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Bio Grad Student Wins 2018 Averitt Award for Research Excellence

May 2, 2018

Jose A. Sanchez-Ruiz, graduate student in the Department of Biology, is the 2018 winner of the Averitt Award for Research Excellence. The Averitt Award is the highest honor bestowed upon graduate students within the Jack N. Averitt College of Graduate Studies.

Sanchez-Ruiz is a native of Puerto Rico. After switching from art to biology (“I decided to try science”), he graduated from the University of Puerto Rico, Rio Piedras in 2016. That same year he joined the graduate program in Biology at Georgia Southern University, where he works under the direction of professor Checo Colon-Gaud, Ph.D.

Sanchez-Ruiz was recognized for his research in the field of aquatic ecology. Specifically, he studies the role that aquatic macroinvertebrates (animals such as aquatic insects, crayfish, and snails) play in breaking down and decomposing leaf litter that falls into streams and rivers.

This may seem trivial, but decomposing vegetation provides much of the energy and nutrients to support healthy food chains in streams and rivers. If you like catching healthy fish in our local rivers, leaf decomposition is important to you.

Sanchez-Ruiz is conducting experiments in the Ogeechee River that place leaves in open mesh bags (leaf packs) to study the rate at which aquatic macroinvertebrates colonize and decompose leaf litter. More importantly, he studies how this rate changes as a function of extreme events such as floods and drought. These extreme events are expected to increase in response to a warming climate.

“In Georgia, the Environmental Protection Agency predicts a higher frequency of droughts and floods,” says Sanchez-Ruiz. “Long-term ecological studies are necessary to understand the implication of this. I am trying to meet this need with my research.”

Sanchez-Ruiz already has five peer-reviewed publications from this and other research, and he has presented his research in seven presentations at professional meetings.

Given all this work, you might expect Sanchez-Ruiz to relax over winter break. Instead, he received a highly competitive International Research Experience Fellowship from the National Science Foundation to conduct research in Chile.

In Chile, Sanchez-Ruiz worked with Chilean and U.S. colleagues to study the effects of non-native trout on local stream ecosystems. Working in sub-Antarctic Chile, he helped develop a sampling protocol for aquatic macroinvertebrates in order to measure the impacts of introduced fish on these ecosystems. A theme of this research is to better understand the importance of healthy streams to the indigenous people of southern Chile.

For his productive research, both locally and internationally, Jose A. Sanchez-Ruiz is an exemplary member of the Department of Biology’s graduate program and a deserving recipient of the Averitt Award for Research Excellence.



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