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## **Uniformed Services University, Georgetown Lombardi Cancer Center Awarded \$4.5 Million to Study Environmental Risk Factors for Breast Cancer**

**Bethesda, MD** – The National Institute of Environmental Health Sciences (NIEHS) of the National Institutes of Health today announced the award of \$4.5 million to the Uniformed Services University of the Health Sciences (USU) and Georgetown Lombardi Cancer Center to study the impact of environmental metal and metalloid exposures on mammographic breast density, a marker of breast cancer.

The five-year study, which will be led by joint Principal Investigators Celia Byrne, Ph.D., an associate professor in USU's Department of Preventive Medicine and Biostatistics, and Mary Beth Martin, Ph.D., a professor at the Georgetown Lombardi Comprehensive Cancer and former post-doctoral fellow at USU, will focus on the women in the Washington, DC, community who have been disproportionately affected by breast cancer and who live in areas with high levels of environmental metal exposures. Dr. Byrne is an epidemiologist who has been a leader in breast cancer research helping to establish the role of mammographic breast density as one of the strongest predictors of breast cancer risk. Dr. Martin is a biochemist who established the role of metals as "metallo-estrogens" showing that environmental levels of metals mimic the biological effects of hormones. Working with community groups in Washington, DC, the researchers will combine their efforts to determine the role of environmental metal exposure on mammographic breast density in women across the menopausal transition.

"This type of research is important since, by combining both a populations study and laboratory studies with community involvement, our study will work to address the reasons why Washington, DC, has one of the highest rates of breast cancer incidence in the country," said Byrne.

The award is part of the Breast Cancer and the Environment Research Program (BCERP) to support integrated scientific research to enhance knowledge of environmental and genetic factors underlying breast cancer risk. This funding opportunity will support trans-disciplinary research projects to investigate the influence of environmental exposures during specific time windows of susceptibility on breast cancer risk. The BCERP, a joint effort by the NIEHS and the National Cancer Institute, began in 2003 and was renewed in 2010.

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### **About the Uniformed Services University of the Health Sciences:**

The Uniformed Services University of the Health Sciences (USU), founded by an act of Congress in 1972, is the academic heart of the Military Health System. USU students are primarily active duty uniformed officers in the Army, Navy, Air Force and Public Health Service who receive specialized education in tropical and infectious diseases, TBI and PTSD, disaster response and humanitarian assistance, global health, and acute trauma care. A large percentage of the university's more than 5,300 physician and 800 advanced practice nursing alumni are supporting operations around the world, offering their leadership and expertise. USU also has graduate programs in biomedical sciences and public health committed to excellence in research, and in oral biology. The University's research program covers a wide range of clinical and basic science important to both the military and public health. For more information, visit [www.usuhs.edu](http://www.usuhs.edu).