



CALIFORNIA

Breast
Cancer

Research

PROGRAM

Compendium of Awards

**Cycle 21
2015**

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 22 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 \$11,676,077 for research projects being performed at 19 institutions and community organizations across the state.**

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

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 several 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 Initiatives** in 2015 supports California Breast Cancer Prevention Initiative projects to identify and eliminate environmental causes of breast cancer; identify and eliminate disparities/inequities in the burden of breast cancer in California; develop population-level interventions (including policy research) on known or suspected breast cancer risk factors and protective measures; and develop target interventions for high-risk individuals, including new methods for identifying or assessing risk.

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 2015:

- **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 (18-month) 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. 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 Initiatives** support **Requests for Proposals (RFPs)** that competitively fund investigator-initiated research responding to the California Breast Cancer Prevention initiative topic and **Program-Directed Awards (PDAs)** that fund contracts with investigators to undertake research projects in close collaboration with CBCRP.

LOI and Application Submissions and 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 CBCRP’s corresponding peer review costs.

Table 1. LOI submission and approval results

Award Type	LOIs submitted	LOIs approved	Percent approved
IDEA	48	36	75%
Translational Research Award	16	8	50%

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

Table 2. 2015 full application submissions by award type and priority issue

Award Type ↓	CBCRP Priority Issue				Award Type Totals
	Etiology & Prevention	Community Impact	Detection, Prognosis & Treatment	Biology of the Breast Cell	
Innovative, Developmental & Exploratory (IDEA)	6	1	21	6	34
Translational Research Award	1	2	5	0	8
Community Research Collaboration (CRC) Pilot and Full	4	4	0	0	8
Community Research Collaboration Full	3	3	0	0	6
CBCRP Conference	1	0	3	0	4
Program-Directed Initiatives	14	0	0	0	14
Priority Totals	29	10	29	6	74

Funding Highlights

Table 3. 2015 grant distribution by award type

Award Type	Number of Applications	Grants Funded (Success Rate)	Amount Awarded	Percentage of Total Funding
IDEA	34	6 (18%)	\$1,381,125	11.8%
Translational	8	2 (25%)	\$2,064,944	17.7%
Community Research Collaboration (CRC)	14	6 (43%)	\$1,501,538	12.9%
CBCRP Conference	4	2 (50%)	\$31,847	0.3%
Program-Directed Initiatives	14	6 (43%)	\$6,696,623	57.3%
Total	74	22 (30%)	\$11,676,077	100%

Table 4. 2015 grant distribution by priority issue

Award Type	Number of Applications	Grants Funded (Success Rate)	Amount Awarded	Percentage of Total Funding
Etiology & Prevention	29	10 (34%)	\$7,834,541	67%
Community Impact	10	3 (30%)	\$1,151,319	10%
Detection, Prognosis & Treatment	29	8 (28%)	\$2,453,651	21%
Biology of the Breast Cell	6	1 (17%)	\$236,566	2%
Total	74	22 (30%)	\$11,676,077	100%

Grants Funded in Cycle 21 2014-2015

Program-Directed Research

Chemical Safety During Breast Cancer Susceptible Windows

Award Type: Request for Proposals - CBCPI
Priority Area: Etiology and Prevention

Barbara Cohn
Public Health Institute
\$1,212,557

Chemical Testing to Prevent Cancer: Research Translation Etiology and Prevention

Award Type: Request for Proposals - CBCPI
Priority Area: Etiology and Prevention Program

Meghan Schwarzmann
\$217,691 UCB

Identifying human breast carcinogens using exposomics

Award Type: Request for Proposals - CBCPI
Priority Area: Etiology and Prevention

Martyn Smith
UCB
\$1,083,676

Human mammary organotypic cultures for chemical screening

Award Type: Request for Proposals - CBCPI
Priority Area: Etiology and Prevention

Paul Yaswen
Lawrence Berkeley National Laboratory
\$1,657,913

Testing chemicals for likely contribution to breast cancer

Award Type: Request for Proposals - CBCPI
Priority Area: Etiology and Prevention

Zena Werb
UCSF
\$1,125,000

Occupational Chemical Exposures and Breast Cancer Risk

Award Type: Program-Directed Research - CBCPI
Priority Area: Etiology and Prevention

Robert Harrison
Public Health Institute
\$1,399,786

Community Initiatives Grants



Breastfeeding to Reduce Breast Cancer in Young Mothers

Award type: Community Research Collaboration Award - Pilot
Priority Area: Detection, Prognosis and Treatment

Alison Chopel
Public Health Institute
\$114,644

Danielle Soto
Brighter Beginnings
\$60,271

Total: \$174,915

Building Mixtec Community Capacity for Breast Health, Phase 2

Award type: Community Research Collaboration Award - Pilot
Priority Issue: Community Impact of Breast Cancer

Annette Maxwell
UCLA
\$120,983

Sandra Young
Mixteco/Indigena Community Organizing Project
\$72,669

Total: \$193,652

Cadmium exposure in a mining impacted community

Award type: Community Research Collaboration Award - Pilot
Priority Area: Etiology and Prevention

Jane Sellen
Joanne Hild
Sierra Streams Institute
\$100,015

Peggy Reynolds
Cancer Prevention Institute of California
\$102,095

Total: \$202,110



Impact of Reducing Chemical Exposure to the Human Breast

Award type: Community Research Collaboration Award - Pilot
Priority Area: Etiology and Prevention

Polly Marshall
Breast Cancer Over Time
\$26,180

Shanaz Dairkee
California Pacific Medical Center Research Institute
\$220,770

Total: \$246,950



Peer-to-peer reduction of pesticide exposure to Latina youth

CRC Full

Priority Area: Etiology and Prevention

Kim Harley

UCB

\$588,887

Kimberly Parra

Clinical de Salud del Valle Salinas

\$110,124

Total: \$669,011

Using Telenavigators to Support Rural Breast Cancer Patients

Award type: Community Research Collaboration Award - Pilot

Priority Issue: Community Impact of Breast Cancer

Scarlett Gomez

Cancer Prevention Institute of California

\$10,400

Susan Ferrier

Mary Anne Kreshka

Connecting to Care

\$4,500

Total: \$14,900

Core Funding Grants



Cell-free tumor DNA in CSF decodes breast cancer brain metastasis

Award type: IDEA Award

Priority Issue: Biology of the Breast

Melanie Hayden Gephart

UCSF

\$236,566

Exploiting Senescence for Breast Cancer Prevention and Treatment

Award type: IDEA Award

Priority Issue: Detection/Prognosis/Treatment

Charles Spruck

Sanford-Burnham Medical Research Institute

\$292,500

GIS for Community Impact: From Technology to Translation

Priority Area: Etiology and Prevention

Award type: CBCRP Conference

Janice Barlow

Zero Breast Cancer

\$19,847

High-resolution dynamic PET for breast tumor differentiation

Award type: IDEA Award
Priority Issue: Detection/Prognosis/Treatment

Guobao Wang
UCD
\$187,500



Identification of novel breast cancer therapeutic antibodies

Award type: IDEA Award
Priority Issue: Detection/Prognosis/Treatment

Gary Johanning
SRI International
\$299,273



Localized Probability of Mammographic Masking

Award type: IDEA Award
Priority Issue: Detection/Prognosis/Treatment

John Shepherd
UCSF
\$124,112



STOP Heart Disease in Breast Cancer Survivors

Award type: Translational Research Award
Priority Issue: Detection/Prognosis/Treatment

Marc Goodman
Cedars-Sinai Medical Center
\$1,122,177

Translating a Stress Management Program for Latinas

Award type: Translational Research Award
Priority Issue: Community Impact of Breast Cancer

Anna Napoles
UCSF
\$942,767

Unique camel-human hybrid mAbs against pro-invasive MMP-14

Award type: IDEA Award
Priority Issue: Detection/Prognosis/Treatment

Xin Ge
UCR
\$241,174

UCSF Breast Oncology Program Scientific Retreat

Award type: CBCRP Conference
Priority Issue: Detection/Prognosis/Treatment

Laura van't Veer
UCSF
\$12,000



Denotes awards that have been supported in part through voluntary contributions from California taxpayers



Denotes awards supported in part by the Katie Ann Buzbee Trust



Denotes Faith Fancher Research Award recipient. [Faith Fancher](#) 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.

2015 CBCRP Funding by Institution

The following 19 California research institutions and community organizations were awarded new CBCRP funding in the 2014-2015 grant cycle. Community Research Collaboration (CRC) grants may be split between institutions.

Institution (city)	# Investigators	Amount
Breast Cancer Over Time	1	\$26,180
Brighter Beginnings	1	\$60,271
California Pacific Medical Research Institute	1	\$220,770
Cancer Prevention Institute of California	2	\$112,495
Cedars-Sinai Medical Center	1	\$1,122,177
Clinical de Salud del Valle de Salinas	1	\$110,124
Connecting to Care	1	\$4,500
Lawrence Berkeley National Laboratory	1	\$1,657,913
Mixteco/Indigena Community Organizing Project	1	\$72,669
Public Health Institute	3	\$2,726,987
Sanford-Burnham Medical Research Institute	1	\$292,498
Sierra Streams Institute	1	\$100,015
SRI International	1	\$299,273
University of California, Berkeley	3	\$1,860,254
University of California, Davis	1	\$187,500
University of California, Los Angeles	1	\$120,983
University of California, Riverside	1	\$241,174
University of California, San Francisco	5	\$2,440,445
Zero Breast Cancer	1	\$19,847

2015 CBCRP application evaluation process & review committee rosters

CBCRP thanks the participants in our 2015 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 review a particular application not covered by the other committee scientist reviewers.

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 CBCRP's Council for **programmatic responsiveness**. The following criteria were used:

- Responsiveness to 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 CBCRP's mission and goals.

Community Impact Review Committee

Chair:

Shiraz I. Mishra, MBBS, Ph.D.

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Independent Research Patient Advocate
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California Advocate Observer:

Chemicals Testing and Occupational Exposures Review Committee

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Jon M. Greif, DO, FACS

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