

# UConn

## UNIVERSITY OF CONNECTICUT

**Department of Marine Sciences  
Presents a Seminar By**

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### **Assessing impacts of climate and land use change on terrestrial-ocean fluxes of carbon and nutrients and their cycling in a river-dominated coastal ecosystem**

Climate change, increasing population, and associated changes in land use have placed tremendous pressures on coastal ecosystems. An integrated research effort is described involving observations, modeling and prediction to explore how climate and weather-related forcing in conjunction with changing human activity can alter the transfer of water, carbon and nutrients through various terrestrial reservoirs into rivers, estuaries, and coastal ocean waters, ultimately impacting the biogeochemistry and trophic dynamics of the coastal ocean. Building on recent NSF- and NASA-funded research, an integrated suite of models is applied in conjunction with remotely sensed as well as targeted in situ observations to understand processes controlling fluxes on land and their coupling to riverine, estuarine and ocean ecosystems. Past and present conditions across land-ocean continua are examined, as well as coupled model projections of future scenarios for climate, land-use and other human activity. Finally, examples are provided of approaches for determining an overall carbon balance in coastal margins and for describing and predicting how climate and land use changes impact coastal water quality, including coastal eutrophication, hypoxia and ocean acidification.

**Host:** Heidi Dierssen

**Time & Date:** 11:00 am, Friday, March 27, 2015

**Place:** Marine Sciences Building, Seminar Room 103

Please see this [page](#) for cancelations and additional seminar information, email [marinesciences@uconn.edu](mailto:marinesciences@uconn.edu), or call 860-405-9152 or 860-405-9151