For the month of October, a portion of proceeds from the sale of Drink Pink eegee’s will benefit Better Than Ever at the University of Arizona Cancer Center.

Today’s outstanding students are tomorrow’s brilliant cancer researchers. To win this war, our training programs must be extraordinary.

Graduates of our programs are working in cancer research labs here at the UA Cancer Center, as well as across the country and around the world. We take our academic mission seriously, and you can read about the work some of our recent graduates are doing in our labs elsewhere in this magazine.

Sincerely,

David S. Alberts, MD
The University of Arizona Cancer Center Director

At the UA Cancer Center, we have been training and educating the next generation of cancer researchers for more than 35 years, through our array of early-phase clinical trials and our ability to recruit patients for those trials, and our outreach and educational activities.

The University of Arizona Cancer Center stands apart in the state as being the only National Cancer Institute-designated comprehensive cancer center headquartered and based in the state. We are one of just 41 nationally with that prestigious designation. We earned that designation through our excellence in basic laboratory, clinical, and behavioral and population-based research, through our array of early-phase clinical trials and our ability to recruit patients for those trials, and our outreach and educational activities.

The money was just one piece of the puzzle necessary for her weight. The study showed promise and could lead to exercise-based interventions for breast cancer survivors to conduct a reasonably aggressive workout plan three days a week. The eight-week intervention was successful in significantly increasing arm and leg strength and lean mass without a change in body weight. The study showed promise and could lead to exercise-based programs targeted to the needs of breast cancer survivors.

Without this grant, Dr. Bea’s research may not have happened. The money was just one piece of the puzzle necessary for her post-doctoral work, but it “was critical in being able to conduct an independent intervention,” said Dr. Bea, instead of having to use data from other investigators’ studies. Dr. Bea plans to use the data from this study to pursue additional funding to conduct the study on a larger scale and she hopes to expand on decreasing barriers to exercise for breast cancer survivors.

Dr. Bea created the study from start to finish and worked with 27 breast cancer survivors to conduct a reasonably aggressive workout plan three days a week. The eight-week intervention was successful in significantly increasing arm and leg strength and lean mass without a change in body weight. The study showed promise and could lead to exercise-based programs targeted to the needs of breast cancer survivors.

A critical piece of the puzzle

The Better Than Ever fitness outreach program aims to help integrate fitness into daily life while raising funds for UA Cancer Center researchers. In 2008, the grant review committee awarded $25,000 to junior investigator Jennifer Bea, PhD, to study “Prevention of Frailty in Breast Cancer Survivors.”

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ATTENTION TO DETAIL

In cancer research, it tends to take major scientific breakthroughs to capture the public’s attention. However, Jessica Miller, PhD, believes that the most creative thinking typically occurs in those quiet moments of study and preparation.

In the early 1900s, physics was considered a dead-end field, said Dr. Miller. “In the 1960s, metabolomics was in the same place. It’s this intellectually adventurous attitude that drew Dr. Miller to the medical field. As an undergraduate student at Hillsdale College in Michigan, the biology major was fascinated by how nutrition impacted healthy body processes. Tragedy struck in 2005, however, when her cousin passed away from leukemia. This led to a passion for cancer prevention, as she looked for ways to apply her nutrition expertise toward the field.

Warm weather, familial ties and a top-ranked Nutritional Sciences program drew Dr. Miller to the University of Arizona, where she completed her doctoral degree in November 2010. Her dissertation research explored a potential anti-cancer agent, limonene, and its implications for breast cancer prevention. Limonene, which can be found in citrus peels, has been shown to have a potentially positive pre-cancer effect on breast tissue, but it’s not yet known if there is a direct link between limonene and breast cancer prevention.

“Breast cancer is such a broad field,” Dr. Miller said. “I’m interested in seeing how we can measure the impacts of various treatments on the entire body, and seeing if we can find ways to improve and hone these targeted therapies.”

In March 2011, Dr. Miller began her training to become an independent investigator with Sherry Chow, PhD, serving as her primary mentor, along with Patricia Thompsons, PhD, the leader of the University of Arizona Cancer Center’s Cancer Prevention and Control Program. This program will support her as she continues her research to determine the feasibility of limonene’s potential uses and how its impacts can be properly measured.

“Every good researcher is a bit of a perfectionist.”

Jessica Miller, PhD

“The Cancer Center’s mentorship program is ideal for me at this point in my career,” Dr. Miller said. “You’re always mentored and supervised by some of the best researchers in the field who truly support you at every step of the process. My mentoring here has been very important in my development and my research, and I can’t thank them enough for it.”

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EVERY GIFT has a home

**COMMUNITY GIVING**
Generous individuals and organizations hold fundraising events to benefit the University of Arizona Cancer Center.

**PLANNED GIVING**
Fenton Maynard was one of the University of Arizona Cancer Center’s most passionate supporters. Having lost two wives to cancer, he pledged to do everything in his power to advance breast cancer research. His estate gift continues to help UA Cancer Center researchers in areas as diverse as prevention, imaging and genomics.

**COMMUNITY FOUNDATION**
The Community Foundation of Southern Arizona and the Phoenix Friends of the University of Arizona Cancer Center paved the way for a $2 million grant from the National Institutes of Health that will help UA Cancer Center researcher Marty Pagel, PhD, predict the effectiveness of chemotherapy in breast cancer patients.

**INDIVIDUAL / ANNUAL GIFT**
Ginny Clements made a commitment to give annually to the UA Cancer Center and agreed to provide a gift through her estate to fund breast cancer research.

**YOU**
To help our researchers achieve a cancer-free future, you can join these efforts and let us give your gift a home.

To learn more, please visit www.arizonacancercenter.org or e-mail development@azcc.arizona.edu or call (800) 327-5279.
THE NEXT GENERATION

Pavani Chalasani, MD, MPH, has high hopes for the future of cancer treatment. At the University of Arizona Cancer Center, her mentors are helping her turn those hopes into reality.

“The faculty is what makes this place so special,” Dr. Chalasani said. “Things are constantly moving forward here, and people are always dreaming big. It’s a very inspiring environment.”

As a young med student at Gandhi Medical College in Hyderabad, India, Dr. Chalasani wasn’t quite sure where her path would lead. She was certain, though, that she wanted to help develop cutting-edge research and treatment procedures.

After Dr. Chalasani graduated from the University of Massachusetts with a master’s in public health in 2004, she enrolled at the University of Arizona in 2006 to begin her residency in internal medicine. She soon became fascinated with the field of hematology/ oncology and was accepted into the UA’s hematology/oncology fellowship program, where she spent the last three years sharpening her focus on both clinical care and research methods.

Toward the end of her second year in the fellowship program, Dr. Chalasani narrowed in on breast cancer and started to take a closer look at defective DNA repair capacity of tumors in patients with breast cancer. She found that tumors that have a defective DNA repair capacity respond differently to chemotherapy drugs. However, there isn’t a standardized way to look at the defective DNA strands in these patients, so she set her mind on the best way to analyze and repair the defective DNA.

She took advantage of the resources that the University of Arizona can provide, assembling a team of genomic and therapeutic researchers and developing a solid protocol and hypothesis that will potentially lead to a clinical trial. During the process, however, Dr. Chalasani learned exactly what it takes to transition from an idea into a clinically applicable decision tool. She spoke of the dozens of essential practical steps that many physicians simply don’t think of when they’re coming up with theories. How many patients will it take to come up with statistically viable data? How much funding gets set aside for data managers, shipping fees or simple office supplies?

This is where mentorship plays a vital role. A handful of the UA Cancer Center’s top faculty members, including breast cancer multidisciplinary team leaders Robert Livingston, MD, and Alison Stopeck, MD, took an interest in Dr. Chalasani’s development and provided her with support every step of the way.

“Dr. Stopeck is such an amazing resource when it comes to writing protocols and grant proposals. She is one of the best editors I have met. She knows how to phrase things correctly, be it in a paper or in a proposal,” Dr. Chalasani said. “She is so generous with her time and her expertise.”

As for Dr. Livingston, Dr. Chalasani’s primary clinical mentor, this defective DNA repair project has been a career-long goal of his. Watching it take shape through the mentorship process has been particularly rewarding — for both of them.

“When everyone around you is thinking and innovating, it keeps you on your toes and it makes your work that much better,” she said. “The environment at the University of Arizona Cancer Center truly allows cutting-edge research to happen.”

As she moves from fellow to full-fledged faculty member, Dr. Chalasani will look to maintain a balance between her research projects and her first love — clinical care.

“I like research, but clinical care is what I live the most,” Dr. Chalasani said. “You really get to know someone and help see that person through the process. Those deep, personal connections you make are the most rewarding. The idea of targeted, personalized therapy wasn’t part of a patient’s treatment as recently as 10 years ago. Now, it’s within our grasp. It is through research where we are constantly figuring out new and better treatments for our patients.”

Pavani Chalasani, MD, MPH, speaks with Robert Livingston, MD, at the University of Arizona Cancer Center - North Campus.

By Nick Prevenas

Knights of Columbus

Knights of Columbus Council #7521 of Our Lady of Lourdes Parish in Benson, Ariz., donated $2,500 to support the University of Arizona Cancer Center through their sixth annual Marie Lovell/Barbara Hug/Paul Pedia Memorial Golf Tournament.

From left: Joe Olivas, Paola Werstler, Mike Hug, Lee Gunterman, Ruben Guerra, Joe Lovell

Act Against Cancer Fund

Donations made to the Act Against Cancer Fund provide pivotal support for research projects. These gifts make a positive impact on the quality of life of cancer patients. We are able to develop better treatments and better outcomes because of these united efforts.

Look for the donation button at www.arizonacancercenter.org.

Taking a swing against breast cancer

The MountainView/Preserve Women’s Golf Associations held their annual breast cancer fundraising tournament on Feb. 28 at the MountainView Golf Club in SaddleBrooke. This year’s event was entitled “Let’s Take a Swing at Breast Cancer.”

“As several of our members, as well as friends and neighbors in the SaddleBrooke community, are breast cancer survivors, it is a focus that is truly near and dear to our hearts,” said MPWGA chair Kim Scolas. “It was our pleasure to be able to donate a portion of our funds to the University of Arizona Cancer Center.”

Donate at Bashas’ and Food City through October

Bashas’ and Food City are teaming up with the University of Arizona Cancer Center in the fight against breast cancer. Together, we can make a difference in finding the causes and cures for breast cancer.

During the month of October, purchase a pink paper ribbon for $1 at any register in Southern Arizona and you’ll help the University of Arizona Cancer Center in its mission to prevent and cure breast cancer.

Members of the MountainView/Preserve Women’s Golf Associations prepare to bid on auction items

Cancer Center.