Special Seminar Presentation

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Ecosystems Genomics Cluster

Microbial life in the ecosystem context:

molecular interactions at macro scales.

Soil microbial life regulates some of the largest fluxes of carbon and nitrogen on Earth. While widely recognized as critical for ecosystem functioning, microbial activity and behavior is usually represented implicitly in conceptual and mathematical models of ecosystem process. New breakthroughs in molecular biology have revolutionized our ability to probe the life history strategies of soil microbial community members in ways that have the potential to transform our understanding of ecosystems and the Earth. I work to understand the allocation strategies of microbial decomposers in the context of ecosystem process, as well as how these decomposers interact with mycorrhizal fungi- critical members of the plant microbiome. I place these frameworks in the context of optimization and game theory, and test predictions at micro and macro scales. By doing so, I hope to create a more predictive ecosystem ecology, informed by the explicit representation of microbial life.

Monday, March 28, 2016 -- 3:00pm

Marley 230

Refreshments at 2:45