

Carlos Holmes: Hello and welcome to another segment of DSU Inside Perspective. My name is Carlos I and this is the show where we talk with faculty, staff, students, guests, about some of the things that are going on in the world, and some of the great things that are going on at Delaware State University. Today we're going to talk about both. We're going to talk with Nivette Perez Perez, welcome to the show today.

Nivette Pérez-Pérez: Thank you, I'm glad to be here.

Carlos: Nivette is a graduate student here at Delaware State University, by way of University of Puerto Rico, where she earned a Bachelor's degree in Coastal Marine Biology, and she's here working on a Master's degree in Natural Resources. She recently got a scholarship that's helping her with some research that has some relationship to climate change, so we're going to span that whole area today. What is the scholarship that you got?

Nivette: Well the scholarship name is the Graduate Research and Training Scholarship Program, by the National Oceanic and Atmospheric Administration, NOAA. The goal of the scholarship is basically to give support, financially and through the network, to be able to introduce themselves to NOAA's mission. Topics of priority (for NOAA) are advancing atmospheric and oceanic sciences. Of course, they also want us to apply our knowledge and bring it to the people. Our projects go ahead to where it starts affecting the public and the community.

Carlos: Now, you're research that you're doing here, and in connection with the scholarship, what is it all about?

Nivette: My title is the effects of temperature and diet in the Red Deep Sea Crab. The Red Deep Sea Crab is a commercially important species.

Carlos: The Red Deep Sea Crab?

Nivette: Yes. It's an important commercial species. It's not well super well known, like you know blue crabs or king crabs, but it's actually captured in most of our fisheries. The catch is exported to Asia and other countries. The importance of the species is that now it's being exploited to satisfy the lack of other fisheries, but we don't know most of its biological history or about the reproduction of the species.

Carlos: Now my understanding of your research, you're looking at the early life of the Red Crab, right?

Nivette: Yes, I am working with the babies; larva, just recently hatched, from one day to two months old. So, we are trying to determine the specific conditions that they need to grow faster and healthier. Basically, we measure growth, how many days it takes, if they feed more, what is their preferred prey, and our findings have been very interesting.

Carlos: Their habitat, which is in the water, in the ocean, in the sea, that's kind of being affected these days by climate change, isn't it?

Nivette: Yeah, one of the major concerns about climate change is the increasing temperature. Some of our preliminary results show that especially this species, in their early life, are affected by temperature. They have very specific thresholds for temperature in their tolerances to be able to pass from one stage of their life to the next one. So, as we change these ranges of temperature, you're basically affecting the development of this species into adulthood, and adulthood means the big ones that we're able to eat and commercialize.

Carlos: Now we've been hearing some things about climate change. Recently, President Obama was talking about it earlier this week. Certainly he's a champion of doing things to minimize climate change. But there are some people out there that, they don't believe this is a problem. From your scientific perspective, is this a real concern?

Nivette: It is a real concern. From my personal perspective, it's a concern because it affects our way of life, the products that we consume in agriculture, fisheries. We actually eat this species. So if you're affecting animals that are part of our diet, you're affecting the cycle of our consumption. It's not just crabs, also fish, plants that we consume, that are getting affected by all these changes in the environment.

Carlos: Oh my goodness. Now, you're doing all of this work, and it sounds like you've got more than a foot in NOAA right?

Nivette: I hope so.

Carlos: Would you like to work for them someday?

Nivette: Of course, that's my goal. I'm actually very interested in the outreach area. How we as scientists prepare ourselves to be better communicators and improve our science communications. To talk to people, to be able to express our findings in a way that everybody can understand and we can satisfy everybody's

curiosity. So that's my area of interest within NOAA's mission. Be able to expand that area; how to communicate and how to educate from K-12 to adulthood.

Carlos: I have to ask you one more question. How do you find the research environment here at Delaware State University?

Nivette: I think that we are very active. Our department is very active. All the professors are involved in different topics of relevance in the scientific world right now; from climate change, to aquaculture and agriculture. All of them are very active in involving the students and pushing us to the limit and pushing us to reach for doors and try to look for funding and more opportunities and collaboration. There's a lot of collaboration that we're trying to work between Delaware State and other institutions. For example, the Living Marine Resources Cooperative Science Center, which I am a part of, that is their mission. Increase collaboration between Minority Serving Institutions; including University of Maryland Eastern Shore, Hampton University, etc. There are five institutions that collaborate and work toward this realization.

Carlos: Your major is in the College of Agriculture and Related Sciences, so you're speaking from that perspective. Thank you so much for being on my show today. Congratulations on your scholarship. Best wishes for your research. I expect to see some really fantastic findings here in the next few years.

Nivette: Thank you for inviting me and I'm really happy to be here.

Carlos: And thank you for joining us for another segment of DSU Inside Perspective, you all have a good day!
