



Kenneth Smith—Hershey Medical Center Staff Photographer

# EQUAL Access

## The Penn State Cancer Institute focuses on underserved, rural communities in the battle against one of the leading causes of death

By DEBORAH A. BENEDETTI

**Dr. Thomas Loughran Jr. sees community collaboration as vital.**

**W**hen it comes to cancer, rural residents have their challenges.

Proven risk factors such as smoking and obesity are more prevalent in rural areas than in urban locales, resulting in a higher incidence of some cancers. Rural residents tend to have to travel long distances to see health care providers—who can offer them preventive services. As a result, cancer, the leading cause of death for individuals under 85 years of age, is often diagnosed in rural communities at a later stage, when survival is less likely.

The Penn State Cancer Institute is committed to discovering ways to change that. Founded in 1996 by the Penn State Milton S. Hershey Medical Center, Lehigh Valley Hospital and the Mount Nittany Medical Center, the institute's outreach programs focus on the

rural resident and community. The institute's founding members partner with community coalitions and groups throughout central Pennsylvania to show that cancer education and prevention—including research, clinical trials and screening programs—can be effectively brought to underserved, rural communities.

### **Prevention and Early Detection**

"Collaborating with community-based organizations is critical to our ability to transfer knowledge to communities about cancer incidence and death," said Dr. Thomas Loughran Jr., director of the institute, which is located at the Milton S. Hershey Medical Center.

For instance, clinical research has identified several effective methods for detecting colorectal cancer at an early stage, when it is most treatable. In fact, doctors now

recommend that everyone should be screened at age 50, with high-risk individuals being screened even earlier. Despite the research, said Dr. Eugene Lengerich, director of the institute's Community Outreach and Education, "Only 30 to 40 percent of rural residents have ever received screening. Our challenge is to develop methods to accomplish the goal of screening in rural communities. We believe that the most effective way to do that is to engage communities, hospitals and researchers collaboratively."

Marcy Bencivenga, lead field coordinator for the Penn State-community partnership Northern Appalachia Cancer Network, added, "The community-research partnership is vital to the discovery of methods that are most successful in improving screening rates among rural residents in our coalition counties."

Composed of survivors,

volunteers and representatives of community and health care organizations, cancer coalitions are organized around the hope of improving cancer survival in their rural counties. “Coalition members know their communities but may be unaware of research-tested methods of cancer education, prevention and screening,” explained Bencivenga. “And researchers understand the science behind the methods but lack the community connection.”

The Northern Appalachia Cancer Network, with the help of Penn State Cooperative Extension and the American Cancer Society, has developed community-based cancer coalitions and provided them with participatory, evidence-based interventions they can use in their communities. Twelve years ago, that partnership developed 13 community-based cancer coalitions; 10 of those 13 still exist.

In the network’s last five years, the coalitions completed 724 community-based interventions, in which nearly 7,000 rural, low-income individuals were screened for breast, cervical, prostate, skin and colorectal cancers. The National Cancer Institute (NCI) recently awarded Penn State \$1.3 million in continued funding for the network.

## **Treatment and Research**

When cancer is diagnosed, the ability to provide the latest treatments is important for local hospitals. Teri Guidi, vice president of Cancer Services for Lehigh Valley Hospital and Health Network, said that membership in the Cancer Institute “makes it possible for many patients in our area to get their treatment close to home,” instead of making a long commute to the nearest medical center.

Video conferencing and other communication technologies have enabled institute members to bring physician expertise and clinical trials to patients in their own communities. This is important to Dr. Gregory Harper, physician-in-chief, Cancer Services, Lehigh Valley Hospital and Health Network, who views the partnership as a way to “bring cancer discoveries into our communities sooner and leverage our resources to get new treatment opportunities and prevention methods.”

The institute’s partners also are participating in research studies. For example, Lengerich is heading

several efforts to analyze cancer incidence data, including one using mapping technology that will help rural hospitals and community coalitions plan early-detection programs.

Another project is focusing on understanding the mechanisms that cause cancer. Dr. Karam El-Bayoumy, associate director of Basic Research at the institute, is conducting a study in collaboration with Harper and Dr. John Richie of the Penn State College of Medicine on the potential prevention effects of selenium, a naturally occurring substance that may inhibit the transformation of normal prostate cells into cancerous cells.

Dr. Philip Lazarus, associate director of population sciences and cancer prevention at the institute, is studying the mechanisms underlying tobacco-related cancers and susceptibility genes in cancer risk.

Loughran hopes to have the institute recognized, in the next three to five years, as an NCI-designated cancer center—a designation that would open more funding opportunities. These centers aim to equalize access to cancer prevention and treatment services for all Americans, said Loughran. The institute’s focus on a rural population, considered by NCI to be medically underserved, increases its chances of earning this recognition.

“Through the institute, we have an opportunity to create a cancer center that will be unique in its approach to reducing the cancer burden for rural and underserved residents throughout central Pennsylvania,” Lengerich said. ♡



**A new building, to open in 2008, will house the Penn State Cancer Institute.**