

Reid Powell, PhD Assistant Professor Combinatorial Drug Discovery Program and High Throughput Flow Cytometry Program Texas A&M Institute of Biosciences and Technology

Establishing Pre-clinical Databases for Drug Repositioning

Dr. Powell is an Assistant Professor in the Gulf Coast Consortia's Combinatorial Drug Discovery Program and High Throughput Flow Cytometry Program at Texas A&M Institute of Bioscience and Technology. He has a diverse set of research interests with expertise in cell and molecular biology, bioinformatics, and lab automation. This has been exemplified throughout his academic carrier where he initially received a Bachelor of Science (BS) in Biochemistry with a minor in Biology from Texas Tech University. He later went on to receive his PhD in Medical Science from Texas A&M Health Science Center, where he also completed his post-Doctoral research in the Drug Discovery area. Throughout his career, he has developed a wide array of biochemical, image-based, and flow-based high throughput screening platforms with accompanying analytical methods. This has included multiple fully automated image analysis routines as well as methods to contextualize high throughput screening data using integrative approaches that combine genomics, transcriptomics, chemical, and pharmacologic data sources. He has supported multiple early-stage drug developed and drug repurposing campaigns, which have been performed across multiple disease contexts including cancer, pathogenic infections, and neurologic disorders.

## **Research Areas**

High throughput screening, High throughput/content microscopy, Bioinformatics, integrative analysis, deep Learning, Machine Learning, drug discovery, pharmacogenomics/transcriptomics