CHESAPEAKE BIOLOGICAL LABORATORY | SOLOMONS, MD

ISSUE 41

Lab Lines

JAN 2020

IN THIS ISSUE:

DIRECTOR'S VIEW

Christmas came late this year, but clearly, we had all been very good boys and girls. Funds to support the Chesapeake Analytics Collaborative Building was in the Governor's Capital Budget for FY2021. This building started life as a new library building. However, since the original concept for the building was prepared, our needs have changed radically. Universities are still citadels of knowledge, but no longer is that knowledge in dusty old books and journals (although we do still have a lot of those). Knowledge is increasingly digital, and we increasingly collaborate in interdisciplinary teams. The new Chesapeake Analytics Collaborative Building recognizes these changes. The new building will have very limited traditional stack space, but instead be full of collaborative spaces, and state of the art cyberinfrastructure that will support our students, staff, and faculty into the future. The 2-story new building will be slightly smaller than the new Truitt Laboratory and is currently envisioned to be built on the space next to Truitt to the north. There will be many opportunities moving forward to hear about and have input on the design. I am greatly looking forward to unwrapping this present!

TRAVEL & AWARDS

V. Lyubchich and Srishti Vishwakarma (AL) traveled in December to the SAMSI's workshop on Causal Inference to present their joint work on Network causality: Investigating causal linkages between networks of crop trade, production, and extreme weather.

Lora Harris and Jeremy Testa were invited to present the "ReeFBioDES" at the Fisheries GIT meeting in Williamsburg, Virginia. ReefBioDES is a numerical model that simulates how particles are trapped on oyster reefs and contribute to changes in nitrogen cycling and nitrogen removal that can influence water quality. This model can help managers compute the contribution of oysters to reducing nitrogen pollution in estuaries. The model has been developed with Larry Sanford and leadership from Mindy Forsyth for her M.S., and now Kevin Kahover, a current MEES student.

Lora Harris is traveling to the U.S. Virgin Islands and Puerto Rico for kickoff meetings of the newly formed SEAS Islands Alliance that seeks to create career pathways for U.S. Islanders into the aquatic sciences. This is part of the NSF INCLUDES program that works to increase diversity across STEM disciplines and cultivate inclusive practices to increase recruitment and retention of underrepresented groups into the STEM workforce.

On January 2nd, the Baltimore Sun published an article about stream restoration that cites Solange Filoso and her work on stream restoration. https://www.baltimoresun.com/news/environment/bs-md-stream-restoration-20200102-hqwyeoa4m5bgfhtxybgdalrhby-story.html

New Student: Nick Coleman will be starting this January as a new MS and LMRCSC student working in Dave Secor's laboratory. He will be joining Dave, Hongsheng Bi, and Kate Lankowicz on a project to use acoustic imaging to census Atlantic sturgeon in the Nanticoke River.

New Staff: Ellie Rothermel, who recently defended her MS thesis has joined Dave Secor's lab's FRA staff.

FACILITIES PROJECTS & UPDATES

The repairs to the floating pier are scheduled for late February and the floating portion of the pier will be closed during the reconstruction. Exact dates will be communicated toward the end of January so you can plan accordingly.

Welcome to CBL!! Please join me in welcoming 3 new team members to the Facilities Department.

John Griffin joins us from the private sector as a Maintenance Mechanic and is focused on landscaping and campus grounds.

Morris Fenwick joins us from Historic St. Mary's City as a Maintenance Mechanic focused on campus improvements and backs up the housekeeping team.

Jake Bell joins us from Medstar St. Mary's as a Maintenance Mechanic and is focused on carpentry and sustainable campus improvements.

If you see any of our new team members on campus, please be sure to introduce yourself.

HUMAN RESOURCES INFORMATION

Mandatory Sexual Harassment Awareness training was released this month. The training is an online module. You have 30 days to complete this training with reminders periodically. The training is 2 hours long with a test at the end. This is a required training due to the State of Maryland law, stating all state employees are required to take a 2-hour harassment class at least once every 2 years. Details should have been received via email. For more information please message Lisa Ross at lross@umces.edu.

Tuition Remission forms are no longer! The new remission online system is up and running. This system is to be used for all remission requests for employees and their dependents requesting remission as a benefit. GRA's do not need to complete any forms for regular semester classes – their tuition is automatically covered via their position. Any questions, please contact Stacy for assistance.

Outreach Activities

VISITOR CENTERS & TOURS

The Visitor Center is closed for the winter season. We will reopen for Calvert and St. Mary's County Public Schools spring breaks. Learn more about the Visitor Center at: https://www.umces.edu/cbl/visitor-center.

SOCIAL MEDIA

Did you know that the Chesapeake Biological Laboratory has social media accounts? Follow us on Twitter at @CBLOutreach and on Facebook at www.facebook.com/ChesapeakeBioLab/.

OUTREACH REPORTING - WE NEED YOUR HELP

The CBL Outreach Committee is trying to more fully capture the number and type of outreach activities that CBL faculty, staff, and students support. If you participated in an outreach event that occurred during the 2019 calendar year, was not coordinated by Sarah B., and you volunteered as a representative of CBL, please fill out the following Google Sheet (one event per row):

https://docs.google.com/spreadsheets/d/1HB42e1pQMYL1I5W-FOxcnnn8N-LJkXvq3kE-yULA1AU/edit?usp=sharing

DRY ICE

Dry ice is a solid form of carbon dioxide that is used for cooling. Carbon dioxide is a solid at a temperature of -109° F (-79° C) and it will sublimate from a solid to a gas at any temperature greater than -109° F. It is colorless, nonflammable and comes in flake, pellet and block form. One pound of solid dry ice will produce 250 liters of carbon dioxide gas.

Storage

Be sure to store dry ice in a well-ventilated area. It should not be stored in walk-in refrigerators, environmental chambers or cold rooms.

Do not store dry ice in a sealed container. Pressure can build up in the container and explode at room temperature. It must be stored in a loosely lidded package that allows for some release of CO2 gas. Styrofoam is the best container. Dry ice will sublimate at the rate of five to ten pounds each 24 hours (for pellets or chips), so if you won't be using the dry ice right away, plan for the loss of product.

Disposal

Do not dispose of in a trash can, sink or toilet. It is best to leave container opened in a well-ventilated area.

Handling

When using dry ice, be sure to wear thermally insulated gloves, eye protection, and a lab coat. Use tongs to handle the ice. Never handle with bare hands.

First Aid

If skin comes into contact with dry ice, remove any clothing not frozen to the skin. Do not rub the body part and do not use dry heat to warm the skin - tissue damage could result. Place the affected part in a warm bath.

If it is inhaled, get the victim to fresh air and place in a comfortable breathing position.

If the eyes are affected, flush eyes for 15 minutes and consult an ophthalmologist.

https://www.thoughtco.com/how-to-handle-dry-ice-safely-606403

https://www.safety.rochester.edu/ih/dryicehandle.html

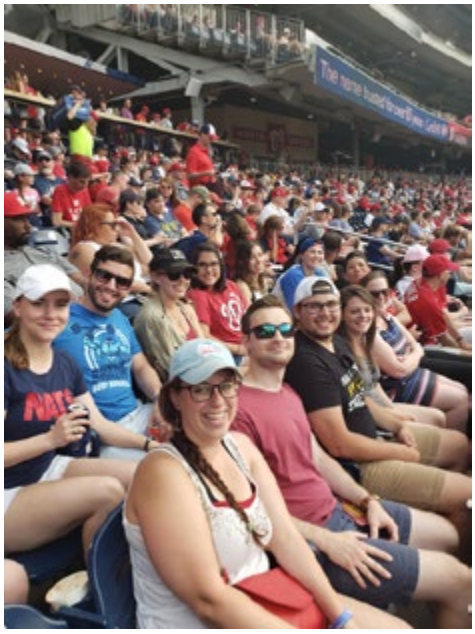
https://www.ehs.washington.edu/system/files/resources/dryice.pdf

https://www.airgas.com/msds/001091.pdf

Development Activity

2019 was a success in the development arena at CBL. Wharton worked with several individual donors and a Maryland family foundation for funding to support students and projects. Gifts include $3,000 to Dr. Ryan Woodland's Belize intern program, $1,000 for a "student networking and social event" (a Nationals baseball game), $1,500 to support Dr. Hali Kilbourne's coral work, thousands to support sea turtle and terrapin research, and new work vests for the R/V Carson (an almost $3,000 gift.) Significantly, this is the first year for CBL to have two individuals who each gave $20,000.

Wharton also works with the University System of Maryland Foundation (database entry and maintenance and prospect research.) She helps faculty seeking charitable foundation support and she supports the Leonardtown Grant staff who were hired to seek large foundation support for CBL intern programs.



Corporate support of CBL also increased this year as Science for Citizens is sponsored by Toyota of Southern Maryland, Team Hyundai and PNC Banks.

Giving Tuesday

Thanks for an individual donor, Giving Tuesday (a global charity giving event the Tuesday after Thanksgiving) was a success at CBL. The day's total was nearly $18,000. Thank you to all who supported the Giving Tuesday effort!

PUBLICATIONS

Kerr, LA, ZT Whitener, SX Cadrin, MR Morse, DH Secor, and W Golet. 2020. Mixed stock origin of Atlantic bluefin tuna in the U.S. rod and reel fishery (Gulf of Maine) and implications for fisheries management. Fisheries Research 224 (2020) 105461

Arai, K, J.E. Graves, and D.H. Secor. 2020. Sub-annual cohort representation among young-of-the-year recruits of the western stock of Atlantic bluefin tuna. Fish. Res. 225 (2020) 105476.

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