CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:
RP180748

Project Title:
GCC Center for Comprehensive PK/PD and Formulation

Award Mechanism:
Core Facility Support Awards

Principal Investigator:
Liang, Dong

Entity:
Texas Southern University

Lay Summary:

Cancer research is evolving rapidly, with many new potential therapeutics reported regularly. However, many of cancer researchers do not have the resources necessary to even begin the FDA's lengthy and costly drug approval process. One of the key challenges for academic cancer researchers and small biotech companies is limited-to-no access to specialized drug development expertise and facilities available to large drug companies. While there are a few Texas core facilities available for discovery of new potential drugs, the next crucial step is to test how the body affects the drug (pharmacokinetics; PK) and how the drug affects the body (pharmacodynamics; PD). Additionally, it is very important to develop/determine appropriate formulation and dosing strategies suitable for treatment in humans. Unfortunately, these types of “preclinical” studies are largely only available through expensive contract research organizations (CROs), not readily accessible or affordable for most Texas cancer researchers, and many potent anti-cancer compounds are, therefore, eliminated simply due to lack of appropriate PK/PD and dosage formulation information. To address this critical unmet need, the Gulf Coast Consortia (GCC) Center for Comprehensive PK/PD & Formulation (CCPF) is proposed and will be a state-of-the-art drug development core facility with experienced faculty from Texas Southern University and University of Houston Colleges of Pharmacy, MD Anderson Cancer Center, and the GCC for Quantitative Biomedical Science. Primary focus will be on preclinical drug development to facilitate rapid advancement of novel cancer drugs to clinical trials. The physicians, scientists and start-up pharmaceutical companies who are planning to use CCPF are conducting cutting-edge cancer research to develop innovative therapies to fight cancer. Research supported by this core facility will have a direct impact on the development and regulatory approval of novel treatments for cancer.