

"Of Mice, Men, MicroRNA and your Microbiome: Building Better Biomarkers for Brain Disorders"

The ability to detect the earliest signs of a brain disease offers the greatest opportunity for effective therapeutic intervention. One of the most promising means for discovering such signs that has emerged in recent years has been the comprehensive measurement of non-coding RNA and microbial features in peripheral biofluids. This talk will describe our successful efforts to develop and validate diagnostic biomarkers of early stage alcoholism, autism, and Parkinson's disease through assessment of peripheral blood and saliva. These studies benefit from the use of rodent models for demonstration of highly-specific and reproducible effects. Results indicate that each disorder is associated with specific changes in host and microbial features that may be directly tied to the core pathophysiology of each condition.