OSU research is for YOU

Get Started in Research & Creative Activity
2022 - 2023 Workshop Series
Research basics

First steps & tips

You can be a researcher
Research is a verb!

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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
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?

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
Skills learned from research transfer to other...

- courses
- jobs
- experiences
- achievements
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
<table>
<thead>
<tr>
<th>Type</th>
<th>Topic</th>
<th>Structure</th>
<th>Time</th>
<th>$</th>
<th>Course Credit</th>
<th>Competitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual research or creative assistant</td>
<td>Any</td>
<td>Arranged by student &amp; mentor</td>
<td>Flexible hours or duration</td>
<td>Paid; volunteer</td>
<td>No</td>
<td>Moderate; many professors looking for assistants. Go for it!</td>
</tr>
<tr>
<td>Research course</td>
<td>Most</td>
<td>Enroll in course after finding a mentor</td>
<td>Minimum hours depending on # of credits; full semester</td>
<td>Not paid</td>
<td>Yes</td>
<td>Low</td>
</tr>
<tr>
<td>Organized programs</td>
<td>Common in STEM (&amp; social sciences)</td>
<td>App. deadlines Few spots Full-time research Extra activities</td>
<td>Usually full-time Often summer Some during school</td>
<td>Stipend</td>
<td>No</td>
<td>High Apply to many opportunities</td>
</tr>
</tbody>
</table>
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 (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](https://cas.okstate.edu/workshops/aurca_program/aurca_students.html)
Browse External Resources

National Science Foundation – Research Experiences for Undergraduates

NSF Sites | NSF - National Science Foundation
NSF’s mission is to advance the progress of science, a mission accomplished by funding proposals for research...

Browse External Resources

Independent listings for specific disciplines

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

<table>
<thead>
<tr>
<th>Program</th>
<th>Location</th>
<th>Application Deadline</th>
<th>Program Dates</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamilton College Summer Program in Philosophy</td>
<td>Hamilton College, Clinton, NY</td>
<td>March 15, 2023</td>
<td>June 25 - July 8, 2022</td>
<td>Stipends, travel, room, and board, provided for all participants.</td>
</tr>
<tr>
<td>Pittsburgh Summer Program (PaPi)</td>
<td>University of Pittsburgh</td>
<td>March 15, 2023</td>
<td>July 10 - July 14, 2023</td>
<td>Housing, meals, and transportation (US) will be covered, and all course materials provided.</td>
</tr>
</tbody>
</table>

Broad listings hosted by other institutions

Council on Undergraduate Research

https://www.cur.org/engage/undergraduate/research/
First Steps and Tips

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
Who is a possible mentor?

**Titles**

- Professor
- Regents Professor
- Associate Professor
- Assistant Professor
- Teaching Assistant Professor
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

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

OSU professor working with Swiss team makes health breakthrough

May 18

Puni Jeyasingh, Department of Integrative Biology - Oklahoma State University
Puni Jeyasingh is a professor in the Department of Integrative Biology. His group strives to...
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
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
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
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

Email: rachael.eaton@okstate.edu

Schedule a Research Goals Chat
OSU Undergraduate Research Symposium
April 18th, 2023
Alumni Center (across from the Union)
Register with CAS Research for news, updates, and opportunities

Don't miss out!

@casresearchosu

@casresearchokstate