PATHOLOGY CORE

Gabriel Sica, MD, PhD
Core Director

I. EXECUTIVE SUMMARY

The Pathology Core provides expertise in lung cancer pathology to ensure efficient and highly coordinated procurement, archiving, and storage of both fresh and archived lung cancer tissue specimens to support the Winship Lung Cancer SPORE projects. These efforts further advance our understanding of the biology of lung cancer and help define novel strategies for the treatment of lung cancer.

II. CORE DESCRIPTION

The objective of the Pathology Core (Core 2) is to serve as a centralized infrastructure to provide the materials and technical expertise necessary to accomplish the translational studies proposed by the Winship Lung Cancer SPORE Research Projects and Developmental Research and Career Enhancement programs. With experience and expertise specifically in lung cancer pathology, the Core will interact directly with each SPORE project, the Administrative and Biostatistics and Biomedical Informatics Cores, to ensure efficient and highly-coordinated procurement, archiving, and storage of both fresh and archived lung cancer tissue specimens. Continuous communication between clinicians, scientists, research nurses, biostatisticians and pathologists, together with established standardized operating procedures for all core activities, will provide optimal tissue collection and accurate processing, analysis and storage of each sample. The Core will function as the main repository of patient specimens. This Core will utilize and expand the well-established tissue banking efforts at the Winship Cancer Institute of Emory University for translational research, including annotating human tissue samples with relevant clinical and pathologic data that is collected and stored from the patient history, and maintaining patient confidentiality. Histopathologic analysis by the core pathologist will confirm the quality of study tissue in research specimens. Selected cellular biomarkers utilizing immunohistochemistry (IHC) will be interpreted by the core pathologist. In addition, animal study specimen processing, histopathology, IHC, and pathologic interpretive support will be provided. Collectively, the primary functions of the Core are stated in the following aims: 1) Comprehensively acquire, process, store, catalog and disburse tissues, cells and blood with relevant clinico-pathologic data; 2) Provide pathologic and molecular genetic classification of lung tumors and interpretation of immunohistochemical stain results; 3) Facilitate human tissue-based investigation of the SPORE research projects; 4) Support Administrative Core-initiated intra-SPORE collaborations, inter-SPORE
collaborations, and collaboration between investigators at our own and other institutions including other peer reviewed projects funded by NCI/NIH and other agencies using SPORE-generated tissues.