

SCHOOL OF BIOLOGICAL SCIENCES SEMINAR

# Louise Comas

## USDA-ARS

### “Exploring Plant Root Traits and Fungal Interactions: Refocusing Long-standing Questions”

Resource availability has long been recognized for playing a major role in structuring plant communities. Nonetheless, a functional understanding of root traits and interactions with soil organisms involved in acquiring those resources has largely remained out of focus and outside mainstream ecology. My research has focused on examining patterns of root trait variation and associations with plant strategies for resource acquisition. I found fine-root morphological traits associated with the evolution of roots with different types of mycorrhizal fungi. Moreover, I found shifts in root traits across evolutionary time frames corresponding to climatic warming and drying, such that more recently diverged species appeared to adapt to a warmer and drier climate by evolving finer roots and less reliance on mycorrhizal fungi. The awareness of root functional traits is growing and the ‘black box’ of belowground plant strategies opening as belowground plant traits are recognized for their important role in governing plant success as well as impacts on ecosystem functioning.

**Hosted by Sabrina Russo**

**Thursday, September 14, 2017**

**Hamilton Hall Room 112**

**3:30 p.m.**



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