

CALIFORNIA

Breast Cancer Research PROGRAM

Compendium of Awards

Cycle 19 2013

Introduction

"The mission of the CBCRP is to prevent and eliminate breast cancer by leading innovation in research, communication, and collaboration in the California scientific and lay communities."

The California Breast Cancer Research Program (CBCRP) is pleased to announce the **funding of 19 new research projects** that will advance our knowledge about the community impact, biology, detection, and treatment of breast cancer. With these new awards we are **investing \$5,198,785 for research projects being performed at 19 institutions and community organizations across the state**.

The CBCRP supports breast cancer research in California from funds obtained through:

- A portion of a 2¢ per pack State cigarette tax
- Contributions from individuals using the **State's income tax check-off** option
- Donations from concerned community members dedicated to defeating breast cancer

The CBCRP is administered by the University of California, Office of the President, in Oakland. Our overall objectives, strategies, and priorities are developed with the assistance of a volunteer California Breast Cancer Research Council (BCRC), which sets program priorities and recommends the grants to be funded. The BCRC consists of 16 members: five are representatives of breast cancer survivor/advocacy groups; five are scientists/clinicians; two are members from nonprofit health organizations, one is a practicing breast cancer medical specialist, two are members from private industry, and one is an *ex officio* member from the California Department of Health Services breast cancer early detection program, "Every Woman Counts."

CBCRP research funding is organized through a number of sub-program units including:

- Community initiatives supports research grants that incorporate both traditional researcher and community group co-investigators to study a problem specific to a community, but with wider dissemination potential.
- **Core funding** focuses on investigator-initiated traditional grants to support smaller, innovative projects, larger translational grants, and conferences.
- Program-Directed Research Initiatives (PRI) grants target topics related to environmental causes
 of breast cancer, disparities in disease incidence and survival in various populations, and novel
 strategies for prevention based on environmental causes and related to disparities.

The full abstracts of these newly funded grants, as well as those from previous CBCRP funding cycles, can be found on our website: www.CABreastCancer.org.

Overview of CBCRP award types

CBCRP funded new research projects using a variety of award types in 2013:

- Community Research Collaboration (CRC) awards bring community organizations—such as breast cancer advocates, community clinics, or organizations serving under-represented women—together with experienced scientists to investigate breast cancer problems that are important to that community, using culturally-appropriate research methods. CRC Pilot (18month) and CRC Full Research awards (three years) are available.
- Innovative Developmental and Exploratory Awards (IDEAs) are 12- to 18-month grants for targeted high-risk/high-reward projects. The CBCRP incorporates the "critical path" concept, which requires applicants to place their project on a research continuum leading to practical applications. IDEAs are offered to both new and established investigators.
- **Translational Research** awards support projects that overcome barriers and put prior research knowledge to practical use in the patient or community setting.
- **Conference Awards** support a conference, symposium, retreat, or other meeting to link breast cancer researchers, non-breast cancer investigators, and community members for the purpose of stimulating new ideas and collaborations.
- Program Directed Research Initiatives fund specific projects identified by the Program Directed Research Steering Committee that will address gaps in our understanding of the role of the environment in breast cancer, the reasons behind breast cancer disparities and breast cancer prevention. Requests for Proposals (RFP) competitively fund investigator-initiated research responding to a specific initiative topic.

LOI and application submissions & review

IDEA and Translational Research Awards applications must pass through a letter of intent (LOI) screening process conducted by our Council to select projects that best meet our award type and programmatic criteria. We view this as a benefit to both the applicants and Program in terms of reducing the effort to prepare full applications and the CBCRP's corresponding peer review costs.

Table 1. LOI submission and approval results

Award Type	LOIs submitted	LOIs approved	Percent approved
IDEA	120	60	50%
Translational Research Award	27	7	26%

After the LOI process the full application data is shown in the table below.

Table 2. 2013 full application submissions by award type and priority issue

Accord Towns	CBCRP Priority Issue				A T
Award Type ↓	Etiology & Prevention	Community Impact	Detection, Prognosis & Treatment	Biology of the Breast Cell	Award Type Totals
Innovative, Developmental & Exploratory (IDEA)	9	4	32	9	52
Translational	2	0	3	0	5
Community Research Collaboration (CRC) Pilot and Full	5	14	1	0	20
Joining Forces Conference	1	1	1	0	3
Priority Totals	15	19	37	9	80

Funding highlights

Table 3. 2013 grant distribution by award type

Award Type	Number of Applications	Grants Funded (Success Rate)	Amount Awarded	Percentage of Total Funding
IDEA	52	9 (17%)	\$2,036,544	39%
Translational	5	1 (20%)	\$502,034	10%
Community Research Collaboration (CRC)	19	6 (32%)	\$1,777,287	34%
Conference	3	2 (67%)	\$49,975	1%
Program Directed Research Initiative	1 (from CRC)	1 (100%)	\$833,945	16%
Total	80	19 (24%)	\$5,198,785	100%

Table 4. 2013 grant distribution by priority issue

Award Type	Number of Applications	Grants Funded (Success Rate)	Amount Awarded	Percentage of Total Funding
Etiology & Prevention	15	5 (26%)	\$1,452,570	28%
Community Impact	19	6 (40%)	\$1,836,166	35%
Detection, Prognosis & Treatment	37	8 (23%)	\$1,910,049	37%
Biology of the Breast Cell	9	0 (0%)	0	0
Total	80	19 (24%)	\$5,198,785	100%

Three awards are of special interest, and are supported by contributions to the California Breast Cancer Research Fund on the state income tax form. They are a Community Research Collaboration Award to Anna Napoles, University of California, San Francisco and Carmen Ortiz, Circulo de Vida Cancer Support and Resource Center for "Meeting the Self-Care Needs of Latinas after Breast Cancer"; and IDEA grants to Axel Schonthal, University of Southern California to investigate "Intranasal Drug Delivery for Brain Metastatic Breast Cancer" and Brian Feldman, from Stanford University for "Vitamin D Signals Via a Novel Pathway to Inhibit Metastasis."

Faith Fancher Research Award

<u>Faith Fancher</u> was a long-time television news anchor and personality with KTVU (Oakland) who waged a very public battle against breast cancer. She also was the founding member of the CBCRP Executive Team, which formed in 2001 to help raise the visibility and fundraising profile of our program. Faith passed away in October 2003 after a six-year struggle with breast cancer. In Faith's honor, and to commemorate all that she did for breast cancer education and research, we have created this annual award. The selected grant reflects the values that Faith held most closely and extends the work that Faith did for all women facing breast cancer.

The recipients of the 2013 Faith Fancher Research Award are Susanne Montgomery (Loma Linda University) and Eudora Mitchell (Quinn Community Outreach Corporation) for their community research collaboration pilot project, "Is Cost of Beauty Putting Black Women at Risk? IEAAWC Study". In this project, members of the Inland Empire African American Wellness Collaborative are teaming up with researchers at Loma Linda University to determine lifetime patterns of African American women's exposure to beauty products such a hair relaxer that contain hormones or placenta and to identify the culturally effective and feasible outreach strategies to engage Inland Empire African American/Black women and their beauticians in a dialogue about the issues of hair products possibly being dangerous to their health.

Grants Funded in Cycle 19 2012-2013

Community Initiatives Grants

Cadmium and Arsenic Exposure in a Mining Impacted Community

Award type: Community Research Collaboration Award - Pilot

Priority Issue: Etiology and Prevention

Jane Sellen and Joanne Hild, M.S. Sierra Streams Institute \$149.099

Peggy Reynolds, Ph.D. Cancer Prevention Institute of California \$62,016

Total: \$211,115

Is Cost of Beauty Putting Black Women at Risk? IEAAWC Study

Award type: Community Research Collaboration Award - Pilot

Priority Issue: Etiology and Prevention

Susanne Montgomery, Ph.D., M.P.H. Loma Linda University \$156,000

Eudora Mitchell, M.A. Quinn Community Outreach Corporation \$62,500

Total: \$218,500

Latinas' Experiences of Breast Cancer Treatment

Award type: Community Research Collaboration Award - Pilot

Priority Issue: Community Impact of Breast Cancer

Meghan Halley, Ph.D., M.P.H. and Carla Gomez, L.C.S.W. Palo Alto Medical Foundation Research Institute \$212,648

Meeting the Self-Care Needs of Latinas after Breast Cancer

Award type: Community Research Collaboration Award - Pilot

Priority Issue: Community Impact of Breast Cancer

Anna Napoles, Ph.D., M.P.H. University of California, San Francisco \$175,706

Carmen Ortiz, Ph.D. Circulo de Vida Cancer Support and Resource Center \$15,725

Total: \$191,431

Reporting Personal Levels of Environmental Chemicals: Impact

Award type: Community Research Collaboration Award - Full

Priority Issue: Community Impact of Breast Cancer

Barbara Cohn, Ph.D., M.P.H., M.C.P. and Laurie Havas

Public Health Institute

\$756,093

Using CBPR to Promote Environmental Justice in Wilmington, CA

Award type: Community Research Collaboration Award - Pilot

Priority Issue: Etiology and Prevention

Annette Maxwell, Dr.P.H. UCLA \$93,750

Jesse Marquez Social and Environmental Entrepreneurs \$93,750

Total: \$187,500

Core Funding Grants

6th International Workshop on Breast Cancer Risk Assessment

Award type: Conference

Priority Issue: Detection/Prognosis/Treatment

John Shepherd, Ph.D. University of California, San Francisco \$25,000

A First-in-Class Allosteric RAF Inhibitor for Breast Cancer

Award type: IDEA Award

Priority Issue: Detection/Prognosis/Treatment

David Cheresh, Ph.D. University of California, San Diego \$187,500

Breast Cancer and Neurocognitive Outcomes

Award type: IDEA Award

Priority Issue: Community Impact of Breast Cancer

Sunita Patel, M.P.H. Beckman Research Institute, City of Hope \$267,423

Cardiovascular Toxicity Following Aromatase Inhibitor Use

Award type: Translational

Priority Issue: Detection/Prognosis/Treatment

Reina Haque, Ph.D. Kaiser Foundation Research Institute \$501,034

Expression Profiling of Circulating Tumor Cells

Award type: IDEA Award

Priority Issue: Detection/Prognosis/Treatment

Julie Lang, M.D.

University of Southern California

\$244,756

Getting a Jump on Cancer with a Genomic Risk Classifier

Award type: IDEA Award

Priority Issue: Etiology and Prevention

Robert West, M.D., Ph.D. Stanford University

\$260,110

Imaging, Genomics, and Glycoproteomics for Cancer Detection

Award type: IDEA Award

Priority Issue: Detection/Prognosis/Treatment

Sharon Pitteri, Ph.D. Stanford University

\$235,500

Internal Chemical Exposure Study among Mexican Immigrants

Award type: IDEA Award

Priority Issue: Etiology and Prevention

Laura Fejerman, Ph.D. University of California, San Francisco \$124,996

Intranasal Drug Delivery for Brain Metastatic Breast Cancer

Award type: IDEA Award

Priority Issue: Detection/Prognosis/Treatment

Axel Schonthal, Ph.D. University of Southern California \$242,530

Radiation-Induced Migration of Breast Cancer Cells

Award type: IDEA Award

Priority Issue: Detection/Prognosis/Treatment

Edward Graves, Ph.D. Stanford University

\$237,295

Sustainable Education to Eliminate Disparities (SEED)

Award type: Conference

Priority Issue: Community Impact of Breast Cancer

Kim Rhoads, M.D., M.P.H. Stanford University \$24,975

Vitamin D Signals Via a Novel Pathway to Inhibit Metastasis

Award type: IDEA Award

Priority Issue: Detection/Prognosis/Treatment

Brian Feldman, M.D., Ph.D. Stanford University \$236,434

Program Directed Research Initiative Grant

Women Firefighters Biomonitoring Collaborative

Award type: Program Initiative Request for Proposals

Priority Issue: Etiology and Prevention

Rachel Morello-Frosch, Ph.D., M.P.H. and Tony Stefani University of California, Berkeley and San Francisco Firefighter Cancer Prevention Foundation \$796,445

Heather Buren United Fire Service Women \$37,500

Total: \$833,945

2013 CBCRP funding by institution

The following 19 California research institutions and community organizations were awarded new CBCRP funding in the 2012-2013 grant cycle. Community collaborative (CRC) grants may be split between institutions.

Institution (city)	# Investigators	Amount	
Beckman Research Institute of the City of Hope (Duarte)	1	\$267,423	
Cancer Prevention Institute of California (Fremont)	1	\$62,016	
Circulo de Vida Cancer Support and Resource Center	1	\$15,725	
Kaiser Permanente	1	\$501,034	
Loma Linda University	1	\$156,000	
Palo Alto Medical Foundation Research Institute	1	\$212,648	
Public Health Institute - Center for Research on Women's &			
Children's Health	1	\$756,093	
Quinn Community Outreach Corporation	1	\$62,500	
	:	Sub-contract	
San Francisco Firefighters Cancer Prevention Foundation	1	to UCB	
Sierra Streams	1	\$149,099	
Social and Environmental Entrepreneurs	1	\$93,750	
Stanford	5	\$994,314	
University of California, Berkeley	1	\$796,445	
UCLA	1	\$93,750	
University of California, San Diego	1	\$187,500	
University of California, San Francisco	2	\$325,702	
United Fire Service Women	1	\$37,500	
University of Southern California	2	\$487,286	

2013 CBCRP application evaluation process & review committee rosters

The CBCRP thanks the participants in our 2013 review committees for their service and dedication to our Program!

In the first phase of the funding process, grant applications were peer reviewed and scored for scientific merit by review committees using a model that follows established practice at the National Institutes of Health (NIH). Each committee is composed of scientists and advocates from outside California. The Committee Chair leads the review process and is a senior researcher. Scientific Reviewers have broad expertise in topics associated with individual applications. Breast cancer Advocate Reviewers are women active in breast cancer advocacy organizations, and many of them are also living with the disease. Advocates bring their personal knowledge and commitment to the review process. Each committee also includes a California Advocate Observer, who does not review or vote, but represents California's advocacy community. The observer gains insight into our process and provides feedback to the Program. When additional expertise is needed, an Ad Hoc Member is brought in to the review a particular application not covered by the other committee scientist reviewers.

The CBCRP uses a scientific **merit scoring system** that rates individual components (e.g., approach, innovativeness, impact). This allows our expert reviewers and Council to better differentiate applications that might otherwise appear identical. Depending on the award type, we use four or five scientific merit components in the peer review process.

We **triage** some applications that score in the lower range of a committee's portfolio using the preliminary scores of the assigned reviewers. Applications in the upper range of a committee's portfolio all receive full committee discussion, as do any of the lower scoring applications nominated to full review by one reviewer.

Applications that were not triaged were rated by the CBCRP's Council for **programmatic responsiveness**. The following criteria were used:

- Responsiveness to the CBCRP's priority issues and award type (or initiative)
- Strength of individual scientific merit component scores (e.g., innovation for IDEA applications)
- Underfunded topic
- Quality of the lay abstract
- Inclusion of advocates in the funded research
- Addressing the needs of the underserved
- Critical path/translation (IDEA and Translational Research Award), or dissemination and translational potential (CRC)

This two-tiered evaluation and funding process ensures both scientific excellence and relevance of the research to the CBCRP's mission and goals.

Community Impact Review Committee

Chair:

Carolyn Gotay, Ph.D.

Prof. & Can. Cancer Soc. Chair in Cancer Primary Prev. School of Population and Public Health University of British Columbia Vancouver, BC Canada

Scientific Reviewers:

Sandra L. Halverson, MPH, PhD

Adjunct Assistant Professor of Medicine Vanderbilt University Social & Scientific Systems, Inc. Durham, NC

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Armin D. Weinberg, Ph.D.

Retired Clinical Professor & CEO Baylor College of Medicine and Life Beyond Cancer Foundation Houston, TX

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Assistant Professor
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University of Maryland School of Public Health
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Advocate Reviewers:

Christine Carpenter

Advocacy Chair Cedar Valley Cancer Committee: Beyond Pink TEAM Cedar Falls, IA

Venus Gines, M.A.

CEO/Founder
Dia de la Mujer Latina
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Patricia O'Brien

S.D. Ireland Cancer Research Fund Fletcher Allen HIth Care/ Univ of VT College of Med. Dept. of Hematology Oncology Burlington, VT

California Advocate Observer:

Jamie Ledezma, Esq.

Cancer Legal Resource Center Disability Rights Legal Center & Loyola Law School Los Angeles, CA

Clinical, Prevention & Biological Sciences Review Committee Roster

Co-Chairs:

Harikrishna Nakshatri, BVSc (DVM), Ph.D.

Marian J. Morrison Professor of Breast Cancer Research

IU Simon Cancer Center Indiana University School of Medicine Indianapolis, IN

Fredika M. Robertson, Ph.D.

Professor
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Scientific Reviewers:

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Karen Weixel

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Ad-Hoc Reviewer:

John H. Ward, M.D.

Professor and Chief

Huntsman Cancer Institute at the University of Utah

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California Breast Cancer Research Council Programmatic Review Committee

Advocates

Cacilia Kim, J.D., Ph.D.

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California Women's Law Center

Marta Nichols

Breast Cancer Connections

Karuna Jaggar

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Breast Cancer Action

Sharima Rasanayagam, Ph.D.

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Director

Lisa Minniefield

Program Specialist

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CORE FUNDING

Larry Fitzgerald, Ph.D.

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Katherine McKenzie, Ph.D. **Brenda Dixon-Coby**