

# UNC sweeps state *in* wide-ranging study to find causes of breast cancer *in* black women



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## CAROLINA BREAST CANCER STUDY

Jeanne Hopkins Lucas (left), the first African-American woman to serve in the N.C. Senate, was a strong advocate for higher education. Lucas is pictured here with N.C.'s Gov. Bev Perdue (middle, then lieutenant governor) and Lucas' sister, Bernadette David-Yerumo (right).

"Jeanne Hopkins Lucas was a strong woman who turned her personal fight with breast cancer into a mission for all breast cancer patients and their families, both now and in the future. This study's objective of identifying causes of breast cancer is exactly what Jeanne would want to happen. She always knew that once the why and how of breast cancer was defined, the cure would follow. And so the work of Sen. Jeanne Lucas goes on – her passion lives on through this study, bolstered by UNC's reputation."

– Gov. Bev Perdue

Each year in North Carolina, about 8,100 women are diagnosed with breast cancer. And each year, about 1,300 women in the state die from breast cancer.

Overall, more white women get breast cancer than do black women, yet black women under age 50 die of the disease almost twice as often as white women under 50.

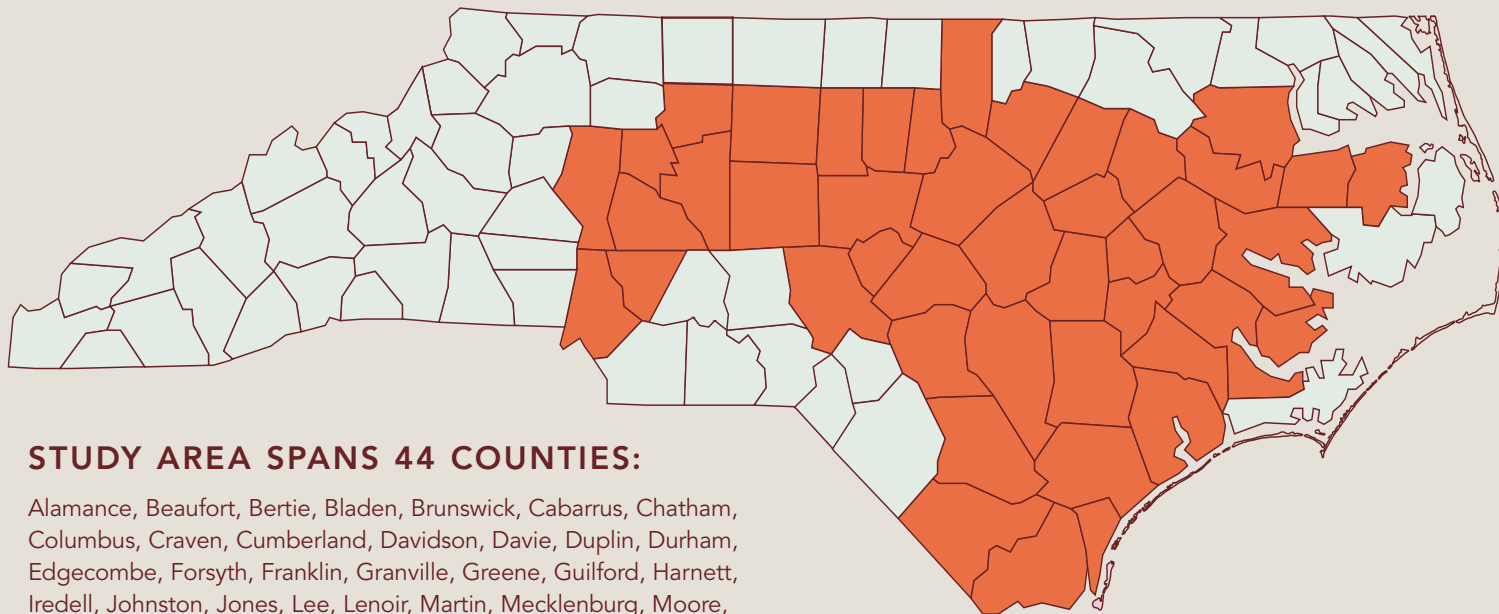
Scientists at the UNC Lineberger Comprehensive Cancer Center want to know why. Led by Robert Millikan, DVM, PhD, they have launched a study of 2,000 women from 44 counties in North Carolina, making it the largest geographical study of its kind.

Named after Jeanne Hopkins Lucas, a highly-regarded North Carolina state senator who died of breast cancer in 2007, the study is supported by the state's University Cancer Research Fund and by the National Cancer Institute's Specialized Program of Research Excellence (SPORE) in breast cancer.

"The Jeanne Lucas Study will provide a comprehensive look at treatment decisions, access to care, and how financial or geographic barriers impact breast cancer outcomes among African-American breast cancer patients in low-income and rural areas," says Millikan, the Barbara Sorensen Hulka Distinguished Professor of epidemiology in the UNC Gillings School of Global Public Health. "Our study also uses molecular subtype information to provide the ►►

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– UNC Professor Robert Millikan



### STUDY AREA SPANS 44 COUNTIES:

Alamance, Beaufort, Bertie, Bladen, Brunswick, Cabarrus, Chatham, Columbus, Craven, Cumberland, Davidson, Davie, Duplin, Durham, Edgecombe, Forsyth, Franklin, Granville, Greene, Guilford, Harnett, Iredell, Johnston, Jones, Lee, Lenoir, Martin, Mecklenburg, Moore, Nash, New Hanover, Onslow, Orange, Pamlico, Pender, Pitt, Randolph, Rowan, Sampson, Tyrrell, Wake, Washington, Wayne and Wilson.

most systematic evaluation to date of breast cancer among African-American women.”

The Lucas study is an extension of the Carolina Breast Cancer Study (CBCS), started by Millikan in 1993, which provides one of the largest breast cancer databases in the United States.

“The Carolina Breast Cancer Study is one the first research studies to combine state-

of-the-art molecular biology with the tools of public health,” Millikan says. “Based on 16 years of work, we now have a much better understanding of how and why breast cancer occurs in women in North Carolina, particularly younger African-American women.”

That study enrolled more than 2,300 women with breast cancer and 2,000 controls between 1993 and 2001. The data were key to

a 2006 published report by a Lineberger team that included Millikan, molecular biologist Charles Perou, PhD, and breast cancer specialist Lisa Carey, MD, that found a subtype of breast cancer called “basal-like” has the highest prevalence among premenopausal black breast cancer patients.

The Lucas study – the third phase of CBCS – also will be used to analyze survival rates



Dr. Robert Millikan

among the cancer subtypes, with information from the National Death Index.

Researchers will follow the women for two years after diagnosis, which Mary Beth Bell, MPH, project manager for the Lucas study, says “will give us a really good picture of their treatments and how they are doing.”

Using newly diagnosed cancer cases reported to the North Carolina Central Cancer Registry as a starting point, the four-year enrollment period began on May 1, 2008, and continues through April 30, 2012. The goal is to enroll 1,000 black women with newly diagnosed cases of invasive breast cancer – half under the age of 50 and half aged 50 and older – and a similar number and distribution of white women with breast cancer.

Initially, the women will be interviewed by a nurse about breast cancer risk factors, such as family history, medical history and physical and emotional well-being, and asked for a DNA blood sample. Then, every six months for the next two years, researchers will touch base with the women, updating records and gathering information about their treatment and general health.

“In other studies, we weren’t really able to go back and reconstruct their medical treatment histories, so this will allow us to examine any disparities in treatment and access to care,” Bell says. ■

– *By Kim Gazella*