

News Items – August 2016

Welcome back to the start of another academic year!! It has already been an exciting start with a lot happening in the coming months. Below are some of the activities and recognitions folks have submitted for August.

Outreach, recognitions, other notables:

- Rob Condon (Biology and Marine Biology) was interviewed by the Star News on jellyfish issues:
<http://www.starnewsonline.com/entertainment/20160808/jellyfish-scare-not-so-fast-uncw-researcher-says>
He was also featured in Hakai Magazine (Coastal Science and Societies)
<https://www.hakaimagazine.com/article-short/dont-fear-jellygeddon>
- Jessica Weinkle (Department of Public and International Affairs) had her Op-Ed published in the Star News.
[Dr. Jessica Weinkle: Science panels must stick to facts, not advocacy](#)
- Jennifer McCall's work on shellfish toxins for SeaTox Research was highlighted in WILMA Magazine; August 2016:
<http://www.wilmaontheweb.com/August-2016/Marine-Sleuth/>
- UNCW has signed an MOU with New Hanover County Schools to continue our work with the Marine Science Academy at Ashley High School. Lynn Leonard (Earth and Ocean Sciences) is the contact if you would like further information.
- Stephen Fabian (GTA in Earth and Ocean Sciences) received an award from the Web of Science (Web of Science Video Challenge competition) for his video about the OCN390 Spring Break Field trip last semester (this video was highlighted in a previous news items mailing). His video and a write-up about him will be featured on their blog later in the month.
- The former Department of Geography and Geology is now officially the Department of Earth and Ocean Sciences.
- Congratulations to Dr. Dylan McNamara as the new Chair of Physics and Physical Oceanography!

- CISME Goes International: Alina Szmant (Biology and Marine Biology; CMS) taught a CISME training workshop at the 2016 International Conference on Underwater Science, Technology and Education (ICUSTE) organized by the City University of Hong Kong, August 9-12. Over 50 faculty, research staff and students from a number of mainland China and Hong Kong universities participated in the workshop. The researchers at CUHK are interested in using CISME to study the effects of marine algal bloom toxins on the health of local reef corals.
- Bonnie Monteleone (Chemistry and Biochemistry) was featured by WECT for the Plastic Ocean Project.
<http://www.wect.com/story/32598903/project-making-waves-for-a-cleaner-future>
The project stationed at UNCW uses a machine that ingests the plastic, and 80 percent of plastics put through the machine are turned into oil.
- We Are UNCW highlights:
 - Madeline Marens, UNCW Marine Biology graduate student:
<http://www.uncw.edu/profiles/Madeline%20Marens.html>
 - Martin Posey, CMS:
<http://www.uncw.edu/weareuncw/>
- The NCNERR staff has been wrapping up some seasonal monitoring programs and preparing for others. Monitoring of the American oystercatcher nesting season is completed. It was a banner year on the island, with reproductive success outstripping the level recommended for population growth. The NCNERR shorebird technician monitored 38 pairs; 37 fledglings were produced; 21 fledglings were banded; and 16 of the banded fledglings remain viable. Monitoring of sea turtle nesting continues: two new nests were laid the week of August 21 and hatching and excavation of nests is ongoing. Biological monitoring for the System-wide Monitoring Program, focused on permanent transects through the intertidal marsh at both Masonboro and Zeke's Island, will begin the second week of September. This program collects various parameters related to the emergent marsh, including stem density, stem length, and species composition, in order to detect change over the long term.
- Art Frampton (Biology and Marine Biology): UNCW will be hosting the North Carolina American Society for Microbiology meeting on Saturday October 1st. This is the first time that this meeting will be held here at UNCW.

Presentations and Publications:

- Stuart Borrett (Biology and Marine Biology) recently gave the Keynote address to the Estuarine Coastal Sciences Association (ECSA) meeting in Bremen, Germany: (<http://www.estuarinecoastalconference.com>): [Stuart Borrett Selected as a Keynote Speaker at the Estuarine & Coastal Sciences Association Conference in Germany](#)
In addition to the keynote, Stuart taught a tutorial on how to do ecological network analysis using the software his lab created (<http://www.estuarinecoastalconference.com/ecosystem-workshop.asp>). This tutorial was organized by colleagues Victor de Jounge (Institute of Estuarine & Coastal Studies, The University of Hull, United Kingdom) and Teresa Fernandes (School of Life Sciences, Heriot-Watt University, Edinburgh, United Kingdom).
- Weinkle, Jessica and Roger Pielke Jr. (In Press). The truthiness about hurricane catastrophe models. *Science, Technology & Human Values*. (PIA)
- Mallin, M.A., M.I.H. Turner, M.R. McIver, B.R. Toothman and H.C. Freeman. 2016. Significant reduction of fecal bacteria and suspended solids loading by coastal Best Management Practices. *Journal of Coastal Research*. 32:923-931. (CMS)
- Mallin, M.A., M.R. McIver, E.J. Wambach and A.R. Robuck. 2016. Algal blooms, circulators, waterfowl and eutrophic Greenfield Lake, N.C. *Lake and Reservoir Management*. 32:168-181. (CMS)
- Mallin, M.A., M.R. McIver, A.R. Robuck and A.K. Dickens. 2015. Industrial swine and poultry production causes chronic nutrient and fecal microbial stream pollution. *Water, Air and Soil Pollution*. 226:407, DOI 10.1007/s11270-015-2669-y. (CMS and BMB)

Grants:

- Elizabeth Darrow Condon, Troy Alphin, Suzanne Brander, Martin Posey, and Aswani Voley (BMB, CMS) received notice that their proposal, "Evaluation of Ecosystem Services Associated with Shellfish Culture Operations in Coastal Regions Served by the National Estuarine Research Reserve" has been recommended for funding by NOAA (\$673,397 for 3 years).
- Alison Taylor (BMB): Our joint international proposal funded by National Environmental Research Council U.K. and NSF GEO division was awarded as of July 1st. "NSFGEO-NERC: An unexpected requirement for silicon in coccolithophore calcification: physiological, ecological and evolutionary implications ". This collaborative proposal includes researchers from UNCW, Marine Biological Association

UK, The University of Southampton UK and The University Bristol University UK. In addition, collaborations with Stony Brook University and UC Santa Barbara are included as part of our NSF-funded objectives. Alison presented this work at the Gordon Conference on Biomineralization, Girona, Spain from 14-19th August and it was very well received!

CMS and Partners:

- CMS hosted new faculty during faculty orientation, with lunch in the gallery and a tour of the center and shellfish hatchery.
- We visited Nelson Mandela Metropolitan University (recently designated as South Africa's marine university) as part of an international Blue Economy Symposium, presenting on the broad coastal and marine programs at UNCW. This has resulted in interest among several universities to enhance research and student (including graduate student) exchanges and cooperative activities. UNCW will be visited by a NMMU Professor of marine law in early November to discuss international law and climate change and we anticipate further visits from other partners (e.g. Goteborg University Institute of Marine Science, Sweden) later in the academic year. Particular areas of cooperation discussed included aquaculture, offshore energy development, and integration of social sciences/humanities with natural sciences in graduate coastal and marine education.
- The Request for Authorization to Plan for the PhD in Integrative Coastal Marine Science, jointly submitted by UNCW and ECU, was approved by UNC General Administration. The next step will be to submit a Request for Authorization to Establish (Appendix C). Thanks to our faculty representatives for doing an excellent job with the proposal, formal presentation, and answering questions posed by other campuses!
- CMS is holding Safety training for Faculty & Staff (& Research Assistants) on October 14th from 1pm-3pm. Please attend if possible.
- September 13th, 6:30 pm: Planet Oceans Seminar featuring Dr. Lane & Dr. Hawkes (EOS); "Muddy Time Machines: Sediment Records of Environmental Change and Sea Level Variability in the Carolinas." All are welcome, but please contact Brittani Blizzard if you plan on attending.
- October 1st: CMS Open House - Tours from 12pm-2pm & 3pm-5pm (pre-registration required, more details to come) and an open Information Fair featuring booths and activities. We are looking for volunteers (students and faculty) who can help with tours as

well as folks who would like to set up a booth. This is a great opportunity to get the word out to the general community about what we are doing in coastal and marine sciences at UNCW!

- Jason White (CMS): The Undersea Vehicles Program has upgraded their georeferencing capabilities with the purchase of a new Trimble SP461 DGPS satellite receiver with dual antennas. This Trimble DGPS receiver provides sub-meter accuracy and heading. The National Marine Sanctuary Foundation also purchased us a new LinkQuest TrackLink1500HA tracking system. With these combined pieces of equipment we can achieve georeferencing accuracy of at least 1.5 meters when the ROV is in 100 meters of water.
- With the start of a new academic year, we are asked to remind employees of the state's Use of State Property policies (use of computers, equipment and space, telephones, etc.). These can be found at:
<http://uncw.edu/policies/>
Some specific links are contained in the Reporting of Misuse of State Property policy:
<http://uncw.edu/hr/documents/MisuseofStateProperty-Fall20142.pdf>
A brief summary of certain aspects of these policies developed by Business Affairs/Physical Plant has also been posted on the bulletin board at CMS.
- Updates from MBCOI
 - The 2nd North Carolina Marine Biotechnology and Seafood Symposium will be held in RTP October 9-10, 2016, and is co-sponsored by the Marine Bio-Technologies Center of Innovation (MBCOI), NC State CMAST, and NC Sea Grant. For a copy of the full agenda and registration, go to the symposium website.
 - International Conference on Mitigation Strategies for Emerging Infectious Diseases will be held October 19-21, 2016 in Cali, Colombia. The conference will address topics ranging from discovery platforms to accelerate known and unknown pathogen identification, host-pathogen molecular interactions, Innovative Antimicrobial Discovery and Development, etc. MBCOI's Dr. Roy Carter will be hosting a plenary session on applications of genomics in aquaculture. Please contact Roy if you are interested in learning more: RCarter@MBCOI.net Registration information can be found here.
 - BioMarine 2016 is only 6 weeks away! Deb Mosca, CEO of MBCOI will be moderating a plenary session on "Marine Derived Natural Products Regulatory Bottlenecks" at the BioMarine Business Convention in Oslo, Norway from 19-21 October, 2016. If you would like MBCOI and NCBiotech SE to represent your field of

interest, please contact Deb Mosca at dmosca@mbcoi.net. Details of the agenda can be found at: <http://www.biomarine.org/oslo2016/program/>

- Kepley BioSystems has been selected as a finalist for The Hello Tomorrow Challenge. Kepley is responsible for developing OrganoBait™ a hockey puck-shaped product that mimics the smell emitted by decaying forage fish, the traditional bait used to catch crab and lobster, but uses no animal by products. KBI was ranked top ten Food and Agriculture startup in North & Central America. Read here how the small Caribbean island of Anguilla will benefit with this collaboration. (Source: Yahoo Finance). Kepley's research has also been covered by Scientific American and the Associated Press.