

Laura Almodóvar-Acevedo, PhD. Student, NOAA LMRCSC

Laura Almodóvar-Acevedo received her bachelor's degree in Biology from the University of Puerto Rico, Mayagüez before joining the Marine Estuarine Environmental Sciences Graduate Program at the University of Maryland Eastern Shore (UMES). She is currently a Ph.D. student at UMES specializing in Ecology and is member of the NOAA Living Marine Resources Cooperative Science Center (LMRCSC).

Laura's research focuses on black sea bass dynamics in the Chesapeake Bay, under the advisement of Dr. Brad Stevens and Dr. Howard Townsend. Her work involves creating a habitat suitability model to investigate if the historical decline in black sea bass landings is associated with a decrease in oyster reef habitat in the bay. She is also conducting a bioenergetics experiment to determine temperature on the respiration rate of juvenile black sea bass and a field survey to compliment the study. The ultimate goal of this research is to develop an Estuarine Habitat Affinity Index that can be incorporated into a stock assessment model to explain some variability in black sea bass juvenile recruitment.

Laura will be conducting part of her research on black sea bass at the NOAA Cooperative Oxford Laboratory in Maryland. Black sea bass are a data-poor federally managed species that will benefit from this new information on their essential fish habitat and juvenile dynamics. Since this species supports commercial and recreational fisheries, understanding juvenile habitat and the effect of different parameters on the population is essential for the NOAA sustainable fisheries goal. The integration of biotic and abiotic factors in a large area model and the analyses of time-series data also meets the strategic goal of advancing observations, modeling, and research necessary to understand climate change and its impacts. The Habitat Suitability Model will provide information about possible ecosystem services of specific reefs that can be used to determine where to invest in future Bay conservation and restoration efforts.



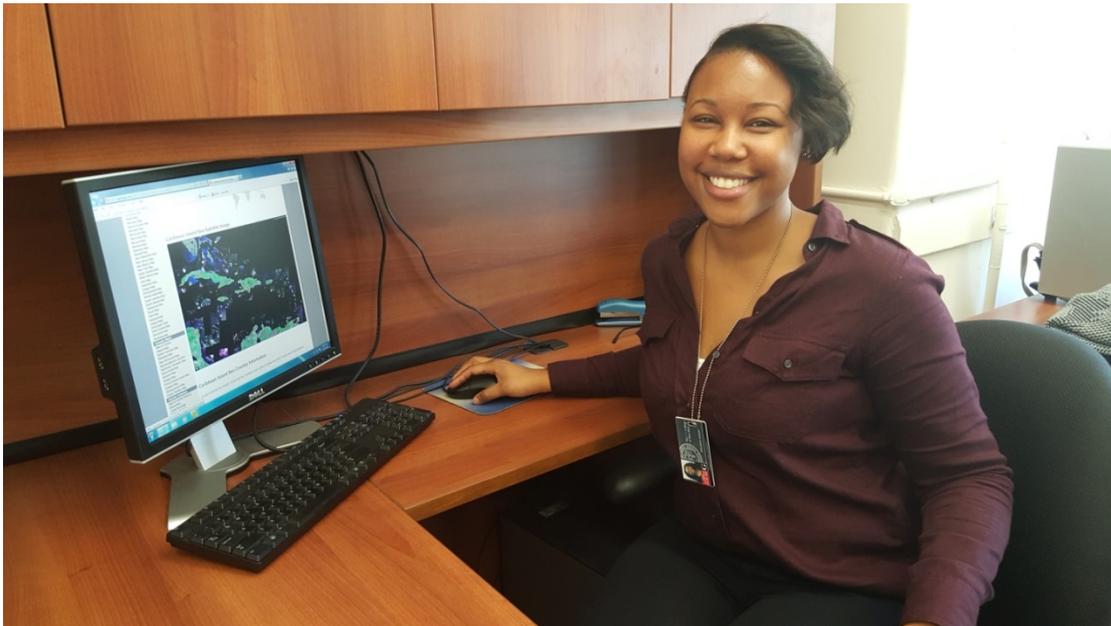
Laura Almodóvar-Acevedo piloting a research vessel on the Chesapeake Bay

Equisha, Glenn, MS Student, NOAA CREST

Equisha Glenn is a graduate student in the Earth Systems Science and Environmental Engineering program at the City College of New York (CCNY). She has always had a strong interest in STEM subjects as they relate to society and the environment, which led her to earn two bachelor degrees: a B.S in Biology (York College) and her B.E. in Earth Systems Science and Environmental Engineering (CCNY). Highly motivated to apply her academic knowledge to real-world projects, Equisha applied to the NOAA Cooperative Remote Sensing and Technology (CREST) Center and has been a research fellow with CREST and the CCNY Earth Science and Environmental Sustainability (ESES) Graduate Initiative program since 2012.

Equisha's current research involves the study of climate trends in the Caribbean and surrounding region under the guidance of her mentors Drs. Jorge E. González (CCNY), Thomas Smith (NOAA) and Daniel Comarazamy (NOAA). During an experiential research experience at NOAA NCWCP, she laid the groundwork for this study using NOAA's Optimum Interpolated Sea Surface Temperature (OISST) product to analyze historical Caribbean SST trends. Since then, her goal to highlight the significance of the region's climate phenomena due to its influence on the U.S. and neighboring countries is progressively coming to fruition. In addition to the publication of her article "Detection of recent regional sea surface temperature warming in the Caribbean and surrounding region" in *Geophysical Research Letters*, the article was selected by the AGU as a "Research Spotlight" on <https://eos.org> and on the journal's website.

As part of the Graduate Research and Training Scholarship Program (GRTSP) class of 2015, she looks forward to the opportunity to continue advancing her research and making contributions to the scientific community. Her interests are in water resources and climate, specifically the impact of climate on sensitive ecosystems and the implications for water resources.



Equisha Glenn conducting remote sensing analysis at NOAA CREST

Tiffany Baskerville, PhD student, NOAA ECSC

Tiffany Baskerville is a PhD candidate at Florida A&M University, the lead institution of the NOAA Environmental Cooperative Science Center (ECSC). Tiffany graduated with a Bachelor of Science Degree in Biology from Fort Valley State University and directly entered the FAMU Environmental Science Ph.D. program. Born and raised in the coastal community of Hampton Roads, Virginia, she was excited to have the opportunity to learn more about the coastal issues that impact the area she calls home while also integrating her love of science with her desire to serve her community.

As a graduate research assistant in the Aquatic Sciences Laboratory at FAMU, Tiffany has collaborated in several research campaigns. Most recently, she participated in the 3 week Deep Ocean Refractory Carbon Expedition in the Gulf of Alaska led by Dr. Dennis Hansell. In addition, she has trained several undergraduate and graduate students in field preparation, aquatic sampling techniques, and microbial and biogeochemical analyses.

Tiffany will use GRTSP resources to conduct in-depth microbial molecular sequencing analysis of offshore samples collected following the Gulf of Mexico Deepwater Horizon Oil Spill at the NOAA Center for Coastal Environmental Health and Biomolecular Research. She expects her dissertation research will fulfill the need for continuous data on the effects of crude oil and the dispersant Corexit® EC9500A on aquatic microbial communities. Her research will enhance coastal resource managers to better understand the biogeochemical effects and ultimately the ecological response to the Deepwater Horizon oil spill disaster.



Tiffany Baskerville at the NOAA EPP/MSI 2014 Forum

Nivette Marie Pérez-Pérez, MS student NOAA LMRCSC

Nivette Marie Pérez-Pérez was born in Puerto Rico, where she constantly interacted with the marine environment and became aware of the disturbances, and difficulties experienced by marine ecosystems and resources. These observations motivated her to increase her understanding of the values and importance of the relationship between marine ecosystems and humans, which drove her to pursue studies in coastal marine biology at the University of Puerto Rico at Humacao (UPRH).

During her undergraduate studies she participated in diverse summer research programs. Those included a Louisiana University Marine Consortium (LUMCON) internship, Miami University of OH - Ecology Research Experience for Undergraduates (REU), Student Fellowship Program of National Science Foundation (NSF) at Woods Hole Oceanographic Institution (WHOI), and Marine and Estuarine Sciences NSF-REU at University of Maryland Eastern Shore. The exposure to a wide range of research in fisheries, aquaculture, oceanography, microbiology, genetics and others, taught her the importance of team work, communication, collaborative attitude, and dedication to become a recognized researcher.

After graduating from UPRH she worked as research observer for the Caribbean Fishery Management Council during a management project for the parrotfish fishery with local fishermen from Puerto Rico and St. Croix. Inspired by the NOAA Living Marine Resources Cooperative Science Center program she started her Master's degree at Delaware State University where her graduate research focuses on the Red deep-sea crab (RDSC), *Chaceon (Geryon) quinquedens*.

RDSC is a commercial species that has been exploited for decades without appropriate knowledge of its biological requirements or population dynamics. She is especially interested in the RDSC larval development, which may be more susceptible to anthropogenic factors. Her graduate research will develop protocols to maintain RDSC larvae under laboratory conditions, which will allow future research on the species and increase our understanding of the species' biological requirements.

Nivette plans to continue her graduate education through a Ph.D. in marine fisheries. She is pursuing her passion to translate scientific research into results that positively impact people's lives, and serves as an example and mentor for young students that are curious and interested about our natural surroundings, igniting their passion through STEM disciplines. In this way she has committed to positively impact our natural world and help preserve it for future generations.



Nivette Pérez-Pérez, out on the bay

Carlos L. Pérez Díaz, PhD student, NOAA CREST

Carlos L. Pérez Díaz calls San Juan, Puerto Rico, home. He is currently a Civil Engineering doctoral student in Water Resources at The City College of the City University of New York (CCNY). He completed both his Bachelor's (BS) degree in Civil Engineering and Master's (MSCE) degree in Geotechnical Engineering at the University of Puerto Rico in Mayagüez, Puerto Rico (UPRM). While completing his BS in Civil Engineering, he worked for the U.S. Army Corps of Engineers as an intern. He is an Engineer in Training (EIT), passed his Professional Engineer (PE) exam and has worked with the Federal Highway Administration (FHWA) and the Autoridad de Carreteras de Puerto Rico (ACT)

Carlos joined the National Oceanic and Atmospheric Administration (NOAA) Cooperative Remote Sensing Science and Technology Center (NOAA-CREST) team at CCNY in 2013 and is working towards completing his PhD thesis entitled *Development of a remote sensing (MW/IR) based snow product through the incorporation of snow wetness*. His research consists on investigating what extent the volumetric water content of the snow affects microwave satellite retrievals and is also working to improve global snow cover mapping by developing a product capable of estimating snow depth with better accuracy than algorithms based on these findings.

He is conducting snow research using both a ground station and satellite remote sensing. The NOAA Cooperative Remote Sensing Science and Technology – Snow Analysis and Field Experiment (CREST-SAFE) is a ground station located within the premises of the National

Weather Service offices in Caribou, ME funded, created, and operated by NOAA-CREST CCNY where manual and automated snow measurements and operations are executed throughout the winter months. He is hopeful that his research will help improve current microwave emission satellite retrieval models and consequently help save human lives and property damage by creating a flood and/or avalanche warning system.

As a Graduate Teaching Assistant for the Hydraulic Engineering course in the Civil Engineering Department, Carlos has participated in mentoring high school students who participated in the High School Initiative in Remote Sensing of the Earth Systems (HIRES) program in summer 2015. He plans to use his mentoring experiences to continue engaging not only high school, but also NOAA-CREST undergraduate and graduate students in remote sensing research in addition to conducting training for elementary, middle, and HS students in afterschool programs.



Carlos Pérez Díaz at the NWS Caribou, Maine field site