

Duke University Marine Laboratory Ph.D. Student News – Summer 2014

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Milestones

•Congratulations to **Reny Tyson** for successfully defending her dissertation entitled "Fine-scale foraging ecology of humpback whales (*Megaptera novaeangliae*) in the near-shore waters of the Western Antarctic Peninsula"! She has started a post-doc at the Institute of Marine in Antarctic Studies at the University of Tasmania (Hobart) to “estimate the physiology of Antarctic krill predators”. Her postdoc is supported by an Endeavour Fellowship (Australian Education International) and a Scientific Committee of Antarctic Research Fellowship.

Publications

•**Daniel Dunn:**

Merrie, A., D.C. Dunn, M. Metian, A.M. Boustany, Y. Takei, Y. Ota, V. Christensen, P.N. Halpin, H. Österblom. (2014) An ocean of surprises – Trends in human use, unexpected dynamics and governance challenges in areas beyond national jurisdiction. *Global Environmental Change* 27:19-31.

Presentations

•**Daniel Dunn** attended the Global Ocean Refuge System Criteria Development Workshop – August, 2014. Glasgow, Scotland.

•**Daniel Dunn** gave a talk titled “Building the theoretical basis for dynamic ocean management” at the 3rd International Marine Conservation Congress in Glasgow, Scotland, August, 2014.

•**Daniel Dunn** gave a talk titled “Dynamic Ocean Management” at the Nereus Program Annual Science Meeting.

•**Leslie Acton** presented her paper at the 5th Ostrom Workshop in a talk entitled “*The Representation of “Alternative” Knowledge in Climate Adaptation Policy for Pacific Island States.*” in Bloomington, Indiana, on June 2014.

•**Charmaine Yung** presented a poster titled "Seasonal partitioning of vibrio populations in coastal seawater" at the Gordon Research Conference on Marine Microbes in June 2014.

•**Heather Heenehan** presented “Promoting marine soundscape awareness in middle school students” at the first Ecology and Acoustics meeting in Paris, France in June 2014.

•**Vivienne Foroughirad** presented at the Animal Behavior Society conference at Princeton University on "Ecological and anthropogenic contributions to modularity in animal social networks"

•**Tara Essock-Burns** presented her work at the International Congress of Marine Corrosion and Fouling in Singapore this summer. She gave two talks, one in the Bioadhesion session and one in a Barnacle Biology satellite symposium.



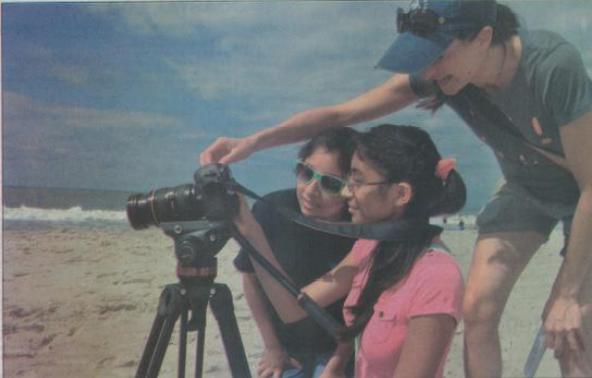
Notes from the Field

- **Julia Burrows** participated in the WHOI-Duke Fellowship during the summer and worked with her committee member, Gareth Lawson, on acoustic data analysis for three weeks in July.
- **Leslie Acton** spent three weeks this summer in Bermuda, interviewing governmental officials, NGO leaders, and industry workers about negotiations surrounding the creation of a large MPA in Bermuda's EEZ.
- **Liz Schrack** spent the summer in the Florida Keys studying the interactive and independent effects of coral predators, water temperature, and overfishing on the health of Caribbean corals. She conducted 2 experiments and large-scale reef surveys across the Florida Keys reef tract.

Teaching, Collaboration, and Community Engagement

- **Joy Stanistreet** led an afternoon field trip for 10th graders participating in the Duke Summer Science Sleuths camp. Field trip activities focused on understanding the importance of sound in the marine environment, as well as gaining hands-on experience recording and analyzing underwater sounds. NCSU graduate student Shannon Brown assisted with this field trip and shared her work on local marsh soundscapes.
- **Maria de Oca** co-founded and co-directed with Sarah Noll - West Carteret High School teacher - the Ocean Filmmaking Camp @ Duke Marine Lab. She ran the camp for the first time with Sarah in June and July. This program gave an opportunity to six local high school students from under-represented minorities that they would not have had otherwise – an opportunity to tell stories in film about their local community and their marine environment. More information at: <http://sites.nicholas.duke.edu/ofc-duml/>

8A THE NEWS-TIMES Friday, Aug. 1, 2014



County high school students, from left, Verónica Martínez and Evelyn Capil-García learn the art of ocean filmmaking from María de Oca, a Ph.D. student at Duke Marine Lab on Pivers Island. (Cheryl Burke photo)

Students study marine science through filmmaking

BY CHERYL BURKE

BEAUFORT — A project funded by Duke Marine Lab on Pivers Island has helped bilingual students from two county high schools improve their proficiency in marine science and English this summer.

María de Oca, a marine lab (Ph.D.) student, launched the six-week Ocean Filmmaking Camp in June in collaboration with Sarah Neff, coordinator of the English as a Second Language program at West Carter High School.

Ms. de Oca said the idea for the camp came from conversations she had with Ms. Neff while serving last year as a volunteer teacher for ESL students at WCHS.

"We wanted to teach the students filmmaking and marry that with marine science conservation," said Ms. de Oca of the camp, which ended Thursday. "We also wanted to help them continue to improve their English skills."

The six students, ranging from ethnic backgrounds of Mexico, China and Japan, have worked in teams to create two conservation films that will be used by two of the entities partnering with Duke on the project.

One film, which will go to the N.C. Aquarium in Pine Knoll Shores, focuses on ocean conservation to provide safe habitat for sea turtles.

The second film will serve as a promotional piece for Marshalling Farms, a fish and cattle farm in Marshalling that serves as N.C. State University's Marine Aquaculture Research Center.

A screening of both films was held Thursday at Duke Marine Lab for those involved in the projects.

Students from West Carter and Ocean High schools, had to apply to attend the camp, with only six selected for the first one.

"We wanted to keep the numbers low so we could provide more one-on-one attention," she said. "We may increase the numbers slightly next year."

The camp was offered free of charge to the students thanks to financial support from the marine lab, as well as donations of time, resources and expertise from numerous volunteers at other county institutions, including N.C. State University, UNC Institute of Marine Sciences, the N.C. Aquarium, Rachel Crews Estuary and others.

The six students taking part were Evelyn Capil-García, Alana Ochoa, Zhenyong Zhang, Alexia Garcia and Ana Paula Rodriguez from WCHS, and Verónica Martínez from Ocean High School.

Mr. Zhang, a rising sophomore, said he enjoyed the camp.

"I like science and photography with physics," he said as students filmed part of their series on cleaning up the ocean Tuesday at Atlantic Beach. "I have enjoyed learning how to use digital cameras and setting up lights."

Mr. Capil-García, a rising sophomore at WCHS, said she, too, enjoyed the camp.

"I wanted to know about filmmaking and I love science," she said. "I've enjoyed filming and learning how to set up the lights and tripod."

During the first half of the camp, students shared ideas around the county and met with marine biologists, conservationists and other scientists to learn about the region's coastal species and ecosystems and the natural and human forces that affect them.

Students also learned basic video, editing and scripting skills from Ms. de Oca, a native of Spain with a background in filmmaking.

During the second half of the camp, students split into two teams to create the videos.

In addition to learning about marine science and filmmaking, the students were required to blog about their experiences in English. These blogs can be seen at <http://sites.unc.edu/mar-de-oca/>.

To learn more about the Ocean Filmmaking Camp, go to its Facebook page at www.facebook.com/OceanFilmmakingCamp.

Shell Landing Open House
Sunday, August 3, 2014 • 1:00 pm - 4:00 pm
127 Shore Drive, Beaufort

- A lesson plan entitled "A Sea of Sound," written by **Heather Heenehan** and CEM Alum Demi Fox, Julia Goss, and Liza Hoos has been published in the new ALA Editions e-book, "[Tablet Computers in School Libraries and Classrooms.](#)"

- Heather Heenehan's** third Huffington Post Girls in STEM blog was posted entitled "Invite-a-Scientist" about her experience with the NC Science Festival. http://www.huffingtonpost.com/heather-heenehan/invite-a-scientist_b_5659728.html

- Heather Heenehan** was chosen for the 2014-2015 Duke Preparing Future Faculty Program and will be mentored by Dr. Erin Lindquist at Meredith College.