

14. Produce Safety

Mentors: [Cristy Dice](#), [Martha Sullins](#), [Marisa Bunning](#)

Location: Front Range (with opportunity for statewide travel)

1. **Extension mentors:** Cristy Dice; Produce Safety Specialist; Cristy.L.Dice@colostate.edu and Martha Sullins; Ag & Business Mgt. Specialist; Martha.sullins@colostate.edu
2. **Region where student will work:** The student will be based along the Front Range but could work in other parts of the state. The student must be physically present in Colorado to participate in this internship.
3. **Internship goals, scope, and objectives:** Internship goals are to develop and carry out field research that will help produce growers understand how to appropriately use cleaning and sanitizing products that are commonly applied to food contact surfaces. This information will improve on-farm food safety practices for growers throughout Colorado. With the need to comply with the Produce Safety Rule and/or meet buyer expectations of certain food safety audit programs, produce growers need to understand the efficacy of the cleaning and sanitizing agents they use on a variety of food contact surfaces. In addition to testing how to effectively use these products and what conditions improve or reduce their effectiveness (temperature, pH, contact time, surface type and condition), the student will also create a fact sheet that will make this information readily accessible to produce growers.
4. **PRU activities included in the scope of this internship:** This internship will support the Food Systems PRU as it will provide tools for market access and regulatory compliance for produce growers who need to meet mandatory federal regulations or obtain voluntary third-party audits. It will also support outreach efforts under the Nutrition, Food Safety and Health PRU.
5. **Student learning outcomes and opportunities for professional development:**
 - a. gaining an understanding of the range of typical cleaning and sanitizing products that produce growers use on different types of food contact surfaces;
 - b. learning how to determine the effectiveness of practices and products through environmental monitoring; and
 - c. creating an outreach resource (fact sheet or similar) for growers based on the research conducted.
6. **How this internship supports identified stakeholder needs:** Many produce growers across the state perform cleaning and sanitizing activities to reduce the prevalence of foodborne pathogens. This project will create a comprehensive resource to help farmers identify the most effective products and methods to clean and sanitize food contact surfaces for their specific operation. Without assistance through a project such as this, it is very difficult for produce growers to find this information in research literature and from private companies that sell these products.

7. **Mentorship experience:** Cristy has worked as a mentor for 15 full-time employees, 4 part-time employees and 4 students she has directly supervised. She has been an advisor and coach for multiple teams and projects. Her approach is to be supportive while allowing for independence by providing direct feedback and encouragement to help employees grow and achieve their desired goals. Martha has supervised 2 previous Extension interns, 2 interns from the School of Public Health, and served on graduate student thesis committees in DARE and FSHN.
8. **On-going connections with CSU faculty:** Marisa Bunning can provide support for lab-based testing of product efficacy.
9. **Travel funds and housing available:** There are travel funds available but no housing.