

## Genomics as a tool to identify biotechnologically relevant bacteria and enzymes

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Microbes play many important roles in the environment and human society, including functions in bioremediation, food fermentation, and antibiotic production. Identifying microbes or enzymes with desired properties is a key challenge in biotechnology. Genomics – the study of entire genomes or sets of genomes – is a valuable approach to revealing the functional potential of both culturable and not-yet culturable microbial organisms. In this talk, I will describe some of the ways we use genomics in my group, focusing on the identification microbes capable of degrading various plastic polymers, and microbes to perform agriculturally-relevant chemical reactions.