

Intern if U-DAIRE: Adding Value to Dairy Through an Inclusive Undergraduate Experience

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Introduction

The agricultural workforce has steadily decreased across all industry sectors over the past decade (Bureau of Labor Statistics, 2023; Economic Research Service [ERS], 2023; Roser, 2023;). In the dairy industry, processors have experienced a ten percent decline in their workforce, with about two job openings for every one person seeking employment (Gibeson, 2023). This decline poses a need for innovative approaches to recruiting and training new professionals. College internships have proved a valuable method of training future professionals by helping students develop job-specific knowledge through hands-on experience (Hall et al., 2017; Johnson, 2020; Wolfgram et al., 2021), increase their employment opportunities when they graduate (Hall et al., 2017; Hora et al., 2021; Johnson, 2020; Wolfgram et al., 2021), and receive higher compensation when first starting (Hall et al., 2017; Hora et al., 2021; Johnson, 2020; Wolfgram et al., 2021).

However, participation in internships can be hindered by students' perceptions toward participating and outside factors that limit their access to internship opportunities. Barriers to students' perceptions include perceived availability of opportunities (Hora et al., 2021; Hora et al., 2022; Johnson, 2020), lack of knowledge of how to access internships (Hora et al., 2022; Wolfgram et al., 2021), and perceived disorganization of the program itself (Hall et al., 2017). Accessibility barriers include lack of transportation, lack of access to housing, having a heavy course load, and having insufficient pay/needing to work a paid job (Hall et al., 2017; Hora et al., 2021; Hora et al., 2022; Johnson, 2020; Wolfram et al., 2021). There are also inclusivity factors that contribute to barriers to entry including academic major, gender, race, and institutional prestige, which can interact to give students a sense they may not be competitive enough to be selected for an internship (Hora et al., 2022). We developed the Undergraduate Development and Internship Research Experience (U-DAIRE) to alleviate barriers and enhance workforce development and diversity across the Southeastern region.

How it Works

U-DAIRE offers undergraduate students of any major the opportunity to gain hands-on experience in the dairy industry, which they might not otherwise have. Students can apply between November and January of the year preceding the internship. During the application process, they are required to provide information about their current college enrollment, ethnicity, race, transportation requirements, and resume with a cover letter expressing their interest. The internship spans a nine-week program, with the initial three weeks dedicated to an on-campus program focused on leadership, team building and conflict resolution, communication, and animal handling protocols at a nearby dairy. The remaining six weeks involve hands-on work experience at a commercial dairy farm. Lastly, students complete the internship by presenting research posters at a regional value-added dairy conference. During the program, students are asked to keep a journal, complete a pre-and post-internship questionnaire, and participate in regular debriefing sessions to help the internship leads evaluate the program. Participating farmers are also asked to participate in a debriefing session.

Results to Date

The program has run for two consecutive summers since 2022 and has attracted a total of fourteen students from three universities across the Southeastern region. Students in each cohort varied in demographic characteristics, including academic year, race, ethnicity, income, animal science background, first-generation status, and in being nontraditional later-career students. Preliminary data from the pre-and post-internship questionnaires and debriefing sessions indicate interns made positive gains in areas of knowledge about the dairy industry, career pathways,

leadership skills, and communication skills. The interns perceived themselves as significantly more knowledgeable about the dairy industry after completing the internship, as well as demonstrated a greater interest in pursuing a career in the industry and more efficacy in overcoming barriers to secure a position in the industry. Regarding their leadership skills, the interns believed themselves to be better leaders and had more confidence in using their leadership skills to address problems. Interns also reported being more likely to go find help when they are unsure of how to address a problem. As for their confidence and abilities to communicate about and within the industry, interns felt overall more confident in their ability to communicate about dairy following the internship. Further, students reported having greater confidence engaging with the public about complex issues, identifying tactics for communicating in crisis situations, and using storytelling to talk about complex issues. Lately, interns noted they were more willing to take time to listen to someone's perspective before responding.

Future Plans

We are continuing the internship program and have expanded it to include an additional participating university. Based on internal evaluations, we have developed a more comprehensive curriculum for the on-campus portion of the internship for the next cohort. This curriculum can be adopted by other practitioners interested in developing a similar internship program. Due to differences in communication styles and backgrounds of interns and host farmers, we also plan to launch a leadership training session that all participating dairy farmers will be required to take prior to hosting interns. The intention behind this training workshop is to help farmers communicate effectively with youth who may not look like them or share their experiences, and how to instruct those who have limited background with animal handling and dairy production. Lastly, we will continue to conduct formative and summative evaluations of the program, as well as debrief with past participants to examine the longer-term impacts of the program on students' perceptions and career pathways.

Costs

The total costs incurred to support 10 interns in a single cohort is roughly \$33,470 annually. The total cost includes \$5,400 for total intern salary, \$4,320 for total benefits, and \$23,750 total in participant support costs. Our interns receive \$15/hour plus benefits for 360 hours of work over the course of the semester. The participant support costs we built into the program include \$250 per intern to travel from home and return home, \$2,250 total for interns and mentors to travel to farm visits during the three-week training portion and follow-up check-ins, and \$1,000 total for vehicle rental or mileage reimbursement for interns to travel to host farms. Our housing costs ranged depending on whether interns were housed at their participating dairy or on a nearby campus. Costs for intern housing on campus, including the three-week training on campus, is \$14,000. Housing costs on the dairy farms were \$4,000. These costs can be adjusted based on number of interns and how travel is arranged.

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