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**MICROBIAL COMMUNITY ECOLOGY AND BIOCHEMICAL CYCLING IN THE
RHIZOSPHERE**

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ABSTRACT:

Plants affect soil properties around their roots in many ways that influence the activity, abundance and structure of microbial communities. While some of the determinants of this rhizosphere effect on microorganisms are now being understood, there are still several fundamental questions which are unanswered such as how to manipulate it to our advantage. The revolution in the techniques available to date offer exciting opportunities for better understanding of the relationships between microbial diversity and soil functions. This challenge is especially of interest in the rhizosphere, which is known to be a hot spot for microbial activities. This talk will focus on the novel insights into the driving forces shaping microbial communities in the rhizosphere and potential consequences for ecosystem processes.