

# Lab Lines

MAY 2019

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## CBL TOWN HALL

Dr. Miller, CBL Director presented service awards to Willis Long and Frank Stebbing for their five years of service to the University of Maryland Center for Environmental Science and the Chesapeake Biological Laboratory.

This year's Director's Award for Excellence recognized the Business Office for their professional support during a period of transitions. Well done - Theresa Holloway, Cindy Dixon, Samantha Mais, Jeanette Duran, and Renee Reamy! Dr. Miller will be providing lunch at a location of their choice.

## RESEARCH & AWARDS

Dr. Laura Lapham received an award from the Department of Energy through Amethyst Research, Inc., February 19, 2019 through November 18, 2019. The title for this project is: *Low Cost, High Speed Multi-Probe Monitoring System for Subsurface Gases.*

Drs. Michael Wilberg, Hongsheng Bi, and Dong Liang received an award from the Atlantic States Marine Fisheries Commission, March 1, 2019 through December 31, 2019. The title for this project is: *Design of an Aerial-Hydroacoustics Survey to Estimate Menhaden Biomass in the Chesapeake Bay.*

Dr. Dong Liang received an award from the Maryland Department of the Environment, February 28 through August 1, 2019. The title for this project is: *Designation of Random Station and Revisit Plan for the Biological Monitoring of Maryland's Local Phase I Municipal Separate Storm Sewer System (MS4).*

Dr. Andrew Heyes received an award from the Department of Natural Resources - Resource Assessment Service, March 1, 2019 through February 28, 2020. The title for this project is: *A Long - Term Ecosystem - Level Mercury Deposition, Fate and Transport Study of a Coupled Estuarine/Terrestrial Ecosystem at SERC 2019.*

Dr. Mario Tamburri received additional time and funds from the Department of Transportation, Maritime Administration, March 1, 2013 through December 31, 2020. The title for this project is: *Phase X Part 6 Test Methods and Compliance Monitoring of Ballast Water Discharge Regulations.*

## RESEARCH & AWARDS CNTD.

Dr. Mario Tamburri received additional time and funds from the Department of Transportation, Maritime Administration, September 1, 2015 through December 31, 2019. The title for this project is: *Phase V Mod 7 Expanding the Evaluation of Ship In-Water Grooming Technologies.*

## ALUMNI NEWS

Brian Gallagher (MS, 2016) has received a 4-year Fullbright Scholarship to pursue a PhD at Concordia University in Montreal (Dr. Dylan Fraser) investigating climate adaptation and evolutionary feedbacks in small brook trout populations.

## CBL PIER SEINE

The CBL Pier Seine becomes legal this year (21!!). Come out, seine, and celebrate a survey that's older than some of this summer's REU students. We are looking for volunteers at low tide on the following dates:

Friday, May 17, 7:59

Thursday, May 18, 12:52

Tuesday, May 28, 4:10

## OUTREACH

### Visitor Center Volunteers Needed

CBL's dedicated volunteer docents independently run our Visitor Center - they open and close the Visitor Center, provide exhibit interpretation for guests, sell merchandise, and more. Volunteers are asked to commit to a minimum of two volunteer shifts (3-4 hours per shift) each month after training is completed. In addition to the pride we hope our volunteers feel for serving their community with science education, Visitor Center volunteers are invited to attend exclusive Docent Engagement Experiences and more! Learn about volunteering as a Visitor Center docent [here](#).

### Visitor Center

In May, the [Chesapeake Biological Laboratory Visitor Center](#) will be open every Friday, Saturday, and Sunday from 9:30am - 4:30pm.

## DEVELOPMENT

One area of success has been in individuals donating \$500-\$750 to support a student in their research. According to national statistics from Charity Navigator, 80 percent of all charitable giving is from individuals and bequests.

In 2018, CBL had 21 first-time donors and 17 gifts of \$1,000 or more (including two personal donations of \$10,000 each). In the first quarter of 2019, donations are three times what they were in the first quarter of 2018. We plan another Giving Tuesday event in November. Last year's Giving Tuesday challenge was a great success.

Foundations account for 16 percent of all charitable donations. Giving to education charities accounts for 14 percent of all charitable giving. Jeane works with faculty for Foundation support (i.e., Bailey/Angell Foundation, Rowe, Woodland/Temper of the Times, Lapham/Simons, and Testa/AAAS). In March, she worked with Dr. Harris and Dr. Testa for support from Koolhof Earth that will be funded.

## TRAVEL AND OUTREACH ACTIVITIES

Dr. Hali Kilbourne recently traveled to Barbados where she was helping teach a field course on corals and sea-level. Data from this classic site for understanding Earth's sea-level history helped geologists recognize that sea-levels can rise very rapidly and helped inform some of the studies used by the writers of the UMCES-led 2018 Maryland Sea-Level Report. Hali brought back a few fossil coral for her own coral-based paleoclimate research to further explore the climate history of the Atlantic.



Dr. Lisa Wainger and visiting scientist Heini Ahtiainen of Finland, both of whom are environmental economists, hosted a St. Mary's College Class on Environmental Sociology on April 12. The class used a case study of Dr. Wainger's testimony to a Maryland House committee to learn how science is used in environmental policy making. The class further learned about how market forces and regulation are being used around the world to cost-effectively achieve environmental goals.

Dr. Helen Bailey presented to 170 students on April 5 at a career day at Arthur Middleton Elementary School in Waldorf, MD.

Dr. Helen Bailey gave a presentation on "PlasticWatch" as part of the Trash Talk seminar series at Maryland DNR on April 10 in Annapolis, MD.

Dr. Carys Mitchelmore will travel to Charleston, SC to present a talk on *The Impact of UV filters in Coral Reef Ecosystems* at the PRIMO 20 (Pollutant Responses in Marine Organisms) conference.

Dr. Carys Mitchelmore will be co-chairing a session and presenting at the SETAC EUROPE 29th Annual Meeting in Helsinki, Finland. The session is "Environmental Monitoring and Risk Assessment of UV Filters in Aquatic Environments". Dr. Mitchelmore's title is: *Concentration of organic UV filters in surface seawater, coral tissue (Porites spp.) and sediment samples from Oahu, Hawaii.*

Dr. Chris Rowe gave an invited seminar on April 16 titled: *Diamondback Terrapins in the Anthropocene* at Towson University, Department of Biology, Towson, MD.

Dr. Chris Rowe led a field trip at American Chestnut Land Trust and gave a lecture on *Vernal Pool Amphibians* to participants in MDNR's Master Naturalist Program.

Dr. Chris Rowe gave a seminar on April 18 to Asbury Community and initiated a volunteer terrapin conservation effort on Asbury property in Solomons, MD.

Dr. Aimee Hoover will be remotely teaching a mini satellite tracking workshop to 10th graders in San Mateo, California. They will be provided leatherback turtle satellite data and taught data exploration techniques and basic statistical analysis and interpretation. The goal is to begin understanding how data can inform policy and environmental management at local and international levels.

Students, Nicole Basenback and Drew Hobbs presented at the Spring Meeting of the Atlantic Estuarine Research Society (AERS) on April 4-6 in Woodbridge, VA.

Dr. Jeremy Testa will attend the 2nd Mid-Atlantic Coastal Acidification Network Workshop in Baltimore, MD.

Dr. Jeremy Testa, FRA, Casey Hodgkins, and student, Drew Hobbs will travel to Rock Creek, Pasadena, MD to support field work on *Cross System Comparison of Oxygen Effects on Nitrogen Cycling in Tidal Sub Estuaries of Patapsco River.*

Dr. Genny Nessler will travel to Providence, RI to attend the National Oceanic & Atmospheric Administration Atlantic Scientific Review Group meeting.

Dr. Slava Lyubchich traveled to College Park, MD to attend the National Oceanic & Atmospheric Administration first workshop on *Leveraging AI in the Exploitation of Satellite Earth Observations & Numerical Weather Prediction.*

**The [Laboratory Safety Institute's](#) Golden Rules of Chemical Fume Hood Use:**

1. Make sure the fume hood is working.
2. Keep the sash down except when working in the fume hood.
3. Raise the sash only the minimum needed to perform the work.
4. Work six to eight inches inside the plane of the sash.
5. Keep the hood area clear and rear vent unobstructed.
6. Raise equipment off the hooded deck. Use PVC pipe donuts (not wood).
7. Remove flammables and unnecessary stuff.
8. Understand the limitations.
9. Check/inspect operation at least annually; sash cables every 2-3 years.
10. Wear Protective Protection Equipment (PPE).

11. Run cords, cables, and tubing under the air foil.
12. Move arms slowly in and out of the hood.

**Please remember:**

a) no volunteers, new employees, interns and students may begin work until they have completed safety training.

b) make sure all phone numbers are current on the emergency contact cards and emergency phone numbers (including 911) are posted by the phones.

c) chemical inventory is up to date.

d) the SDS binder contains Safety Data Sheets and not Material Safety Data Sheets.

Saba, G., M. Poach, S. Meseck, K. Goldsmith, R. Rheault, D. Grosse, B. Phelan, S. Cooley, W. Miller, K. St.Laurent, R. Zimmerman, **J.M. Testa**, J. Weis. 2019. *Recommended Priorities for Research on Ecological Impacts of Ocean and Coastal Acidification in the U.S. Mid-Atlantic*. Estuarine, Coastal and Shelf Science. [UMCES Contribution No. 5624]

**Nesslage, G. and M. Wilberg.** 2019. *A Performance Evaluation of Surplus Production Models with Time-Varying Intinsic Growth in Dynamic Ecosystems*. Canadian Journal of Fisheries and Aquatic Sciences. [UMCES Contribution No. 5619]

## UPCOMING EVENTS

### The Art and Science of Climate Change on the Coasts

Saturday, May 11, 2019 from 2:00pm to 4:00pm

During this public seminar, Dr. Orrin Pilkey and Mary Edna Fraser will plan to reflect on their two books: *A Celebration of the World's Barrier Islands* and *Global Climate Change: A Primer in the time of sea level rise in America*. This seminar is presented as part of CBL's Science for Citizens seminar series. Pre-registration is required for this free event. [Book your tickets today!](#)

