

WATER QUALITY  
Education  
COASTAL RESILIENCE  
HAB Aquaculture  
Marine Science  
sea grass MARSH  
RESTORATION  
Food Web OYSTER  
Modeling RESTORATION  
RESEARCH  
SUSTAINABILITY  
Climate Change STUDENTS



## Brief...and Interesting

News from the Horn Point Laboratory

### Research Highlights: Resilience, Innovation and Predictions

#### The Blue Crab Genome is Successfully Sequenced

Collaboration between HPL Associate Professor Louis Plough and IMET Professor J. Sook Chung and Research Assistant Professor Tsvetan Bachvaroff has led to the successful sequencing of the blue crab's genome. Plough's role was to make sure all of the genetic pieces in the genome are in the right place and the right number. Understanding the genetic makeup of the blue crab equips scientists to answer important questions about reproductive success and adaptation to climate change.



#### Build or Retreat: Putting a price tag on the impacts of Climate Change



HPL [Professor Ming Li](#) sums up the importance of addressing the impacts of climate change on coastal communities, “We have to think big,” Li said. “If you just have a Band-Aid solution, it’s not going to work.” Li who heads the [Coastlines and People \(CoPe\) Research Coordination Network](#) says, “Moreover, the risks are growing. Last year, five hurricanes

hit the US Gulf Coast, one with sustained winds up to 150 mph. There’s scientific consensus that climate change will cause greater numbers of these



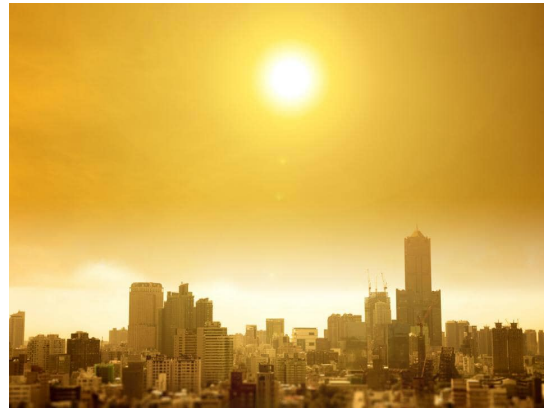
monster Atlantic hurricanes.” Li and other global experts look at Houston as they grapple with the issue of build or retreat.

[READ STORY IN WIRED](#)

## Setting the Record Straight on Carbon Dioxide

Professor Emeritus Tom Malone applies his expertise in a Spy Op-Ed explaining the relationship between increasing CO<sub>2</sub> in the earth’s atmosphere and global warming. Tom also sets the record straight on climate change vs. global warming.

[READ OP-ED](#)



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## FACULTY, STUDENT and ALUMNI

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Morgan Ross



Pinky Liau



Lynda Bell



Miles Bolton

UMCES/HPL

**CONGRATULATIONS GRADUATES  
2020-2021!**

## Horn Point Laboratory Students Shine at UMCES Virtual Commencement Ceremony

*“Take a look at those around you. You are the future. You are our experts,”* said **U.S. Senator Ben Cardin**, keynote speaker at the University of Maryland Center for Environmental Science’s Commencement ceremony. *“Thank you, UMCES! I know that we are in good hands with this new round of distinguished graduates and professionals.”*



Four students from the Horn Point Lab were among the twelve graduate students receiving joint degrees from the University of Maryland Center for Environmental Science (UMCES) and the University of Maryland College Park (UMD) at a virtual ceremony on May 27, 2021. Horn Point graduating students include; Lynda Bell, Miles Bolton, Pinky Liao and Morgan Ross. Their areas of study address critical issues for our future's well-being; coastal resilience, sea level rise, harmful algal blooms (HAB's) and microbial interaction and impact on the sea's floor. Each graduate is eager to take their knowledge and passion out into the world to advance understanding and spark new research questions for other students and scientists to pursue.

### [READ STUDENTS' STORIES](#)

## Applying Science to real world challenges through business



[Catherine Fitzgerald](#) was among nine UMCES students to complete the year-long [Ratcliffe Environmental Entrepreneurship Fellowship \(REEF\)](#) program. Catherine was awarded the “Spirit of Entrepreneurship” award at the final pitch presentation where each of the students skillfully articulated their business vision in short

presentations to a panel of entrepreneurs and investors. Through workshops with local entrepreneurs, lessons on important topics such as intellectual property and customer discovery, and a final pitch competition, students cultivate leadership and business skills to transition technologies from the lab or field into commercial markets.

## Science in a Story

Anna Windle, PhD student, explains how drones enhance water quality monitoring in this StoryMap overview of her research.

### [READ ANNA's STORYMAP](#)



## Scholarships Provide Opportunities for Students to Broaden Horizons

The Mid-Shore chapter of Izaak Walton League of America (IWLA) warmly welcomed scholarship recipients for 2020 and 2021 at their annual summer barbecue. [Paulina Huanca](#) and [Anna Windle](#) were 2020 recipients and [Sophia Ahn](#) and [Carol Kim](#) are 2021 recipients. All are PhD





students. The \$2,000 scholarships offer the opportunity for students to expand their research by taking intensive courses relating to their work, traveling to conferences to present and network, and purchase equipment to further their research. We are extremely grateful for the Mid-Shore Chapter's generous support of two HPL students annually and their

commitment to the next generation of environmental leaders.

Pictured here, Sophia Ahn, Anna Windle and Paulina Huanca. (Carol Kim was unable to attend)

[READ MORE](#)

## Out and ABOUT: HPL Faculty sharing their knowledge

### Art and Science come together to enhance Cambridge's Streetscape.

Saturday, June 12 a new mural was unveiled in Cambridge. Located above Chesapeake College's building at 418 Race Street, the mural inspires the community to consider the rich diversity of marine life in the Chesapeake Bay and the benefits we all receive from it.

The UMCES - Horn Point Lab was invited to share its scientific knowledge to assist in creating a vision and storyboard for the new mural. Faculty members [Jamie Pierson](#) and [Victoria Coles](#) and graduate student [Lisa Ziegler](#) provided plant, flora and fauna suggestions to the artists [Red Swan](#), a woman owned, Baltimore-based mural studio. HPL assisted with creating the storyboard located on the College's building on Race Street.

[READ MORE](#)



### Sharing Scientific Knowledge to Advance Innovation



[Matt Gray](#), [Jeff Cornwell](#), [Imani Black](#) (founder of Minorities in Aquaculture and incoming HPL student) were panelists for the Chesapeake Oyster Science Symposium held June 3. A gathering of early career professionals, graduate students, researchers, restoration experts, and aquaculturalists, the Symposium

focused on emerging science and innovative approaches to advance the



oyster population of Chesapeake Bay.

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## EVENTS: Growing Engagement and Education

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### **CBS This Morning Visit to HPL Oyster Hatchery to Air Saturday!**

Gorgeous sunrise, check! Planting vessel full of spat-on-shell destined for the Tred Avon River, check! Successful oyster spawn, check! CBS News crew on site to capture it all, check!

The [Oyster Recovery Partnership](#) and the [HPL Oyster Hatchery](#) had a blast shooting the upcoming CBS this Morning with [Skyler Henry](#).

**Tune in Saturday, July 10 at 8;00 am on CBS morning WJZ-Baltimore or WBOC- Salisbury**

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**Save the Date to Celebrate! Beverly and Richard Tilghman are the 2021 Chesapeake Champion for the Environment**



# SAVE THE DATE

## Horn Point Laboratory

Chesapeake Champion for the Environment Award Reception

Richard & Beverly Tilghman  
2021 RECIPIENT



Thursday, September 30, 2021  
Cocktail Reception 5-7 pm  
Tidewater Inn, Easton, MD



Details to follow  
Carin Starr 410-221-8408  
cstarr@umces.edu

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**Give Now**

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

**[VISIT OUR WEBSITE](#)**

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



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE  
HORN POINT LABORATORY