# UCDAVIS DISCOVER WHAT MATTERS



Undergraduate Research Center









## UCDAVIS Undergraduate Research Center Office of Undergraduate Education

## **Mission Statement**

Our mission is to inspire and facilitate students' engagement in research, scholarship and creative activities in all disciplines. We empower students to find research opportunities with UC Davis faculty, and provide them with resources to hone skills that are vital to success as researchers and in their future careers.

#### **DISCOVER WHAT MATTERS**





#### UCDAVIS **Undergraduate Education**



UCDAVIS **GLOBAL AFFAIRS** 

THE GREEN INITIATIVE FUND **OFFICE OF SUSTAINABILITY** 

UCDAVIS

LICDAVIS

**HUMANITIES INSTITUTE** 

OFFICE OF RESEARCH



**LICDAVIS Undergraduate Research Center** 

**NSF CAMP MURPPS IIFH research fellows Mentor-Mentee Program Beckman Scholars Program** 

UCDAVIS **First-Year Seminars** 

UCDAVIS **University Honors Program** 



LICDAVIS Center for Educational Effectiveness



UCDAVIS **Center for Leadership Learning** 



UCDAVIS Academic Advising

ratorium expl

**Division of Student Affairs** 





## Stop by to visit us...

#### Location: 2300 Student Community Center Hours: Monday–Friday; 9:00 a.m.–5:00 p.m. Email: urc@ucdavis.edu



or visit the URC website: urc.ucdavis.edu





### **Engaging Students in Undergraduate Research**

Benefits to undergraduate students Benefits to faculty Benefits to graduate students and postdocs Benefits to research enterprise Increases visibility of research at UC Davis Increase legislature and donor support





"I enjoy mentoring undergraduates and find that they invigorate my lab with their enthusiasm. I had such a great undergraduate experience myself and want to help educate the next generation of scientists with an undergraduate research experience."

**Prof. Susan Kauzlarich.** Chemistry 2017 Chancellor's Award for Excellence in Mentoring Undergraduate Research





#### Awards and Programs for Undergraduate Research

- Provost's Undergraduate Fellowship (PUF)
- Chancellor's Awards
  - Award for Excellence in Undergraduate Research
  - Award for Excellence in Mentoring Undergraduate Research
- Undergraduate Travel Awards (e.g. to National Conferences)
- Hanson Family Undergraduate Publication Award New in 2018!
- IIFH Undergraduate Research Fellowship New in 2018!
- Research Rockstars Undergrad Slam New in 2018!
- Research Ambassadors New in 2018!
- Special Undergraduate Research Programs
  - NSF CAMP Scholars
  - MURPPS Scholars
  - Mentor-Mentee Program in Humanities & Social Sciences
  - Beckman Scholars Program
  - McNair Scholars Program (Office of Grad Studies)

... and many more!





Approximately **50%** of all UC Davis undergraduate students (representing <u>more than 100 majors</u> at UC Davis) assist faculty in research projects or creative activities during their academic career.

Source: UC Undergraduate Experience Survey, 2017



## UCDAVIS DISCOVER WHAT MATTERS



# **Research takes many forms**

- Laboratory benchwork
- Modeling and computations
- Fieldwork
- Surveys and interviews
- Library searches and archive work
- Data science initiative

#### ... in many places

- In departments across all four colleges
- Davis and Sacramento campuses
- Schools of Medicine, Veterinary Science, and Education
- National Labs with affiliated faculty members
- Research Stations (Bodega, Tahoe, etc)
- UC Center Sacramento
- Library Archives













#### **Research & Discovery Experiences in All Majors**

## Student % by Major



In 2017-18, students engaged in faculty-sponsored research and discovery experiences represented *more than 100 of the 110 majors* at UC Davis.





#### **Research & Discovery Experiences in All Majors**

#### Student % by faculty sponsor location



Numbers based on 2018 conference presenters

## UCDAVIS DISCOVER WHAT MATTERS



## Getting Involved with Undergraduate Research Benefits to students

- Earn credit towards your degree
- Build technical skills
- Lab experiences outside of coursework
- Apply knowledge to real-world applications
- Develop communication and writing skills
- Experience with state-of-the-art instrumentation
- Gain insight into career possibilities
- Enhance your resume and build a professional network.
- Valuable opportunities for Presentations & Publications
- More competitive application for campus awards, graduate school and fellowships







# It Takes More Than a Major.... Importance of Research

**93% of employers** said that "a candidate's demonstrated capacity to think critically, communicate clearly, and solve complex problems is *more important* than their undergraduate major."

https://www.aacu.org/press/press-releases/employers-more-interested-critical-thinking-and-problem-solving-college-major







### Engaging Students in Undergraduate Research Benefits to Faculty

- Can often be as productive as new graduate students
- Undergraduates have not yet developed bad lab habits!
- Including undergraduate mentorship as part of your "Teaching" (MyInfoVault) and in the candidate "diversity statement" for merits & promotions.

#### UCDAVIS DISCOVER WHAT MATTERS









### Engaging Students in Undergraduate Research Benefits to Faculty

- Can often be as productive as new graduate students
- Undergraduates have not yet developed bad lab habits!
- Including undergraduate mentorship as part of your "Teaching" (MyInfoVault) and in the candidate "diversity statement" for merits & promotions.





## Engaging Students in Undergraduate Research Benefits to Faculty

- Can often be as productive as new graduate students
- Undergraduates have not yet developed bad lab habits!
- Including undergraduate mentorship as part of your "Teaching" (MyInfoVault) and in the candidate "diversity statement" for merits & promotions.
- Developing a vibrant culture of mentoring establishes a foundation for including outreach and diversity aspects in grant proposals.
- Students' questions and inquiring minds give you a fresh perspective.
- Win faculty awards and other recognition for mentoring; student accolades also directly reflect on the faculty mentor.
- Positively impact students at early stage in academic/professional career.
- Provides opportunities for graduate students, postdocs and lab techs to develop mentoring skills, which is important for their career development.





## **URC Services for Students**

#### Workshop (examples)

- How to get involved in research
- How to write an abstract
- How to give a presentation
- Applying for awards

#### **One-on-one Advising**



- Understand and prepare for undergraduate research
- Academic planning related to research
- Contacting a faculty research sponsor

#### **Poster Printing for Conferences**

#### **Awards & Funding**

Chancellor's award, Travel award, Provost's Undergraduate Fellowship (PUF), Publication Award, applying to summer research programs





#### **Email analysis and etiquette**

Use professor's proper title and last name – shows respect Dear Dr. Jessica, I am a senior biology student and looking for research. Do you still have available opposition in your lab? I am looking forward to hear from you Thanks

> Why their research? No evidence provided to indicate anything about their research has been read

Lacks grammar, basic letter etiquette and correct spelling

DERGRADUATE RESEARCH CENTER





# Undergraduate Research, Scholarship & Creative Activities Conference

#### For 2018 Conference:

679 total presenters

507 poster presenters

164 oral presenters

8 arts/design presenters

365 research sponsors (faculty and research staff)

121 moderators

Mark your Calendars! The 30<sup>th</sup> Annual UC Davis Undergraduate Research, Scholarship & Creative Activities Conference will be April 26-27, 2019

82 majors represented

Over **5,500 attendees**, including friends, family, colleagues, peers, staff, and various community college faculty with their students





# THANK YOU for your SUPPORT of Undergraduate Research!

- Mention research methods and benefits of participating in undergraduate research in classes you teach
- Serve as a moderator for the Undergraduate Research, Scholarship & Creative Activities Conference (approx 2 hr time commitment)
- Serve on a faculty panel sharing about your own research experiences participating in undergraduate research





# THANK YOU for your SUPPORT of Undergraduate Research!

- Mention research methods and benefits of participating in undergraduate research in classes you teach
- Serve as a moderator for the Undergraduate Research, Scholarship & Creative Activities Conference (approx 2 hr time commitment)
- Serve on a faculty panel sharing about your own research experiences participating in undergraduate research
- Mentor an undergraduate student in a discovery experience
- Mentor undergraduate students to co-author publications
- Request supplement funding for undergraduate research from the NSF (or other agencies)
- Develop and teach a First Year Seminar Course-based Undergraduate Research Experience (FYS-CURE) related to your research





## Thank you!

#### Location: 2300 Student Community Center Hours: Monday–Friday; 9:00 a.m.–5:00 p.m. Email: urc@ucdavis.edu



## or visit the URC website: urc.ucdavis.edu