



Seminar Announcement

A unicellular host-pathogen system in the ocean

Date: 29 January 2021, Friday
Time: 4pm
Venue: Classroom 1, SBS

Coccolithophores are the third most abundant group of phytoplankton in the world's oceans and play a critical role in the carbon, oxygen and sulphur biogeochemical cycles.

Emiliana huxleyi is the most abundant coccolithophore making it an excellent model species to study chemical ecology as it communicates with various trophic levels including birds, fish, grazers, bacteria and viruses. My research is focused on a group of marine pathogens, the roseobacters, that activate an apoptotic-like programmed cell death (AL-PCD) pathway in their unicellular host. I will present our work describing this AL-PCD mechanism in *E. huxleyi* and a candidate virulence factor in the pathogen, *Phaeobacter inhibens*, which activates AL-PCD in its host. I will discuss the significance of a mechanism that co-ordinates death through populations and how this impacts earth's biogeochemical cycles.



Speaker:

Rebecca Case

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