

## **Dr. Kelsey Hall - Philosophy Statement about Mentoring Undergraduate Researchers**

I am privileged to work at a land-grant university that strongly supports undergraduate research opportunities, especially during the last three years when I have recruited 12 students from 7 different disciplines to address research problems that determine what methods, models, programs, and communication strategies can effectively inform individuals about agricultural and environmental issues. At the initial meeting with potential undergraduate researchers, I explain how they would be considered colleagues who would work alongside me and contribute ideas and their point of view on our projects. I also use this time to ensure we would work well together, discussing their background, preferred work style, research interests, project ideas, strengths and weaknesses in their writing, data analysis ability, funding opportunities, and career goals. This information helps us select appropriate research projects and the desired amount of mentoring needed.

One of the most important responsibilities I have is to work with my undergraduate researchers on projects that interest them and help them develop skills needed to achieve their career goals, including critical thinking, creativity, problem solving, or communication. I encourage my undergraduate researchers to develop their own research ideas and apply for the university's Undergraduate Research and Creative Opportunities (URCO) Program grant. For example, two undergraduate researchers want to work in the Extension system as communicators or county agents, so we designed research projects that allowed them to mimic the skills they would use in that career field by identifying a research problem in extension education, getting a URCO grant funded, collecting data, analyzing results, delivering trainings, and writing curriculum, fact sheets, and journal articles. I also coach my mentees so that they communicate about their research through poster and oral presentations at conferences as well as have casual conversations with colleagues. We rehearse presentations and proofread our posters and presentation slides to prepare for these experiences. These experiences enable me to introduce them to colleagues in the agricultural communications or extension education disciplines, learn about graduate programs, and identify possible mentors for future research projects.

My mentees typically struggle with problems at unique times, so I make myself available by setting a minimum of a weekly meeting, then making myself available through email, phone calls or text messages so that I can assist them when I am away from the office. Some mentees enjoy working independently with knowledge of the tasks to complete, deadlines, and weekly meetings. Other mentees need multiple weekly meetings as they tackle new tasks like writing IRB applications, interpreting their data, learning to write their research abstracts or journal articles, and following APA Style for citations. It is equally important for my mentees to work independently and communicate their needs, as these are necessary employability skills. Ways I guide their independent learning are by 1) introducing them to resources that can help them thrive on their own or when I'm not around and 2) demonstrating how to use the software programs prior to their data analysis. At times, this mentoring style requires much effort on my part, but the benefits of their successful research scholarship far exceed the challenges. Mentees bring fresh ideas and advance our discovery of new research questions and methodologies. Their work not only benefits the scientific community but also provides information Utah farmers, consumers, and policy makers have used to make agricultural-based decisions—truly meeting the land-grant's mission of scholarship, teaching, and outreach.