

25. Evaluating yield and quality of cool-season grain legumes in western Colorado

Mentor: [Reza Keshavarz](#), [Mark Uchanski](#), [Henry Thompson](#), [Seth Urbanowitz](#)

Location: Western Colorado Research Center-Fruita

1. Extension mentor and application contact information:

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2. In what region will the student be working (county/region/state)? Fruita, Mesa County, Western CO

3. In less than 150 words, please describe the proposed internship goals, scope, and objectives. The intern will support an ongoing research and extension project evaluating yield, quality, and economy of cool-season grain legumes, including pea, lentil, chickpea, and faba bean in western Colorado. The goal is to train the intern on principles and practices of conducting field-based research trials and performing extension. The intern will closely work with the mentor and support this study. Activities include plot preparation and establishment, data collection, harvest, sample processing, data analysis, report preparation, and participation in extension activities related to this project.

4. Which PRU activities are included in the scope of this internship? Cropping Systems

5. What student learning outcomes do you anticipate and are there opportunities for professional development? The intern will gain knowledge and experience of conducting scientific field research trials. The intern will also learn about daily activities in a farm and in a research center including learning about agricultural equipment and operation. Additionally, the intern will learn about general agronomy, physiology, and morphology of leguminous crops. The intern is expected to help organizing and coordinating WCRC annual field day and interact with researchers, extension staff, and stakeholders. Ideally, the intern will have enough research data to prepare a poster or oral presentation.

6. How does this internship support identified stakeholder needs in your county/region? Grain legumes can provide growers in CO with new potential high-value crops to include in their cropping systems. Specifically, winter-type and cool-season legumes have an advantage over warm-season crops in terms of water use which is extremely important for agricultural sustainability in CO. This research and extension project is funded by the Colorado Department of Agriculture and many growers are showing interest to start growing these crops.

7. What is your experience with mentorship? In less than 100 words, please describe your experience with and approach to mentorship. I have mentored several undergraduate and graduate students. I try to establish and maintain a professional, though friendly, relationship with the intern, spend time with the mentee to discuss goals and expectations, and evaluate the internship progress periodically, and help her/him to expand her/his community network.

8. Are there on-going connections with CSU faculty associated with this project, or is there identified faculty interest? Yes. Dr. Mark Uchanski and Dr. Henry Thompson are collaborating in this project

9. Are travel funds available? Opportunities to provide student assistance with housing? Travel funds to and from campus to the research center will be provided at the start and end of the internship. The intern can use the on-site housing at Orchard Mesa Research center, which will be shared with others. A CSU vehicle will be available for farm visits or off station trips. Support will be provided for the intern to attend a local or regional scientific or extension meeting.