

SPRING 2016 SEMINAR SERIES

DEPARTMENT OF OCEAN, EARTH, AND ATMOSPHERIC SCIENCES 3PM – ROOM 200 IN THE OCEANOGRAPHY/PHYSICS BUILDING THURSDAY MARCH 17th, 2016

"Control of the microbial loop by phytoplankton and DOM in the Delaware estuary."

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ABSTRACT

Bacteria and the rest of the microbial loop process a large fraction of primary production that is routed through the dissolved organic matter (DOM) pool in aquatic ecosystems. That fraction likely varies with the make up or composition of the bacterial community along with many other environmental parameters. This seminar will use data from the Delaware estuary to examine how the composition of the phytoplankton community (assayed by algal pigments) and the DOM pool (ultra-high resolution mass spectrometry) may control the composition of the bacterial community (pyrosequencing of 16S rRNA genes). These data will be combined with other data on basic biogeochemical properties to explore the controls of bacterial community composition over time and space in the estuary. I will end with some speculation about the general importance of bottom-up versus top-down controls of the microbial loop and implications for the carbon cycle in marine systems.

AFTER THE SEMINAR, PLEASE JOIN US IN ROOM 404, THE ZANEVELD CONFERENCE ROOM, FOR COFFEE AND COOKIES, AND TO MEET WITH THE SEMINAR SPEAKER.