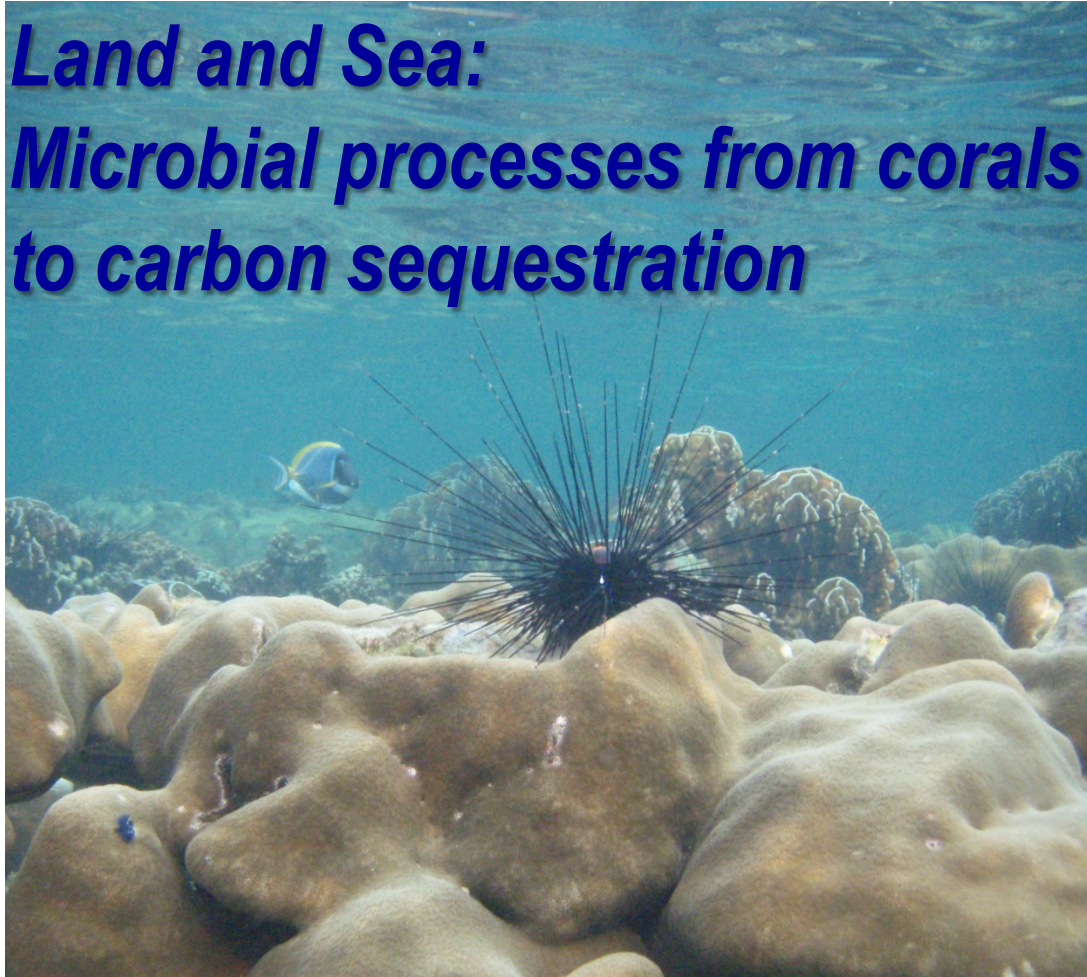


Earth System Initiative Young Faculty Seminars:

Land and Sea: Microbial processes from corals to carbon sequestration



4:00 pm Tuesday, June 1st

MIT Building 54-915

Reception to Follow

Janelle Thompson

Doherty Assistant Professor
Civil & Environmental Engineering

Microorganisms drive global cycles of carbon and energy and are integral to the health of living systems at scales from the microscopic to the geologic. Research in our Microbial Ecology and Engineering Lab aims to understand how microbial communities influence the integrity of perturbed environments at multiple scales. Our projects include exploring how shifts in microbial activity mediate the balance between health and disease in reef-building corals; and studying the nature and engineering applications of microbial populations isolated from subsurface carbon sequestration sites, which remarkably can grow in supercritical carbon dioxide conditions. We also are developing a model system of a well-characterized sea anemone and its' associated microbial community to help us understand the role microbes play in acclimatizing 'hosts' to different environments. These three unique 'problem spaces' are unified by our view of microbial systems as integral to the functioning of living systems at every scale.



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