Mechanisms of organic matter degradation in the water column

The amount of organic carbon sequestered in the deep sea depends both on primary productivity and the intensity of heterotrophic respiration. This project will employ compound-specific stable isotope techniques for a range of organic compounds in order to distinguish the impacts of microbes, zooplankton, and particle dynamics on the degradation of particulate material in the ocean. Research will begin with existing samples. Future seagoing field work is likely.

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