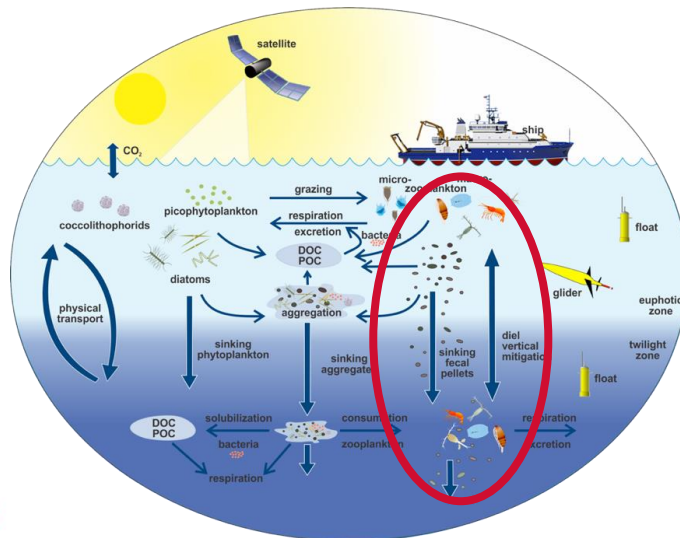


Zooplankton-mediated export pathways: Quantifying fecal pellet export & active transport by diel & ontogenetic vertical migration in the N. Pacific and Atlantic Oceans

SCIENCE GOALS

- Quantify production & export of fecal pellets and other zooplankton by-products (mucous feeding webs, molts, carcasses)
- Quantify active transport of carbon from the euphotic zone by both diel & ontogenetic (seasonal/life-cycle) vertical migrations



TEAM MEMBERS



Deb Steinberg
(PI) VIMS



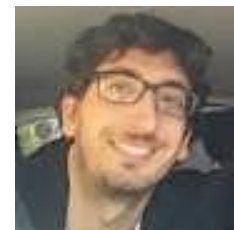
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Andrea Miccoli
(tech) BIOS



Zooplankton-mediated export pathways: Quantifying fecal pellet export & active transport by diel & ontogenetic vertical migration in the N. Pacific and Atlantic Oceans

LOGISTICS

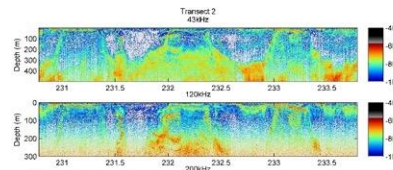
Abundance/Distribution



MOCNESS tows to 1000m
2 day/night pairs per state



VVP (to 1000 m)
half day, half night



Acoustic sampling

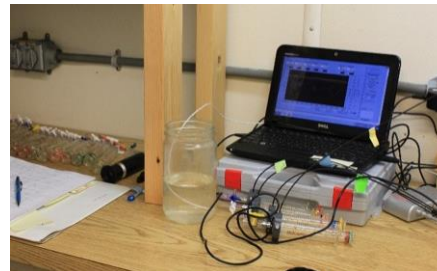


Live zooplankton capture

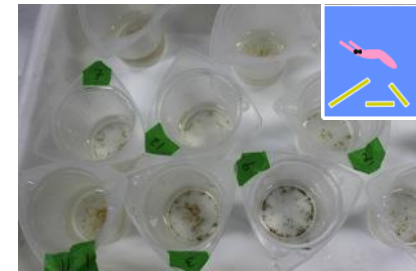
MEASURED
PARAMETERS



- Size-fractionated Biomass (wet, dry, C & N weights)
- Electron transport system
- Zooplankton ID, biovolume



Respiration & excretion Rates



Fecal Pellet production Rates