

Inherited Susceptibility Genes
Summary of BCRF think-tank session

Moderator:
Judy E. Garber, MD, MPH

Attendees:

Susan Clare
Susan Domchek
Fergus Couch
James Ford
Mary-Claire King
Rosette Lidereau

Joan Marks
Katherine Nathanson
Kenneth Offit
Olunfunmilayo Olopade
Gad Rennert
Anna Maria Storniolo
Ilan Tsarfaty

The group had a focused discussion covering two areas. The latter led to a recommendation for the formation of a Consortium with a proposal for a first joint publication.

1. **Volunteer Biospecimen Bank, University of Indiana:** Drs. Anna Maria Storniolo and Susan Clare presented information about a resource they have been developing with Komen Foundation support that they thought might be useful to the group, and of which the group was largely unaware. Their breast surgeons have been volunteering their time to collect core biopsy specimens from healthy female volunteers, already numbering more than 400, which are stored as frozen cores with paraffin samples on a subset. They have completed epidemiologic risk factor questionnaires on all women providing the samples. They have the same information on more than 1500 blood samples from their Indiana cohort, which is representative of Indiana in terms of ethnic distribution, and have begun to travel to sites in the US to supplement the diversity of the repository. Investigators can apply for specimens for approved research.

2. **Proposal for the formation of a BCRF Breast Cancer Genetics Consortium:** Drs. Olopade, King, Offit and Couch proposed the formation of a North American consortium of breast cancer genetics researchers. They cited the very successful and well-organized consortia that have been functioning in Europe and Australia, to which many of the BCRF investigators already contribute specimens, which focus on the discovery of new breast cancer susceptibility genes, or the assessment of genes that may modify the risk of breast and ovarian cancer conferred by mutations in the BRCA1 and BRCA2 high penetrance genes. The North American groups have never organized. Dr. Lidereau discussed the model of cancer genetics in France. It was felt that the time had come for the creation of a consortium in which the members would share samples and data on a group of families meeting criteria to be established that would be valuable for both the discovery of new breast cancer genes, but also for the clinical characterization of the

syndromes associated with those genes and the careful estimation of the impact of new genes on breast and associated cancer risk (ovarian, etc.). Research on the communication of these risks, which are likely to differ substantially from the very high risks associated with currently known genes could also be facilitated.

The group agreed to begin by sharing data for a first joint publication of the Consortium, combining work done by the individual groups on the prevalence of mutations in the PALB2 gene, identified in the laboratory of BCRF grantee David Livingston, among families negative for BRCA1/2 mutations among other criteria. Dr. Katherine Nathanson will coordinate this effort.

A core group agreed to meet the following morning at breakfast before the BCRF Public Forum to begin to establish logistics for the consortium using the BCRF Web Portal. Further discussion with BCRF leadership will be initiated after a proposal is prepared. Membership in the consortium will be open to all BCRF grantees: discussion includes the possibility of inviting other active North American investigators whose data and specimens would enhance the power of the consortium to make a difference. There was interest in potentially including other international BCRF investigators, as valuable input was also provided by the international investigators in the session.