NEWS FROM THE UNIVERSITY OF MARYLAND CENTER FOR ENVIRONMENTAL SCIENCE – Horn Point Laboratory

December 2021



It has been incredibly positive year at the Horn Point Lab! **THANK YOU** for your generous support!

Here are highlights from a long list of accomplishments.

"Be the change that you wish to see in the world." — Mahatma Gandhi



Champions for the Chesapeake

Horn Point's students were celebrated this year at our Chesapeake Champion celebration. Champion's Beverly and Richard Tilghman have long been advocates for educating the next generation of environmental leaders at Horn Point. From their initial agreement to accept the honor

of Chesapeake Champions, the Tilghmans made clear their reason for accepting was not their own accolades. Instead, they saw an opportunity to highlight something they care deeply about, the many graduate students dedicated to environmental science at the Horn Point Lab (HPL). **Spy Video**

Mike Roman to step down as Horn Point Laboratory Director

After serving 20 years as director of the Horn

Point Laboratory of the University of Maryland Center for Environmental Science (UMCES), Professor Mike Roman has announced that he will relinquish the position by the end of the academic year and continue his ocean research as a Horn Point faculty member. A nationwide search is underway for the incoming Lab Director.

"It has been a great honor and privilege to work with the staff, students and faculty these last 20 years. Horn Point has grown in size, stature and productivity thanks to their hard work and dedication. I am proud of our increased efforts in public outreach, partnerships with other environmental groups on the Eastern Shore and development activities to provide graduate student financial support," said Roman. **MORE**



Research Highlights: Resilience, Innovation and Predictions



From the Gulf of Mexico, Red Tide Research Update

Professor Glibert and students, **Sophia Ahn** and **Bruna Sobrinho** spent 10 days collecting waters across the Gulf of Mexico in early December. Their work is part of a National Oceanic and Atmospheric Administration (NOAA) \$5 million grant in which Maryland researchers are applying lessons learned in Chesapeake Bay to study harmful algal blooms in Gulf of Mexico.

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Maiden Voyage for Autonomous Research Vehicle

One small step for robotics, one giant leap for aquaculture. It was 39 bonechilling degrees on the Choptank's waters earlier this month when **Matt Gray**, an ecophysiologist and HPL assistant professor, and student, **Alan Williams**, and other team members took their device to the open waters for its maiden trial. Gray and a group of University of Maryland researchers and institutions throughout the U.S. received a \$10 million grant from the



United States Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA) to bring advanced technology to the domestic shellfish

aquaculture industry, with a specific focus on improving bottom-culture of oysters. "We believe oyster crops could be better managed and tracked with underwater vehicles equipped with sensors that also have environmental sensing capabilities," said Gray, "This might sound far-fetched until one learns about how terrestrial farmers can track crop growth and harvest crops while they are far from the field using satellites and computer-controlled tractors." **WATCH VIDEO**



Journey to Thailand to collaborate on global stressors to marine ecosystems

Despite widely differing latitude, the waters of southern Thailand and the Chesapeake Bay experience similar climate and human

stressors. Oceanographers, Victoria Coles and Raleigh Hood are working in Thailand at the Phuket Marine Biological Center collaborating with Thai colleagues to better understand carbon dioxide variability in the Indian Ocean and to analyze a collection of observations made as part of the US GoShip program in the western Indian Ocean. Dr's Coles and Hood will spend six months collaborating with Thai colleagues to advance our understanding of the global impacts of human induced stressors and ocean acidification.

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New Additions: Expanding horizons

Horn Point Lab Welcomes Dr.Matt Houser in a new partnership with The Nature Conservancy

In a partnership to build and execute collaborative projects that will advance their collective goals in regenerative agriculture and sustainable agricultural landscapes in the Chesapeake Bay watershed, **Dr. Matt Houser** joined the University of Maryland Center for Environmental Science's Horn Point Laboratory as its first Regenerative Agriculture Fellow. This



is a new partnership between The Nature Conservancy (TNC) and the University of Maryland Center for Environmental Science (UMCES). Houser is an environmental sociologist who conducts interdisciplinary research programs to inform the development of "policy and engagement strategies toward increasing the short- and long-term resilience of managed ecosystems and human communities to environmental change."

Horn Point Lab Welcomes 6 new graduate students

From as far away as China and as near the Eastern Shore, the Horn Point Laboratory is pleased to welcome a bright and talented group of new students:

Imani Black, David Garcia, Marshall Grossman, Wenjing Liu, Nicole Trenholm and Alan Williams.

Going Virtual: Growing Engagement and Education

Explore our library of virtual seminar recordings. Experts from around the globe and the University of Maryland Center for Environmental Science's four labs dive into current environmental issues and scientific research addressing them. **SEMINAR RECORDINGS**

The Horn Point Laboratory is grateful for your appreciation of science and our passion for the environment. We wish you and your family the very best for a happy, healthy, and safe New Year!

Make a Gift

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. <u>VISIT OUR WEBSITE</u>



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