

NUR ZEINOMAR, PHD

AWARDED R01 GRANT FROM NIH!

Nur Zeinomar, PhD, an Assistant Professor in the Section of Cancer Epidemiology and Health Outcomes at Rutgers Cancer Institute and Robert Wood Johnson Medical School, has been awarded her first National Institutes of Health R01 grant, R01CA315618-01. This five-year award marks an important milestone in Nur's research career and celebrates the power of thoughtful preparation, collaboration, and persistence.



Nur's path to this achievement began during her postdoctoral training, when she led a systematic review of environmental exposures and breast cancer risk. That work revealed an important unanswered question: what happens after a breast cancer diagnosis, and how might the environments where survivors live influence their health? Air pollution stood out as a compelling area of study because it can affect cardiovascular health and inflammation, pathways that are also relevant to breast cancer survivorship.

Her R01 project will study more than 1,900 Black breast cancer survivors from the Women's Circle of Health Follow-Up Study in New Jersey. The team will examine whether long-term exposure to outdoor air pollution is associated with overall and breast cancer-specific survival, quality of life, fatigue, sleep, systemic inflammation, and early signs of cardiac injury.

Developing the application required Nur to bring together cancer survivorship, environmental epidemiology, geospatial exposure assessment, biomarkers, and complex statistical methods into one cohesive scientific story. Participation in an NJ ACTS Workforce Development grant-writing program, along with early feedback from mentors and collaborators, helped her sharpen that story and strengthen the proposal. Nur describes the process as challenging, but her belief in the importance of the question kept her moving forward.

“Understanding whether something as ubiquitous and potentially modifiable as air pollution is associated with survival and quality of life in breast cancer survivors was a question worth pursuing.”

The award will allow Nur and her team to connect residential histories, air pollution estimates, patient-reported outcomes, clinical information, and stored blood samples in a comprehensive study of survivorship. NJ ACTS congratulates Nur on this accomplishment and on the next chapter of a research program designed to improve the lives of women living with and beyond breast cancer.