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From Global Change Effects on Microbes to Microbial Effects on the Globe: A Personal Journey



Much of my research has examined how global change affects the microbes that live in soils, and how their responses affected nutrient cycling. I often tried to isolate the direct effects of climate change on soil microbes from interactive plant effects. This was a useful approach, and allowed me to unravel how microbes acclimate to new climates. However, I eventually came to appreciate the importance of plant-microbe interactions that I tried so hard to ignore, which led to a focus on the rhizosphere. For example, we discovered that plants are able to shape microbial community assembly as they grow, in ways that impact their fitness. Armed with this deep understanding of plant-microbial interactions, I felt compelled to harness the power of microbes to enhance crop growth and resiliency and decrease the environmental impact of agriculture. I will share my whirlwind journey that led to a patent-pending microbial biostimulant that enhances phosphorus availability to plants and the founding of a start-up company focused on enhancing soil health.

Friday, Feb. 13, 2015; Room 307, SERF; 3:30 - 4:30PM. Pre-talk reception: 3:00 PM in Dabney 568