AGRONOMY SEMINAR SERIES SPRING 2025

Monday, February 24, 2025 2:30 p.m. LILY 2-425

Attend virtually via Zoom Seminar links will be posted at: purdue.ag/agryseminars

DR. ELIZABETH RIEKE, PhD

PROGRAM DIRECTOR, MEASUREMENT STANDARDIZATION LEAD SOIL MICROBIOME SCIENTIST SOIL HEALTH INSTITUTE Faculty Host: Dr. Roland Wilhelm

Moving Beyond Land Use Change: Agricultural Management Impacts on the Soil Microbiome

To date, soil microbiome research has largely focused on deciphering differences between unmanaged perennial systems and row crop agriculture. While these studies have revealed shifts in microbial taxonomy and function, less is known regarding the capability of specific agriculture management practices to alter microbial structure and function. This seminar will focus how increasing living roots and reducing tillage impact microbial structure and function in agricultural soils across North America and their associated implications.





PANS purdue applied microbiome sciences



Dr. Elizabeth (Liz) Rieke is a Soil Microbiome Scientist and Program Director at the Soil Health Institute. Her work aims to

understand how agricultural management decisions impact soils' ability to degrade organic residues and transform nutrients via DNA sequence-based technologies. Dr. Rieke also serves as the Institute's Measurement Standardization Lead, where she works to standardize soil health measurements across commercial laboratories and streamline measurement and management data quality assurance and quality control. Dr. Rieke received her B.S. in Biological Systems Engineering from Virginia Tech and M.S. and Ph.D. in Agricultural & **Biosystems Engineering from Iowa State** University.

Agronomy