

The Coastal Waters Consortium Presents:

Scientist Spotlight



Dr. Paola López Duarte

What is your role as a scientist for CWC?

My work focuses on understanding the effects of the 2010 Oil Spill on marsh fish communities and food webs. I work closely with other PIs to develop hypotheses, design experiments, and coordinate sampling efforts. I also work with a fantastic group of technicians in the laboratory to process samples and analyze results. I also mentor exceptional students who participate in our undergraduate research programs (at Rutgers and LUMCON) and who greatly enjoy their research experiences in the CWC.

Can you summarize your oil spill research and describe any surprising findings you have come across?

Our work indicates that oil impacts vary widely among different taxonomic groups. While some groups exhibited negative responses, no negative effects have been reported for marsh-resident and marsh-associated fish populations. We know that predators can affect prey abundance, resulting in trophic cascades throughout marsh food webs, and that marsh oiling can alter the diet of consumers as well as nutrient and energy flow.

The Coastal Waters Consortium's mission is to assess the chemical evolution, biological degradation, and environmental stresses of petroleum and dispersant within Gulf of Mexico coastal and shelf ecosystems.

What is your educational background?

As a doctorate student at Florida Tech, I conducted my research at various marine stations along the east and Gulf coasts of the US, as well as the Pacific and Caribbean coasts of Panama. My postdoctoral experiences were also bicoastal, at the Scripps Institution of Oceanography and Haskin Shellfish Research Laboratory at Rutgers University. As an Assistant Research Professor I remain close to the ocean, based at the Rutgers Marine Field Station.

What inspired you to become a scientist?

As a college student, I enjoyed my classes, but felt like I was going through the motions by memorizing answers. Then I had the opportunity to participate in an undergraduate research program and I was hooked! I realized there are still many things we don't understand about our environment and the organisms we find so fascinating. I was inspired to become a scientist because as scientists we get to ask questions and design experiments to answer those unknowns. Plus, we get to travel to exciting places.

Can you describe what you enjoy the most about conducting scientific research?

I work with people who are passionate about their research, who are always asking questions, who challenge themselves on a daily, and who have made major contributions to society by learning more about our environment and the organisms that live in it. It can be intimidating to be part of this group, but it is also fun and exciting, and you can't help but be motivated and inspired by them.