

News Items – May 2016

The following news items have been forwarded to share for May. Although shortened in some cases to fit the overview format of this communication, these are being provided essentially as received. Thank you for your willingness to share the great work being done over the past month in Marine and Coastal Studies at UNCW!

Outreach, Service, and Recognitions

- Mike Mallin (CMS) participated on a radio panel discussing the environmental impacts of CAFOs in North Carolina, on WHQR's Coastline show May 4.
- The Star News featured Drs. Pawlik and Pabst (Biology and Marine Biology) and the importance of grant funding to the region:
<http://www.starnewsonline.com/article/20160520/NEWS/160529977/>
- Ongoing work by Jim Herstine (HAHS), Chris Dumas (Economics), Alexia Franzidis (HAHS), Lisa Sprod (HAHS) and Brandi Crowe (HAHS) was highlighted in recent news features by WECT and the Star News:
[UNCW seeks input on coastal access](#)
[State coastal agency to survey beachgoers about coastal access](#)
They are in the second year of a 3 year study which will conclude with beach field surveys at selected public beach access sites throughout the NC coastal area between Memorial Day weekend and Labor Day weekend of this year.
- Rob Whitehead and Alina Szmant (CMS; Chemistry and Biochemistry; Biology and Marine Biology) taught the first "CISME" training workshop at the Rosenstiel School of Atmospheric Sciences of the University of Miami. CISME is a new diver-portable, underwater respirometer that Whitehead and Szmant have developed with NOAA funding, and is designed to make quick, non-destructive measures of metabolism of corals and other benthic substrate types such as algal turfs, coralline algae, sediments, etc. This is another step towards the commercialization of this new invention. They previously exhibited CISME at the 2016 Ocean Sciences meeting and presented the first data generated by CISME at the Ocean Sciences meeting in February and at the 41st Eastern Fish Health Workshop this past April.
- Troy Alphin (Biology and Marine Biology; CMS) was elected for a 3 year term to the Board of Directors for the Cape Fear River Assembly. The Cape Fear River Assembly brings together a diverse group of stakeholders including, local and state government, industry, academics, and conservation organization groups to discuss issues

effecting the Cape Fear and to recommend actions that are in the best interest of the river and the communities that live in that basin.

- Steve Eitelman (CMS) and two others (Jeremy Morgan and Nicole Palmer of Chemistry and Biochemistry) at UNCW have been cited by the Lilly Open Innovation Drug Discovery (OIDD) Program for OUTSTANDING CONTINUOUS CONTRIBUTION TO COMPOUND SCREENING.

<https://openinnovation.lilly.com/dd/oidd-in-action/continuous-contribution.html>

- Troy Alphin and the Benthic Ecology lab (Biology and Marine Biology; CMS) were featured in the State Port Pilot. The UNCW Benthic Ecology Lab conducted a community based oyster restoration workshop with the Town of St. James in May. There were more than 20 community leaders and residents present. Martin Posey was interviewed by a Washington Post reporter for an online article on the blue crab fishery.
- The following students in Biology and Marine Biology were recognized for outstanding achievements:
 - MBY Achievement Award: David Billups
 - BIO Achievement Award: Chelsea Crocker
 - Service Award: Eleanor Fallaize
 - Honors Poster Award: Bethany Williams- “The effects of acclimation temperature on anaerobic metabolism in exercising yellow bellied sliders”
 - Non-Honors Poster Award: Christine Kharkevitch- “Genetic analysis reveals two distinct lineages within the introduced colonial ascidian *Distaplia bermudensis* in North Carolina”

Publications, Presentations, and Grants

- Md. Shah Alam, W.O. Watanabe, A.D. Anderson, P. M. Carroll, P. Seaton, T. Wedegaertner and M. Dowd [UNCW-CMS, Cotton Incorporated (Cary, NC), and USDA-ARS (New Orleans, LA)]. Evaluation of glandless, solvent extracted and genetically modified low-gossypol cottonseed flour as alternative protein sources in the diet of black sea bass, *Centropristis striata* and southern flounder, *Paralichthys lethostigma*. Paper presented at the International Symposium on Fish Nutrition and Feeding
- Andrea D. Hawkes^a, (Earth and Ocean Science, EOS), Andrew C. Kemp^b, Jeffrey P. Donnelly^c, Benjamin P. Horton^{d, e}, W. Richard Peltier^f, Niamh Cahill^g, David F. Hill^h,

Erica Ashe^{i,j}, Clark R. Alexander^k. 2016. Relative sea-level change in northeastern Florida (USA) during the last ~8.0 ka. Quaternary Science Reviews, Volume 142, Pages 90–101

<http://www.sciencedirect.com/science/article/pii/S0277379116301275>

- M. Scott Baker Jr. (NC SeaGrant / CMS), Marc Benjamin Sciante (former Marine Science grad student) & Joanne N. Halls (EOS). 2016. Potential for a Simple GPS-Based Binary Logit Model to Predict Fishing Effort in a Vertical Hook-and-Line Reef Fish Fishery. *Marine and Coastal Fisheries*, 8:1, 118-131, <http://dx.doi.org/10.1080/19425120.2015.1135221>
- Ray Danner et al (Biology and Marine Biology): Derryberry EP*, Danner RM*, Danner JE*, Derryberry GE, Phillips JN, Lipshutz SE, Gentry K. (2016) Patterns of song across natural and anthropogenic soundscapes suggest that White-Crowned Sparrows minimize acoustic masking and maximize signal content. *PLoS ONE* 11(4): e0154456. doi:10.1371/journal.pone.0154456 (*equal authorship)

In May and June, Ray Danner is conducting experiments to study the effects of thermal stress on behavioral performance in birds.

- Troy Alphin, Fred Scharf and Martin Posey (Biology and Marine Biology, CMS) received funding for a new Fellowship program titled “A partnership for sustained fisheries management: development of a research fellowship program between NCDMF and UNCW”
- Wade Watanabe, Md. Shah Alam and Patrick Carroll (CMS) are initiating their North Carolina Sea Grant funded project titled “Overcoming Technical Barriers to Cost-Effective Production of Marine Finfish Fingerlings and Expanded Growout Production: Optimizing Nursery Stocking, Feeding and Harvesting Strategies.” More information can be found at this link: [here](#).

CMS and Partners:

- Hosted meeting of the Cape Fear River Partnership; which included presentations by Larry Cahoon (Biology and Marine Biology), Mike Mallin (Center for Marine Science), Pete Schuhmann (Economics); Madi Polera as well as former students Keith Walls (Marine Science) and Dawn Carrol York (Biology and Marine Biology).
- Hosted meeting of the Lower Cape Fear River Program.

- We are officially on Facebook! Go like our page and share it with everyone!
<https://www.facebook.com/UNCWCMS/>
- All are welcome to a CREST campus social, 11:30 on Friday, 24 June. We will be having a “best dip” competition. Contact Brittani for details.
- OUR has established new coastal and marine science web portals under the Academics and Research pages of the UNCW website. As discussed at our April CMS faculty meeting, these are designed to provide easier access to the various coastal and marine programs for visitors to our website. They also show the breadth of programs involved with marine and coastal work. Please let Martin Posey know if you have any corrections, suggestions for updates, or suggested changes to this initial effort. Thanks to OUR for working on these portals!
- Shark research nonprofit OCEARCH will partner with the N.C. Aquarium at Fort Fisher and the University of North Carolina Wilmington in a June expedition in the Cape Fear region
OCEARCH to partner with NC Aquarium, UNCW on shark expedition.
- Ongoing work being conducted by Physical Plant at CMS (provided by David Olsen):
Fume hood monitors in CMS labs – work should be completed next week.
Design of wet lab – funded only for design.
Install protective handrail at reflection pond – completed last week. (requested by NC Department of Insurance)
Environmental chambers – work underway, slated to be completed by fiscal year end.
- We have had several people utilize the new 3-D printer to develop instructional and demonstration models. Contact Randy Turner if you would like to utilize this resource.



Karenia brevis

- If you have research space or materials at CMS, please remember to send Brittani a hurricane preparedness sheet outlining needed actions and contacts in case of emergency.

- NC NERR Spring 2016 newsletter:
http://myemail.constantcontact.com/Spring-2016-Newsletter.html?soid=1113800373457&aid=T_0lfkEAYOw

- News from MBCOI:
 - The Marine Bio-Technologies Center of Innovation (MBCOI) www.mbcoid.net was part of a recently awarded NSF-AIR proposal titled “**Rapid, quantitative, molecular diagnostics for virulent *vibrio* pathogens in water and shellfish.**” MBCOI will facilitate the effective transfer and interpretation of the motif fingerprinting data for development of reagents or kits to assess water-quality and shellfish food safety.
 - Learn about MBCOI’s achievements at the next **Stewards of the Future** meeting, at the Duke Marine Lab, Beaufort, NC on 13 June 2016 at 5:30 – 7:00pm.
 - Mark your calendars - in case you missed the recent **ROI Symposium**, UNC-TV will broadcast the program on its new North Carolina Channel on **Thursday June 2nd at 8pm**. The North Carolina Channel can be seen on Time Warner Cable channel 1276 and on Wilmington 39.4/ 29.4.
 - MBCOI is a member of the Wilmington and Carolina Coast [InnovateNC](#) program (InnovateSENC). InnovateNC is a two-year cross-city learning collaborative for five North Carolina communities as they look to accelerate the growth of their innovation economies. In April, InnovateSENC hosted representatives from five InnovateNC regions at several venues including MARBIONC, tekMountain, Ironclad Brewery, and Cape Fear and Brunswick Community Colleges.