

Ecology and evolution of giant viruses

We investigate how biotic interactions shape the physiology and eco-evolutionary trajectory of diverse microorganisms in the ocean. A key research theme is the interactions between 'giant' viruses and microbial eukaryotes (protists).

Although widely distributed in nature, we have just started to understand the role of giant viruses in modulating microbial population in the marine environment. You will investigate the dynamics of the giant viruses associated with ecologically devastating harmful algal blooms (HABs), including Florida Red Tides.

You will employ laboratory techniques, field sampling, and bioinformatic approaches to address fundamental questions regarding the molecular and eco-evolutionary aspects of giant virus - host interactions.

