

3rd Annual Town Hall Meeting
Translating Breast Cancer and Environmental Research into Action

*The Breast Cancer and the Environment Research Centers:
New Information From a New Approach to the Conduct of Science*

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Dr. Robert A. Hiatt was the first speaker from the panel entitled, “Understanding BABCERC Research and the Research Process”. He expressed his hope that the audience members come away from the event with an understanding of the work that is being done by BABCERC and why that work is important for society. He encouraged people to pay particular attention to the ways in which knowledge gained from research is integrated into decision-making.

Scientists, Dr. Hiatt explained, spend their time trying to understand how the world works in terms of biological processes. Usually, that is where their work ends. They “write a paper, give a presentation, write a book.” However, BABCERC scientists are committed to a new approach that communicates their ongoing work and findings to the community so that study results can lead to action.

By way of example, Dr. Hiatt described the way in which the data collected by cancer registries was used to figure out what kind of women were getting breast cancer, where they were from, their race, ethnic identities, ages, and socioeconomic status. It became clear that the Bay Area had breast cancer rates that were much higher than anticipated and that the kind of women who were getting it did not fit the expected profile. Most cancers occur in people of lower socioeconomic status, while in the Bay Area breast cancer was occurring in women of higher socioeconomic status. This created a great deal of momentum in the community. Advocacy organizations were formed, community members spoke out, and state and federal agencies were encouraged to fund research that would try to uncover the cause for this unexpected finding.

Dr. Hiatt went on to explain the various scientific pathways that can be used in response

to new information. Sometimes the information gets translated into drug development by the pharmaceutical industry. Some scientists begin to look for biomarkers, which are molecular indicators of environmental exposures that may cause disease. Other scientists create better and earlier methods of screening to prevent the disease from occurring in the first place.

The National Institutes of Health (NIH) chose to focus on early life events such as breast development, as well as processes that occur in utero. They published a Request for Proposals. BABCERC submitted a proposal and subsequently won a grant to focus on these early life events. BABCERC is one of four centers nationwide that studies the environmental causes of breast cancer by focusing on mammary gland development during puberty when the breast may be especially vulnerable to environmental influences.

The researchers framed their work in a new way; they made a commitment to educate young girls and women at risk of developing breast cancer about the role of specific environmental factors in breast cancer and how to reduce their exposures to those agents. Their intention is that this information will be used to help develop public health programs for breast cancer prevention.

The Community Outreach & Translation Core (COTC), led by Janice Barlow, is the arm of BABCERC that creates the two-way street that allows the researchers and the community to communicate. COTC members actively participate in research projects where they bring the communities' perspectives to the scientists and translate research findings back to the community members to keep them informed.

Dr. Hiatt expressed his hope that by using this new way of doing science, people will better understand the process of science as well as its application.