

Project Title: CA Community College Program Expansion: CA Secure Food Supply (SFS) Enhanced Biosecurity Plans

<p>Project Profile</p> <p>Cooperator: University of California (Davis) Project ID: Agreement ID: FAIN: AP22VSSP0000C025 Award Amount: \$ 502,156 Agreement Period: 4/1/2022 – 3/31/2024 Project PI POC: Bennie Irve Osburn Financial POC: Bennie Irve Osburn VS Program Manager:</p>	<p>Project Summary</p> <p>The WIFSS team at UC Davis will work collaboratively with two Hispanic serving institutions (HIS) to develop teaching materials and on-farm, experiential learning activities on enhanced biosecurity practices that will be integrated into existing community college certificate and degree programs. The community colleges that will be participating in the project are San Joaquin Delta College (SJDC) and Woodland Community College (WCC). The content of the newly developed community college curriculum will be derived from educational materials already developed by WIFSS and CDFA to assist farmers in the development of enhanced biosecurity plans that comply with the California Secure Food Supply program; a project funded by a 2019 USDA NADPRP grant. The newly proposed project will utilize the deliverables from the 2019 project and extend their impact. The new curriculum will give current college students in-demand job skills of writing enhance biosecurity plans and consulting on biosecurity for animal agriculture farms. Faculty from each college, along with other community college stakeholders, will help WIFSS staff adapt the current materials for use in existing college classes. This team will also interface with CDFA and the CA dairy industry to ensure that the skills taught will benefit CDFA and dairy farmers, and contribute to workforce development. College students who complete the new curriculum will complete on-farm experiential learning events that provide hands-on experiences including setting up and practicing essential biosecurity activities on an actual working dairy farm, and tours of poultry farms as a demonstration of existing enhanced biosecurity.</p>	<p>Report Date 7/2022 – 9/2022</p> <p>Completion Score (Project is active)</p> <p>Budget Status XX% Spent</p>
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Project Update

Objectives	Completion Score (0-10)	Major Project Milestone Achievements
<p>1. Create one (1) enhanced biosecurity curriculum framework that will articulate with existing community college programs at both Woodland and SJDC by the end of month 5 (July 31, 2022).</p>	<p>10 (Project completed)</p>	<p><i>See Activities Completed This Quarter for further details.</i></p> <p>Objective 1 Create one (1) enhanced biosecurity curriculum framework that will articulate with existing community college programs at both Woodland and SJDC by the end of month 5 (July 31, 2022).</p> <ul style="list-style-type: none"> This objective was completed in Q2. The framework can be viewed by following this link: https://ucdavis.box.com/s/r0g33ld8hecpnxik5vmnbigke1uddigo <p>Objective 2 Synthesize fifteen (15) new online learning modules, learning activities, and/or video-based teaching aids on enhanced biosecurity theory and practice on-farms by the end of month 9 (December 31, 2022).</p> <ul style="list-style-type: none"> 2.2: Team members are working on the development of course materials. Assignments are as follows: <ul style="list-style-type: none"> Heather Johnson is overseeing the following modules: <ul style="list-style-type: none"> “Wild birds, rodents, and insects” module content (script, storyboard, video, vocabulary PDF, quiz questions) “Overview of CA Secure Food Supply (SFS) program” module content “One Health” module content David Goldenberg is overseeing the following modules: <ul style="list-style-type: none"> “Anatomy of an Outbreak” module content (script, storyboard, video, quiz questions, learning activity) Mike Payne is overseeing the following presentation that is part of the “Preventing Disease Transmission” section of the framework: <ul style="list-style-type: none"> “Bulk Tank Milk Sampling during and Outbreak” Brandi Asmus: <ul style="list-style-type: none"> Developing learning activities for in the classroom that allow students to practice the knowledge and skills being taught through the online modules Developing case study learning activities Candice Stafford-Banks: <ul style="list-style-type: none"> Set up the project learning management system (LMS) – Canvas
<p>2. Synthesize fifteen (15) new online learning modules, learning activities, and/or video-based teaching aides on enhanced biosecurity theory and practice on-farms by the end of month 9 (December 31, 2022).</p>	<p>3.5 (Project is active)</p>	

		<ul style="list-style-type: none"> • Creating student learning activities that go with the modules that are under construction. • Developing case study learning activities • Jessica Cardoso: <ul style="list-style-type: none"> • Providing feedback and review of course materials as they are being developed. • Developing case study learning activities • Bennie Osburn: <ul style="list-style-type: none"> • Providing oversight and guidance in the development of the One Health presentation; Dr. Osburn is the author of the slides that are being used, and has given similar presentation for decades on the topic. • 2.3 – 2.8: The curriculum development steps outlined here are being followed as each module/learning activity is being developed. • 2.9: The final edits will be completed following presentation of the course materials to other college professors in December 2022 at the CATA conference
<p>3. Train at least sixty (60) college students on enhanced biosecurity so that they can demonstrate knowledge and skills by passing formative assessments with a score greater than or equal to 70%, and complete on-farm enhanced biosecurity activities scored by SMEs using a rubric. All student training and assessment will be completed by the end of month 21 (December 31, 2023)</p>	<p>1 (Project is active)</p>	<p>Objective 3 Train at least sixty (60) college students on enhanced biosecurity so that they can demonstrate knowledge and skills by passing formative assessments with a score greater than or equal to 70%, and complete on-farm enhanced biosecurity activities scored by SMEs using a rubric. All student training and assessment will be completed by the end of month 21 (December 31, 2023)</p> <ul style="list-style-type: none"> • The community college faculty are preparing to implement the new course materials starting in January 2023 (Spring 2023 semester) • The course syllabus is being updated to include the new learning objectives and project plans

<p>4. Publish one (1) article on the development of the curriculum and the delivery of the new course materials and experiential learning activities.</p>	<p>1 (Project is active)</p>	<p>Objective 4 Publish one (1) article on the development of the curriculum and the delivery of the new course materials and experiential learning activities.</p> <ul style="list-style-type: none"> • Discussions with Dr. Osburn about the article have begun; an outline will be generated in Q3 or Q4 • The article will be written for an educational journal
<p>Next Steps</p> <ul style="list-style-type: none"> - (new) Complete the design of on-farm experiential learning activity - (new) Finalize Pest Management module - (new) Finalize Anatomy of An Outbreak module - (new) Finalize the updates to the course syllabi that will be used in Spring 2023 semester - (new) Finalize the changes to the Canvas course - (new) Prepare presentation for CATA conference to introduce course materials to other college faculty in CA - (carry over from Q2) Create the project landing page on the WIFSS website for sharing of materials and publication of project updates - (carry over from Q2) Modules next to be developed: Secure Food Supply Overview, Biosecurity and One Health, Specific On-Dairy Biosecurity Practices, Personal Protective Equipment (PPE) - (carry over from Q2) Select topics that need training videos and outline the video script and shot list - (carry over from Q2) Coordinate a day/time/location for filming the training video(s) 		

Activities Completed This Quarter

List activities completed in the last quarter. These should align with items listed in the project Work Plan under the plan's action section.

Major Project Milestone Achievements

Objective 1 Create one (1) enhanced biosecurity curriculum framework that will articulate with existing community college programs at both Woodland and SJDC by the end of month 5 (July 31, 2022).

- Milestones 1.1, 1.2, 1.3, and 1.4 were completed through the collaboration between UC Davis staff and community college (CC) faculty. The curriculum framework is available for review and was submitted along with this report.

Objective 2

- The project team is continuing to work on the development of our course materials that will align with the curriculum framework that was completed at the start of the project. This work will continue through Q4 and possible even into Q1 of 2023.
- (On-going): The project team is working very well together and continues to divide up the development work (milestone 2.1) as the project unfolds. The CC faculty are taking the lead on the assembly of the course materials in the colleges' LMS, Canvas. The WIFSS project team is working on gathering content, organizing "raw" materials that will be used for creating learning activities and presentation, and is managing the logistics of the project (timeline, spending, work assignments, etc.).
- The team has made progress towards milestone 2.2 in that we have final version of the module on pest management for biosecurity on farms that is ready to move into final production.
- We were able to acquire the most recent presentations on the Secure Food Supply from CDFA and have been given permission to develop those slides into a 508 compliant video presentation that will be used in the college classes, but may also serve as a reference that can be posted on the CDFA website. CDFA personnel have agreed to review the presentation draft when ready to ensure all content is correct and in alignment with the CA state SFS program.

Significant Changes from the Work Plan

Describe major deviations from the original project work plan. Significant changes in the project objectives, sub-objectives, deliverables, and outcomes must be approved by the Program Manager.

- Curriculum development may continue into Q1 of 2023. At this pace, some of the materials and learning activities for the college classes may still be under development when the Spring semester begins. We are working to make sure that the foundational presentations are ready for the start of the semester, but the culminating activity lesson plan may need to be finalized during the semester. We continue to work as quickly as we can to avoid this, but it may be necessary.

Success Stories

Please share any unique event, outcomes, or evidence of positive change related to the project that provides a narrative for project success. This includes any story related to the project that paints a picture of a situation, provides background information, or shares activities associated with the project that do not qualify for reporting elsewhere in the report.

- (From Q3 report) - As was mentioned above, we have the opportunity to work closely with CDFA on the creating of a module that will satisfy part of the curriculum framework while also ensuring that the content being taught in class is the most up-to-date material on the subject of the secure food supply program.
- (From Q2 report) - As we move forward with the creation of the course materials to satisfy the objectives of this project, our team continues to look for opportunities to further develop a complete certificate and/or degree program in on-farm biosecurity that could be delivered through the community college system. The program would be based on needs assessment data and specific needs from the industry following the community colleges well-established system for evaluating community needs. The mission of the community college

is to serve the local community first and foremost. We believe in this mission and are looking for opportunities to help develop the agricultural workforce in communities where agriculture is a major industry. We also aim to strengthen the working relationship among institutions of higher learning from the community colleges to the universities to state and county agricultural departments. Funding for workforce development projects will likely become available during the course of this project and we plan to gather information from the industry and college administration to help us better understand the needs that a certificate and/or degree program in on-farm biosecurity could meet.