CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:
RP180734

Project Title:
UTHealth Cancer Genomics Core (UTHealth CGC)

Award Mechanism:
Core Facility Support Awards

Principal Investigator:
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Entity:
The University of Texas Health Science Center at Houston

Lay Summary:

The University of Texas Health Science Center at Houston (UTHealth) is one of the major institutes within the University of Texas System and part of the Texas Medical Center (TMC). UTHealth McGovern Medical School is the seventh-largest medical school in the United States - it currently has ~1500 faculty in 24 academic departments as well as 39 research centers or institutes in specific areas. In all the clinical, basic, preventive, and translational research areas, cancer-related activities have been substantially growing in UTHealth recently, but it currently does not have a genome sequencing core. As technology and innovation continue to drive cancer research, a UTHealth Cancer Genomics Core (CGC) will be a powerful engine to assist our cancer investigators in both the discovery and translation of research findings to clinical care and disease prevention. In fact, UTHealth healthcare partner, Memorial Hermann Health System, has diagnosed more cancer patients than any other hospital in the TMC, and the discoveries made using a cancer genomics core could eventually lead to the development of treatments for newly diagnosed patients. UTHealth have already collected thousands of tumor samples through several clinical departments. Importantly, there are many cancer investigators in UTHealth, TMC, and other Texas regions frequently need genome sequencing in their research, but the sample size is not large enough to gain a high priority in existing local genome sequencing cores or centers, which have already been in full capacity. To address these issues above, we request funds to establish the UTHealth CGC, which will provide the state-of-the-art sequencing facilities and timely bioinformatics service and training to help these investigators, including a group of 30 well-funded cancer researchers we have identified, to accelerate the adoption of cutting-edge genome technologies into their research and clinical programs in the rapidly emerging cancer precision medicine.