

# Living Life to the Fullest



Giving a new meaning to fitness • The gift of life • Racing toward a cure  
Blazing new trails • Highlights in giving

## Director's message



Throughout any given day, my thoughts turn to the benefits of physical activity as a key element in cancer prevention and cancer survivorship.

In this issue of Act Against Cancer, we see two of our researchers employing and benefitting from physical activity in their lives.

Tim Bowden, an active and productive researcher at the University of Arizona Cancer Center, engages in hiking and other activities to fight off the effects of Parkinson's disease, even as he researches the link between Parkinson's and melanoma.

Manny Katsanis runs long distances to stimulate his mind as he works through the challenges of healing those with leukemia and other blood cancers.

What can physical activity do for you? Becoming active can be effective in preventing cancer and can impact physiological and psychological outcomes for cancer survivors. Exercise also improves your cardiovascular health and bone and muscle strength, can aid in reducing the risk for diabetes and, of course, contributes to weight loss and weight management.

Physical activity is powerful medicine.

Sincerely,

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

### On the cover

G. Timothy Bowden, PhD, and his wife, Diane, train in Pima Canyon the week before their 15-mile hike up Mount Lemmon. See page 6 to read more.

Photo by www.csrichards.com

## Giving a new meaning to fitness



A group of Better Than Ever participants take part in the 2012 Catalina State Park 5.2-mile trail race.

Exercise can be about so much more than strenuous exertion – it can be fun, exciting and meaningful. Just ask anyone in Better Than Ever (BTE). Whether they are looking for a way to prevent or fight cancer, make new friends, or just get fit, BTE participants know that their efforts can help more than just themselves.

"Through BTE, I have befriended many wonderful people and supported them in reaching their goals," said BTE Team Leader, Claudia Gary, who has been involved with the program for more than eight years. "I have watched friends come to training after receiving chemo and struggle to walk one more block, and I have celebrated their half-marathon finishes. I have also mourned those whose struggles are over."

Physical activity can reduce risk for cancer occurrence and recurrence, and improve quality of life for those undergoing

treatment. With that in mind, BTE helps participants train for running/walking and cycling events with group training sessions. Goal events for the 12th season of BTE included the CATwalk 10K, the Tucson Half Marathon or portions of El Tour de Tucson cycling event in the fall and the Catalina State Park 5.2-mile trail race and the Cinco de Mayo 10K in the spring. In addition to training groups in Tucson, BTE has satellite groups in Green Valley, Sedona and Phoenix that train for these and other events.

The \$90,000 raised through the 12th season of BTE will fund an investigator-initiated clinical trial at the UA Cancer Center focusing on women's cancers, and laboratory studies correlative to clinical trials with an emphasis on other cancer types.

Season 13 of BTE will kick off in early September. Check out [www.arizonabte.org](http://www.arizonabte.org) for more details.

- By Marisa Allen



Cindy Hairgrove in the healing garden at the University of Arizona Cancer Center – North Campus.

## THE GIFT OF LIFE

**Cindy Hairgrove is not the type of person who backs down from a fight.**

Up until 2001, Hairgrove, a North Dakota native and Tucson resident since 1975, never had to spend much time at the doctor's office. Outside of routine check-ups and the occasional bout with high blood pressure, this 48-year-old mother of two was the picture of health.

That was until she started experiencing nausea and abdominal pain. She thought nothing of it at first, but the symptoms weren't going away. Just after Thanksgiving - more than a decade ago - Hairgrove paid her doctor a visit. She was not prepared for what he would have to say.

On Nov. 30, Hairgrove found out she had acute myeloid leukemia (AML).

"My first thought was, 'Oh my gosh, how can this be?'" Hairgrove said. "For something like this to hit me out of the blue was simply devastating."

She began treatment the next day. She battled through her initial induction treatments and the subsequent infections. She went into remission almost immediately, but her health continued to fluctuate.

At some points, she appeared well enough to go back home, but weeks later, a new infection or an inflated white-blood-cell count would force her back into the hospital.

Nearly one year after the initial diagnosis, Hairgrove felt healthy again. Her energy level was up and she was back to work at Arizona Community Physicians, managing six doctors and three nurses. That good feeling wouldn't last long.

"I got this phone call from my doctor at 6 a.m. Monday morning. He told me they found new leukemia cells during my last check-up," Hairgrove said. "That was a very dark time."

The word "transplant" had been discussed during her first battle with AML, but now it was a reality. She was going to need a bone marrow

transplant as soon as a donor could be located. She has two kids and two siblings, so she was sure she'd find a match right away.

Her son, Michael, and her daughter, Lorie, didn't match. Neither did her sister, Jeanine. Her brother, Ritchie, was certain he'd be the match, but he wasn't, either. Her next stop would be the National Donor Registry.

While she waited, she continued her treatments at Northwest Hospital. Two weeks later, she finally heard some good news. A matching donor was found in Jackson, Miss.

"I was so sick and fatigued at that time that I couldn't even get excited when I heard the news," Hairgrove said. "I thought I dreamt it at first."

She was immediately transferred to the University of Arizona Cancer Center, where former member, Elliot Epner, MD, PhD, administered the transplant. On May 6, 2003, she underwent the life-saving procedure.

"Just before I went under, I got a look at the cells that were going to save my life," Hairgrove said. "It was the strangest sensation. I wondered if I was going to feel any different when I woke up."

Slowly, but surely, she did. Hairgrove spent the next three years battling. She said she felt as if her disease would take back over if she ever let up.

Where did she get the strength to fight like that every day?

"Deep down, I know I couldn't have done this without my friends and family so close to me," Hairgrove said. "That overwhelming support is what carried me. People I hadn't heard from in years got back in touch. It was so humbling, and so vital to my recovery."

One night, her pastor paid her a visit and offered her some encouraging words that served as her road map through this ordeal. "You're going through this," he said. "You're not going to stay here. You're just passing through."

At no point did Hairgrove entertain the idea that she was going to succumb to this disease. She was going back to work. She was going to see her children graduate from college. She was going to see the birth of her grandchildren. Her life was not over.

A year after her transplant, she contacted her donor, Chad Manlove, to thank him for his selfless act. They're still close friends to this day.

"What can you even say to someone who gave you the gift of life?" Hairgrove said.

By 2006, Andrew Yeager, MD, had taken over as Hairgrove's primary oncologist. After years of fighting, Hairgrove was about to hear some welcome news.

"One day, Andy came in with this big smile on his face, but I didn't think anything of it, because Andy is always smiling," Hairgrove said. "He went over my blood work with me and said, 'I couldn't wish for anything better than what is written on this paper.'"

Today, Hairgrove is 59 and in full remission. She's back at work, helping to keep Arizona Community Physicians running smoothly.

"Everyone at the Cancer Center was a superhero," Hairgrove said. "From the people who helped you in the door to the nurses to the doctors, everyone made me feel like I was going to get through this – and they were right!"

- By Nick Prevenas

## RACING TOWARD A CURE

*Emmanuel Katsanis, MD, has spent the better part of four decades on the leading edge of cancer research. Some of his greatest breakthroughs have occurred while wearing running shoes.*

Photo by www.csrhands.com

Dr. Katsanis grew up with two loves in his life: medical research and distance running. As a teenager in Greece, he was the nation's 800-meter champion and an Olympic hopeful. When he arrived at the National University of Athens, his track coach told him he had a great deal of promise, but that he would need to choose between rigorous twice-a-day training or dedicate himself full-time to his studies.

"It was a no-brainer," Dr. Katsanis said. "I was either going to be a doctor or a runner, and I wasn't going to be a professional runner."

So, from the age of 19 through his residency at the University of Ottawa in Canada, Dr. Katsanis was among the most diligent, talented researchers in his class, having five first-author publications as a pediatric resident. He earned high marks and fielded offers from the most prestigious pediatric health centers in the world — including a rare, on-the-spot job offer from the Children's Hospital in Philadelphia in 1987.

But Dr. Katsanis was attracted to a cutting-edge area of research that was still in its developing stages — bone marrow transplants (BMT).

He accepted a fellowship with the University of Minnesota, the site of the first successful bone marrow transplant in 1968. The idea of taking part in such a thrilling new field with limitless possibilities captured Dr. Katsanis' imagination.

"With BMT, you can destroy leukemia and install new blood and a new immune system to aid in the recovery and, in many cases, truly see a cure take place," Dr. Katsanis said.

In March, the University of Arizona Cancer Center named Dr. Katsanis the program director of its Blood and Marrow Transplantation program. This marks the first time that the Cancer Center's adult and pediatric programs will be under consolidated leadership, which spans the UA Departments of Medicine and Pediatrics, as well as the Sections of Hematology-Oncology and Pediatric Hematology-Oncology.

"My goal is to build and grow our program, both in terms of basic and translational research," Dr. Katsanis said. "I will put a lot of effort into bringing new ideas here that will eventually become significant advancements in our field."

As the program director, Dr. Katsanis will guide the integration of the adult and pediatric BMT programs, while maintaining separate clinical services for adult and pediatric patients.

Dr. Katsanis has been a UACC member since 1997. As a physician-scientist, Dr. Katsanis provides clinical care for children with cancer and blood disorders and conducts research at the University of Arizona Steele Children's Research Center. He currently serves on National Institute of Health grant study sections, numerous international granting organizations and on journal editorial boards.

During his time as a pediatric oncologist, Dr. Katsanis has provided care for children with cancer and other blood diseases at the University of Arizona Medical Center – Diamond Children's, and the Hematology/Oncology/BMT Clinic, an outpatient clinic housed within UAMC.

In addition to his clinical duties, Dr. Katsanis is a professor of pediatrics, medicine, pathology and immunobiology and an associate chair for research in the Department of Pediatrics. He is also the Louise Thomas Chair in Pediatric Cancer Research at the Steele Center and the director of the MD-PhD Program for the UA College of Medicine.



*Emmanuel Katsanis, MD, examines 8 year-old patient Azayliah D. Perez.*

He hopes to develop a cutting-edge clinical trials program that will help put the UA Cancer Center's BMT program on the map. It's a field with endless possibilities for innovation, particularly in an academic medical center. As the program continues to strengthen its bonds, both within the UACC and with the BMT field at large, Dr. Katsanis wants to develop clinical trials that will separate his program from other institutions.

"Just in the time that I've been studying bone and blood marrow transplants, we've seen countless innovations," Dr. Katsanis said. "When I began, you couldn't do transplants in anyone older than 55. Now, we're seeing successful transplants for a patient in his or her 70s. With a deeper understanding of the immune system, along with advances in antibiotics, anti-viral and anti-fungal drugs, we're able to administer much more personalized care for each patient."

That personalized care begins in the lab with painstaking research.

Long before the sun rises, researchers are often hard at work either running experiments or writing grants until long after sundown. It's a process that shares striking similarities with Dr. Katsanis' other love — distance running.

After a lengthy hiatus away from the track, he rediscovered his love for running at the tail end of his time in Ottawa. He found that his research and focus improved as he maintained a steady running regimen.

In fact, as recently as three years ago, Dr. Katsanis broke three hours in a marathon in Sacramento. He's still among the top runners in his age group and he completed his first Boston Marathon in April.

"Running, research — it's just like anything else," Dr. Katsanis said. "If you work hard enough and take a long-term view instead of agonizing over the short-term setbacks, you can accomplish anything you set your mind to."

## BLAZING NEW TRAILS

*When G. Timothy Bowden, PhD, wasn't hard at work on his many research projects within the University of Arizona Cancer Center's Cellular and Molecular Medicine program, he could often be found hiking up Mount Lemmon or through the Sabino Canyon trails with his wife, Diane, at his side.*

Things changed in 2007, however, as Dr. Bowden was diagnosed with Parkinson's disease. It's a condition that can have devastating effects on a patient's balance and motor skills — a dangerous combination for anyone attempting to navigate rocky terrain.

But through a serious attention to detail and a rigorous exercise routine, the Bowdens are hiking more than ever, thanks in large part to Parkinson's Wellness and Recovery Gym (PWR! Gym), a Parkinson's-specific exercise program. Becky Farley, a physical therapist and exercise physiologist at the University of Arizona, started the PWR! program in 2010 to emphasize specific exercises that help reduce symptoms for Parkinson's patients.

"We've found that certain intense exercises help ease the motor disturbances and rigidity that accompany Parkinson's disease," Dr. Bowden said.

In 2011, the Bowdens' 15-mile hike through Mount Lemmon covered 5,000 feet in elevation and raised more than \$10,000 for the gym. They repeated the feat once again this year.

This is Dr. Bowden's typical response to adversity. Instead of dwelling on the potential pitfalls of a situation, he uses the circumstances to investigate possible solutions.

In that spirit, Dr. Bowden is part of a research team looking into a potential link between Parkinson's disease and an increased risk of melanoma.

Dr. Bowden indicates that published studies have shown that Parkinson's patients are between two and 20 times more likely to be diagnosed with malignant melanoma — and vice versa. "It wasn't until very recently that this correlation became apparent," Dr. Bowden said. "It's imperative that we help get this message out there, both for Parkinson's patients and for those with melanoma."

Dr. Bowden is a professor emeritus of cellular and molecular medicine, having retired from the University of Arizona two years ago. His research is in the field of molecular and cellular biology, pharmacology/toxicology and radiation oncology. He has been a UACC member since 1978, served as the Center's chief scientific officer and continues to have an active research laboratory at the UACC. He has a long-standing interest in skin cancers, and began studying links between the two diseases shortly after his diagnosis.

He began working with Scott Sherman, MD, PhD, a professor of neurology at the University of Arizona, as well as Dr. Bowden's primary neurologist, on this study more than a year ago. Fellow neurology researcher, Torsten Falk, PhD, and Brian S. McKay, PhD, research associate professor of ophthalmology and vision science, joined the research effort soon after.

This group of researchers is working on the theory that variations in the oculocutaneous albinism II gene (OCA2) act as the link between Parkinson's and malignant melanoma. The OCA2 gene product helps control the synthesis of melanin, which is present in melanocytes in the skin and in neurons in the brain — neurons that often die in Parkinson's patients. Alterations in pigmentation controlled by the OCA2 gene could lead to the death of L-DOPA-producing neurons and malignant transformation of melanocytes in the skin, giving rise to potential malignant melanoma formations.

The group has spent the past year gathering preliminary data and is in the process of applying for grants from the National Institutes of Health and the Michael J. Fox Foundation to continue its research.

"We want Parkinson's patients to start getting melanoma screenings as soon as possible," Dr. Bowden said. "It never used to be a part of the standard Parkinson's exam. Now, Parkinson's patients need to schedule regular screenings — at least twice a year."

- By Nick Prevenas

G. Timothy Bowden, PhD, and his wife, Diane, train in Pima Canyon the week before their 15-mile hike up Mount Lemmon.



## Highlights in giving

### Kiss Me Dirty

On March 24, more than 1,400 women came together in Tucson for the first Kiss Me Dirty Women's Mud Run Series. The event raised more than \$6,000 for the University of Arizona Cancer Center to support gynecologic cancer research. Participants hopped, skipped, jumped, slipped and scrambled their way through obstacles and mud to become an official "Dirty Girl."



Photo by Peter Weber

### Westbrook Charity Challenge

Hundreds of members of the Westbrook Village Community teed off, served, walked, rode and tasted their way toward raising more than \$45,000 at the third annual Charity Challenge held Jan. 28-29 in Peoria. Guests had their pick of golf, tennis and pickleball tournaments, as well as a three-mile walk, bingo, car show and chili cook-off.

The event is the brainchild of Paul Brown, Pete Riedel and Bonnie Franco, all avid golfers who wanted to find an active way to raise funds and awareness for cancer research in Arizona. All proceeds benefit an area of promising cancer research at the University of Arizona Cancer Center.

### SaddleBrooke: A Community that Cares

Our friends and neighbors in SaddleBrooke HOA No. 1 raised more than \$41,000 to support local cancer research at the University of Arizona Cancer Center at the third annual Tee Off Against Cancer golf outing on Feb. 21.

The event was preceded by a special Evening Against Cancer, where the dinner guests participated in live and silent auctions. Proceeds will benefit the area of cancer research chosen by each donor.



Scott Devereaux and Andy Higgins

### An Evening With the Friends

A crowd of nearly 500 people filled the ballroom of The Phoenician March 31 as the Phoenix Friends of the Arizona Cancer Center put on its 26th annual "Evening with the Friends" to support the Cancer Center's mission to prevent and cure cancer.

More than \$200,000 was raised for research programs through extraordinary corporate and individual support, bidding on fabulous silent auction items — ranging from pre-Columbian art objects to high-end toy cars for children — that filled several more rooms at the famous resort, live auction participation, and chances to win a vacation at the Ritz-Carlton on Maui.

Among those attending the festive evening were Cancer Center advisory board members Adam Goodman, Victor Schwanbeck, Dan Cavanaugh and Jim Craft with their guests.

To see more photos from the gala, see the gallery at [www.azcc.arizona.edu/giving/phoenix-friends](http://www.azcc.arizona.edu/giving/phoenix-friends).



Brian and Ardie Larkins



Jon and Tammy Underwood

Left to Right: Walt and Kathy Woys, Tracy and Donna Uffelman, Randy Garces, Debbie Hess



By making a planned gift to The University of Arizona Cancer Center, you provide a legacy that benefits future generations. Please consider creating a legacy for you and your family.

To learn more, please visit [www.arizonacancercenter.org](http://www.arizonacancercenter.org) or e-mail [development@azcc.arizona.edu](mailto:development@azcc.arizona.edu) or call (800) 327-5279.

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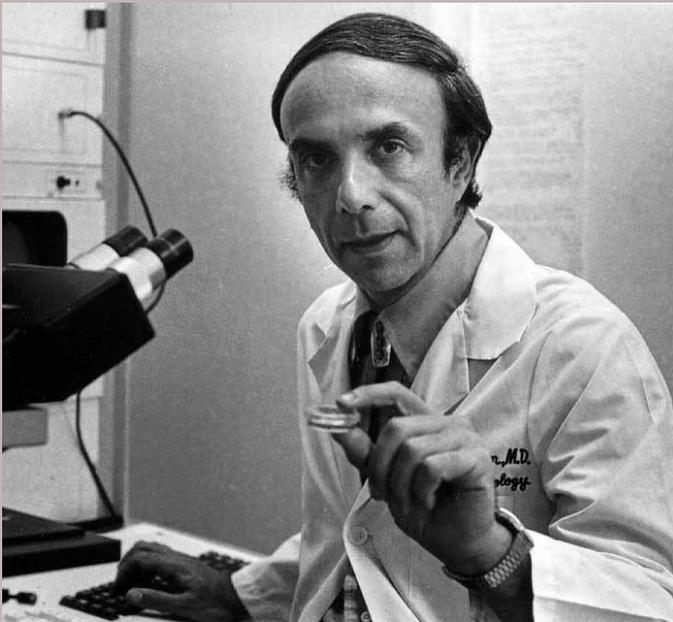
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## SYDNEY E. SALMON, MD AWARD LECTURES

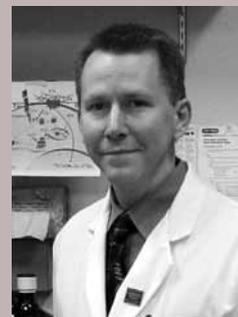
University of Arizona Cancer Center researchers **M. Peter Lance, MD, FRCP**, and **Steven P. Stratton, PhD**, were selected as the 2012 recipients of the Sydney E. Salmon, MD, distinguished senior investigator award and distinguished junior investigator award, respectively.

The Salmon Awards are presented in memory of the UA Cancer Center's founding director, Sydney E. Salmon, MD. Drs. Lance and Stratton received their awards and presented their latest research findings on May 8, in honor of Dr. Salmon's birthday.

The Salmon Awards recognize University of Arizona Cancer Center faculty members for their leadership in cancer research, grant support, publications, community service and clinical responsibilities.



**M. Peter Lance, MD, FRCP**, is a professor of medicine, molecular and cellular biology and public health at the University of Arizona. He is also the University of Arizona Cancer Center's chief cancer prevention and control officer and medical director of the CaTS Clinical Research Unit. He is the recipient of the Distinguished Senior Investigator Salmon Award.



**Steven P. Stratton, PhD**, is an associate professor of medicine at the University of Arizona and a member of the University of Arizona Cancer Center's Cancer Prevention and Control Program. He is the recipient of the Distinguished Junior Investigator Salmon Award.