

## **Danielle Creeley, MARS**

Dissolved Organic Matter Dynamics on Coastal Ecosystems

The goal of my thesis work is to estimate degradation and production rates of DOM in coastal environments to support ongoing efforts to understand the role of organic matter in estuarine ecosystem functioning. The research approach consists of 1) development of quantitative biomarkers using microbial and coupled photochemical-microbial incubations of vascular plant leachates, and 2) application of the new biomarkers to river plume gradients in the Brazos River and Sacramento River/San Joaquin River Delta in California. The research is coordinated with scientist from UC Davis and Florida State University who collaborate on this NSF sponsored project.

