COLLEGE OF SCIENCE AND HONORS COLLEGE MATCHING RECEPTION
What is undergraduate research?

**Undergraduate research:**

An inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to their discipline
Student benefits of undergraduate research

• Engages and empowers students in hands-on learning

• Enhances the student learning experience through mentoring relationships with faculty

• Provides effective career preparation

• Promotes interest in graduate education

• Develops critical thinking, creativity, problem solving, self confidence, and intellectual independence

Source: Council on Undergraduate Research. Dr. Nancy Hensel, Executive Officer; slide courtesy of Prof. Harriet Nembhard
Honors College resources

• HC Advisors! (and assistant dean)
• Extensive online resources: https://honors.oregonstate.edu/current/thesis
• HC 408 series

• Thesis mentor
• Departmental/College advisors
• Previous students, current students
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<tr>
<th></th>
<th>ACTIVE</th>
<th>HIBERNATING</th>
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<tbody>
<tr>
<td>Heart rate</td>
<td>300 - 400</td>
<td>3 - 10</td>
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<tr>
<td></td>
<td>beats/min</td>
<td>beats/min</td>
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<tr>
<td>O₂ Consumption</td>
<td>100%</td>
<td>2%</td>
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<tr>
<td>Body Temp</td>
<td>37°C</td>
<td>3 - 5°C</td>
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**HIBERNATION in MAMMALS**
• Riluzole is the first FDA Drug for the treatment of Amyotrophic Lateral Sclerosis; increase survival for 3-12 month
• 50-75% of the ALS patients take riluzole


Long-term incubation with riluzole of astrocytes derived from human iNPCs inhibits early protective effects on motor neuron survival

![Diagram of the study setup](image)
Terry Lab ~ Integrative Biology

Modern, historical and paleoecology of small mammals

Research Opportunities:

- Owl pellets!
- Stable isotope ecology - niche breadth & competition
- Putting the dead to work: reconstructing baselines
- Historical resurveys - Alvord desert & Steens Mountain

Classes: Ecology (BI370); Paleobiology (BI427); Biogeography (BI481)
Science Success Center

Gabrielle James

- College of Science
GET INVOLVED IN RESEARCH

Gabrielle James – Science Success Coordinator

Kidder 109 – sciencesuccess@oregonstate.edu
What Interests You? Where can you find it?

Before you begin, think about

• your areas of scientific interest
• your skills and strengths
• techniques you would like to learn
• how much time you can commit

The Search Process

• Look at department faculty websites
• Look at departments outside of your major
• Build a list of at least 6 labs you really find interesting

COS website with department links
http://www.science.oregonstate.edu/academics
Keep in Mind

- Cold emailing will be your first point of contact
- Don’t be afraid to reach out multiple times if you don’t hear back
- Graduate students, Post-docs, and Lab technicians will be interacting with you the most
- It takes time to train an undergraduate, so most will want some type of long term commitment
Cold Emailing 101

• Use a descriptive subject line
• Address them by their correct prefix
• Start with an introduction
• Mention a specific reason you want to work in their lab
• Tell them you are an Honors College student
• Attach a resume if you have one
• Finish with an ask
• Sign your name as you would like to be addressed in future
• Keep it short – no more than 6 sentences
Cold Emailing Example

Potential Honors College Undergraduate Researcher

Dear Dr. Smith,

My name is Sara Weiss and I am a sophomore chemistry major interested in polymer chemistry. I recently read one of your group’s papers entitled “Really sticky stuff and how to make it stickier.” I’m really interested in adhesives and would love to talk to you more about your research and ask you some questions about this paper. I am an Honors College student and am wanting to find a great project for my thesis work, and was hoping to speak with you about opportunities in your lab. I am available after 1pm on Tuesdays and Thursdays and before 3pm on Fridays. Please let me know if you have time to discuss your research further and potential opportunities in your research group.

Best,
Sara
More to Keep in Mind

• Learn as much as you can
• Mentors are the best pathway to success
• You will be working with grad students, post-docs, and lab managers
• Lab meetings are important, NOT optional
• Keep a clear notebook
• Make sure you are contributing to lab responsibilities
• Don’t be afraid to ask questions
• Don’t be afraid to Google things you don’t know and then confirm your findings with a mentor
Good Luck!

Email me questions:
gabrielle.james@oregonstate.edu
sciencesuccess@oregonstate.edu