



Research Grant Recipients

Since our inception in 1995, Friends for an Earlier Breast Cancer Test® has awarded **128** Research Grant Proposals totaling **\$4,885,482** to fund seed grants in the specific area of finding a biological test to detect breast cancer in its earliest stage.

All grants are funded for a one year period unless otherwise noted

2022

Total Grants \$120,000

Dana Farber Cancer Institute (Boston, MA)	\$40,000
<i>“An Ultrasensitive Blood Test for LINE-1 ORF1p for Breast Cancer Detection”</i>	
Drs. Kathleen Burns & David Walt	
University of Milano-Bicocca (Milan, Italy)	\$40,000
<i>“Improving liquid biopsy tools for earlier detection of breast cancer: identification of extracellular vesicles-derived markers”</i>	
Dr. Emanuela Grassilli	
University of Washington (Seattle, WA)	\$20,000
<i>“Improved breast cancer screening and lesion diagnosis with ultrafast dynamic contrast enhanced MRI”</i>	
Dr. Anum Kazerouni	
Johns Hopkins Sidney Kimmel Comprehensive Cancer Center (Baltimore, MD)	\$20,000
<i>“Early Detection of Breast Cancer Using Liquid Biopsy Approaches”</i>	
Dr. Jessica Tao	

2021

Total Grants \$120,000

Sheba Medical Center (Tel-Hashomer, Israel)	\$40,000
<i>“Towards earlier than ‘early diagnosis’ of breast cancer in the BRCA carrier population”</i>	
Dr. Debbie Anaby	
Olivia Newton-John Cancer Research Institute (Heidelberg, Australia)	\$40,000
<i>“Early Detection of Breast Cancers”</i>	
Dr. Jessica Duarte	

Sheba Medical Center (Ramat Gan, Israel) **\$20,000**
“Early breast cancer detection by analyzing LDL composition with lipidomic & proteomic tools”
Dr. Rom Keshet

Beckman Research Institute of the City of Hope (Duarte, CA) **\$20,000**
“Development of an ELF5-based clock for estimating breast cancer risk”
Dr. Masaru Miyano

2020

Total Grants \$160,000

University of Washington School of Medicine (Seattle, WA) **\$40,000**
“Liquid Biopsies to Aid in Early Detection, Improve Accuracy of Diagnosis, Avoid Invasive Biopsies, and Increase Survival for Breast Cancer in Uganda”
Dr. Julie Gralow

Teesside University (United Kingdom) **\$40,000**
“Application of computational models of breast cancer for early-detection personalised tests”
Dr. Annalisa Occhipinti

University of California – Irvine (Irvine, CA) **\$40,000**
“Isolation of Circulating Cells for the detection of early breast cancer using a lateral cavity acoustic trasducer device”
Dr. Ritesh Parajuli

Tel Aviv University (Tel Aviv, Israel) **\$40,000**
“Early detection of breast cancer in humans using glucosamine Chemical Exchange Saturation Transfer (CEST) MRI – a pilot study”
Dr. Michal Rivlin & Prof. Gil Navon

2019

Total Grants \$199,844

Royal College of Surgeons (Dublin, Ireland) **\$39,850**
“Network analysis of Epi-genetic alterations for earlier detection of breast cancer”
Dr. Sara Charmsaz

University of Washington (Seattle, WA) **\$40,000**
“Using a population-based imaging registry to validate an artificial intelligence algorithm for improved screening mammography performance: a pilot study”
Dr. Christoph Lee

University of Colorado Denver (Denver, CO) **\$40,000/over 2 years**
“Using subnucleosome signature in cell free DNA for early detection of breast cancer”
Dr. Srinivas Ramachandran

Roswell Park Cancer Center (Buffalo, NY) **\$40,000**
"Harnessing 3D breast ductal carcinoma in situ (DCIS) models to detect biomarkers for liquid biopsies"
Dr. Nicoletta Sacchi

University of Washington (Seattle, WA) **\$39,994**
"The use of seven autoantibody targets as biomarkers to identify patients with breast atypia as compared to benign lesions by mammography"
Dr. Sasha Stanton

2018

Total Grants \$160,000

Stanford University (Stanford, CA) **\$40,000**
"Mapping of the single cell level clonal architecture of pre-invasive and benign breast disease for early breast cancer detection"
Dr. Francisco Beca

Arizona State University (Tempe, AZ) **\$40,000**
"Metabolic Biomarkers for Breast Cancer: Discovery and Initial Cross-Validation"
Dr. Haiwei Gu

Memorial Sloan Kettering Cancer Center (New York, NY) **\$40,000**
"A Novel Intelligent Breast Exam Tool for Earlier Breast Cancer Detection in Low Resource Populations"
Dr. Victoria L. Mango

Hebrew University Institute for Medical Research (Jerusalem, Israel) **\$40,000**
"Using pre-mRNA isoforms in saliva as biomarkers for breast cancer diagnosis"
Dr. Maayan Salton

2017

Total Grants \$159,300

Weill Medical College of Cornell University (New York, NY) **\$40,000**
"Bioinformatically-identified, site-specific methylation markers as potential blood-based indicators of early stage breast cancer."
Dr. Manny Bacolod

Central Texas Veterans Research Foundation (Temple, TX) **\$39,385**
"A Novel exosome isolation method based on ion exchange chromatography."
Dr. Hosoon Choi

University of Naples (Naples, Italy) **\$40,000 over 3 years**
"Early Breast cancer diagnosis through aptamer-mediated exosomes detection"
Dr. Gerolama Condorelli

University of California, San Francisco (San Francisco, CA) **\$39,915**
"Leveraging cancer-specific small RNAs for early detection of high-risk breast cancer"
Dr. Hani Goodarzi

2016

Total Grants \$160,000

University of Washington (Seattle, WA) \$40,000

"Non-contrast Diffusion-weighted MRI Tailored for Early Detection of Mammographically Occult Breast Cancer in Women with Dense Breasts"

Dr. Savannah Partridge

The Felsenstein Medical Research Center/Tel Aviv University (Tel Aviv, Israel) \$40,000

"Circulating hTERT mRNA in serum exosomes: a novel marker for early diagnosis and relapse of breast cancer"

Dr. Orit Uziel

Ben-Gurion University of the Negev (Beer-Sheva, Israel) \$40,000

"Combinatorial Engineering of Proteolytically Resistant APPI Variants that Selectively Target Human Mesotrypsin for Breast Cancer Imaging"

Drs. Niv Papo & Evette Radisky

The George Washington University (Washington, D.C) \$40,000

"Detection of Early Breast Cancer by Circulating MicroRNAs"

Dr. Xiaohui Tan

2015

Total Grants \$200,000

Fox Chase Cancer Center (Philadelphia, PA) \$40,000

"Ultra-Deep Sequencing for Detection of p53 and PIK3CA mutations in DCIS and Surveillance of High-Risk Women by Blood as a Liquid Biopsy for Early Diagnosis of Invasive Breast Cancer"

Dr. Paul Cairns

Tulane University (New Orleans, LA) \$40,000

"Detection of Early Breast Cancer by Circulating HER4 Extracellular Domain ELISA"

Dr. Frank Jones

University of Louisville (Louisville, KY) \$40,000

"Isolation and Characterization of Circulating Tumor Cells for Detection of Early Breast Cancer"

Dr. Lori Millner

Mayo Clinic (Rochester, MN) \$40,000

"Pilot Study to Evaluate Dedicated Breast Positron Emission Tomography as a new Imaging Technique for Early Detection of Breast Cancer"

Dr. Michael O'Connor

Indiana University (Indianapolis, IN) **\$40,000**
“*Quantitative PCR Analysis of Telomere Fragility in Plasma Circulating and Cell-Free DNA for Early Breast Cancer Detection*”
Dr. Hiromi Tanaka

2014

Total Grants \$159,961

University of Massachusetts (Amherst, MA) **\$40,000**
“*Detection of micro-scale tumors and metastases with non-toxic bacteria*”
Neil S. Forbes

Cleveland Clinic (Cleveland, OH) **\$40,000**
“*Microbiomics for Breast Cancer Detection*”
Stephen R. Grobmyer, MD, FACS

Washington University in St. Louis (St. Louis, MO) **\$39,961**
“*Development of anti-CD44 scFv’s for Early Detection of Breast Cancer by PET Imaging*”
\$39,961
Buck E. Rogers, Ph.D.

Case Western Reserve University (Cleveland, OH) **\$40,000**
“*Circulating RNAs for the Early Detection of Breast Cancer*”
Cheryl Thompson, Ph.D.

2013

Total Grants \$200,000

Mayo Clinic (Rochester, MN) **\$40,000**
“*Development and evaluation of a combined molecular breast imaging/breast ultrasound system*”
Dr. Carrie Hruska

Ben-Gurion University (Beer-Sheva, Israel) **\$40,000**
“*Non-Invasive early detection of breast cancer: developing bi-specific APPI peptides and small molecule conjugates that bind to both avbeta3 integrin and MY1-MMP*”
Dr. Niv Papo

Tel Aviv University (Tel Aviv, Israel) **\$40,000**
“*Combining genetic and epi-genetic markers for early detection of breast cancer*”
Dr. Noam Shomron

Stanford University (Stanford, CA) **\$40,000**
“Highly Sensitive Breast Cancer and Lymphnodes Cereukow Imaging Mediated by Gold Nano-Clusters”
Dr. Lei Xing

University of California, Irvine (Irvine, CA) **\$40,000**
“In vitro evolution of molecular sensors that detect breast cancer at early stage”
Dr. Weian Zhao

2012 **Total Grants \$160,000**

Roswell Park Cancer Institute (Buffalo, NY) **\$40,000**
“Identification of Novel MicroRNA biomarkers for Early Detection of Breast Cancer”
Dr. Stefano Rossetti

Harvard University (Cambridge, MA) **\$40,000**
“Novel Peptides as Candidate Breast Cancer Biomarkers”
Dr. Alan Saghatelian

University of North Carolina – Greensboro (Greensboro, NC) **\$40,000**
“An Ultrasensitive Detection Platform for Breast Cancer Biomarkers Present in Serum”
Dr. Marinella Sandros

University of California – San Francisco (San Francisco, CA) **\$40,000**
“Detecting the Early Oncogenic Kinome Signature of Breast Cancer”
Dr. Laura Van’t Veer

2011 **Total Grants \$160,000**

Mayo Clinic (Rochester, MN) **\$40,000**
“Evaluation of Low-dose Molecular Breast Imaging for Detection of Breast Cancer”
Dr. Carrie Hruska

Stanford University (Stanford, CA) **\$40,000**
“X-Ray Stimulated Fluorescence for Early Detection of Breast Cancer”
Dr. Dimitre Hristov

Fox Chase Cancer Center (Philadelphia, PA) **\$40,000**
“DNA-Methylation Changes in Premalignant Lesions of the Breast”
Dr. Sandra V. Fernandez

University of North Carolina at Chapel Hill (Chapel Hill, NC) **\$40,000**
“Epigenetic Field Cancerization in the Development of Basal-like Breast Cancer”
Dr. William B. Coleman

2010

Total Grants \$240,000

Mayo Clinic (Rochester, MN) **\$40,000**
“Evaluation of Molecular Breast Imaging in the Detection of Breast Cancer in Patients with high risk Benign Breast Lesions”
Dr. Judy Boughey

Duke University (Durham, NC) **\$40,000**
“Diagnosis of Aggressive Breast Cancer with Enhanced Microwave Radiometry: Detection of Rapidly Proliferating Tumors by Noninvasive Deep Temperature Mapping”
Dr. Paolo Maccarini

Stanford Univeristy (Stanford, CA) **\$40,000**
“Combined Mammography and X-Ray Activatable Nonophosphor Molecular Imaging for Early Breast Cancer Detction”
Dr. Lei Xing

Technion-Israel Institute of Technology (Haifa, Israel) **\$40,000/2 yrs.**
“Early Diagnosis and Screening of Breast Cancer by an array of Nanosensors”
Dr. Hossam Haick

Roswell Park Cancer Institute (Buffalo, NY) **\$40,000**
“Identification of Unique Breast Pre-Malignant Signatures”
Dr. Nicholetta Sacchi

Roswell Park Cancer Institute (Buffalo, NY) **\$40,000**
“A Blood Test for Early Detection of Breast Cancer”
Dr. Ashwani Sood

2009

Total Grants \$394,694

University of California at San Diego (San Diego, CA) **\$37,250**
“PTHrP: Translation of Molecular Biology to the Development of an Earlier Breast Cancer Test”
Dr. LJ Deftos

Edinburgh Napier University (Edinburgh, Scotland) **\$40,000**
“Potential of Altered AGP Glycosylation As A Marker for Breast Carcinoma”
Dr. Kevin Smith

Sidney Kimmel Cancer Center (San Diego, CA) **\$40,000**
“Evaluation of a Protein Microarray-based Profiling Assay of Enzymatic Activity for Breast Cancer Detection”
Dr. Charles Spruck

Arizona State University (Tempe, AZ)	\$40,000
<i>“Discovery and Validation of Artificial Recognition Elements for Detection of MUC1 Breast Cancer Biomaker”</i>	
Dr. Kathryn Boltz	
Moffitt Cancer Center (Tampa, FL)	\$37,500
<i>“Identified of Circulating Serum Biomarkers Via Gene Expression Profiling For Breast Cancer Screening”</i>	
Dr. Marie Catherine Lee	
University of Texas (Austin, TX)	\$40,000
<i>“Hyperspectral Microscopic Imaging of Circulating Tumor Cells (CTSCs) Isolated in Microfluidic Channels for Early Breast Cancer Diagnostics”</i>	
Dr. John Zhang	
Duke University (Durham, NC)	\$39,944
<i>“Assessment of nuclear Snail-1 protein in early stage breast cancer”</i>	
Dr. Robin Bachelder	
University of Texas - MD Anderson Cancer Center (Houston, TX)	\$40,000
<i>“DNA damage as a Biomarker of Risk of Breast Cancer”</i>	
Dr. Isabelle Bedrosian	
Mayo Clinic (Rochester, MN)	\$40,000
<i>“Molecular Breast Imaging for Screening of Women at Average Risk of Breast Cancer”</i>	
Dr. Carrie Hruska	
University of California at San Diego (San Diego, CA)	\$40,000
<i>“Breast Cancer Detection with Targeted DNA Nanoparticles”</i>	
Dr. Bradley Messmer	

2008

Total Grants \$317,915

University of Virginia (Charlottesville, VA)	\$40,000/2 years
<i>“Measurement of Aromatase in the Breast: Use for Breast Cancer Risk Assessment and Early Detection”</i>	
Dr. Sarah Aiyar, <i>et al</i>	
University of Massachusetts (Amherst, MA)	\$39,915/15 months
<i>”Compact Microwave Array Imaging Chamber for Improved Early Breast Cancer Detection”</i>	
Drs. Anatoliy Boryssenko and Richard Arenas	

University of North Carolina (Chapel Hill, NC) **\$40,000**
"Contribution of a Novel BRCA1 Promoter Polymorphism to Increased Breast Cancer Susceptibility"
Dr. William Coleman

Duke University (Durham, NC) **\$40,000**
"Validation of Novel Candidate Genes Involved in Early Breast Cancer Progression"
Dr. Joseph Geradts

University of Pittsburgh Cancer Institute (Pittsburgh, PA) **\$40,000**
"Development of Chimeric Biopolymers as Molecular MRI Contrast Agents to Detect Premalignant Breast Lesions, Breast Cancer, and Metastasis"
Dr. Qihong He

University of Texas at Houston (Houston, TX) **\$40,000**
"Developing a New Serum Assay for Detection of a Potential Novel Biomarker in Early Stages of Breast Cancer"
Dr. Wenzheng Zhang

University of Pittsburgh Cancer Institute (Pittsburgh, PA) **\$40,000**
"Biomarkers of Invasive and Metastatic Potential in Breast Cancer in Situ"
Dr. Stephen Grant

University of California at San Francisco (San Francisco, CA) **\$38,000**
"Targeted X-Ray Nano Molecular Imaging Agents for Breast Cancer Early Detection"
Dr. Ella Fung Jones

2007 **Total Grants** **\$470,550**

University of California at San Francisco (San Francisco, CA) **\$39,977**
"Developing tumor-specific uptake of MR contrast agents in breast cancers"
Dr. Heike E. Daldrup-Link

Washington University School of Medicine (St. Louis, MO) **\$40,000**
"A Serum Assay for the Detection of Breast Cancer"
Dr. Timothy Fleming

Indiana University (Indianapolis, IN) **\$37,000**
"Targeting Telomere Dysfunction for Early Detection of Breast Cancer"
Dr. David P. Gilley

Indiana University (Indianapolis, IN) <i>"A Cancer Associated Isoform of PCNA in Breast Cancer has Implications as a Potential Biomarker for Disease"</i> Dr. Robert J. Hickey	\$39,300
Mayo Clinic (Rochester, MN) <i>"Serum Biomarkers for Early Detection of Basal-Like Cancer of the Breast"</i> Dr. Eric W. Klee	\$34,300
Robert H. Lurie Comprehensive Cancer Center (Chicago, IL) <i>"A Composite DNA Methylation Biomarker for Detection of Breast Cancer"</i> Dr. Victor V. Levenson	\$40,000
Purdue University (West Lafayette, IN) <i>"Breast Cancer-Specific tNOX Isoform for Early Detection and Diagnosis"</i> Dr. D. James Morré	\$40,000
Mayo Clinic (Rochester, MN) <i>"Comparison of Magnetic Resonance Imaging and Molecular Breast Imaging in Breast Diagnostic Evaluation"</i> Dr. Michael K. O'Connor	\$40,000
MD Anderson Cancer Center at the University of Texas (Austin, TX) <i>"Proteomic Detection and Validation of Proteins Produced Human Breast Tumors at the Earliest Time for Detection"</i> Dr. Fredika Robertson	\$40,000
Mayo Clinic Comprehensive Cancer Center (Jacksonville, FL) <i>"Defining Protein Kinase D1 As An Early Marker For Breast Cancer"</i> Dr. Peter Storz	\$40,000
Russian Academy of Medical Sciences (Moscow, Russia) <i>"Development and validation of a differential methylation screening technology applicable for the identification of early breast cancer diagnostic markers"</i> Dr. Vladimir Strelnikov	\$40,000/2 yrs.
Mayo Clinic College of Medicine (Rochester, MN) <i>"Candidate Gene Approach for Identification of Novel Breast Cancer Susceptibility Genes"</i> Dr. Csilla Szabo	\$39,973

2006 **Total Grants \$144,664**

University of North Carolina at Chapel Hill (Chapel Hill, NC) **\$39,914**
"Detection of a +ACA BRCA1 Promoter Polymorphism in Constitutional DNA Identifies Individuals at Increased Risk for Breast Cancer"
Dr. William Coleman

University of Washington School of Medicine (Seattle, WA) **\$40,000**
"Identifying the Immunologic Signature of Breast Cancer for Use in the Early Detection of Disease"
Dr. Mary Disis

University of Melbourne (Melbourne, Australia) **\$8,250**
"Targeting the Novel Glucose Transporter GLUT12 for the Early Detection of Breast Cancer"
Dr. Suzanne Rogers

State University of New York – Downstate (Brooklyn, NY) **\$39,000**
"BC200 RNA: A Novel Molecular Indicator of Invasiveness for Breast Cancer"
Dr. Anna Iacoangeli

Wake Forest University Baptist Medical Center (Winston-Salem, NC)
Dr. Steven Akman **\$17,500**
Grant funded in conjunction with *Golfers Against Cancer*

2005 **Total Grants \$316,354**

Dana-Farber Cancer Institute (Brookline, MA) **\$40,000**
"Using Protein Microarrays to Identify Early Biomarkers in DCIS"
Dr. Karen Anderson

SUNY Stony Brook (Stony Brook, NY) **\$40,000**
"Breast Cancer Detection and Screening Using Testes Specific Protein 50 (TSP 50) Antibodies"
Dr. Vladimir Jurukovski

Columbia University (New York, NY) **\$40,000**
"Gene Methylation in Tumor DNA in Blood"
Dr. Regina Santella

University of California at Davis (Davis, CA)	\$37,900
<i>"Serum Glycan Profiling as a Diagnostic Aid in Breast Cancer"</i>	
Suzanne Miyamoto	
University of Kansas (Lawrence, KS)	\$40,000
<i>"Centrosomal Biomarker For Early Detection of Human Breast Cancer"</i>	
Dr. Jonathan Li	
Mayo Clinic (Rochester, MN)	\$40,000
<i>"Visual and Computer Aided Analysis of Real-time Ultrasound Strain Image Sequences for Non-invasive Diagnosis of Breast Lesions"</i>	
Dr. Nicholas Hangiandreou	
Winship Cancer Institute at Emory University (Atlanta, GA)	\$40,000
<i>"Targeted Magnetic Nanoparticle Probes for Non-invasive Imaging of Breast Cancer Using MRI"</i>	
Dr. Lily Yang	
Wake Forest University School of Medicine (Winston-Salem, NC)	\$38,458
<i>"BARC (SCGF) in Breast Cancer Growth and Detection"</i>	
Dr. Suzy Torti	

2004

Total Grants \$193,489

Fox Chase Cancer Center (Philadelphia, PA)	\$40,000
<i>"Benign Breast Registry to Assess Valid Endpoints"</i>	
Dr. Mary Daly	
Mayo Clinic (Rochester, MN)	\$39,900
<i>"Prediction of Invasive Breast Cancer and Breast Cancer Risk in DCIS and Benign Breast Disease by Analysis of Methylated Gene Markers"</i>	
Julian R. Molina, MD, PhD and Lynn Hartman, MD	
Purdue University (West Lafayette, IN)	\$35,289
<i>"Using the local bright feature algorithm to monitor the distribution of the nuclear protein NuMA. A novel approach for earlier detection of breast cancer"</i>	
Sophie A. Lelievre, D.V.M.	

Washington University (St. Louis, MO) **\$38,300**
"PET Imaging for Early Detection of Breast Cancer with a Radioactive Peptide"
Buck E. Rogers, PhD

University of Missouri at Columbia (Columbia, MO) **\$40,000/2 years**
"DNA Methylation Pattern in Breast Cancer Tissue and matched Nipple Aspirate Fluid/Serum"
Dr. Weizhu Zhu

2003 **Total Grants \$177,052**

Dana-Farber Cancer Institute (Brookline, MA) **\$38,000**
"A Proteomic Approach to Early Diagnosis of Breast Cancer"
Drs. Alexander Miron and Lyndsay Harris

Duke University School of Medicine (Durham, NC) **\$20,000**
"Acoustic Radiation Force Impulse (ARFI) imaging of Breast Cancer"
Dr. Kathryn Nightingale

Georgetown University, Lombardi Cancer Center (Washington, DC) **\$40,001/2 yrs.**
"Imaging of Carcinogenesis and Cancer Prevention: A study of changes which occur in early breast cancer and how they look on MRI scans"
Dr. Matthew Freedman

The Chaim Sheba Medical Center (Tel Hashomer, Israel) **\$40,000**
"Nanotechnology for Early Detection of Breast Cancer: Development of Tailored Magnetic nanoparticles"
Dr. Nave Epstein

Wayne State University (Detroit, MI) **\$39,051**
"Detection of Breast Cancer by Protein Arrays"
Drs. Kathryn Carolin and Michael Tainsky

<u>2002</u>	<u>Total Grants</u>	<u>\$276,747</u>
Georgetown University, Lombardi Cancer Center (Washington, DC)		\$37,544/2 yrs
<i>"Use of Invadopodia Antigens for Clinical Detection or Metastatic Cancer in Serum and Tissue Samples"</i>		
Drs. Ozge Alper and Susette Mueller		
Georgetown University, Lombardi Cancer Center (Washington, DC)		\$39,389
<i>"Mitochondrial DNA Mutations in Nipple Aspirate Fluid as Molecular Markers for Detection of Breast Cancer"</i>		
Dr. Lee-Jun C. Wong		
University of California at Los Angeles (Los Angeles, CA)		\$40,000
<i>"Nipple Aspiration in Diagnosis of Breast Cancer"</i>		
Mai Nguyen		
University of California at San Francisco (San Francisco, CA)		\$40,000
<i>"Protein Signatures of Nipple Aspirate Fluid for Individualized Risk Assessment"</i>		
Drs. Maria Pallovicini and Laura Esserman		
University of Manitoba (Manitoba, Canada)		\$40,000
<i>"CTM-OPT: Computed Tomographic mammography One Photon at a Time"</i>		
Dr. Richard Gordon		
University of Manitoba (Manitoba, Canada)		\$39,814
<i>"hSBEM in serum: a new marker for the early detection of breast cancer"</i>		
Drs. Yvonne Myal and Etienne Leygue		
Wake Forest University School of Medicine (Winston-Salem, NC)		\$40,000
<i>"Serum level of cytotoxic cytokines as indicators for the tumor burdens and stages of breast cancers: an immunological approach for an early detection of breast cancer"</i>		
Dr. Zheng Cui		

<u>2001</u>	<u>Total Grants</u>	<u>\$116,364</u>
Georgetown University, Lombardi Cancer Center (Washington, DC)		\$36,364
<i>"Profiling immune responses in patients with breast cancer: Identify anti-tumor antigens/antibodies found in the serum of patient with early breast cancer"</i>		
Dr. Peter D. Burbelo		

University of Alabama at Birmingham (Birmingham, AL) \$40,000
"Technetium-99m-labelled Human Anti-EGFR Single-chain Antibody for the Early Detection of Breast Cancer"
Dr. Kevin P. Raisch

University of Iowa Cancer Center \$40,000/2 yrs.
"Diagnosis and Prognosis Value of Circulating Breast Carcinoma"
Dr. Emil Racila

2000

Total Grants \$159,548

AMC Cancer Research Center (Denver, CO) \$32,000
"A Novel Tumor Marker in Early Detection of Breast Cancer"
Dr. Margaret Hanausek

Duke University Cancer Center (Durham, NC) \$20,000
"Prediction of Breast Cancer Risk from Parenchymal Patterns in mammograms"
Dr. Cary Floyd

Georgetown University Lombardi Cancer Center (Washington, DC) \$83,870
"Electrical Impedance Imaging of the Breast: Explorations"
Dr. Matthew Freedman

University of Pennsylvania Medical Center (Philadelphia, PA) \$23,678
"Tissue and Serum Markers of Breast Cancer Development"
Dr. M. Anne Blackwood

1999

Total Grants \$79,000

Georgetown University Lombardi Cancer Center (Washington, DC) \$19,000
"A Non-invasive Approach to Early Detection Using State of the Art Genetic techniques"
Dr. Bassem Haddad

Mayo Clinic Foundation (Rochester, MN) \$20,000
"Circulating sErbB1 and sErbB2 Levels as Breast Cancer Biomarkers"
Dr. Andre T. Baron

Wake Forest University School of Medicine (Winston-Salem, NC) \$40,000

“Genetic Polymorphisms in Drug Metabolic Enzymes as Risk Factors for p53 Gene Mutations”

Dr. Mark Miller

1997- 1998

Total Grants \$40,000

Wake Forest University School of Medicine (Winston-Salem, NC) \$40,000

“Biologically-based Early Detection of Breast Cancer”

Dr. Steven Akman