

FILAMO supported visit by Dr. Chen to Dr. Menden-Deuer's lab at URI

As an essential step to initialize the FILAMO project entitled "Warming up the arm race: how temperature affects interactions between phytoplankton and microzooplankton", Dr. Chen did a pilot visit to the Menden-Deuer lab at the University of Rhode Island, Graduate school of Oceanography from April 7-12th, 2019. During that time, Dr. Chen held visits with members of the lab as well as Prof. Tatiana Rynearson and Dr. David Ullman and members of their labs. In addition, he also participated in a departmental seminar and a 1/2 day research symposium that was showcasing research around Rhode Island.

The visit provided Dr. Chen with exposure to empirical data on phytoplankton and microzooplankton temperature responses, the long term data series on plankton and environmental conditions obtained from a site within a shallow, coastal estuary (Narragansett Bay) and ongoing modeling work on the physical and nutrient forcing embedded in a circulation and ecosystem model of the local estuary. Together these data fit very well within the spirit of integrating field, laboratory and modeling efforts and we will use the coming month for exploratory analyses of these data sets and possible avenues for publications. Specifically, we will work to embed the biological rate measurements obtained to embed in modeling efforts as well as develop model-derived, testable hypotheses about temperature effects on ecosystem function, using Narragansett Bay as a testbed and indicative of coastal ecosystems.

To support this work Dr. Chen is working on a NERC proposal that would leverage facilities available in Dr. Menden-Deuer's lab and further their collaboration. Irrespective of that funding status, the FILAMO support is sufficient for a future visit by Dr. Chen to the University of Rhode Island.