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# BCFR NEWSLETTER

Keeping you up to date on the Breast Cancer Family Registry

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## PUBLICATIONS & NEWS

### Breast Cancer Risk Genes - Association Analysis in More than 113,000 Women

Testing for BRCA1 and BRCA2 gene mutations has been available since the mid-1990s, soon after the start of the Breast Cancer Family Registry. Since then, researchers have found many more genes that affect risk for breast cancer.

In some cases, genetic testing for cancer risk may involve looking for changes in dozens of genes.

This New England Journal of Medicine study, which included women from the Breast Cancer Family Registry, analyzed 34 genes that might play a role in the risk for breast cancer. The investigators studied over 60,000 women with breast cancer and over 53,000 women without breast cancer. Variations (mutations) in 5 genes were strongly associated with a high risk for breast cancer: BRCA1, BRCA2, PALB2, ATM, and CHEK2. Four other genes also increased the risk for breast cancer (BARD1, RAD51C, RAD51D, and TP53). Variants in three other genes that increase the risk for breast cancer (CDH1, PTEN, and STK11) are very rare and were not detected in this study. Results from this study can help genetic counselors, individuals, and families make choices about genetic testing options.

To read the full study, [click here](#).

### 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.

## PARTICIPANT RESEARCH HUB

### CANCER MOONSHOT

On February 2, 2022, United States President Joe Biden announced a reignition of the Cancer Moonshot, highlighting new goals: to reduce the death rate from cancer by at least 50 percent over the next 25 years and improve the experience of people and their families living with and surviving cancer—and, by doing these and more, to end cancer as we know it today.

The Breast Cancer Family Registry is committed to advancing this goal. Your continued participation and support are helping to make this goal possible - THANK YOU!

To read more about Cancer Moonshot, [click here](#).

## MEET A RESEARCHER

### Whitney Espinel, CGC, MS

Whitney Espinel is a board-certified genetic counselor with a master's degree in human genetics and genetic counseling from Emory University. She joined Huntsman Cancer Institute (HCI) in 2016 where she specializes in hereditary breast and ovarian cancer risks. She currently works in HCI's High Risk Breast Cancer Clinic where she follows women with genetic mutations including BRCA1/2, ATM, CHEK2, and PALB2. Her research focuses on expanding genetic risk assessment into new and underserved populations and educating healthcare providers and patients on hereditary risks and management. She also studies the effects of genetic changes that occur in the cancer (somatic) compared to genetic changes that are passed down from a parent (germline).

[Click here](#) to watch a town hall where Whitney talks more about breast cancer and genetic counseling.



## HEALTHY TIPS

### Fitting in Fitness

Regular physical activity can lower your lifetime risk for cancer and provide a host of other physical and mental benefits. The American Cancer Society recommends 150-300 minutes of moderate or 75-150 minutes of vigorous activity each week. This can sound like a lot, but physical activity can be easier to fit into a busy schedule than you realize! Below are a few ideas for making physical activity a regular part of your daily life:

#### If you're working or taking online classes from home

- Stand or walk around while you read and answer emails.
- During conference calls, stand up and pace, or stay seated and do leg lifts, knee lifts, and toe curls.
- Take a short walk during lunch or a coffee break.
- Set an alarm to remind you to take a one- or two-minute standing or walking break every hour.

#### Make TV time active time

- Stand up and fold laundry while you watch.
- Do simple exercises like jumping jacks or stretching.
- Make a new rule: No sitting during commercials.
- Use an exercise bike or treadmill, or do arm curls, squats, lunges, and crunches while watching.

Find more physical activity ideas at the [American Cancer Society website](#).

#### Make household chores count

- Mop or vacuum fast enough to get your heart pumping.
- Playing with kids or pets can burn 200 calories/ hour.
- Yard work and gardening are also ways to burn calories and strengthen your muscles. Pushing a lawn mower, raking leaves, shoveling, and other outdoor chores can be an effective workout.
- Use stay-at-home time for projects you may have been putting off. Cleaning out the garage or attic is another way to be productive and active at the same time.

#### Other ideas to get moving

- Walk outside to speed up heart rate and break a sweat.
- Walk up and down your stairs. Take every other step to give your legs a good workout.
- Turn on the radio and dance!
- If you don't have much open space, do jumping jacks, or walk or jog in place. Try to move for at least 10 minutes.
- Use hand weights or grab an object like a soup can. Bend at your elbows to curl your hand to shoulder level. Repeat 10 to 12 times, or until you can't do it anymore.
- Do squats when cleaning or playing with kids.
- Check for live-stream exercise sessions or activity challenges.
- Use a fitness tracker to try to increase your daily steps.

## CONTACT US

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



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