School of Plant Sciences Seminar

Tue, April 28 • 4 pm
Hybrid • Marley 230 and online
https://arizona.zoom.us/j/83742635768

Josh Oyekanmi
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Leveraging multi-omics and functional microbiome characterization to enhance lettuce resilience, nutrition, and quality

Josh's research explores how microbiomes from wild lettuce can be leveraged to improve crop resilience and productivity in arid environments. In this presentation, he will discuss his work on endophytic microbes associated with *Lactuca serriola*, a wild relative of cultivated lettuce (*L. sativa*), and their potential as low-input microbial tools for sustainable lettuce cultivation. Wild lettuce thrives under harsh conditions and harbors diverse microbial communities. Using an integrated multi-omics and functional approach, Josh examines how genomic potential and metabolite production define the functional roles of microbes that occur endophytically within wild lettuce. Specifically, his work combines genomics, metabolomics, and functional assays to identify key microbial traits and evaluate their roles in plant growth promotion, nutrient acquisition, and heat stress resilience. This research establishes a multi-omics framework for translating beneficial microbes from wild systems into agricultural applications. Join us to learn how microbiomes associated with resilient desert plants can inform strategies to enhance crop productivity, health, and sustainability in arid agroecosystems.

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