Soil Community Responses to Climate Change Factors in Arid Land Ecosystems

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Frontiers in Biological Sciences

Seminar Series

Presented by…

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Abstract Soil microbial communities in arid land ecosystems play important roles in carbon and nitrogen cycling, and their processes contribute significantly to response of those ecosystems to changes in environmental conditions. Using molecular and metagenomic approaches, we are investigating the responses of soil microbial communities in biological soil crusts and creosote bush rhizospheres to multiple climate change variables in two large manipulated field experiments.

The first experiment, located in a cold desert of the Colorado Plateau, has monitored the responses to alteration in precipitation frequency and soil warming. The second experiment, located in the Mojave Desert, has monitored the response to long-term elevated carbon dioxide. This seminar will provide an overview of our studies in arid land ecosystems, and our assessment of soil bacterial and fungal community shifts in response to climate change variables at these two field experiments.

More info?

See http://www.pnl.gov/biology/

Date: March 2, 2011

Location: BSF Darwin

Time: 9 – 10 a.m.