March 2017

Breast Cancer and the Environment Research Program (BCERP)



BCERP NEWSLETTER

WHAT'S NEW IN BCERP?

- Silent Spring Institute's ELLA Project is in full effect. Read more information about the project, their outreach database, and the value of collaboration and community outreach to BCERP on page 2.
- Opportunity Funds have been awarded! You can find these abstracts on the portal and more information about these projects and further cross-site collaborations on page 3.
- The BCERP Coordinating Center is here for you! Read about the Coordinating Center's role in BCERP and what activities we can facilitate for each of the sites on page 4.
- The public website is up-to-date! Check it out at bcerp.org
- Meet key members of BCERP, including NIH program directors and junior investigators from our sites, on pages 5-6.



ALSO FEATURING:

- Community Outreach Events and Activities
- Publications
- Upcoming Meetings and Events

COMMUNITY OUTREACH UPDATES

- Michigan State University is working on a content analysis of breast cancer websites to study the presentation of breast cancer on websites.
- UCLA: The Chilean team had their first annual meeting to introduce the study and findings so far. They are planning a larger meeting in the spring.
- University of Massachusetts-Amherst met with Girls, Inc., to discuss a follow-up summer program to assess behavioral interventions and are planning a Survivors Day workshop in April.
- **City of Hope**: The Community Leadership Committee met to evaluate educational materials that City of Hope has developed to build a foundation for future focus groups.



COMMUNITY PARTNER SPOTLIGHT



THE ELLA PROJECT AND OUTREACH DATABASE

Silent Spring Institute has recently launched a website (<u>www.silentspring.org/ellastudy</u>), to connect the project—and BCERP—with breast cancer advocates and environmental health and justice organizations throughout the United States. **The Early Life exposures in Latina Adolescents (ELLA)** project is a collaboration between UCLA Silent Spring Institute, Fox Chase Cancer Center, and University of Chile. They are investigating the influence of environmental chemicals on breast composition in a cohort of 500 young teenage girls in Santiago, Chile, and how these early life exposures might increase susceptibility to breast cancer later in life.

They have also developed the first iteration of an outreach database that includes contact information for approximately 170 U.S. breast cancer advocacy and research organizations, environmental health organizations, and other NIEHS BCERP grantees (both investigators and community partners). The outreach database will allow for the dissemination of BCERP research to increase awareness and action about environmental risk factors for breast cancer. The advocacy database incorporates breast cancer advocacy organizations from 31 different states, as well as national and international organizations.

The ELLA website will serve as an important resource on environmental chemicals and breast cancer risk. Currently, it includes an introduction on environmental chemicals and breast cancer, an overview of windows of susceptibility, and a resource section with fact sheets and tips for avoiding breast carcinogens and endocrine-disrupting compounds. The site also features an English-Spanish blog that will highlight important news items, stories, and preventive action tips from breast cancer researchers, study participants, and activists.

In addition, Silent Spring would like to feature other BCERP projects on the website and invite you to share information about your own project and share the ELLA website with your own constituents as well. By connecting ELLA to breast cancer and environmental advocacy groups in the US, they hope to provide new opportunities for individuals to connect with BCERP and expand our outreach, so that they may ultimately translate the program's findings into policy and personal changes that promote health and prevent breast cancer.

As exemplified by the ELLA project, community outreach is an essential component in health education and dissemination of impactful information. This study highlights the significance of collaboration between research studies and advocacy groups and how this information can be used to make a difference in behaviors and policies across the nation.

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CROSS-SITE COLLABORATION AND HARMONIZATION

OPPORTUNITY GRANTS

Four grants have been awarded to collaborators across the windows of susceptibility sites. The purpose of introducing these awards was to enhance the collaborative and translational nature of BCERP among investigators and community partners to expedite scientific, education, and community-related engagement opportunities. Read about the PIs and the collaborations for these projects below:

- DNA Methylation Changes Induced by Estrogenic Exposures
 - ♦ PI: D. Joseph Jerry, University of Massachusetts-Amherst
 - Collaborating with: City of Hope, Columbia University, Georgetown University, Uniformed Services University of the Health Sciences, University of California-Los Angeles, Michigan State University, University of Cincinnati, University of Massachusetts-Amherst, Baystate Medical Center, and University of Wisconsin-Madison
- Identification and Harmonization of Intermediate Endpoints for Environmental Exposures
 - ◊ PI: Sallie Smith Schneider, Baystate Medical Center
 - ♦ Collaborating with: City of Hope, Columbia University, University of Massachusetts-Amherst, Michigan State University, and Fox Chase Cancer Center
- Cross-site Formative Audience Analysis Research to Facilitate Effective Outreach Efforts and Communication Strategies
 - PIs: Kami Silk and Richard Schwartz, Michigan State University
 - Collaborating with: Silent Spring Institute, City of Hope, University of Massachusetts-Amherst, Georgetown University, and Columbia University
- Comparison of Breast Tissue Characteristics in Women and Adolescents using Optical Spectroscopy and DXA
 - ♦ PI: Mary Beth Terry, Columbia University
 - ♦ Collaborating with: University of Chile

The abstracts for these projects can be found on the **<u>BCERP portal</u>**.

WINDOWS OF SUSCEPTIBILITY SITE COLLABORATION

Through the work of the BCERP Animal Models Working Group, led by Dr. Sallie Schneider and Dr. Laura Vandenberg, investigators at the Michigan State University and University of Massachusetts-Amherst have sought to harmonize the dosage, delivery, and analyses of chemical exposures, on their respective BP-3 studies.

Investigators from MSU, UMASS, UCLA, and Columbia shared biospecimen collection protocols, study instruments and questionnaires, leading to some modifications to align study protocols and questionnaires.

What's next in BCERP collaboration and transdisciplinary discussion?

Look for updates on the mid-summer Integration Meeting paired with a mammary gland whole mount training workshop at the Fox Chase Cancer Center (see page 4 for dates). We are also recruiting volunteers to participate in writing committees for papers based on discussions and findings in the thematic working groups, in conjunction with discussion on common themes and assays.

RECENT PUBLICATIONS

Ramirez-Andreotta MD, Brody JG, Lothrop N, Loh M, Beamer PI, Brown P. Reporting back environmental exposure data and free choice learning. *Environmental Health*. 2016;15:2. DOI:10.1186/S12940-015-0080-1.

Silk K, Smith S. Organizations, Communication, and Health. Harrison TR, Williams EA, editors. New York: Routledge; 2016. Organizing transdisciplinary research: A breast cancer and the environment collaborative model; p.297-312.



MARK YOUR CALENDARS:



WHOLE MOUNT WORKSHOP

WHEN: July 17-18, 2017

WHERE: Fox Chase Cancer Center, Philadelphia, PA

WHAT: Join Dr. Jose Russo and the Fox Chase team for a Mammary Gland Whole Mount Preparation and Analysis Training Workshop. There are 16 spaces available, with at least 2 reserved for each of the WOS sites.

If you are interested in participating in the workshop, please contact the Coordinating Center.

MID-YEAR INTEGRATION MEETING

WHEN: July 19-20, 2017

WHERE: Philadelphia, PA

WHAT: This meeting is an opportunity for consortium members, investigators and community partners to come together and have interactive transdisciplinary discussion to promote collaboration.

BCERP ANNUAL MEETING

WHEN: November 15-17, 2017

WHERE: Duarte, CA

WHAT: On the November 15th, the BCERP will hold its annual business meeting for the grantees. On November 16-17th, the Breast Cancer and the Environment public conference and community forum will take place. Take this opportunity to engage your fellow grantees and the public about innovative breast cancer and the environment research, new findings, and future directions!

COORDINATING CENTER CORNER

The BCERP Coordinating Center is here for you!

The goals of the Coordinating Center are to facilitate communication between sites, provide leadership, and promote the finding of common themes and collaboration amongst each of the windows of susceptibility sites. We hope to achieve this through:

- **Collaboration**: Supporting cross-site data sharing, identifying shared resources, and fostering collaboration based on common themes and interests
- **Communication**: Facilitating interaction and communication across sites and working groups
- **Coordination**: Defining BCERP's shared vision and mission, establishing standard policies, supporting working groups, and general administration

Our multidisciplinary team includes experts in breast cancer epidemiology (Trentham-Dietz), basic science including genetics (Shull, Gould, Bradfield), environmental health and applied public health (Malecki), toxicology (Bradfield), program evaluation (Lindberg), biostatistics (Gangnon, and outreach/community Hampton), engagement (Berry), as well as mentoring training (all) and research and administration and logistical support (McGregor). Guided by our lead community partner Mary Pat Berry, we will work closely with breast cancer advocates and community

Planning and Administration	• Amy Trentham-Dietz, PhD • Julie McGregor
Biostatistics	• Ronald Gangnon, PhD • John Hampton, MS
Publications and Proposals	• Michael Gould, PhD
Training and Mentoring	James Shull, PhD Christopher Bradfield, PhD
Evaluation	• Sara Lindberg, PhD
Outreach and Dissemination	• Kristen Malecki, PhD • Mary Pat Berry, MA
Advisors	• Mia Guadet, PhD • Mark Thornquist, PhD

partners to foster dissemination of research findings and work collaboratively to identify and support action steps to reduce breast cancer risk in vulnerable populations. We have also have the support of a advisors (Gaudet, Thornquist) who are available to extend the expertise and capacity of the BCERP.

Check out our new BCERP public website!

The BCERP public website is now updated at www.bcerp.org

The information on the site includes the main dissemination highlights from the previous round of BCERP and is targeted toward parents and young girls and the puberty and pregnancy windows of susceptibility. In this round of BCERP, our sites are studying other important windows, such as young adulthood and menopause, and we would like to reach these additional groups with our website as well. We also hope to include more actionable items for outreach organizations and advocates, including policy advocacy and general community engagement. We are working to coordinate a review of the current educational materials. As we continue to update these key components, we ask for your expertise and guidance to introduce and incorporate these important concepts into a new and updated BCERP website.

We would also like to put a more personal touch on the site! If you have any pictures of your site's outreach events or groups, research laboratories, and any other aspects of your research and community outreach you would like to share, we would like to feature them on the website.

Please send any update suggestions or pictures to Natalia Arroyo at narroyo@wisc.edu.

How can the private BCERP Portal help you? You can:

- Share documents, publications, and other resources with BCERP members
- Present the meeting minutes from your last meeting or conference call
- Track group action items based on priority and status
- Maintain a private and secure place for your working group through GroupSpaces
- Connect with your fellow consortium members through message boards or listservs
- · Contact members of a group or any individual

For any assistance with the portal, including but not limited to account or password reset, registration, navigating the portal, and addition of resources and links, please contact one of the site administrators:

John Hampton (john.hampton@wisc.edu) Natalia Arroyo (narroyo@wisc.edu)

Link to the BCERP Portal: https://epi.grants.cancer.gov/bcerp-portal

TRAINEE HIGHLIGHTS

One of the goals of BCERP is to encourage future investigators and nurture the foundation of the next generation of breast cancer researchers. BCERP would like to introduce the postdoctoral fellows of the consortium and their work:

- **Dr. Jennie Ohayon**, Silent Spring Institute, completed her PhD at the University of California, Santa Cruz looking at remediation of toxic waste in military Superfund sites. She is currently working on a project to report back to study participants and community partners their exposures to hormone disruptors and other emerging contaminants.
- **Dr. Debashish Sahay**, Columbia University, completed his PhD at INSERM (French National Institute of Health and Medical Research). He is currently working identify the effects of PAH exposure on breast cancer risk in multiple generations of mice at Columbia University.
- **Dr. Kedra Cyrus**, Georgetown University, completed her PhD at the University of Kentucky in Pharmaceutical Sciences. She is currently contributing to studies that elucidate the role of hormone-sensitivity in tumor development.

THAD SCHUG, NIEHS PROGRAM DIRECTOR

Thaddeus (Thad) Schug, PhD, joins us as the new NIEHS program director for BCERP. Dr. Schug received his doctorate in nutrition and biomedical sciences from Cornell University. His graduate work focused on the relationships between nuclear hormone receptor activation and various forms of cancer and conducted his postdoctoral studies at NIEHS, where he investigated the sirtuin family of genes which are involved in the aging process, homeostasis, metabolism, and inflammation. Dr. Schug is currently a health scientist assigned to the Population Health Branch in the extramural division of NIEHS where he helps with programs in the scientific areas of male and female reproduction, metabolism, the development and disruption of the endocrine systems, and nanotechnology. He also has interest in projects associated with green chemistry. He has followed the BCERP for years and is familiar with our history and direction.

Email: schugt2@niehs.nih.gov

TRAM KIM LAM, NCI PROGRAM DIRECTOR

Tram Kim Lam, PhD, is NCI Program Director for BCERP and provides programmatic stewardship and oversight of the project. She began her career at NCI as a Cancer Prevention Fellow and then a Cancer Research Training Fellow in the Division of Cancer Epidemiology and Genetics (DCEG). She is currently a Program Director in the Environmental Epidemiology Branch (EEB) of the Epidemiology and Genomics Research Program (EGRP) in NCI's Division of Cancer Control and Population Sciences (DCCPS). She oversees a research grant portfolio that focuses on modifiable factors (e.g., infectious agents, environmental exposures, genomics, and lifestyles), and the interplay between determinants of cancer and how they influence susceptibility to cancer nationally and globally. Dr. Lam is involved in EGRP-wide efforts to understand factors that influence the practice of cancer epidemiology research and extend the reach of the discipline in the near future, such as sharing of epidemiologic data, training of the next-generation of cancer epidemiologists, translating epidemiologic findings into evidence-based practice/policy, developing evaluation metrics, and evaluating scientific initiatives.











ABEE BOYLES, NIEHS PROGRAM DIRECTOR

Abee Boyles, PhD, has recently joined BCERP representing NIEHS. Dr. Boyles received her Ph.D. in Genetics and Genomics from Duke University. In addition to BCERP, she is a program officer for a portfolio of reproductive epidemiology and climate change grants in the Population Health Branch of the Division of Extramural Research and Training. She was a health scientist with the Office of Health Assessment and Translation in the National Toxicology Program at NIEHS, where she led the systematic review of Mountaintop Removal Mining: Impacts on Health in the Surrounding Community and the Synthetic Turf/Recycled Tire Crumb Rubber Research Program. She was the lead scientist for the Identifying Research Needs for Assessing Safe Use of High Intakes of Folic Acid Expert Panel. Dr. Boyles was part of the team that developed the OHAT Approach to systematic review and evidence integration for literature-based environmental health science assessments and contributed to the NTP Monograph on Health Effects of Low-level Lead.

Email: abee.boyles@nih.gov

The BCERP: A transdisciplinary study of the effects of environmental exposures on mammary development and breast cancer risk.

The Breast Cancer and the **Environment Research** Program (BCERP) is a joint effort co-funded by the National Institute of **Environmental Health** Sciences (NIEHS) and the National Cancer Institute. The BCERP supports a multidisciplinary network of scientists, clinicians, and community partners to examine the effects of environmental exposures that may predispose a woman to breast cancer throughout her life.



BCERP Coordinating Center Contact Information

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Quick Links: BCERP Public Website BCERP Portal

A link to the portal can also be found on the bottom of each page of the public website titled **BCERP Member Login**.