

## **New Drivers in Microbial C1 Cycling**

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### **Abstract:**

Extrachromosomal DNA elements (ecDNA), such as plasmids, viruses and Borgs, are emerging as potential important factors influencing microbial processes. In this talk, I will discuss what is known about ecDNA linked to bacteria and archaea that use the ancient Wood-Ljungdahl pathway to convert carbon dioxide and methane. I will further provide an overview on the ongoing projects in our group which range from environmental metagenomics in anoxic ecosystems to molecular processes in one-carbon cycling microbes.