

Lab Lines

DIRECTOR'S VIEW

OCTOBER 2020

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Our Science for Citizens series is drawing to a close. I want to take this time to thank our speakers (Dave Secor, Ryan Woodland, Jeremy Testa, and Carys Mitchelmore) and both Sarah Brzezinski and Jeane Wharton for organizing and promoting the series. Pre COVID we would welcome about 80 people every week to BFL 1101. Many were repeat attendees for

- 1 whom I often knew how they took their coffee and what cookies they liked. In this COVID world, we have seen none of our seminar attendees, and I have missed their enthusiasm and hearing their stories. But many of our regulars have continued to attend. What perhaps is more exciting, is that we are drawing in new attendees from throughout the Chesapeake watershed, from Atlanta and Chicago even further afield. Our attendance has averaged about 120 people for each seminar, although many more registered. We have also seen an increase in fund raising - albeit modest. Clearly our seminars have engaged the public and created a quiet buzz about our science.
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The Science for Citizens series has been a part of our [Virtual Science Semester](#) program which Sarah has led. This program tries to replace our open house and outreach programs. We have a series of "behind the scenes" videos that show aspects of our campus that visitors, and even some of us, don't get to see. So for example, you can see Chris Rowe tattoo a terrapin! It also includes interviews with current students and alumni. For those students who have taken part, I thank you. If you want to know, "Whatever happened to...." we may have some answers. Finally the Virtual Science Semester includes some Science at Home intended for middle school students who may be lacking dedicated STEM teaching.

Binge watch Virtual Science Semester - it's the new Tiger King.

IN CASE YOU MISSED IT

Carys Mitchelmore has been invited to serve on the [National Academies of Sciences committee oil in the Sea IV](#). The committee will study the inputs, fates and effects of oil in the marine environment.

Carys Mitchelmore was also a featured speaker in the 2020 Personal Care Products Council Virtual Science Symposium on October 20-21st. She presented an overview on the current state of the science on the exposure to and effects of UV filters on coral reefs, summarized the research publications to date, highlighted data gaps and discussed next steps for research.

Victor Kennedy presented another invited seminar on the history of exploitation of Chesapeake Bay's once abundant resources. In this case it was a [webinar](#) in October for the Hampton History Museum. The title was "Depleting the Immense Protein Factory that was Chesapeake Bay".

Congrats to John Griffin! John Griffin and his wife welcomed baby Coltín to the family October 6, 2020. Momma and baby are doing great!



OVEN SAFETY



1. The first thing you should do is to read the manual to know how to operate the oven.
2. Be aware of what you are doing and follow safety procedures.
3. Do not use an extension cord to connect an oven to a plug.
4. Never use laboratory ovens to prepare food for human consumption.
5. Do not use household ovens in the laboratory. While laboratory ovens have their heating elements separated from the interior of the oven, household ovens do not.
6. Inspect oven prior to use. The oven should be clean and free of spills, residue and debris.
7. Make sure the oven is working properly and the cord and plug are in good working condition. If there are any problems, do not use the oven and label it to warn others from using it.
8. Make sure the oven temperature is correct. Do not use a mercury thermometer to calibrate ovens. Breakage can cause an accidental spill and exposure to mercury.
9. Use the right oven for the task. You need to consider the temperature range that is needed and what is the maximum safe working temperature for the material involved.
10. Be sure to check the materials going into the oven. Do not put plastics, flammables or combustibles in regular laboratory ovens. These can melt or ignite, spreading fire into the lab.
11. Do not use ovens to dry any chemical sample that might pose a toxic hazard unless special precautions have been taken to ensure continuous venting of the atmosphere inside the oven. Volatile substances can become airborne and expose personnel to harmful fumes. Any glassware should be rinsed with distilled water before going into oven to remove any chemical residue.
12. Make sure there is airflow around the samples when packing them in the oven in the oven. Do not pack them tightly to get as many as possible in there.
13. Wear the appropriate personal protective equipment. There is a potential burn hazard from the hot surfaces of the oven and the contents. If steam is released from the oven, be sure to step behind the oven door when opening.

References:

<https://www.labmanager.com/product-focus/how-safe-is-your-lab-oven-2798>

<https://www.labmanager.com/lab-health-and-safety/laboratory-oven-hazards-6724>

<https://www.bu.edu/researchsupport/forms-policies/lab-equipment-dryerovenwasher-safety-guidelines/>

Outreach

Visitor Center

Out of an abundance of concern related to the COVID-19 pandemic, the Chesapeake Biological Laboratory Visitor Center will remain closed throughout the 2020 calendar year.



Fall 2020 Science for Citizens Schedule

Join the Chesapeake Biological Laboratory for the final Science for Citizens seminar of the fall season. Pre-Registration is now required, and can be completed at: <http://www.usmf.org/scienceforcitizens/>

- **OCTOBER 27** Dr. Helen Bailey. *Reducing Plastic Waste and Pollution*

Missed a seminar? No problem! Catch-up with what you missed using the Science for Citizens seminar video archive: <https://www.umces.edu/cbl/science-citizens-videos>

Virtual Science Semester

During the COVID-19 pandemic, the Chesapeake Biological Laboratory is not able to host in-person outreach events. This year, we are challenging ourselves to host a "Virtual Science Semester" instead! During the fall 2020 semester, view behind-the-scenes videos about CBL's library archives and terrapin research, or explore Science at Home with an ocean acidification experiment led by Christina Goethel and the Wave of Plastic curriculum unit! Interviews with young alumni and current students are in production and will be added to the website soon!

Check out the Virtual Science Semester webpages at <https://www.umces.edu/cbl/ScienceSemester>

Creativity Challenges

The Chesapeake Biological Laboratory continues to host biweekly Creativity Challenges to help maintain a sense of community and to combat stress during the COVID-19 pandemic. Faculty, staff, and students can complete these family-friendly activities with their children, family, or friends in their households. Challenges are opened for all-UMCES participation.

Please congratulate recent Creativity Challenge winners -



Julie Trommater
and Samantha Mais
Repurpose Challenge
Entry

&

Suzi Spitzer's Forage Art
Challenge Entry



Facilities Updates



During this time when staff on campus is minimal, the Facilities and IT teams have been able to tackle some projects that have been "in the queue." These include:

1. Replacement of the outdated fluorescent lighting in the Nice Hall 2nd floor dorms with LED lighting. This retrofit project is eligible for a 40% rebate from SMECO. Additionally, all of the carpet was removed from Nice Hall and replaced with recycled laminate & wood flooring. These two flooring surfaces help to improve the air quality in the building by reducing allergens typically trapped in carpet.
2. Several of our campus building HVAC systems have been upgraded to include UV light air purification systems. The UV filtration system removes contaminants, mold and virus particles from the air as it passes through the ductwork -- not only is this beneficial during COVID, but is an outstanding enhancement in reducing the flu, common cold, allergies and other virus particulates from circulating throughout the buildings. In buildings where UV light filtration was not an option, we have increased to a higher MERV rating filter and have increased the filter change rate. This UV filtration costs were submitted to and reimbursed 100% by the CARES Act.
3. The floating pier is scheduled to begin its return to campus the week of October 19. Major repairs were made to the structure when it was off site and the finger piers were removed. New pilings will be installed to further stabilize the main section of the pier. We're hopeful that the new set-up of the floating pier will not only be useful for scientists but also provide several years of reliable stability.
4. The IT department has been busy making several upgrades to our campus infrastructure. New routers and firewalls have been put in place and we now have a redundant system to provide us with uninterrupted service if we encounter any equipment failures. Additionally, all WiFi hubs on campus have been updated with the latest firmware.

Development Activity: Jeane Wharton

Many charities and non-profit organizations have been hard-hit as donors face job losses, business closures and uncertainty. We are in an evolving situation with varied impacts. In a recent survey by Fidelity Charitable, 54 percent of donors plan to maintain their giving levels. Younger donors surveyed said they'd give more, and 43 percent of all donors surveyed said they'd continue to donate to the organizations to which they'd donated previously. Donations to CBL in the last quarter of 2020 are a little ahead of this period of 2018 and 2019.

Since March, Wharton and other UMCES development staff meet frequently by phone and Zoom with Vice President for Strategic Initiatives Stuart Clarke. Development staff has had extensive online training with the Ellucian Advance database, the large database hosted by the University System of Maryland Foundation.

She continues to stay in contact with CBL donors and prospective donors through emails, texts and phone calls. On the phone or in email, donors have complimented the Science for Citizens presentations. They said they missed our spring series and have responded positively to the series being on Zoom/YouTube now. The average attendance has been higher than the in-person event, with attendees from all over the US. A few donations have come in following the presentations by CBL faculty. Data collected from attendees will be utilized in CBL's Giving Tuesday fundraising efforts. Last year for Giving Tuesday more than \$40,000 was raised for CBL students and research projects.

Wharton was nominated by UMCES's Stuart Clarke and the University System of Maryland Foundation's Office of Advancement's Associate VP/Vice Chancellor/Chief of Staff Marianne Horrigan to participate in an intensive course in "Creating Major Gifts." She was accepted into the program, and it continues each weekday through October. A major gift is traditionally any donation over \$20,000. In 2019, Wharton worked with two donors who made major gifts to CBL.

Publications

Bangley, C.W., T.H. Curtis, D.H. Secor, M.B. Ogburn. 2020. Search for important habitat for juvenile dusky sharks (*Carcharhinus obscurus*) in the Northwest Atlantic Ocean using acoustic telemetry and spatial modeling. *Marine and Coastal Fisheries* 12:348-363.

UPCOMING EVENTS

Invitation to UMCES Weekly Mindfulness

Join Denise Yost and your colleagues as we continue to find small ways to practice mindfulness and find a bit more ease during our continued quarantine. Practice continues in the usual friendly format, no experience necessary. Practice in real time and engage with others in short discussion questions as you'd like.

Thursdays @ 2:00pm, Staff/FRAs/Faculty/Graduate students

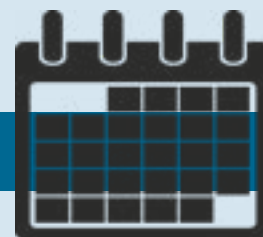
Join Zoom Meeting (Updated)

<https://zoom.us/j/96939404575?pwd=bjU2YzZhR0Z5TGfYSlFyT2lxQzltQT09>

Dial +13017158592

Meeting ID: 969 3940 4575

Password: 277857



DISTINGUISHED SCHOLAR SEMINARS 2020

Wednesday's at 3:30 PM

Join Zoom Meeting: <https://zoom.us/j/96105792609?pwd=QmhwUGpMQ3ZPWGFoT2MzRzFacIM5QT09>

Dial +13017158592

Meeting ID: 961 0579 2609

Passcode: 1925

CBL's Distinguished Scholars Seminar is open to the public. However, interested participants should be aware that these highly technical seminars are intended for an academic audience. Members of the public who would like to learn about featured research efforts are encouraged to participate in [CBL's public Science for Citizens Seminar Series](#).

- **OCTOBER 28** Dr. Danielle Haulsee, Stanford University. *Dynamic Ocean Management: Using Technology to Capture the Complexities of Spatial Ecology for Marine Conservation and Management*
- **NOVEMBER 4** Dr. Scott Lynn, EPA. *EPA's high throughput toxicity and endocrine disruptor screening programs*

