



Quarter 4 Report

Year 2

Southeastern Coastal Center for Agricultural Health and Safety

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November 2, 2018

For More Information

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Background

The occupational risks for farmworkers, fishers and forestry workers in the coastal southeast are numerous. Farmworkers who harvest fruit, vegetables, and ornamental plants by hand frequently bend, crouch, and lift to carry crops and tools weighing as much as 90 pounds. They can be exposed to pesticides sprayed on crops and are at risk for injuries caused by farm machinery. Fishers also labor under hazardous conditions, and transportation to medical facilities can be difficult if they are injured while on the water. Most fatalities for fishing industry workers are from drowning, but injuries can also be caused by malfunctioning fishing gear, entanglement in fishing gear, slippery decks, strong currents, tidal surges and waves washing over the deck, and collisions. Forestry workers face risks using heavy logging equipment, as well as risk of injury from the massive weights of falling, rolling and sliding trees and logs. Transporting logs from harvesting sites to processing sites can also lead to injuries in forestry workers. Farmworkers, fishers and forestry workers generally work outdoors in all kinds of weather, leading to major concerns in Florida, other southern states and the Caribbean about the impact of heat stress on workers, particularly in the setting of recent increases in number of days with temperatures above 90 degrees F.

In response to these issues, the Southeastern Coastal Center for Agricultural Health and Safety (SCCAHS) was established in 2016 as part of a Centers for Disease Control and Prevention (CDC) / National Institute for Occupational Safety and Health (NIOSH) Agricultural Health and Safety Initiative. SCCAHS explores and addresses the occupational safety and health needs of people working in agriculture, fishing, and forestry in Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Puerto Rico, and the U.S. Virgin Islands. SCCAHS focuses specifically on the unique environments and occupational communities of this region (e.g., hot, humid climate and coastal/coastal plains with farming and fishing and timber). SCCAHS is a multidisciplinary partnership of academic institutions, community organizations, and industry representatives that brings together individuals and organizations that are already pursuing academic and applied basic research, intervention, translational, and outreach solutions for occupational illness and injuries. SCCAHS provides centralized regional infrastructure where these individuals, organizations and companies can engage in mutual learning, leverage resources, build on previous efforts of colleagues, and promote new research.

The SCCAHS Evaluation Program is tasked with collecting relevant monitoring and evaluation (M&E) data from the Center's projects and Cores to document program progress and assess the extent to which the SCCAHS meets its intended goals. The Evaluation Program analyzes and interprets data to establish the quality, effectiveness, and impact of the Center and its disparate parts, and reports and shares evaluation findings and recommendations with key stakeholders.

Research Projects

Research Project 1- Occupational Health and Safety Surveillance of Gulf Seafood Workers

Project PI: Andrew Kane, PhD

Project Description

This project has two specific aims focusing on surveillance and hazard intervention. Surveillance will be conducted using in-person survey interviews, and by making direct field observations to discern workplace hazards and risk factors associated with the dominant Gulf coast fisheries subsectors. Surveillance data will be used to identify and support relevant points of intervention for hazards in the difference fishery subsectors throughout the study region.

No updates for this project in Y2Q4.

Research Project 2- Extent of Agricultural Pesticide Applications in Florida Using Best Practices

Project PI: Gregory Glass, PhD

Project Description

This two-year surveillance project uses an integrated remote sensing (RS) system (time series of high and moderate resolution) to create an analytic framework to establish the levels of various, selected herbicides/pesticides (H/P) on specific, commercially grown crops within the state of Florida. The extent of health risks for agricultural workers depends, as an initial step, on the amounts of H/P that they contact during their work activities. Although acute unintentional exposures are serious risks for individuals, the more extensive, lower dosage exposures of the workers may be a more serious issue. Unfortunately, estimates of amounts of H/P used in the industry were last gathered between 2007-2009. This report aggregated H/P usage by target pests and crops but was insufficiently detailed to establish potential worker exposure from the environment. Given the continued absence of exposure data, the proposed work is essential for subsequent research projects seeking to correlate health impact with H/P exposure.

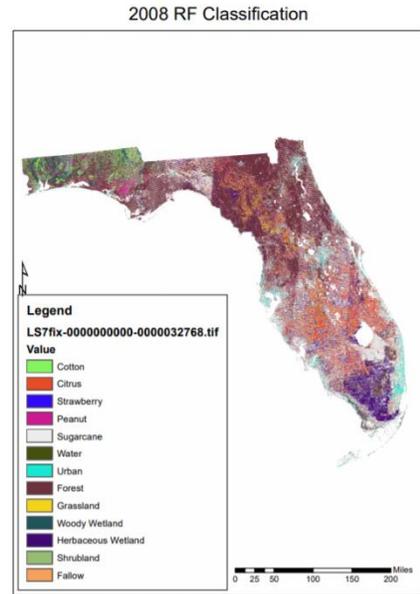
Activity Indicator: Develop Crop Spectral Signature

Grant Proposal Text

“Develop spectral signatures from high and moderate resolution archived RS imagery of crop phenology.”

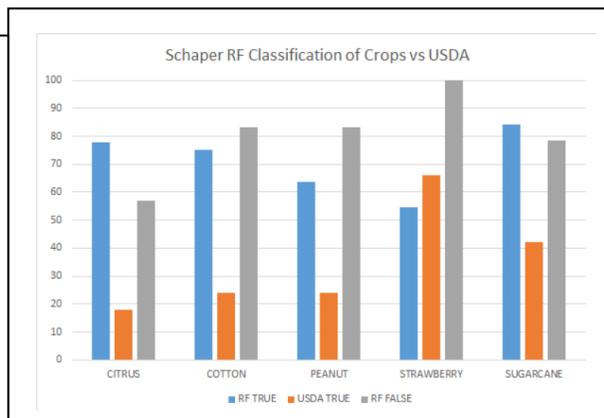
Description of Progress

The random forest classifier for mainland Florida has been completed for 2008-2009. Classification improvements required increasing the number of classes identified beyond the targeted five crops to a 13-class categorization (Figure). The obvious north-south striping in the classifier reflects different days that imagery were obtained. The 2015-2016 classification is in progress. Additionally, high resolution imagery has been acquired and uploaded, and classification and evaluation for its potential use is in progress.



Initial acreage validation has been completed and is being cross-checked. High resolution imagery was used to ‘ground truth’ the crops being grown during the time periods in question. Fifty sites for each of five crops (250 sites total) were randomly identified from the USDA classification. The Figure, below, compares the current classifier used by the USDA remote sensing algorithm (orange bars), with the new, Random Forest (RF) classifier (blue bars). With the exception of strawberries, the RF classifier substantially outperformed the USDA algorithm in correctly identifying where the crops are located. The classification for RF identifying that a site would not be the specific crop (gray bar) is also generally quite high (with the exception of citrus). In epidemiologic parlance the RF classifier shows both good sensitivity and specificity in crop identification.

Figure. Comparison of USDA (orange) classifier and RF (blue) classifier in correctly identifying listed crops. The RF (gray) classifier’s ability to exclude non-target crops. Vertical axis is % correct.



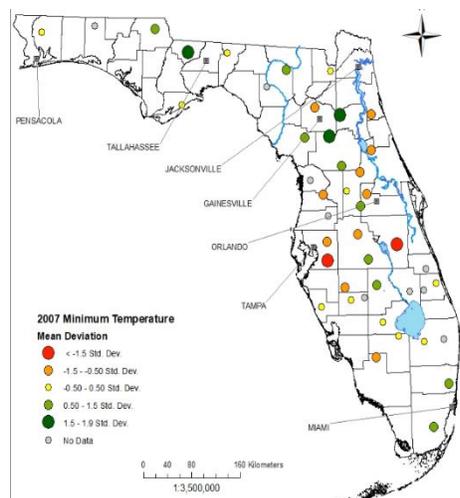
Activity Indicator: Use

Weather Data to Estimate Environmental Conditions

Grant Proposal Text

“Generate a temperature-precipitation analysis of local conditions to establish the phenology response of citrus, strawberry and snap bean crop development to meteorological conditions and link these results to applications of H/P.”

Description of Progress



DayMet data were acquired from Oak Ridge National laboratory for 1 sq km resolution for the entire region of mainland Florida. The sq km centered on each of the FAWN weather stations maintained by UF IFAS was identified for each weather station. A random sample of thirty days throughout the study years were selected and the deviation between the maximum, and minimum temperatures and precipitation between DayMet and FAWN (presuming FAWN is 'truth') was calculated. Average deviations of < 2 units was considered not significantly different. Results indicated that the DayMet data were within the range of acceptable error and could be used to estimate temperature and precipitation regimes within mainland Florida.

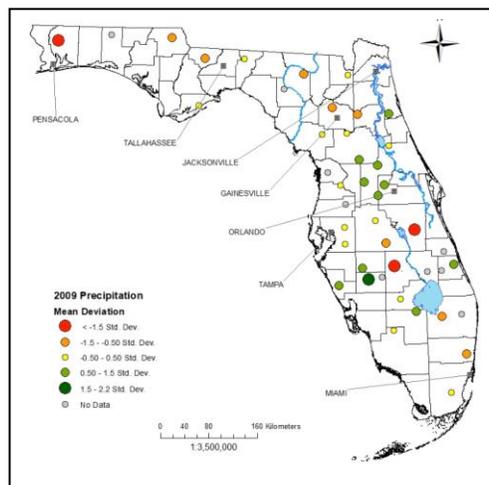
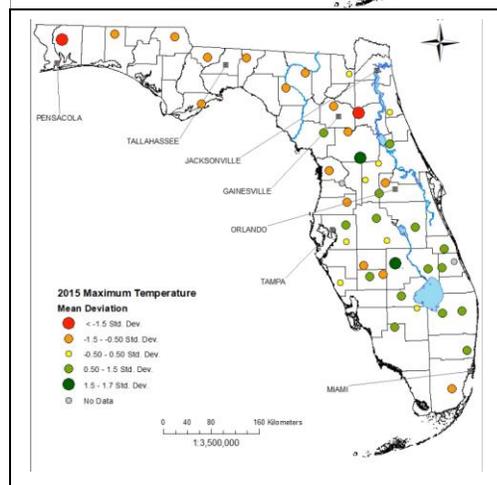


Figure. Comparison of DayMet and FAWN meteorological data for mainland Florida. (Top) Minimum temperature, (Bottom, left) Maximum temperature, (Bottom, right) Precipitation. Note that the differences are < 2 Standard deviations indicating good concordance.

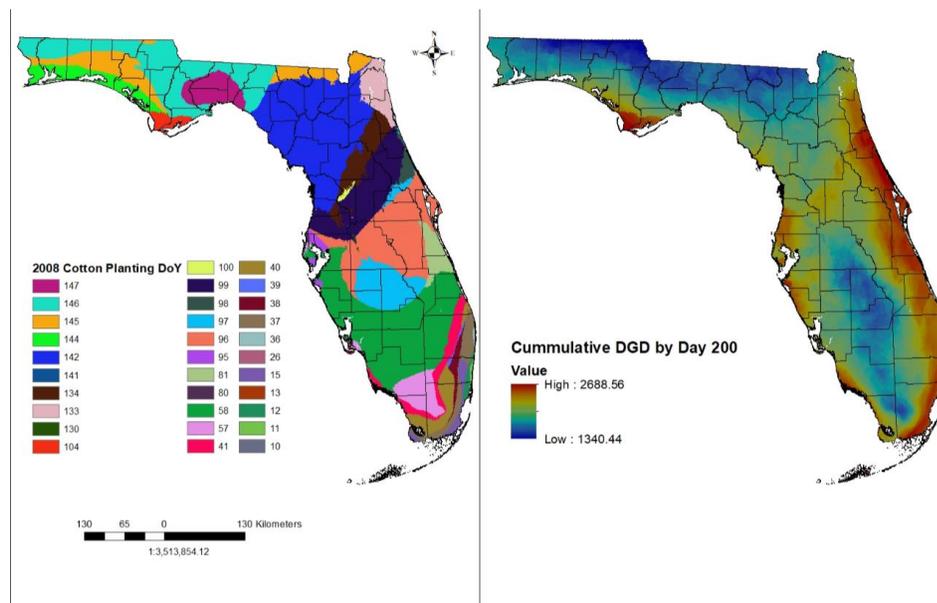
Complete temp-weather model of crop growth/herbicide application validation

Degree growing day (DGD) models of selected crops:

The DGD models are based on the accumulation of days above some average temperature threshold in a region. These models are obtained from published, peer-reviewed literature. Our focus is on those models encouraged by IFAS at UF for use by farmers and managers, when possible. The two key variables for these models are 1) the specific crop; 2) the local temperature (and occasionally, but rarely, the precipitation pattern). Local temperatures were derived from the Oak Ridge National Laboratory DayMet data set that provides daily time step information on various

meteorological conditions, including temperature. During Q3 we showed the errors in the DayMet modeled data were within satisfactory range when we used the IFAS FAWN weather station data throughout the state.

An example of a DGD model for the 2008-2009 cotton crop. The left panel shows the first day of planting according to the model. The right panel shows the cumulative DGD by day 200 which is the stated expected day of harvest.



Execute final model of crop growth and herbicide application

The initial comparison of the expected herbicide use based on crop acreage and best practices usage was evaluated for glyphosate. As a calibration of the acreage x label usage estimate we relied on the IFAS publication by Wells and Fishel (2010; PI 235). Their survey estimated 1,532,800 lbs of active ingredient applied to surveyed crops. Our estimate for the same period was 1,266,042 lbs. Given the many potential sources of error (which are still being examined), these estimated applications are quite similar.

Of practical significance, however, is the list of crops for which Wells and Fishel did not obtain estimates. These included sugarcane, cotton and peanuts – three of our target crops. Additionally, they have among the largest areal coverages in the state. We estimate in 2008-2009 they included 681,000 acres. Assuming a maximum label treatment of 6 lbs/year/acre this indicates **approximately 4.09 million lbs of glyphosate could have been used but were not captured in the survey.**

Among the next four most frequently used herbicides, Diuron (512,300 lbs), Simazine (313,400 lbs), Sulfosate (166,200 lbs) and Bromacil (73,700 lbs) were exclusively reported to be used on various citrus crops. We are attempting to determine their possible uses on sugarcane, cotton and peanuts during this time and whether similar omissions might have occurred.

Research Project 3- PISCA: Pesticide & Heat Stress Education for Latino Farmworkers that is Culturally Appropriate

Project PIs: Joseph Grzywacz, PhD / Jose Antonio Tovar-Aguilar, PhD

Project Description

The overall goal of this project is to reduce poor health outcomes among Latino farmworkers resulting from exposure to pesticides and extreme heat and humidity. To achieve this goal the proposed project will build a community-advocate-university partnership to accomplish three primary aims.

Specific Aim 1

“Create reproducible, culturally- and contextually-appropriate appropriate curricula for Latino farmworkers targeting pesticide exposure (suitable for meeting employer requirements under the revised Worker Protection Standards (WPS), and heat-related illness (HRI).”

Completed.

Specific Aim 2

“Determine the effectiveness of the developed pesticide and HRI curricula implemented by professional educators in promoting advocated safety behaviors.”

Product Indicator: Phase 1 Results Publication

Phase 1 data analysis was completed in Y2Q2. A publication based on these results has been submitted.

Activity Indicator: Phase 2 Safety Training Sessions

Description of Progress

To date, our team has facilitated six PISCA-WPS trainings, one EPA-WPS training and three heat stress trainings in Lake Park, GA, Fargo, GA, Omega, GA, Stockton, GA, Immokolee, FL, and Jennings, FL. A total 180 farmworkers have participated- approximately 7% of these workers were female, and approximately 93% of them were H2A workers. Follow up surveys have been solicited for seven of the ten trainings, and we have received completed surveys from 30 participants.

Specific Aim 3

“Identify the comparative effectiveness of promotora-based implementation of developed pesticide and HRI curricula relative to the use of professional educators.”

This phase of the project will begin in Year 3.

Other Activities and Products

Community Outreach Events

- Fiesta Latina planning meeting. September 19 and October 2, Valdosta, GA.

Conferences

Presented

Tovar-Aguilar, A., Trejo, M., Ordaz Gudiño, C. (September 11-13, 2018). PISCA: Entrenamiento en Pesticidas e Insolación que es Culturalmente Apropriado – Processes of Development & Implementation of Training Conducted by Community Health Workers. *Midwest Migrant Stream Forum*. New Orleans, LA.

Farm work has always been a risky occupation with social structures that maintain this labor on conditions of vulnerability. Addressing the multiple factors that contribute to this condition and outcome require multiple approaches, strategies, and actors. The Environmental Protection Agency (EPA)' workers protection standard is a regulation aimed at preventing pesticide exposure. The PISCA project intends to serve as a model training that incorporates the required elements of the updated regulations. It is culturally relevant for workers, and it is easy to implement. During this session, presenters will share personal experiences with the model, past and current efforts to implement the WPS's training, and facilitate a discussion on the group's concerns regarding heat stress and the strategies that other groups may be using. The overall goal of this session is to describe and discuss strategies and methods to implement a successful intervention project aimed at reducing poor health outcomes among Latino agricultural workers due to exposure to pesticides and extreme heat and humidity conditions.

Attended

Trejo, M., Ordaz Gudiño, C. (October 4-6, 2018). Tabling for SCCAHS and PISCA. *East Coast Migrant Stream Forum*. Portland, ME.

Publications

Manuscript submitted

Grzywacz, J.G. Attending to Pesticide Exposure & Heat Illness among Farmworkers: Results from an Attention Placebo- Controlled Evaluation Design.

Other Products

Curriculum

The PISCA curriculum was translated into Haitian Creole. Work on this curriculum is still being finalized.

Outreach materials

We partnered with the Migrant Clinicians Network to create a comic book to demonstrate WPS practices. The publication is still in progress.

Research Project 4- Heat Stress and Biomarkers of Renal Disease

Project PI: Linda McCauley, PhD

Project Description

We **hypothesize** that biomarkers of renal damage previously identified in the Mesoamerican population will also exist among Latino farmworkers who have immigrated to the U.S. to work in agriculture. We will recruit 70 agricultural workers in Florida who are between 18 and 54 years of age, oversampling workers who report they have migrated from Central America or Southwest Mexico, and 30 controls of similar heritage who do not work in heat intensive agricultural environments such as mushroom facilities, restaurants and hotels. In this work, we will accomplish the following specific aims:

1. characterize the occupational environment of these workers including work practices, workplace heat exposure and work intensity;
2. characterize the physiologic profile of these workers including body anthropometrics, dehydration, and self-reported heat-related illness symptoms;
3. determine if biomarkers indicating kidney injury are present (kidney injury molecule – 1 (KIM-1), Beta-2 microglobulin (B2M), neutrophil gelatinase-associated lipocalin (NGAL), elevated blood urea nitrogen (BUN), creatinine, uric acid, uromodulin, and decreased glomerular filtration rate (GFR)) and if the presence and levels of these biomarkers in agricultural workers differ from controls who are not employed in agriculture; and
4. use non-targeted metabolomics analysis of blood plasma to explore the molecular mechanisms of renal dysfunction associated with occupational heat exposure.

Activity Indicator: Recruit and Collect Data from Workers

We progressed in data collection by acquiring baseline, pre-work, post-work, and osmolality and renal function data from treatment and comparison groups in Homestead, FL between April 20 and August 23, 2018. A total of 62 fernery workers were recruited along with 28 workers from the comparison group. Frozen samples were obtained for analysis at our Emory laboratory, and were safely transported back to Emory.

Activity Indicator: Blood Sample Data Bank

We assembled a bank of serum and plasma samples for future exposome analysis for pesticide and nephrotoxic chemicals. The bank also includes pre-workday and post-workday urine samples. All samples are being stored at -80C at our Emory laboratory.

Activity Indicator: Data Analysis

Our team is working with Dr. Brumback and her student Yian Guo to develop a biostatistics data analysis plan. Currently, metabolomics data is processing with a potential queue of four months and planning for renal biomarker assay processing is will take place during the next quarter.

Product Indicator: Preliminary Data Reporting

We have a paper in progress that will detail biomarkers findings. Preliminary data will also be presented at the Heat Related Illness State of the Science Meeting in Y3Q1.

Pilot Projects Program

Task 1

Advertisement and assistance for pilot project applications

Activity Indicator: Create and advertise Pilot Project Request for Application

A request for application (RFA) document was generated to identify prospective **new, early stage investigators** exploring a more narrowly defined area of research within our SE region and the Caribbean.

The Year 3 RFA was released in July and the letter of intent and proposal submission dates were extended. Five proposals were received. The RFA priority distribution list included the following –

- U.S. Department of Agriculture’s (USDA) National Institute of Food and Agriculture (NIFA) Awardees
 - North Carolina A&T
 - South Carolina State University
 - Alabama A&M University
 - Alcorn State University
 - Southern University
 - Tuskegee University
 - Fort Valley State University
 - Florida A&M University
- Hampton University, Center for Caribbean Health Research
- Caribbean Agricultural Research & Development Institute
- Caribbean Farmers Network (CaFAN)
- Caribbean Fisheries Training and Development Institute
- Technical Centre for Agricultural and Rural Cooperation (CTA)
- University of Puerto Rico, Río Piedras (Nutrition and Environmental Science)

Applications that prepare plans for new high impact activities that are not feasible with existing resources were invited in the priority areas of **worker safety in forestry, occupational respiratory health**, and the health status and protective behaviors of **Caribbean migrant and seasonal farmworkers and fisherfolk**

Product Indicator: Pilot project mentorship protocol

In Year 3, a stronger emphasis has been placed on seeking pilot proposals from new and early stage investigators. The Pilot/Feasibility Program aims to promote growth of researchers in agricultural health and safety by bolstering their competitiveness. Awarding innovative research approaches to new and early stage investigators is designed to encourage independent research careers - enabling awardees to successfully compete for research funding. An awardees mentorship timeline and milestone chart will be clearly represented within the grant application package. Applicants will submit a mentorship plan and letter of support within their grant package.

Pilot awardees will identify a mentor – a recognized/accomplished investigator in agricultural science, public health, environmental health sciences, nursing, and/or biomedical research – who will assist with career development and foster training and mentoring of emerging scientific

approaches to help new and early stage investigators disseminate and implement evidence-based interventions into communities and communicate research advances to the public.

**Note that Dr. Glenn Morris' role will be to provide funding oversight and review the timeline and milestones chart quarterly for progress. Farah Arosemena manages the process from the development/ release of the RFA through peer review.*

Task 2

Selection of Pilot Projects

Activity Indicator: Select rotating internal and external reviewers to score projects

A deadline extension was implemented to September 14, 2018 for proposal submissions. Dr. Glenn Morris reviewed proposals and made recommendations for peer reviewers. Peer Reviewers include:

1. Joseph Grzywacz (FSU)
2. Valerie Mac (Emory)
3. Divya Patel (UF, Medicine)
4. Janice Krieger (UF, STEM Translational Communication Center)
5. Ann Zaia (UF, Occupational Medicine)
6. Christopher Vulpe (UF, Veterinary Medicine)
7. Diana Gomez Manjarres (UF, Medicine)

Proposal packages and scoresheets were emailed to peer reviewers September/October 2018. The due date for all scoresheets was extended to October 12, 2018. If there is a conflict of interest an alternate peer reviewer and/or PPRC member will be selected.

Task 3

Monitoring of projects, and converting pilot projects to federally funded grants.

Activity Indicator: PPRC monitoring of pilot projects

Assessment of progress, recommendations, publications and presentations, drafts of extramural proposals.

- Quarterly
- 12 & 24 months after project completion

Pilot project monitoring meetings will take place in Y3Q1.

Task 4

“Development of metrics for evaluating the Pilot Project Program”

Activity Indicator: Evaluate pilot projects based on number of presentations/ publications, further funding

This activity will take place in Y3.

Product Indicator: Metrics for evaluating the impact of pilot program research, including ROI score

The following metrics will be used to evaluate pilot projects:

Project Logic Model Key Components to Measure Impact

- Outputs
- Outcomes – Achievement of outcome indicators

Research data impact

- Publications
- Citation of literature

Sustainability

- No. of grant applications submitted
- Impact scores of grant proposals
- No. of funded proposals
- Award types (foundation, state, federal)

Community Engagement (if applicable)

- Partner network strength
- Contribution to Outreach Core

Outreach Core

Project Description

The Outreach Core is comprehensive in nature, providing knowledge transfer support for the proposed research projects, integration with all proposed educational and extension activities, and effective and culturally competent communication and information dissemination to stakeholders across the six state region. Outreach Core activities align with the National Occupational Research Agenda (NORA AgFF) plan. Our outreach plan follows NORA AgFF's Strategic Goal 3 – Outreach, Communications and Partnerships, which indicates the intention to “move proven health and safety strategies into agricultural, forestry and fishing workplaces through the development of partnerships and collaborative efforts” (CDC, 2013). As in the NORA AgFF plan, our outreach consists of disseminating relevant risk reduction interventions and research findings and promoting adoption of best practices in the agricultural and fishery workplaces.

Specific Aim 1

“Develop a robust, comprehensive plan to disseminate research to practice findings and promote adoption of health and safety strategies in agricultural workplaces among the center's target populations, including underrepresented, vulnerable and culturally diverse subpopulations.”

Communication with Internal and External Stakeholders

Activities Indicator: Heat Related Illness State of the Science Meeting

The Outreach Core has collaborated with the Admin Core to build a slate of esteemed presenters on the topic of heat related illness, showcasing research at the intersections of heat related illness and climate change as they relate to the health and safety of outdoor workers and farmworkers, as well as athletes and military personnel. This crosscutting, one day meeting will bring together

researchers from various fields to present current findings and pave the way for developing future research collaborations on these topics. The SCCAHS Heat Related Illness State of the Science Meeting will take place in Y3Q1, and will include a one-day meeting as well as a Heat Related Illness poster session.

The following speakers have been confirmed for the meeting:

- **Thomas Bernard:** Professor, Environmental and Occupational Health, Sunshine Education and Research Center
- **Candi Ashley:** Professor, Exercise Science, University of South Florida
- **Rebecca Lopez:** Program Director, Athletic Training Professional Program, University of South Florida
- **Joe Grzywacz:** Chair, College of Human Sciences, Florida State University
- **Linda McCauley:** Dean, Nell Hodgson Woodruff School of Nursing, Emory University
- **Eric Coris:** Director, Primary Care Sports Medicine, University of South Florida
- **Vasubandhu Misra:** Professor, Earth, Ocean and Atmospheric Sciences, Florida State University
- **Mike Sawka:** Professor, Biological Sciences, Georgia Tech

Activities Indicator: Meetings with Community Stakeholder Advisory Board (CSAB) Members

Grant Proposal Text

“The CSAB will meet formally as a group with project staff twice a year. In addition, public education and outreach team members will personally meet with each of the board members during the summer months.”

Description of Progress

Following the State of the Science meeting, Dr. Tom Bernard from the Sunshine Education and Research Center and Outreach Core Director Dr. Tracy Irani will host a webinar for CSAB members describing the research and meeting outcomes in Y3Q1.

Communication with the CSAB about the board structure will continue in Y3Q1. Interview data from Y2Q3 will be analyzed, and based on responses, we will create a quantitative instrument to get further input on how the board would like to organize themselves. The project will be completed in preparation for the CSAB meeting in March 2019.

Specific Aim 2

“Translate r2p best practices and approaches to the workplace through prevention and promotion activities targeted to farmworkers, farm employers and supervisors and farm family members.”

Prevention and Promotion Activities

Activity Indicator: CBSM with Stakeholders

Grant Proposal Text

We will work closely with the CSAB to determine what practice changes and risk reduction and mitigation strategies are relevant for farmworkers, operators and crew leaders and then develop appropriate tools and trainings to enhance adoption. The use of social marketing will focus our

efforts on developing best practices and materials for dissemination as well as the means of promotion for these activities.

Description of Progress

To follow up with our data collection in Y2Q3, we transcribed and analyzed recorded interviews and focus group interviews. The Farmworker Association of Florida provided Spanish transcriptions of research data. Initial analysis found from worker interviews are that workers value supervisors that “look out for them”, and also describe the difficulty of working supervisors that do not value safety. We also interviewed agricultural laborers that work year round and found they face different conditions and risks, such as working alone and driving vehicles in the fields in the hot season when there is no harvesting. Workers generally know the importance of hydration but have some misconceptions about the use of sports and energy drinks.

Analysis from grower interviews found that growers and insurance companies are increasingly concerned about the costs of HRI among their workforce, and that some blame workers for heat related illnesses because of their use of energy drinks.

Product Indicator: Updated r2p materials Roka-Monaghan Crew Leader curriculum to include heat stress training

Grant Proposal Text

In years one and two, we plan to leverage the work of PIs Roka and Monaghan, who have developed existing programs to conduct training and professional development opportunities focused on specialty crop worker health issues, such as eye injuries, heat stress and ladder safety. We will work with Roka and Monaghan to refine materials for, promote and expand these trainings to a broader geographic area, and with more frequency.

Description of Progress

Two EDIS documents are being drafted on this topic, entitled “Preventing HRI in Agriculture” and “Using HRI Training with Supervisors”.

Activity Indicator: Roka-Monaghan Crew Leader Training

Grant Proposal Text

“In years one and two, we plan to leverage the work of PIs Roka and Monaghan, who have developed existing programs to conduct training and professional development opportunities focused on specialty crop worker health issues, such as eye injuries, heat stress and ladder safety. We will work with Roka and Monaghan to refine materials for, promote and expand these trainings to a broader geographic area, and with more frequency. We plan to conduct four to six trainings a year in the first two years of the project. We will utilize the findings from the CBSM research that will be conducted by PI Monaghan in years one and two with CSAB members to determine the most effective adoption practices and training modalities and will assist in adapting the existing trainings and testing of these in years three to five.”

Description of Progress

In August, Dr. Antonio Tovar provided a heat-related illness training for farm labor supervisors who are employees of a private vegetable producer. There were 20 supervisors present. Additionally,

there are two farm labor supervisor trainings scheduled for Y3Q1 on October 23-24 in Wimauma, FL and on November 27-28 in Immokalee, FL.

Activity Indicator: Extension In-Service Trainings (Y1-Y5)

Grant Proposal Text

“We will develop promotional tools and Extension In-Service Trainings (ISTs) to promote effective worker protection strategies and training of county Extension agents and Sea Grant Extension agents in Florida and Georgia to deliver trainings to crew leaders, workers, independent contractors and supervisors in support of the findings from all of the research projects. Each year, we will hold four one-day training workshops webinars, and multiple train-the-trainer activities throughout the region.”

Description of Progress

Using the content from three seminars presented in 2017 in the Department of Agricultural Education and Communication, Tovar (HRI Research) Roka (Farm Labor Supervisor Training Program) and Flocks (Immigration Policy in Florida Agriculture), we have created draft presentations in Powerpoint.

Activity Indicator: Farm Risk-Management Web-based In-Service Training

Grant Proposal Text

“We will also develop tools, disseminated by county Extension faculty, to promote farm family awareness of property and liability risk management activities involving farm work... A series of web-based in-service training sessions (1.5 hours each) will be held quarterly to increase extension agents’ knowledge and access to property and liability risk management resources. Each web-based session will be recorded and made available for future viewings.”

Description of Progress

Dr. Martie Gillen recorded four webinars for an education series about farm risk management. She presented a live webinar to introduce the series on 9/18/18. The webinars are available on the SCCAHS website: <http://www.sccaahs.org/index.php/ag-health-safety-topics/assessing-agricultural-liability/>

Corresponding EDIS documents are in draft and will be released in Y3Q1. Extension agents who provided risk management webinar topics in the SCCAHS 2017 needs assessment will be contacted to disseminate the webinars through their networks.

Activity Indicator: Monthly Seminars/Webinars in Agricultural Safety and Health

Grant Proposal Text

“Monthly SCCAHS seminars/webinars in agricultural safety and health/occupational health. The seminar series will draw on SCCAHS investigators as well as external speakers. At least one of the sessions will be devoted to short project presentations by investigators in the pilot/feasibility grant program. All seminars will be webcast and archived on the SCCAHS website, to facilitate inclusion of investigators at collaborating institutions. Our group at UF routinely webcasts all seminars, and the IT group from the Administration Program will work with each collaborating institution to assure that necessary facilities are available for webinar participation.”

Description of Progress

The SCCAHS webinars take place once a month for most months each year, totaling approximately 10 during a calendar year. The webinar series began in September 2018, and planning took place several months leading up. A Qualtrics survey for webinar speaker applicants was created, as well as a survey for reviewers to view the applications. To date, nobody has filled out the survey through unsolicited means. The SCCAHS webinar series will initially host speakers who are primary investigators for research projects on the grant.

The first webinar took place on September 18, with speaker Dr. Martie Gillen on the topic of assessing agricultural liability. The next webinar is on October 24, with speaker Dr. Andy Kane on the topic of occupational health and safety surveillance of gulf seafood workers. The November webinar is still being planned, and Phillip is in discussion with Jose Perez from the Wonderful Company to give a webinar prior to his arrival for the Fall 2018 seminar. There will not be a webinar in December 2018. Joseph Grzywacz will speak in the January 2019 webinar. All subsequent webinars for 2019 are being planned.

Most SCCAHS webinars will be IST's. Dr. Gillen's webinar was not an IST because the webinar was an overview of training material that can be IST's on their own. Dr. Andy Kane's webinar is an IST.

Specific Aim 3

"Develop, test and implement culturally competent communications and education materials utilizing a wide range of traditional and social media on agricultural and seafood workers' health and safety issues."

Communications Activities

Activity Indicator: Message Testing for Stakeholder Groups

Grant Proposal Text

"Pursuant to the content analysis and social media analysis and in conjunction with the other teams on this proposal, we will develop messages for farm families, laborers, supervisors and company owners (all the stakeholders) to communicate important points about workplace safety. These messages will be developed with different frames to ascertain which frame is most effective."

Description of Progress

No updates for Y2Q4.

Activity Indicator: Website Update

Grant Proposal Text

"We will provide... effective utilization of cutting edge communication techniques, including an interactive public outreach web site containing information databases, downloadable print fact sheets for use by county extension faculty and Sea Grant agents, and brochures, video interviews, blogs and social media. (The public outreach web site will include a link to the project web page maintained by the Planning and Evaluation Core)."

Description of Progress

During the past quarter, the SCCAHS website received 2,242 page views with 1,751 of those views being from unique visitors. This is almost double the amount of page views from Y2Q3. Eighty-seven percent of the website visitors are new visitors. Visitors spend an average of two minutes on the website. Among frequently visited webpages are the homepage; SCCAHS faculty receives research award (news post); State of the Science meeting page; Pilot project call for proposals; and research projects. Nine new posts were added to inform audiences about resources, upcoming events, achievements from faculty. Additionally, an affiliate faculty form was also added to facilitate coordinated engagement of faculty at various universities.

Activity Indicator: Social Media Update

Grant Proposal Text

“We will provide... effective utilization of cutting edge communication techniques, including an interactive public outreach web site containing information databases, downloadable print fact sheets for use by county extension faculty and Sea Grant agents, and brochures, video interviews, blogs and social media. (The public outreach web site will include a link to the project web page maintained by the Planning and Evaluation Core).”

Description of Progress

In Y2Q4, the communications team shared information about heat illness, specifically how heat illness impacts kidney disease. This campaign allowed us to promote Linda McCauley’s research and inform audiences about a relevant topic. This campaign reached over 300 people on Facebook and Twitter. The end of September was devoted to National Farm Safety Week. This national campaign was tailored to better represent the southeast region. We also used social media to promote SCCAHS events and the new webinar series. Eight new Facebook followers were gained as a result of these campaigns.

Activity Indicator- Social Media Analysis

Grant Proposal Text

We will pay attention to social networks such as Facebook and Twitter to listen to conversations related to agricultural safety and health. Our sampling frame will be Facebook posts and tweets identified through a Twitter search using the keywords “agricultural safety”, “farm safety”, “farm risk” and others identified through our preliminary participatory research. We will include tweets and posts written in English and Spanish. If tweets and posts have links to articles, photos or videos, this material will also be archived, coded and analyzed. We will identify influential voices in these conversations. Examples of these include, but are not limited to, media outlets, community leaders and religious leaders. Listening to these voices will lead to a better understanding of perceptions and an increased capacity to develop messages that effectively communicate about agricultural safety and health in authentic ways.

Description of Progress

We used Sysomos, a social media monitoring program, to identify and describe the most authoritative Twitter users in regard to agricultural health and safety topics for the areas covered by the Southeastern Coastal Center for Agricultural Health and Safety. The first objective was to describe the top five most authoritative influencers in Twitter agricultural health and safety issues conversations in Alabama, Georgia, Florida, Mississippi, North Carolina, and South Carolina. The second objective was to describe the credentials and areas of specialty of the top five most authoritative influencers in agricultural health and safety issues conversation in Alabama, Georgia, Florida, Mississippi, North Carolina, and South Carolina.

Charts listing the results of this analysis are listed in the appendix of this report.

Key findings for this analysis were that of the top five most authoritative influencers from each state contributing to the agricultural health and safety conversation:

- All had more than 55,000 followers
- 16 out of 30 were news sources
- 2 of 30 were considered social media influencers (beyond operational definition for this study)
- 1 out of 30 was a community marketing/promotion team
- 2 out of 30 were personal accounts
- 3 out of 30 were political officials (including governor of Mississippi)
- 1 out of 30 was a university
- None had direct connections to agriculture, food, or natural resources

Other Activities and Products

Conferences and meetings

Presented

Monaghan, P., (July 10-13, 2018). The Role of Labor Supervisors in Florida Citrus and Vegetable Production and How that Shapes Safety Behaviors. *University of Nebraska Medical Center Agricultural Health and Safety Course*. Omaha, NE.

Presented

Tovar J.A., (September 10-12). Processes of Development and Implementation of Training Conducted by Community Health Workers. *Midwest Migrant Stream Forum*. New Orleans, NA.

Products

Manuscript drafted

Morera, M., Tovar, J.A., Roka, F., Monaghan, P., (2018). Field Supervisors and Crew Leaders in Citrus and Vegetables: A Key Professional Sector in Florida Ag. *Journal of Agromedicine*.

This article will present findings on how HRI is affected by hydration practices, climate and the nature of the tasks being performed by workers. The potential infringement of field sanitation rules on HRI-mediating behaviors will also be discussed, as will the successes

that have been achieved in sports and industrial worker settings where HRI trainings have been employed. These findings are key for outreach translation.

Article submitted

Lundy, L.K., Rogers, T., Lindsey, A.B., Hurdle, C., Ryan, H., Telg, R.W., Irani, T., (2018). Analyzing Media Coverage of Agricultural Health and Safety Issues. *Journal of Applied Communications*.

Farming, by the very nature of the occupation, is riddled with uncertainty. The risks associated with the agriculture industry are just as diverse as the industry itself. For all risks, one challenge is the development and dissemination of safety communication materials tailored for diverse audiences. Valkenburg, Semetko, and Vreese (1999) examined common frames used in news media. Their analysis pointed to four commonly used news frames: conflict, human interest, responsibility and economic consequences. The purpose of this study was to describe the agricultural and health safety issues discussed in [State] news media during the year 2016, discussing the prominence of the frames outlined by Valkenburg et al. (1999). In this study, the most prominent frame was the human interest frame, followed by responsibility, economic consequences, and conflict. Frames carry a great deal of weight in shaping individuals' opinions, attitudes, and actions towards agriculturally based messages; therefore it is essential for agricultural communicators to understand the framing of agricultural health and safety issues. Acknowledging the frames used in the reporting of agricultural issues allows agricultural communicators to enter into informed interactions with media outlets and better prepare the resources they provide to them. These framing analyses also provide agricultural communicators with a solid foundation on which to best position and frame their messaging on behalf of the industry. Further research is recommended to examine frames from an audience perspective and to investigate the impact of human interest frames in the presentation of agricultural news articles.

Poster display

Mitchell, R.C. (August 15-16, 2018). Southeastern Coastal Center for Agricultural Health and Safety. *Citrus Expo*. Ft. Meyers, FL. Available at:

<https://public.3.basecamp.com/p/5M5WdbGzHTWYoA3TTPw5zzsb>

Community/Stakeholder Outreach

- Florida Department of Agriculture and Consumer Services Worker Protection Standard stakeholder meeting. Alachua, FL, July 16.
- Florida Citrus Expo, Ft. Myers August 15-16.
- Florida Fruit and Vegetable Association Labor Relations Forum, Orlando, September 12-14.
- Midwest Stream Forum for Agricultural Worker Health, New Orleans, September 10-12.

Planning and Evaluation Core

Administration

Program Description

“The Administration Program will provide support for Planning and Evaluation Core and SCCAHS activities, including communication, Advisory Board and Committee support, administrative infrastructure, and biostatistics and IT/data management.”

Task 1

“Coordinate/integrate Center components and activities.”

Coordinate Center Activities

Description of Progress

The planning/administrative core continues to work directly with the outreach cores media specialist to provide infrastructure, access and support for SCCAHS. This is achieved by hosting the SCCAHS website (www.sccaahs.org), organizing monthly PI meetings, and facilitating activities on the Center’s project management website.

Quarterly PI Meetings

Grant Text

Quarterly one-on-one meetings with the Center Director/Associate Center Director and each PI and Core Director. Meetings will focus on reviewing results to date, and assuring that work is moving forward appropriately. Ways in which the Administration Program and other Center staff/investigators can facilitate progress will be identified. If there appear to be major challenges with a project, meeting frequency will be increased to monthly. Meetings will be in person, or by Skype.

Description of Progress

Director Glenn Morris met with the following project leads in September 2018 of Q4 through face-to-face meeting or zoom video conferencing:

Administration Core

Babette Brumback (Biostatistics)
Glenn Israel (Evaluation Program)
Joan Flocks (Emerging Issues Program, EIP)

Outreach Core

Tracy Irani

Research Core

Andy Kane (UF)
Gregory Glass
(UF)
Joe Grzywacz
(FSU)

Linda McCauley (Emory)

Pilot Program

Farah Arosemena (UF)

Description of meetings (agendas, action items, issues resolved etc.)

Overarching Agenda

1. Milestones met to-date
2. Sustaining synergy across Cores – Admin (Biostatistics, EIP, Evaluation), Outreach, Research and (R01s, R21s, Pilot/Feasibility Program)
3. Project Budget Summary
4. Projected expenditures
5. Next steps – revised logic model

Action Items

A strong emphasis has been placed on the need for Research Core and Year 1 Pilot PIs to prepare preliminary results and have manuscripts in progress to be submitted in Year 3, Quarters 1 and 2. A common thread remains across all Core Program Directors and Research PIs to increase engagement and have stronger oversight of fiscal management in accordance with stated specific aims and projected reached milestones along project timelines as indicted throughout initial grant approach/study design narratives. Additionally, there is a stronger push to revise logic models and Farah Arosemena will work closely with the Evaluation Program to include their team during upcoming PI-to-PI quarterly meetings.

Task 2

“Organize and staff Advisory Boards and key SCCAHS committees”

Activity Indicator: External Scientific Advisory Board

In Year 3 the Center will seek to add three members to the ESAC for a total of 7 members.

Task 4

Provide Biostatistical Support for Research Projects

Grant Proposal Text

“Strong biostatistical support is critical to research, and is an essential part of the IRB and IACUC approval process. In our experience, integration of biostatistical support into the core infrastructure of Center grants is a highly effective (and cost-effective) way to assure that studies are appropriately designed, with a sufficient sample size, and that plans for data analysis are in place from the start of the project. We have also found that by having a single statistical teamwork across all projects within a Center, there is often recognition of opportunities for collaborative studies which might not otherwise have been recognized. Oversight of the biostatistical group will be provided by Dr. Babette Brumback, Professor and Associate Chair of Biostatistics in the UF College of Public Health and Health Professions and the UF College of Medicine.”

Description of Progress

SCCAHS has incorporated a dedicated biostatistical support group. Research projects require accurate and efficient study designs, a sound data management protocol, a detailed data analysis plan, careful statistical analysis, and clear interpretation of results. Research Core and Pilot

projects benefit from inclusion of a dedicated biostatistician, Dr. Babette Brumback, as a collaborator on their research teams. Close collaborations with biostatisticians with project support allow in-depth plans, design, and analysis directly addressing research questions of interest using available data. Dr. Brumback and Yian Guo, a second year MS student in Biostatistics, are working closely with all Research Core PIs and Pilot/Feasibility Program PIs – 11 total. Their most active collaborations are with Dr. Grzywacz (Florida State University) and Dr. McCauley (Emory University) and Dr. Grattan (University of Maryland).

Evaluation Program

Program Description

“A formal monitoring and evaluation (M&E) strategy is a critical, interwoven component in SCCAHS. Evaluation tools provide meaningful data to guide the work of the Center as well as accountability information to the sponsoring agency. The Evaluation Program places special emphasis in managing the evaluation process and meeting evaluation standards for utility, feasibility, propriety, and accuracy.”

Task 1

“Engage key stakeholders to maintain a responsive and focused evaluation program.”

Activity Indicator: Communication with SCCAHS Teams

Evaluation Program personnel attend monthly Internal Operation Committee meetings and bi-weekly Outreach & Evaluation meetings.

Task 2

“Collect relevant M&E data from the Center as a whole, its Cores, and individual research projects.”

Activity Indicator: Quarterly M&E data collection

The evaluation team collaborated with the administrative team to collect M&E data from research projects and cores in Q4. The data collected were used to create both this report and the CDC annual report. M&E indicator forms were distributed to project leaders approximately one month before Q4 ended.

Task 3

“Analyze and interpret data to establish the quality, effectiveness, and impact of the center as a whole, its cores, and the individual research projects.”

Activity Indicator: Return on Investment review

The evaluation team continued work on developing a return on investment (ROI) assessment plan. We conducted a literature review on ROI in agricultural health and safety and found limited results. We reviewed an Australian publication that evaluated the economic impacts of investment in farming and fishing health programs, which provided an example of how an ROI evaluation could be conducted. We followed up on that review by inviting economist Fernando Wilson to join us on a conference call to explain his involvement with the Central States Center for Agricultural Safety and Health (CS-CASH). Dr. Wilson conducts an ROI project by examining data collected in an annual survey mailed to farmers and farmworkers in that Center’s region, inquiring about healthcare visits,

healthcare expenditures and days missed from farm work due to health problems. Responses are then compared to secondary data or data in the literature to calculate an economic impact analysis.

Our next steps are to develop a plan of how to perform ROI analysis at our center, considering the scope and maturity of our projects as well as defining the beneficiaries in our region. We foresee this could evolve into its own separate project, and would need to involve an economist like Dr. Wilson.

Task 4

"Report and share evaluation findings and recommendations with key stakeholders."

Product: Quarterly report

Data from quarterly indicator forms were compiled into quarterly reports which are shared with project and core leaders. The quarterly report was shared among SCCAHS team members, addressing communication challenges outlined in the Process Evaluation Report, to facilitate keeping staff from various Center projects updated about the progress made by colleagues on different teams. The Quarter 3 report was shared on Basecamp for SCCAHS team members to review, and also published to the SCCAHS website for public review: <http://www.sccaahs.org/wp-content/uploads/2018/08/Y2Q3-Report.pdf>

Task 5

"Maintain an open line of communication and engagement with the Evaluation Programs of other Ag Centers across the country."

Activity Indicator: Moving forward with common metrics

The evaluation team is beginning work with a UF PhD student to continue the conversation we began at ISASH in June 2018 by presenting a poster about common evaluation metrics across NIOSH centers. On a conference call with evaluation and program coordinators at NIOSH, we received feedback about this new project, and will move to invite and involve other NIOSH centers to be involved from the beginning. We will present the common metrics project on the next NIOSH ECO call in October, 2018.

The Evaluation Program participated in the NIOSH ECO call on August 8, 2018. Topics for this call included a review of the NIOSH Ag Center YouTube channel, and the Cultivating the seeds of Safety social media campaign. The Evaluation Program is scheduled to present on the next ECO call in Y3Q1 to lead a discussion about common evaluation frameworks across centers.

Other Activities and Products

Product Indicator: Article draft

The Evaluation Program is in the process of writing an article to submit to the American Journal of Evaluation or Journal of Evaluation and Program Planning. The purpose of the article is to describe the creation of a developmental evaluation program for a multi-disciplinary federal research center, specifically focused on the role that evaluation teams can play in defining project goals, bridging

communication gap and creating dynamic monitoring and evaluation structures to react to changing situations within the center. The goal for submission is Fall 2018.

Conferences attended

The Evaluator's Institute

Claremont Graduate University. July 16-17, 2018. Rockville, MD.

Our evaluation coordinator, Claire Mitchell, attended the course *Using Program Theory*, taught by Dr. Stewart Donaldson. The course detailed how program theory can be used in conjunction with stakeholder theory and social science theory to create change in program participants. The course provided a venue to discuss real work pitfalls in conducting evaluations, and how to best build relationships with stakeholders to create the most impact. It was valuable to interact with other professional evaluators to compare and contrast the nature of our evaluation program with other government, not for profit and NGO evaluation programs.

Digital Summit

August 8-9, 2018, Tampa, FL.

Digital Summit focuses on sharing information in practical solutions to improve digital strategies. It includes topics on enhanced content, email effectiveness, mobile trends and strategies, user experience design, and social media strategies and trends.

Paula Hamsho-Diaz, our social media evaluator, attended the following talks:

- Marketing analytics: get the insights you need faster
- Tools, tactics, and algorithms for game changing content
- Marketing through emotion and sentiment
- Using customer intent data to elevate the b2b customer journey
- Predictive analytics: making your data work harder for your SEO and other content marketing
- Zero-dollar marketing: driving global impact through growth hacking
- The Instagram vs. Snapchat battle: is Snapchat dead yet?

Emerging Issues Program

Program Description

The Emerging Issues Program (EIP) works within the Center to maintain connections with all projects, cores, advisory boards and other stakeholders to identify, prioritize, and address issues that appear during the life of the Center. The tasks of the EIP include: identifying new AgFF worker safety and health issues in the region; prioritizing these issues; addressing prioritized emerging issues through small investments; and referring other emerging issues to appropriate resources.

Task 1

Identify new AgFF worker safety and health issues in the region.

Activity Indicator: Monitor Potential Emerging Issues

In Y2Q4, EIP participated in regularly scheduled and as needed internal meetings with SCCAHS IOC, the Administrative Core, the Outreach Core, and personnel from Research Projects 3 and 4. The EIP regularly reminds project PIs at the IOC meeting to share any issues they encounter during the course of their research. At these internal meetings during Y2Q4, the following ongoing and new issues were discussed:

- Support for FWAFF/Emory Reproductive Health Training;
- Support for domestic violence and reproductive health trainings offered by the Rural Women's Health Project (RWHP);
- Support for research assistants to conduct culturally competent in-field data collection for SCCAHS Research Projects.

The funding and outcomes of these activities are discussed below.

Additionally, during Y2Q4, EIP participated in meetings with external organizations and individuals such as: the NIOSH Ag Centers directors, Florida Department of Agriculture and Consumer Services (FDACS), the Farmworker Association of Florida, the Rural Women's Health Project, IFAS extension, the University of Florida Health Street, and Vanessa Casanova of the Southwest Center for Agricultural Health, Injury Prevention and Education. Additional emerging issues were identified:

- Support for efforts by FDACS and IFAS Extension agents to provide training within the Florida agricultural industry on revised Worker Protection Standard respirator requirements.

Task 2

Prioritize emerging issues.

Activity Indicator: Prioritize Emerging Issues

Grant Proposal Text

"The EIP leader and assistant will meet regularly and document any emerging issues of concern monthly. They will discuss these issues during regularly scheduled meetings with the Center Director, IAB, and Community/Stakeholder Advisory Board. If there are emergency issues or no upcoming regular meetings, the EIP will request meetings with key personnel to discuss prioritization. The purpose of discussing documented issues will be to determine if any issues: 1) can be addressed through ongoing research projects or cores; 2) can be referred to known outside resources; 3) should be addressed immediately through the provision of small amounts of funding from the EIP program."

Description of Progress

Internal and external meetings have led to the following projects being organized and/or funded in collaboration with EIP:

- Updating FWAF/Emory Reproductive Health Training:** The FWAF and Emory developed this training approximately five years ago as part of a federally funded research project. The FWAF subsequently trained more than 400 farmworkers with funding from the Eileen Fisher Foundation. The training focuses on risks associated with reproductive health caused by occupational hazards such as pesticides and heat stress. Because of ongoing research the FWAF wanted to update the training, but did not have the time or resources. A team of EIP and FWAF staff successfully completed updates to the training in mid-July. On August 22, the 60 minute revised training was presented to 4 FWAF staff members and 11 community members in Immokalee, Florida. More trainings are planned.
- Extending training offered by the Rural Women’s Health Project (RWHP):** Within the work of Project S.A.L.U.D., the RWHP is offering programming to Latinos in Levy, Alachua and Marion counties. Funding from EIP will underwrite meetings on the topic of domestic violence for farmworker women in Alachua, Marion and Levy counties to build participants’ capacity to offer peer assistance to a person experiencing domestic violence. EIP funding will also be used to train community health workers in Marion County on reproductive health issues using the RWHP produced, *Pongamanos de Acuerdo* magazine and their interactive birth control education materials. On August 31, the RWHP, *Madres Sin Fronteras*, and Peaceful Paths held a domestic violence presentation with 12 women. On September 1, RWHP, the Ocala Farm Ministry, and Peaceful Path held a domestic violence presentation with 12 women. On September 13, RWHP trained 6 health workers on reproductive health. More trainings are planned.
- Support for research assistants to assist with culturally competent in-field data collection for SCCAHS Research Projects.** A history of conducting community-based research projects with vulnerable populations such as farmworkers has revealed a need for students and research assistants to be trained in culturally sensitive in-field data collection methods. As a start to what could hopefully become a larger SCCAHS program, the EIP provided support through the FWAF to train research assistants to conduct in-field data collection in conjunction with SCCAHS research projects. EIP staff also assisted with data collection and research assistant training in Immokalee, Florida, from August 6-10.

Task 3

Award EIP funds

Grant Proposal Text

“A special fund (total of \$8,000) is included in the EIP budget to respond to highly prioritized emergency health and safety issues. The EIP program will develop a protocol for awarding these funds on a case by cases basis to assist stakeholders in addressing these issues. Funds will be expended after careful consultation with program administration and key advisory groups, and approval by the IOC.”

Description of Progress

The following EIP funds have been distributed during Y2Q4 after approval from the IOC:

- \$1206 to the FWAF for Reproductive Health Training Update.
- \$2750 to the FWAF for Training Support for Fieldwork Research.
- \$1190 to the RWHP for Domestic Violence Trainings.
- \$1800 to the RWHP for Reproductive Health Trainings.

Task 4

“Refer other emerging issues to appropriate resources.”

Description of Progress

This is an ongoing task that involves making connections between issues and people encountered at every event. In addition to networking, the goal of this task is to consistently bring SCCAHS into the focus at relevant arenas. During this quarter, the following connections were completed:

- Recommendation and invitation of Jose Perez, Senior Manager, Environmental Health & Safety, The Wonderful Company, as the Fall 2018 SCCAHS Seminar speaker.
- 9/6: Collaboration with experts such as Richard Pont (Environmental Protection Specialist at the EPA) and Ricardo Davalos (Worker Safety Specialist at FDACS) regarding current issues with respirator training, use, and awareness for farmworkers, agrochemical vendors, Extension personnel, and healthcare professionals.
- 9/7: Discussion of request from Vanessa Casanova at the Southwest Center for Agricultural Health, Injury Prevention and Education for researchers to participate in a multi Ag Center workgroup to trial run Alice Larson’s farmworker enumeration methodology.

Other Activities and Products

Meetings attended

“Providing Information to Stakeholders and Farmworker Organizations on The New Approved Changes to the Worker Protection Standard (WPS) Rule” FDACS Worker Protection Standard Stakeholders Meeting. Alachua Regional Service Center, July 16, 2018.

Presentations

“The Environmental and Social Injustice of Farmworker Pesticide Exposure,” (online guest lecture) for Vanessa Casanova’s Environmental Justice class at the University of Texas Health Science Center at Tyler, July 11, 2018.

“Pesticides and Health: What We Need to Know” (panel) *19th National Our Community, Our Health Town Hall*, University of Florida Health Street, Gainesville, FL, August 29, 2018. Located at: <https://mediasite.video.ufl.edu/Mediasite/Play/e7e8e15cc65c462b93bfb0c1d22da2371d>

Report

Reapplication Planning Committee Final Report to SCCAHS IOC. July 30, 2018. Located at: <https://3.basecamp.com/3665092/buckets/2688597/documents/1316523500>

Appendix

Preliminary Social Media Analysis Results

Objective 1:

Describe the top five most authoritative influencers in Twitter agricultural health and safety issues conversations in Alabama, Georgia, Florida, Mississippi, North Carolina, and South Carolina.

Alabama

Handle	User Name	Authority	Location	Type	Followers
@aldotcom	AL.com	10/10	Alabama	Media	292K
@waff48	WAFF 48	10/10	Huntsville, Alabama	News	134K
@abc3340	ABC 33/40 News	10/10	Birmingham, Alabama	News	218K
@ALcomBirmi ngham	AL.com Birmingham	10/10	Birmingham, Alabama	Media	141K
@WAAYTV	WAAY 31	10/10	Huntsville, Alabama	News	75.3K

Georgia

Handle	User Name	Authority	Location	Type	Followers
@PasteMagazi ne	Paste Magazine	10/10	Decatur, Georgia	Media	236K
@13wmaznew s	13WMAZ News	10/10	Macon, Georgia	News	67.2K
@KILLCLIFF	Kill Cliff	10/10	Atlanta, Georgia	Marketing	110K
@StacieinAtla nta	Stacie H Connerty	10/10	Atlanta, Georgia	Influencer	174K
@rbstill2	Russ Still	10/10	Atlanta, Georgia	Music	159K

Florida

Handle	User Name	Authority	Location	Type	Followers
@nxtivemelanism	Enfant fleur	10/10	Florida	Personal	147K
@FCN2go	First Coast News	10/10	Jacksonville, Florida	News	124K
@ChuckCallesto	Chuck Callesto	10/10	Florida, USA	Political Official	118K
@MiamiHerald	Miami Herald	10/10	Miami, Florida	News	408K
@BN9	Spectrum Bay News 9	10/10	Tampa Bay area	News	370K

Mississippi

Handle	User Name	Authority	Location	Type	Followers
@16WAPTNews	16 WAPT News	10/10	Jackson, Mississippi	News	95.9K
@PhilBryantMS	Phil Bryant	10/10	Mississippi	Political Official	85K
@WJTV	WJTV 12 News	10/10	Jackson, Mississippi	News	81.7K
@WLBT	WLBT 3 On Your Side	10/10	Jackson, Mississippi	News	134K
@MarshallRamsey	Marshall Ramsey	10/10	"Somewhere in Mississippi"	Cartoonist and TV host	56.8K

North Carolina

Handle	User Name	Authority	Location	Type	Followers
@WLOS_13	WLOS	10/10	Ashville, North Carolina	News	72.7K
@NCState	NC State University	10/10	Raleigh, North Carolina	University	115K

@DowntownRaleigh	Downtown Raleigh Alliance	10/10	Downtown Raleigh, North Carolina	Location marketing	72.7K
@CohhCarnage	Cohh Carnage	10/10	North Carolina, USA	Influencer	130K
@myfox8	Fox8 WGHP	10/10	Greensboro/ Winston-Salem, North Carolina	News	137K

South Carolina

Handle	User Name	Authority	Location	Type	Followers
@sammyrhodes	Sammy Rhodes	10/10	Cola, South Carolina	Personal	99.1K
@ABCNews4	ABC News 4	10/10	Charleston, South Carolina	News	93K
@SenatorTimScott	Tim Scott	10/10	South Carolina	Political Official	368K
@wis10	WIS News 10	10/10	Columbia, South Carolina	News	123K
@foxcarolinanews	Fox Carolina News	10/10	Greenville, South Carolina	News	78.1K

Objective 2:

Describe the credentials and areas of specialty of the top five most authoritative influencers in agricultural health and safety issues conversation in Alabama, Georgia, Florida, Mississippi, North Carolina, and South Carolina.

Alabama

Handle	AFNR Connection	Other area of specialty/credential
@aldotcom	No	Media
@waff48	No	Current events

@abc3340	No	Current events
@ALcomBirmingham	No	Media
@WAAYTV	No	Current events

Georgia

Handle	AFNR Connection	Other area of specialty/credential
@PasteMagazine	No	Music, film, culture
@13wmaznews	No	Current events
@KILLCLIFF	No	Performance drinks, navy seals
@StacieinAtlanta	No	Travel, lifestyle blog, food, fashion
@rbstill2	No	Current events

Florida

Handle	AFNR Connection	Other area of specialty/credential
@nxtivemelanism	No	Food, beauty, parenting
@FCN2go	No	Current events
@ChuckCallesto	No	Politics
@MiamiHerald	No	Current events
@BN9	No	Current events

Mississippi

Handle	AFNR Connection	Other area of specialty/credential
@16WAPTNews	No	News
@PhilBryantMS	No	Politics

@WJTV	No	Current events
@WLBT	No	Current events
@MarshallRamsey	No	Art, TV, writing

North Carolina

Handle	AFNR Connection	Other area of specialty/credential
@WLOS_13	No	Current events
@NCState	No	Education
@DowntownRaleigh	No	Community, current events
@CohhCarnage	No	YouTube, gaming
@myfox8	No	Current events

South Carolina

Handle	AFNR Connection	Other area of specialty/credential
@sammyrhodes	No	Ministry, writing
@ABCNews4	No	Current events
@SenatorTimScott	No	Politics, current events
@wis10	No	Current events
@foxcarolinanews	No	Current events