Partnership for Research Excellence in Sustainable Seafood (PRESS)

Announcement of funded projects – Fall 2023

The Partnership for Research Excellence in Sustainable Seafood (PRESS), a University of Rhode Island (URI) initiative, is a grant program funded by the National Oceanic & Atmospheric Administration (NOAA), that supports the development of innovative solutions to challenges facing the state's seafood sector.

About PRESS
PRESS, launched in 2023, is led by Marta Gomez-Chiarri, professor of Aquaculture/Fisheries in the URI College of the Environment and Life Sciences. It provides funding to projects proposed by teams of industry members and researchers regarding sustainable seafood production in Rhode Island. Each proposal is reviewed by an interdisciplinary advisory board, and funding is distributed rapidly to respond to urgent issues. Proposals will be accepted and reviewed on a rolling basis through March 2026.

Three projects have received awards in the second funding round:

Award: $36,412

Lead: Nicole Richard, Research Associate & Food Safety Specialist, Rhode Island Sea Grant

Assessing the risk of pathogen contamination from roosting birds on aquaculture gear

Waterbirds roost on oyster cages, with their waste potentially causing human pathogens, such as *Campylobacter*, to contaminate shellfish meat—a problem if the food is consumed raw or undercooked. This project will seek to improve data about this risk by studying how long it takes oysters to clear the bacteria and will operate several sampling stations to see if and how bacteria spread. Project results could help inform control strategies, such as the length of time necessary for sinking cages before harvest, as well as enable regulators and growers to make informed decisions regarding best management practices to reduce the risk of *Campylobacter* in oysters.

Award: $50,000

Lead: Hongjie Wang, Assistant Professor of Oceanography, URI Graduate School of Oceanography (GSO)

Team: Andrew Griffith, U.S. Department of Agriculture–Agricultural Research Service, Kingston RI; Fiona Teevan-Kamhawi, URI GSO, Ph.D. student

Commercial Team: Wickford Oyster Company, Rome Point Oyster Farm

Impacts of water quality and alternative surface flip gear on eastern oyster production in Rhode Island estuaries

The research proposal aims to address challenges in Rhode Island's oyster farming industry. The study focuses on evaluating the effectiveness and operationality of alternative surface gear compared to traditional cultivation techniques, as well as understanding the influence of water quality on oyster health. In partnership with local oyster farms, the research team will deploy high-resolution water quality monitoring systems to gather data on factors such as temperature, salinity, oxygen levels, pH and nutrients while also monitoring oyster health and production from March 2024 to Feb 2025. This comprehensive approach is designed to support Rhode Island's aquaculture industry by providing data-driven insights into best farming practices and the potential impacts of environmental factors on oyster production.

Award: $45,050

Lead: Sarah Schumann, Campaign Director, Fishery Friendly Climate Action

Team: Fred Mattera and Shaye Rooney, Commercial Fisheries Center of Rhode Island; Tim Rovinelli, commercial shellfisherman

Participatory decarbonization planning with Rhode Island's fishing and seafood industries

To build understanding of how decarbonization—removing carbon from the ocean—can help fish species and ultimately help Rhode Island fisheries industries to adapt to climate change, this project will offer a two-part process. The first part will prepare climate leaders within the fishing industry to participate robustly in Rhode Island's state-level decarbonization planning processes via development and use of a framework to assess prospective decarbonization. The second part will focus on reducing greenhouse gas emissions inside the fishing industry and will bring together a task force of members of the seafood and fishing industries, relevant government agencies, and knowledge and thought leaders on the topic of low-carbon energy innovation in marine applications. The project will work to identify near-term and long-term actions and investments that can prepare the fishing and seafood industries to thrive in a post-carbon world.

Learn More

PRESS is accepting pre-proposals for other projects; for information, visit web.uri.edu/cels/press-initiative/ or contact Azure Cygler at acygler@uri.edu or 401.874.6197.

THE UNIVERSITY OF RHODE ISLAND

NOAA

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Four projects have received awards in an initial funding round:

Award: $29,988

Lead: Rebecca Brown, Professor and Chair, Plant Sciences and Entomology, College of the Environment and Life Sciences, URI

Team: David Brown, URI; Robbie Hudson, URI Coastal Resources Center and Rhode Island Sea Grant; Josh Reitsma, Cape Cod Cooperative Extension

Testing the feasibility of laser scarecrows to prevent birds from roosting on aquaculture gear

While changes to shellfish sanitation regulations now require oyster farmers to deter birds from roosting on floating gear, most strategies that work for agriculture aren't suitable for aquaculture, as the marine environment is heavily used by people and other wildlife. The project will test whether a URI-developed laser scarecrow – an automated bird deterrent – can work for local aquaculture.

Award: $29,621

Lead: David Bethoney, Executive Director of the Commercial Fisheries Research Foundation (CFRF)

Team: Fred Mattera, Commercial Fisheries Center of Rhode Island (CFCRI); Noelle Olsen, CFRF; Katie Viducic, CFRF

Fostering the development of automatic squid jigging

While the longfin squid fishery in Rhode Island and New England is prosperous, there is desire to test new harvesting methods that decrease bycatch of other species, won't damage the seafloor, and increase access to squid. Automatic squid jigging is a method used in other parts of the world, and this project will test this method locally. The CFRF will provide its four jigging machines to fishermen, via participation with CFCRI, who will test the equipment and report results, to help enhance this fishing sector and encourage production of a sustainable and quality food source.

Award: $99,991

Lead: Kate Masury, Executive Director, Eating with the Ecosystem

Team: Jason Jarvis, South County fishmonger/Quonochontaug Fish Company; Shayna Cohen, Karen Karp & Partners; Julius Kolawole, African Alliance of Rhode Island; Mary Parks, Green Crabs.org; Fred Mattera, CFCRI

A Quonochontaug Fish Company effort to market overlooked and underserved fish species to diverse customers

Although there is increasing need for healthy and affordable seafood, the supply is not as robust as it could be, as some fish species, while nutritious and palatable, aren't popular or effectively or widely marketed. This project will provide a case study as the Quonochontaug Fish Company, supported by partners from industry, policy, and the local African community, tests methods for marketing lesser-known fish species to a broader customer base, including urban-based ethic groups interested in accessing these alternate protein sources. The project will also consider opportunities to engage communities in workforce development activities related to the harvesting, marketing, and preparation of seafood.

Award: $15,000

Lead: Hiro Uchida, Professor, Environmental and Natural Resource Economics, College of the Environment and Life Sciences, URI

Team: Mitch Hatzipetro, URI; David Bethoney and Michael Long, CFRF; Fred Mattera, CFCRI; Jason Jarvis, South County Fishmonger; Kate Masury, Eating with the Ecosystem; Stuart Meltzer, Fearless Fish Market

Examining the market potential for ikejime-treated local fish in Rhode Island

Ikejime is a traditional Japanese slaughter technique that requires the handler to instantaneously kill a fish using a manual brain spike thrust into the fish's brain cavity. The method enhances the quality of the final product as well as increases the shelf life of a fish through the supply chain, and is considered a humane method for killing fish. A 'training the trainers' approach will be employed, with selected trainers receiving formal ikejime instruction so they can then teach the method to local fishers. The project will lay the foundation for the next step, organizing demonstration sessions targeted at dealers, restaurant chefs, retailers and consumers. It is part of a larger research effort exploring the marketability for value-added, locally caught and underappreciated species.

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