Practical Considerations for Metaproteomic Analysis of Soil:

Soil is a complex matrix where biotic and abiotic components including bacteria, fungi, archaea, protists, protozoa, and roots interacting with minerals and soil particles that are in constant communication with each other. Much of our understanding these interactions has mainly relied metagenomics and metatranscriptomics however, metaproteomics can target both intracellular and extracellular proteins from soil samples, providing a more complete picture of the physiological and functional state of the “soil community”. This talk will focus on practical considerations of metaproteomics in soils including stable isotope labeling studies as well as provide a brief look into real-time analyses of these systems.