NECAFS
The Northeast Center to Advance Food Safety

Northeast Regional Food Safety Update
Summary of Actively Funded Projects
February 2021

CONNECTICUT

Name	Project	Funding Source
Abhinav Upadhyay	Application of ultra-fine bubble technology to reduce Listeria monocytogenes contamination of fresh produce	Center for Produce Safety
Abhinav Upadhyay	Enhancing the Safety of Eggs and Fresh Produce by Novel Ultra-fine Bubble Technology	Northeast Sustainable Agriculture Research and Education
Melissa A Petruska	Ultrahigh efficiency ethylene scrubber to increase shelf life of fresh produce	Small Business Innovation Research Program
Jason Christopher White	Nanoscale sulfur for plant nutrition, disease suppression and food safety	USDA Ag and Food Research Initiative
Dennis D`Amico	Application of Commercial Bacteriophages for the Control of Pathogens in Raw Milk and Raw Milk Cheese	USDA Ag and Food Research Initiative

D.C.

Name	Project	Funding Source
William Mitchell	Assisting Small- and Medium-Sized Farmers through Cross-State Collaboration	FSOP

DELAWARE

Name	Project	Funding Source
Jung-lim Lee	Establish a PHAGE and new omics capacity for the mitigation of AMR bacteria	1890 Capacity Building Grants Program
Kalmia Kniel	Analysis of the presence of Cyclospora in waters of the Mid-Atlantic States and evaluation of removal and inactivation by filtration	Center for Produce Safety
Lara Kirkham	Improved Pathogen Neutralization Through Nanobubbles	Small Business Innovation Research Program
Todd Hay	Ozone-Nanobubble-Enhanced Washing for Produce Longevity and Safety	Small Business Innovation Research Program
Haiqiang Chen	Development and evaluation of an appliance to be used at home and other places for fresh produce decontamination and cleaning	USDA Ag and Food Research Initiative

MASSACHUSETTS

Name	Project	Funding Source
Boce Zhang	Non-fouling food contact surfaces - prevention of biofilm and surface-mediated cross-contamination	Center for Produce Safety
Jill Fitzsimmons	Improving Access and Motivation for Small and Medium Processors in the Northeast to be in Compliance with FSMAs PC Rule	FSOP
Margaret Christie	Food Safety Solutions for Farm Owners and Employees	FSOP
Jiakai Lu	Enhancing The Next-Generation Washing Strategy For Fresh-Cut Produce By An Artificial Intelligence Assisted Hurdle Technology	USDA Ag and Food Research Initiative
Lili He	Investigate the impact of adjuvants on pesticide persistence and develop an effective strategy to reduce pesticide residues on fresh produce	USDA Ag and Food Research Initiative
Lynne A McLandsborough	Development and validation of oil based antimicrobial delivery systems for dry cleaning and sanitation of food processing equipment	USDA Ag and Food Research Initiative
Matthew D Moore	Concentration and detection of human noroviruses from food and environmental samples using bacteria	USDA Ag and Food Research Initiative

MARYLAND

Name	Project	Funding Source
Tracy Ward	Building the Capacity of Community-Based Produce Safety Education for Hard-to-Reach Farmers in the Mid-Atlantic	FSOP
Debabrata Biswas	Ecology, transmission and control of Salmonella and shigatoxin producing E. coli in integrated crop-livestock farm	Integrated Res., Educ., & Ext. Competitive Grants Program
Abani Pradhan	Incorporating molecular data into a quantitative microbial risk assessment framework for Salmonella in chicken	USDA Ag and Food Research Initiative
Debabrata Biswas	Control colonization of pathogenic Salmonella in poultry by autolytic intracellular Salmonella vaccine	USDA Ag and Food Research Initiative
Shirley Micallef	Metabolomic and proteomic characterization of tomato traits towards the development of food safety-improved tomato (FIT) cultivars	USDA Ag and Food Research Initiative
Y. Luo	Food safety innovations and preventive controls during fresh and fresh-cut produce washing, packing, and retail display	USDA Specialty Crop Block Grants

MAINE

Name	Project	Funding Source
Carol Kim	Enhancing the Safety and Quality of Fresh Produce and Low-Moisture Foods by Waterless Non-Thermal Technologies	USDA Ag and Food Research Initiative
Douglas Gardner	Developing Nanostructured Biobased Nanocellulose Polymer Films For Improved Food Packaging	USDA Ag and Food Research Initiative

NEW YORK

Name	Project	Funding Source
Martin Wiedmann	Factors affecting persistence of Listeria monocytogenes need to be identified for evaluation and prioritization of interventions.	Center for Produce Safety
Martin Wiedmann	Listeria develops reduced sanitizer sensitivity but not resistance at recommended sanitizer use levels	Center for Produce Safety
Martin Wiedmann (Co-PI)	Simulation analysis of in-field produce sampling for risk-based sampling plan development	Center for Produce Safety
Abigail Snyder	Food safety management and document development for PCHF Rule qualified exemption-eligible food facilities	FSOP
Cara Fraver	Produce Safety Spring Training: Engaging Beginning Farmers With Timely and Practical Guidance to Build a Community of Food Safety Practitioners	FSOP
Melinda Meddaugh	Sullivan County Food Safety Outreach Program	FSOP

NEW YORK

Name	Project	Funding Source
Martin Wiedmann	A systems approach to improve quality and shelf life of organic dairy products for domestic and export markets	Integrated Res., Educ., & Ext. Competitive Grants Program
Jim O'Connell	Farm Health and Safety Best Practice Training	NE Risk Management
Mingyu Qiao	A Scalable and Rechargeable Antimicrobial Coating for Food Equipment	Small Business Innovation Research Program
Abigail Snyder	Transforming sanitation strategies in dry food manufacturing environments	USDA Ag and Food Research Initiative
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Alireza Abbaspourrad	Investigating the Effect of High Pressure Processing (HPP) on Molecular Structure and Stabilization of Natural Hydrophilic Colorants	USDA Ag and Food Research Initiative

NEW YORK

Name	Project	Funding Source
Emma L. Farquharson	Genetic manipulation of bacteriophage tail fibers to expand host range recognition for use in food/water safety	USDA Ag and Food Research Initiative
Julie Goddard	Antimicrobial & nonfouling polymeric coating to control pathogen contamination in food production environments	USDA Ag and Food Research Initiative
Julie Goddard	Clean Label Active Packaging to Reduce Food Waste & Loss	USDA Ag and Food Research Initiative
Michelle Minh Duong	Engineering Of Bacteriophages For Isolation, Concentration, And Detection Of Salmonella In Agricultural Water	USDA Ag and Food Research Initiative
Miguel I. Gomez	Ensuring Quality and Safety in the U.S. Fresh Vegetable Supply Chain	USDA Ag and Food Research Initiative
Myfanwy Catrin Adams	Elucidating structure and localization of luteovirids as a means to characterize pathogen-vector interactions	USDA Ag and Food Research Initiative

NEW YORK

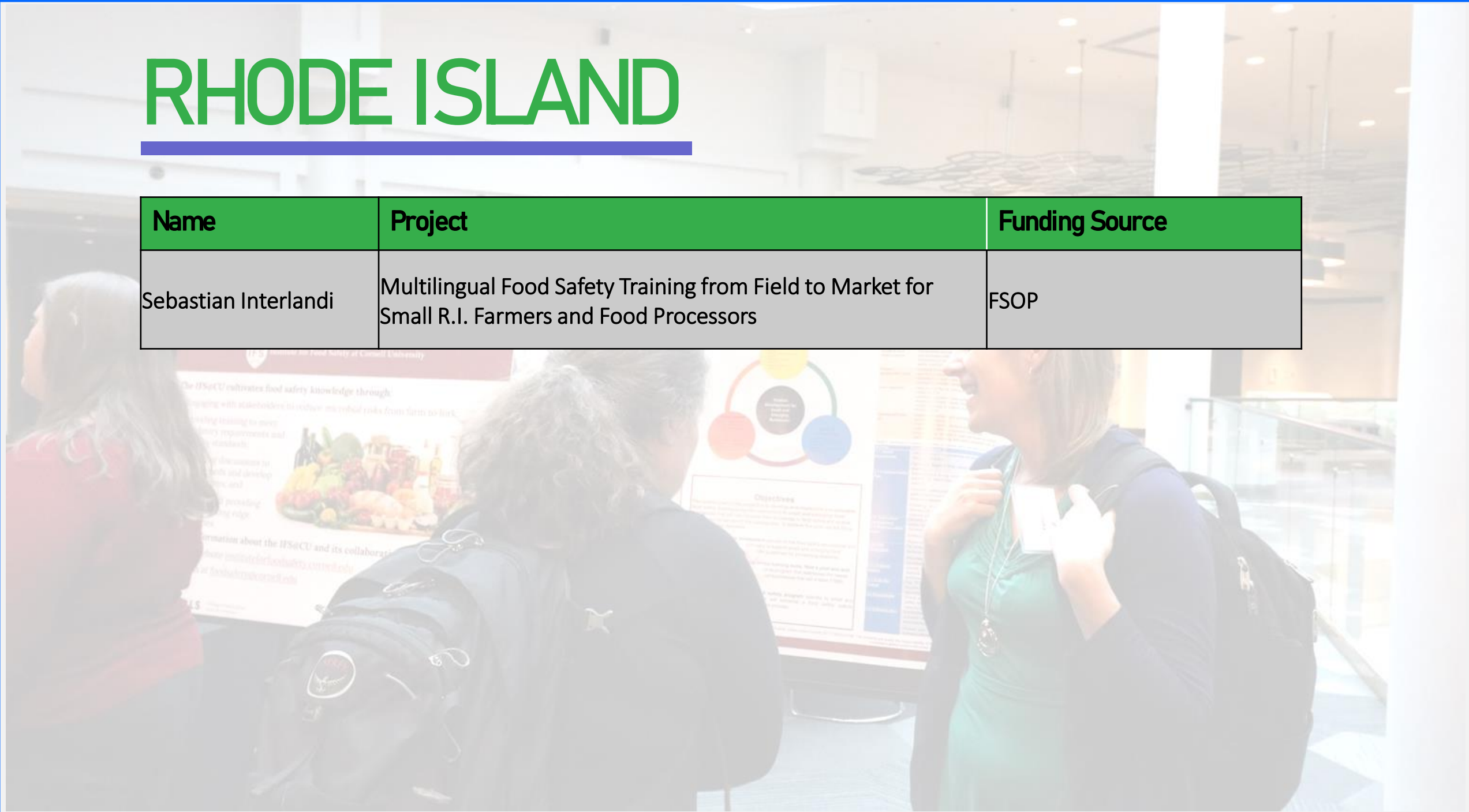
Name	Project	Funding Source
Rodman Getchell	Increasing the number of safe and effective therapeutics for aquaculture	USDA Ag and Food Research Initiative
Sam Nugen	Phage-based Nanosensors for the Rapid Detection of Salmonella in Agricultural Matrices	USDA Ag and Food Research Initiative
Samuel Reichler	A multi-omics approach to extend the shelf-life of fluid milk	USDA Ag and Food Research Initiative
Shardendu Singh	Stomatal Conductance to Improve Leafy Green Shelf Life	USDA Ag and Food Research Initiative
William Weldon	Analysis of Pathogen Distribution and Virulence Patterns at a Continental Scale for Improved Management of Hop Powdery Mildew	USDA Ag and Food Research Initiative
Martin Wiedmann	A systems approach to microbial food safety in produce: leveraging data science approaches to inform food safety decisions	USDA Specialty Crop Block Grants

PENNSYLVANIA

Name	Project	Funding Source
Alexander Fridman	Post-Harvest Fresh Produce Wash Water Disinfection by Submerged Cold Plasma Non-Chemical Continuous Treatment System	Center for Produce Safety
Lisa Hall Zielinski	Empowering Farmers to Comply with Food Safety Modernization Act (FSMA) Preventive Controls for Human Foods (PCHF)	Northeast Sustainable Agriculture Research and Education
Carla Aparecida Baumel	Mapping Potential Human Exposure to Per- and Polyfluoroalkyl Substances (PFAS) from Domestic and Imported Food Packaging	USDA Ag and Food Research Initiative
Gregory Ray Ziegler	Interaction of Food Constituents with Novel Metal Can Coatings	USDA Ag and Food Research Initiative
Jasna Kovac	Development of Integrated Functional Genomics-Based Approaches for Bacillus Cereus Exposure Assessment	USDA Ag and Food Research Initiative
Jennifer Quinlan	Don't Wash my Chicken?! Developing Food Safety Education Messages to Address Consumer Barriers to Adopting Safe Food Handling Practices	USDA Ag and Food Research Initiative

RHODE ISLAND

Name	Project	Funding Source
Sebastian Interlandi	Multilingual Food Safety Training from Field to Market for Small R.I. Farmers and Food Processors	FSOP



VERMONT

Name	Project	Funding Source
Elizabeth Newbold	Developing a Handbook of Produce Safety Standards for Buyers	FSOP
Elizabeth Newbold	Northeast Center to Advance Food Safety (NECAFS)	FSOP
Elizabeth Newbold	Summarizing and Extending Information from Existing Produce Safety Research	FSOP
Vernon Grubinger	Training and Technical Support to Help Small Vegetable Farms Meet the Cleaning and Sanitization Requirements of the Produce Safety Rule	FSOP
Christopher W Callahan	Decision Support Tool for Grower Adoption of Food Safety Practices	USDA Ag and Food Research Initiative
Andrea J Etter	Identifying Gene Expression Profiles Associated with Enhanced Stress Tolerance in Outbreak and Non-Outbreak Associated Salmonella Enterica	USDA Ag and Food Research Initiative

WEST VIRGINIA

Name	Project	Funding Source
Cangliang Shen	Establishing a Summer Internship Program to Enhance Undergraduate Practical Knowledge and Skills of Food Microbial Safety through Research and Extension Activities	USDA Ag and Food Research Initiative
Cangliang Shen	Improving the Microbial Safety and Quality of Locally Grown Produce in West Virginia by Adopting a Three-Step Wash Process with Antimicrobials Through Research and Extension	USDA Ag and Food Research Initiative