

Pathways to Impact

**Institutionally Coordinated Resources
to Support Faculty and Staff Engaged in
Undergraduate Research**



THE UNIVERSITY OF ARIZONA
RESEARCH, INNOVATION & IMPACT

Societal Impact



Land Acknowledgement



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and Practice
Research Director of the STEM Learning Center

Research on

Inclusive and equitable practices

STEM education

Undergraduate research

**Designing and Implementing
a Successful Undergraduate
Research, Scholarship, and
Creative Activity Program**

Holly E. Unruh, Heather Haeger, John E. Banks, and Winny Dong

ROUTLEDGE UNDERGRADUATE RESEARCH SERIES



Reflection

Thinking of yourself and your connection to research:

- What experiences have connected you to research
- Are there ways you wished you were more connected to research
- Are there supports that were important for you as a researchers



Why undergraduate research?



High-impact Practices (HIPs)

Capstone Courses

Collaborative Assignment and Products

Common Intellectual Experiences

Diversity/Global Learning

ePortfolios

First-year Seminars and Experiences

Internships

Learning Communities

Service Learning/ Community-based Learning

Undergraduate Research

Writing Intensive Courses

Why These Practices

Performance expectations set at appropriately high levels

Significant investment of time and effort by students over an extended period of time

Interactions with faculty and peers about substantive matters

Experiences with diversity, wherein students are exposed to and must contend with people and circumstances that differ from those with which students are familiar

Frequent, timely, and constructive feedback

Opportunities to discover relevance of learning through real-world applications

Public demonstration of competence

Benefits of Undergraduate Research

For Students

Academic achievement: college retention and graduation, and retention in STEM.

Graduate school preparation: disciplinary knowledge, relevant experience and skill development, and building cultural and social capital.

Career readiness: critical thinking and skill development, and refined career aspirations.



For Faculty Mentors

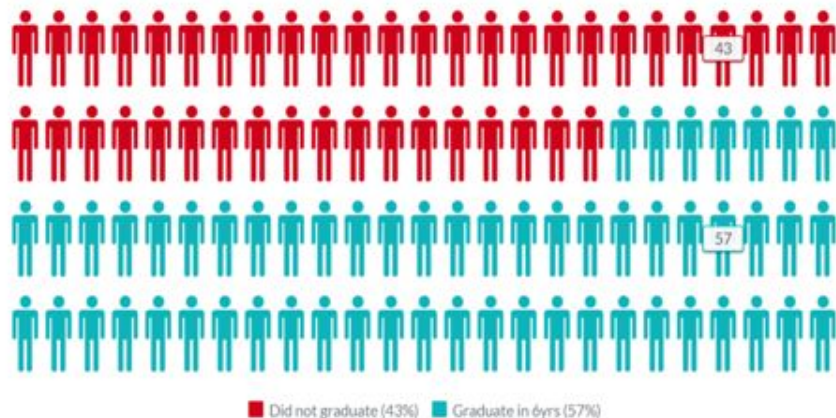
Increased job satisfaction, research support, inclusion of diverse perspectives in research, benefits in tenure and promotion.

Broader Impacts

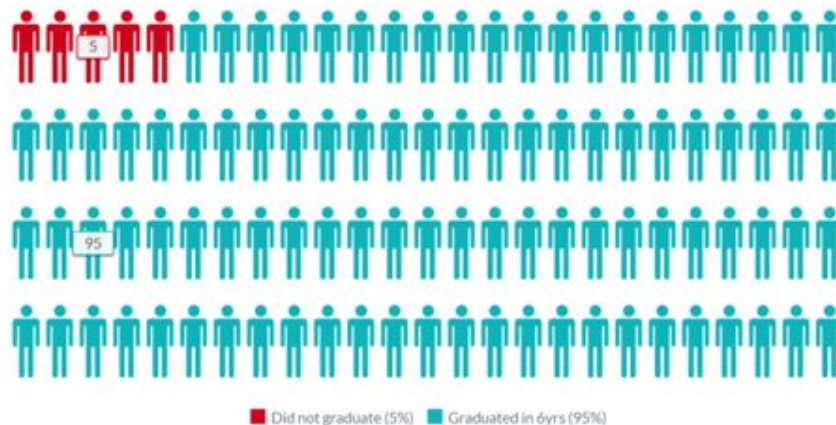
Creating a society that can think critically and stay intellectually curious, increased research productivity, greater diversity in research and scholarly activity.



For every 100 students who enter college at or below the poverty level, 43 will not make it to graduation



For every 100 undergraduate researchers who enter college at or below the poverty level, 95 will graduate in 6 years or less



Participation in Undergraduate Research Increases

Cumulative GPA

4yr and 6yr graduation rates

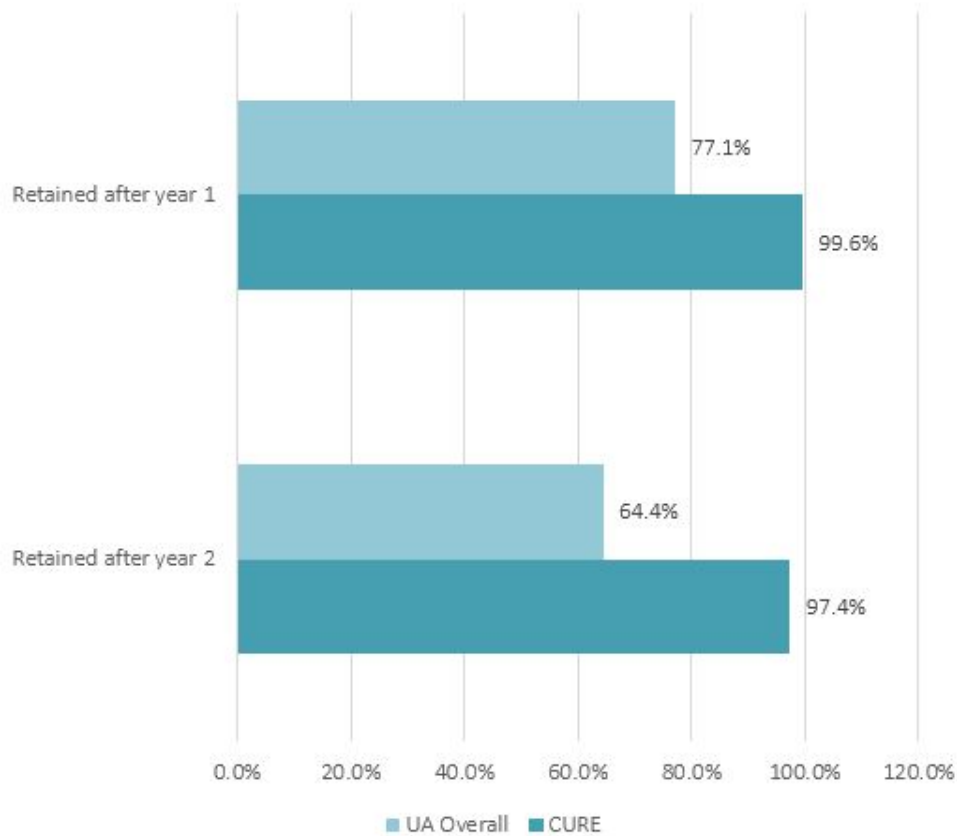
Retention in STEM

STEM Graduation rates

Haeger, H., & Fresquez, C. (2016). Mentoring for inclusion: the impact of mentoring on undergraduate researchers in the sciences. *CBE – Life Sciences Education*, 15(3). <https://doi.org/10.1187/cbe.16-01-0016>

Unruh, H., Haeger, H., Banks, J. E., & Dong, W., (2024). *Designing and implementing a successful undergraduate research, scholarship and creative activity program*. Routledge. ISBN 9780367724818

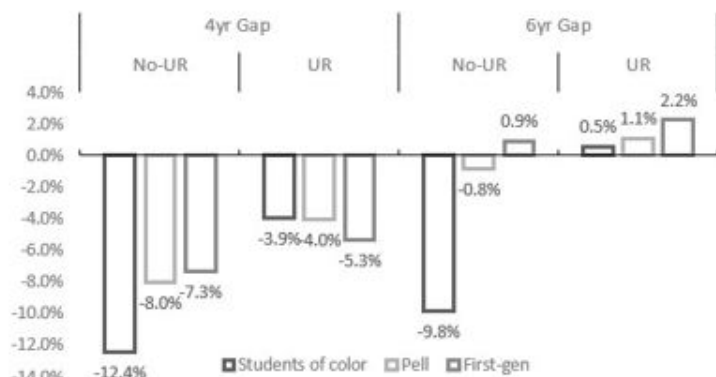
Course-based Undergraduate Research at UAz



Students taking courses developed through the Course-based Undergraduate Research Experiences (CURE) Institute (232 students) had significantly higher 1st and 2nd year retention rates and had a significantly higher cumulative GPA by the end of their 1st year and 2nd year

Participation in Undergraduate Research Reduces Equity Gaps in STEM Graduation Rates

Figure 5: Equity gaps in STEM graduation rates for students of color, Pell eligible students, and first-generation students (n=2,727)



1. Equity gaps are the differences between the average graduation rates and the traditionally marginalized group with the axis representing the average graduation rate.

Contribute to **closing equity gaps in STEM education** for students traditionally marginalized in STEM (students of color, first-generation, low-income, and transfer students)

Undergraduate Researchers traditionally marginalized in STEM are **more than twice as likely to graduate in 4 years**, and more than 14x as likely to ever graduate than like peers

Underrepresented STEM students who participate in UR graduate with **significantly higher GPA** than like peers even when controlling for background characteristics and prior (first-year) academic performance. $\beta=.24$

Who has access to undergraduate research experiences?



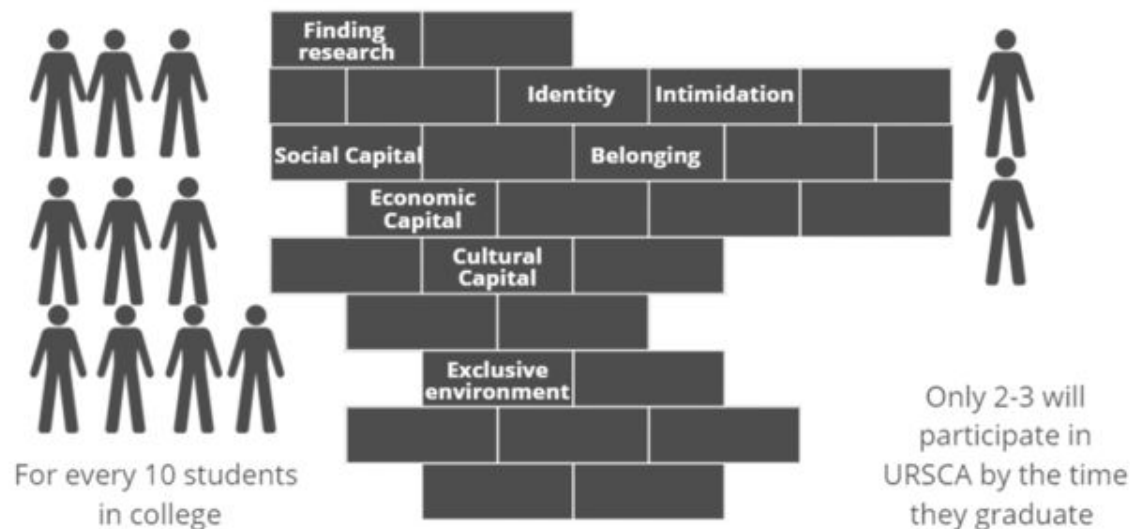
Traditionally privileged students

Unequal access even at Minority Serving Institutions and Hispanic Serving Institutions
Historically Black Colleges & Universities had more equitable participation

Haeger, H., BrckaLorenz, A., & Webber, K. (2015). Participation in Undergraduate Research at Minority Serving Institutions. *Perspectives on Undergraduate Research and Mentoring*, 4(1). <http://blogs.elon.edu/purm/files/2015/11/Haeger-et-al-PURM-4.1-1.pdf>

Haeger, H., & Fresquez, C. (2016). Mentoring for inclusion: the impact of mentoring on undergraduate researchers in the sciences. *CBE – Life Sciences Education*, 15(3). doi.org/10.1187/cbe.16-01-0016

Barriers to undergraduate research experiences

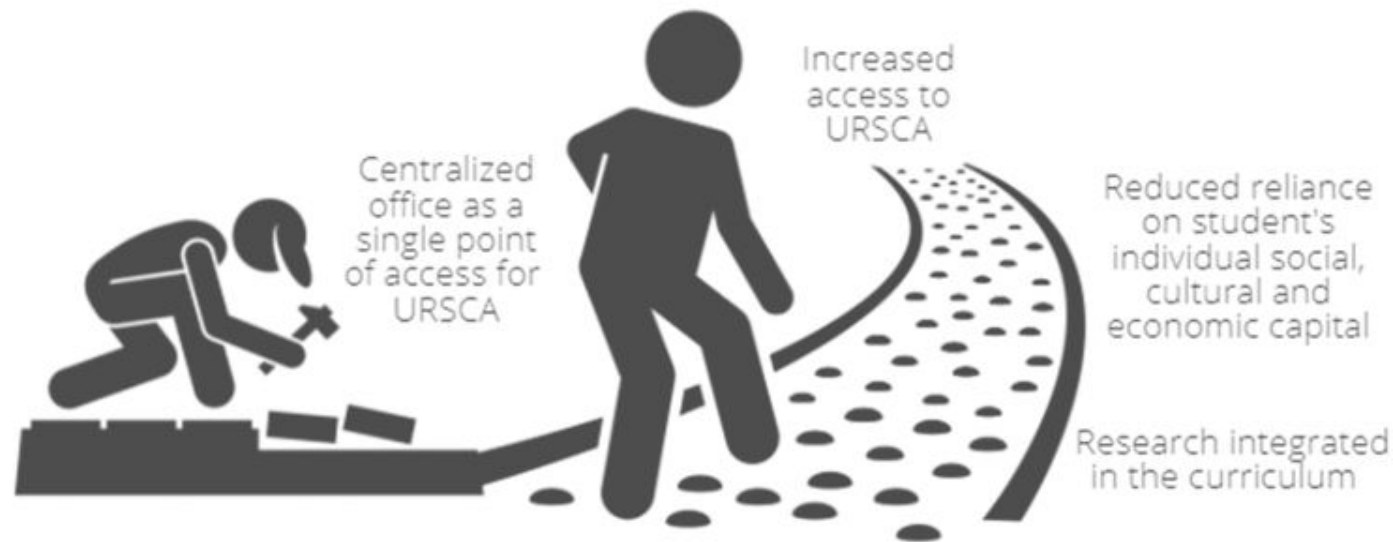


Institutions with programs specifically aimed at diversifying research had more equitable participation

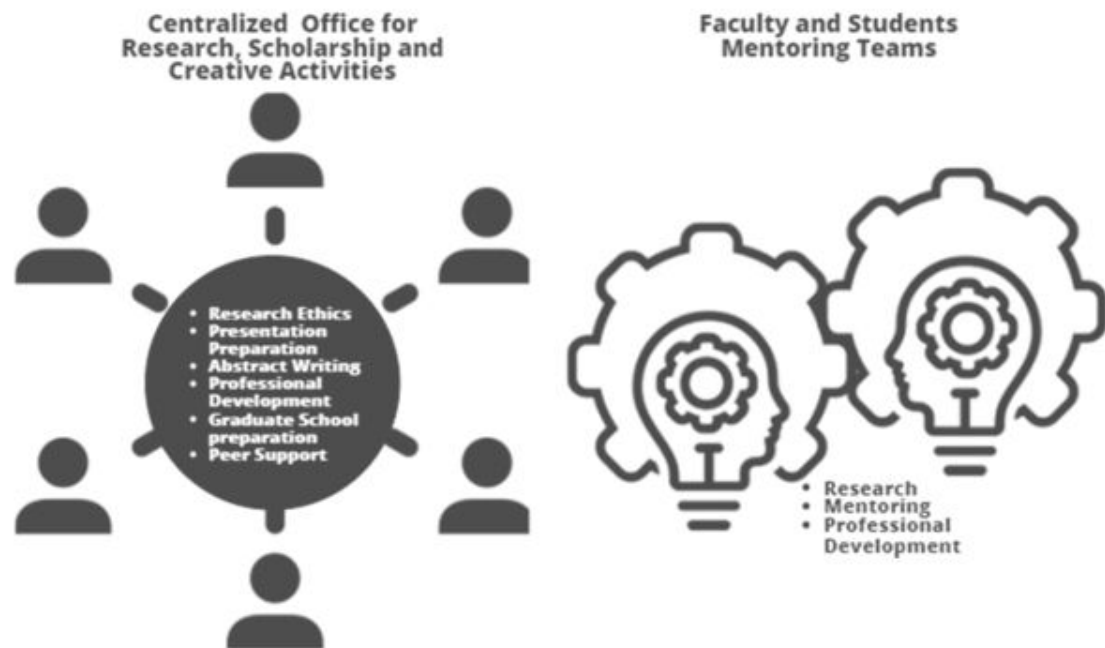
Unruh, H., Haeger, H., Banks, J. E., & Dong, W., (2024). *Designing and implementing a successful undergraduate research, scholarship and creative activity program*. Routledge. ISBN 9780367724818

Haeger, H., Hilda Bueno, & Sedlacek (2024). Researching for Equity: Participation in Undergraduate Research Reduces Equity Gaps in STEM Graduation Rates. *CBE – Life Sciences Education*

Reducing barriers to undergraduate research, scholarship, and creative activities (URSCA) by centralizing support



Centralizing Support for URSCA



Unruh, H., Haeger, H., Banks, J. E., & Dong, W., (2024). *Designing and implementing a successful undergraduate research, scholarship and creative activity program*. Routledge. ISBN 9780367724818

Discussion and Questions

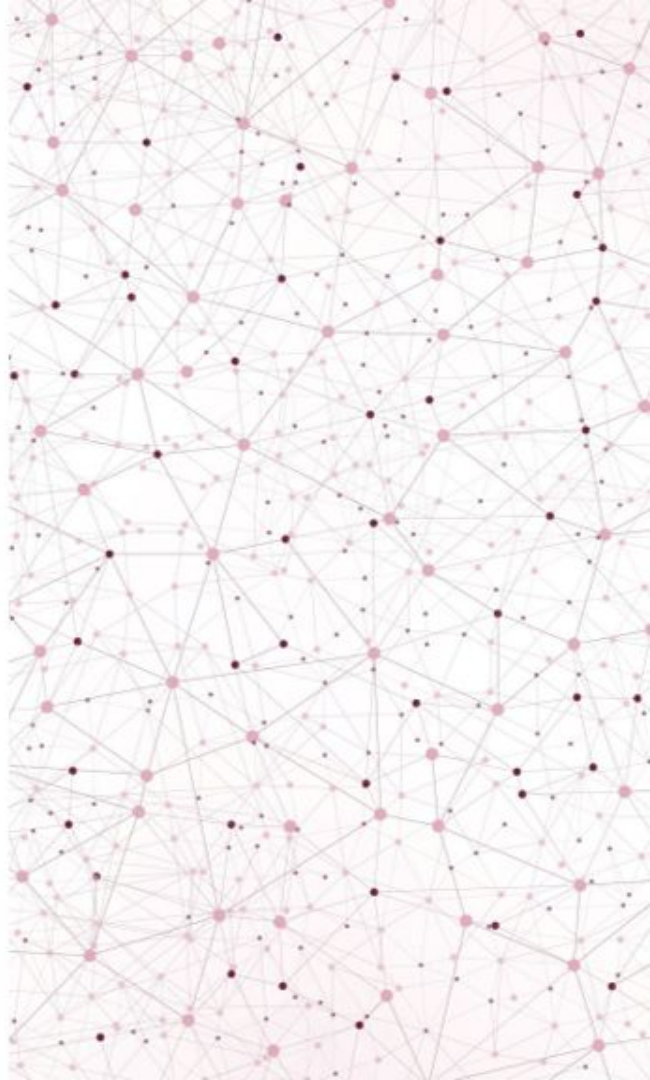
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University of Arizona



University Central Support for Undergraduate Research (UR)



Kimberly J. Sierra

Director of Undergraduate
Research and Inquiry



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Undergraduate Research
Coordinator

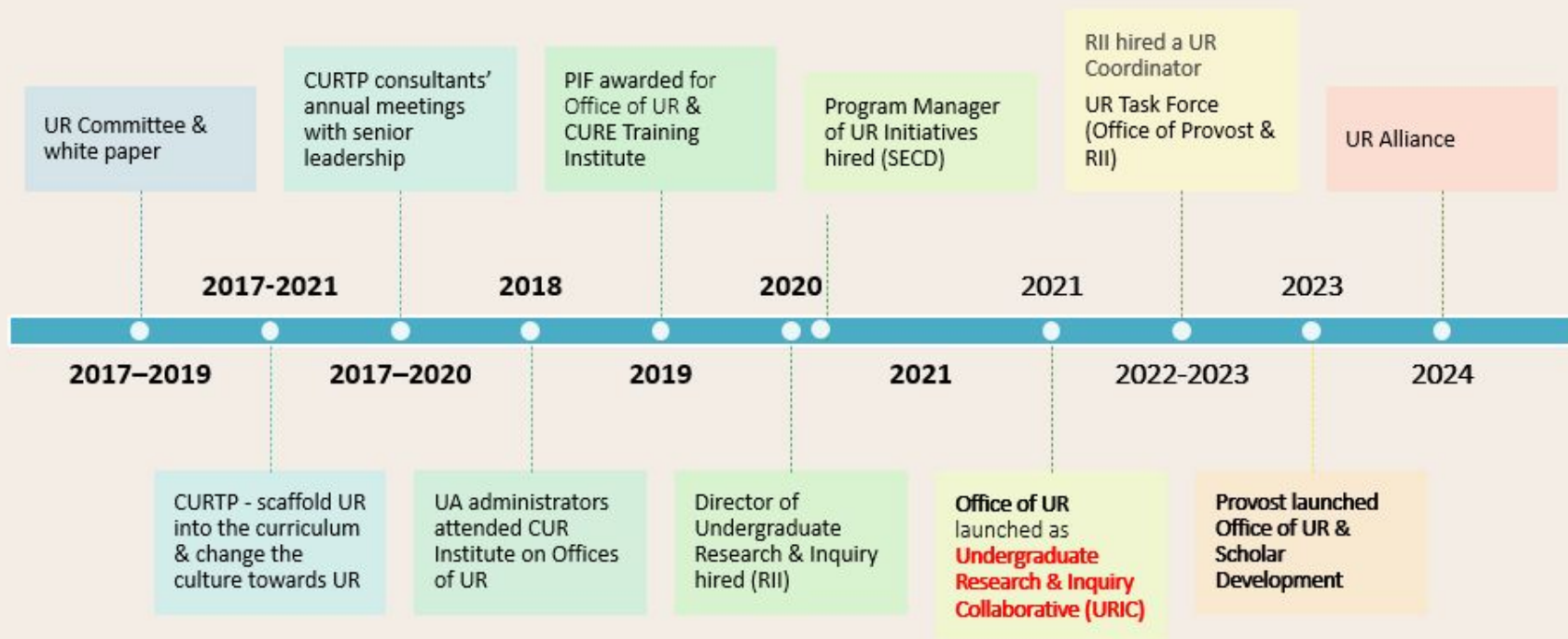


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Undergradresearch@arizona.edu

Long-Term Efforts to Create an Office of UR



Data on UR at UArizona (2022-2023)

- 2022-2023 = 4,294 students participated in UREs
 - 1092 in structured or academic research programs
 - 295 summer research experiences
 - 1416 UR student jobs (34% underrepresented)
 - 1320 in research courses (14% underrepresented)
 - 26+ structured research programs
 - 13 during both summer and academic year
 - 10 solely during summer; 3 solely during academic year



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Q.11 - Which of the following have you done or do you plan to do before you graduate? - NSSE Survey

... work with a faculty member on a research project	Undergraduate Responses
First year students	5% had or were in progress
First year students	43% planned to
Graduating seniors	30% had or were in progress
Graduating seniors	13% planned to



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**So, why do we need
to put any more
resources into
undergraduate
research?**



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**Undergraduate
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45,025 undergraduates (FA24)
11,826 seniors

UR is a HIP leading to improved retention.

> 25% STEM students (29% first gen)
Technical skills & research skills required for
jobs or grad school

Workforce needs

Undergraduate Research Task Force

- 2022-2023
- 311 Task Force Members
- 1354 Student Survey Respondents
- 402 Faculty Survey Respondents
- 128 UR Experiences in the Current Practices Inventory (CPI)



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Key Findings from the UR Task Force

1. The undergraduate research (UR) experience needs to be **defined and operationalized**;
2. The diverse activities encompassed by a comprehensive definition of UR should be **assessed and evaluated**;
3. Efforts and resources that have the potential to be especially impactful should be **coordinated and promoted**;
4. UR needs to be thoroughly **integrated in the curriculum**;
5. UR needs to be more **widely funded and rewarded**.



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Undergraduate Research Alliance

- Facilitated by the Office of the Provost and RII
 - Office of Undergraduate Research & Scholar Development
 - **Dr. Kevin Bonine**
 - RII Office of UR (formerly Undergraduate Research & Inquiry Collaborative)
 - **Kimberly Sierra**
- 5 committees formed based on the 5 major key findings from the UR Task Force
- Meeting monthly



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Undergraduate Research Alliance

- Tracking, Evaluation, and Assessment: **Jen Fields**
- Curricular Integration: **Raine Ikagawa**
- Funding and Support: **Kay Orzech**
- Communication and Coordination: **Dr. Kelley Merriam-Castro**
- Culture, Access, Equity, & Inclusion: **Tori Nardinelli**
 - Ensuring these are infused within all aspects of the committees' work

Why Does Equitable Access to Research Matter?

- Need diverse perspectives to strengthen the research
- Representatives from communities that research impacts
- Future researchers will research issues personally important to them



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Societal Impact – Support and Assistance Outline

- CUREs and CURE Training Institute
- UR.arizona.edu - Student Resources
 - Researcher Database
 - Skills Workshops
 - UR Ambassadors
 - AJIS
- UR.arizona.edu - Faculty Resources
 - Researcher's Guide
 - CUR
 - REU Funding Webinar



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Coordinator



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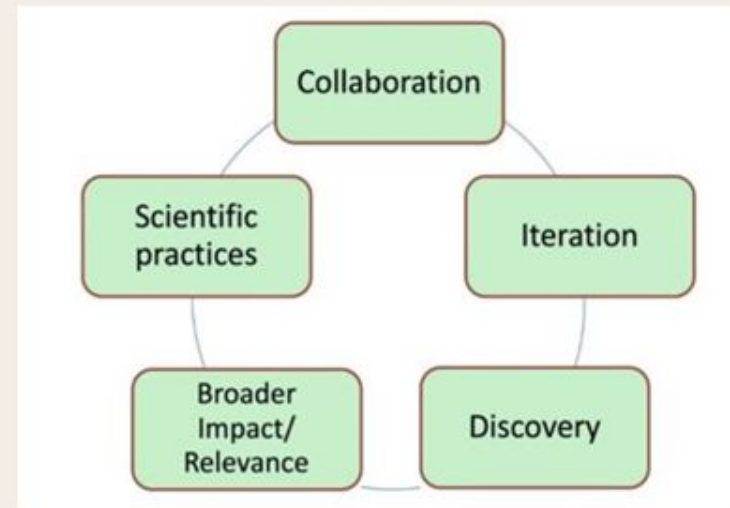
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Expanding Early Access to Research through CUREs

CUREs – Course-Based Undergraduate Research Experiences

- Authentic research experiences incorporated into courses.
- Removes barriers of 1-on-1 positions

CUREnet: CUREs involve whole classes of students in addressing a research question or problem of interest to stakeholders outside the classroom. During a CURE, students will engage in scientific practices, such as collecting and analyzing data and developing and critiquing arguments. Auchincloss et al., 2014



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UA CURE Training Institute

- A 2 ½ day workshop taught by national expert, Dr. Sara Brownell, ASU
- Small \$ incentive for supplies, assistants, or stipends
- 81 faculty, staff, post docs, and grad students have attended since 2020
- Open to local community college faculty
- Culturally responsive CUREs



<https://ur.arizona.edu/cure-training-institute>



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Diversity in CURE Courses

Spring 2021 - Spring 2024

- 28 unique CUREs developed, 6 in development
- CUREs span 8 colleges
- 46 CURE offerings SP21-SP24
- Cumulative 2102 students

College of Agriculture, Life, and Environmental Sciences (CALES)

College of Applied Science and Technology (CAST)

College of Education (COEd)

College of Fine Arts (COFA)

College of Humanities (COH)

College of Science (COS)

College of Social and Behavioral Sciences (SBS)

W.A. Franke Honors College (HNRS)



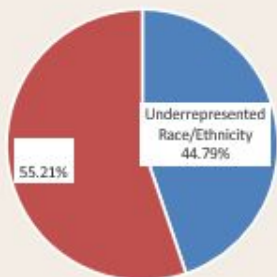
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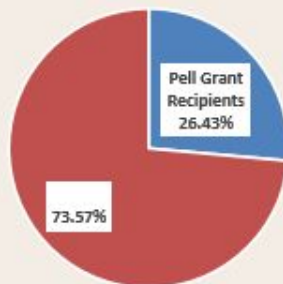
Diversity in CURE Courses

Spring 2021 - Spring 2024, Cumulative 2102 students

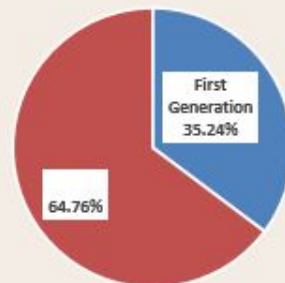
CURE Students - Underrepresented Ethnic Groups



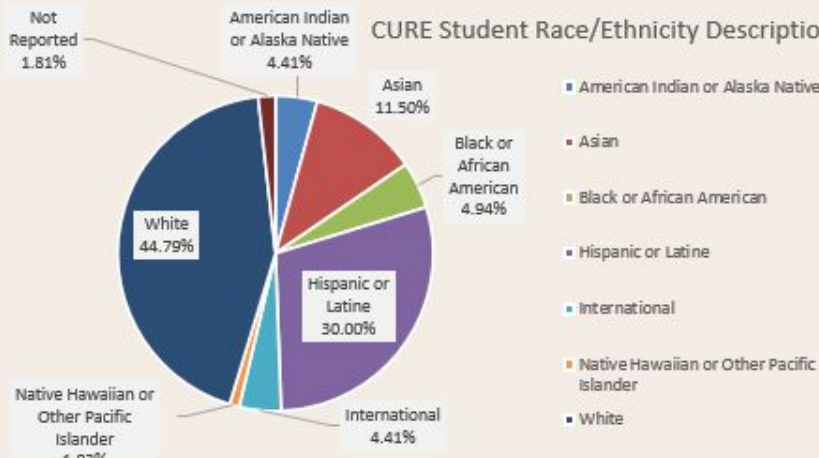
CURE Students - Pell Grant Recipients



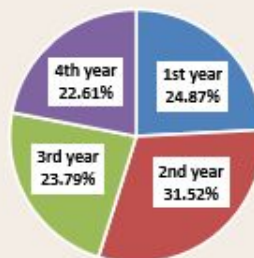
First Generation CURE Students



CURE Student Race/Ethnicity Description



CURE Student IPEDS Classification



Diversity in CURE Courses

Spring 2021 - Spring 2024, Cumulative 2102 students

Demographic	CUREs (2102 students)	Entire UA Student Population (45025 students)
First Generation	35.24%	32.08%
From low-income household	26.43%	24.80%
Race & Ethnicity underrepresented in research	44.79%	41.69%
1st/2nd year students	56.39%	52.93%



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Centralized UR Website – Student Resources

Undergraduate Research & Inquiry Collaborative

Search Site

HOME GETTING STARTED **FIND RESEARCH** RESOURCES NEWS AND EVENTS ABOUT FACULTY

Looking for Year-Long Research?
Apply to the **UROC-PREP Program!**

JUNIORS! Apply to the UROC-Prep Research Program.
UROC-PREP Program is a year-round undergraduate research and mentoring program for under-represented juniors. The deadline to apply to November 1st, 11:59 PM! [Click here to learn more and apply!](#)

JUNIORS! Apply to the UROC-Prep Research Program.

SOPHOMORES! Apply to the McNair Program!

SOPHOMORES! Apply to the MARC Program!

Who Does Undergraduate Research?

ur.arizona.edu



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Undergraduate Research

UA Researchers Database

College: Department: Types of Opportunities:

Research Location: Tucson off-campus
Phoenix
Online
Other

Keyword search:

NAME	DEPARTMENT	OFFERING RESEARCH OPPORTUNITIES?	TYPES OF OPPORTUNITIES	PREREQS	RESEARCH LOCATION	END DATE
Shankar Venkataramani	Mathematics	Yes	Paid Volunteer	Calculus, Linear Algebra, Programming, Differential equations would be very helpful.	Tucson main campus	
Patrick Shipman	Mathematics	Yes	Paid Volunteer For Credit	None	Tucson main campus	
Laura Miller	Mathematics	Yes	Paid Volunteer For Credit	None	Tucson main campus	



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>10,000 views *per semester*

Skills Workshops for Students



- **Professionalism in the Lab**
 - Ethical considerations in research
 - Lab hierarchy
 - Record keeping
 - Professional communication
 - Student-Mentor contracts



- **Molecular Biology Skills**
 - Aseptic technique
 - Micropipetting
 - DNA rapid extraction
 - PCR
 - Gel electrophoresis



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Undergraduate Research Ambassadors

RESOURCES - NEWS AND EVENTS - ABC

Workshops for Students

Funding for Research

Individual help for students

Guidance and Support from SECD

Weekly Undergraduate Research Newsletter

Publish your Research

ur.arizona.edu/content/undergraduate-research-ambassadors



uazugresearch

Follow

Message



313 posts

1,668 followers

186 following

UArizona UndergraduateResearch

Undergraduate Research Ambassadors at the University of Arizona

linktr.ee/UArizonaUndergradResearch



Desiree Nguyen



Peniella Irakoza



Mariam Rana



Solani Robinson



Simi Saha



Lexi Vanco



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AZ Journal of Interdisciplinary Studies

RESOURCES - NEWS AND EVENTS - ABC

Workshops for Students

Funding for Research

Individual help for students

Guidance and Support from SECD ▾

Weekly Undergraduate Research Newsletter ▾

Publish your Research

- Team of undergraduate students
- TRIF funds stipends and administrative oversight
- Publishes undergraduate work, with an emphasis on interdisciplinary research, every spring



uazajis

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11 posts

88 followers

176 following

Arizona Journal of Interdisciplinary Studies
University of Arizona Undergraduate Journal

Interested in submitting

journals.librarypublishing.arizona.edu/azjis/submissions



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[Undergraduate Research Guide](#)

[CURE Training Institute](#)

[Vertically Integrated Projects \(VIP\)](#)

[Faculty Funding Opportunities](#)

[Update your UR listing in the Search Database](#)

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[Council on Undergraduate Research](#)

[Federal Funding to Support Student Involvement - Resources and Webinar](#)

[Undergraduate Research Resources for Faculty](#)



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Undergraduate Research Guide

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Undergraduate Research Resources for Faculty

- >14000 individuals, 650 colleges and universities
- Collaboration & Discussion spaces
- CUR scholarly journal
- Member-only programs on evolving hot topics
- Consulting and program reviews
- Sample syllabi
- Discounts

REU Funding Webinar - Recording

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[Undergraduate Research Resources for Faculty](#)

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- Information about NSF and NIH funding for REUs
- How to write proposals
- Different types of grants and supplements available
- Additional resources and support available to you!



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Welcome to TIMESTEP!

TIMESTEP (Tucson Initiative for **Minoritized Student Engagement in Science & Technology Program**) offers educational and professional development opportunities for undergraduate students in the physical sciences at the University of Arizona. We seek to make STEM disciplines inclusive, diverse, and accessible by creating greater access to information, mentoring, and resources for student success.



**UNDERGRADUATE RESEARCH OUTREACH, EDUCATION, PROMOTION,
AND RECRUITMENT**
November 14, 2024



Undergraduate Research & Inquiry Collaborative

Our Team



Kelley Merriam-Castro, PhD

Program Manager

Undergraduate Research Initiatives

Student Engagement and Career Development

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Why Undergraduate Research?

Undergraduate research is a high impact educational practice that leads to increased retention and improves post-graduation success

- High-Impact Practices are positively associated with student engagement, deep learning, and educational advances, particularly for historically underserved students (Zilvinskis et al, 2022)
- Early undergraduate research experience (URE) in social sciences and humanities leads to significant gains in analytical and critical thinking skills for first-and second year students, especially for first generation students (Ishiyama, 2002).
- UREs, particularly during the academic year, are especially effective at increasing interest and persistence in STEM, particularly for underrepresented minorities (Hurtado, 2009; Lopatto, 2004; Russell, 2007; Schultz et al., 2011).

Students who participate in Internships are 1.7 times more likely to find full-time employment upon graduation

Students who participate in UREs are 1.8 times more likely to advance to continuing education programs



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Challenges to participating in UREs

Underrepresented students face a number of hurdles that keep them from participating in independent UREs (Bangera and Brownell, 2014):

- 1) Lack of awareness of existing research opportunities
- 2) Lack of awareness of cultural norms associated with scientific research
- 3) Perceived barriers to interactions with faculty
- 4) Financial and personal barriers

And from my own observations:

- 5) Enduring view that research is an elite experience for advanced students

Peer mentor model - we strive to help students overcome these challenges through outreach and individualized support from students who have been there.



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Undergraduate Research Ambassadors

Here to help students on their research journey!

We are here to help students learn **WHAT** research experiences are available and **HOW** to get involved!



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Undergraduate Research Ambassadors, 2024-25



Desiree Nguyen
Neuroscience &
Cognitive Science,
Molecular &
Cellular Biology



Lexi Vance
Environmental
Science,
Microbiology



Soleil Robinson
Biochemistry,
Spanish



Simi Saha
Computer Science,
Mathematics



Mariam Rana
Physiology &
Medical Sciences
and Public Health



Peniella Irakoze
Microbiology

Sharing WHAT is available

ur.arizona.edu

"The everything repository"

- Perennial information: Internal and external research programs, funding opportunities, events, workshop series, classes, jobs (link to Handshake)
- The Arizona Researchers Database: ur.arizona.edu/find/search-ua-researchers
- Time-sensitive information: Event calendar and carousel
- Over 153,000 site visits per year

To promote opportunities here, email undergradresearch@arizona.edu (UR promotion and recruitment submission form coming soon!)



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Looking for Year-Long Research? Apply to the UROC-PREP Program!

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Who Does Undergraduate Research?

The Undergraduate Research & Inquiry Collaborative

The Office of Societal Impact within Research, Innovation, and Impact (RII), and Student Engagement and Career Development (SECD) within the Office of the Provost have partnered to create and promote opportunities in undergraduate research and inquiry across campus. The University of Arizona's Undergraduate Research & Inquiry Collaborative brings together centralized resources to expand access to undergraduate research and inquiry (URI), to coordinate outreach and support, to showcase URI talent, to provide training, and to enhance the quality of the URI experience with a focus on equity, inclusion, and cultivating success for all students.

Deadlines and Events

November 15, 2024 (All day)

Indigenous-Centered Mini Grants - Application Deadline

CAMPUS SUSTAINABILITY FUND

Indigenous-Centered Mini Grants



The Campus Sustainability Fund has two \$5,000 grants each year for Indigenous-focused projects that support environmental and social justice.

November 15, 2024 (All day)

AWARDSS-PLUS Program - Application Deadline



Spring 2025

- Researcher - Undergraduate
- Researcher - Graduate Student
- Researcher - Faculty
- Researcher - Postdoctoral Fellow
- Researcher - Visiting Scholar

Fall 2025

- Researcher - Undergraduate
- Researcher - Graduate Student
- Researcher - Faculty
- Researcher - Postdoctoral Fellow
- Researcher - Visiting Scholar

Eligibility for the AWARDSS-PLUS program:

- U.S. Citizen, Permanent Resident, or Lawful Permanent Resident
- U.S. born or U.S. raised
- U.S. born or U.S. raised

November 17, 2024 (All day)

The Salk Summer Undergraduate Research Fellowship (Salk SURF) - Application Deadline



Undergraduate
Research & Inquiry
Collaborative

Sharing WHAT is available NOW:

Handshake

- Post jobs, internships, workshops and events that are open now!
- Ask our team to label the items as “undergraduate research”
- Send targeted emails to specific student populations



Handshake



Home

Profile

University of Arizona

> Students

∨ Communicate

Emails

Resources

Collections

∨ Schedule

Events **148**

Fairs **50**

Appointments **91**

∨ Jobs

Job postings **194**

∨ Relationships

Employers

Contacts

Alumni

∨ Data

Analytics

Surveys

Invoices

Search all of Handshake...



<input type="checkbox"/>	Science Shadows - Southern Regional Crime Lab, AZDPS - Forensic Scientist Experiential Learning · Part-Time	University of Arizona College of Science - Science Shadows
<input type="checkbox"/>	Science Shadows - Matrix New World Engineering - Hydrogeologist Experiential Learning · Part-Time	University of Arizona College of Science - Science Shadows
<input type="checkbox"/>	Science Shadows - The Nature Conservancy - Freshwater Scientist Experiential Learning · Part-Time	University of Arizona College of Science - Science Shadows
<input type="checkbox"/>	William M. Lapenta NOAA Student Internship Program 2025 Internship · Full-Time	National Oceanic and Atmospheric Administration (NOAA)
<input type="checkbox"/>	2025 Summer Corporate Intern - Product Support Engineering Internship · Full-Time	Caterpillar Inc.
<input type="checkbox"/>	Field Technician On Campus Student Employment · Part-Time	The University of Arizona (The School of Plant Sciences)
<input type="checkbox"/>	Undergraduate Research Fellow Internship · Part-Time	Cambridge International Advisory Group
<input type="checkbox"/>	FDA Food Chemistry Summer Research Fellowship Fellowship · Full-Time	Oak Ridge Institute for Science and Education
<input type="checkbox"/>	Biosphere 2 Biome Helper On Campus Student Employment · Part-Time	University of Arizona Research, Innovation & Impact
<input type="checkbox"/>	Clinical Research Data Analyst - Part-time Job · Part-Time	Palo Alto Veterans Institute for Research (PAVIR)
<input type="checkbox"/>	Intern Grant Researcher Internship · Part-Time	Family Housing Resources
<input type="checkbox"/>	BEST-CLIM: Best Ecosystem Structure for CLimate Mitigation Research Assistant (Course Credit) Experiential Learning · Part-Time	University of Arizona Vertically Integrated Projects (VIP) Undergraduate Research Program
<input type="checkbox"/>	Developing Climate-Smart Practice Optimization Tool for Agriculture Research Assistant (Course Credit) Experiential Learning · Part-Time	University of Arizona Vertically Integrated Projects (VIP) Undergraduate Research Program
<input type="checkbox"/>	Advanced Nanoelectronics & Nanostructures Researcher Experiential Learning · Part-Time	University of Arizona Vertically Integrated Projects (VIP) Undergraduate Research Program
<input type="checkbox"/>	Assessing Resilience of Arizona Grasslands to Changes in the North American Monsoon Research Assistant (Course Credit) Experiential Learning · Part-Time	University of Arizona Vertically Integrated Projects (VIP) Undergraduate Research Program

Sharing WHAT is available NOW:

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URA Weekly Newsletter

- Weekly email updates on programs, events, resources, and application cycles
- Over 1220 subscribers, 30% are staff/amplifiers



URA Weekly Newsletter

Undergraduate Research Weekly Updates

November 12th, 2024

Compiled by Lexi Vance and Soleil Robinson

Here are some Upcoming Events to look out for:

- Talks of Job/Internship Opportunities!
- Workshops
- Conferences/Publishing Opportunities

See new announcements here. Scroll down for reminders about upcoming events and deadlines.

New Announcements!

**Attention Undergrads!
& Recent Grads!**

Who should apply: • Junior, Senior, Post-Bacc (w/in 5 years),
or current Master's Student (graduate May 2025+) • 3.0
GPA • PhD Aspirations • Education related research
interest



Stipends &
Funding



Personal
Mentoring



Professional
Development



Grad School
Prep Courses

Want Research Experience?

We've got it!

- 12 Month Mentored Research Experience!
Spring • Summer (full-time) • Fall
- Research experience with UA mentor
- Supportive courses, prof. dev., etc.

INTERESTED?

grad.arizona.edu/uruc

Apply online now!

Apps due early Nov.

Program Website
<http://www.urs.arizona.edu>



**COLLEGE OF SCIENCE
SCIENCE SHADOWS PROGRAM**

Science Shadowing is a unique, day educational experience where students can gain exposure to a professional workplace, explore potential careers and make professional connections.

Students may apply for up to two opportunities per semester.

Applications Open:
November 1st - December 1st

Workshop Take-Place:
December 10th - January 5th

Selected students meet at the



Sharing WHAT is available NOW:

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URA Instagram Account @uazugresearch

- Updated daily during the academic year – follow us to stay informed!
- Engaging, student-developed content
- Over 31,000 views/month this fall (posts and stories)





uazugresearch

Follow

Message



314 posts 1,670 followers 186 following

UA Arizona Undergraduate Research
Undergraduate Research Ambassadors at the University of Arizona
linktr.ee/UAArizonaUndergradResearch



Meet the T...



Q&A



Appointments



UR Week 2019



UA Opportuni...



Ever Considered Summer Research?

POSTS

REELS

TAGGED

& GRADUATE RESEARCH OPPORTUNITIES

PRESENTED BY UNDERGRADUATE RESEARCH AMBASSADORS

Gould Simpson Building, rm 837 5:30pm-6:30pm Register with QR code

Maximizing Access to Research Careers Program

Want to pursue a PhD in Molecular Biology?

APPLY BY DEADLINE: FEB 1ST, 2023, 11:59 PM

NO PRIOR RESEARCH EXPERIENCE REQUIRED!

ABOUT THE MAGIC PROGRAM
In this 2-year program, experienced graduate research training and mentorship in labs at outstanding faculty at the University of Arizona, where faculty with on-site and off-site research programs provide research guidance and intensive mentoring to participants in laboratory research.

BENEFITS

- Monthly stipend of \$3000
- Tuition assistance
- Travel support for conferences
- Health insurance

APPLY NOW IN LINE IN BIO @uazugresearch @uazugresearch @uazugresearch

CONNECTING WITH CURRENT STUDENTS RESEARCHERS PANEL: SCIENCE RESEARCH READINESS

DATE: FRIDAY, NOVEMBER 5TH
TIME: 12:00-1:00 PM

LOCATION: Beer Down Gym 302 AND online Register for attend and receive the Zoom link

4 part College of Science Research Readiness series.

- Equip students with resources tools to apply for research
- In this panel, learn more about Undergraduate Research from an Undergraduate Research Ambassador and students who are active in research.

Current researchers will share their experiences with finding research and getting started in their projects, as well as mentoring and changing their work. Bring your questions and your curiosity!

REGISTER / WISCONSIN STATE IN BIO @uazugresearch @uazugresearch @uazugresearch

UROC YEAR LONG PROGRAMS

UROC is part of the Graduate College's Diversity, Equity, and Inclusion office. Many programs specifically support students of color, first generation students, or other under-represented populations.

BENEFITS

- Spring Summer, and Fall
- Stipend
- Research experience
- Graduate School preparation
- Research Summer Research Program

ELIGIBILITY

- US Citizen/Permanent Resident
- Minimum 3.0 GPA
- Research or research in related field
- Regular enrollment on program

AWARDS-PLUS

- Access to research and Professional Development of Researcher Leadership, and the long-term

ASEMS STARS

you could undergo of research and mentoring program for ASEMS STARS

UROC- PREP

help you graduate into a top program in life or PhD program

- Underrepresented students and women
- Researcher Leadership, and the long-term

APPLY TODAY! → GRAD ARIZONA.EDU/WEB/ST/PROGRAMS/UROC

ARE YOU AN INTERNATIONAL STUDENT INTERESTED IN RESEARCH?

ARE YOU AN INTERNATIONAL STUDENT STRUGGLING TO FIND AN INTERNSHIP THAT OFFERS SPONSORSHIP?

IF SO, CONSIDER EXPLORING UNDERGRADUATE RESEARCH JOIN THE UNDERGRADUATE RESEARCH AMBASSADORS AS THEY PROVIDE ACCESS TO VALUABLE EXPERIENCES THAT CAN ENHANCE YOUR RESUME—WITHOUT THE CONCERN OF SPONSORSHIP.

DON'T MISS OUT!

OCTOBER 31ST 5:00PM-6:00PM (EST)

KANSAS STATE UNIVERSITY: LABORATORY TRAINING PROGRAM FOR UNDERGRADS

Undergraduates will begin in Summer 2023. This program is designed to help summer jobs that knowledge needed to work in a high-caliber lab. program, which is mandatory for those who do not receive insurance and other benefits.

DEADLINE: NOVEMBER 3RD 9:59 PM AZ TIME

What are benefits?

- Stipend
- Research experience
- Graduate School preparation
- Research Summer Research Program

APPLY NOW IN LINE IN BIO @uazugresearch @uazugresearch @uazugresearch

RONALD E. MCNAIR POSTBACCALAUREATE ACHIEVEMENT

Student Experiences & Career Development

It's Time to Start Thinking About REUs! (Research Experience for Undergraduates)

- Competitive summer programs
- Hands-on research experience
- Networking with professionals and academics

UR Inspiration / Inspiración Conference

UR Inspiration / Inspiración Conference

UR Inspiration / Inspiración Conference

URA Instagram



Undergraduate Research & Inquiry Collaborative

Helping students know “HOW” to get there!

In-person, peer mentor guidance for individuals or groups:

Customized presentations and workshops

- Invite us to present to your class or club! We customize every presentation we give: <https://ur.arizona.edu/workshops>
- Topics: 1) How to find research experiences; 2) How to communicate with faculty about research; 3) Finding summer research experiences; 4) Applying for research experiences; 5) Using Federal Work-Study toward a paid research experience, 6) student research panel.

One-on-one support for students seeking UREs

- One-on-one meetings with a URA to support students at any phase of their research journey. In person or over zoom.
- URA drop-in hours, T-F, 2-3pm, Bear Down 306 or stop by LifeLab M-F, 12-5pm
- Email questions to undergradresearch@arizona.edu



Helping students know “HOW” to get there!

career.arizona.edu

Research Experiences page

The “how to” site

- Always available, multi-modal content
- Tips on communicating with potential or current research mentors, applying for programs, using Handshake, searching research experience databases, and more!
- Student research blogs and experience stories
- Visit <https://career.arizona.edu/channels/research-experiences/>





How to Find Research Opportunities? ▼

Are you ready to take the next step in your academic journey and explore research opportunities at the University of Arizona? Engaging in research can be a transformative experience that enhances your skills, helps you build meaningful connections, and prepares ...

By Simi Saha

[READ MORE >](#)



A student's research story: Jennifer Marie Kirchmeier! ▼

Over four months ago, I had the opportunity to attend and present at the National Conference on Undergraduate Research (NCUR) in Long Beach, California. 4,300 people gathered for a common purpose: to celebrate STEM fields and Course-Based Undergraduate Research. The ...

By Simi Saha

[READ MORE >](#)



Preparing Your Research Application Material ▼

Applying for a research position can involve multiple moving parts. *When is the deadline? Do you need a resume, cover letter, research statement of interest, or transcripts?* We know it can be overwhelming to prepare the required documents for applying ...

By Sarah Randolph

[READ MORE >](#)



Navigating Radio Silence: What to Do When You Don't Hear Back About a Research Position ▼

Securing a research position is often a competitive and time-consuming process. You've submitted your application or sent your email to the faculty member and now... nothing. This situation can be frustrating and anxiety-inducing, but it's important to remember that it's ...

By Sarah Randolph

[READ MORE >](#)



Services for faculty and staff

We provide:

- Promotion and visibility of UREs and UR programs
- Broad recruitment strategies to inform students of your programs and UREs
- Targeted promotion and recruitment for UREs with specific qualification requirements
- Outreach and application preparation for students through customized workshops and presentations
- An option for students who prefer hands-on, one-on-one attention when seeking research experience
- Collaborative peer mentor training with departmental / program peer mentors
- Grant writing support: Collaboration with PIs on access, equity, recruitment

Thank you!

Kelley Merriam-Castro

Program Manager

Undergraduate Research Initiatives

Student Engagement and Career Development

kmerriam@arizona.edu

undergradresearch@arizona.edu



What is Vertically Integrated Projects (VIP)?

- **VIP** is an easy way for UA students to connect with **team-based** research, design, & creative inquiry projects led by faculty. We have 58 teams for Spring (so far), led by faculty in 16 UA colleges/units.
- **Students** join teams (generally with no research experience required) *mainly for credit* or sometimes pay or as a volunteer.
 - Teams have 3-35 students.
 - Larger teams organized into sub-teams led by experienced researchers (grad or undergrad).



VIP Benefits for Faculty

Goal of VIP is to:

Involve younger, diverse students in research/design/creative activities (though open to all class years/backgrounds).

Encourage students to stay involved in a team for multiple semesters/years.

Student Recruiting Support:

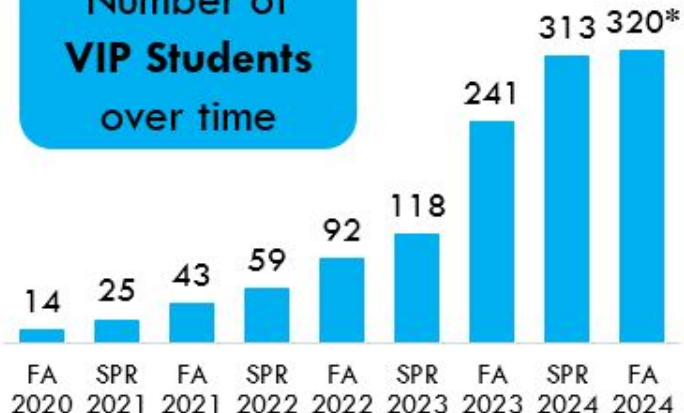
- [VIP Website](#)
- [VIP Instagram](#)
- Handshake experiential learning posts
- The [VIP interest form](#): a brief student application that auto-emails you when students are interested in your team
- Program Coordinator with tips on how to involve students for credit & pay (helping those least able to participate in research experiences to do so)



VIP Growth Across Nine Semesters

Be Part of Our Growing Program!

Number of
VIP Students
over time



Number of
VIP Teams
over time



*based on preliminary data reporting



VIP Benefits for Faculty - Funding

Grant Application Support:

- VIP Faculty Director letter to demonstrate your inclusion of undergraduate students in research.

Funding Opportunities:

- Spring Seed Grant funds through VIP for new/continuing teams.
- ~10% of students in VIP (program-wide) supported as Federal work-study students, up to 10 hrs per week.



VIP Benefits – Professional Development

For Faculty

- Inclusive Mentoring of Undergraduate Researchers – 6-hour synchronous training
- Improve mentoring skills & **earn a badge through UA**
- Involvement in VIP is not a requirement for this training/badge!



For Students

- Annual VIP Poster Session that invites students at all levels to present an individual poster OR participate in presenting a team-created poster.
- Inclusive Mentoring open to **grad students & postdocs!**



Interested? Reach Out to VIP!

Email VIP Coordinator
Kay Orzech at
vipprogram@arizona.edu

Scan this QR
Code to visit
our VIP
Faculty Page



Michael Johnson



THE UNIVERSITY OF ARIZONA
RESEARCH, INNOVATION & IMPACT
Societal Impact

PATHWAYS TO IMPACT

Symposium Series

Cultivating Collaboration Among
Multi-Organizational Teams

December 10, 2024

Time: 1:00 - 2:30pm

Location: ENR2 - S107

1064 E Lowell St

Successful teams lead to successful projects. Learn about collaborative project management (CoPM) tools and practices that put the people of the project at the center. These practices enhance team cohesion, sharpen shared understanding of goals and deliverables, and incorporate organizational cultures in order to coordinate stakeholder timelines, talent, and preferences. Explore CoPM in this workshop to cultivate your team's collective progress and project success.

Questions? Contact Emily Davis at
emilydavis@arizona.edu



THE UNIVERSITY OF ARIZONA
RESEARCH, INNOVATION & IMPACT
Societal Impact



Presenters



Michelle Higgins

Associate Director,
Office of Societal Impact



Cara Shopa

Program Manager,
Office of Societal Impact

Join us for our next Pathways to Impact Event!

Register Here



THE UNIVERSITY OF ARIZONA
RESEARCH, INNOVATION & IMPACT

Societal Impact

Thank you for attending!



ur@arizona.edu



impact.arizona.edu



impact@arizona.edu



fieldsj@arizona.edu



RESEARCH, INNOVATION & IMPACT
**Undergraduate
Research**



THE UNIVERSITY OF ARIZONA
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Societal Impact