

Your Role in Fighting Breast and Ovarian Cancer

Participation in the TGen Breast Cancer Research Initiative offers you a window of opportunity—to play a key role in preventing breast cancer and in improving the quality of life for thousands of women in the United States.

The research conducted at TGen as a result of your generous gift will allow us to:

- Identify novel drug targets and drug therapies for breast and ovarian cancer.
- Develop new clinical tests for improving the accuracy of breast and ovarian cancer diagnosis.

We request your consideration of a \$5 million gift to support the following components of our Women's Healthcare Initiative:

- Molecular Profiling Institute: (Christine?)
- Drug Development Laboratory (??)
- Equipment support
- Collaborative efforts
- Profiling of tumors

Contributions may be scheduled over several years, and we will work closely with you to provide appropriate recognition for your generous gift. You may choose to support one or more of the research activities listed above, or you may prefer to rely on TGen's president and scientific director to guide your gift to the most promising and immediate area of support within the Women's Healthcare Initiative.

Your \$5 million gift includes membership within the Founders Program, an elite group of visionary leaders responsible for launching TGen, a research facility poised to become the world's premier genomics research institute.

TGen Partners:

STATE, MUNICIPAL AND TRIBAL

State of Arizona
City of Phoenix
Salt River Pima-Maricopa Indian Community
Arizona Disease Control Research Commission
Commerce and Economic Development Commission

EDUCATIONAL

Arizona State University
Northern Arizona University
University of Arizona
Maricopa Community Colleges

PRIVATE FOUNDATIONS

Flinn Foundation
The Virginia G. Piper Charitable Trust
Arizona Community Foundation
The Kemper and Ethel Marley Foundation
St. Luke's Health Initiatives

PRIVATE, CORPORATE AND PERSONAL

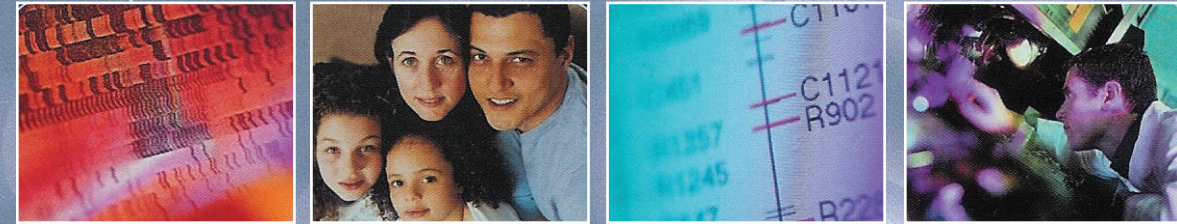
Arizona Public Service Bank One
Banner Health System
Salt River Project
St. Joseph's Hospital and Medical Center
Wells Fargo Bank
Arizona, N.A.



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The TGen Women's Healthcare Initiative

A proposal to Mr. and Mrs. John Q. Donor



The Importance of Genomic Research

TGen researchers and scientists know that time is of the essence in combating breast and ovarian cancer. They also know that the key to understanding—and defeating—breast and ovarian cancer lies in genomic research. Specifically, TGen scientists are working to understand the underlying genetics of disease. Why do some breast and ovarian cancer patients respond favorably to treatments while others don't? Why are some families more susceptible to cancer than others? What genetic changes cause disease?

Women's Healthcare Research Initiative

These questions are at the heart of genomics study—and at the heart of TGen's Women's Healthcare Research Initiative. Each of us has a unique genetic blueprint that predisposes us to disease and our ability to fight it. These genetic blueprints that contain our unique DNA—called genomes or gene sequences—are the key to creating diagnostics and individualized treatment options that will improve the quality of life for millions. By understanding gene sequences and their function, scientists can unravel the genetic components of complex diseases such as breast and ovarian cancer. This understanding will result in treatments based on the underlying cause of the disease rather than its symptoms.

in 2004...

- About 216,000 NEW CASES of invasive breast cancer will be diagnosed.
- Approximately 59,390 NEW CASES of non-invasive breast cancer will be diagnosed.
- Our mothers, sisters, friends—40,000 WOMEN TOTAL—are expected to die from breast cancer.
- The incidence of breast cancer has increased from one in 20 in 1960 to ONE IN EIGHT today.
- Ovarian cancer occurs in 1 OUT OF 57 women.
- 50 PERCENT of the women diagnosed with ovarian cancer die from it within five years.

Statistical sources: National Cancer Institute, National Breast Cancer Foundation and OvarianCancer.org

TGen's Vision for the Future

TGen's Women's Healthcare Research Initiative blends advanced genomic technologies with a multidisciplinary team of leading research investigators and clinicians. Our focus on breast and ovarian cancer is part of an overarching mission to rapidly translate scientific discoveries into the diagnosis and individualized treatment of disease.

Founded in 2002, TGen is directed by Dr. Jeffrey M. Trent, the founding Scientific Director of the National Human Genome Research Institute at the National Institutes of Health (NIH), part of the Human Genome Project. TGen is now one of the best-equipped labs in the world for genomics research.

While our peers in the bioscience industry generally focus on discovery science or translational work alone, we integrate the two to bring advances to the patient as quickly as possible. World-class scientific expertise, contemporary research programs and strategic partnerships accelerate our ability to tackle women's health issues.

TGen's Women's Healthcare Research Initiative focuses on specific laboratory projects aimed at understanding disease resistance as it relates to breast and ovarian cancer:

Sub-classification of breast tumors:

All tumor types (breast, prostate, etc.) have specific genetic patterns resulting in recognizable molecular profiles. Tumors in different people, however, have different

EVERY THREE MINUTES, a woman in the United States is diagnosed with breast cancer.

EVERY 12 MINUTES, breast cancer claims another life.

In 2004, MORE THAN 25,580 WOMEN in the United States will be diagnosed with ovarian cancer. An estimated 16,090 of them will die this year.

EVERY MINUTE COUNTS.

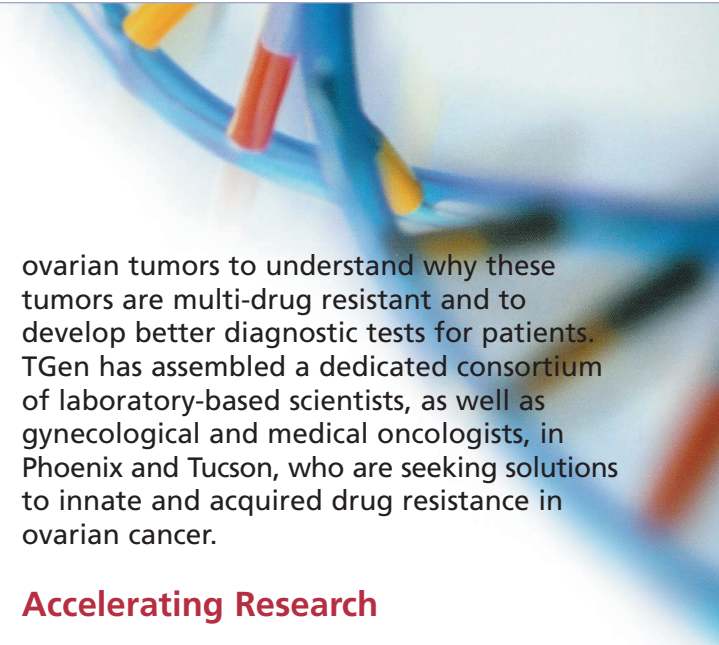
genetic backgrounds, making individuals respond differently to drug therapies. Microarray technology provides TGen scientists with a color-coded visual representation of the molecular structures of individual tumors. By identifying and sub-classifying these genetic variations and studying clinical responses of patients with similar genetic patterns, researchers can determine how these genes influence the development of cancer and how they affect drug response.

Identification of genetic signatures in invasive breast tumors:

TGen researchers are working to understand how less threatening, non-invasive tumors transition to deadly, invasive tumors that invade the blood stream and lymph nodes. Using an advanced technology called Tissue Microarray Technology (TMA), they investigate genetic signatures (patterns) in the DNA of patients with invasive breast tumors. These consistent genetic alterations—or biomarkers—are used to predict prognosis and drug responsiveness in breast cancer patients. With TMA, 600 tumor samples can be studied at once, helping researchers identify new biomarkers that will aid in the development of patient-tailored treatments.

Analysis of drug-resistant genes in ovarian tumors:

A large percentage of ovarian tumors do not respond to traditional chemotherapy treatments. Detecting evidence of drug resistance is critical in offering patients the most effective treatment. TGen is working to identify the specific gene mutations in



ovarian tumors to understand why these tumors are multi-drug resistant and to develop better diagnostic tests for patients. TGen has assembled a dedicated consortium of laboratory-based scientists, as well as gynecological and medical oncologists, in Phoenix and Tucson, who are seeking solutions to innate and acquired drug resistance in ovarian cancer.

Accelerating Research

As TGen scientists identify genetic patterns and biomarkers, their research can be shared with TGen's accelerators—functional divisions of the institute designed to develop therapeutics, prognostics and diagnostics that can be delivered directly to patients. Among those divisions are TGen's Drug Development Laboratory and Molecular Profiling Institute, accelerators designed to create new drug therapies and to help physicians suggest specific, existing drug therapies based on the molecular structure of diseases.

The Power of Strategic Partnerships

With the help of benefactors like you, we will improve the quality of life for women afflicted with breast and ovarian cancer. In fact, we have already made tremendous strides as a result of generous funding and support by individuals, state and city leaders, charitable foundations and corporations. (see back panel)

TGen also has attracted world-class partners—academic institutions, technology companies and world-renown medical centers—allowing us to grow rapidly and make great strides in women's health research. Although TGen has many of the necessary resources to accomplish its goals, additional assets are required. As a private, not-for-profit organization, we rely solely on private support.

Now is the time...

to show your support—as we continue to unveil exciting scientific discoveries.