

## **Suggested research proposal topics**

Organic ligand-metal biogeochemistry

Carbon sequestration/iron fertilization and old DOC in the deep ocean

Dissolved organic nutrients and climate change

Carbon preservation in marine sediments-testing the Mayer/Hedges hypothesis

Early diagenesis and light isotope (CHN) fractionation on paleoenvironmental studies using biomarkers

The deep biosphere: molecular evidence and consequences for interpretation of the sedimentary record

Anaerobic methane oxidation and the formation of gas hydrates, carbon cycling and burial on continental margins, and climate: molecular evidence

Climate extremes during Cretaceous oceanic anoxic events (OAEs).

Molecular evidence for dramatic variations in sea surface temperature, pCO<sub>2</sub> and photic zone anoxia.

The biogeochemical role and molecular manifestation of viruses in the ocean.