

# UNCW Coastal & Marine April 2018 Science News

*A note from the executive director, Dr. Aswani Volety:*

*Dear Colleagues:*

*Given the recent memo from Chancellor and Provost regarding CMS organizational structure, there has been a great deal of speculation about what changes I may make. I want to alleviate most of your concerns.*

*I am not planning to make any immediate organizational changes. I intend to work with the directors overseeing various units to ensure communication and resource sharing and to create synergies. By placing all of the centers (CMS, Finfish Aquaculture Facility, Shellfish Research Hatchery and academic portions of MARBIONC) under the direction of a CMS Executive Director, we will streamline existing processes and be better able to coordinate resources and efforts across programs. This will enhance the university's marine science programs, raise UNCW's state and national profile, and ensure UNCW's position as a leader in marine science education and research. Your dedication and commitment to our students' success and meeting regional needs is one of the many things that makes UNCW and the broader marine science enterprise so special. In the past three years, we have made substantial investments - both physical and personnel at the CMS as well as in various academic departments (e.g., Cluster hires, facility upgrades, website upgrades, and virtual tours) and I will continue to invest in the coastal and marine sciences enterprise.*

*We will begin to implement the new structure on May 1. The CMS Director will continue to oversee day-to-day operations at CMS during this interim period. In the coming weeks, I will meet with all the directors, and members of the Coastal and Marine Council to discuss the transition in further detail, clarify workflow and address any concerns.*

*I am looking forward to working with all of you to set priorities for the coming year and make sure we accomplish these goals.*

*Best regards,  
Aswani Volety*

## Outreach, Recognitions, & Other Notables

- ◆ Larry Cahoon (Biology and Marine Biology) was awarded the Catalyst award by the North Carolina League of Conservation Voters for his work on GenX and other environmental issues in our region.
- ◆ UNCW sophomores and Honors students Emily Clancey '20; Kayleigh Herrmann '20; Rebekah James '20 and Savannah Miller '20 are official members of the 2018 class of [UNCW Hollings Scholars](#).
  - ◆ Info on the 2-year program [here](#).
- ◆ Former UNCW student, Hollings Scholar (2015), and 2016 Portz Scholar [Audrey Taylor '17](#) received a [2018 National Science Foundation Graduate Research Fellowship](#). She is currently working on her Ph.D. in earth sciences at the University of Notre Dame.
- ◆ Jamie Rotenberg's (Environmental Sciences) work on Harpie Eagles was featured on [WHQR](#).
- ◆ Earth and Ocean Sciences Student Awards:
  - ◆ Marie Bartlett, Student Research Grant, Society of Sedimentary Geology
  - ◆ James Arnuk, Student Research Grant, Geologic Society of America; Paleontology Society Ellis Yochelson Award
  - ◆ Jess Magolan, Student Research Grant, Geologic Society of America; Master Research Fellows Award, American Association of Geographers Applied Geography Specialty Group
  - ◆ Sarah Chahin, Master Research Fellows Award, American Association of Geographers Applied Geography Specialty Group
  - ◆ Olivia Koster, Student Research Grant, Geologic Society of America
  - ◆ Amelia Perry, Student Research Grant, Geologic Society of America
  - ◆ Derek Detweiler, MS Marine Science, UNCW Graduate Teaching Award
  - ◆ Audrey Taylor, UNCW (2016) alumni of the CMS Isotope Ratio Mass Spectrometry, received a NSF Graduate Research Fellowship for her PhD (Earth Sciences) research at University of Notre Dame.
- ◆ Steve Skrabal (Chemistry and Biochemistry), Robert Kieber (CHM), Ralph Mead (CHM), Andrea Bourdelais (MARBIONC), Brooks Avery (CHM), Aswani Volety (CAS), and Joan Willey (CHM) were featured for their GenX work (also featured Ron Vetter) by [StarNews](#), [WECT](#), and [WWAY](#).
- ◆ State lawmakers heard from UNCW chemists and a top executive of the Wilmington area's main water utility as they try to figure out how the state should respond to rising concern about the prevalence of untested chemicals in drinking water. [WRAL article](#).

## Outreach, Recognitions, & Other Notables

- ◆ Mike Mallin (CMS) was interviewed by Hunter Ingraham, Wilmington Star-News, on the water quality of Greenfield Lake.
- ◆ Patricia Kelley (EOS) attended the SE Geological Society of America meeting April 11-13, where she staffed the exhibit booth for the Association for Women Geoscientists and presented a talk on “Lack of taphonomic bias in the record of drilling predation for Pleistocene bivalves from North Carolina and the gastropod *Crepidula* from beach assemblages along the U.S. east coast” coauthored with former UNCW students Kim Cooke, Bridget Kelly, and Christy Visaggi. She will be attending the Association for Women Geoscientists Board of Directors meeting in Westminster, CO, April 27-29.
- ◆ Jessica Winkle (Public and International Affairs) had an op-ed published in the [News & Observer](#): “The looming trade war exposes a dependence on industrial farming.”
- ◆ MARBIONC was featured in [Port City Daily](#).
- ◆ Martin Posey was one of 4 UNCW faculty inducted into the [Order of Isaac Bear](#).

## Presentations

- ◆ Roger Shew (EOS) and Colleen Reilly (English Dept.) presented at the National Environmental Justice Conference in Washington, D.C. (4/25 – 4/27). Talk entitled “Collaborations of UNC Wilmington with the Town of Navassa: EPA CUPP Partnership Results.”
- ◆ Roger Shew (EOS) gave a presentation and headed a field trip to the Green Swamp Preserve – Brunswick County, NC for the Southport NatureFest.
- ◆ Mallin, M.A. 2018. Non-traditional benefits of controlling phosphorus loading to lakes, reservoirs and streams. Southeastern Lake Management Conference, Asheville, N.C. (CMS)
- ◆ Iraola, N.D., P. Zamora and M.A. Mallin. 2018. Using radon-222 to assess groundwater contributions to eutrophic Greenfield Lake, North Carolina. Southeastern Lake Management Conference, Asheville, N.C. (EOS and CMS)
- ◆ Hao, H. & Hill, J. (2018). Sustainable or not: Actions and barriers. American Association of Geographers Annual Conference. (EVS)
- ◆ Martin Posey and Troy Alphin, Planet Oceans: The Blue Crab: Beautiful Swimmer and Coastal Wolf: North Carolina’s most valuable fishery. (CMS and BMB)

## Presentations

- ◆ Jessica Weinkle: Normalization of US hurricane damage 1900-2017. “American Meteorological Society 33rd Conference on Hurricanes and Tropical Meteorology.” Conference Paper. Ponte Vedra, FL. (several co-authors) Apr. 16, 2018 (PIA)
- ◆ Jessica Weinkle: Science and Politics of Insurance Risk Characterization. Conference Paper. “Predicting the Unexpected, Models and Simulations 8.” Conference Paper. University of South Carolina, Columbia. Mar. 2018 (PIA)
- ◆ Jessica Weinkle: Negotiating the Residual: Shifting enactments of 'actuarial fairness' in Florida's public hurricane insurer. “Performativity and governance of actuarial models.” Fondation Maison des sciences de l'homme, Paris, France. (co-authored) Feb. 13, 2018 (PIA)

## Publications & Grants

- ◆ Joanne N. Halls (EOS): NC Sea Grant Community Collaborative: Assessment of flood risk and simulations of wetland change in Pender County, NC. Joanne Halls (Lead-PI) and Wes Macleod (co-PI) \$24,777.
- ◆ Eulie, D. (2018). Environmental monitoring for Brunswick Town/Fort Anderson State Historic Site, \$21,226 (EVS)
- ◆ Eulie, D. (2018). Pine Knoll Shores watershed restoration plan, \$4,109. (EVS)
- ◆ Devon O. Eulie, D. O., Corbett, D. R., Walsh, J. P. (2018). Shoreline erosion and decadal sediment accumulation in the Tar-Pamlico estuary, North Carolina, USA: A source-to-sink analysis, *Estuarine, Coastal and Shelf Science*, (202), 246-258, (EVS)
- ◆ Elizabeth A. Flaherty, E. A, Urbanek, R. E., Wood, D. M., Day, C. C., D'Acunto, L. E., Quinn, V. S., & Zollner, P. A. (2018). A framework for mentoring students attending their first professional conference. *Nat. Sci. Educ.* 47:170022. (EOS)
- ◆ Dumas, C. (2018). An assessment of CIOERT's economic benefits and impacts, 2009-2018. \$64,252 (funded). (EVS)
- ◆ Delsuc F, Philippe H, Tsagkogeorga G, Simion P, Tilak M-K, Turon X, López-Legentil S, Piette J, Lemaire P, Douzery EJP (2018) A phylogenomic framework and timescale for comparative studies of tunicates. *BMC Biology* 16:39. (BMB)
- ◆ Grooms, B. P., & Urbanek, R. E. (2017). Local scale comparisons of avian and woody vegetation communities within four Arkansas State Parks. *Journal of the Arkansas Academy of Science*, 71 (24). (EVS)

## Publications & Grants

- ◆ Erdsack, N. McCully Phillips, S.R., Rommel, S.A., Pabst, D.A., McLellan, W.A., and J.E. Reynolds. 2018. Heat flux in manatees: An individual matter and a novel approach to assess and monitor the thermal state of Florida manatees (*Trichechus manatus latirostris*). *Journal of Comparative Physiology B*. <https://doi.org/10.1007/s00360-018-1152-7> (BMB)
- ◆ Keenan-Bateman, T.F, McLellan W.A., Costidis, A.M., Harms, C.A., Gay, D.M., Rotstein, D.S., Rommel, S.A., Potter, C.W., and D. Ann Pabst. 2018. Pattern of habitat use of the giant parasitic nematode, *Crassicauda magna*, within its host, the pygmy sperm whale (*Kogia breviceps*). *Diseases of Aquatic Organisms*. 127:163–175. <https://doi.org/10.3354/dao03205> (BMB).
- ◆ McLellan, W.A., McAlarney, R.J., Cumming, E.W., Read, A.J., Paxton, C.G.M., Bell, J.T., and D.A. Pabst. 2018. Distribution and Abundance of Beaked Whales (Family Ziphiidae) Off Cape Hatteras, North Carolina, USA. *Marine Mammal Science*. DOI: 10.1111/mms.12500 (BMB)
- ◆ Hodge, L.E.W., Baumann-Pickering, S., Bell, J.T., Cummings, E.W., Foley, H., Hildebrand, J.A., McAlarney, R., McLellan, W.A., Pabst, D.A., Swaim, Z., Waples, D.M., and A.J. Read. 2018. Heard but not seen: Occurrence of *Kogia* spp. along the western North Atlantic shelf break. *Marine Mammal Science*. DOI: 10.1111/mms.12498 (BMB)
- ◆ Yirka, L. M., Collazo, J. A., O’Shea, B. J., Gerwin, J. A., Rotenberg, J. A., & Cobb, D. T. (2018). Demographic rates of two southeastern populations of Painted Bunting, 2007–2015. *The Condor*, 120(2), 319–329. (EVS)
- ◆ Li, J., S. Jian, J.P. de Koff, C.S. Lane, G. Wang, M.A. Mayes, and D. Hui. 2018. Differential effects of warming and N fertilization on soil respiration and microbial dynamics in switchgrass croplands. *Global Change Biology-Bioenergy*, doi: 10.1111/gcbb.12515. (EOS)
- ◆ Kemp, A. Hawkes, and R. O’Donnell, 2018. Stable carbon isotopes in salt-marsh sediment as proxies for Holocene sea-level change: a comparison of Europe and North America, *Geophysical Research, Abstracts Vol. 20*, EGU2018-11037 (EOS)
- ◆ Richards, J.L., P.W. Gabrielson, J.R. Hughey & D.W. Freshwater. 2018. A re-evaluation of subtidal *Lithophyllum* species (Corallinales, Rhodophyta) from North Carolina, USA, and the proposal of *L. searlesii* sp. nov. *Phycologia* 57: 318-330. (CMS)
  - ◇ Nearly all the specimens for this project were collected with the assistance of CMS Marine Operations.

## Publications & Grants

- ◆ Researchers at the University of North Carolina Wilmington gave the NC House of Representatives their report on GenX, which reveals several new poly-fluoroalkyl chemical compounds were identified at the Sweeney Water Treatment Facility. [WWAY article](#).

## CMS & Partners

- ◆ Upcoming Events:
  - ◇ CREST Summer Social #1 - Tuesday, June 19th from 12:30pm-1:30pm in the CMS lobby. Catered lunch.
  - ◇ CREST Summer Social #2 - Thursday, July 26th from 12:30pm-1:30pm in the CMS lobby. Catered lunch.
  - ◇ We plan to do the food drive again for the NC Food Bank!
  - ◇ CMS Fall Open House - September 22nd.
- ◆ The 2nd floor tritium facility is in the process of being decommissioned. Student assistants will be putting clean materials out for others to take as they need – stuff like glassware, etc. Only certified clean stuff will be put out in public spaces.
- ◆ Notes from MarineQuest:
  - ◇ MarineQuest is excited to announce that we will be hosting a new AmeriCorps member at the Center for Marine Sciences beginning in September, 2018. The ten-month term of service position is currently open to all applicants, and can be found on our Facebook, HiringThing, Indeed, and several other circulated listservs.
  - ◇ The AmeriCorps Coastal Citizen Science Ambassador is going to be a dynamic and challenging position, and it is our goal to provide the member with connections and skills that will contribute to continued success in a career as a coastal advocate after his/her term of service is complete. Our AmeriCorps member will be responsible for organizing outreach events, volunteer training, workshops, and developing a coastal monitoring citizen science project. MarineQuest aims to expand our mission beyond the classroom and enhance our involvement and presence within the community.
- ◆ CMS welcomes Mr. Jimmy White to CMS! He is a new aquaculture systems technician assistant and will be working closely with the seawater team. Drop in to say hi if you pass by. His office is beside Jay Styron's.