

# UConn

## UNIVERSITY OF CONNECTICUT

Department of Marine Sciences  
Presents a Seminar By

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### **Post-Transcriptional Regulation of Nitrogen Assimilation in Marine Diatoms**

The assimilation of inorganic nitrogen (N) into organic compounds is a key process regulating the growth and productivity of photosynthetic eukaryotes. Diatoms are responsible for approximately 40% of marine primary productivity and exhibit rapid growth in response to increases in N availability, which in marine ecosystems, varies over several spatial (meters to kms) and temporal scales (hours to months). Thus, the ecological success of diatoms can, in part, be attributed to their ability to rapidly sense and respond to fluctuations in N source and supply.

In all living cells, the regulation of gene expression is a multifaceted and dynamic process. Cells integrate intrinsic and environmental signals into multiple regulatory pathways allowing for coordinated gene expression and cellular function. While there has been much focus on patterns of coordinated gene transcription, there are now examples from diverse taxa of coordinated post-transcriptional regulation of mRNAs encoding functionally related proteins. In this seminar, I will present evidence for coordinated post-transcriptional regulation of genes involved in N transport and assimilation in marine diatoms and explore how regulatory coordination may change in response to nutrient source and supply.

**Host:** Senjie Lin

**Time & Date:** 11:00 am, Friday, October 30, 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