

## News Items – April 2016

The following news items have been forwarded to share for April. 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!

### **Recognition, Publication, and Grants:**

- 9 of 125 Hollings Scholarships nationwide were received by UNCW students:
  - Sarah Brewster (Marine Biology)
  - Colleen Brown (Marine Biology / Oceanography)
  - Maya Drzewicki (Marine Biology)
  - Jamie Knaub (Marine Biology)
  - Christina Makris (Chemistry)
  - Maxwell Mattejat (Chemistry)
  - Michael Miller (Chemistry)
  - Mallory Munden (Marine Biology)
  - Natalie Panasiak (Marine Biology)
- Community outreach events: Biology and Marine Biology; Center for Marine Science; Chemistry and Biochemistry; Earth and Ocean Sciences; Environmental Studies; Marine Quest / Youth Programs; Physics and Physical Oceanography; and a number of other programs had great representation at both the STEM Expo and the CAS open house this month. Special thanks to Sue Kezios and Marine Quest for their part in putting on the STEM Expo event. Both were well attended and helped to get the word out to our area community regarding the work we are doing at UNCW.
- Jay Styron (CMS) was involved in several meetings related to oyster aquaculture in North Carolina, including conversations with legislative representatives, NC Department of Environmental Quality administrators, and Brunswick County representatives. He also sat on a panel along with DMF and NC Coastal Federation representatives as part of the NC Coastal Local Governments Annual Meeting to discuss oyster restoration and mariculture and what it could mean for the coast.
- Jay Styron and the Shellfish Research Hatchery (Ami Wilbur and Amy Finelli) were highlighted in the Coastal Review Online: “In Praise of the Humble Oyster”

- As a member of the NCDMF Crustacean and Shellfish Advisory Committee, Martin Posey participated in a discussion on new rules for managing the NC blue crab fishery, the state's largest commercial fishery with a 2015 dockside value of over \$30 million.
- Fred Scharf, Tom Lankford, and Amanda Williard (Biology and Marine Biology) responded to requests for information on sharks from the Town of Caswell Beach.
- Joe Pawlik (Biology and Marine Biology) provided a presentation for undergraduates on "How to get into Graduate School in the Sciences: Preparations start Freshman year!". This was a special seminar for students who want to go to graduate school in the Sciences.
- As part of the Planet Oceans series, Kara Lavender Law spent two days at UNCW discussing the issues related to plastics in the ocean. These included evening presentations open to the general public as well as class / student centered discussions during the day.

#### Publications:

- Susanne Brander, Wilson White (Biology and Marine Biology): Susanne M. Brander, Ken M. Jeffries, Bryan J. Cole, Bethany M. DeCourten, J. Wilson White, Simone Hasenbein, Nann A. Fangué, Richard E. Connon. 2016. Transcriptomic changes underlie altered egg protein production and reduced fecundity in an estuarine model fish exposed to bifenthrin. *Aquatic Toxicology*, (174) 247-260.
- Patrick Erwin and student Brooke Wiegel (Biology and Marine Biology): Brooke L. Weigel, Patrick M. Erwin. 2016. Intraspecific Variation in Microbial Symbiont Communities of the Sun Sponge, *Hymeniacidon heliophila*, from Intertidal and Subtidal Habitats. *Applied and Environmental Microbiology* (82) 650- 658

#### CMS News:

- The Undersea Vehicles Program just returned from its first mission of the year in Puerto Rico. During the mission the ROV spent over 62 hours on the bottom and took more than 3400 digital stills during the 25 day trip. Please see photo and video documentation from the trip at: <https://www.facebook.com/UNCWUnderseaVehiclesProgram>
- Thanks to representatives from the NC Coastal Reserve / National Estuarine Research Reserve and NC SeaGrant who each made separate visits to UNCW during April to discuss their programs and opportunities for interactions. In both case we had a great discussion about possibilities for support and collaborations. If you have questions

regarding NCNERR see Bryon, Heather, Hope or Marie at CMS NERR lab. If you have questions regarding NC SeaGrant, contact John Fear (Deputy Director) in their Raleigh office; or Spencer or Scott at the SeaGrant office in CMS.

- Temporary desk space for college road folks and short term visiting researchers is now available at CMS. Contact Brittani Blizzard for information / reservations.
- We have had recent discussions regarding getting modest amounts of Gulf stream water for culture or other uses. If you anticipate this need, please contact Jay Styron within the next week. Relatedly, the ship schedule is available online through the CMS website.
- We received news that CMS received no citations for either the spring IUCUC inspection or the spring state hazardous waste inspection. Thanks to everyone for their help with these compliance items!
- Link to Spring 2016 N.C. Coastal Reserve & National Estuarine Research Reserve newsletter, “Tidal Flats”:  
<http://campaign.r20.constantcontact.com/render?m=1113800373457&ca=8d416c45-20e3-45c3-9c91-88fc7288f080>
- We had a very successful graduate student poster session with students from MCOP, Marine Science, Marine Biology, Chemistry, EOS, EVS, as well as several other programs:

**C. Scott Adams**; Foraminiferal Estimate of Coseismic Subsidence for Coastal Washington from the AD 1700 Megathrust Earthquake

**Matthew Anttila**; Isolation of Novel Secondary Metabolites from the Freshwater Cyanobacterium *Lyngbya wollei*

**John D. Barker II**; Water Quality and the North Carolina Blue Crab Fishery Connection: A Policy Analysis on Nutrient Sensitive Water Strategies and the Agricultural Rule

**Jonathan Bingham**; Coastal Storm Damage Reduction Projects & Federal Benefit-Cost Analyses

**Paulina M. Capar**; Developing Late Holocene High-Resolution Relative Sea-Level Records in Southern North Carolina

**Bryan M. Carter**; Vertical Distribution of Mesopelagic Invertebrates on the Hatteras Middle Slope (“The Point”) Off Cape Hatteras, NC

**Megan Cheney**; Biological and Chemical Investigations of *Planktothrix agardhii*

**Amanda M. Cole**; Relationships Between Water Quality Variables and Benthic Macrophyte Communities in Florida Bay

**Derek J. Detweiler**; An *In Situ* Study of Seasonal Dissolved Organic Carbon and

- Nutrient Fluxes from a *Spartina alterniflora* Salt Marsh in NC, USA
- Stephen Fabian**; Investigating the Morphology and Hydrodynamics of the Former Cabbage Inlet Masonboro Island, NC
- Alexandra Goldstein**; Realizing the Benefits of Collaborative Watershed Management: Recommendations for the Albemarle-Pamlico National Estuary Partnership
- Cessely Gordon**; The Development and Evaluation of Protocols for Fluorescently Labeling Microplastics in Feeding Experiments with Larval Fish
- Nick Iraola**; Determining Nutrient Input to Greenfield Lake, North Carolina
- Sarah Kwon**; Spatial and Temporal Analysis of Terrestrially-Derived n-Alkane Distributions and Isotopic Compositions Along the Southeastern Coastline of the United States
- Melissa E. LaCroce**; Seasonal Recruitment of Epibenthic Organisms on the Hard Bottom at Five Mile Ledge in Onslow Bay, North Carolina
- Feletia Lee**; The Language of Leachate: How Words Shape Waste Management in New Hanover County
- Erin K. McCarthy**; Trophic Transfer and Habitat Use: Assessing the Pre-Restoration Impact of Faka Union Canal in Southwest Florida Estuaries
- Conor J. Murphy**; Influence of Connections Between Previously Isolated Restored Marsh Habitats on Nekton Populations
- Samuel H. Neely**; Spatial Comparisons of Drilling Predation in the *Serripes* Zone, Tjörnes, Iceland, and the Red Crag Formation, East Anglia, England, Across the Trans-Arctic Invasion
- Robbie O'Donnell**; Modern  $\delta^{13}\text{C}$  Signatures and Their Use in Measuring Coseismic Subsidence Along the Northern Margin of the Cascadian Subduction Zone
- Renee Pelletier**; Spatial Assessment of Cuban Coral Reef Mortality in Response to Changing US-Cuban Relations
- Eric Quigley**; Preparing for America's Next War, The War For Fish: Increasing U.S. EEZ Enforcement to Enhance Sovereignty and Economic Security
- Michael J. Recchia**; Metabolomic Analysis of Potential Therapeutic Secondary Metabolites from a 2015 Cyanobacterial Bloom in Silver Lake, Wilmington, NC
- Michael J. Recchia and Matthew M. Anttila**; Chemical Modifications and Bioactivity Studies of the Marine Algal Toxin Domoic Acid
- Katherine Reed**; Metabolic Status in Dormant Embryos of the Antarctic Zooplankton, *Boeckella poppei*
- Anna Reh- Gingerich**; Total Maximum Daily Loads: A Review and Critique of Water Quality Legislation
- Shelby White**; Socioeconomics of Commercial Fishermen in Albemarle Sound, North Carolina
- Hayley Wise**; The National Flood Insurance Program: A Driver for Unsustainable Coastal Development