CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:
RP160657

Project Title:
Targeted Therapeutic Drug Discovery & Development Program

Award Mechanism:
Core Facility Support Awards

Principal Investigator:
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Entity:
The University of Texas at Austin

Lay Summary:

With the growing appreciation of the molecular pathways underlying different cancers, the new approach of cancer therapeutics is to target specific pathways so that ultimately, we may create rationally-developed combinatorial strategies that circumvent drug resistance. While cancer researchers have identified many clinically important cancer-related targets, the critical challenge in advancing new molecules from ‘discovery’ to pre-clinical testing is lack of access to the specialized resources and multi-disciplinary experiences that are necessary to support the early phase of drug development effort. The goal of the GCC High Throughput Screening Program has been to provide Texas’ researchers with access to cutting-edge technologies and expertise to enable the translation of their research into new treatments for cancers. The Targeted Therapeutic Drug Discovery & Development Program (TTDDDP), the subject of this proposal, is a critical component of this larger program and is focused on assisting cancer researchers by utilizing a truly integrated approach of targeted molecular drug discovery, uniting every key discipline to achieve their goals in a single platform. We believe that having such an integrated platform will increase the number of new compounds in Texas reaching the stage of pre-clinical testing that possess the potency, selectivity and pharmacokinetic parameters needed to engage and inhibit oncogenic targets in tumors. This CFSA grant proposes to expand and enhance the capabilities of the existing TTDDDP. The physicians and scientists who are planning to take advantages of this newly expanded program are conducting research that is at the forefront of exploring new therapies for devastating diseases such as Triple Negative Breast, lung, Prostate, Melanoma, Pancreatic and Pediatric Brain Cancer. Research supported by this core facility will have a direct impact on the development of new treatments for these and many other forms of cancer.