UNC to Study Pregnancy, Obesity and Breast Cancer Disparities

University of North Carolina at Chapel Hill (UNC) scientists have received a five-year, $2.2 million grant to study how factors such as pregnancy and obesity may promote susceptibility to an aggressive subtype of breast cancer that is more prevalent in young African-American women. Dr. Melissa Troester, assistant professor of epidemiology, and Dr. Liza Makowski, assistant professor of nutrition, both in the UNC Gillings School of Global Public Health, are the principal investigators.

Drs. Troester and Makowski also are members of UNC Lineberger Comprehensive Cancer Center.

Data have shown that a full-term pregnancy reduces the risk for breast cancer overall, but recent studies reveal that pregnancy actually may increase the risk of an aggressive subtype of breast cancer called basal-like. UNC researchers previously have shown that basal-like breast cancer is more prevalent among premenopausal African-American patients. Better understanding of the relation between pregnancy, obesity and basal-like cancer is needed to support prevention strategies.

In the laboratory, the team hopes to identify molecular pathways and biomarkers that are regulated by pregnancy and obesity and that also promote basal-like tumors. As part of the study, a community advisory board is being formed to share scientific findings and solicit input from breast cancer survivors, caregivers, nutritionists, dietitians and advocates.

The grant is funded by the National Institute of Environmental Health Sciences (NIEHS) Breast Cancer and Environment Research Program.

[Photos: (top to bottom) Dr. Melissa Troester and Dr. Liza Makowski]