



## The world of microzooplankton: Ocean carbon movers and shakers

**Co-Chairs:** Benjamin Twining and Stephen Archer (Bigelow)

**Summary:** Microzooplankton are recognized as a critical component of ocean plankton ecosystems. Recent studies are demonstrating previously unrecognized diversity, as well as providing new ideas about their ecological and biogeochemical roles. This session will highlight recent work that is helping to alter traditional views microzooplankton, including estimates of grazing potential, impact of mixotrophy, chemical communication, and insights from molecular ocean surveys.

**Confirmed speakers** include Stephen Archer (Bigelow), Diane Stoecker (UMCES), Virginia Edgcomb (WHOI), and Ben Ward (Univ. Southampton).



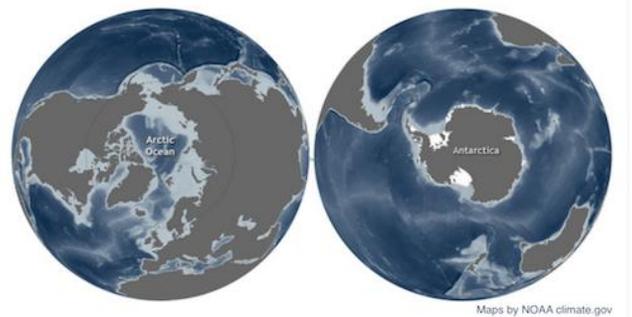
Image: Microzooplankton, the major grazers of the plankton: Dinoflagellates (spindle-shaped 'Gyrodinium', spiny-globe 'Protoperidinium') and a tintinnid ciliate (hairy-topped cell in a shell, 'Favella') from the Thau Lagoon of Sète, France (Image by Tintinnidguy via Wikimedia Creative Commons)

## A tale of two poles: Arctic and Antarctic responses to global change

**Co-Chairs:** Laurie Juranek (OSU) and Matt Long (NCAR)

**Summary:** The Arctic Ocean is broadly characterized by some of the fastest rates of change on the planet; some physical and biogeochemical state changes are so fast as to challenge our ability to measure or understand them. In contrast, the Southern Ocean exhibits mixed signals, with rapid change along the Antarctic Peninsula, large open-ocean regions buffered against change by vigorous overturning circulation, and a unique oceanographic context that remains enigmatic. This session will feature talks by an interdisciplinary group of researchers who bring new insights into the coupled physical-biogeochemical systems of the Arctic and Southern Oceans.

**Confirmed speakers** include Jon Zehr (UC Santa Cruz), Pelle Robbins (WHOI), Mathieu Ardyna (Stanford), Lauren Kipp (WHOI), Jeff Bowman (SIO), Magdalena Carranza (SIO), Barney Balch (Bigelow Laboratory), and Matt Mazloff (SIO).



## It's about time: Insights from long-term marine ecological monitoring programs

**Co-Chairs:** Angelicque White and Maria Kavanaugh (OSU)

**Summary:** Ecological time-series are critical to our understanding of the drivers of ocean change and serve important roles as a forum for international collaboration. This session will highlight presentations that span open ocean and coastal time-series as well as ecological networks. Talks will also touch on coordination of shipboard, remote, and autonomous sensing of ocean biogeochemistry.

**Confirmed speakers** include Benedetto Barone (University of Hawaii), Gabrielle Canonico (NOAA IOOS), Francisco Chavez (MBARI), Jennifer Fisher (NOAA NWFSC), Ralf Goericke (SIO), Laura Lorenzoni (NASA/USF), and Heidi Sosik (WHOI).

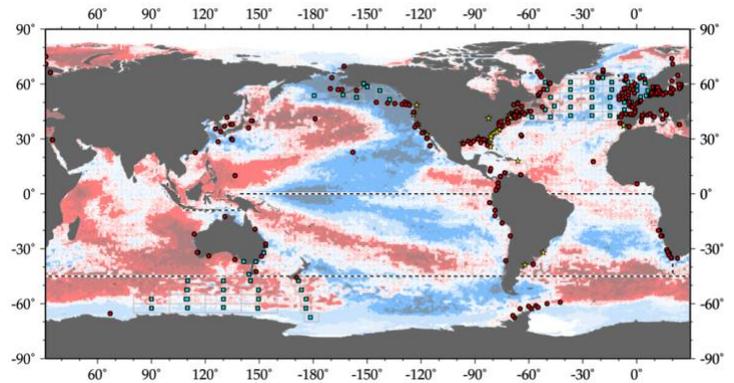


Image courtesy of International Group on Marine Ecological Time-Series, IGMETS (Lorenzoni et al., 2017)