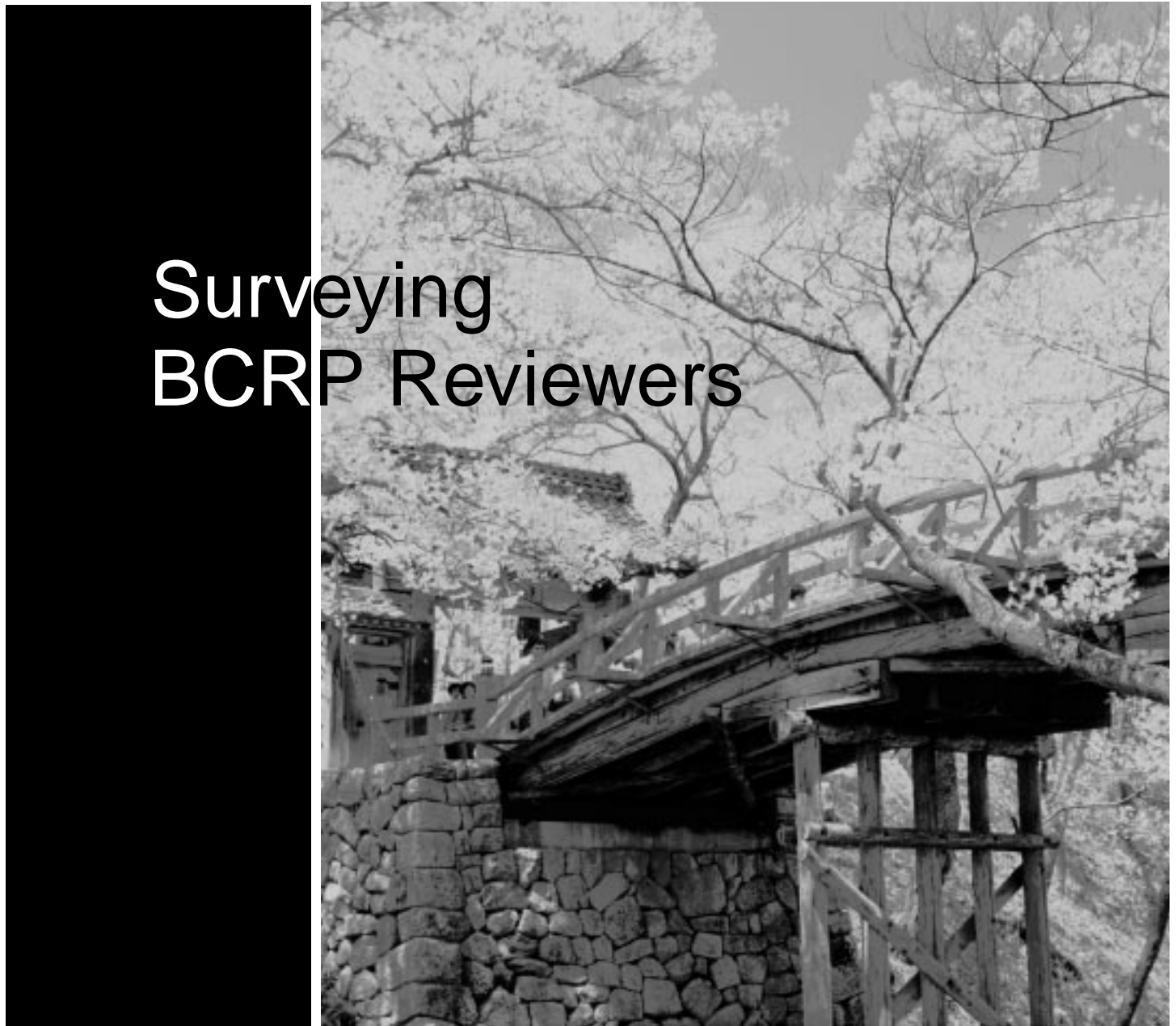


Looking Back, Looking Forward

California Breast Cancer Research Program

March 2001

Surveying BCRP Reviewers



BCRP Staff

Marion Kavanaugh-Lynch, M.D.,
M.P.H. *Director*

Sandra Basic
Janna N. Cordeiro, M.P.H.
Brenda Dixon-Coby
Mary Daughtry
Laurence Fitzgerald, Ph.D.
Ben Freeman
Katherine McKenzie, Ph.D.
Walter Price, Dr. P.H.
Roslyn Roberts
Ivy Savant
Sharon Simms, M.P.A.

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M. Ellen Mahoney, M.D., F.A.C.S.
Michele Rakoff
Tammy Tengs, Sc.D.
Sandy Walsh
Anna Wu Ph.D.

Georjean Stoodt, M.D., M.P.H.
Ex-Officio Member



For more information,
please contact
Janna Cordeiro,
Program Evaluator,
(510) 987-9841
(510) 587 - 6325 FAX
janna.cordeiro@ucop.edu

Evaluating Past Activities and Informing Future Decision Making

Background

Each spring, staff at the California Breast Cancer Research Program (BCRP) undertake the task of recruiting and coordinating peer review committees who assess and score every grant proposal received in January. The review committees, comprised of scientific and advocate experts from outside California are organized into research areas consistent with the current BCRP priority areas¹ designated by the California Breast Cancer Research Program Council (BCRC). Additionally, each committee is observed by one advocate from within California.

As part of an on-going effort to evaluate the program's operations and assess the impact of BCRP funding, BCRP staff and council members identified reviewers as a valuable resource for ideas, input and expert advice. In the Spring of 2000, during the annual review process, reviewers were asked to complete a survey and participate in focus groups to discuss BCRP's current priorities and funding mechanisms as well as suggestions for the future. This report summarizes the information gained from those efforts.

Goals

The primary goals of the study were to tap the BCRP reviewers' expertise and opinions to:

- 1) Evaluate BCRP's priority areas, award types, current scoring procedures, inclusion of advocates in the process, and quality of portfolio; and
- 2) Inform the BCRP Council's future priority setting and decision making process.

Acknowledgements

The authors would like to acknowledge the dedication and input from the peer reviewers who participated in the survey and the focus groups. Special thanks to the reviewers who facilitated focus groups. Their insight and expertise will help guide us towards an end to breast cancer. Thank you.

Methods

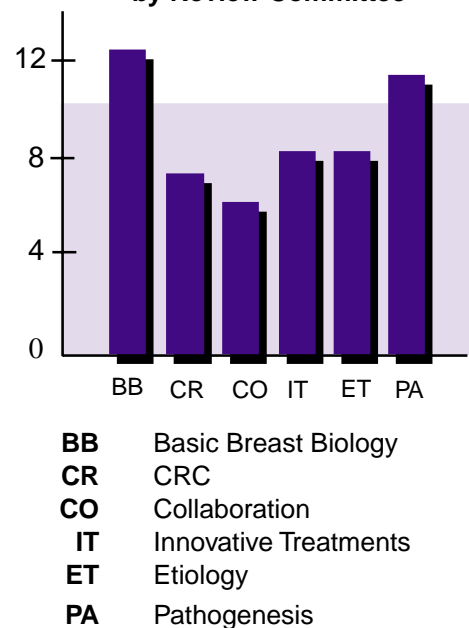
A written questionnaire and focus groups were utilized in the study. First, a written survey was created by staff members and sent on a computer disk to all reviewers. The survey asked reviewers to evaluate BCRP's priority areas, award types, current scoring procedures, inclusion of advocates in the process, and the research portfolio. The BCRP staff encouraged participation by sending out an accompanying letter and asking for the survey during the review committees. All data collected have been kept confidential by BCRP staff.

During the review committee meetings in San Francisco, focus groups were held and facilitated by one of the reviewers. The focus groups lasted between 45-60 minutes. Each focus group leader asked the reviewers to imagine themselves in three roles: 1) a member of BCRP; 2) a potential applicant to the BCRP; and 3) an evaluator attempting to measure the impact of BCRP funding. In each role, the participants were asked various questions to help guide BCRP evaluation efforts and future decision making processes at BCRP.

Description of the Sample

A total of 52 (62%) reviewers responded to the survey. Of those 52, 12 (25%) were breast cancer advocates. Twenty (38%) of the respondents were first time BCRP reviewers, 19 (37%) had one year experience reviewing for BCRP, and 13 (25%) had at least 2 years experience. Please see the figure below for a distribution of respondents by their review committee.

Figure 1. Number of Survey Respondents by Review Committee



Findings

This next section will present summary findings² from the study focusing on:

- ▼ BCRP's research agenda,
- ▼ Underlying assumptions and grant evaluation,
- ▼ Looking towards the future, and
- ▼ Additional comments.

Primarily, the information gathered from the survey will be presented in this summary. Focus group data are added where appropriate to provide depth and context for the survey responses.

BCRP's Research Agenda

Consensus of Opinion

At least 85% of the survey respondents agreed to the following statements:

- ▼ *Fostering collaboration is worthwhile.*
- ▼ *Postdoctoral Fellowship, New Investigator, and Training program awards are maximally conducive to fostering career development.*

Respondents suggested topics that could be targeted with additional RFAs:

- ▼ Minority Researcher
- ▼ Alternative or complementary medicine
- ▼ Methodological research
- ▼ Evaluation of current model systems
- ▼ Phase 5 research (dissemination)
- ▼ Use of microarray technology/novel imaging technology
- ▼ Novel immunotherapeutics for breast cancer
- ▼ Novel genes/human genome

Some Disagreement

The following statements had less than 85% agreement from respondents:

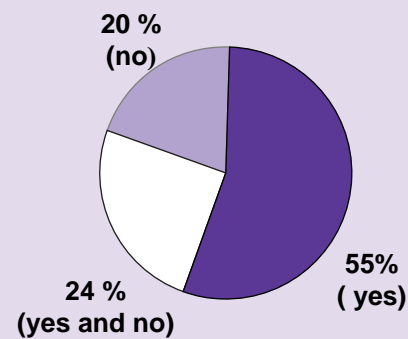
63% believe the TRC, CRC, SPRC and Conference awards are maximally conducive to fostering collaborative research.

Primarily, those who disagreed with this statement felt that the best collaborations occur through natural relationships and are not created through funding opportunities.

77% believe the IDEA awards maximally foster novel, innovative, and breakthrough research.

Those who disagreed based their observation on the level of innovativeness of the proposals they reviewed.

Figure 2. Is the BCRP significantly unique?



Many of the respondents who answered either yes/no or no said one of the following things:

- 1) BCRP is similar to the Department of Defense breast cancer research program but unique from other funders, or
- 2) BCRP is trying to be unique but the proposals BCRP received were not particularly innovative

“I believe that the California BCRP is trying to fill a unique niche but many of the investigators are trying to use the funding source as just another way to do basic research.”

“Scientific Merit is the minimum qualification for funding.”

Underlying Assumptions and Grant Evaluation

Consensus of Opinion

At least 85% of the survey respondents agreed with the following statements:

- ▼ *It is useful to score scientific merit using individual components.*
- ▼ *Scientific merit is a good predictor of a project’s potential value.*
- ▼ *Qualities such as impact on breast cancer and innovation can be measured and predicted by peer review.*
- ▼ *Collaborative research can be driven by grant funding.*
- ▼ *Career development can be driven by grant funding.*

Some Disagreement

75% believe important breast cancer research conducted does not have to be within existing, recognized topics.

Those who disagreed with this statement primarily said that the current breast cancer topics are so broad that most, if not all, viable research will fit within the topics.

68% believe scientific merit score should not be the sole determinant of funding.

In addition to scientific merit, the majority of respondents said that BCRP should consider at least one of the following: research priorities, relevance of the research, balancing the portfolio, and allowing applicants to make revisions. Those who disagreed tended to have relatively strong opinions. For example, one reviewer said: “Funding bad science leads to bad science.” Another implied that criteria other than scientific merit score constituted political considerations. “Political considerations only waste money, time, and resources.”

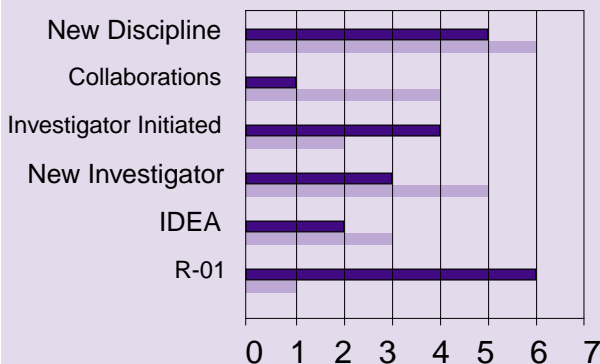
61% believe there are no additional elements that could be measured by peer review.

Additional elements suggested by respondents included: investigators background and experience, past productivity of PI, readiness for clinical application, how patient advocates are involved in research, quality of application such as following directions and clear writing, importance of the question and evaluation of design and methods.

80% believe novel research can be driven by grant funding.

The small percentage of respondents who disagreed with this statement gave reasons such as: “Novel research ‘happens,’ it is not ‘proposed.’”

Figure 3. Which of the following award types will contribute the most to defeating breast cancer over the next 5-10 years?



Legend

- Advocates
 - Scientist
- 1 = Most Important
7 = Least important

Looking Towards the Future

Special California Resources

Respondents identified the following resources unique to California:

- ▼ Diversity: cultural differences, large Asian/Pacific Islander (API), Latino and African American populations in California;
- ▼ Large rural and urban populations; and
- ▼ World renown experts and research institutions.

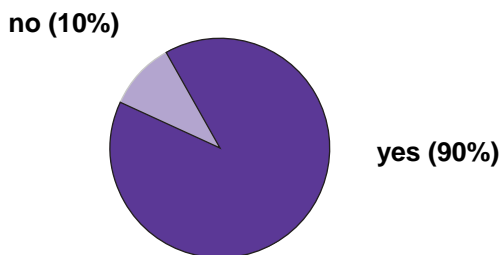
Ways to address underserved and diverse Californian populations

Suggestions from respondents included:

- ▼ **Create** special RFAs;
- ▼ **Make** funding for underserved populations a priority;
- ▼ **Encourage** more researchers to study underserved;
- ▼ **Collaborate** with funders who offer money for programs and/or services; and
- ▼ **Award** or recognize the best projects that benefit underserved and/or diverse CA populations at the bi-annual symposium.

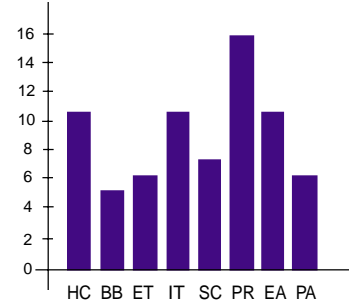
Significant Impact

Can BCRP make a significant impact on understanding, preventing, treating, and curing breast cancer with the current level and approach to funding?

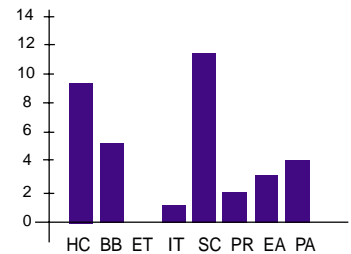


Which of our current eight priority issues:

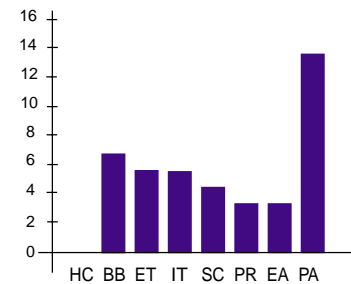
Deserve more emphasis in funding?



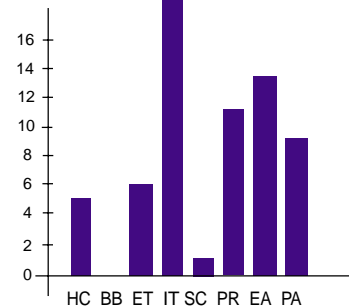
Deserve less emphasis in funding?



Are adequately funded by other agencies?



Will have the most impact on breast cancer in the next 5 years?



- HC Health Care Delivery and Health Policy
- BB Biology of the Normal Breast
- ET Etiology
- IT Innovative Treatments
- SC Socio-cultural, Behavioral and Psychological Issues
- PR Prevention
- EA Earlier Detection
- PA Pathogenesis

“Most advocates ... always have important and significant information to convey. They may not know the science, but they remind us all of what our end point should be.”

Conclusions

- 1) Generally, BCRP's year 2000 reviewers agreed with BCRP's approach to funding breast cancer research including:
 - o Current priority areas
 - o Current award types
 - o Current scoring procedures (i.e., scoring elements separately, topics)
 - o Inclusion of Advocate reviewers in the process.
- 2) There was no clear mandate about new directions for the BCRP. Reviewers have diverse opinions about what priority issues:
 - o Deserve more funding
 - o Deserve less funding
 - o Are adequately funded
 - o Will have the most impact on breast cancer in the future.
- 3) There is some evidence that breast cancer advocates and scientist reviewers have different ideas about which award types will contribute the most to defeating breast cancer over the next 5-10 years. The advocates valued collaborative research while the scientists valued traditional R-01 type research.
- 4) Breast cancer advocates play an important role in the peer review process. Both breast cancer advocates and scientist reviewers highly value the inclusion of advocates in the review process. The advocates valued the opportunity to learn about breast cancer research and have an intimate influence on grant funding decisions. Many of the scientists felt that the advocates' presence helped them to remain focussed on the human side of breast cancer research.

Uses of this Report

- ▼ Both the qualitative and the quantitative data gathered from this study will go to our advisory council to inform future decisions about evaluation efforts, priority setting, and award types.
- ▼ Lessons learned from the process of collecting data using focus groups and written questionnaires with reviewers will help inform future evaluation efforts conducted by staff.
- ▼ The data gathered will add to increasing information available to the public about how to improve BCRP's grantmaking and the impact of our efforts.

Additional Comments

Role of Breast Cancer Advocates

Respondents expressed overwhelming support for the inclusion of breast cancer advocates participating in the peer review process. Many of the scientists said that the advocates provided a much needed presence and helped to keep the committee focussed on the human side of the research proposals they reviewed. Many advocates expressed enthusiasm for BCRP's program and said they learned a tremendous amount as a result of their participation in the review committees. While most scientists support full participation from the advocates, one said that their input should be kept in "proper perspective" and another suggested that the advocates have little say on technical merit but full input on the rest of the review.

Further Research

Additional Support for Advocate Reviewers

BCRP may benefit from additional research into how to better support and train advocate reviewers. For example, one advocate suggested pairing each advocate with a scientific mentor. Additional inquiry could help to generate further suggestions to improve and support advocate inclusion in the peer review process.

Lessons Learned

BCRP reviewers represent a good source of information, expertise, ideas and feedback.

Data gathered from this effort confirm BCRP's staff anecdotal information which indicates that staff and reviewers communicate adequately about these issues.

Future Surveys

To increase participation and validity of the data, BCRP may need to:

Shorten surveys

Pilot test surveys

Offer incentives (for reviewers, the return of the survey could be tied to receiving honorarium payment)

Offer anonymity to respondents

New Directions

- ▼ New award type for Junior Faculty/ Senior Postdoctoral
- ▼ Narrow BCRP's focus to a few areas of research
- ▼ Extensive outreach promoting BCRP funding opportunities
- ▼ New award type for capacity building
- ▼ Increased number of award cycles
- ▼ Media campaign
- ▼ Survey Advocates to learn about impact of being involved in BCRP activities

Suggestions to disseminate research findings

- ▼ Newsletter for lay audience and scientists
- ▼ TV or video
- ▼ Training for medical and graduate students
- ▼ Web site listing cutting edge tools and/or resources and ways to obtain them
- ▼ Offer prize for most important research
- ▼ "Teach scientists to speak in layman terms"

¹ For a complete description of BCRP's current funding priorities and mechanisms, see our web site at: <http://www.ucop.edu/srphome/bcrp/>

² Due to small response rate in the final section of the survey, data from reviewers analyzing BCRP's portfolio are not included in this report.

