

NOTABLE CANCER CENTER MEMBER**Susan Gapstur, PhD**

When Susan Gapstur, PhD, MPH, moved from Arizona to join the Lurie Cancer Center in 1994 she took one look at Chicago's skyscrapers and traffic and wondered, "What have I done?" Fortunately, she headed north to Evanston where she found an apartment surrounded by trees and foliage, thought, "Okay, I can do this," and never looked back.

Growing up in Minnesota, Gapstur's love of animals led her to plan a career in veterinary medicine. Her focus changed at the University of Wisconsin, where she encountered an "incredibly motivating professor" who encouraged her interest in microbiology, research and science. After working in a biochemistry and physiology research laboratory at the Mayo Clinic, she went on to receive her MPH degree and PhD in epidemiology from the University of Minnesota's School of Public Health.

As Associate Director for Cancer Prevention and Control Research for the Lurie Cancer Center, Gapstur is responsible for the development and coordination of the Center's two research programs in Cancer Prevention and Cancer Control. An additional facet of her role is fostering interdisciplinary collaborations and interprogrammatic interactions within the division.

A professor of Preventive Medicine at the Feinberg School of Medicine, Gapstur's objectives include training skilled clinical and public health investigators in the appropriate

design, conduct and interpretation of epidemiologic research. Her primary research focus is examining the lifestyle and genetic determinants of hormones, growth factors and molecular markers related primarily to breast and prostate cancer risk—with a special emphasis on understanding how ethnicity might impact those relationships.

For the past nine years Gapstur has studied the lifestyle and genetic determinants of longitudinal changes in sex hormone and growth factor levels linked to prostate cancer in a large, well characterized sample of African American and Caucasian men. “This study utilizes data and biologic specimens available from the Coronary Artery Risk Development In (Young) Adults Study (CARDIA), a multi-center longitudinal cohort study of African-American and white men and women, and is conducted in collaboration with Kiang Liu (PI of the Chicago Field Center of the CARDIA Study) and Peter Kopp (Division of Endocrinology),” she says. “No other study has access to repeated serum samples, DNA samples, and high quality exposure data collected in a standardized way in such a large sample of African-American and white men.”

Although her research revolves around people, Gapstur found a way to help animals through her involvement with a local animal rescue organization CARE (Community Animal Rescue Effort) for the Evanston Animal Shelter. An all volunteer non-profit organization dedicated to eliminating animal and pet homelessness, they care for animals at the shelter, place them in safe homes and work with schools to educate the community about animal abuse and neglect. When Gapstur first volunteered with CARE in 1999 she planned to help out by feeding and walking dogs on a weekly basis. Within a few years, however, she was on their board as Director of Development and Volunteer Initiatives and managing a planned expansion of the shelter. Slowly but surely, Gapstur began bringing her work home and now has a houseful of dogs that “adore each other. I said I was fostering the first two, but I knew I’d never really give them up,” she confesses. After her third foster dog was returned to her because of seizures and a need for special care, it also became a member of the household. Gapstur recently retired from CARE and is now focusing on her own pets and spending more time with aging parents.

In 2007, Gapstur had the opportunity to participate in an International Agency for Research of Cancer (IARC) monograph. As part of a panel of international experts meeting in Lyon, France, Gapstur evaluated the world body of literature on the relationship between alcohol consumption and cancer. “I’ve never worked so hard in my entire life as I did for those nine days,” she relates. “There were experts in basic science, in mechanistic studies from the animal and the human perspective, as well as demographers, social policy specialists and a group of epidemiologists. Since the early draft of the monograph came out, people have woken up and realized that this is an important issue. I did my first paper on alcohol and breast cancer in the early 1990s. Working on the monograph reinforced for me that this is significant—it’s not necessarily one single paper that makes an impression, as part of a larger body of evidence it makes a difference. At the end of the day, I take pride in the fact that this work will have a real impact on the population.”