Breast Cancer Stamp Funds Produce Results

Funds from the breast cancer stamp are now being used in a different way, but two previous funding efforts had also produced results. The first, the Insight Awards to Stamp Out Breast Cancer, funded high-risk research conducted by investigators outside the federal government. The second, the Exceptional Opportunities in Breast Cancer Research fund, supported established research that hadn’t been funded because of lack of money. Several advances in breast cancer research have come from these grants.

- Susan Neuhausen, Ph.D., an epidemiologist at the University of California, Irvine, has been awarded several grants to investigate the breast and ovarian cancer risk in women with BRCA1 and -2 mutations. This research has led to new insights into how this risk is affected by pregnancy, hormone replacement therapy, and abortion.

- A group of Japanese researchers identified peptides found in the blood of cancer patients that bind to ErbB2 and Grb7—genes that are expressed in breast and esophageal cancers. Future research will investigate whether using these peptides as drug targets is possible.

- A group at the Massachusetts General Hospital center for cancer led by Daniel Haber, M.D., Ph.D., established a national referral center for families with Li-Fraumeni syndrome, a rare hereditary genetic disorder that is responsible for the development of multiple cancers, including breast cancer, often at an early age. Haber and his team developed new methods for detecting mutations to p53, which cause the syndrome. Doing so allowed them to identify more families and collect more genetic material, which they can use to find the genetic mutations that lead to LFS and other multicancer syndromes.

- Other advances include the development of several therapeutic and chemoprevention treatments that show promise for fighting breast cancer in animal models; the creation of a test that detects the absence of a tumor suppressor gene, which could better predict breast cancer prognosis; and new techniques for imaging spontaneous breast cancer in mice.

—Liz Savage

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