



## PhD Opportunity at the University of Wyoming

The Mountain Hydrology Research group & Irrigation Science & Management Center at the University of Wyoming are looking for a Ph.D. student to start in May of 2025. The successful applicant will become a research assistant (RA) on the topic of improving streamflow forecasting for an active irrigation system. The research will build on understanding of local snow accumulation and melt to design the requirements for a monitoring network to improve streamflow forecasting both seasonally and in real-time. This network could include rain gages, soil moisture sensors, snow pillows, radiometers, and other suitable equipment. The student is expected to administer the irrigation system from May- July to ensure correct delivery of water to appropriators. This project includes components that welcome applicants from a variety of scientific backgrounds including, but not limited to hydrology, agriculture, snow science, remote sensing, geophysics, and analysis of large datasets. Skills in R, Matlab, or Python, and experience with GIS are highly desirable.

The RA will be part of the Mountain Hydrology Research group led by Dr. Ryan Webb ([www.webbhydrology.weebly.com](http://www.webbhydrology.weebly.com)) in direct collaboration with Joseph Cook at the Irrigation Science & Management Center. The student will have the option to also be part of the Interdisciplinary Program in Hydrologic Sciences program at the University of Wyoming (<http://www.uwyo.edu/wrese/index.html>). The selected student will spend the summers living in a mountain ranching environment, gaining valuable experiences in managing an irrigation network that will further supplement the student's salary during this time (in addition to regular student stipend).

### Desired Qualifications and Skillsets:

- Ability to work independently
- Fieldwork experience (instrumentation installation, offroad driving, ATV use)
- Effective communication (oral and written)
- Interpersonal communication/conflict resolution
- Ability to conduct field work in mountain environments
- Experience with GIS software

This RA position includes tuition/fee coverage, health insurance, along with a stipend. See here for more detailed information (<https://www.uwyo.edu/uwgrad/enrolled-students/financial-assistance/assistantship-funding.html>).

### **To Apply:**

Interested applicants should submit a single PDF that includes 1) a cover letter outlining your research interests, research questions you are interested in pursuing, and relevant experience/skills, 2) a copy of your CV including GPA, and 3) contact information for 2-3 professional references. 4) Send this **single pdf** to [ryan.webb@uwyo.edu](mailto:ryan.webb@uwyo.edu) & [jcook34@uwyo.edu](mailto:jcook34@uwyo.edu) with the subject line "Student Application".

Please note that UW requires GRE and TOEFL scores for international students. Please include these scores in your CV, if applicable.

Members of underrepresented groups in STEM fields are encouraged to apply. Applications will be reviewed immediately.

Please reach out to Ryan Webb ([ryan.webb@uwyo.edu](mailto:ryan.webb@uwyo.edu)) or Joseph Cook ([jcook34@uwyo.edu](mailto:jcook34@uwyo.edu)) if you are interested or if you have any questions!

### **Hiring Statement:**

UW is an Affirmative Action/Equal Opportunity Educator and Employer. We are committed to a multicultural environment and strongly encourage applications from women, minorities, veterans and persons with disabilities. The Division of Communication Disorders' Diversity, Equity, and Inclusion statement can be found here: <http://www.uwyo.edu/comdis/files/docs/division-dei-statement-.pdf>

### **About UW and Laramie:**

The University of Wyoming is located in Laramie, a town of 30,000 in the heart of the Rocky Mountain West. The state of Wyoming continues to invest in its university, helping to make it a leader in academics, research and outreach. The university has state-of-the-art facilities in many areas and the community provides the advantages of a major university. Located in a high mountain valley near the Colorado border, Laramie offers both outstanding recreational opportunities and close proximity to Colorado's Front Range, a bustling group of metropolitan cities including Denver, Boulder, and Fort Collins. This beautiful mountain landscape offers outdoor enjoyment in all seasons, with over 300 days of sunshine annually. For more information about the region, please visit <http://visitolaramie.org/>

