

Lab Lines

JULY 2021

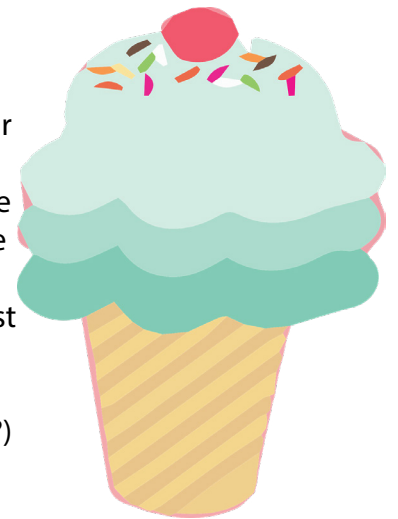
DIRECTOR'S VIEW

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I have enjoyed seeing people's smiling faces around campus this month as many of us have engaged fully in a more normal routine. I am sad to say that I think we will be facing the return of masks in the near future as an additional precaution in response to the increase of the delta variant. But this will be a small price to pay if it marks the beginning of the end of the pandemic.

A principal concern I have had is how we regain the sense of community that has been eroded over the last year as we have limited contact and kept our distances. It is too early to restart all programs - so our Science for the Community program will remain virtual for one more semester, and we will keep our Visitor Center closed as we can't control exposure risks in such a small building when open to the public. But, I am hopeful that some limited outdoor gatherings will be possible as we move forward in an effort to get together once more. We will host in person seminars this semester if the speakers are vaccinated and willing to visit our campus. I will host brown bag seminars again. And to welcome new students, we will have an ice cream social at 1 pm following their orientation on Friday August 27th. We will provide drinks and wrapped ice cream bars (What would you do for a Klondike bar?) to welcome this year's group of new students, and to celebrate those students who joined us last year, but didn't get a welcome.



IN CASE YOU MISSED IT



On 29th June 2021, Amber Fandel assisted with the repairs of our real-time whale detection buoy of Ocean City, Maryland, onboard the R/V Rachel Carson. The real-time detections are available at: <https://www.umces.edu/wind-energy-projects>



Lauren Rodriguez has been collecting water samples for eDNA to study dolphin occurrence and their prey in the Chesapeake Bay with assistance from our Chesapeake DolphinWatch volunteers.

On 9th and 12th July 2021, Helen Bailey attended the National Academies Committee on Offshore Science and Assessment webinars. The webinars provided feedback on BOEM's 2022-2023 Studies Development Plan.

Lee Cooper, Jackie Grebmeier, Andrea Pfaff, Christina Goethel, and Holly Kelly make up the UMCES/CBL team now on the Canadian Coast Guard icebreaker Sir Wilfrid Laurier sailing from Victoria, British Columbia to Utqiagvik, Alaska. The whole US team also includes scientists from Clark University and the US Fish and Wildlife Service; all of the US participants completed a Canadian requirement for a 14 day quarantine on the Fourth of July (photo). Four Canadian scientists from the University of Victoria and Fisheries and Oceans Canada are also participating.



IN CASE YOU MISSED IT Cont.

Lisa Wainger organized and moderated a conference panel discussion that brought together prominent policy makers and academic researchers to consider, What makes economic analysis useful for large water body restoration? A comparison of the Chesapeake Bay and Baltic Sea contexts. Panelists included Veronica Manfredi, Director of Quality of Life, European Commission, Directorate-General for Environment; Richard Davis, water quality lawyer and shareholder of Beveridge and Diamond Law; Jim Shortle, Distinguished Professor Pennsylvania State University; and Heini Ahtiainen, Natural Resources Institute Finland (Luke), Finland and recently Project Manager at HELCOM - Baltic Marine Environment Protection Commission. The virtual session was part of the 26th Annual Conference of the European Association of Environmental and Resource Economists (Berlin - online) and the panelists used the Chesapeake Bay and Baltic Sea case studies to evaluate how economic analyses have been applied to policy and explored the legal and institutional incentives for environmental restoration and protection. They also considered some of the opportunities for using economic analysis in future policy, particularly as needed to respond to rapidly changing ecosystems.

Congratulations to Amber Fandel and Ben Frey who have both been selected to join the 2022 class of the Dean John A. Knauss Policy Fellowship. "The Sea Grant Knauss Fellowship provides a unique educational and professional experience to graduate students who have an interest in ocean, coastal and Great Lakes resources and in the national policy decisions affecting those resources. The Fellowship, named after one of Sea Grant's founders, former NOAA Administrator, John A. Knauss, matches highly qualified graduate students with "hosts" in the legislative and executive branch of government located in the Washington, D.C. area, for a one year paid fellowship. To learn more, please visit the [John A. Knauss Marine Policy Fellowship Program](#) on the web."

Congratulations to Mike O'Brien on his promotion to FRA 4. Mike arrived at CBL in 2010, a graduate of University of Miami. After completing his MS on fish communities in MD Coastal Bays, he began his FRA career, promoted to FRA 3 in 2017. In 2019, he received the Director's Award for Excellence. Mike has independently developed expertise in biotelemetry, bioinformatics, and has mad R coding skills. He has contributed his intellectual and analytical skillset to 10 publications on the migrations of coastal fauna and provided extensive training and guidance to CBL students and staff on diverse science applications. Mike is a regional leader in developing code and procedures for biotelemetry data-sharing; his curated data sets comprising over a million records. In his letter of promotion, Director Miller commented, "It has a been a privilege to observe your development, Mike, from the new graduate student who hobbled along the Cronin corridor on crutches - the result of a rugby injury - to someone who holds the respect of the community for his skills, collegiality and enthusiasm in the field and behind the computer."



Outreach

Outreach Planning

Thank you to the faculty members, faculty research assistants, and graduate research assistants who submitted responses to the Outreach Planning Survey! Your feedback on these topics is greatly appreciated and will inform conversations on strategic outreach priorities.

A report summarizing CBL scientist feedback received through the survey will be developed this month. During weekly meetings, CBL's Director and Outreach Coordinator continue to discuss the impact and requirements for maintaining existing programs, and possible new directions for CBL outreach. Survey results will help guide outreach planning efforts.

Visitor Center

Prior to the COVID-19 pandemic a dedicated team of volunteer docents ran day-to-day operations of the CBL's Visitor Center. The Outreach Coordinator is evaluating docent availability to return to volunteering. Docent feedback is one of several factors that will inform outreach planning discussions about the potential reopening of the Visitor Center in Fall 2021 or Spring 2022.

Science for Communities

Planning for the Fall 2021 Science for Communities Seminar Series is beginning. Preliminary planning is focused on creating a series themed around "Climate Change and Its Impacts."

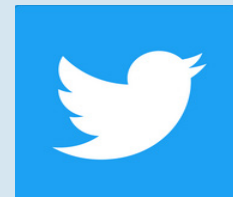
In Fall 2021, CBL will continue with a virtual seminar series. CBL docents, who are regular attendees of the Science for Communities program, have been asked to share their comfort level for attending this program in-person with different limitations on meeting room maximum capacity.

As a reminder, beginning with our Fall 2021 series the Chesapeake Biological Laboratory is rebranding our popular Science for Citizens Seminar Series as the Science for Communities Seminar Series. In changing the title of this series, we hope to better represent UMCES' commitment to diversity, inclusivity, and equity by emphasizing that all individuals are welcome to learn about our innovative research through this public program

Social Media



Follow CBL on [Facebook](#) and [Twitter](#)!



Please contact Outreach Coordinator Sarah Brzezinski at brzezins@umces.edu if you have information, like upcoming public presentations or news, that you would like to have shared with CBL's social media audiences.

Safety Corner: Cheryl Clark

KNOW YOUR CHEMICALS

When you start to work in a laboratory (or even at home) you need to make sure you have a good working knowledge of the chemical(s) you will be using for your research or work. This information is made available to you in the Safety Data Sheets (SDS) which are kept in binders in every laboratory.

The SDS is helpful to let you know what type of chemical (flammable, toxic, corrosive, etc.) you have, how to handle it before starting a procedure, storage, disposal and the associated hazards. The SDS will list the type of protective gear you should wear and it also has the first aid information you will need if you should have an accident. You should determine beforehand what would be the worst case accident scenario for a chemical so you would know what immediate action to take rather than having to deal with finding the information after an accident has occurred.

If you are a supervisor, please be sure to instruct new hires on how to handle the chemicals in your lab before starting any experiments or procedures. It must not be assumed that they will know what to do in terms of safety and handling. Most undergraduate laboratories use a fixed program of experiments year in and year out and the safety training that students received are particular to those procedures and will not always translate to an academic research laboratory.

Safety Data Sheet Section Information

1. Identification of substance

2. Hazards Identification

3. Composition/information on ingredients

4. First aid measures

5. Firefighting measures

6. Accidental measures

7. Handling and storage

8. Exposure controls/personal protection

9. Physical and chemical properties

10. Stability and reactivity

11. Toxicological information

12. Ecological information

13. Disposal considerations

14. Transport information

15. Regulatory information

16. Other information

Publications

Martin, K. R., N. M. Robey, S. Ma, L. C. Powers, A. Heyes, P. Schmitt-Kopplin, W. J. Cooper, T. G. Townsend, and M. Gonsior (2021), Characterization of landfill leachate molecular composition using ultrahigh resolution mass spectrometry, *Environ. Sci. Water Res. Technol.* DOI: [10.1039/D1EW00020A](https://doi.org/10.1039/D1EW00020A)

Secor DH, Bailey H, Carroll A, Lyubchich V, O'Brien MHP, Wiernicki CJ (2021) Diurnal vertical movements in black sea bass (*Centropristis striata*): Endogenous, facultative, or something else? *Ecosphere* 12(6): e03616. <https://doi.org/10.1002/ecs2.3616>

Muller-Karger F, Kavanaugh M, Iken K, Montes E, Chavez F, Ruhl H, Miller, Robert, Runge, Jeffrey, Grebmeier, Jackie, Cooper, Lee, Helmuth, Brian, Escobar-Briones, Elva, Hammerschlag, Neil, Estes, Maury, Pearlman, Jay, Hestir, Erin, Duffy, Emmett, Sarri, Kristen J., Hudson, Charlotte, Landrum, Jason, Canonico, Gabrielle, Jewett, Libby, Newton, Jan, Kirkpatrick, Barbara, Anderson, Clarissa, Bates, Amanda, Sousa-Pinto, Isabel, Nakaoka, Masahiro, Soares, Joan, Marine Life 2030: Forecasting Changes to Ocean Biodiversity to Inform Decision-Making: A Critical Role for the Marine Biodiversity Observation Network (MBON). *Marine Technology Society Journal.* 2021;55(3):84-5. doi.: [10.4031/MTSJ.55.3.28](https://doi.org/10.4031/MTSJ.55.3.28)

