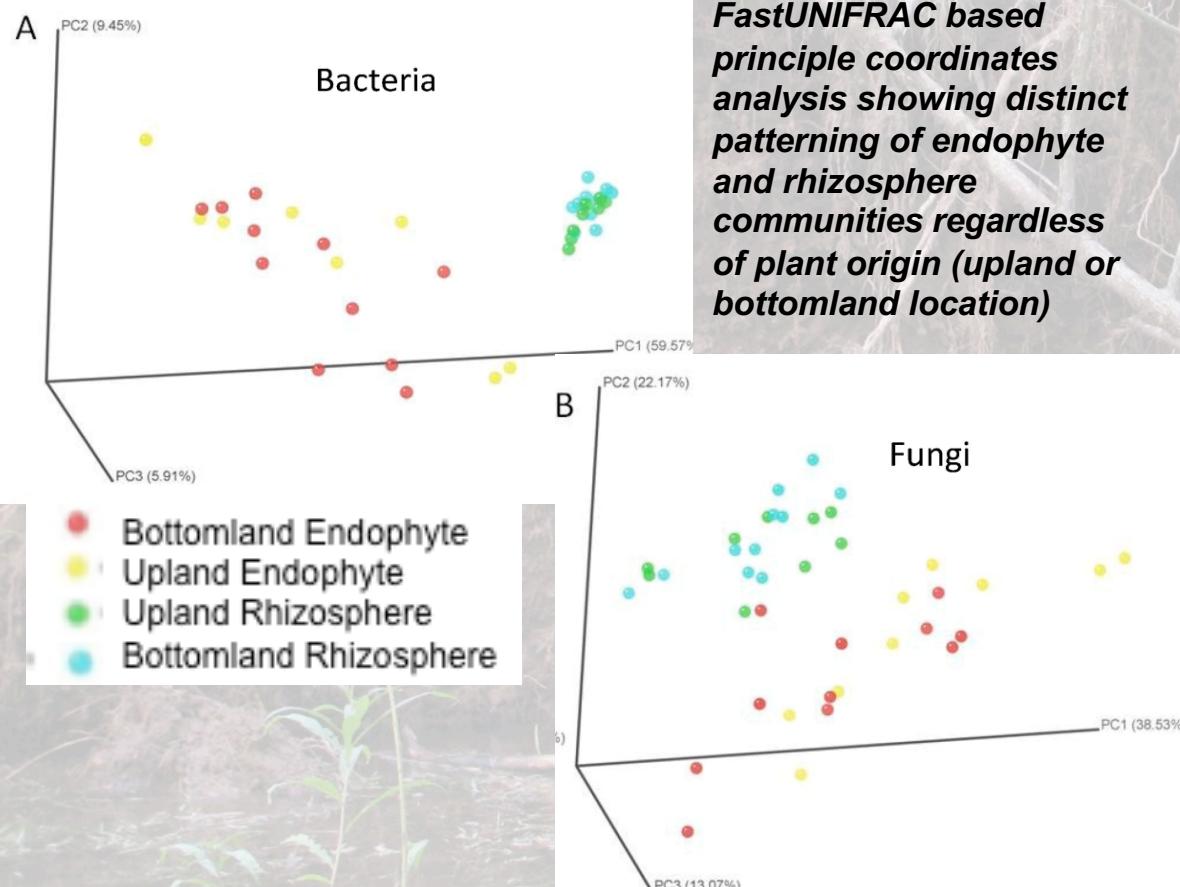


Populus deltoides harbors distinct microbial communities within the endosphere and rhizosphere

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- The root-rhizosphere interface is the nexus of a variety of associations between bacteria, fungi and the host plant and is critical to the health and sustainability of the plant and its ecosystem. *Populus* spp. provide an ideal model for understanding these interactions.



FastUNIFRAC based principle coordinates analysis showing distinct patterning of endophyte and rhizosphere communities regardless of plant origin (upland or bottomland location)

- We undertook the first comprehensive molecular survey of *Populus* associated microbes in a natural system to explore the diversity and composition of both bacterial and fungal root endophyte and rhizosphere communities.

- Our findings demonstrate that native root endophytic communities are variable, but distinct assemblages rather than opportunistic subsets of the rhizosphere