2025 RAIN WY INBRE Summer Research (WISR) program for undergraduate research experience at the University of Wyoming in Laramie, WY



The Regional Alliance of INBRE Networks (RAIN) was formed to support regional collaborations focused on common scientific themes. Opportunities exist for undergraduate students from the

region to participate in transformative research experiences in the RAIN states. Students from RAIN states (Alaska, Hawaii, Idaho, Montana, New Mexico, Nevada) interested in working in Wyoming may apply for a 2025 RAIN WY INBRE Summer Research (WISR) internship at the University of Wyoming in Laramie, WY.

The Wyoming INBRE program is a 10-week research experience for visiting RAIN undergraduate students interested in biomedical research. In addition to



conducting guided research, students will attend training sessions and present their research at the annual WY INBRE Summer Research Symposium on Thursday July 24, 2025.

To apply: https://uwyo.infoready4.com/#competitionDetail/1961243

- 1. Review the Faculty Mentor listed below, visit their lab websites, and identify 3 preferred summer mentors. You will enter the names in the application.
- 2. Your most recent college transcripts unofficial copies are acceptable. Be sure to save the transcripts in an easily accessible PDF format to upload in the application.
- 3. Email for 1 reference that can explain why you are a good candidate for this research experience. References from science faculty/instructors are preferred. Reference letters must be submitted by Friday February 21, 2025. Be sure to request a reference early on your application so your reference can submit a letter by the deadline. To request letters click "Send Letter Request" after you save a draft or submit your application. Scroll down the application on your screen to find the "Send Letter Request" button. The reference will receive an email request with instructions for submitting their letter.



Complete application is due by 5:00 pm MT Monday February 17, 2025. Reference letter is due by 5:00 pm MT Friday February 21, 2025

Incomplete or late applications will not be considered.

Internship awards will be announced in March 2025.

Program Details

- Program Starting Date: **Monday May 19, 2025** (travel dates include the prior weekend of May 17-18, 2025)
- Program Ending Date: **Thursday July 24, 2025** (INBRE Summer Research Symposium) with one travel day thereafter
- Wyoming INBRE Summer Research Symposium Date: Thursday July 24, 2025.
- Pay: up to \$6400 for the summer (paid as hourly wage over the working dates of the program).
- Additional Support for travel and housing for the RAIN summer experience may be available. Students should contact their HOME state INBRE office for details.

Requirements for being an Intern:

- Students must currently be enrolled at an institution in a RAIN state (Alaska, Hawaii, Idaho, Montana, Nevada, New Mexico).
- Students must be graduating on or after December 2025. Students graduating in May or August 2025 will not be eligible for internships in 2025.
- Students must be committed to a full-time position.
- Summer interns are required to meet weekly with Annie Bergman, WY INBRE Student Research Program Director.
- Student must present their research at the INBRE Summer Research Symposium 7/24/25.

How are students selected to be RAIN Visiting Interns?

RAIN Interns are the best and brightest undergraduate students pursuing education and careers in the biomedical sciences in the RAIN Region. The selection process is competitive and rigorous. Students submit an application form that includes a few short essays, their GPA, letter of recommendation and their college transcript(s). The number of applications we receive will exceed the available internships and we will not be able to support all applications. To be competitive all information and responses to questions should be clear, concise and edited for grammar.

Criteria for Intern selection: Wyoming INBRE considers the following criteria as a 'whole' when choosing a RAIN Visiting Intern and not necessarily in the order listed.

- Interest in biomedical science and research
- Academic record, including science classes, major in a biomedical-related discipline, and GPA
- Reference letter
- Date of expected graduation
- Family educational background
- Preference is given for those who graduated high school in the Western INBRE region (AK, HI, ID, MT, NEV, NM, WY)
- Challenges you have overcome to obtain your education

For questions contact Dr. Annie Bergman (abergman@uwyo.edu) or Dr. Scott Seville (sseville@uwyo.edu).

Faculty mentor list

Grant Bowman Lab Molecular Biology

The Bowman lab studies the organization of structures inside bacteria, which self-assemble into anatomical features of the cells' body plan. We also investigate ways of engineering those structures to control cell functions, such as asymmetric cell division, cell type differentiation, and the synthesis of valuable products.

Utkarsh Kapoor Lab Chemical & Biomedical Engineering

The Kapoor lab aims to expand the fundamental understanding of self-assembly in biological systems and design novel materials to make impactful contributions to bioengineering applications. We are particularly interested in understanding biomolecular condensates, their roles in organizing our genome, their implications on human health and their manipulation as elements in biomaterials design. To probe the dynamic biomolecular self-assembly process, we develop and use multiscale modeling and computer simulation approach.

Eunsook Park Lab Molecular Biology

We are studying stress-inducible organelle dynamics and communications and its role in hostmicrobe interaction. One of our main projects is to utilize highly innovative tools to target fungal autophagy for developing new antifungal agents for human fungal infectious diseases.

Kara Pratt Lab Zoology & Physiology

We study the formation of neural circuits. Specifically, we study how the Xenopus tadpole visual system self-assembles to give rise to specific visually-guided behaviors. Media: <u>https://www.scientia.global/dr-kara-pratt-from-neurons-to-behaviour-exciting-insights-from-the-xenopus-tadpole/</u>

Todd Schoborg Lab Molecular Biology

We are biologists interested in understanding what makes animal cells misbehave to cause disease and disrupt development.