Department of Earth and Environmental Systems

Indiana State University

More from Day One



Paleoceanography & Marine Sciences

Jennifer Latimer is a low-temperature geochemist interested in studying metal and nutrient cycles in marine sediments. Of particular interest is the marine phosphorus cycle, including diagenetic redistribution in sediments and the use of reactive phosphorus as a proxy for paleo-export production. Also of interest are terrigenous provenance and fluxes to the open ocean and the potential role terrigenous metals, such as iron, have on export production in the deep sea. Current research projects include phosphorus burial and diagenesis during Cretaceous ocean anoxic events and Pennsylvannian black shale deposits, terrigenous fluxes to the South Pacific Ocean over the last 20 million years, export production in the Subantarctic South Pacific, and late Quaternary phosphorus burial in the Bering Sea. (Jen.Latimer@indstate.edu)

Anthony Rathburn's research interests include the biogeochemistry and ecology of foraminifera (single-celled organisms) for applications in assessments of modern and paleoceanographic environments. His current projects focus on the ecology and stable isotope biogeochemistry of seafloor methane seep organisms (off Costa Rica, in Monterey Bay; at Hydrate Ridge off Oregon); trace metal compositions of biogenic carbonate in contaminated environments (Australia and Venice, Italy); the relationship between foraminiferal test (shell) morphology and oxygen availability (off California and elsewhere); the ecology and stable isotope biogeochemistry of deep-sea foraminifera on the Australian margin and from oxygen minimum zones (off Costa Rica and California). His field work often includes the use of Alvin (manned submersible) or Jason (remotely operated vehicle). He actively involves students in all of his research projects.

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