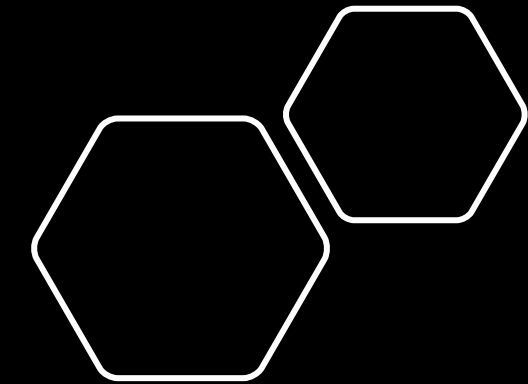




Getting Started In
**UNDERGRADUATE
RESEARCH**

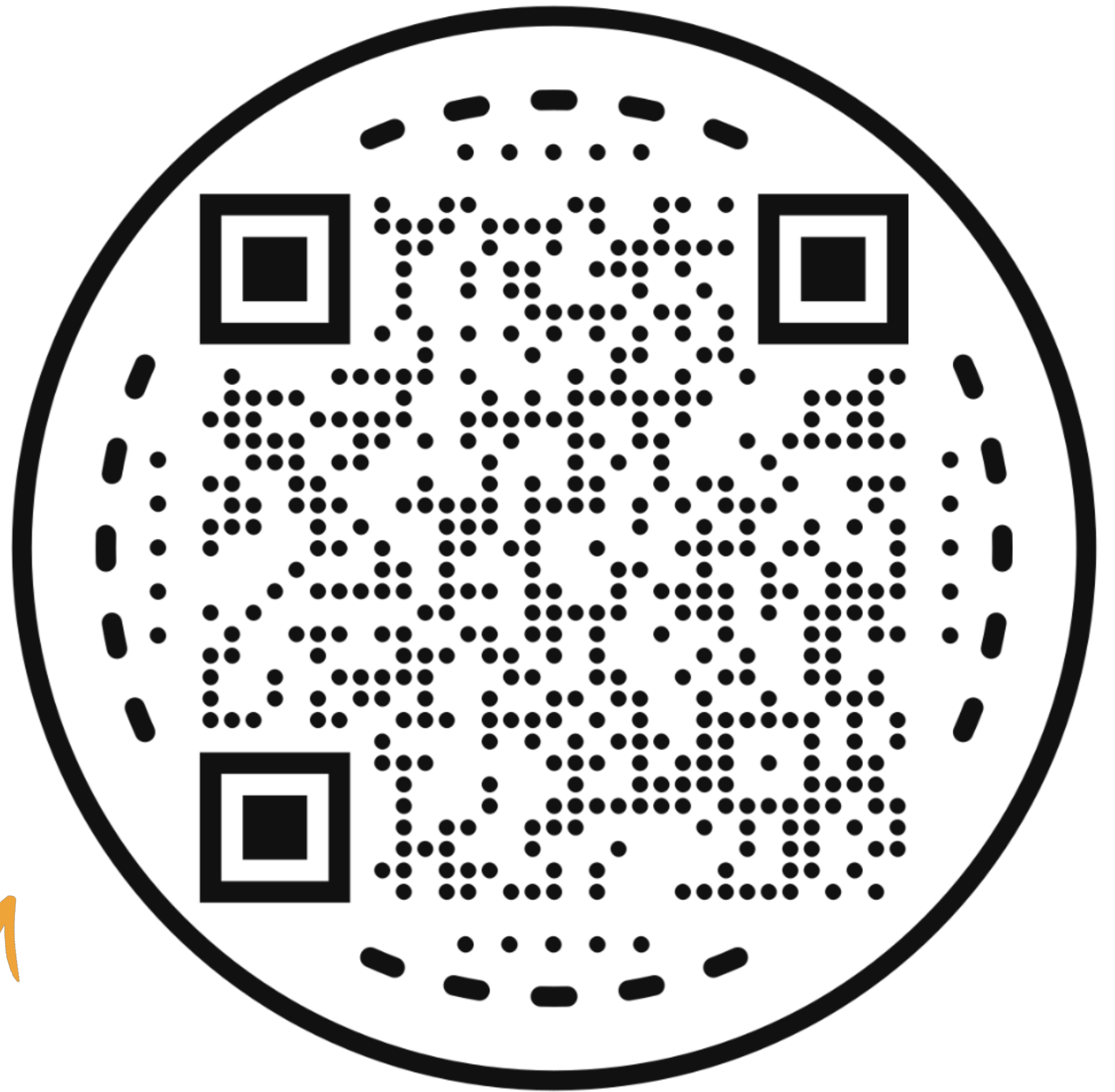
Facilitated by: Aysa-Monae Collins

Tuesday, February 6, 2024



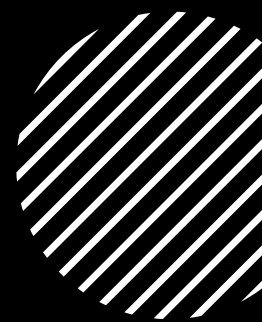
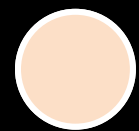


Thank you for
Joining....
Please Sign-In





Agenda



About Me

What is Research?

Undergraduate Research

Benefits of Research

Pathways to Research

Getting Started In Undergraduate Research

Tips

Resources

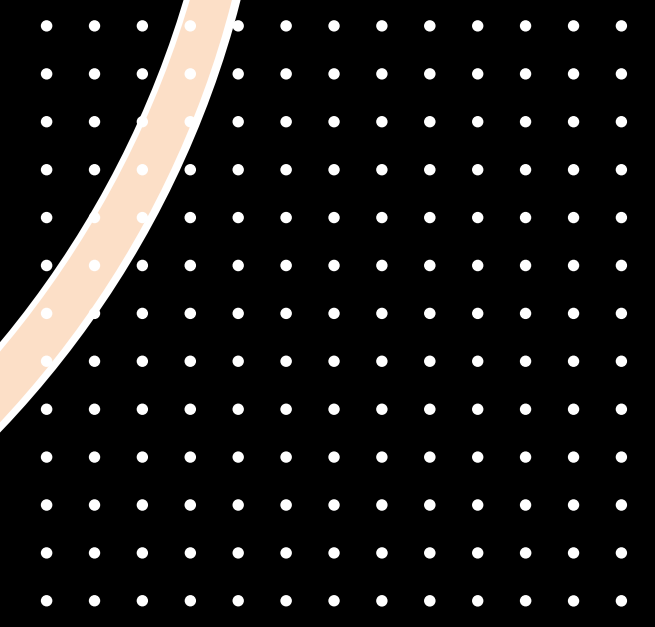
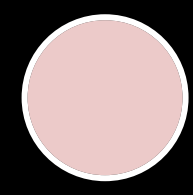
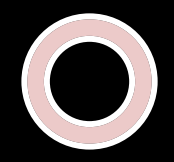
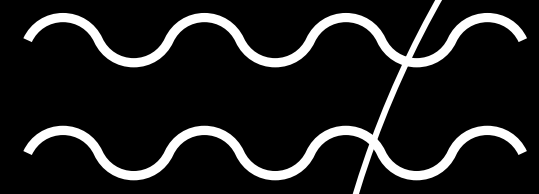
Survey

About Me

- Undergraduate Researcher
- McNair Scholar
- Research Assistant
- California Department of Public Health, Research Intern
- Peer Research Mentor
- Award-Winning Researcher

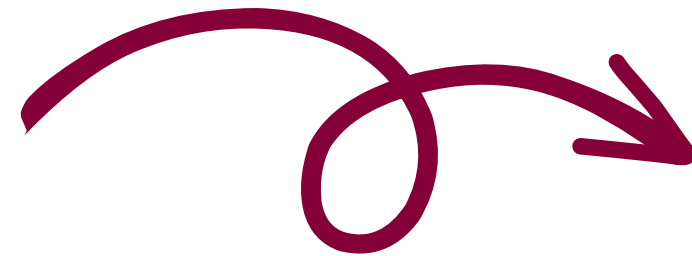


What is
Research?



Let's Define Research!

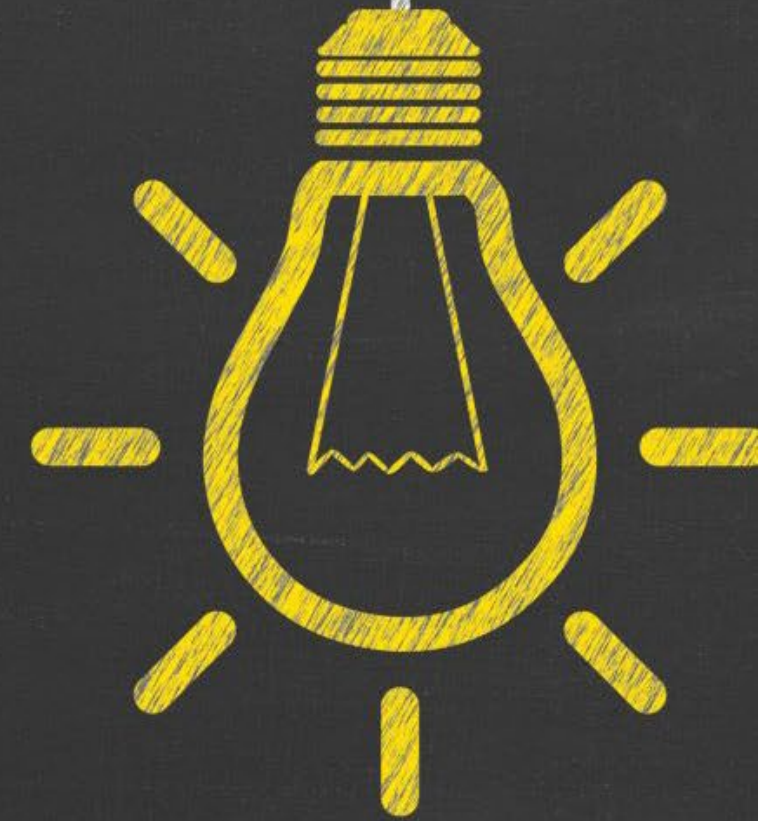
Scan the QR
Code to Get
Started!





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.



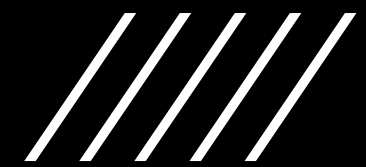
What is Research?

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?

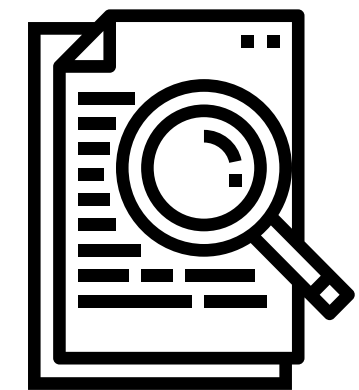
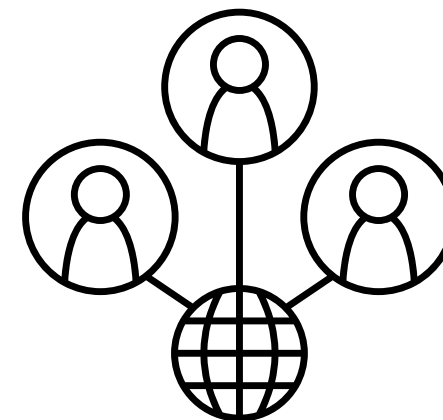
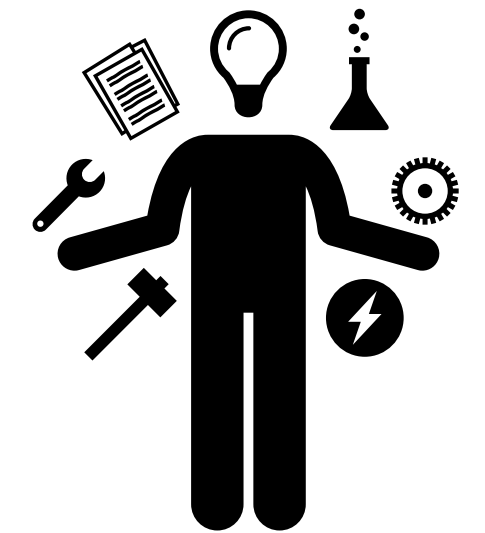
- Undergraduate research refers to the involvement of undergraduate (college or university) students in academic research projects, typically under the guidance and supervision of faculty members or researchers.
- It provides students with an opportunity to actively participate in the process of inquiry 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



South Bay:
Archaeological Artifact Collection
Department

Results

Archaeological research confirmed that a series of massive feasts were held in the early 1900s, dating back to at least 1903 and continuing through an especially massive one in 1913. Excavations at NT 313 likely recover material remains from these feasts, including a massive quantity of animal bones from the northeast corner of the property. Other artifacts such as ceramic wares, cloth and fabric fragments, glass shards, a newspaper clipping, and metal objects were recovered from excavations in this area.

Discussion & Conclusions

A substantial amount of animal bone fragments, charred plant fragments, and charcoal were found while excavating, which indicates that there had been a barbecue and/or barbecues at the site. It can be deduced that the barbecues were mainly held in the northeast location on the property from analyzing articles, newspaper search papers and photographs. Other materials found, aside from bones, include a ceramic mug handle, bits of glass shards, and cloth fragments – all materials that could have been deposited as part of feasting activities. These materials were likely deposited along with the bones and refuse when the feast areas were cleaned up following the massive celebration events. Archaeological research and the recovery of even the tiniest artifacts can help us understand how people lived (and died) in the South Bay 100 years ago.

References Cited

Library database (South archive)
 Library database (Sancho San Pedro Collection)
 "VIEJA EN EL RANCHO" Los Angeles Times (1886-1922); Los Angeles Times (1886-1922); "MONSTER BARBECUE AT THE RANCHO" Los Angeles Times (1886-1922); 22 Aug 1914
 "THE DAYS OF GOING ON HISTORIC RANCHO" Los Angeles Times (1886-1922); 17 Sep 1906
 "NEW THINGS WILL BE DONE - OLD-TIME SPANISH RANCHO" Los Angeles Times (1886-1922); 17 Sep 1906
 Library (photos)
 Library database (Sancho San Pedro History)

Acknowledgments

I would like to thank the staff of the Sancho San Pedro History Museum for their help with this project, as well as the staff of the University of California, San Diego (UCSD) for their help with the project.



CSUDH
 California State University, Dominguez Hills

Analysis of Prenatal and Maternal Risk of Fetal Mortality
 Aysa Monae Collins
 Enrique Ortega, Ph.D.

Abstract

Background:

- Non-Hispanic Black women are at the highest risk for fetal and maternal mortality rates compared to women of all other races and ethnicities.
- Previous studies have shown that early and adequate prenatal care can considerably reduce the risk of fetal and maternal morbidity.

Methods:

- This study examined five major maternal and fetal mortality risk factors, the month prenatal care began, and patient demographics in California from 2014 to 2019 using the Centers for Disease Control and Prevention, National Vital Statistics System, CDC WONDER Online Database.

Results:

- Addressing prenatal care is not enough to address the disparity experienced by black mothers. Understanding that fetal and maternal morbidity is multi-faceted and widespread among Black women helps find integrative solutions to address this issue.

Introduction

Studies have shown that early and adequate prenatal care can considerably reduce the risk of fetal and maternal mortality. Previous studies have shown that Black mothers are less likely as white mothers to receive late or no prenatal care. According to the National Vital Statistics Reports of 2018, Only 67% of Black mothers receive prenatal care in the first trimester, compared to the 83% of White mothers that begin prenatal care within the first two weeks. This study is examining 5,000 black women in Alameda County during 2013 - 2016. Despite 77% of the mothers receiving prenatal care, more than 10% of these women experienced fetal/maternal mortality.

Methods

- A secondary analysis was completed using the fetal death reports for the years 2014 to 2019 in California using the Centers for Disease Control and Prevention, National Vital Statistics System, CDC WONDER Online Database.
- Data used include all fetal deaths reported for 28 or more weeks of gestation.
- Fetal mortality rates in this report are computed as the number of fetal deaths at 28 or more weeks of gestation per 1,000 live births.
- The risk factors included: the mother's education level, the condition of diabetes, the mother's pre-pregnancy BMI, and the report of infertility treatment.
- Risk factors were examined by race and ethnicity and by which trimester prenatal care began and the number of fetal death reports.
- Statistical analysis used the categories of non-Hispanic white, non-Hispanic black, and Hispanic.

Results

Findings reveal that non-Hispanic Black women were facing a health disparity.

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

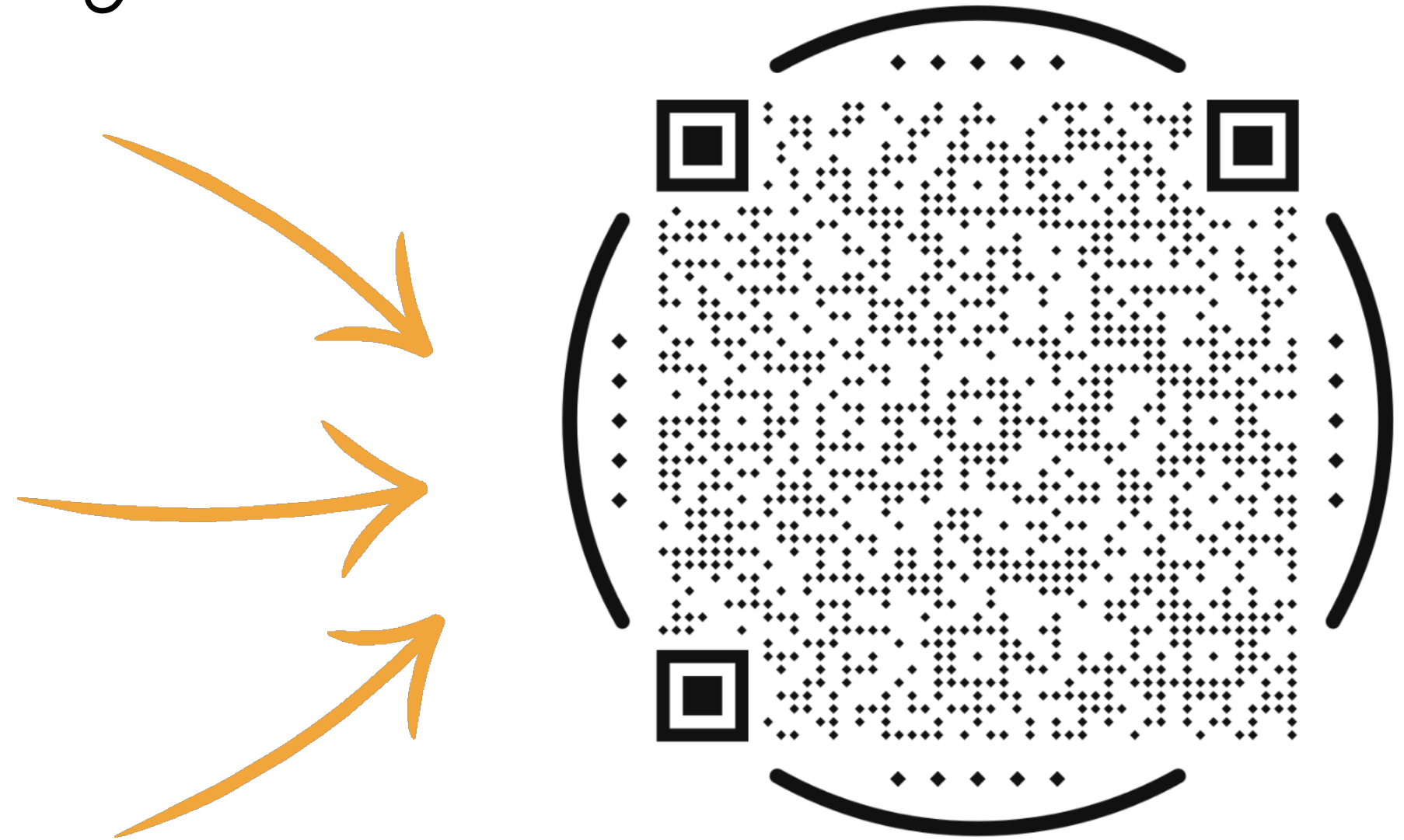
If you are contacting faculty directly, email them a cover letter and CV. Your cover letter will comprise the body of your email and should clearly & concisely:

- 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

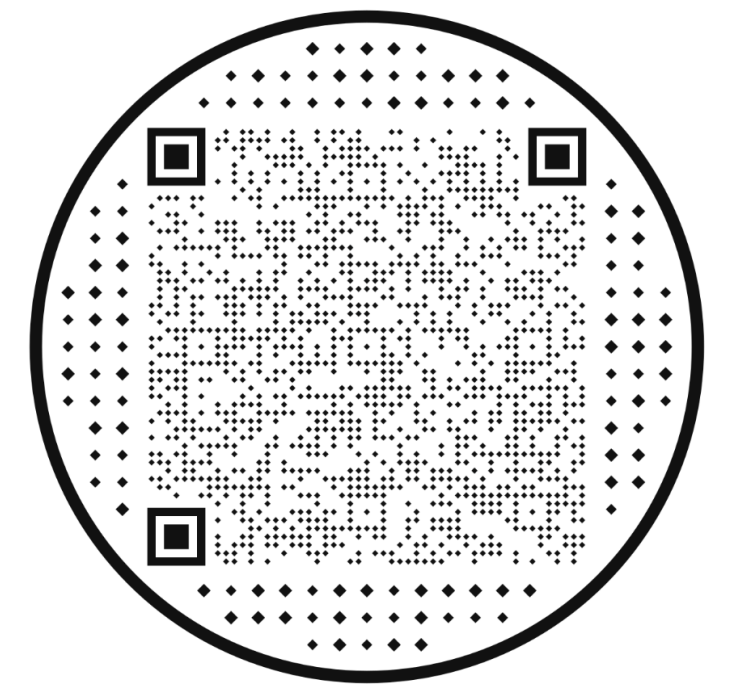


Final Tips on Getting Started

- 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

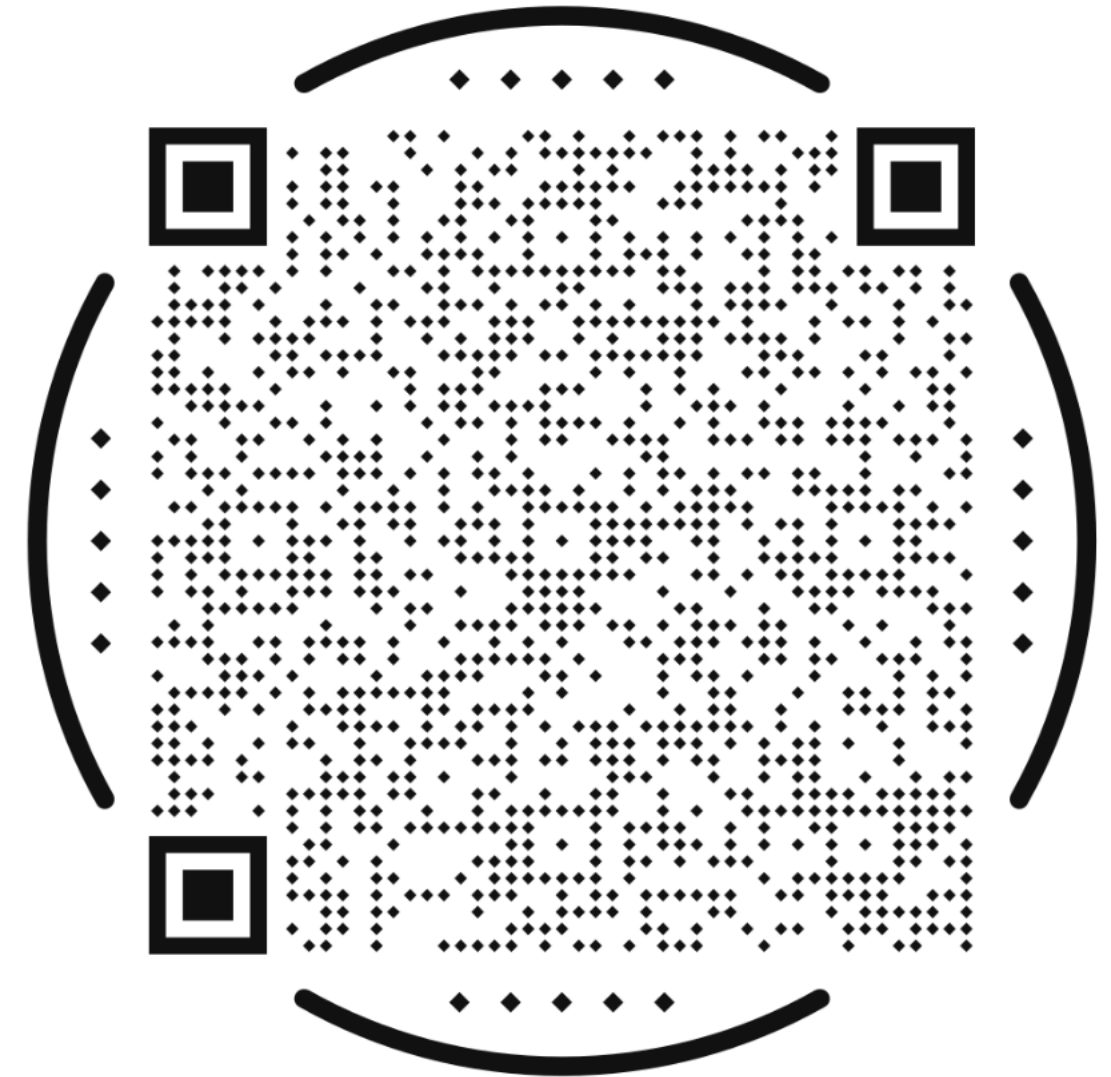
Summer Research Experience for Undergraduates:



- 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.



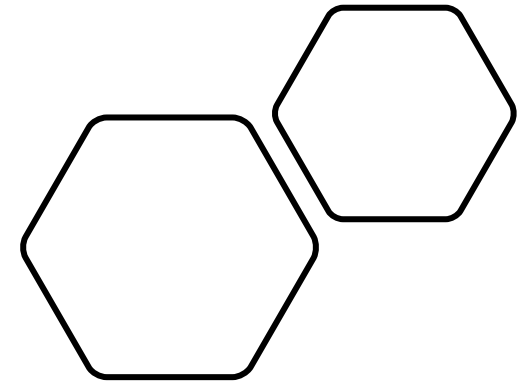
Handout

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Thank You

Questions?





Survey

Please provide feedback on your
workshop experience.

We appreciate your feedback.