



CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:
RP180670

Project Title:
Small Animal Imaging Core Facility for Cancer Research at UT Dallas

Award Mechanism:
Core Facility Support Awards

Principal Investigator:
Hoyt, Kenneth

Entity:
The University of Texas at Dallas

Lay Summary:

Preclinical imaging is a powerful resource that can be used to visualize and target tumors in small animal models enabling cancer researchers to assess the efficacy of new diagnostic and therapeutic strategies prior to clinical translation. A centralized state-of-the-art small animal imaging core facility at the University of Texas at Dallas (UT Dallas) would be a major stimulus for accelerating cancer research efforts by the faculty and student population. To that end, the objective of this proposal is to significantly expand the capabilities of preclinical imaging resources that are currently available at UT Dallas. We will acquire several powerful and cost-effective small animal imaging instruments, including a magnetic resonance imaging and spectroscopy system, whole body optical imager with X-ray computed tomography functionality, and a hybrid ultrasound and photoacoustic system. It is estimated that at least 16 investigators will immediately use the requested shared instruments. Establishment of the new small animal imaging core facility will help UT Dallas recruit new faculty with cancer research interests as well as to retain its best investigators. Furthermore, this new core facility will greatly speed translation of basic research to human clinical trials.