate research offers students a hands-on, experiential learning opportunity that goes beyond traditional classroom instruction. It allows them to apply the knowledge and skills they have acquired in their coursework to real-world research questions.
Mentorship:

Mentors guide students in developing critical research skills, including experimental design, data analysis, literature review, and presentation skills. These skills are not only valuable for research but also transferable to various career paths.

Mentors can provide one-on-one guidance tailored to each student's needs and goals.

Mentors often have established networks in their field, and they can introduce students to other researchers, conferences, and opportunities for collaboration. These connections can be invaluable.
Undergraduate research is for any major!

And not just students who want to go to research-based graduate programs.
Path to Undergraduate Research

Learn
- Learn about Research

Identify
- Identify Your Interest

Connect
- Connect with Faculty and Programs

Plan and Finance
- Plan and Finance Your Research

Showcase
- Showcase Your Work
Getting Started in Undergraduate Research

Joining a research project is not like registering for a class. Instead, it is much more like finding a job.
Identifying Your Interest

1. Determine the field or area of research that aligns with your academic and career goals.

2. Reflect on your coursework, passions, and long-term aspirations to identify subjects or topics that intrigue you.

3. Look for faculty members or research groups at your university who are involved in research related to your interests. Review their published work, ongoing projects, and areas of expertise.
Contacting Faculty

If you are contacting faculty directly, email them a cover letter and CV. Your cover letter will comprise the body of your email and should clearly & concisely:

• Introduce yourself
• Explain your interest and enthusiasm in their research
• Identify your goals and how working with them will help you progress toward those goals
• Request an interview to discuss further a potential research opportunity (include your general availability and potential start date)
• Include your contact information (email & phone)

If you don’t hear back from a specific faculty you emailed or a research opportunity you applied to, send a polite follow-up email 1-2 weeks after your initial email. You should not drop into a faculty’s lab or office unannounced.
Finding a Research Mentor Guide

Scan the QR Code
Final Tips on Getting Started

• Talk to Professors after class.
• Look for Off-Campus Opportunities
  • Internships
  • Volunteer Opportunities
  • Off-Campus Research Opportunities
• Take your Coursework seriously!
• Look for Questions and Not subjects.
• Research Takes time...it is not bound to semester timeframes.
Research Programs

- **LSAMP Program**
  - An undergraduate major in a STEM discipline.
  - Be an individual who has faced or faces social, educational, or economic barriers to careers in STEM.

- **McNair Scholars Program**
  - Aims to support and fund first-generation, low-income, and/or underrepresented students preparing for their future doctoral studies.

- **Mellon Mays Program**
  - For students who wish to pursue a PhD in humanities and select social sciences and work as faculty after graduation

- **U-RISE Program**
  - A STRONG desire to pursue a Ph.D. in the biomedical sciences after CSUDH
  - An undergraduate student enrolled fulltime at CSUDH, majoring in either Biology, Biochemistry, chemistry, physics, psychology or sociology
Summer Research Experience for Undergraduates:

• Opportunity to conduct a research project in various fields
• Designed to expose undergraduates to research
• Graduate Program Exposure
• Work closely with faculty and other researchers
• 8–10 weeks at a host university during the winter or summer term (Virtual or Online).
• Paid: Travel, Housing & Food, + stipend
Summer Research Programs
Guide
Scan the QR Code
REMEMBER:

• Undergraduate research is a learning experience, and it’s okay to make mistakes and ask questions. Embrace the opportunity to grow and contribute to the advancement of knowledge in your field.

• Connecting with your institution's professors, research centers, or programs is important to explore the available research options within your field of interest.
Scan the QR Code
Thank You

Questions?
Survey

Please provide feedback on your workshop experience.

We appreciate your feedback.