Host-Microbiome Dynamics under Environmental Stress

Animal surfaces are inhabited by complex dynamic microbial communities known as the microbiome. These microbial communities provide many “services” to the host and significantly impact the host’s health and well-being. The microbiome can be involved in food digestion, immune system development, and even modulate animal behavior. Many factors can shape the traits of animal microbiomes, including environmental changes. Our research focuses on understanding microbiomes’ responses to various stressors and the effects of these responses on the “microbiome services” provided to the host.