

SUMMER 2015

Believe

IN A CURE

UF HEALTH CANCER CENTER NEWS

CALLING Cancer into Question

Public health researchers
search for answers to stop
cancer — before it starts



3 From the director's desk
New initiative is accelerating the UF Health Cancer Center's efforts

4 On target
UF patient receives novel treatment for rare jaw tumor

5 Community
Gold Rush Fantasy Event 2015
Hogtown 5K Beer Run

6 Calling cancer into question
Parsing big data to find a cure

11 Communicator with a cause
Researcher seeks to make health care messages accessible to all



About us



Believe in a Cure is the newsletter for the UF Health Cancer Center, home to cancer care and research for the Southeast's most comprehensive academic health center. In each issue, we will bring you stories about the progress and patient-centered care occurring at the center, as well as the partners who help make it happen.

Are you a patient?

For more information about care and services offered at the UF Health Cancer Center, call **352.273.8689**.

To support the work of the UF Health Cancer Center, call the UF Health Cancer Center Development Office at **352.273.8689**, write to P.O. Box 103633, Gainesville, FL 32610, or visit "Make a Gift" at www.cancer.ufl.edu.

To receive or opt out of receiving this newsletter, email Lindy Brounley at brounley@ufl.edu.

ON THE COVER

Epidemiologist Travis Gerke, Sc.D., is just one of the public health researchers in the UF Health Cancer Center searching for answers to cancer's biggest questions. In this issue, he and his colleagues share those burning questions — along with the ways their work seeks to address them. Photo by Mindy Miller.

PUBLISHED BY UF HEALTH COMMUNICATIONS

Director, UF Health Cancer Center
Paul Okunieff, M.D.

Chief Communications Officer, UF Health
Melanie Fridl Ross, M.S.J., E.L.S.

Communications Director, UF Health Cancer Center
Lindy Brounley

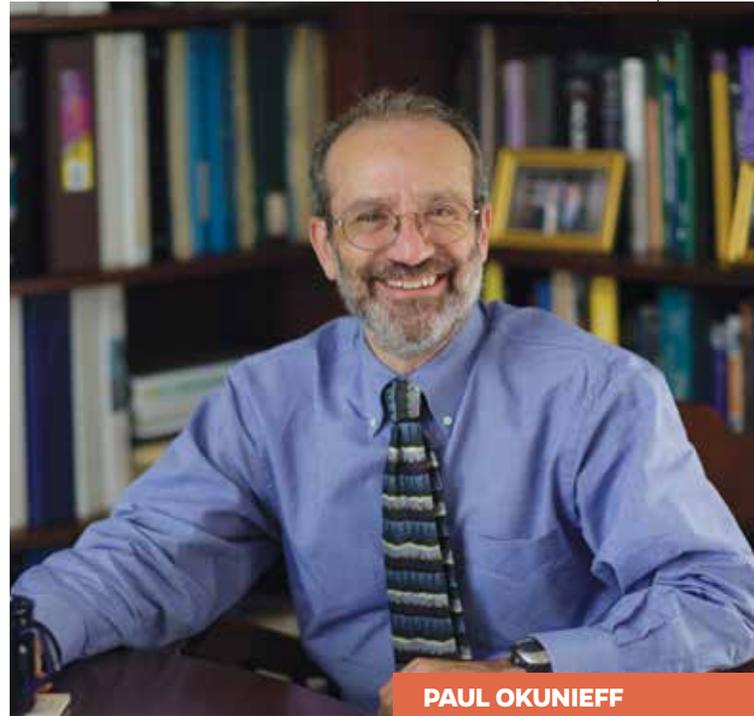
Editor
Marilee Griffin

Designer
J&S Design

From the director's desk

It has been my pleasure to write this director's letter for Believe in a Cure for nearly five years. During this time, the Cure has explored the many ways in which the outstanding cancer doctors, nurses and researchers of the UF Health Cancer Center contribute to improving cancer treatments and patient outcomes for the people we serve. It is, therefore, bittersweet for me to announce to you in this issue that I am stepping down as cancer center director so that I may focus my energies on cancer research and care.

During my time as center director, I've been honored and proud to work with the extraordinary cancer physicians and researchers whose hard work and dedication have been instrumental in expanding the reach of the UF Health cancer brand. That's why it gives me great confidence to introduce Jonathan D. Licht, M.D., as our new director. Dr. Licht is a world leader in cancer care and research who could be cancer director anywhere in the country; it is a testament to the good work we do that he's chosen to serve as our director here at the UF Health Cancer Center. The UF Health Cancer Center is poised to achieve truly great things under his leadership.



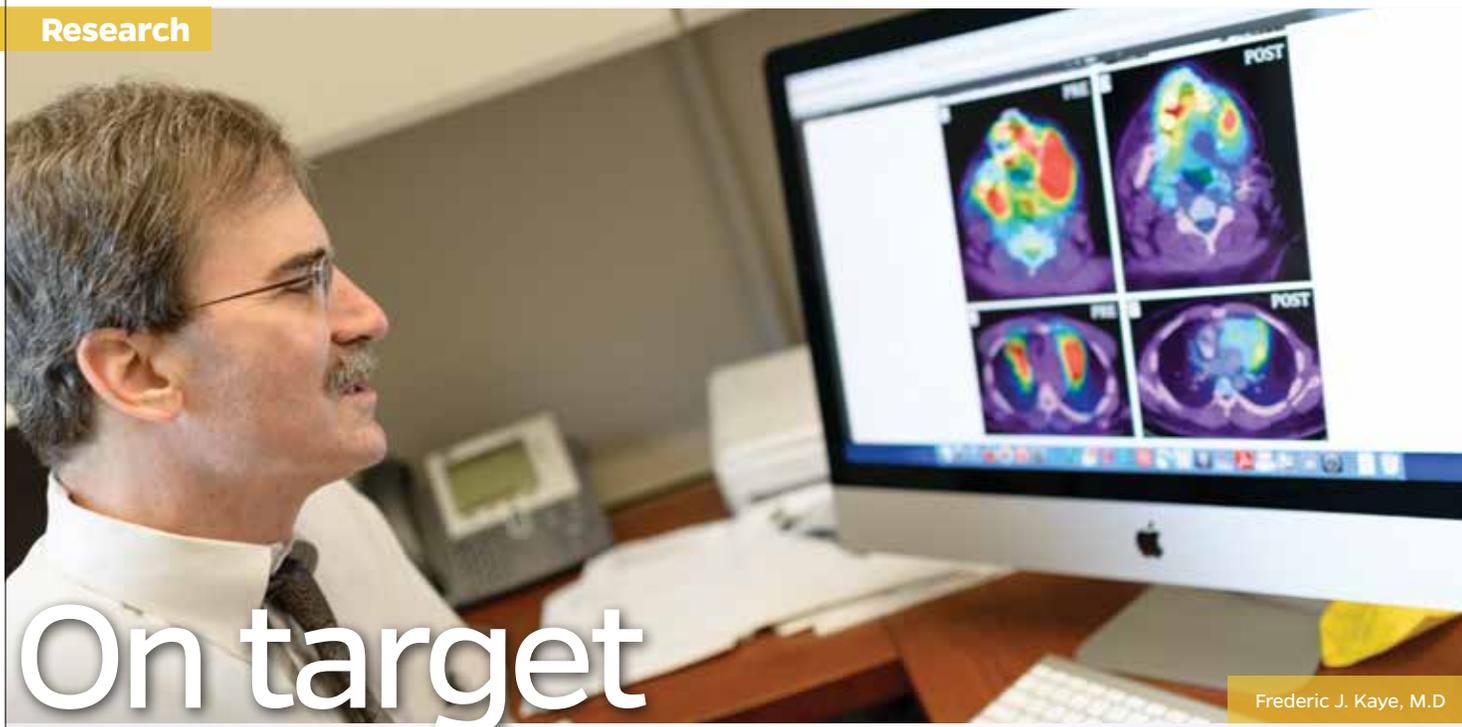
PAUL OKUNIEFF

Paul Okunieff, M.D., is the Marshall E. Rinker Sr. Foundation and David B. and Leighan R. Rinker chair and serves as director of the UF Health Cancer Center and chair of the College of Medicine department of radiation oncology.

I hope you will visit the formal announcement of Dr. Licht's appointment online at <http://bit.ly/1Jt8sAK>. He is an extraordinary cancer physician-scientist and a visionary thinker. I look forward to being a member of his cadre of hardworking cancer clinician-scientists as he moves our cancer center in to the future.

Best regards,

Paul Okunieff, M.D.
Director, UF Health Cancer Center



Frederic J. Kaye, M.D

On target

UF patient receives novel treatment for rare jaw tumor

Anthony Woods of St. Petersburg, Florida, was 10 years old when he was diagnosed with ameloblastoma, a rare oral tumor. Typically, ameloblastoma is not considered cancerous and doesn't spread to the lymph nodes or through the bloodstream, according to William Mendenhall, M.D., a radiation oncologist at the UF Health Cancer Center who specializes in head and neck cancers.

From the time he was diagnosed, Woods, now 40, underwent several surgeries, which were sometimes paired with reconstructions of his jaw. When Woods' tumor recurred and surgery was no longer an option, Mendenhall treated Woods with a high dose of radiation. Six years later, the ameloblastoma tumor recurred again in his jaw and neck, but this time also metastasized to both lungs.

"At that point, he had limited choices as to what to do," said Frederic J. Kaye, M.D., medical co-director of the Thoracic Oncology Program and co-director of the UF Health Lung Cancer Center. "That's when he showed up in my clinic."

Kaye and his colleagues analyzed the cancer gene profile of Woods' disease and found a gene mutation that made him a candidate for a new type of combination cancer therapy. The results of the therapy were published in the *Journal of the National Cancer Institute*.

Specifically, Woods had a mutation of a gene called BRAF. BRAF is a receptor on the surface of cells that regulates cell growth. When it's faulty, it can no longer regulate cell growth, causing tumors such as Woods' ameloblastoma.

Kaye and others knew a cancer drug called dabrafenib was used in cancers such as melanoma to treat the BRAF mutation. Researchers have found that it binds specifically to BRAF, turning off the receptor. The second drug, trametinib, targets a second receptor, which is higher up on the cellular signaling circuit. Targeting them both ensures that the BRAF mutation is shut down at two different points.

Kaye's team began treating Woods with the combination therapy in June 2014. Within days, Woods noticed a reduction of the tumor in his face and jaw. In subsequent clinic visits, Kaye said Woods' jaw tumor was much smaller, and the tumor in his lungs was no longer detectable on specialized X-ray scans. In August 2015, a new scan confirmed that Woods appears to be in complete remission.

Researchers are now working to open a clinical trial to study new patients with ameloblastoma in the hope of improving the outcome and quality of life for new patients undergoing surgery.

"This is the new arena of targeted therapy directed to the mutation," Kaye said. "Since these treatments are not FDA approved, our clinical trials office had to work hard to navigate the regulatory hurdles to get approval from the pharmaceutical company, the Food and Drug Administration and our Institutional Review Board."

Woods says God had it in his hands the whole time.

"The tumor could have gone to my lungs a lot sooner, when I was 17, when I was 18, 20 or 22, when they didn't have that pill developed," Woods said.

Study co-authors include Mendenhall, Alison Ivey, R.N., Walter Drane, M.D., and Robert Allan, M.D.

—*Morgan Sherburne*

GOLD RUSH



CHANGING LIVES

COMMUNITY

STOP CHILDREN'S CANCER FANTASY EVENT

Decked out in saloon attire, attendees of the Stop Children's Cancer Fantasy Event "Gold Rush" dined on appetizers and twirled under twinkling lights at the Santa Fe River Ranch on May 9. The Fantasy event, held with a different theme each year, serves as a fundraiser for donations to prevent, control and cure cancer in children. Along with performances from various organizations and a silent auction, the attendees also participated in three prize drawings at the event.



GOLD RUSH (Top) This year, the 27th Annual Stop Children's Cancer Fantasy Event "Gold Rush" hosted more than 500 guests. To learn more about the event or get involved, visit www.stopchildrenscancer.org.

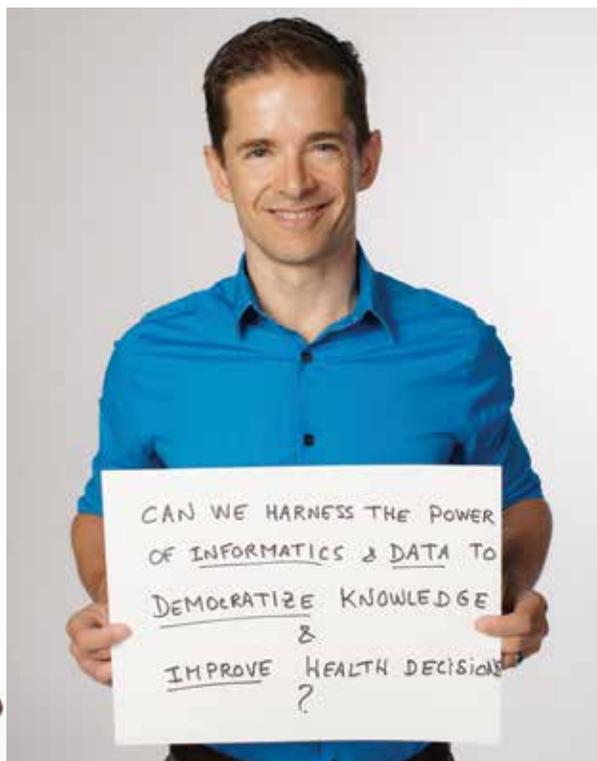
HOGTOWN 5 K BEER RUN: (Right) For the Hogtown 5K Beer Run in Haile Plantation, hundreds of runners participated in a unique cross-country run that supports cancer patients and related research. To learn more, visit www.cfc-foundation.org.



HOGTOWN 5K BEER RUN

On April 18, runners burned calories for a cause at the Hogtown 5K Beer Run in Haile Plantation. Starting at 9 a.m., participants ran through winding park trails and loops through the neighborhood. At the finish line, they enjoyed family-friendly refreshments, live music and entertainment. All of the proceeds from the race benefited the Climb for Cancer Foundation, which supports cancer patients and their families at UF Health.





CALLING CANCER

Into Question

BY DOUG BENNETT

In the battle against cancer, research discoveries often seize the headlines. The world celebrates the latest breakthrough in the hunt for a cure. But behind the curtain, other scientists are hard at work. Instead of *in vitro*, they toil *in silico*, harnessing computing power to sift through mountains of data for answers about the origins of cancer.

It's a determined group of public health researchers at the University of Florida Health Cancer Center. It includes an epidemiologist focused on the molecules that give rise to breast cancer, a computer expert developing a tool to get more people screened for colorectal cancer and an epidemiologist using big data to guide prostate cancer treatment decisions.

Their backgrounds are diverse, but they're united by one mission: Catch the killer before it strikes.

THE THRILL OF THE HUNT

Travis Gerke, Sc.D., didn't set out to become an epidemiologist. It wasn't until he was studying biostatistics at Harvard University that cancer epidemiology caught Gerke's eye. That led to a doctor of science degree in epidemiology and, in 2014, to an assistant professorship at his alma mater: UF.

Ask Gerke about the lure of cancer epidemiology, and he'll talk about a chance to do good things for the world. Press him further, and he'll describe the thrill of the hunt — determining how gene expression signatures can help identify non-aggressive types of prostate cancer. The implications of such detailed findings are significant: Prostate cancer isn't always lethal or likely to spread, and knowing that can reduce the number of procedures.



“There’s a saying that most men will die with prostate cancer, but not from the disease itself,” he said. “It’s very much true.”

That’s where the power of epidemiology comes in. Some 2.9 million men in the United States have prostate cancer, so fewer procedures can lower medical costs on a massive scale.

Gerke’s work in bioinformatics is also driving different ways of thinking about inactive prostate cancer. He was part of a research group that found a way to better identify slow-growing indolent tumors, which can be left alone and monitored. That lets patients avoid unnecessary procedures and the difficult aftereffects that come with them, such as urinary, bowel and sexual dysfunction.

“You avoid all the costs and all the side effects of things like a radical prostatectomy,” he said.

BOTH SIDES OF THE FIGHT

Lusine Yaghjian, M.D., Ph.D., has been on both sides of the cancer fight. As a physician in Armenia, Yaghjian saw the suffering of cancer patients. Now an assistant professor

of epidemiology, she focuses on preventing cancer by studying breast density.

Dense tissue increases the chance of getting breast cancer, so Yaghjian is studying the molecular processes that drive breast tissue density changes. The goal is to keep breast cancer at bay by thwarting its opportunity to flourish.

Yaghjian also recently established the North Florida Breast Cancer Cohort through the department of epidemiology. Women who volunteer for the program provide information about breast cancer risk factors and permission to access their mammograms and medical records. Yaghjian will use these data to study the associations between breast tissue density and breast health outcomes. The mammogram images that are compiled will also be used to improve computerized techniques for breast density estimation in research studies.

Treating cancer as a physician and preventing it as an epidemiologist is also deeply personal for Yaghjian. Cancer struck twice in her family, which led Yaghjian to her life’s work.

LEFT TO RIGHT: Folakemi Odedina, Ph.D.; François Modave, Ph.D.; Linda Cottler, Ph.D.; Travis Gerke, Sc.D.; Lusine Yaghjian, M.D., Ph.D.

THEIR BACKGROUNDS ARE DIVERSE, BUT THEY’RE UNITED BY ONE MISSION: CATCH THE KILLER BEFORE IT STRIKES.

“That’s my biggest motivator — being able to produce something that prevents disease from occurring in the first place,” she said.

A CHANCE AT SURVIVAL

Colorectal cancer screening saves lives, and François Modave, Ph.D., wants to make it easier and more commonplace. Before long, there will be an app for that.

Modave, an associate professor of biomedical informatics in the department of health outcomes and policy, is building a bilingual computer application to be used in physicians’ offices to help people decide which colorectal screening method is best for them. The app also provides education about the disease, its diagnosis and screening methods, which helps patients understand why they need to get screened.

For example, less than 60 percent of patients who are at risk for colorectal cancer follow screening guidelines.

Among Hispanics, the rate is even lower. Screening rates in the El Paso, Texas area, where Modave started the project while working at Texas Tech University’s Health Sciences Center, are as low as 35 percent. Knowledge of colorectal cancer, its screening and diagnosis are issues among all patients, but Hispanics are known to have a more fatalistic outlook, Modave said. *Ni modo*, the saying goes in El Paso, Texas: *Oh well, never mind*.

That’s where Modave’s software comes in. He plans to recruit 140 Hispanic patients and 20 medical providers to collect data about colorectal cancer screening rates and physician-patient interaction. The goal: Make it easier for patients to decide to get screened and facilitate that discussion with their doctor. Modave expects to have the data collected by early next year.

“The reality is that colorectal cancer evolves slowly,” he said. “If you get tested early and it’s positive, that improves the patient’s chances of survival.”

BIG DATA, BIG DREAMS

For Elizabeth Shenkman, Ph.D., big data has big potential for preventing cancer — which is why Shenkman, director of the Institute for Child Health Policy and chair of the College of Medicine’s department of health outcomes

and policy, is extremely optimistic about the OneFlorida Cancer Control Alliance and data trust.

Essentially, the OneFlorida data trust is a repository of anonymous medical data collected through OneFlorida’s vast statewide network that comprises 22 hospitals, including UF Health facilities; 914 medical practices; and more than 4,000 physicians providing care for 10 million people. It is led by UF’s Clinical and Translational Science Institute in partnership with the University of Miami, Florida State University and the statewide clinical partners.

For researchers, the trust is a way to implement cancer prevention and population science studies while including diverse patient populations, Shenkman said.

Having reliable statewide medical data will accelerate the pace and efficiency of research, Shenkman said. For example, researchers who want to study pregnant women who smoke can find out how many subjects are available in a general area.

“The efficiency is enormous,” Shenkman said. “It will decrease the startup time for researchers and allow them to design better studies.”

The data trust should be fully functional in mid-2016.

“THE CANCER CENTERS THAT HAVE THE OPPORTUNITY TO ENGAGE THE COMMUNITY ARE THE ONES THAT WILL BE THE MOST SUCCESSFUL.”

—Linda Cottler, Ph.D.

NO ONE LEFT BEHIND

As the UF Health Cancer Center works toward one of its goals, becoming a National Cancer Institute-designated cancer center, maintaining a strong cancer control and population sciences program is crucial. As one of the program leaders of the cancer human services program and the cancer center’s associate director for cancer health disparities, Folakemi Odedina, Ph.D., has been working with a 69-member group of researchers at UF to develop cancer control and population sciences specialties. These could ultimately be behavioral research, epidemiology, survivorship, implementation science and/or health care delivery research, said Odedina, a professor of pharmacotherapy and translational research in the College of Pharmacy.

Members of the Cancer Human Services Program were surveyed recently about the factors and opportunities that could help in the development of a successful cancer control and population science program at UF, Odedina

said. As the group continues to work together, team science areas will develop specific cancer prevention and control program areas. For Odedina, it's important that no one in the community gets left behind. That means paying special attention to groups that might be especially vulnerable to cancer and lack access to care.

"UF is uniquely positioned for an effective cancer control and population sciences program due to our collaborative environment, diverse expertise, talented clinicians, outstanding basic scientists and strong institutional support for team science and multidisciplinary approaches," Odedina said. "Our goal is to do human-focused cancer prevention research that will improve quality of life."

FROM THE LAB TO CURBSIDE

Linda Cottler, Ph.D., came to UF in 2011 as a professor and founding chair of the department of epidemiology. She hit the ground running and never stopped. Despite

her full plate — teaching, doing research and running the department — Cottler is focused on her passion: reducing disparities for health research and health services.

Health care disparities matter, especially for minorities and those in rural communities, she said.

"There are some populations who come to treatment at a later stage," Cottler said. "Because of that, their outcomes are worse."

Changing that is what brings the power and promise of epidemiology from the lab bench to a curbside in the community. That is why Cottler began HealthStreet, the outreach project that sends community health workers into the Gainesville community to assess the needs and concerns of everyone.

"The cancer centers that have the opportunity to engage the community are the ones that will be the most successful," Cottler said.

In the epidemiologist's world, sometimes success is measured by the cancer cases that never happen.

Cancer resource center offers support to local community

The UF Health Community Cancer Resource Center is coming into its own.

Though organized as an extension of the UF Health Cancer Center, the resource center is housed at HealthStreet, a community-engagement program that aims to reduce disparities in health care and research. There, the Community Cancer Resource Center provides a way for community members to obtain a variety of information and support resources about cancer risk reduction, screening, diagnosis, treatment and survivorship.

"We wanted to make sure that we had a place for people to come and get cancer materials of any kind," said Samuel Gaddy, the center's director.

Any kind is right. The resource library, located inside HealthStreet at 2401 SW Archer Road, Gainesville, Florida, offers up-to-date informational resources on leukemia and cancers of the prostate, breast, lung, kidney and skin. In addition to the standard pamphlets, brochures and handouts, the center provides ways

for the public to look up health concerns on their own; a computer, graphic charts and anatomy models are just a few of the other, more interactive resources at hand.

In addition to providing community members with educational and networking opportunities, the center acts as a home to the Alachua County Prostate Cancer Alliance Incorporated, a monthly support group. Aside from offering emotional support for members going through prostate cancer diagnosis and treatment, the group provides reassurance to those who are newly diagnosed or overwhelmed with the implications of the disease — for themselves or their loved ones.

"One of the things we tell people in these situations is, 'Come in and sit in on the support group,'" Gaddy said. "'You don't have to participate, but just listen in.' Believe it or not, it's one of the best ways in the world to ease people into this."

Gaddy's goal is to increase traffic, not just to the center, but to the HealthStreet program as well. Both work together to



Samuel Gaddy

provide North Central Florida residents with access to information about their health concerns and connect them to opportunities to participate in research as well as links to medical and social services.

Enthusiastic about HealthStreet's mission, Gaddy believes that the best part of his role in community outreach is just that — the community.

"Meeting people that you can really converse with about something you're passionate about ... to me, that's the neatest thing about this job, Gaddy said. "After all, a man is not an island unto himself." —Dorothy Hagmajer

Development dispatch

Life moments. They are the pivotal and treasured occasions in our lives that have a profound effect on us and those around us; those memorable milestones often thought of as the unforgettable moments of past or

present events.

At the UF Health Cancer Center, we understand how priceless these moments are and how impactful legacy commitments of today can be for the future — providing cherished and inspirational life moments for our patients and their families.

Several times throughout the day, I hear the chime of the Liminal Bell followed by the sound of joyful emotion down the hall from my office at the UF Health Davis Cancer Pavilion. The ceremonious ringing of the bell marks the end of a cancer patient's treatment and the hope for a healthy life. Those rings resonate throughout the building and offer hope and encouragement to patients going through treatment. Those rings represent the progress

we are making, in part through the generosity of those who invest in our work and believe it will improve our patients' lives.

To learn more about these events and other meaningful opportunities to improve the lives of our patients and families at the UF Health Cancer Center, please contact Carol Nimitz, senior director of development, at 352-273-9080 or by email at cnimitz@ufl.edu.

Please consider making your legacy one of hope and compassion by including the UF Health Cancer Center in your estate plans. There are a variety of ways to impact our future while also benefiting your estate. Let us show you how your legacy can transform the lives of future generations of cancer patients — by supporting research and care that can lead to the life moment of being cured.

Sincerely,

Carol Nimitz, Senior Director of Development
cnimitz@ufl.edu | 352.273.9080



Carol Nimitz



EVENTS

Thursday, Sept. 10, 11:30 a.m.-1 p.m.

A Dose of Fashion is a historical journey through history, fashion and medicine featuring the Taylor Girls Fashion Show and high tea — courtesy of Ruffled Rose Tea Room at the Gainesville Woman's Club. Benefitting the Climb for Cancer Foundation for oncology programs at UF Health. Learn more: <http://bit.ly/1JTYubN>

Saturday, Oct. 10, 8:30 a.m.

The Third Annual Pink Pumpkin Pedal-Off is a charity bike ride supporting breast cancer research at UF. The ride begins and ends at the Cancer and Genetics Research Complex on the university's campus. Register online: <http://bit.ly/1lPeZV8>

Friday, Oct. 16

The 22nd Annual Stop Children's Cancer Golf Classic at Haile Plantation Golf and Country Club in Gainesville. The tournament is considered by many to be the area's premier golf event. Tee-off time follows a catered lunch. When play is finished, dinner is served, the silent auction closes, and player prizes are awarded. Learn more: <http://bit.ly/1fui8yk>

Saturday, Oct. 17, 9 a.m.-12p.m.

The First Annual Halloweener Derby Day is a fundraising event that includes a dachshund-only race, followed by a pet costume contest. Prizes are awarded to the fastest dachshund, as well as the best costume. Benefitting the Climb for Cancer Foundation for oncology programs at UF Health. Learn more: <http://bit.ly/1LWd2qW>



AWARDS & ACHIEVEMENTS

On Jan. 1, **Diana J. Wilkie, Ph.D., R.N.**, joined UF as a Prairieview Trust-Earl and Margo Powers Endowed Professor. Wilkie is an internationally known pain specialist who concentrates in alleviating cancer pain and end-of-life care. At UF, she will focus on creating a center of excellence in palliative care research within the College of Nursing that will help to address pain management in cancer patients.

The **UF Health Blood and Marrow Transplantation Program** was ranked among the top 2.5 percent of centers nationwide for its patient survival outcomes after stem cell transplantation in February. It is the only program in the state with this distinction, and one of four in the Southeast region.

An analysis from a media campaign on mouth and throat cancer, performed by a team of UF Health researchers in the **departments of health outcomes and policy and community dentistry and behavioral science**, was published in the American Journal of Public Health in May. In 2010, the researchers implemented the campaign in rural communities in six of Florida's poorest counties to educate black men on the dangers of mouth and throat cancer. Following the campaign, the researchers found the number of first-time mouth and throat cancer screenings in the area increased by 13 percent.

Catherine T. Flores, Ph.D., an assistant professor in the department of neurosurgery, has been awarded a Young Investigator Grant from Alex's Lemonade Stand Foundation. Designed to help young researchers pursue innovative projects at leading hospitals and institutions across the country, these grants provide critical startup funds totaling \$100,000 over the course of two years to each awardee.



COMMUNICATOR with a cause

Faculty Spotlight

Janice Krieger, Ph.D.

Researcher seeks to make health care messages accessible to all

Hi. Hello. How are you? Sometimes the most important conversations about health take place somewhere outside of a doctor's office: between family and friends.

Janice Krieger, Ph.D., an associate professor in the College of Journalism and Communications' department of advertising and director of the STEM (Science, Technology, Engineering, Mathematics) Translational Communication Research Program, is all about interpersonal communication. Although it isn't a factor typically associated with health, Krieger maintains that it is one of the most important.

"Interpersonal communication is at the core of how we make our health decisions," she said. "How we come to understand our health, how we make decisions about our health ... even as kids, how do you learn what is healthy? It's through what your parents, friends and family members say and do."

Krieger grew up in a small rural town. When she went to graduate school, she took a class in health communication and fell in love with it.

"But at the same time, I felt that all of the articles I was reading didn't reflect the reality of what I had experienced growing up and the way people communicated about their health," she said.

Krieger's interest in research related to health and communication was sparked by a desire to genuinely understand the effects and realities of low-income

households and a lack of access to healthy foods and public transportation.

Currently, her work has three main areas of focus: message-design influences on how people understand health risks and information; social influences in health care decision-making; and the way in which family and friends affect mediated interventions.

The latter is especially important in cancer treatment decision-making. Although medical professionals tend to focus on the patient, Krieger maintains that the patient's support network ought to be taken into consideration, too.

"When you begin to talk with cancer patients and their family members, you see different dynamics emerging," she said.

In some cases, a patient might be overwhelmed by the stress of the decision and want to share the rights and responsibilities of decision-making. Other times, neither patient nor the family want to decide. And occasionally, the patients and families may disagree on the best course of treatment.

"We need to do a better job of helping families reduce the conflict about the decision-making because if you're going through cancer, the last thing you need is added stress," she said.

In these cases, access to information about health and health care decisions is key. But it is the format — and ability to be easily understood and shared — that is crucial.

"Health is so foundational to our lives," Krieger said. "I think everyone deserves to understand it."

—Dorothy Hagnajer

EXCELLENCE IN RESEARCH



RESEARCH TRAINING OPPORTUNITIES FOR OUTSTANDING LEADERS, or ReTOOL, scholars from the University of Florida, Florida Agricultural and Mechanical University and Bethune-Cookman University pose with their faculty mentors during a Prostate Cancer Research Showcase in June. The ReTOOL program was founded in 2012 as a university partnership to increase the number of well-trained minority prostate cancer researchers in Florida. In addition to enabling students to conduct independent research alongside faculty mentors, the program aims to create careers for these students in the areas of basic, behavioral, biomedical and clinical sciences. For more information, visit retool.cop.ufl.edu.



P.O. Box 103633
Gainesville, FL 32610-3633