## **Queens County Bird Club presents**

## "The American beachgrass microbiome:

spying on private conversations underground"

by Dr. Javier Izquierdo, PhD



Wednesday, September 20, 2017, 8 pm **Alley Pond Environmental Center** 228-06 Northern Blvd. Douglaston, NY 11362 www.qcbirdclub.org Free Admission.

Light refreshments served.

American beachgrass, or Ammophila breviligulata, is considered an important sand dune architect of barrier islands, promoting the formation of dunes that offer protection to these coastal ecosystems. When severe storms and events like Hurricane Sandy dramatically disturb or eliminate dunes, many efforts in ecosystem restoration are made to replant beachgrass in affected areas. However, many of these efforts are not successful due to a wide variety of biotic and abiotic factors. The Izquierdo lab at Hofstra University is interested in the role that microbes (particularly bacteria and fungi) play in healthy beachgrass growth. In this talk, Dr. Izquierdo will discuss what his research group has learned from characterizing the diversity of the microbiomes associated with the roots of beachgrass collected along the South Shore of Long Island under a variety of health conditions. He will also talk about some of the beneficial microbial species they have identified that could play a key role in promoting healthy growth of the American beachgrass.

Dr. Javier A. Izquierdo is an Assistant Professor in the Department of Biology at Hofstra University. Research in Dr. Izquierdo's lab explores the metabolic diversity of microbial processes and the applications we can derive from them, particularly in the areas of plant-microbe interactions and sustainable biofuels production.



