

OSU research is for YOU



Get Started in Research & Creative Activity

2022 - 2023 Workshop Series



RESEARCH
COLLEGE OF ARTS AND SCIENCES

**Research
basics**

**First steps
& tips**

**You can be a
researcher**



Research basics



**Research
is a verb!**

- - -

Go seek!

Go look!

Go explore!



*Dr. Merle Massie, Author/Historian,
Coordinator of Undergraduate Research Initiatives, University of Saskatchewan*

Undergraduate Research



"A mentored investigation or **creative inquiry** conducted by undergraduates that seeks to make a scholarly or artistic contribution to knowledge"

-Council on Undergraduate Research

“

”

Research is formalized curiosity.

It is poking and prying
with a purpose.

— *Zora Neale Hurston*



AZ QUOTES

Renowned anthropologist, author, filmmaker

WHAT SPARKS YOUR CURIOSITY?

Exciting Interesting

Intriguing Perplexing

What makes you curious?
Why did you pick your major?
What classes seem exciting?
What do you like to read about?

So.
Many.
Benefits.



STUDENT RESEARCHERS WILL...

Learn beyond the classroom

Make concrete contributions

Develop a stronger community

Discover diverse career paths

Clarify academic and career goals

Complete degrees in desired field

Enhance qualifications for future
jobs and academic training

RESEARCH ENVIRONMENT AKA 'THE LAB'



YOU!

Undergraduate
research assistants



MENTOR

Faculty / professor
The PI
Advisor



OTHERS

Graduate students
Post-docs
Staff scientists

You can be a researcher



Real OSU undergraduate projects, and so many more

Identifying microbes in animal gut biomes

Bio-inspired design of underwater drones

Linking mathematics and music

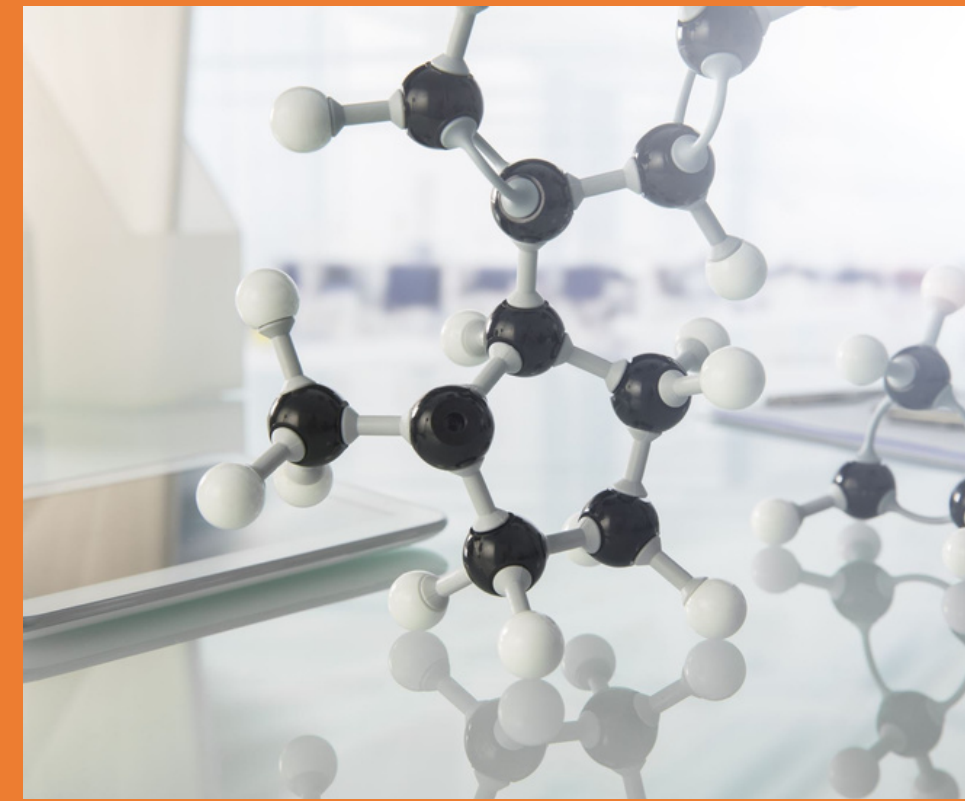
Augmented reality in retail clothing world

Psychology of jealousy in friendship

Business linguistics in companies

3-D printing for sign language instruction

Social media marketing for art performances



What student researchers actually DO?

- Read scholarly academic writings
- Explore a creative or artistic topic in depth
- Gather data or information
- “Bench work” procedures/techniques in a laboratory
- “Field work” procedures/techniques in a location or environment
- Develop and perform artistic works
- Analyze or compute data or information
- Interview individuals, make observations of people or animals
- Monitor or maintain research materials, specimens, organisms, animals, databases
- Create an artistic product or production
- More!



Types of Research Experiences for Undergraduates

Types of experiences and programs

Type	Topic	Structure	Time	\$	Course Credit	Competitive
Individual research or creative assistant	Any	Arranged by student & mentor	Flexible hours or duration School year & summer	Paid; volunteer	No	Moderate; many professors looking for assistants. Go for it!
Research course	Most	Enroll in course after finding a mentor	Minimum hours depending on # of credits; full semester	Not paid	Yes	Low
Organized programs	Common in STEM (& social sciences)	App. deadlines Few spots Full-time research Extra activities	Usually full-time Often summer Some during school	Stipend	No	High Apply to many opportunities

Some OSU Opportunities



Undergraduate Research Transcript Designation

- Notation on your transcript
- 2 (or more) semesters of research with a mentor
- Must present or publish your work outside of OSU

Undergraduate Research Certificate

- Open to all majors/disciplines
- 15 total credits of research/study with a mentor
- Thesis requirement; 2.5 minimum GPA

OK-LSAMP

- Louis Stokes Alliance for Minority Participation
- STEM focused
- Research experiences, grad school preparation
- Stipend

McNair Scholars

- Mentoring and resource program for undergraduates
- Preparation for PhD programs, specifically
- Research and scholarly training activities

CAS has the AURCA program



AURCA Program


The Advancing Undergraduate Research and Creative Activity (AURCA) program provides expands access to paid research opportunities for undergraduates in the OSU College of Arts and Sciences.

 okstate.edu / Apr 26, 2022

- AURCA (rhymes with "orca")
- Advancing Undergraduate Research & Creative Activity
- **Work-study** research/creative assistant
- Pays \$12.00 per hour!
- Mentored by a faculty member
- Applications open in late spring for 2023-2024 school year
- https://cas.okstate.edu/workshops/aurca_program/aurca_students.html

Browse External Resources

National Science Foundation – Research Experiences for Undergraduates



REU Sites | NSF - National Science Foundation
 NSF's mission is to advance the progress of science, a mission accomplished by funding proposals for research...
[nsf.gov](https://www.nsf.gov)

Council on Undergraduate Research

<https://www.cur.org/engage/undergraduate/research/>

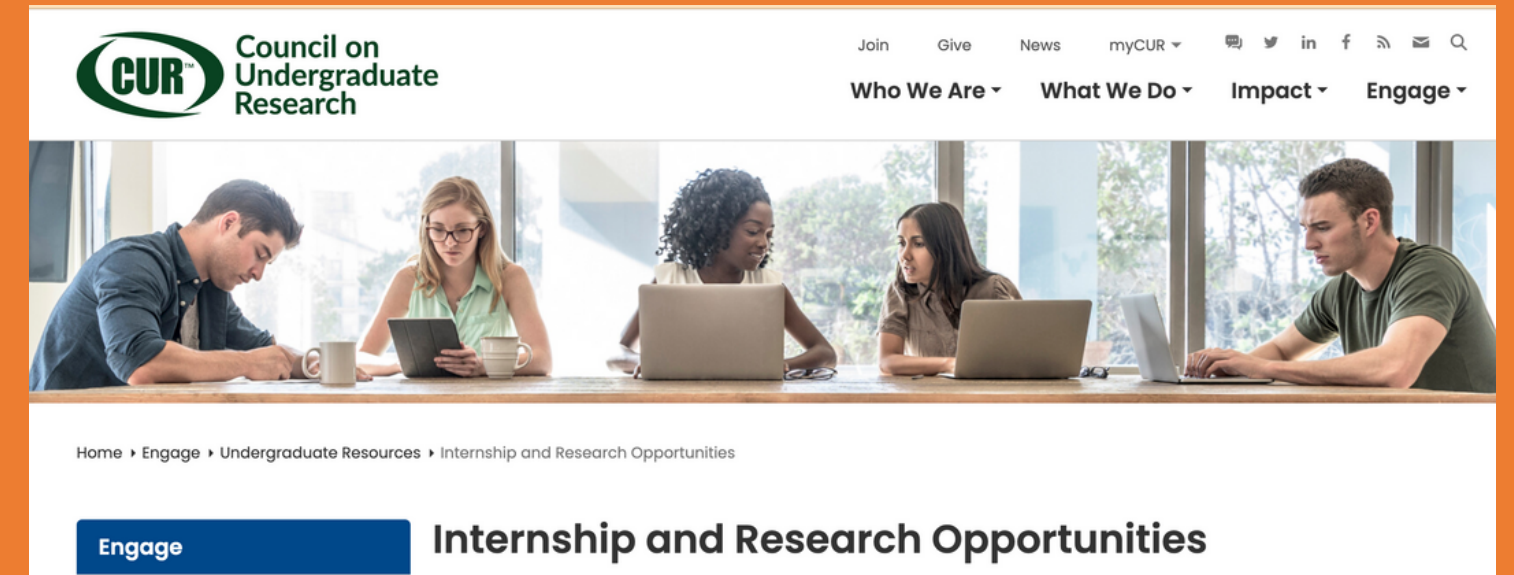
Independent listings for specific disciplines

Summer Programs (and Similar) in Philosophy for Undergraduates, 2023

Organized by [Russell Marcus](#), Hamilton College. Additions/corrections are welcome: [Email me](#)

See also my list of [Conferences and Journals](#) for undergraduates in philosophy and [these resources for students](#). [Here's another page of good resources](#). [Past Years](#)


Program	Location	Application Deadline	Program Dates	Notes
Hamilton College Summer Program in Philosophy	Hamilton College, Clinton NY	March 13, 2023	June 25-July 8, 2022	Stipends, travel, room, and board, provided for all participants.
Colorado Summer Seminar in Philosophy	University of Colorado, Boulder		June 4-23, 2022	Topic: TBA. Registration: \$850; Housing: \$550-\$700; Meal Plan: \$340. Only registration costs if online.
Pittsburgh Summer Program (PSP7)	University of Pittsburgh	March 15, 2023	July 10-14, 2023	Housing, meals, and transportation (US) will be covered, and all course materials provided.



Home > Engage > Undergraduate Resources > Internship and Research Opportunities

Engage Internship and Research Opportunities

Broad listings hosted by other institutions



Arts & Humanities | Undergraduate Research Experiences
 There are many off-campus summer undergraduate research opportunities spanning most arts and humaniti...
 Pacific University / Feb 2

First Steps and Tips

UNDERGRADUATE RESEARCH AND CREATIVE ACTIVITY

What will you discover?

Limitless opportunities.

CAS offers numerous ways for you to engage in research and creative activity. Research lets you build confidence and to make important contributions to our knowledge. Getting What sparks your curiosity? Do you have a passion for people, numbers, art, organizations, technology, history, or the natural world? Think about what you're interested in exploring and why. Get started now!

Tell us about your awesome work

Did you complete a project, receive an award or grant, hold an exhibition, give a presentation, publish your work, or something else exciting? We want to brag about it!

→ [SHARE YOUR SUCCESS](#)



Know where to look for information!

Visit the CAS undergraduate research page!

https://cas.okstate.edu/undergraduate_research/undergraduate_research.html

FINDING A FACULTY MENTOR



YOUR CURIOSITY

Interests
Goals
Enthusiasm



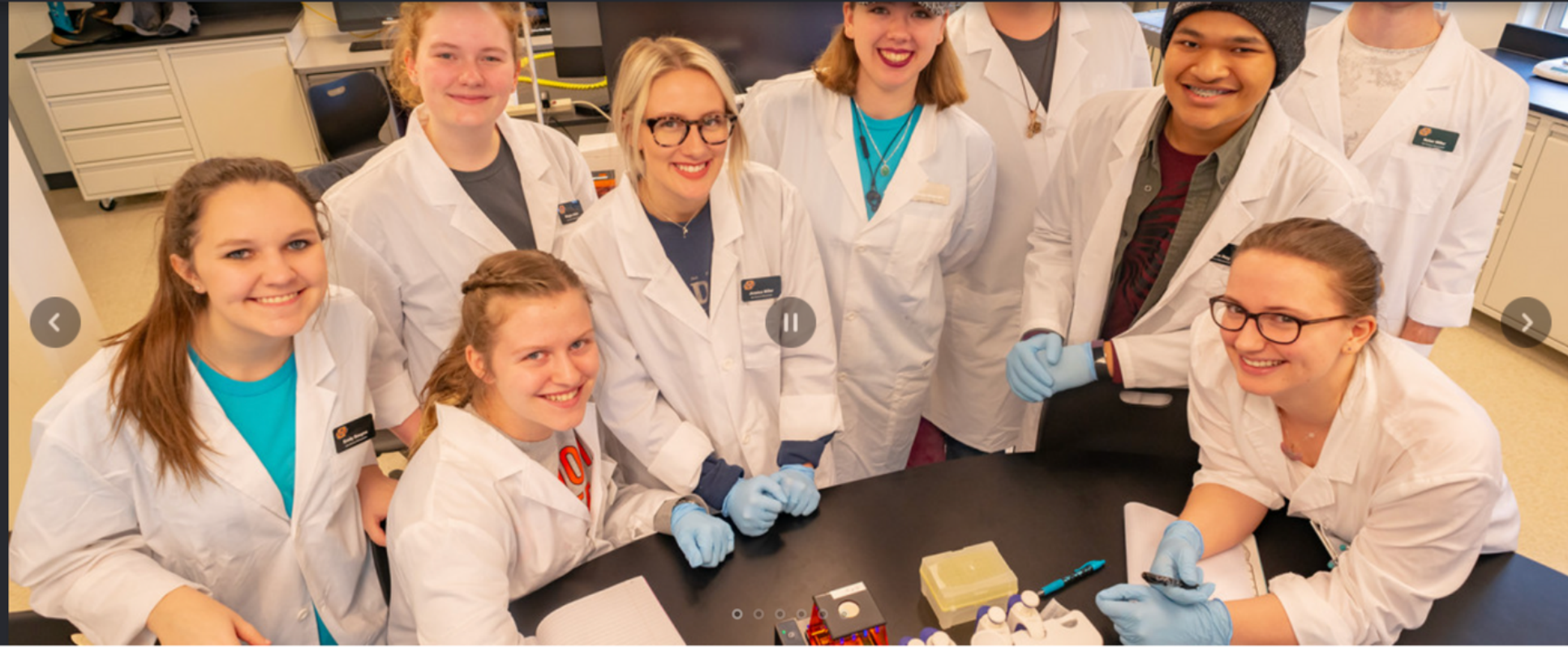
FACULTY LISTS

Webpages
Databases
Social Media



CONNECTIONS

Email
Connect in class
Ask GTA



DEPARTMENT OF CHEMISTRY

PROSPECTIVE GRADUATE STUDENTS - IT'S NOT TOO LATE... APPLY TODAY! We have Spring 2023 assistantships available. Click Here

What is Chemistry?

Chemistry is referred to as the "central science" because it connects other sciences to one another. For example, Biology, Physics, the Earth Sciences, and Geology are all connected through Chemistry. The OSU Department of Chemistry offers several Chemistry degrees. Do you want to be a physician? Find a cure for cancer? Create new and better products people use everyday? Click below to look at the different degree plans offered by the College of Arts and Sciences. Chemistry isn't a boring old class in High School - it's a whole wide world of possibilities, and you could be a part of that!

DEGREE PLANS



Chemistry

Watch on YouTube

Women in STEM



DR. WOZNAK AND STUDENTS FROM HER LAB AT THE MICROBIOLOGY AWARDS BANQUET



Dr. Béné Bachelot receives NSF Grant for 2022!

DEPARTMENT OF CHEMISTRY FACULTY

Current Faculty



[Dr. Allen Applett](#)
Professor



[Dr. Frank Blum](#)
Regents Professor



[Dr. Jeanne Bolliger](#)
Assistant Professor



[Dr. Richard Bunce](#)
Regents Professor



[Dr. Gabriel Cook](#)
Assistant Professor



[Dr. Andrew Doust](#)
Associate Dean/Interim Dept. Chair



[Dr. Ziad El Rassi](#)
Regents Professor



[Dr. Christopher Fennell](#)
Associate Professor



[Dr. Tracy Kerr](#)
Teaching Assistant Professor



[Dr. Sadagopan Krishnan](#)
Associate Professor



[Dr. Reza Latifi](#)
Teaching Assistant Professor



[Dr. Barry Lavine](#)
Professor



[Dr. Nicholas Materer](#)
Professor



[Dr. Martin McCullagh](#)
Assistant Professor



[Dr. Smita Mohanty](#)
Professor



[Dr. Jacinta Mutambuki](#)
Assistant Professor

Who is a possible mentor?

Titles

Professor

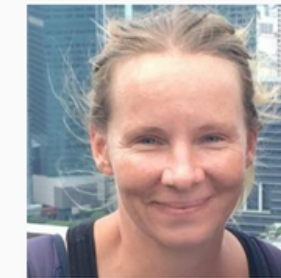
Regents Professor

Associate Professor

Assistant Professor

Teaching Assistant Professor

People



[Sabrina Beckmann, Ph.D.](#)
Assistant Professor
Research Area: environmental microbiology, biogeochemical, methane cycle



[Robert L. Burnap, Ph.D.](#)
Regents Professor
Research Area: Cyanobacteria, photosynthesis



[Matthew Cabeen, Ph.D.](#)
Assistant Professor
Research Area: stress responses, biofilms



[Tyrrell Conway, Ph.D.](#)
Department Head
Regents Professor
Research Area: microbiome, genetic regulatory circuit



[Mostafa Elshahed, Ph.D.](#)
Professor
Research Area: environmental microbiology, uncultured microbial phyla



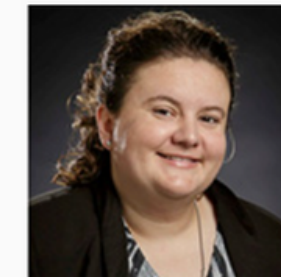
[Babu Z. Fathepure, Ph.D.](#)
Professor
Research Area: environmental microbiology, hydrocarbon degradation, halophiles



[Jeffrey Hadwiger, Ph.D.](#)
Professor
Research Area: G protein mediated signal transduction pathways, Dictyostelium



[Wouter D. Hoff, Ph.D.](#)
Professor
Research Area: photoreceptor proteins, folding, function, signaling



[Erika Lutter, Ph.D.](#)
Associate Professor
Research Area: microbial pathogenesis, host-pathogen interactions, Chlamydia trachomatis, cystic fibrosis



[Avi Mitra, Ph.D.](#)
Assistant Professor
Research Area: microbial pathogenesis, iron, heme acquisition, Mycobacterium tuberculosis



[Randy Morgenstein, Ph.D.](#)
Assistant Professor
Research Area: cell shape, bacterial cytoskeleton



[Marianna Patrauchan, Ph.D.](#)
Professor
Research Area: calcium signaling, Pseudomonas aeruginosa

WEB/NEWS/SOCIAL



Experimental Psychology Faculty
Juliana E. French, Ph.D.
Assistant Professor
Florida State University

juliana.french@okstate.edu

Biological and evolved mechanisms underlying romantic attraction, long-term relationship maintenance and dissolution, and intrasexual competition with a focus on modern environmental disruptions. Recent publications appear in Psychological Science and Evolution & Human Behavior.

Anticipates admitting a student in 2022.

► [Lab Website](#)



Clinical Psychology Faculty
DeMond M. Grant, Ph.D.
Professor
University of Buffalo - SUNY

demond.grant@okstate.edu

The role of repetitive negative thought (e.g., worry, rumination) on cognitive processes associated with anxiety disorders, using information processing tasks, event-related potentials, and peripheral psychophysiology.

Anticipates admitting a student in 2022.

► [Lab Website](#)



[OSU professor working with Swiss team makes health breakthrough](#)

May 18



Dept. of Integrative Biology - Oklahoma State University

September 16, 2021 · 🌐

The CAS Faculty Spotlight features our own Dr. Puni Jeyasingh. Check it out! [#GoScience](#) [#IBIO](#)

https://cas.okstate.edu/.../faculty.../puni_jeyasingh.html



CAS.OKSTATE.EDU

Puni Jeyasingh, Department of Integrative Biology - Oklahoma State University

Puni Jeyasingh is a professor in the Department of Integrative Biology. His group strives to...

Black Equity and Mental Health Research Lab

HOME

PEOPLE

RESEARCH

GALLERY

CONTACT

Meet The Team



Director
LaRicka R. Wingate, Ph.D.

Dr. Wingate joined the OSU faculty in 2006. She is currently the only Black female Full Professor on the OSU campus. She regularly teaches Black Psychology and Positive Psychology. Dr. Wingate is on sabbatical for the 2021-2022 school year.



4th year, Doctoral Candidate
Deja Clement, M.S.

Deja is originally from NY and she received her B.A. from West Virginia University. Her research interests are risk and resilience factors of suicide in African American women.
dejcem@okstate.edu



3rd year Graduate Student
Wenzel (JR) Rhaming, B.A.

JR is a graduate of Northeastern Illinois University in Chicago. His research interests are interpersonal risk factors and protective factors of suicide in African Americans. Primarily he is looking at optimism and its association with mitigating adverse life events in reducing psychopathology, specifically suicide ideation.

[Top of Page](#)
[Meet the Team](#)
[Graduate Alumni](#)
[Undergraduate Alumni](#)

Faculty websites about their research

Bo Zhang Lab
Integrative Biology Department at Oklahoma State University



I am an Assistant Professor in the [Department of Integrative Biology at Oklahoma State University](#).



I will start recruiting both MS and Ph.D students very soon, starting for Fall 2022. **Interested in joining us? Please contact me at bozhang@okstate.edu**

Faculty websites and academic/science social media

Tweets Tweets & replies Media Likes

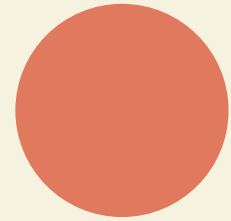
Pinned Tweet

Bo Zhang @bo_zhang11 · Nov 25, 2021

Our recent paper is out @Ecology_Letters. Our results not only support the previous theory that the slow mover prevails in heterogeneous environments but also reveal that moderate levels of a directed movement allow species to coexist. Hope you like it!

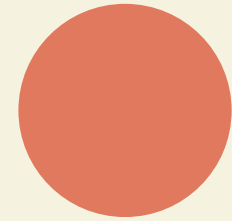
onlinelibrary.wiley.com
Directed movement changes coexistence outcomes in heterogeneous ...
Our results not only supported the previous theory that slower movers win in heterogeneous environments but also discovered that moderate...

MAKE THAT FIRST CONNECTION



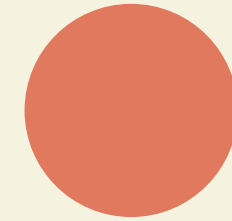
Email

Follow tips



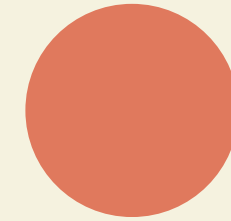
After class

If you have them
as an instructor, or
find out when
they teach



Office hours

Find out when
they happen and
be there



GTA

Graduate teaching
assistants do
research with
mentors

THE FIRST EMAIL

From: awesomestudent@okstate.edu

Subject: Undergraduate
research opportunities

Dear Professor X,

My name is **Awesome OSU Student**, and I am a.... [*first-year Zoology major*]. I read about **your project studying**.... [*bluebird nests in prairies*], and I think **your research seems really exciting** [*because*.....]. I am interested in starting a research experience and I think your work fits well with my interests. I plan to be....[*a conservation scientist in the future*].

Could we **set up a time to talk** more about your research and **potential opportunities** in your group? I would be happy to come to your office hours or meet at **a time that is open on your schedule**. My schedule is mostly / usually open on....[*Wednesday afternoons or Tuesday mornings*].

Thank you for your time.

Sincerely,

Awesome OSU Student

THE SECOND (?) EMAIL



Carrie Masiello @biogeochem · 11h



Truth:



Harmit S. Malik @HarmitMalik · 13h

Dear trainees, two emails is not stalking. If you write to a PI requesting something and they don't get back to you within a reasonable time frame (say 1-2 weeks) please don't hesitate to contact them again. They may have meant to but forgot. 1/

[Show this thread](#)

Start early!

We can't wait to see
what you will discover!



It's **OK** to be new to research.
Just **START!**

Research/creative activity with a
professor outside your major(s) is **OK**

OK to contact a professor you
do not know

Don't take "no" personally.
Just contact someone else!

Be persistent to make your
research goals happen

Dr. Rachael Eaton

Program Manager for Student Research

College of Arts & Sciences



RESEARCH

COLLEGE OF ARTS AND SCIENCES



Schedule a
Research
Goals Chat

Email: rachael.eaton@okstate.edu

Save
THE
Date

OSU Undergraduate Research Symposium

April 18th, 2023

Alumni Center (across from the Union)



UNDERGRADUATE
RESEARCH
SYMPOSIUM

Don't miss out!



@casresearchosu



@casresearchokstate

**Register with CAS Research
for news, updates, and
opportunities**



CAS Research Student Registration

Complete this form if you are interested in receiving information about events, awards, and opportunities related to student research and creative activity.

Reach out to Dr. Rachael Eaton, Program Manager for Student Research, with any questions or for guidance about getting involved. rachael.eaton@okstate.edu

Follow @casresearchOSU on Twitter and CAS Research OSU on Facebook for updates and info.

<https://cas.okstate.edu/research/index.html>

Preferred Name *

