

Clues to controlling cancer



Mapping food deserts and tobacco hotspots

School researchers use a geographic information system to map neighborhoods in three counties that lack availability of fresh food and places to exercise, as well as those that have clusters of tobacco retailers. The information can help cities and towns make policies that promote health. ■■■■

“Zoning laws could be used to reduce the number of tobacco retailers in a neighborhood or to restrict outdoor tobacco advertising near schools,” says Kurt Ribisl, PhD, associate professor of health behavior and health education. The project is one of six supported by Health-E-NC, which funds pilot projects from UNC researchers testing new ways to prevent North Carolinians from getting cancer and to help improve diagnosis and care. Sponsored by UNC Lineberger Comprehensive Cancer Center and the University Cancer Research fund, Health-E-NC also has funded other School investigators, including Laura Linnan, ScD, health behavior and health education associate professor; and Stephanie Wheeler, PhD, assistant professor, and Bryan Weiner, PhD, professor, both from the Department of Health Policy and Management.

For more information, visit <http://tinyurl.com/UCRF-awards>.

What makes breast cancer grow?

Melissa Troester, PhD, assistant professor of epidemiology, has found that normal tissue adjacent to breast tumors shows gene expression changes (the turning “on” or “off” of genes) similar to those that happen during wound healing, and that these changes vary greatly from case to case. These variations may explain why some patients with similar

tumors have very different prognoses. “We think that changes in the adjacent normal tissue are providing rich soil for the tumors to grow in. If we can understand the soil conditions better, we can understand how to stop the cancer from growing,” Troester says.

Revealing disparities in cancer care

The Integrated Cancer Surveillance System will link cases from the N.C. Central Cancer Registry to data from hospitals, insurance programs and clinical trials to reveal disparities in cancer treatment, access to care and clinical trial enrollment. Many aspects of the system will be available to researchers statewide. “After we confirm our data security systems and establish our data-use agreements, we look forward to partnering with researchers from other institutions,” says William Carpenter IV, PhD, assistant professor of health policy and management.

– Angela Spivey



Dr. Kurt Ribisl



Dr. Melissa Troester



Dr. William Carpenter IV