

**IBT Is Co-recipient of \$7.5 million Komen Grant for Breast Cancer Research***December 15, 2008*

A five-year, \$7.5 million Susan G. Komen for the Cure Promise grant has united research teams at the Texas A&M Health Science Center Institute of Biosciences and Technology and The University of Texas M.D. Anderson to better understand the link between obesity and breast cancer and determine whether clinical intervention in obesity can alleviate breast cancer risk.

The researchers, led by **Wallace McKeegan, Ph.D.**, of the HSC-Institute of Biosciences and Technology and M.D. Anderson researchers Dr. Sai Ching Jim Yeung, Dr. Mong-Hong Lee and Dr. Francisco Esteva, will use mice exhibiting symptoms of obesity and diabetes that eventually develop into breast cancer for preclinical studies of mechanisms and the effectiveness of treatments that reduce obesity and diabetes in the progression of breast cancer. These studies will guide clinical trials in obese breast cancer patients.

Statistics indicate breast cancer is the most common cancer in women and the second leading cause of female cancer death. Approximately 200,000 women are diagnosed yearly with breast cancer.

In recent years, obesity has risen to epidemic proportions in developed and developing societies. Some studies estimate 20 percent of all postmenopausal breast cancers may be caused by obesity and account for up to 50 percent of postmenopausal breast cancer deaths.

The Komen grant is one of seven such grants funded nationwide that are designed to support collaboration between basic and clinical researchers from different institutions to speed the discovery and delivery of a cure. The joint grant is the first in a broader joint program in molecular and cellular aspects of cancer survivorship between the HSC-Institute of Biosciences and Technology and M.D. Anderson.

"Obesity at the time of diagnosis is a significant predictor of poor prognosis and adverse outcomes in both pre- and post-menopausal women with breast cancer," said Dr. McKeegan, who directs the HSC-Institute of Biosciences and Technology Center for Cancer and Stem Cell Biology.

"Reduction in obesity and its complications as diabetes and

hyperlipidemia – either by calorie restriction, exercise or pharmaceutical intervention – is potentially a preventable risk factor that results in mortality of breast cancer patients. Obese women exhibit a variety of hormonal abnormalities including blood levels of estrogens that may contribute to the disease.”

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