The goal of our research project was to determine if targeting of Connexin 43 is effective for treating metastatic breast cancer. We proposed to test the effect of ACT1, a Cx43 targeted agent, for the treatment of metastatic breast cancer.

Accomplishments:

- Completed in vivo metastatic assays using ACT1 as a single agent.
- Generated and tested breast cancer cell lines overexpressing wildtype Cx43 or a gap junction deficient mutant of Cx43 (G60S) as a surrogate for ACT1 treatment.
- Completed and published a research manuscript for ongoing work on Cx43 in breast cancer (https://www.ncbi.nlm.nih.gov/pubmed/?term=Dysregulated+Connexin+43+in+HER2-positive+drug+resistant+breast+cancer+cells+enhances+proliferation+and+migration)
- Used METAivor data to submit an R03 NIH grant