

EEB Seminar

Friday, January 10th;

Room 307, SERF; 3:30-4:30PM

Pre-talk reception: 3:00 PM in Dabney 568

Speaker: Jenny Talbot, Stanford University

Title: From hyphae to mycobiomes: a continental-scale look at form and function of soil fungal communities

Abstract/Summary: Fungi drive many processes that regulate carbon (C) and nutrient cycling through ecosystems. Over the last decade, advances in molecular technologies have enabled exploration of the massive diversity of fungi on Earth and the mechanisms they use to control biogeochemical processes from the hyphal to continental scales. This talk will describe how we have leveraged these technologies to identify key mechanisms that soil fungi use to decompose dead organic matter (i.e., litter) in soils. This approach has allowed us to test theories about the role of microbial species in ecosystem processes that have traditionally been reserved for macro-organisms. With this data, we are generating new theoretical, empirical, and predictive models of how interactions between fungi and soil resources control the exchange of energy and nutrients between the biosphere and the atmosphere.

