Update on the CTC Biorepository Core

The Biorepository’s mission is to support clinical and translational studies that aim to better understand transplant immunology, combat rejection, and induce tolerance to help improve patient care. The Biorepository Core collects, hosts and distributes fully annotated biological specimens from multiple transplant disciplines, including kidney, liver, pancreas, stem cell, islet, and lung transplantation. After they are collected in the clinic, biospecimens are processed and stored in the Biorepository Freezer Farm.

The Biorepository staff are highly trained, with Good Laboratory Practice/Good Manufacturing Practice (GLP/GMP) knowledge and maintain highest standards of Biorepository conduct. Specimen processing and storage at the Biorepository is in compliance with the College of American Pathologist (CAP) standards and HIPAA. Each individual patient is de-identified according to HIPAA, yet biospecimens are fully-catalogued and managed by FreezerPro, which is sophisticated inventory software that not only feeds directly to the Northwestern Enterprise Data Warehouse (EDW), but also links to clinical data and to the pathology imaging platform, an Aperio system. Upon request, individual biospecimens can be quickly identified, packaged and shipped according to specific requirements. The Biorepository Core has expanded its storage capacity and maintain its freezers in the Freezer-Farm to meet the increasing demand. Temperatures are monitored by state of the art online monitoring system 24/7 with alerts sent to all Biorepository staff members via text, emails or phone calls in the event the temperatures are out of acceptable ranges.

The Biorepository Core is both CAP and ASHI (American Society of Histocompatibility and Immunogenetics) and therefore Clinical Laboratory Improvement Amendments (CLIA) certified. Our strength is the ability to deploy this unique specimen portfolio to support clinical and translational studies to the research community at Northwestern University and across the U.S.

The collection of specimens in the Biorepository can be used for prospective as well as retrospective clinical and translational studies, including discovery and validation of biomarkers of transplant immunology, rejection and tolerance. Our specimens are assimilated with enriched information and provide investigators with the edge to quickly reach their goals.

Currently, the Biorepository Core supports more than 25 clinical research and clinical trial projects conducted by CTC researchers. These studies are funded by a variety of sources including the NIH, pharmaceutical companies and internal funding mechanisms. Each of these entities conducts their own site visits to inspect the laboratory and approve our processes time and again.

For further information, please contact our lab manager Nancy Herrera at n-herrera@northwestern.edu.