



School of Natural Resources
and the Environment

Seminar Series: Spring 2022

HARNESSING SOIL METAGENOMICS FOR DRYLAND ECOLOGICAL RESTORATION

SPEAKER: Albert Barberán,
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DATE: Wednesday, February 9

TIME: 3:00-4:00 pm

LOCATION: ENR2 S107 & [Zoom](#)

ABSTRACT:

With 10–20% of drylands worldwide already defined as degraded, the United Nations has declared restoring degraded drylands as a top priority for supporting human life in the coming decades. Despite time-consuming and expensive efforts, dryland restoration success remains low. Although soil microorganisms and plants are inextricably linked, researchers and restoration practitioners rarely consider the soil microbiome in the design and deployment of management strategies, under the assumption that aboveground restoration can trigger concomitant belowground restoration. I will present my research group's strategy of integrating the conceptual framework of functional ecology (community-level traits, trade-offs, and life-history strategies) with tools of metagenomics to harness the ecosystem-level role and applied potential of the soil microbiome for restoration.

