

Biology Seminar



12:30 - 1:30 pm
Friday, September 27, 2024
BGS 0165



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Investigating the microbiome for environmental protection and ecosystem sustainability: A field-based research approach

My research program works at the intersection of microbiology, plant science, and soil science, investigating microbial communities and biogeochemical cycles driving the global processes that help support life on Earth. This research builds from an understanding of microbiome connectivity. Where microbes are an interconnecting factor from the soil-plant-animal-environment to human continuum, and microbiology research can be used to deepen our understanding of critical global issues in areas such as climate change mitigation, soil health, and clean environment. A key component of my research program, and key to its success is the in situ and applied nature of the work. In this seminar, I will present a few examples of long-term studies where we have taken a transdisciplinary approach to find solutions to complex global environmental challenges, including, protecting soil biodiversity and soil health, characterizing microbial drivers of nutrient cycling; and breaking down pollutants in industrial sites.

