

December 2020

Bay Water Quality



Marsh Restoration



Oyster Restoration



Brief...but Interesting

Highlights from Horn Point Laboratory

It was a year like no other. In 2020 new opportunities were realized to expand education, engagement and research at the Horn Point Laboratory.

Going Virtual: Growing Engagement and Education

Horn Point Laboratory presents

CHESAPEAKE BAY 101:

a series of virtual seminars to dive
into science and see the Bay in a whole new way

Grab a beverage and meet our faculty and students for 30-minute seminars
with opportunity for conversation and questions from the audience.

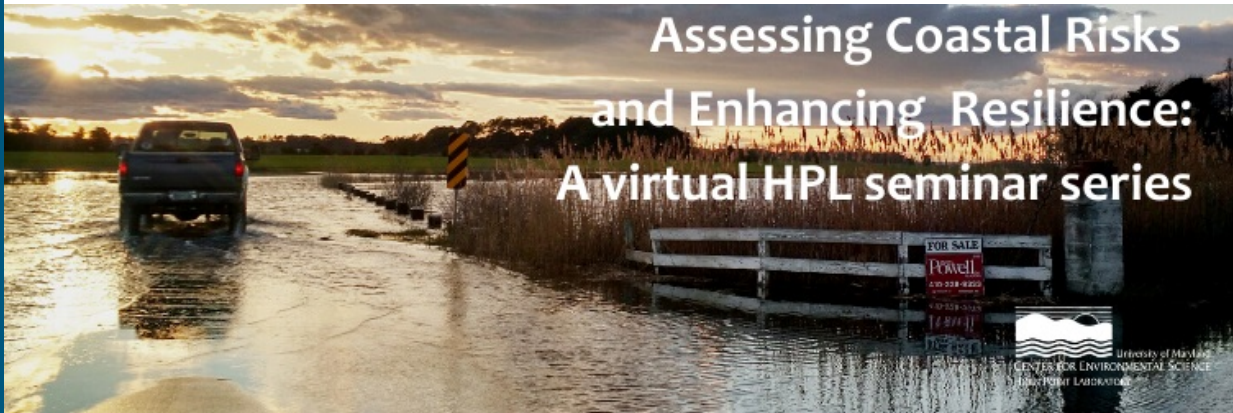


University of Maryland
CENTER FOR ENVIRONMENTAL SCIENCE
HORN POINT LABORATORY

By going BIG and virtual "Bay 101 with HPL" was shared with over 300

inquiring participants. Mysteries of the Bay were highlighted in 5 virtual seminars hosted by HPL faculty. We dove into science to see the Bay in a whole new way by sharing programs and research working to improve the health of the Bay and its aquatic life, from sea grasses to oyster genetics.

[SERIES RECORDINGS](#)



Assessing Coastal Risks and Enhancing Resilience: A virtual HPL seminar series

Click the image to watch the Talbot Spy's synopsis of invited speaker Dr. Ariana Sutton-Grier's seminar on the power of wetlands to generate coastal and community resilience.

Horn Point Lab is hosting 12 virtual seminars with celebrated scientists, speaking from around the world, sharing their knowledge about about risks to our coastal communities and ecosystems and ways to enhance resilience.

[SERIES RECORDINGS](#)

Research Highlights: Resilience, Innovation and Predictions



Fighting Surging Seas in a Changing Climate

HPL-UMCES Professor **Ming Li**'s research focuses on the threats coastal communities face and potential solutions to the rising tides, as the impacts of climate change grow. With his expertise Li works on UMCES' **Sea-Level Rise Projections for Maryland**, and he leads the **Estuarine Coastlines and People (CoPe) Research Coordination Network**, a group of national experts focused on understanding the dangers coastal communities face and the impacts of a changing coastal environment.

[MORE](#)

Research Team Receiving \$10M to Transform Shellfish Farming with Smart Technology

HPL-UMCES Assistant Professor **Matt Gray** and a group of University of Maryland researchers and institutions throughout the U.S. received a \$10 million grant from the USDA and NIFA to bring advanced technology to the domestic shellfish aquaculture industry. The five-year project



seeks to develop an autonomous underwater vehicle that can help with management of crops, improve understanding of lease conditions, and do all of this while having a low environmental impact.

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First-ever Scenario Modeling System to Link Human Activity, Water Quality and Policy Action

HPL-UMCES Professor [Raleigh Hood](#) and a group of researchers from 3 other institutions throughout the United States have been awarded a \$1.4 million grant by the National Science Foundation (NSF). The 4-year project will develop a coupled modeling system to represent and simulate the complex interrelationships between humans and the environment.

[MORE](#)

New Additions: Expanding horizons

Horn Point Lab Welcomes Dr. Andrea Pain, Biogeochemical morphologist, to the Faculty

[Andrea Pain's](#) research links terrestrial and coastal processes by looking at the quantity and quality of water flowing from land to sea, including both stream runoff and groundwater. Streams and groundwater both contribute carbon and nutrients to the coast but vary in composition due to differences in how they flow through the landscape.



Horn Point Lab Welcomes 6 new graduate students

From as far away as China and Brazil and as near as New Jersey, the Horn Point Laboratory is pleased to welcome a bright and talented group of new students: [Yuren Chen](#), [Laura Wiltsee](#), [Llmin Sun](#), [Bruna Sobrhino](#), [Chelsea Fowler](#), and [William Atkinson](#). With UMCES' virtual teaching all of our new students are able to be engaged in classes while travel restrictions due to the pandemic keep some in their native countries.

Help Support the Work of Students at the Horn Point Laboratory

During this unprecedented year, students at the Horn Point Lab have faced multiple challenges in completing their degrees, including courses rapidly going completely virtual, restricted access to laboratory and field sites during Phase 1 of the state's shutdown, prohibited travel, and more. These issues have forced many students to revise their research goals, plans and timelines in a short period of time, adding to their financial

burden and mental stress.

You can help by making a gift to Student Support at the Horn Point Laboratory. Gifts to Student Support make it possible for the Laboratory to offer grants to students in support of their research activities. By making a gift today, you will be helping students continue their work through difficult times and fostering the next generation of environmental leaders.

Some of the outstanding students at the Horn Point Lab.



The Horn Point Laboratory wishes you and your family the very best for a happy, healthy, and safe new year!

[Give Now](#)

Located in Cambridge, MD, Horn Point Laboratory is part of the University of Maryland Center for Environmental Science -- a fully-accredited graduate school and research facility conducting

environmental research on a variety of ecosystems. From dealing with the effects of climate change to oyster restoration and other science-based efforts that lead to a healthier Chesapeake Bay, Horn Point Laboratory IS environmental science.

UMCES/HPL remains closed to the public until further notice. We look forward to sharing time with you on campus as soon as it is safe and possible. Until then, please stay safe and follow us on facebook



With ongoing research programs spanning from the estuarine waters of the Chesapeake Bay to the open waters of the world's oceans, Horn Point Laboratory is a national leader in applying environmental research and discovery to solve society's most pressing environmental problems.

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