

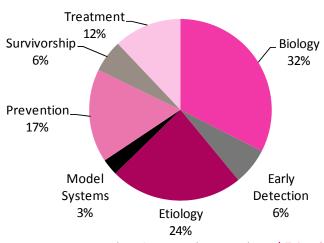
# Research Fast Facts: BRCA

#### **BRCA Research Saves Lives**

BRCA1 and BRCA2 (<u>breast cancer susceptibility</u>) are genes that help prevent cancer from developing. They repair cell damage so breast cells can grow normally. Everyone has BRCA genes. But, when BRCA is mutated, it cannot function normally and breast cancer risk increases.

Most inherited breast cancers are a result of BRCA mutations and people who have them are at increased risk; however, not all people with the BRCA mutation will get breast cancer. Nonetheless, making decisions to manage this risk can be overwhelming. Komen has long been committed to finding newer and better ways of detecting, treating, and preventing cancer in BRCA mutation carriers.

#### Total Investment In BRCA Research



Susan G. Komen has invested more than \$34 million in over 100 grants focused on BRCA related research.

# What We're Investigating

Komen-funded researchers are:

- Developing new ways to prevent breast cancer in BRCA mutations carriers, including new drugs, hormone therapies, and dietary approaches
- Identifying environmental or hormonal factors that may contribute to breast cancer risk in women with the BRCA mutation
- Understanding how BRCA mutations lead to breast cancer so that targets for new drugs can be identified
- Determining whether certain BRCA mutations are associated with more aggressive breast cancers and occur more frequently in select populations

### What We've Learned

Komen-funded research has helped us to understand that:

- Mutations in the BRCA1 gene are associated with familial breast cancer
- Women from the Bahamas appear to be twice as likely to have a BRCA1 mutation than the general population
- Newly identified genetic risk factors may help predict which women with the BRCA mutation will get cancer

## **More Than Research**

These research investments reflect only part of our commitment to supporting those with BRCA mutations. Komen also provides <u>educational materials</u> and <u>conference support</u> to help BRCA carriers understand their risks and receive up to date information on current treatments and research.

Breast cancer survivor <u>Terri Swain</u> shares her experience and thoughts on genetic testing for BRCA mutations.



Survivors at the 2012 Bahamanaian Race for the Cure