

# UConn

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Department of Marine Sciences  
Presents a Seminar by

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## **Is bubble-mediated gas transfer important for climate-relevant trace gases?**

Direct flux observations using the eddy covariance (EC) technique can help us understand and quantify the global biogeochemical cycles of important elements, such as sulfur and carbon, as well as unravel the multiple physical forcings on gas transfer at the air-sea interface. By measuring compounds with different biogeochemical and physical properties simultaneously, we can gain insight into interfacial gas transfer, bubble-mediated gas transfer, and influence of efflux vs. influx on gas exchange, among other processes. Here I will present simultaneous DMS and CO<sub>2</sub> EC datasets measured to date and examine what they have taught us about bubble-mediated gas exchange in the open ocean (in comparison with other studies). Finally, I will present a research cruise in preparation, during which we will address these issues in the Labrador Sea with a focus on oxygen (Bubble mediated exchange in the Labrador Sea, BELS) and make a pitch to you all to join on-going efforts to understand air-sea interactions.

**Host:** Penny Vlahos

**Time & Date:** 11:00 am, Friday, December 2, 2022

**Place:** Lowell Weicker Building, Seminar Room 103 (or WebEx)

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