

Oceanography Seminar

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"Microbial Ecology of Polymetallic Nodule Field"

Rising metal prices and technological advances have combined to bring the mining of deep-sea polymetallic nodules close to fruition. Mining will cause large disturbances across the deep sea floor, both directly as the machinery disrupts the surface sediment and indirectly through trailing sediment plumes. Despite the imminent threat, there is a paucity of studies addressing biological diversity and ecosystem functioning in these systems. Sedimentary studies outside of nodule fields have found that microbial cells constitute the majority of the benthic biomass, and that microbial processes at the deep seafloor sustain both primary and secondary production in benthic ecosystems. In this talk I will present the most complete picture to date of the polymetallic nodule field microbial community, addressed through taxonomic and metagenomic methods.

Thursday November 20, 2014 3:00 p.m. MSB 100