

Vanderbilt Biorepository and Clinical Validation Center, EDRN-Lung Group: Support for the Early Detection of Lung Cancer.

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Vanderbilt’s Thoracic Biorepository has been supported by the EDRN for over a decade. It continues to fulfill the role of supplying academia and industry with high quality specimens, clinical insight, logistic and statistical expertise for the development and validation of imaging and liquid biomarkers for lung cancer early detection. The biorepository was initiated over 20 years ago by Dr. David Carbone, grew under Pierre Massion’s leadership and continues today under the Direction of Drs. Deppen and Grogan. Enrollments of new and returning participants in 2023 shows full recovery from the depressed collections during COVID (**Figure 1**). Three cohorts are available to researchers in the biomarker space: the ongoing interventional cohort from surgery and bronchoscopy (200-300 enrolled per year, high cancer prevalence), Nashville Lung Cancer Screening Cohort (n~800 with ongoing enrollment), Vandy Curated Cohort (400-500 nodules with blood, imaging and clinical data, 55% cancer prevalence). Multiple specimen types are available including tumor and normal tissue, serum, plasma, PBMC, brushings and micro arrays. Over 5,000 aliquots are distributed annually. Put in a request or contact us to initiate discussion on availability, process and collaboration:

<https://www.vumc.org/massion-lab/thoracic-biorepository-request-form>

