FACILITIES AND RESOURCES – Liquid Biopsy Core

The NCI Norris Comprehensive Cancer Center Liquid Biopsy Core is equipped with a vast array of cutting-edge instrumentation for Liquid Biopsy processing and analysis. The laboratory has RareCyte's high-content imaging system (AccuCyte® Sample Preparation System and CyteFinder) and a Leica Bond RxM automated stainer for high-throughput image analysis for CTC identification, phenotyping and single cell retrieval through robotic micropipette recovery. Other CTC imaging and manipulation technologies include two DEPArray Systems (Menarini Silicon Biosystems) for 6-channel immunofluorescent image analysis and single cell recovery, two Zeiss Axiozoom V16 microscopes with automated multispectral fluorescence and an Eppendorf TransferMan NK 2 Micromanipulator coupled to a Cell Tram Vario precision single cell micropipette. Multiple CTC isolation technologies include four Parsortix (Angle) and two ClearCell FX (Clearbridge) systems for size-based microfluidic CTC enrichment, two Parylene-C slot microfilter apparatuses, and a Cellsearch (Menarini) system for automated, immune-affinity capture, enumeration and immunofluorescence protein profiling.