



# MICROBIOME NETWORK

## COLORADO STATE UNIVERSITY

Wednesday, February 20, 2019: 4-5:15pm

Microbiology Room A101

### "Fermenting an agricultural waste with a probiotic: A mouse gut-centered journey."

Kristopher Parker, PhD is investigating diet-driven metabolic changes to host and gut microbiomes to understand how the interplay between these components may confer protection from chronic diseases, including cancer. His current work focuses on the composition of microbiota and metabolites in a murine model of colon carcinogenesis and in healthy mice consuming rice bran or rice bran fermented with the probiotic *Bifidobacterium longum*. Kristopher earned his undergraduate degree from Pittsburg State University where he researched mechanisms that viruses utilize to hijack plant cytoskeletal machinery in order to facilitate cell-to-cell spread. His PhD from the University of Wyoming explored the relationship between gut microbiota and intestinal inflammation within the backdrop of mice and humans afflicted with a rare congenital disease."



### "The koala (*Phascolarctos cinereus*) microbiome."

Kylie Brice, PhD is a molecular biologist with interests in the gut microbiome, specifically how differences in gut microbial community composition and function can be used to assist the management and conservation of endangered species. In her PhD, she investigated how diet impacts the microbial community composition of the koala (*Phascolarctos cinereus*) gut microbiome, across two geographically separated populations from the east coast of Australia. In undergraduate studies, she focused on the development of marsupial immune cells in the fat-tailed dunnart (*Sminthopsis crassicaudata*). She works as part of a multidisciplinary team at CSU to understand and better manage the devastating citrus greening disease (huanglongbing) in commercial citrus groves. She studies the influence of management strategies on citrus plant/soil microbial community structure and microbiome function. In particular, her interests lie in how alterations in microbial community structure impact plant health and disease progression.



Please join this interdisciplinary group of students, staff and faculty for two exciting short seminars, informal networking, and refreshments. Learn about upcoming events and opportunities get involved with microbiome science at CSU.