Core A: Tissue Bank and Biomarkers Core

Core Co-Directors

Daniel T. Merrick, MD, FCAP
Adrie van Bokhoven, PhD

The Tissue Bank and Biomarkers Core (TBBC) is the central repository of specimens necessary for the execution of the studies of the Colorado SPORE in Lung Cancer program. Furthermore, as an extensive resource for lung cancer related specimens, the TBBC also provides specimens to extramural investigators when there are adequate materials to accommodate these requests beyond the needs of the internal projects. The three primary goals of the TBBC are to procure, characterize and process, and distribute specimens. The provision of these services takes advantage of a close working relationship with the existing facilities, infrastructure, and personnel for biobanking and histology operations of the University of Colorado Cancer Center Tissue Biobanking and Processing Shared Resource. Two general banks are maintained: a tumor bank and a premalignant bank. Specimens for both of these banks are collected as archival tissue or, in collaboration with the Clinical Trials Core, SPORE trial associated specimens are obtained under IRB approved protocols. In addition to tissue, ancillary specimens including blood, sputa, urine, exhaled breath and special bronchoscopic specimens are collected. The TBBC, in collaboration with the Biostatistics and Bioinformatics core of the SPORE, also collects correlative clinical and biologic information that can be included in specimen distributions. The TBBC provides histologic and cytologic interpretation, prepares RNA, DNA and protein samples, creates TMAs and provides molecular analysis on selected specimens required by the SPORE projects. This includes histologic review and classification by up-to-date published WHO classification systems for malignant and pre-malignant lesions of the lung by the pathologist members of the core. The core designs its activities to meet the needs of each of the SPORE projects as outlined in the proposal. In order to meet the tissue needs and achieve the goals of the projects, the TBBC collects and processes tissues in a specific manner as determined via collaboration with project investigators. The TBBC also collaborates in the performance of project related studies in which expertise of TBBC personnel can benefit study design, data generation, and data analysis.