



CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:
RP170668

Project Title:
Data Science and Informatics Core for Cancer Research

Award Mechanism:
Core Facility Support Awards

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

Lay Summary:

Each day, more than 100 Texans lose their battle with cancer. The causes of cancer are now studied extensively using the latest technologies that can generate huge amounts of data. These technologies have shifted the focus of cancer research from data generation to data analysis, demanding novel ways to sift through the sea of cancer research data to find cures. As the only free-standing biomedical informatics school in the nation, the faculty, trainees, and research staff at the School of Biomedical Informatics (SBMI) are at the forefront of developing these computational methods to analyze cancer research data. However, many of these methods are the results of academic research and not readily available to the cancer research community. To address this gap, we propose a Data Science and Informatics Core for Cancer Research (DSICCR) to translate the cutting-edge data science and informatics research at SBMI to easily accessible, high-quality, and user-friendly software and services to advance cancer research. The DSICCR will build a "big data" infrastructure for cancer research, provide data science and informatics services to cancer researchers, and educate cancer researchers about the latest data science and informatics methods and their application in cancer research. DSICCR will significantly advance cancer research through the application of cutting-edge data science, and thereby help to find cures for cancer and reduce cancer deaths in Texas.