



Your link to the latest news on research, treatment, prevention and education from the state's only National Cancer Institute - designated Comprehensive Cancer Center

### **CINJ Research Highlights Breast Cancer Advances at International Conference**

Investigators at The Cancer Institute of New Jersey (CINJ) recently presented new research at the 33rd Annual CTRC-AACR San Antonio Breast Cancer Symposium. Their work highlights how a variation in a person's DNA sequence is associated with an earlier age of onset for breast cancer that is stimulated by the hormone estrogen (estrogen receptor positive). At focus were DNA sequence variations (polymorphisms) in the human enzyme known as HDAC9. Recent studies of this enzyme suggest that its suppression could lead to strategies that would regulate estrogen signaling. This latest research, led by [Kim M. Hirshfield, MD, PhD](#), medical oncologist at CINJ, and CINJ researcher [Alexei Vazquez, PhD](#), both assistant professors of medicine at UMDNJ-Robert Wood Johnson Medical School, further supports a role for HDAC9 in estrogen signaling in that genetic changes in the HDAC9 gene may modulate onset of ER positive breast cancer and its recurrence. In this latest study investigators used a bioinformatics approach to identify specific DNA sequence variations in HDAC9 for further study. These sequence variations were evaluated for associations between HDAC9 polymorphisms and age at diagnosis and recurrence in 1,101 patients enrolled in a CINJ study from 2004 to 2009. Patients with ER positive tumors who had a genetic variant at a specific location along the HDAC9 DNA sequence were found to develop breast cancer nearly five years earlier than those with the normal sequence at that same location (49.3 years versus 54.1 years). Conversely, those with ER negative disease with the same variant at that DNA location, developed breast cancer nearly six years later than ER negative patients with the normal sequence (53.7 years versus 48.0 years). Investigators note though, that the comparison for the estrogen receptor negative group was statistically limited because the number of cases in that group was small.

### **Allstate New Jersey Raises \$40,000 through 'Quotes for a Cure to Benefit CINJ**

For the second straight year, Allstate New Jersey Insurance Company held its "Quotes for a Cure" program to support research, treatment, prevention, and education programs at The Cancer Institute of New Jersey. The company exceeded its \$25,000 goal by raising \$40,000 for the campaign. This past fall, Allstate New Jersey donated \$10 to the CINJ Foundation for every life or auto insurance quote requested through any of Allstate's 240 New Jersey agents. The company utilized social media platforms including Facebook to encourage its agents and employees to promote the program and to educate followers about CINJ.

### **Panera Bread® Aids Breast Cancer Fight Through Pink Ribbon Bagel Sale that Benefits CINJ**

The community reach of Panera Bread® bakery-café locations in central and northern New Jersey has resulted over the past four years in nearly \$28,000 raised to support breast cancer programs at the state's only National Cancer Institute-designated Comprehensive Cancer Center, The Cancer Institute of New Jersey. The CINJ Foundation is one of the many entities nationwide that receive contributions from the sale of Panera's Pink Ribbon Bagel – shaped in the form of

a traditional breast cancer awareness ribbon and sold during October. For every Pink Ribbon Bagel sold during this year's campaign in the 37 Panera Bread locations in northern and central New Jersey ([www.panerabread.com](http://www.panerabread.com)), 25 cents was dedicated to CINJ to support breast cancer research and patient education programs. Proceeds this year were nearly \$8,000.

Research  Treatment  Prevention  Education



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