

# **The *Trichodesmium* Microbiome and its Role in the Marine Nitrogen and Phosphorus Cycles**

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**1:30 – 2:30pm**

**Clark Lab 507, Quissett Campus, WHOI**

## **Abstract**

*Trichodesmium* is a colonial cyanobacterium that plays a key role in the oligotrophic ocean because of its ability to fix nitrogen and thereby drive overall primary productivity. *Trichodesmium* have thus been the focus of intense study for decades, and yet our understanding of what controls their rates of nitrogen fixation is woefully incomplete. One reason for this is that colonies of *Trichodesmium* in the ocean contain a diverse community of heterotrophic bacteria that has largely been ignored by oceanographers. My colleagues and I are finding that members of the colonial microbiome facilitate *Trichodesmium* nitrogen fixation through their abilities to acquire of phosphorus and other nutrients.

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