Welcome

by Sue Friedman

What an exciting year! Our 4th annual conference was a resounding success, with 520 attendees, including 57 recipients awarded scholarships from FORCE. World-renowned experts discussed the latest research on hereditary cancer; we continue that theme in this issue, reporting on three studies important to our community.

The WISER Sister Study will determine if exercise reduces breast cancer risk. See below to learn how you can participate—you don’t have to be a sister—and take home a treadmill. At the American Society of Clinical Oncology (ASCO) annual conference, I heard updates on PARP inhibitor research. I was particularly gratified to see FORCE acknowledged by researchers for our efforts in recruiting to these studies. I first heard about PARP inhibitors at ASCO’s 2005 conference, and later met Drs. Andrew Tutt and Alan Ashworth. These British researchers dedicated the last several years to showing certain therapies, including PARP inhibitors, work preferentially against BRCA cancers. Preliminary results are encouraging, as you’ll see in our article.

You’ll also want to read our review on mammography for young high-risk women. And don’t miss Rep. Debbie Wasserman Schultz’s story. A breast cancer survivor with a BRCA2 mutation, she introduced the EARLY Act to increase resources for young women who have breast cancer or are at high risk. Learn how you can support this bill.

Help Us Determine if Exercise Lowers Risk

by Kathryn Schmitz, PhD, MPH

Research shows that exercise lowers estrogen levels, and reducing estrogen substantially reduces breast cancer risk. Most elite female endurance athletes, for example, have significantly reduced estrogen levels. At the University of Pennsylvania, we’re not suggesting that all women at elevated risk start training for the 2010 Olympics, but we would like to know whether a particular level of exercise might affect a high-risk woman’s likelihood of developing breast cancer.

We are currently recruiting women aged 18-40 for the Women in Steady Exercise Research (WISER) Sister study. Funded by the National Cancer Institute, researchers hope the eight-month study will determine to what degree exercise affects estrogen levels and breast cancer risk. Each of the 160 participants will be categorized into one of three groups: those who exercise 150 minutes a week, those who exercise 300 minutes a week, and those who maintain their current exercise regimen.

Key eligibility criteria includes:

- Age 18-40.
- Must have an elevated risk for breast cancer due to family history, but NOT diagnosed yourself. It is not necessary to be a BRCA carrier or have had genetic testing.
- Willing to refrain from taking any hormonal medications during the study, including tamoxifen and hormonal contraceptives.
- Can live anywhere in the U.S. to participate (study is based in Philadelphia). Travel expenses will be reimbursed if you live more than 75 miles away.
- Must be considered sedentary (no more than an hour of vigorous physical activity/week). Our study staff will help you determine if you are too active to participate.

You do not need to be a sister to participate! This is a “sister” study to the WISER study at the University of Minnesota that focuses on breast cancer prevention in the general population. Our study focuses on high-risk women.

We need the FORCE community to succeed. All participants who successfully complete the study will be provided with an in-home treadmill that is theirs to keep when the study ends.

Join us and make a difference in the high-risk community. Visit http://bmic.upenn.edu/wiser or join the WISER Sister Study group on Facebook. You can also contact the study at wiser@mail.med.upenn.edu.

Kathryn Schmitz, PhD, MPH is an Associate Professor of Epidemiology at the University of Pennsylvania School of Medicine. She is an exercise interventionist who has led multiple research trials on exercise and cancer.
PARP Inhibitor Research Presented at 2009 ASCO Annual Conference

by Sue Friedman

Early and promising research on a class of drugs called PARP inhibitors that may work preferentially for hereditary cancers was presented at the 2009 American Society of Clinical Oncology (ASCO) annual conference in Orlando.

One ASCO session presented results from a clinical trial for breast cancer patients with triple-negative cancers—cancers that do not express estrogen receptors, progesterone receptors, or the Her2neu protein. This study is particularly relevant to our community since almost 85% of BRCA1 mutation carriers who have breast cancer have triple-negative disease. Some BRCA2 carriers and women with non-hereditary breast cancer, especially African-American women, also develop triple-negative disease.

This phase II study involved BiPar Sciences’ PARP inhibitor BSI-201. Participants with triple-negative breast cancer that had metastasized beyond the breast and lymph nodes were divided into two groups: one group received a chemotherapy combination of gemcitabine and carboplatin. The other group received both these medications in combination with the PARP inhibitor BSI-201. Three times as many women who took

Calculating the Risks and Benefits of Mammograms for Young BRCA Carriers

by Dr. Margaret Snow and Sue Friedman

A new study affirms the benefits of mammograms for BRCA carriers over age 30, but raises questions about relative risks versus benefits for younger women.

Although National Comprehensive Cancer Network (NCCN) guidelines recommend BRCA carriers begin mammography at age 25, some experts have concerns that starting mammograms before age 30 means a higher lifetime exposure to radiation and increased breast cancer risk. Because breast cancer is uncommon in younger women—even those who have a BRCA mutation—mammography detects fewer cancers in high-risk women in this age group; thus fewer cancer deaths are prevented by starting mammograms at this young age. Additionally, because mammography frequently fails to detect cancers in the typically dense breast tissue of younger women, whether the benefit of early mammograms offsets the risk of additional radiation exposure is unclear. Study authors noted that no direct research...results of this exercise raise questions about the practice of recommending mammograms from age 25, but do not provide enough evidence to change protocols.

continued on page 3
Mammograms (continued)

has compared the benefits and risks of mammogram screening for women younger than 40.

Exactly how much cancer risk is increased when mammograms begin before age 30 is unknown. Using data from research specific to BRCA carriers and other studies of non-BRCA carriers exposed to radiation, the study authors estimated the risk of radiation-induced breast cancer from mammography given before and after age 30. Using mathematical models, they calculated that for every 10,000 women between ages 25-30, early mammograms would save 12 or fewer lives, while radiation delivered to those same women would cause about 51 breast cancer deaths 10 or more years later.

PARP Inhibitor Research (continued)

the PARP inhibitor had improvement of their cancer compared to those who received chemotherapy alone. On average, the PARP inhibitor participants had no disease progression for about 3.5 months longer and lived about 3.5 months longer than those on chemotherapy alone. Side effects were similar in both groups.

A second study investigated a different drug manufacturer's PARP inhibitor product, AstraZeneca's olaparib, formerly known as AZD2281. Fifty-four women with known BRCA1/BRCA2 mutations and metastatic breast cancer received the PARP inhibitor as a “single agent,” with no other treatment. The study was open to women whose cancer had progressed after previous courses of chemotherapy. Women in the study took either a low dose (100 mg twice daily) or a high dose (400 mg twice daily) of olaparib orally.

One woman who took the higher dose had a complete response: she was found to have no measurable cancer during the trial. Ten other participants had a partial response—their cancers were measurably smaller or did not increase. The overall positive response rate was 41 percent in the high-dose group and 22 percent in the group who took the lower dose. Side effects were primarily fatigue and nausea, but were not severe. Both BRCA1 and BRCA2 carriers responded favorably, suggesting that the medication is effective for both mutation populations. The presenters also noted that one participant’s lung metastasis has not progressed in the 18 months since she started the study, and she remains on the medication.

A separate phase II clinical trial studied the use of olaparib for advanced ovarian cancer in BRCA mutation carriers. In this research, the olaparib was also given as a single agent to women whose cancers had progressed

PARP Inhibitor Studies (continued)

chemotherapy
Location/Contact: NIH Bethesda, MD
Contact ClinicalTrials Referral Office (888-624-1937) or Jennifer Squires, Research Coordinator (301-443-643)

Study title: Assessment of Efficacy of AZD2281 in Platinum-Sensitive Serous Ovarian Cancer
Cancer type: Ovarian
Study type: Phase II randomized study
Details of diagnosis: Women with serous ovarian cancer must have completed at least 2 previous courses of platinum-containing therapy; cancer must be platinum sensitive to the previous 2 chemotherapy regimens. Patients must be enrolled in the study within 8 wks of completion of their final dose of the platinum-containing regimen
Medication/s: Women will receive the PARP inhibitor olaparib or placebo
Location/Contact: AstraZeneca Cancer Study Locator Services (877-400-4656 or astrazeneca@emergingmed.com) or visit www.emergingmed.com/networks/AstraZeneca and refer to ClinicalTrials.gov identifier: NCT00753545

Study title: MK4827 in Patients with Advanced Solid Tumors and BRCA Mutant Ovarian Cancer
Cancer type: Ovarian or solid tumors
Study type: Phase I study
Details of diagnosis: Open to people with locally-advanced solid tumors or BRCA mutation and ovarian cancer
Medication/s: The PARP inhibitor MK4827 will be administered orally once daily in capsule form in 21-day cycles
Location/Contact: Tampa, FL and Madison, WI. Contact Merck's clinical trials information center (888-577-8839) and refer to clinicaltrials.gov study identifier: NCT00749502

...PARP inhibitor participants had no disease progression for about 3.5 months longer...than those on chemotherapy alone.”
Voices of FORCE

Each issue, we’ll invite a FORCE member to share an insightful perspective, a valuable experience, or a touching story to help others who are dealing with issues of hereditary breast and ovarian cancer.

Educating Young Women about Breast Cancer
by Congresswoman Debbie Wasserman Schultz

Breast cancer is a disease that knows no boundaries. It strikes women from all backgrounds, races, and ethnicities, the rich and the poor, the old and the young.

In 2008, the American Cancer Society estimated 182,460 new invasive cases of breast cancer in women, with 10,000–11,000 cases occurring in women under 40 years of age. Although the incidence of breast cancer in young women is much lower than that of older women, young women’s breast cancers are generally more aggressive, are diagnosed at a later stage, and result in lower survival rates. In fact, breast cancer is the leading cause of cancer deaths in women younger than 40.

As you may know, for 17 years as an elected official, I have been a staunch advocate for transforming our approach towards breast cancer and have worked towards its eradication. However, this issue took on a greater significance in my life when I found a lump in my breast last year while doing a routine self-exam, and my doctor diagnosed breast cancer. Because I found the lump so early and it was less than a half centimeter, my doctor initially recommended removing the cancer with a lumpectomy followed by radiation. However, after sitting down with a nurse educator who asked me many, many questions about my personal and family health history, I also decided to have a blood test to see whether I had an inherited alteration in the BRCA1 or BRCA2 genes.

To that end, I’ve introduced the Breast Cancer Education and Awareness Requires Learning Young Act, or the EARLY Act, HR 1740/S.994. This legislation directs the Centers for Disease Control to develop and implement a national education campaign about the threat breast cancer poses to young women of all ethnic and cultural backgrounds, and the particular heightened risks of certain groups.

The campaign will help educate young women and better enable health care professionals to identify the specific threats and warning signs of breast cancer, which will lead to early diagnoses and saved lives. The bill calls for $90 million a year from 2010 to 2014. The EARLY Act will also provide grants to organizations that support young women who have breast cancer so they can receive the social and psychological support, fertility preservation counseling, and recurrence prevention training they need.

My legislation is not meant to alarm people; its goal is to educate and empower young women so we can reduce the number of fatalities from this horrific disease. Because at the end of the day, the old saying rings true: knowledge is power.

By making sure young women know their risk factors, the EARLY Act is a first step in transforming how we approach the fight against breast cancer.

For over fifteen years, Debbie Wasserman Schultz has dedicated her public life to working on behalf of the people of Southern Florida. On January 4, 2005, she was sworn in as a member of the United States House of Representatives from Florida’s 20th Congressional District. Wasserman Schultz arrived in Washington with the reputation as a force to be reckoned with, someone who works hard on behalf of children, education, health care, Social Security, Medicare and the security of every American.

“...many young women mistakenly believe that breast cancer is only a problem for women over 40.”

Share Your Story
Do you have something to say that may inform our readers or ease their experience?
We invite you to share your reflections or personal story about dealing with the issues of hereditary breast or ovarian cancer. Tell us how you feel, how you cope, or what you've learned.

E-mail stories of 500-550 words to info@facingourrisk.org or submit a letter to Congress in support of the EARLY Act by visiting http://www.facingourrisk.org/advocacy/support_early_act.html.

Young women with breast cancer have unique circumstances. They face greater risk for second cancers, concerns about fertility, and cancers that are more likely caused by a hereditary mutation, which increases the likelihood that their risk may be shared with other family members and passed on to their children.

Education of women and their families who are in this situation is key to achieve adequate prevention of cancer in these high risk groups.

Educating health care providers is also vital, because many do not sufficiently understand genetics or the unique needs of their young patients. In fact, a recent study presented at the American Society of Clinical Oncology 2009 annual meeting found, "Less than 25% of oncologists report referring patients for fertility preservation and only 38% reported knowledge of the ASCO guidelines suggesting oncologists should discuss fertility preservation, and refer all patients of childbearing age.

A second study from Harvard found 71% of women diagnosed with breast cancer at age 40 or younger discovered their breast cancers by self-exam. Most had never had a mammogram at the time of their diagnosis. The women were rarely offered genetic testing even though half of them had a family history of breast cancer and all qualified for referral for genetic counseling and testing based on published guidelines. Researchers concluded, "These results underscore the importance of identifying young women who are at high risk, performing appropriate genetic testing and delivering appropriate mammographic and MRI screening.” While the optimal use of screening and prevention tools in young women remains unresolved, the EARLY Act supports additional research that will ultimately provide the basis for breast cancer prevention in young women.

Read the full text and view the list of supporters on our advocacy page at: http://www.facingourrisk.org/advocacy/support_early_act.html.

Action Alert (continued)

Joining FORCES
Introducing the Consecutive Year Club

by Debbie Sokolov

Are you a member of our Consecutive Year Club (CYC)? If not, join now. Donate $500 or more and receive the following benefits:

- A lapel pin signifying your consecutive years of giving to the club.
- Participation in a BRCA conference call with Sue Friedman.
- Your name listed on a special recognition page on the FORCE website.
- Recognition at our 5th annual Joining FORCEs conference in June 2010.

All donations to FORCE are tax-deductible and 100% of your contribution will be used to continue our mission. Pay by credit card, check or set up monthly payments. Become a member now and help us ensure the continuation of support and services for those affected by hereditary breast and ovarian cancer.

To enroll, go to the FORCE website or contact Debbie Sokolov at debbies@facingourrisk.org or 727-871-0366.

Don’t miss out on this opportunity! ☺

One Step Ahead of Cancer

by Barbara Pfeiffer

Staying ahead of cancer requires your help. Genetics, personalized medicine, targeted therapy, prevention: these topics are on the cutting edge of cancer research and care. From legislation like GINA and the EARLY Act to research on PARP inhibitors, FORCE works to keep our community one giant step ahead of cancer.

This year we need you to get involved to raise funds and raise the volume about our hereditary breast and ovarian cancer community’s needs. We’re asking all FORCE members, supporters, friends and family to ensure we are heard and well represented, and that our unique needs for awareness, education, support and research are met.

With a community that stretches across the U.S., the traditional run/walk doesn’t work for FORCE, so we’re encouraging our members to create their own One Step Ahead fundraisers. Our campaign has already started. Join us through October as we host everything from pancake breakfasts to fashion shows, run in local marathons, and reach out to others in our personal fundraising campaigns. Use your connections and imagination to fund FORCE services.

Check out our One Step Ahead web page (www.facingourrisk.org/onestepahead) for great ideas. Looking for some inspiration? Click on “check out events hosted by our members” to see how the Cincinnati Rollergirls skated their way to a $500 contribution, and learn about the 2009 Crespi Carmelite High School Lacrosse team who recently presented FORCE with a check for $11,000. This generous donation from the team’s “Walk Like A Man” event—a community service project born from the desire to make a difference in the lives of women affected by hereditary cancer—will fund publication of a brochure specifically for young women with breast cancer.

We will have a single run/walk thanks to the generosity of the Gynecological Cancer Foundation. We’ll be joining their special awareness weekend in Washington, D.C. on November 8th. Come and be a part of this amazing weekend of events, including a 5K-run/walk and other activities. This is a great opportunity to connect with other FORCERs, run or walk for your cause and make our voices heard. See the One Step Ahead web page for details. ☺

Joining FORCEs
PARP Inhibitor Research (continued)

following several previous courses of chemotherapy. The dose of olaparib studied mirrored the AstraZeneca breast cancer trial: 24 women took a low dose (100 mg twice daily) while 33 women took high dose (400 mg twice daily). The overall response rate was 33% at the higher dose and 12.5% at the lower dose. Among the trial participants, 58% of those in the high-dose group experienced clinical benefit from the olaparib, while 17% of the women on the lower dose experienced clinical benefit. Side effects were mild, including nausea, fatigue and anemia. More serious nausea and low white blood count occurred rarely.

This research shows that olaparib is well tolerated and active in women with advanced BRCA-associated breast or ovarian cancer. Although exciting, larger studies are needed to show if PARP inhibitors can extend the life of women with advanced cancer. Future studies of women with early-stage disease will be needed to determine if these medications might be used to prevent recurrence in women with early-stage cancer.

Mammograms (continued)

benefit in favor of screening. One of the researchers, Dr. Mark Robson of Memorial Sloan Kettering, reported that results of this exercise raise questions about the practice of recommending mammograms from age 25, but do not provide enough evidence to change protocols.

The researchers noted the study’s limitations, acknowledging the gaps in what we know of breast cancer and screening in young BRCA carriers, and specifically, how radiation exposure affects them. They also acknowledged that some of the model assumptions made are not universally accepted. They theorized that even very small doses of radiation cause small changes in DNA and increase the risk of cancer by a small amount, and that the combination of risk factors multiplies. Their study also relies on presumptions that survival in young women diagnosed with BRCA-related breast cancer is similar to survival of older women with sporadic breast cancer. Their model didn’t take into account the emerging theory that BRCA1 cancers may develop more quickly than sporadic cancers. According to Dr. Robson, allowing that BRCA1-related cancers develop quicker and between screenings further reduces the potential benefit of mammography in BRCA1 mutation carriers under age 30.

More needs to be known about the effectiveness of mammograms in this young age group, particularly when compared to MRI screening, which is without radiation risk. We need to identify types of breast cancers that typically occur in young women and determine the frequency of cases of DCIS, which, when missed by MRI are sometimes detected by mammogram. The answers to those questions will help determine whether mammograms should continue to be a part of screening protocols for women under 25.

Dr. Robson is already taking the next step to better determine how safe and useful mammograms are for women under age 30. He and other researchers are reviewing study data of breast cancer in young women, and early detection studies comparing MRI and mammogram. He points out that because the risk of radiation-induced cancer is small, particularly compared to the risk of BRCA-associated breast cancer, and the timeframe for radiation-induced cancers to develop would span a woman’s life, studying this question directly would require large numbers of BRCA carriers and take decades to provide answers.

Dr. Margaret Snow is a previvor and a Physical Medicine and Rehabilitation physician who enjoys golfing and photographing birds. She serves as FORCE’s West Michigan Outreach Coordinator.

PARP Inhibitor Studies (continued)

Name: Study to Assess the Safety and Tolerability of a PARP Inhibitor in Combination with Gemcitabine in Pancreatic Cancer
Cancer type: Pancreatic
Study type: Phase I study
Details of diagnosis: Open to people with cytologically confirmed adenocarcinoma of pancreas
Medication/s: Patients will receive the PARP inhibitor olaparib and gemcitabine chemotherapy
Location/Contact: AstraZeneca Cancer Study Locator Services (877-400-4656 or astrazeneca@emergingmed.com) or visit www.emergingmed.com/networks/AstraZeneca and refer to ClinicalTrials.gov identifier: NCT00515866

Mammograms Reference


New Research Highlights Importance of Breast Self Exam

At the annual meeting of the American Society of Breast Surgeons, Duke University researchers demonstrated that breast self exam (BSE) can detect new breast cancer in high-risk women, stating, “Our results provide evidence that BSE should not be abandoned as an adjunct for breast cancer education, as well as a surveillance tool for high-risk women.”

Reference

Our Sponsors

Your generous donations allow us to provide this newsletter at no charge to people at high-risk. Philanthropic support is critical to FORCE's survival and ensures our continuing ability to provide publications like our newsletter to our community. Your charitable gift can help save lives—please consider making your gift today! To learn more about helping FORCE, visit www.facingourrisk.org/how_to_help.

We Want to Hear From You

What's on your mind? What would most help you understand or cope with issues of prevention, diagnosis or treatment? Perhaps you've recently tested positive for a BRCA gene mutation and don't know where to turn. Maybe you're dealing with breast or ovarian cancer, or care about someone who is. Send your input, ideas and comments to info@facingourrisk.org or mail to FORCE, 16057 Tampa Palms Blvd. W. #373, Tampa, FL 33647.

Help FORCE Go Green

Want to save some trees? Help FORCE save dollars? To receive an electronic version of this newsletter rather than a print copy e-mail us at: newsletter@facingourrisk.org. Include your name and city and state in the e-mail.

What's New @ FORCE

Save the Date: Joining FORCEs 2010

Thursday through Saturday, June 24-26, 2010. Mark your calendars now, because that's when you'll want to be part our 5th annual Joining FORCEs conference at the Buena Vista Palace Resort and Spa in Orlando, FL. You'll hear new speakers and current topics, and enjoy past popular events, including our pre-conference welcome reception and the Birds of a Feather Show-and-Tell. If this will be your first FORCE conference, you'll appreciate our orientation for new attendees. We're also adding more content and sessions for young women, and for women who have completed surgery and wonder "what now?" Visit our online conference portal for updates, registration and information. The preliminary agenda will be posted in October.

In the Family Nominated for an Emmy®!

The highly-acclaimed BRACumentary, In the Family, from producer Joanna Rudnick of Kartemquin Films has been nominated for an Emmy®! The film will compete for a News and Documentary award in the Outstanding Informational Programming category. Winners will be announced at the September 21 ceremony held at Lincoln Center in New York City. The event is expected to be attended by more than 1,000 media industry executives, news and documentary producers, and journalists. We wish Joanna and Kartemquin the very best and hope their compelling film takes home a much-deserved Emmy®.

New FORCE Brochure

According to National Comprehensive Cancer Network (NCCN) guidelines, any woman diagnosed with young-onset breast cancer, regardless of her family history, meets criteria for genetic evaluation for BRCA. A recent study from Harvard, however, found that women diagnosed with breast cancer at age 40 or younger were rarely offered genetic testing, even though half of them had a family history of breast cancer and all qualified for referral for genetic counseling and testing based on NCCN guidelines. To inform this unique group of women about genetic counseling and testing, FORCE is developing What Every Young Woman with Breast Cancer Should Know, a new brochure that will soon be available on our website.