

# ENVIRONMENTAL INSIGHTS

NEWS FROM THE UNIVERSITY OF MARYLAND CENTER FOR ENVIRONMENTAL SCIENCE

## A new way to understand the Chesapeake Bay's role in releasing and capturing greenhouse gases

A team of scientists from the University of Maryland Center for Environmental Science is working to understand how much the Chesapeake Bay contributes greenhouse gases to the atmosphere versus trapping them, and how it impacts the Earth's changing climate. They are examining microbial communities, the primary producers of greenhouse gases in aquatic systems, to get a fundamental understanding about their ecology.



“This project will give us the most detailed picture yet of who the major microbial groups are in the Chesapeake Bay, where they live in the Bay, and how they are driving important nutrient and carbon cycles in the Bay,” said Assistant Professor Clara Fuchsman. [MORE](#)

## "Explore the Shore Through Science" at the Horn Point Laboratory Open House

Horn Point Laboratory invites the public to a FREE Open House on Saturday, October 15, 2022, from 11 a.m. to 4 p.m.

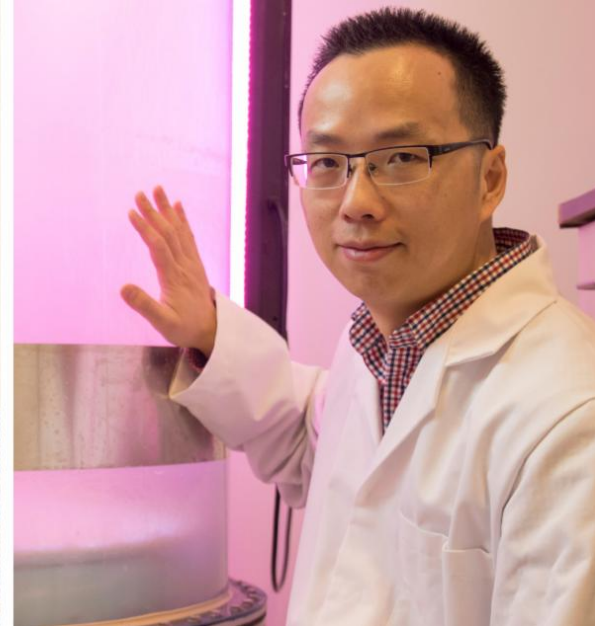
Learn about healthy marshes, how oysters



clean the water and build resilience to sea level rise and climate change, dive into the largest oyster hatchery on the east coast, and more! [MORE](#)

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## Researchers collaborate with Maryland companies to innovate new technology



UMCES scientists received support from the Maryland Industrial Partnerships (MIPS) program to collaborate with Maryland-based companies on technology product development projects. Matthew Gray is working with Ferry Cove Shellfish to develop and test a new, man-made base for oyster aquaculture, and Yantao Lio is working with Baltimore-based AlgaBT LLC to develop a technique to produce an antioxidant health supplement from microalgae while reducing the discharge of nutrient-rich water into the Chesapeake Bay. [MORE](#)

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**NOTABLE** Associate Professor Xin Zhang was selected to receive the 2022 Global Environmental Change Early Career Award from the American Geophysical Union. This award recognizes outstanding contributions in the area of global environmental change by honorees within 10 years of receiving their Ph.D.

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## Next Generation: Samara Nehemiah on assessing striped bass populations

The most recent stock assessment of Atlantic striped bass, one of the most popular sport fish on the Atlantic Coast and a large commercial fishery, indicated that they are being overfished. Graduate student Samara Nehemiah is finding ways to assess the status and population sizes of the Atlantic striped bass population in smaller spatial regions in order to better manage and conserve the species.

"The methodology I develop will also be able to be used for other significant fish species to develop population estimates in the Bay for better long-term management efforts," said Nehemiah. [MORE](#)



## UMCES IN THE NEWS

Was the forecast for Hurricane Ian bad? Depends on your perspective (Forbes)

APNI, INRA organize workshop for olive tree production in Morocco (Morocco World News)

Whale Watch: Offshore monitoring to protect marine mammals (The Bay Net)

New study shows eastern shore landowners support wetland restoration (The Nature Conservancy)

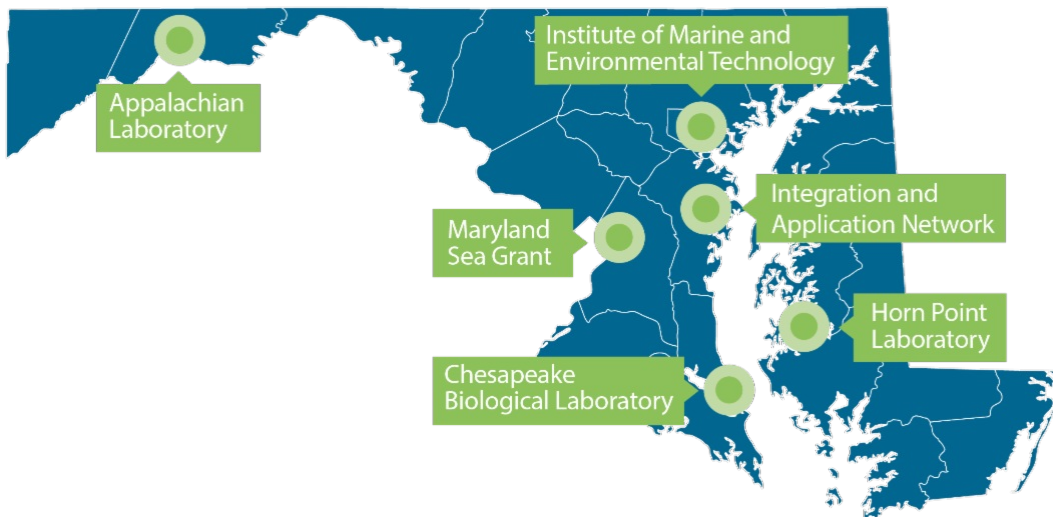
Controversial fish farm could be coming to a pristine Chesapeake Bay tributary (USA9-TV)

Do the math: Oysters can't be the cure-all for a clean Chesapeake Bay (SoMD News)

Massive salmon factory could harm wild sturgeon, residents fear (Southern Maryland Chronicle)

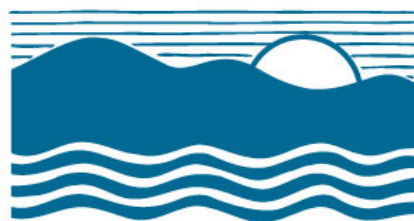
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