A note from the director of CMS, Dr. Martin Posey:

It is an exciting start to another academic year! As can be seen from the contributions provided below, folks have had a very active summer. We also have a number of events coming up during the next few months, including the Coastal & Marine science open house on Saturday, Sept. 23; the first Planet Oceans talk of the academic year on Sept. 12, and the Global Marine Summit Nov. 5-8. Thank you again for the tremendous research, education and outreach efforts you are supporting!

- Martin

Outreach, Recognitions, & Other Notables

- Joe Pawlik (Biology and Marine Biology) received the Frank Hawkins Kenan Distinguished Professorship of Marine Biology in the College of Arts and Sciences. Established by the C.D. Spangler Foundation, the award recognizes international achievement in marine science and a commitment to outstanding research and student mentorship. WilmingtonBiz article. UNCW article.

- Kara Yopak (BMB) was mentioned in Science. She is serving on the advisory board for an NSF-funded 3D scanning project called “oVert: Open Exploration of Vertebrate Diversity in 3D.” The goal is to create a thematic collection network that generates and serves high-resolution digital 3D data for internal anatomy across vertebrate diversity that will be freely downloadable on the web.

- Larry Cahoon (BMB) was featured in the Coastal Review online article, “Rising Seas: NC Coast Faces Chronic Flooding.”

- Larry Cahoon was also interviewed regarding GenX by WHQR. And by WWAY.

- Larry Cahoon testified before the NC House and Senate environmental oversight committee on GenX contamination.

- Patrick Carroll (CMS) participated in the NC Aquariums’ Fish Propagation Workshop held at the NC Aquarium, Pine Knoll Shores, July 27-28, 2017.
Outreach, Recognitions, & Other Notables

- Troy Alphin (BMB and CMS) and the benthic ecology laboratory, along with Oceans 17 (MarineQuest), worked with more than 100 volunteers from Brunswick County to restore salt marsh areas and build oyster reefs in the area of St. James.

- Melissa Smith (CMS) was one of this year’s recipients of the UNCW Global Travel Grant for Staff supported by the Office of International Programs, and attended a week-long artist research residency called “Biophilia: Biology for Artists” in Chelsea, Quebec, Canada.

- Ami Wilbur (BMB and the Shellfish Research Hatchery), Martin Posey (BMB and CMS), Jay Styron (CMS) and Troy Alphin (BMB and CMS) participated in discussions on advancing shellfish mariculture at meetings of the NC Oyster Steering Committee and the UNC Collaborative Mariculture Advisory Committee. Former UNCW students Ken Riley (now at National Marine Fisheries Service), Ted Wilgis (Coastal Federation) and Brian Bouton (Nature Conservancy) were also involved in these partnership and agency meetings.

- The Danner Lab (Raymond Danner, BMB) launched a new daylong applied learning experience for Oceans 17 entitled “Surviving the heat: Beach bird thermoregulatory biology.” Robert Snowden (MS student) and Ray Danner led this activity with two different student groups.

- Mike Mallin (CMS) was interviewed for a University of Mississippi documentary project on how industrialized animal production impacts environmental injustice within minority communities.

- Bonnie Monteleone, plastic marine debris research and lab assistant/administrative assistant in the Department of Chemistry and Biochemistry, discussed how everyday plastics end up in the ocean on WHQR’s “Coastline” Program – Ocean Plastics. Bonnie also provided an op-ed piece for Plastics Recycling Update.

- Ann Pabst (BMB) gave a presentation and answered questions about vaquitas (a marine mammal) as part of the “Save the Vaquita Day” hosted by the NC Aquarium at Ft. Fisher to give aquarium visitors the opportunity to learn and play their way to a better understanding of the plight of the animal and why it matters.
Outreach, Recognitions, & Other Notables

- MMS student Melissa LaCroce, along with Landis Bullock (Environmental Sciences) and D. Wilson Freshwater (CMS), participated as scientific divers on a July 4-15 NOAA cruise off the coast of NC. The mission of this cruise was to characterize the epibenthic and fish communities of wrecks being considered as part of the Monitor Marine Sanctuary.

- The Wilmington Business Journal featured an article on the continued efforts of InnovateSENC, including conversations with Dan Baden (MARBlIONC) (July 28, 2017 article by Christina Haley O’Neal).

- Allison Stewart, MARBlIONC research specialist, was selected to attend the 5th Annual Metabolomics Workshop at University of Alabama Birmingham in July. This course was co-sponsored by the National Institute of General Medical Science as part of the NIH Common Fund Metabolomics Initiative. Allison was also invited to attend the “Metabolomics in Translational Research Technology Summit” at Georgetown University Medical Center, cosponsored by Waters Corporation.

- Susanne Brander (BMB) was interviewed on the GenX issue by the Wilmington StarNews, WHQR, and the Fayetteville Observer.

- Bill McLellan (BMB) was interviewed by the News and Observer on whale strandings.

- Larry Cahoon (BMB) was interviewed regarding shark attacks by People.com.

- Cahoon, L.B. (BMB) and R.H. Cutting (EVS): We are human guinea pigs. Wilmington StarNews Op-ed, July 22, 2017. This was an op-ed about the GenX situation, analyzing the legal framework that has allowed this kind of pollution to proliferate nationwide.

- UNC Wilmington graduate student Ashley DeLeon (BMB) was featured in the News and Observer for her work with shark physiology. Ashley works with Heather Koopman (BMB).

- UNCW was involved in the Offshore Drilling Forum. WilmingtonBiz article, WECT article.

Presentations

- Wendy Strangman (MARBlIONC) was invited to present her research on cyanobacterial bloom metabolomics, toxins and new bioactive compound identification "Microcystins and Beyond: Untargeted UPLC-ToF-MS Metabolomics and 15N Labeling in Cyanobacterial Harmful Algal Bloom (CHAB) Research" at the Canadian Trace Organics Workshop in Toronto.
Presentations


- Avery Delmaine (BMB), Wade Watanabe (CMS) and Md Shah Alam (CMS) presented a poster paper entitled “Replacement of Menhaden Fish Meal by the Tunicate Styela plicata in the Diet of Juvenile Black Sea Bass” at the World Aquaculture 2017, Cape Town, South Africa, June 26-30, 2017. Delmaine (a spring 2017 graduate), presented the results of his undergraduate honors thesis.

- Joni Backstrom (EVS) presented “Monitoring Marine Sand & Gravel Extraction: The UK Approach” at the American Fisheries Society (147th Annual Meeting) in Tampa Bay. This was part of a symposium on the use and development of offshore resources in relation to sustainable fisheries and ecosystem services.

- Roger Shew (Earth & Ocean Sciences) presented to the Annual Professional Engineers of North Carolina Meeting on “Offshore Energy: Facts and Issues.” Roger also has been asked to give a webinar on this topic for their organization.


- Larry Cahoon (BMB) presented to the NC Policy Collaborative and ERC on Cape Fear water quality issues.

- Roger Shew (EOS) spoke to the Cape Fear Audubon on the natural history and geology of Brunswick County.
Presentations

- The iMESA lab gave several presentations at the Tunicate International Meeting:
  - Stefaniak L, López-Lagentil S (BMB) presented “Moving to the reef: historical and present observations of the worldwide introduced species Styela plicata in the Northwest Atlantic continental shelf” at the Tunicate International Meeting, New York.

Publications

- Patrick Erwin, Ryan Rhodes, Tiffany Keenan-Bateman, William McLellan and Ann Pabst. 2017. High diversity and unique composition of gut microbiomes in pygmy (Kogia breviceps) and dwarf (K. sima) sperm whales. Scientific Reports. 7: 7205 | DOI:10.1038/s41598-017-07425-z; (BMB).
  - This paper represents the first chapter of Bethany DeCourten’s dissertation.
Publications

  - This paper resulted largely from Cíntia Iha’s work during a FAPESP funded research visit to CMS.


  - Amanda Kahn Dickens (formerly UNCW, MBY Ph.D.) is now working for the South Florida Water Management District, Kalman Bugica (formerly UNCW, MBY MS) is now in a Ph.D. program at Texas A&M, and Michael Wooster (formerly UNCW, MBY BS) is in a graduate program at KAUST in Saudi Arabia. (BMB)

Grants & Contracts (note: partial list based on faculty submissions only)

- John Morrison (Physics and Physical Oceanography) received $2.4 Million from the Gordon and Betty Moore Foundation to launch a small but mighty satellite to monitor ocean changes from space. [Moore.org article.]
- CFPUA signs contract with UNCW to research water; [Gen X testing begins.]
- Susanna Lopez-Legentil and Patrick Erwin (BMB) received a grant from Puerto Rico Sea Grant: “Development of a cost-efficient assessment tool to prevent the establishment of invasive marine species in Puerto Rico.” $115,600 for two years (2018-20).
- Jennifer McCall (SeaTox Research, Inc; CHHS School of Nursing) received a grant from NC’s One North Carolina Small Business program as match for grants received from Small Business Innovation Research and Small Business Technology Transfer programs.
- Ann Stapleton (BMB) received a $490,000 U.S. Department of Agriculture grant through a program sponsoring research that leads to improved crop production, yield and disease control. [UNCW article.]
- Alcamı Corp., a pharmaceutical development and manufacturing firm with a major presence in Wilmington, has teamed up with the University of North Carolina Wilmington for a new laboratory course this fall.
- Dr. LePabic (BMB) received funding from NIH for “Role and Regulation of Cellular Polarity in Craniofacial Skeletogenesis.”
CMS & Partners

- Coastal & Marine Science Open House 2017 is Saturday, Sept. 23. Let Brittani or Crystal know if you would like to have a booth! This event is in conjunction with Seahawk Saturday and the S.T.E.A.M. event.
- The new wetlab building, located on the seawater pad, is completed. Thanks to the College of Arts and Sciences and Dean Voley for making this building a reality!!
- The Cape Fear River Assembly is hosting a series of sub-basin forums to focus attention on developing issues in the Cape Fear River Basin. While the event is free, they do request registration, as space is limited. A forum will be held at UNCW at 4 p.m. on Sept. 28.
- CMS hosted a meeting of the Mariculture Advisory Group of the UNC Collaborative
- From Jason White, Lance Horn and Eric Glidden:
  - Underwater Vehicles Program news:
    - UVP’s NOAA/NMFS Andy David ROV trip aboard the NOAA Ship Pisces was featured in the NOAA Corps monthly newsletter.
    - UVP had an article published in the July Sea Technology magazine on pages 75-34. In the same Sea Technology issue, we were also mentioned regarding our Cuba mission: Successful US-Cuba Research Expedition.
    - UVP returned in early August from a two-week research mission on the NOAA ship Nancy Foster at the Florida Keys National Marine Sanctuary. The team spent over 26 hours on the bottom with the ROV during the seven days of operations. Miller’s Ledge, Riley’s Hump and the Dry Tortugas Ecological Reserve were among areas the team researched.
- CMS hosted a visit by NOAA’s Southeast and Caribbean Regional Collaborative team. This visit included presentations on work conducted at UNCW as well as a tour of CMS, MARBIONC and the Shellfish Research Hatchery.
CMS & Partners

- **Campus & Community S.T.E.A.M. Celebration**: UNCW welcomes the community to a celebration of science, technology, engineering, arts and mathematics. Faculty, staff and students will host interactive learning stations, informative presentations, and tours of facilities used for S.T.E.A.M. learning and research on UNCW's Main Campus. S.T.E.A.M. partnerships between campus and the community will be showcased. This is a family-friendly event.

- Welcome Grayson! Grayson is our new work study main office assistant. Be sure to introduce yourself and say hi. She will be here to help us Mondays and Wednesdays.

- Just a quick reminder that chemicals and supplies in research labs and core facilities have been purchased for a purpose and should not be taken or “borrowed” without clear permission from the appropriate person. Thanks for your consideration.