



## Scientific Abstract

### SU2C Lung Cancer Health Equity Research Team: “Southeastern Consortium for Lung Cancer”



Lung cancer continues to be one of the leading causes of morbidity and mortality among racially and ethnically diverse populations in the United States, especially for the Black/African American (AA) population. Black/AAs have greater exposure to stressors related to the social determinants of health, including socioeconomic, financial, and other types of stressors (e.g., racial discrimination, structural stress because of low social capital and neighborhood violence) that can increase their risk for smoking and impede their ability to access screening and care. This Stand Up to Cancer application titled *Southeastern Consortium for Lung Cancer Health Equity* (SC3) will facilitate scientific collaborations between investigators at three National Cancer Institute-designated cancer centers: Massey Cancer Center (MCC) at Virginia Commonwealth University (VCU), Lineberger Comprehensive Cancer Center (LCCC) at the University of North Carolina-Chapel Hill (UNC), and Hollings Cancer Center (HCC) at the Medical University of South Carolina (MUSC). During the past 20 years, the field of cancer health disparities has evolved into a complex science requiring transdisciplinary collaborations. Unfortunately, the rigor required to conduct this research has not been uniformly applied, and the infrastructure needed to take it to the next level, where lasting solutions can be found, is limited. Therefore, SC3 will focus intently on the lung cancer disparities among the Black/AA population using a “cell-to-society” approach and create a sustainable infrastructure to gather relevant biological, clinical, individual, and contextual data needed to increase lung cancer screening (LCS) and develop more precise methods for identifying those at the highest risk for succumbing to a diagnosis of and/or poor treatment outcomes for lung cancer. To accomplish this, SC3 will:

- (1)** initiate and evaluate a high-impact, multimodal navigation intervention, in partnership with regional Federally Qualified Health Centers, to promote LCS among Black/AA communities in Virginia, North Carolina, and South Carolina; and
- (2)** Develop a robust population-based cohort to understand biologic determinants of poor lung cancer outcomes among Black/AA populations in the Southeast with an initial emphasis on testing a 10-single-nucleotide polymorphism panel combined with a clinical risk score to generate a composite risk score for lung cancer risk among Black/AA individuals.

In addition, SC3 will promote communication between the investigators and the Black/AA communities of the collective catchment areas regarding culturally appropriate strategies for the design, implementation, and dissemination of the proposed research. To accomplish this, SC3 has included designated patient advocates on the team and will utilize each Center’s ongoing community outreach and engagement efforts. SC3 leaders are also equally committed to fostering the next generation of investigators who will be committed to lung cancer disparities research and will include early career investigators on the SC3 team to promote their research efforts through collaborative pilot projects.



