

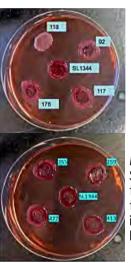
Research Interests

RNA Therapeutics
Promoter-Enhancer Interactions
Cancer

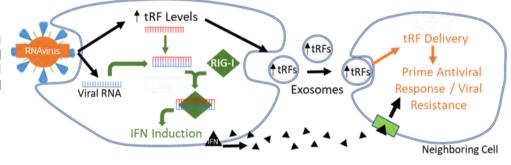
microRNA snoRNA tRNA Bacteriocidals Virology G4 Quadruplex DNA

Experimental Capabilities

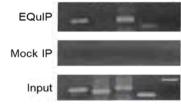
Extracellular RNA Isolation Next-Gen Sequencing Oxford Nanopore Sequencing Bioinformatics Transcriptomics ChIP-seq Characterization of RNA Modifications



Model of proposed role of exosomal transfer RNA-derived fragments in antiviral immunity.



Morphotyping of Salmonella mutants to confirm a loss of their ability to form infection-relevant biofilms.



PCR confirming the ability of a method recently developed by the Borchert lab, Enhancer Quadruplex ImmunoPrecipitation (EQuIP), to identify long-range genomic interactions.

## 2021 Antibiotics

"Characterization of 475 Novel, Putative Small RNAs in Carbon-Starved Salmonella Enterica Serovar Typhimurium"

## 2022 Biomedicines

"Small Nucleolar Derived RNAs as Regulators of Human Cancer"

2020

## **Nucleic Acids Research**

"Characterization of Long G4-rich Enhancer-Associated Genomic Regions Engaging in a Novel Loop" Journal of Biological Chemistry
"Stress Response of Salmonella Through
sRNA-Mediated Regulation"

