

BCFR NEWSLETTER

Keeping you up to date on the Breast Cancer Family Registry

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Who is my favourite singer?

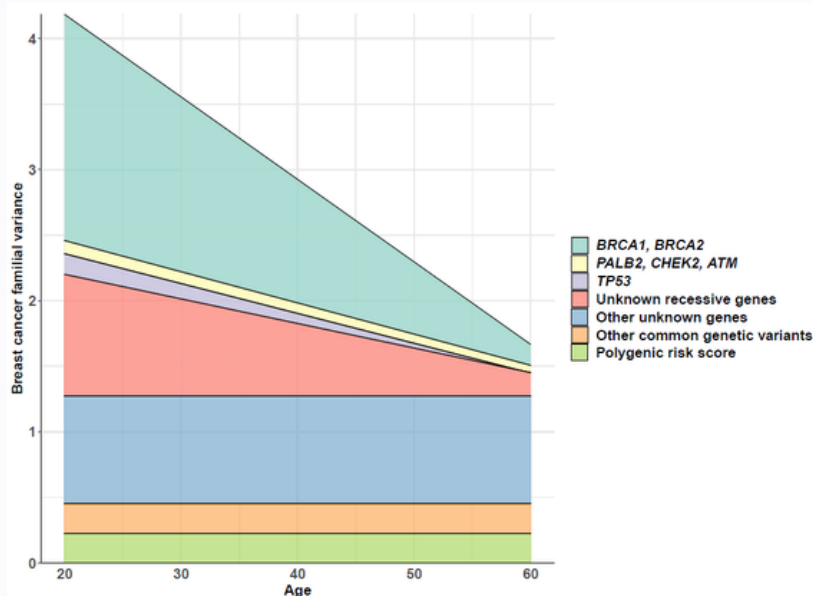


PUBLICATIONS & NEWS

New insights into the missing heritability of breast cancer

Research over the last few decades has revealed much about the genetic causes of breast cancer, however, we still lack a complete picture as to why breast cancer runs in families. To address this gap in knowledge, dubbed the "missing heritability", we conducted a study of 2,712 families from the Australian Breast Cancer Family Registry led by Dr Shuai Li (The University of Melbourne), and using extensive genetic testing conducted by Prof Melissa Southey (Monash University, Melbourne).

We found that the missing heritability is unlikely to be due to as yet undiscovered dominant genes. (These are genes for which only one fault inherited from either the mother or father is needed to cause the increased risk.) Instead, a substantial amount could be due to recessive genes (for which two faults, inherited from both the mother and father, are needed). To date no recessive breast cancer risk genes have been identified.



Age-specific breast cancer familial variance explained by genes

[Read the full paper "Segregation analysis of 17,425 population-based breast cancer families: Evidence for genetic susceptibility and risk prediction."](#)

The diagram to the left shows how different genetic factors contribute to breast cancer running in families. It shows that the contributions of the known major genes (the top three colours), and of the unknown recessive genes (pink), all diminish with age. It also shows that other unknown genes (blue) could play a significant role.

We cannot exclude the possibility that part of the reason breast cancer runs in families is due to non-genetic factors shared by sisters.

The two new challenges for breast cancer research identified by this paper are:

- The discovery of recessive genes implicated in breast cancer risk
- Identifying factors in early life that cause breast cancer risk, in particular those that might be shared by sisters



Love and Light Olivia

Olivia Newton-John passed-away in August this year. The ABCFR we will be forever grateful for her patronage and extraordinary impact on community involvement in breast cancer research.

COVID-19 Vaccine Information for Cancer Patients, Survivors, and Caregivers

As vaccines are now widely available to help protect against COVID-19, you may have questions as a cancer patient, survivor, or caregiver. Please visit the [American Cancer Society](#) for more information about the vaccine.

MEET A COMMUNITY REPRESENTATIVE

Gerda Evans has a personal and family history of breast cancer. She has represented Breast Cancer Network Australia (BCNA) in familial cancer studies on local, national, and international committees including kConFab and ABCFR.

She is currently the Community Advocate on 'Information Forum on Mammographic Density' (InforMD) and co-chair of the Australian Breast Density Consumer Advisory Council (ABDCAC).

With her background in oncology nursing—Clinical Nurse Specialist in I.V. and chemotherapy at the Royal Marsden Hospital UK and Peter MacCallum Cancer Clinic—and her personal and family experience of breast cancer, she has credibility with researchers, clinicians, and research participants.

GERDA EVANS



Gerda is married, has four fabulous sons, and five wonderful granddaughters who are her inspiration for involvement in breast cancer research. Gerda has spent over twenty years paddling in a breast cancer dragon boat team and has recently taken up lawn bowls.



L-R: Dr Sue Malta - Project Manager for MyBRISK, Rita Butera - Chief Executive Officer of BreastScreen Victoria, Gerda Evans - breast cancer survivor and advocate, Professor John Hopper - Chief Investigator, MyBRISK CRE. Photo: Peter Casamento.

ALCOHOL-FREE MULLED WINE

This festive non-alcoholic mulled wine is great for holiday celebrations, and can be served hot or cold!

INGREDIENTS

- 2 cups pomegranate juice
- 2 cups cranberry juice
- 2 cups water
- 8 cloves
- 6 blackberries (optional)
- 1 cinnamon stick
- 3 star anise
- 1 orange, sliced



ELFIS
PRESLEY!

BEYON-
SLEIGH



INSTRUCTIONS

1. Add all ingredients to a large saucepan and bring to a very low boil on medium-high heat.
2. Turn heat to low and simmer gently for 30 minutes (up to an hour if you can).
3. Strain to remove orange slices and spices.
4. Pour into a mug and add garnish with extra orange, cinnamon and star anise.

☆ Serve chilled if you're in the southern hemisphere ☆

CONTACT US

Select your BCFR site to be directed to your Research Team. Or, select BCFR to visit our website.



Australia



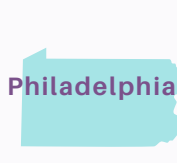
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