

Sanghoon Kang Asst Professor, Baylor University



Characterization of ecologically active microbial communities and their temporal dynamics under natural and disturbed conditions. Understanding the spatial distribution and scaling of microbial communities in regard to function and overall activity. Linking diversity, dynamics and distribution of microbial community with environmental constraints and expanding and validating ecological laws of macro-organisms into microbial systems.



Terry Gentry. Assoc Professor, Texas A&M University



Development and use of molecular technologies to enhance the detection and remediation of environmental contamination, including detection and identification of microbial pathogens from animal, human, and natural sources and also the characterization of microbial populations and communities contributing to applied remediation processes such as the bioremediation of organic and metal contaminants.



Robert Mclean. Regent Professor, Texas State University



Bacterial biofilm communities are significantly more resistant to environmental stresses. We study the ability of individual bacteria to grow slowly, survive stresses, express a variety of biofilm-activated genes, and the role of quorum sensing on enabling biofilm community members to perform many metabolic activities. We have expanded these studies by employing gene arrays and transcriptional profiling to investigate overall patterns of gene expression in mixed culture bacterial biofilms. ***Investigating How E. coli Grows in Mixed Cultures***



Elizabeth Pierson. Assoc Professor, Texas A&M Univ.



Understanding plant-microbe interactions that determine plant health, including pathogenesis and biological control. Systems studied include ecological significance of secondary metabolite production on biocontrol success, mechanisms of pathogenesis in zebra chip disease of potato, microbe-insect interactions, and terrestrial plant ecology.

eDNA release promotes biofilm formation in the biocontrol strain Pseudomonas chlororaphis 30-84

