SPECIAL SEMINAR

Friday May 11, 2018

333C Kottman

Extreme Climate:

Soil Microbiome Responses to Fluctuating Moisture From Pore- to Core-scales

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A major challenge in soil microbial ecology is to predict how global climate change, with its expected increase in soil moisture fluctuations, will affect microbial communities and their functions. This is complicated by the extraordinary phylogenetic and functional diversity of the soil microbiome within a complex physico-chemical soil matrix. The seminar will present results on extreme soil moisture shifts in a tidal wetland and a native prairie as case studies in microbial stress-physiology. A “multi-omics” approach was used to investigate microbial responses to drought, towards the development of an improved mechanistic understanding of microbially controlled C processes as a basis to predict and manage soil microbial communities to deliver ecosystem services in a changing climate.