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UNIVERSITY OF MASSACHUSETTS

AMHERST

Recruiting Lactating Women who know they have a *BRCA* Mutation to Donate Breastmilk

Researchers at UMass Amherst are analyzing breastmilk from women who know, from genetic testing, they have a *BRCA* mutation. A system is in place for shipment of milk samples from across the US to UMass. We are asking you to help by passing our contact information and/or brochures to applicable patients.

**BreastmilkResearch.org - Kathleen Arcaro - (413) 545-0813 - Breastmilk@UMass.edu**

This project was developed by Drs. Kathleen Arcaro and Brian Pentecost. It is funded by the Breast Cancer Research Program (BCRP) and has UMass IRB approval. The formal project title is *Non-Invasive Assessment of Lactating Breasts Using Somatic Mutations and DNA Methylation as a Pre-Symptomatic Test for BRCA Breast Cancer*.

We study breastmilk in an effort to develop strategies to reduce breast-cancer-risk. Breastmilk provides a unique opportunity to non-invasively examine the breast, through sloughed cells, secreted proteins, and lipophilic environmental contaminants.

The main target population of the project is high-risk asymptomatic women who are nursing, specifically: women who have tested positive for a pathogenic *BRCA* mutation. The sloughed epithelial cells present in the milk is examined for DNA methylation and somatic mutations to uncover profiles identifying breasts at increased risk of breast disease, as well as to shed light on breast cancer development.

We are recruiting BRCA mutation positive who and are able to donate a breastmilk sample. We need single set of milk samples. We seek your help solely in identifying possible participants, we handle enrollment and details of samples donation. We ship collection materials to participating women to enable milk collection on a single occasion.

We hope to convert the findings into a screen for assessing current breast cancer during lactation, a period during which current screening methods are either not usable or are not fully effective, in addition to gaining further understanding of the development of BRCA-related breast cancers.

Donating Breastmilk for Breast Cancer Research

Our website, BreastmilkResearch.org , describes the program. You can view recruitment materials from the site at [**tinyurl.com/BRCA-milk-study**](https://tinyurl.com/BRCA-milk-study) . We can ship Informational materials to you at your request, including a brochure for patients and clients that describes the program.