RUTGERS Cancer Institute of New Jersey

# Institute Jersey Connection

## Back on Track:

Winter 2016

Advanced technology in proton therapy is helping 'weekend warrior' Tina Fasano tackle breast cancer.



## Director's Corner

write this Director's Corner with very mixed emotions — I am excited as I prepare to take on a new endeavor as the Dean of the College of Medicine at the University of Kentucky, while at the same time feeling as if I am leaving my family

of 22 years. In the approximately eight years as Director at Rutgers Cancer Institute of New Jersey, I have had the privilege of watching our center transform into one of the nation's leading Comprehensive Cancer Centers as designated by the National Cancer Institute (NCI).

So many people, including our founding Director Dr. William N. Hait, have had a role in the foundation and growth of the Rutgers Cancer Institute. The efforts by everyone supporting, guiding, and/ or working at the Rutgers Cancer Institute have resulted in a strong and vibrant institution focused on a clear mission to improve the lives of patients with cancer, or at risk for cancer, through state-of-the-art science, education and care. As a true multi-disciplinary team, we have brought the cancer center to stand proudly among its national peers. In fact, Rutgers Cancer Institute is at the forefront of cancer research and patient care, making advances every day in areas such as immunotherapy, precision medicine, cancer metabolism, DNA instability, and innovative cancer clinical trials, to name just a few.

We also established a model for a full service line with our flagship hospital, Robert Wood Johnson University Hospital, enabling amazing growth and service to the people of the state of New Jersey; we are now creating a similar model with our Newark campus. We have strengthened our relationship with, and our responsibility to, the state of New Jersey working together to improve patient outcomes and the quality of life for its citizens; we have increased grant and clinical trial activity; we launched the state's first precision medicine initiative under an NCI-designated center; and we have transitioned the Cancer Institute into Rutgers University as part of the historic New Jersey Medical and Health Sciences Education Restructuring Act, creating a new structure as an autonomous center within a large university matrix with strong leadership, adding the best value to the university and state, and at the same time partnering across Rutgers to leverage great opportunities for our patients. In fact, this model is being discussed and duplicated nationally.

While I plan to embark on my new journey, I am very energized but will always remember the phenomenal advisors, supporters, staff, physicians, healthcare providers, and researchers that make up the team at Rutgers Cancer Institute of New Jersey. Working together we have impacted thousands of lives, and made great advances in the fight against cancer. We are closer than ever to a cure, but our work is not done.

When John F. Kennedy proposed to put a man on the moon he said,

"We choose to go to the moon in this decade and do other things not because they are easy, but because they are hard, because the goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win."

And for the patients we serve, "winning is everything!" I cherish the memories and accomplishments we have made over the years at Rutgers Cancer Institute of New Jersey and look forward to watching the center continue to grow and flourish.

Thank you all,

**Robert S. DiPaola, MD** Director, Rutgers Cancer Institute of New Jersey Vice Chancellor for Cancer Programs Rutgers Biomedical and Health Sciences (RBHS)

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# Cancer Institute of New Jersey Connection







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Tina Fasano didn't want to think about giving up an active lifestyle when diagnosed with breast cancer. Thanks to new proton therapy available at Rutgers Cancer Institute of New Jersey and Robert Wood Johnson University Hospital, this 'weekend warrior' is back on track **By Michele Fisher** 

Winter 2016

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There's a new team in head, neck and skull base surgery at Rutgers Cancer Institute of New Jersey taking the fear out of cancer. For Tony Spadora, that meant the right hands at the right time. **By Maryann Brinley** 

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# Forefront

News from the front lines at Rutgers Cancer Institute of New Jersey

Training the Next Generation

Aining of cancer surgeons, a two-year fellowship program is now being offered by Rutgers Cancer Institute of New Jersey and Rutgers Robert Wood Johnson Medical School. The Fellowship in Complex General Surgical Oncology offers board-eligible surgeons an opportunity to subspecialize in the intricacies of cancer care both in the clinical and research arenas.

"This fellowship is an investment in the next generation of cancer surgeons, as it prepares them to provide comprehensive surgical care in an oncology setting. Using cutting-edge technologies and training alongside nationally renowned experts in the field, these fellows will learn how to apply a multidisciplinary approach to the prevention, diagnosis and treatment of cancer."

- Leonard Y. Lee, MD, FACS, FACC, FCCP

"Offering this specialized training within an academic unit that collaborates with a National Cancer Institute-designated Comprehensive Cancer Center is ideal, since the nature of the cases here is often unique and complex. This type of environment is more conducive to learning the realities of this rapidly changing field rather than just reading about a unique procedure or diagnosis in the classroom," says Rutgers Cancer Institute Chief Surgical Officer and Associate Director for Clinical Science



Howard L. Kaufman, MD, FACS, who is also a professor of surgery and a professor of medicine at Rutgers Robert Wood Johnson Medical School.

David A. August, MD, chief, section of gastrointestinal surgical oncology at Rutgers Cancer Institute and professor of surgery at Rutgers Robert Wood Johnson Medical School, has been appointed as director of the fellowship program, which provides advanced training for candidates. This includes rotations within the areas of gastrointestinal surgical oncology, melanoma/ soft tissue surgical oncology, breast surgical oncology, head and neck surgery, pathology, medical oncology and radiation oncology. Basics of tumor biology and the biology of cancer therapies — including surgery, chemotherapy, immunotherapy and radiation therapy also are covered

Along with required training in clinical research methods and regulatory issues, fellows have an opportunity to explore laboratory research, public health research and clinical trials research with an emphasis on translational research. They may also request a third year of training devoted to research.

"This fellowship is an investment in the next generation of cancer surgeons, as it prepares them to provide comprehensive surgical care in an oncology setting. Using cutting-edge technologies and training alongside nationally renowned experts in the field, these fellows will learn how to apply a multidisciplinary approach to the prevention, diagnosis and treatment of cancer," says Leonard Y. Lee, MD, FACS, FACC, FCCP, the James W. Mackenzie Chair in Surgery, professor and interim chair of the Department of Surgery and chief of the Division of Cardiothoracic Surgery at Rutgers Robert Wood Johnson Medical School and Robert Wood Johnson University Hospital.

Mihir Shah, MD, has been selected as the program's inaugural fellow. Dr. Shah completed his general surgery training at the Cleveland Clinic and is currently a fellow in the minimally invasive surgery program at Emory University in Atlanta. He will begin the Fellowship in Complex General Surgical Oncology on August 1. ■

### Drawing the Line on Teen Tanning Bed Use

In December 2015, the U.S. Food and Drug Administration (FDA) proposed a ban on tanning bed use by those under 18. Rutgers Cancer Institute of New Jersey behavioral scientist **Jerod L. Stapleton, PhD** (below), who is also an assistant professor of medicine at Rutgers Robert Wood Johnson Medical School, conducts research exploring why young people frequently engage in indoor tanning. He shares his concern for teen tanning bed users.

**Many** scientific studies show the risk of skin cancer from tanning bed use is greater among people who start using tanning beds at a younger age and report longer periods of prolonged use. Young women are

the most likely group to become prolonged users of tanning beds and many first engage in indoor tanning as teenagers. The steady rise in melanoma rates among young adult females in the United States and in several European countries is a particularly concerning reason to enact additional restrictions related to indoor tanning, says Dr. Stapleton.

"The proposed FDA ban is significant, even in light of existing and ongoing indoor tanning laws, as state-level laws that restrict or ban ac-

cess to indoor tanning beds widely vary across the country. Some states have no restrictions on indoor tanning or instead of bans rely on parental consent laws, which studies suggest may not be effective in preventing minors from using indoor tanning beds. An FDA ban would provide necessary protection for all U.S. minors from harmful tanning beds and would represent a significant public health improvement," notes Stapleton. Stapleton's research with young females who use tanning beds shows that being tan is an important part of being attractive. As a result, these young women are unhappy with their appearance when they are not tan.



He recently tested an internet-based intervention designed to encourage women to reconsider the importance they placed on tanning in light of the harmful effects and to consider alternative ways to achieve some of the benefits of indoor tanning. He found encouraging results, as women who viewed the intervention reported less tanning behavior compared to a group who did not take part in the intervention.

### A Closer Look at Lung Cancer

**Rutgers** Cancer Institute of New Jersey researcher **'Jessie' Yanxiang Guo, PhD** (*below*), has received a \$628,884 Transition Career Development Award (K22CA 190521) from the National Cancer Institute to investigate the role of a cell survival mechanism known as autophagy in lung cancers driven by the active Kras protein, which is re-



sponsible for cell division. The aim is to provide a new strategy for lung cancer treatment.

Between 85 to 90 percent of lung cancers are nonsmall-cell lung cancer (NSCLC), and mutations in the Ras protein

family — including Kras — are frequently detected in this type of cancer. Drugs directly targeting Ras mutations in NSCLC have not been effective.

Working in the laboratory of her mentor Rutgers Cancer Institute Deputy Director **Eileen White, PhD**, Dr. Guo discovered that cancer cells activated by the Ras protein family require autophagy for cell maintenance, metabolic stress tolerance and tumor development. When Ras proteins are 'switched on,' they have the ability to turn on other proteins that can activate genes responsible for cell growth and survival. With that, Guo's work will explore the impact of autophagy on cell metabolism and lung cancer growth.

"By learning more about how autophagy impacts the cellular metabolism of Ras-driven cancer cells, we may be able to identify novel treatment approaches targeting this process for lung and other cancers," notes Guo, an assistant professor of medicine at Rutgers Robert Wood Johnson Medical School.

## Forefront Faculty Feature



**Dr. zloza** was recruited to Rutgers Cancer Institute in February 2015 from Rush University Medical Center in Chicago, where he was an assistant professor of immunology/ microbiology and internal medicine. Dr. Zloza earned his MD and PhD (with a focus on immunology/microbiology) from Rush University and further trained in tumor immunology and cancer vaccine design at The University of Chicago. He shares more about his career story, current research and administrative interests with us.

### Q: You have an interesting story behind the progression of your career from engineering to medicine to research. Tell us more about that.

A: It started when I was in high school pondering a music major for college. I watched the movie "And the Band Played On," which I thought was related to music. It turned out to be a dramatic recreation of the political, social, medical, and scientific response to HIV in the United States during the early years of the epidemic. Like the physician-scientists in this movie, I wanted to impact the lives of people through research on the most difficult of diseases. This led me Andrew Zloza, MD, PhD, is the chief of surgical oncology research and a member of the Clinical Investigations and Precision Therapeutics Program at Rutgers Cancer Institute of New Jersey who has an interest in the effect that infections have on cancer and in translating cancer-related basic science findings to clinical trials. He also is an assistant professor of surgery at Rutgers Robert Wood Johnson Medical School.

to major in chemical engineering with a pre-medical studies focus at Illinois Institute of Technology. I soon after began medical studies at Rush University and entered their dual-degree physician-scientist MD/PhD Program. It was during this time I realized my overwhelming passion for research and decided to pursue a full-time research career pathway. I then completed a National Institutes of Health-sponsored research fellowship in tumor immunology and cancer vaccine design at The University of Chicago and subsequently transitioned to a faculty position at Rush University to run my own research lab.

### **Q:** How has your career training led you to your current work on cancer immunotherapies?

A: During my PhD dissertation work, I recognized new evidence showing patients with long-term infections are more prone to all types of cancers. Most of these infections are not the kind of infections that lead to cancer directly. So, this led me to the idea that infections in general may alter our ability to fight cancer. As I transitioned to my first independent lab, we began work on creating novel models of cancer and infection in order to understand how infections may influence the immune system's response to cancer. We discovered that immune cells can leave the tumor site and travel to a distant site of infection. During this time the tumor is left with fewer immune cells controlling it, thus the tumor continues to grow and is no longer sufficiently controlled by the immune system. This is possibly when new tumors emerge, current tumors spread, or previous tumors recur. A good thing is we also have been able to show that this negative effect of infections on cancer responses can be reversed by blocking the PD-1 molecule. Several cancer immunotherapy drugs that block this molecule recently have been approved for treatment of cancers, thus we are learning more about the mechanism behind these types of drugs.

## **Q**: As the chief of surgical oncology research, what are some of your goals?

A: I would like to further enhance collaboration between basic scientists and clinicians, many of whom already have overlapping interests. This includes streamlining the process by which they are paired so that they can work together to acquire the pre-clinical data necessary to justify and fund clinical trials. I also would like to foster additional studies to be performed alongside clinical trials that help define why certain patients respond more favorably than others to treatment. This may provide novel leads for determining the mechanisms through which therapies in clinical trials work and towards the rationale design of combination treatments that improve patient outcomes.

### *Clinical Trials Corner*:

### Putting the Brakes on Kidney Cancer

conjunction with the **Big Ten Cancer Research Consortium** (BTCRC), **Rutgers Cancer Institute of New Jersey** has opened a clinical trial for patients with kidney cancer that has spread to other parts of the body (metastatic).

The study, known as BTCRC-GU14-003, is examining a combination of pembrolizumab, a type of drug known as a PD-1 or "checkpoint" inhibitor, with bevacizumab, a therapy that targets blood vessel formation in tumors, for the treatment of



patients with met-astatic kidney cancer. Pembrolizumab works by targeting a receptor on the sur-

For more information on

how to take part in either of

these trials, individuals can

call 732-235-8675 or e-mail

visit cinj.org/clinical-trials.

cinjclinicaltrials@cinj.rutgers.edu.

For information on other clinical

trials at Rutgers Cancer Institute,

Teaming up to fight cancer

face of T cells called PD-1. This receptor turns off T cells and prevents them from killing cancer cells. Pembrolizumab blocks that action, allowing T cells to remain active and have an immune response against cancer.

Eric A. Singer, MD, MA, FACS, urologic oncologist at

Rutgers Cancer Institute and assistant professor of surgery at Rutgers Robert Wood Johnson Medical School, is the lead researcher on the study at Rutgers Cancer Institute. "For patients with advanced stages of kidney cancer, effective treatment options are limited. By exploring therapies that harness one's own immune system, there is an opportunity to address an unmet need in this patient population," he said.

The aim of this Phase II trial is to determine what effects pembrolizumab in combination with beva-

cizumab has on patients who have not received prior therapy for metastatic kidney cancer. Accepted participants will be followed by the study team for up to two years. Patients aged 18 and older who are diagnosed with metastatic kidney cancer are eligible to take part in the clinical trial. Other criteria must also be met. Prior to being accepted into the study, participants would be required to undergo a number of tests including blood work and a physical exam. Vaccine Treatment Takes Aim at Bladder Cancer

## Rutgers

**Cancer Institute of New Jersey** is one of two sites in the nation offering a clinical trial targeting a specific type of bladder cancer with a vaccine treatment.

The standard care for high grade non-muscle

invasive bladder cancer is a treatment known as bacillus Calmette-Guerin or BCG. BCG is a liquid delivered into the bladder through a catheter which is then removed, leaving the medicine inside the bladder. BCG has been found to delay bladder cancer from returning, slow the cancer from growing or help bladder cancer patients live longer with their disease.

A poxvirus-based cancer treatment called PANVAC has shown to be effective against a number of cancers. Given by injection, it helps stimulate the body's natural defenses (the immune system) against infection to recognize and destroy tumor cells

that produce specific proteins.

Along with the National Cancer Institute, which is the sponsor of this clinical trial, investigators at Rutgers Cancer Institute are examining how effective BCG is when combined with PANVAC. Patients aged 18 and older who are diagnosed with high grade non-muscle invasive bladder cancer and failed at least one previ-

ous course of BCG are eligible to take part in the clinical trial. Other criteria must also be met. Prior to being accepted into the study, participants would be required to undergo a number of tests including blood work and a physical exam.

## Forefront

### Identifying a Barrier

Research from inves-

tigators at Rutgers Cancer Institute of New Jersey examining a rare noncancerous (benign) kidney tumor type has revealed a mechanism to prevent this type of tumor from becoming cancerous. Rutgers Cancer Institute Deputy Director Eileen White, PhD, distinguished professor of molecular biology and biochemistry in the School of Arts and Sciences at Rutgers University and Rutgers Cancer Institute Researcher Chang S. Chan, PhD, assistant professor of medicine at Rutgers Robert Wood Johnson Medical School, are the co-corresponding authors of the work published in the November 2015 journal Cell Reports (doi: 10.1016/ j.celrep.2015. 10.059). Shilpy Joshi, PhD, a New Jersey Commission on Cancer Research fellow in Dr. White's laboratory is the colead author.

In this effort, they sought to identify what limits some tumors to benign disease. The team sequenced 11 benign human renal oncocytoma samples. Renal oncocytoma is a type of kidney tumor that is typically not cancerous but may have the ability to



become malignant. The samples were characterized based on chromosome losses. 'Type 1' was designated as having no chromosome loss, while 'Type 2' samples were designated as having specific chromosome loss.

Investigators discovered the Type 2 oncocytomas with chromosome loss may progress to a subtype of malignant kidney cancer called eosinophilic chromophobe renal cell carcinoma (ChRCC). In contrast, they found no evidence that Type 1 oncocytoma may progress to malignant disease. "These findings suggest that determining the subtype of oncocytoma is important, and patients with Type 2 should be followed more closely," say the authors.

They further add that irrespective of the 'type,' oncoytomas showed genetic defects in the production of energy, due to mutations in the mitochondrial genome. Mitochondria are the powerhouses of the cell and mutations that inactivate their function in these oncocytomas result in insufficient energy levels to support tumor progression, which can explain their benign nature. Due to this lack of energy, oncocytomas display disruption of key cellular activities including cell waste disposal, and collection and distribution of proteins in the cell events attributed to defective mitochondrial function.

"This finding suggests the genetic defects in the mitochondria activate a barrier that impairs energy production, thus limiting tumor progression. This reveals a novel tumor-suppressive mechanism and suggests that mito-chondrial inhibitors like the diabetes drug metformin, which is currently being tested in the treatment of some cancers, may work this way. Mechanisms that restrict tumors to benign disease can inform approaches to cancer therapy," say the authors.

### Come visit us at Rutgers Day!

**TO** honor the 250th anniversary of Rutgers University, Rutgers Day will be celebrated statewide this year, with Rutgers Day programming and Alumni Weekend events at locations in New Brunswick, Camden and Newark. Be sure to visit us on the College Avenue Campus on Saturday, April 30.

For additional information, visit: RutgersDay.Rutgers.edu.



### **Exploring E-Cigarettes**

## According to the

Centers for Disease Control and Prevention, electronic cigarette (e-cigarette) use is on the rise. Researchers from **Rutgers Cancer Institute of New Jersey** and **Rutgers School of Public Health** have examined how smokers learn about these devices.

After surveying 519 adults considered 'current cigarette smokers,' it was found 86.4 percent reported seeing e-cigarettes in stores and 83 percent reported seeing the devices used in as the most trustworthy source.

"Given that physicians were perceived as the most trustworthy source and that physicians have historically been influential in motivating smokers to quit, it is important for health professionals to be informed about e-cigarettes and feel comfortable in talking to their patients about the devices. Physicians should increasingly expect their patients to ask about e-cigarettes," note authors **Olivia A. Wackowski, PhD, MPH**, assistant professor of health education and



person. Many (73 percent) also heard about e-cigarettes from known users, broadcast advertisements (68 percent), print/online advertisements (71.5 percent), and/or from the new (60.9 percent).

In looking at risk perceptions, most smokers (59.9 percent) believed ecigarettes are less harmful than regular cigarettes. Despite this belief, the majority of smokers (79.5 percent) felt that having e-cigarette safety information would be important if they were to consider trying or using e-cigarettes again in the future. More than one-third of surveyed smokers said they would turn to a doctor first for this information and most (59.6 percent) ranked doctors behavioral science in the Center for Tobacco Studies at Rutgers School of Public Health and member of the Rutgers Cancer Institute's Cancer Prevention and Control Program, and **Cristine Delnevo, PhD, MPH**, coleader of the Rutgers Cancer Institute's Cancer Prevention and Control Program and director of the Center for Tobacco Studies.

The work appeared in the November 2015 edition of 'Preventive Medicine Reports' (http://dx.doi.org/10.1016/ j.pmedr.2015.10.006).

### In the Interim

**AS** mentioned in our *Director's Corner*, a change in leadership is coming to Rutgers Cancer Institute of New Jersey. **Bruce G.** 



Haffty, MD (left), has been named to serve as interim director of Rutgers Cancer Institute effective April 1 following the departure of **Robert S. DiPaola, MD**.

Dr. Haffty current-

ly serves as professor and chair, Department of Radiation Oncology at Rutgers Cancer Institute, Rutgers Robert Wood Johnson Medical School, and Rutgers New Jersey Medical School. He came to Rutgers Cancer Institute in 2005, after spending the majority of his career at Yale. He received his MD from Yale University School of Medicine; his MS from Worcester Polytechnic Institute; and his BS from the University of Massachusetts, Amherst.

Consistently ranked as one of the nation's leading physicians by Best Doctors in America, *Ladies Home Journal, Good Housekeeping*, America's Top Doctors, Top Doctors for Cancer, and Top Doctors in New York and New Jersey, Haffty is internationally recognized for his expertise in breast cancer, as well as in head and neck cancers.

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# Back on Track

t was in the mid-1940s when it was first suggested that protons could be used for medical treatment. While the scientific basis was evident, it took decades to develop the current technology being used at fewer than 20 proton therapy centers in the United States – including the Laurie Proton Therapy Center at Robert Wood Johnson University Hospital (*RWJ*), which opened just last year in partnership with Rutgers Cancer Institute of New Jersey. A very individualized form of radiation treatment, proton therapy was an appropriate option for breast cancer patient Tina Fasano.

'weekend warrior' when it comes to physical activity, 37-year-old Tina Fasano loves to ski, cycle, and hike – this is on top of regular visits to the gym during the week and brisk walks along the Delaware and Raritan Canal near her Franklin Park, New Jersey, home. No stranger to muscle aches and pain, it was in March 2015 when she returned home from a ski trip and felt sore in her left armpit. At first she thought the pain may be related to skiing, but then she felt a lump there. Knowing her body well, "it just didn't feel right," Fasano notes. "If you find something, you need to question it and be an advocate for your own health. You have to learn how to check yourself and get checked." Fasano immediately called her primary care physician. Since she was not yet 40 (the age at which many practitioners recommend a woman receive a baseline mammogram), the mammogram she was sent for was her first ever. After reviewing the results, the radiologist suggested Fasano see a breast surgeon. After reading about top-rated breast surgeons, Fasano found Rutgers Cancer Institute of New Jersey and the Institute's Stacy Goldstein Breast Cancer Center. She made an appointment for further examination.

**BY MICHELE FISHER** PORTRAIT BY NICK ROMANENKO

"If you find something, you need to question it and be an advocate for your own health,"says Tina Fasano. "You have to learn how to check yourself and get checked."



After meeting with one of the surgical oncologists, Fasano had a fine needle biopsy and a breast MRI. With suspicious spots showing on the MRI, Fasano was sent for a more precise MRI-guided biopsy. The suspect areas of the breast examined through this latest biopsy came back negative for cancer, but there was still concern about the lump under Fasano's armpit. Surgery to remove the lump took place in mid-June 2015 followed by a second surgery a few weeks later to remove a larger margin of tissue around the suspect area and to perform a biopsy of the sentinel lymph nodes. "I knew in my heart it was breast cancer," Fasano recalls. One sentinel lymph node was found to be positive and she was diagnosed with stage II breast cancer.

By early July, Fasano met with Rutgers Cancer Institute's Chief Medical Officer Deborah Toppmeyer, MD, who is also the director of both the Stacy Goldstein Breast Cancer Center and the LIFE (LPGA pros In the Fight to Eradicate breast cancer) Center at the Institute and a professor of medicine at Rutgers Robert Wood Johnson Medical School. Dr. Toppmeyer worked out a treatment plan with Fasano. When it came to making treatment decisions "I felt like I was part of that team," remembers Fasano. Radiation oncologists (above, left to right) Sharad Goyal, MD; Atif Khan, MD; and Rahul Parikh, MD, associate medical director of proton beam therapy, inside the Laurie Proton Center. The proton therapy team works closely with each patient's surgeon and medical oncologist to create a comprehensive treatment plan.

From August to October 2015, Fasano underwent a chemotherapy regimen of taxotere and cyclophosphamide. Her "supportive second family" at the fragrance development company where she is employed enabled her to work during her treatment period. "We had a system of prioritizing emails, phone calls and projects. Thanks to my co-workers, I really didn't miss anything." While things remained mostly routine with work, there were some physical changes Fasano endured during this period, including the beginning of hair loss. Looking to find a positive in the experience, she thought "how can I help someone else?" Having her long mane sheared off, she donated her hair to a non-profit organization that provides hairpieces for children, teens and young adults who have suffered hair loss due to illness. Her energy level was hampered as well, but she pressed on. "Even on days when I wasn't feeling that great (from chemotherapy), I forced myself to at least walk along the canal." Being physically active during that time "was a hard thing to do if fatigue hit – but Dr. Toppmeyer told me to get out there and continue as much as I could with my exercise regimen."

### Fighting to be Fit

Being physically active is an important part of Fasano's life, so when chemotherapy was over and she met with radiation oncologist Sharad Goyal, MD, another member of the Stacy Goldstein Breast Cancer Center, to discuss further treatment options — she kept that aspect front and center. With Fasano's type of breast cancer, radiation therapy is a natural progression following chemotherapy — but what kind of radiation was the question.

"I was really concerned about my heart," says Fasano – and she conveyed that to Dr. Goyal. A University of Oxford study published in the March 2013 issue of *New England Journal of Medicine* concluded that the amount of exposure to the heart from ionizing radiation during radiotherapy for breast cancer increases the risk of dying from heart disease. This correlation is a concern Goyal often grapples with — especially with young, female, left-sided breast cancer patients like Fasano. Given the location of the internal mammary nodes, which are on top of the heart, Goyal explained Fasano would be a good candidate for proton since the therapy would result in a reduced amount of radiation exposure to the heart. "He sat down and showed me my radiation plans comparing samples (images) of proton therapy and (conventional) radiation therapy *(see photos below)*. He said in my case proton therapy would better protect my heart," recalls Fasano.

The Laurie Proton Therapy Center opened in mid-2015 at Robert Wood Johnson University Hospital (RWJ) in partnership with Rutgers Cancer Institute, Rutgers Robert Wood Johnson Medical School and private physicians in the community. The Laurie Proton Therapy Center is one of only three such centers in the state offering this type of radiation treatment – and one of only 18 or so in the entire country.

### **Unique Barrier**

When compared to conventional X-ray (photon) therapy, proton beams can be programmed to stop at a certain depth in tissue – much like putting up a fence or barrier. With traditional photon therapy, a certain location can be targeted, but the beams will penetrate adjacent healthy tissue along with the intended treatment area. With proton therapy, the beams can be directed to the precise spot of the cancer without going beyond the perimeter of the affected tumor site. In some breast cancer cases,

Comparison images of Tina Fasano's treatment area *(below)*. The colored portion in the left image represents the treatment field with proton therapy (just bordering the left lung), while the right image represents the treatment field with X-ray/photon therapy (overlapping part of the left lung and bordering the heart).





Lina Fasano, at a favorite spot along the Delaware and Raritan Canal near her Franklin Park home, is happy to share her story and willing to educate others about her experience with proton therapy — hoping this information can help others faced with the same challenge.

this means less radiation dose to the heart and lung. There is another benefit too. "Along with the advantage of controlling the depth of the radiation and thus eliminating exit dose, the dose profile of protons can be much more favorable in terms of sparing tissues along the beam path. Traditional X-rays release their maximum dose of radiation soon after penetrating the skin. With proton, the delivery of that radiation can be controlled to have maximum impact at the tumor site itself, thus preserving healthy tissue," says Rutgers Cancer Institute radiation oncologist Atif J. Khan, MD, who is the medical director of the Laurie Proton Therapy Center and an associate professor of radiation oncology at Rutgers Robert Wood Johnson Medical School.

"With so much physical growth in and around the academic medical campus of RWJ and Rutgers Cancer Institute, we are fortunate to have the ability to offer proton therapy here," adds Bruce G. Haffty, MD, professor and chair of radiation oncology at Rutgers Cancer Institute, Rutgers Robert Wood Johnson Medical School and Rutgers New Jersey Medical School. "Traditionally, the space needed for a proton therapy system is larger than a football field. We were able to secure a system (MEVION S250, manufactured by Mevion Medical Systems) that is much smaller and more practical than most others. The ability to offer this form of radiation treatment for cancer provides an alternate option for those patients with tumors in and around sensitive locations, such as the central nervous system, the heart or growing bones and organs in children," notes Dr. Haffty, who will take on the role of Interim Director of Rutgers Cancer Institute on April 1. "With the recent addition of our proton beam facility, we now have every available option in radiation technology at our facility here at Rutgers Cancer Institute and RWJ to be able to determine which modality is most appropriate such that the optimal radiation treatment can be delivered for each patient."

"The unique aspect of proton therapy means many of the longterm side effects of radiation treatment (heart disease, reduced lung function, or secondary cancers) can be significantly reduced, allowing patients to have an improved quality of life," adds Goyal, who is an associate professor of radiation oncology at Rutgers Robert Wood Johnson Medical School. "Our proton therapy team works closely with each patient's surgeon and medical oncologist to create a comprehensive treatment plan."

### The Path Back to Normal

F asano admits she had no knowledge of proton therapy prior to meeting with her radiation oncologist, thus spoke with her sister Jamie about it and asked this trusted confidant to explore it further for her. "She does the research in the family," Fasano muses. With their parents living out of state, Fasano says she is grateful for her sister and brother-in-law who live close by. "Jamie looked up everything for me. My sister is my rock. I am so lucky to have her."

With her sister's recommendation and learning more from Goyal that the targeted nature of the treatment would potentially protect her heart and reduce the risk of heart disease later in life, Fasano agreed to undergo proton therapy. Before proton therapy is delivered, a treatment plan - much like a contour or three-dimensional relief map showing surface configuration of terrain — is plotted out. Fasano was given a CT scan while placed in the exact position that she would receive her treatment. The lungs, heart and breast tissue were identified and mapped out, treatment fields were developed and the amount of radiation needed to treat the breast and lymph nodes was calculated. Taken into consideration are the "organs at risk." The aim is to avoid treating these areas as much as possible. For Fasano, that meant the heart, lungs and soft tissue. The treatment plan Goyal prescribed was 33 sessions - each lasting approximately 25 minutes - five days a week - with the last five days concentrated just on the node area. Typically, proton therapy begins four to six weeks following surgery or chemotherapy, and is given over a period lasting about six weeks.

While receiving proton therapy from mid-November 2015 to the start of 2016, Fasano worked even more at her job than she did while on chemotherapy. Halfway through proton, she had bouts of fatigue, "but the energy I had was different than when I was treated with chemotherapy. I felt better." In terms of appearance, she experienced very slight redness along her left shoulder and chest area. It looked like mild sun exposure — barely noticeable. Moisturizers, an over-the-counter pain reliever, rest when needed, and visits to the gym are what physically helped her through those two months.

But of course, cautions Goyal, the side effects of proton therapy are different for everyone, depending on the location of their cancer and previous cancer treatments. And despite the potential benefits of proton therapy — it is not for everyone, especially when it comes to breast cancer. "The ideal candidate in breast cancer cases is a younger patient whose cancer is in the left breast and needs to have their lymph nodes treated," says Goyal. "Bottom line, patients should speak with their radiation oncologist about all forms of radiation — proton therapy, X-ray (photon) therapy, brachytherapy as the location of the cancer, other existing health conditions and other factors will weigh in to the decision-making process. Weighing the risks and benefits of each type of radiation treatment is a judgment call that radiation oncologists have to make every day. Treating cancer is our primary objective, but a very close second is making sure that we protect everything else around it. Treatment decisions are very unique to every individual." "That's what I loved about proton — the exactness of it. It's amazing that it (the treatment) is so individualized. And for me — it worked with my lifestyle," says Fasano.

### Down the Road

With a majority of the nation's proton therapy centers having opened over the past decade, Goyal expects more studies on this modality to be completed in the coming years. While short-term side effects (those seen within the first three weeks of treatment) are similar between proton and traditional radiation therapy, he expects more studies to be conducted examining the differences in long-term side effects — the ones that come years after treatment. He adds that Rutgers Cancer Institute soon will be opening a study with other cancer centers to further explore the differences in cardiac outcomes between proton and traditional radiation therapy.

Fasano too is looking toward the future thanks to proton therapy. Thankful to have access to comprehensive care by the entire breast and radiation oncology teams at Rutgers Cancer Institute and RWJ, Fasano is back to seeing Toppmeyer. She is currently taking the oral medication tamoxifen, designed to block estrogen-fueled breast cancer cells from growing, and will be monitored for the next five to 10 years. Fasano says 2016 is a new year for her in a lot of respects. Now finished with a challenging part of her treatment, she's "focused on getting back to an active lifestyle and looking forward to buying a home." She's become involved in the Young Survival Coalition — a network of young women who have battled breast cancer — and attends the group's meetings. "It helps me with reality." She's happy to share her story and willing to educate others about her experience with proton therapy — hoping this information can help others faced with the same challenge. ■

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Liming is everything," says Tony Spadora, who was treated for Merkel cell carcinoma by specialist, Kianoush Sheykholeslami, MD, PhD, FACS, at Rutgers Cancer Institute of New Jersey. "As we get older, all sorts of things can happen to us. I am realizing just how lucky I am."

**BY MARYANN BRINLEY** Portrait by Nick Romanenko

# Perfect Timing

he diagnosis of a rare and highly aggressive type of skin cancer anywhere on your body is frightening enough but when it is found inside your nose, the road to a cure can look ghastly.

This was the situation for Tony Spadora of Union Township, New Jersey, in the summer of 2015. "Timing is everything," admits this happy, 62-year-old father, husband, grandfather and business executive. He's been with L'Oréal USA for 32 years where he is vice-president of corporate compensation. As he tells his story, he still can't put the word *cancer* front and center. "I don't even like typing the word when I'm saving files on my computer. I never thought of myself as being sick." But his wife Cathy interjects, "It didn't immediately sink in how serious this was."

> There was a tiny bump, less than a quarter inch, inside his left nostril and when his regular dermatologist wasn't available last May (2015) for his an

nual checkup, Spadora found another doctor. "This person didn't think it was remarkable but told me I'd need to see an ear, nose and throat (ENT) specialist to have it removed." A week after the bump was excised, the call came with the lab results. "The doctor was honestly surprised," recalls Spadora. "He wasn't that familiar with Merkel cell carcinoma, but he had researched it and found Dr. Howard Kaufman, chief surgical officer at Rutgers Cancer Institute of New Jersey, who is a leader in the field doing clinical trials on this condition." The words "rare and aggressive skin cancer tumor" were all that Spadora heard. A visit to Howard L. Kaufman, MD, FACS, who is also a professor of surgery and a professor of medicine at Rutgers Robert Wood Johnson Medical School, was the next stop.

Spadora's cancer journey hinges on a series of *what if's* so intricately timed that as he looks back, he is amazed. "As we get older, all sorts of things can happen to us. I am realizing just how lucky I am," he says. For six months, each medical step he took looks perfectly logical and predictable in hindsight but *what if* they hadn't occurred just when they did? His wife shares the scariest thought, "Some doctors told us that if it weren't for our specially trained surgeon, a part of Tony's nose might have been taken off." The timing was so perfect that when the couple first sat down to discuss Spadora's case with Kianoush Sheykholeslami, MD, PhD, FACS, in August 2015 after meeting with Dr. Kaufman, this doctor was so new to Rutgers Cancer Institute that his business cards hadn't been printed yet. A few weeks earlier and the two lives might not have crossed.

### Worldwide Journey

The Shey," as he is affectionately known, is the new Director of Head and Neck Surgery, Director of Trans-Oral Robotic Surgery and Co-Director of Skull Base Surgery at Rutgers Cancer Institute. He is also an associate professor of surgery at Rutgers Robert Wood Johnson Medical School and an attending physician at Robert Wood Johnson University Hospital (RWJ), which is the flagship hospital of Rutgers Cancer Institute. One of the few specialists in the world who is board-certified in otolaryngology/head and neck surgery as well as facial plastics and reconstructive surgery, along with sleep medicine, Sheykholeslami has taken a career path from Iran to New Jersey so long and winding that it includes a PhD in neuroscience studies from Tokyo University School of Medicine. It was a pursuit he began despite knowing hardly a word of Japanese.

A graduate of Shabid Babai Ghazvin Medical University where he earned his MD, Sheykholeslami was the emergency room chief at

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▲ n the past, patients would leave their first surgery with a big bandage for at least two to three weeks until they could get back in for reconstruction. I am equally good in all these specialties," says Kianoush Sheykholeslami, MD, PhD, FACS (right), the new Director of Trans-Oral Robotic Surgery and Co-Director of Skull Base Surgery at Rutgers Cancer Institute, and one of the few specialists in the world who is board-certified in otolaryngology/ head and neck surgery as well as facial plastics and reconstructive surgery, along with sleep medicine. one of the busiest Iranian hospitals by the time he was in his early 20s. But emergency medicine didn't interest him for the long-term. "I wanted to know what happened to my patients and be able to follow up on them," he explains. So Shey went looking for an international program that would include patient care as well as research.

When a friend in Japan studying for a PhD in ophthalmology opened a door there, Sheykholeslami left home for a three to six month observership in the ENT department of Tokyo University School of Medicine. He is fluent in Farsi, Azeri and Turkish. The woman sitting next to him on the airplane taught him, "Have a good day" and "Good afternoon" in Japanese. That was the sum of his Japanese language skills. But he persevered and taught himself Japanese and English by listening to the radio. Eventually he won a graduate scholarship and later earned another to continue his studies in neuroscience, neurotology and neurophysiology.

In Japan, Sheykholeslami earned his PhD in 2001, and continued with postdoctoral research on the auditory vestibular system and the metaphysiology of balance. "Hearing and balance were my areas and I actually invented a new technique called VEMP using boneconducted clicks delivered to the ears and recorded from the sternocleidomastoid muscle. We published extensively on that." Other international research brought him into contact with the Case





Western Reserve University Medical Center in Ohio, where he applied for a prestigious medical residency in otolaryngology, head and neck surgery and was told, "Good luck. Foreigners never get in." But, Sheykholeslami was successful. "It was very hard surgical training and I got really good hands-on experience. I ended up chief resident." Later, he added courses to his medical - surgical repertoire in Pittsburgh doing skull base work as well as obtaining board certification in sleep medicine. //Ţ

am tremendously grateful to Dr. Shey and the oncology team at Rutgers Cancer Institute for their skills," Tony Spadora says, "and to my family and friends for their prayers and support."

Along the way, he got frustrated. "I could take cancer out of my patients but I had to ask another surgeon to do the reconstruction for them." So in July 2014, he decided to add reconstructive and plastic surgery to his expertise. This brought him to New Jersey where he studied at Robert Wood Johnson. Sheykholeslami had just completed that training in June 2015 when he got the opportunity to build the head and neck cancer program at Rutgers Cancer Institute.

### Comprehensive Reach

Call it one stop shopping," he jokes describing the surgical experience at Rutgers Cancer Institute for patients with any kind of head or neck pathology. "In the past, patients would leave their first surgery with a big bandage for at least two to three weeks until they could get back in for reconstruction. I am equally good in all these specialties. My work is difficult, complex, time-consuming and there aren't a lot of people interested in doing this kind of thing. Here we have

a team of multi-disciplinary oncologists and reconstructive surgeons." This includes neuro-oncologists, medical and radiation oncologists, rehabilitation specialists for speaking, hearing, swallowing or eating and "we are also bringing a psychiatrist on board," he adds.

Among his first lucky patients at Rutgers Cancer Institute was Spadora, who recalls, "I was given three alternatives: Do nothing. Go immediately to radiation and chemotherapy. Or opt for surgery to remove the tissue that would be extensive. This surprised me. It was just common sense to have surgery first but I guess some patients are scared." Spadora, on the other hand, "just wanted to get this thing out." Sheykholeslami explained that it looked like the cancer had been caught early but the nature of skin inside the nose, which is mucosal and sensitive, made this a special case. "Merkel cell carcinoma is not supposed to be there," the doctor explains, "but once it happens, it's like melanoma and though it might be tiny, it can spread across your body. This is frightening for both patients and pathologists." Everyone has Merkel cells in their body. Exposure to sun is what usually makes them cancerous and they

look like a flesh-colored or bluish-red nodule then. In addition to sun exposure, many, if not all, Merkel cell cancers are associated with the presence of a virus that has been called the Merkel cell polyomavirus.

Before the surgery, Sheykholeslami described his plan. "Tell me again," Spadora remembers asking. His wife recalls, "A lot of doctors can be stiff and cold but you just feel Dr. Shey's compassion and patience. He told us that one reason he became a surgeon is that he used to sew his socks when he was a kid," she laughs. This doctor also promised to do his very best to preserve Spadora's nose. "He was very serious about that," she says. "People often tell me

### **Robert D. Aiken, MD: Putting Patients First**

Very day, Robert D. Aiken, MD (below), the new Director of Neuro-Oncology at Rutgers Cancer Institute of New Jersey, walks over to the

labs. "There are so many evolving therapies in germination now. In the past, it wasn't really clear that treatment apart from radiation was substantially better than chemotherapy plus radiation, but that has changed." Though the majority of his time is devoted to patient care and clinical trials, "my real interest is in the early developmental therapies, the really new ideas, being translated out of the labs."



want patients to have a whole network available with the best of standard care as well as the best

A recognized leader in brain cancer and neuro-oncology, Dr. Aiken joined Rutgers Cancer Institute in August 2015 for the opportunity to develop a comprehensive program within a National Cancer Institute (NCI)-designated center. He says when it comes to treating

well as the best of investigational care." investigational care." tor of the Comprehen-

sive Brain and Spine Tumor Program and Director of the Section of Neuro-Oncology at Rush University Medical Center in Chicago before joining Rutgers Cancer Institute. Happy to be back on the East Coast now, he spent 20 years in Philadelphia at Jefferson Medical College

best of standard care as

Aiken was the Direc-

patients, it is important to remember

"that a patient is part of a larger whole.

There is the patient. There are his or her

wishes and aspirations. And there is his

and was also on the faculty at Mount Sinai School of Medicine in New York. Here in New Brunswick, he is an associate professor of medicine at Rutgers Robert Wood Johnson Medical School. He's closer to family now and proximity to the cluster of pharmaceutical companies in New Jersey is also key. "I'm trying to develop a thrust in the brain tumor arena. A lot of cancers are more common and profitable but that doesn't mean it's not worthwhile to consider working on orphan brain tumors like glioblastomas. So part of my job is to convince these companies that developing strategies for orphan tumor therapies is potentially promising. Having them nearby makes it easier to follow up a telephone call with a personal visit." For him, Rutgers Cancer Institute means being "in the right place at the right time."

Aiken's research is supported by numerous philanthropic and health entities including Gateway for Cancer Research, Voices Against Brain Cancer and a recent \$10,000 gift from inVentiv Health.



A lot of doctors can be stiff and cold but you just feel Dr. Shey's compassion and patience. This doctor also promised to do his very best to preserve Tony's nose. He was very serious about that," says Tony Spadora's wife Cathy, who along with their children, friends and Spadora's "work family" gave him incredible support throughout his journey.

some from his ear to put inside. Then I took skin from his shoulder to reconstruct his ear."

In recovery later that afternoon, Spadora awoke to a labyrinth of plastic tubes inside and outside his nose, packing stitched and stuffed

everywhere, swelling, and the outside of his ear stapled to a bunch of gauze bandages. "The nurses mentioned they had never seen anything like it before," he laughs. He spent several uncomfortable weeks recovering. He didn't really sleep well those first few nights. And two months later, he was still sore. But Cathy Spadora says, "He looks so good that no one would ever understand how bad it was."

At the follow-up appointment, Spadora was told that there was no need for radiation or chemotherapy. He was cured. "I am tremendously grateful to Dr. Shey and the oncology team at Rutgers Cancer Institute for their skills and to my family and friends for their prayers and support," he shares.

"Dr. Shey is a big guy and I asked him, 'How did you get inside my nose to do everything in there?' His response, 'Would you like to see the pictures I took?'" but this patient respectfully declined. "I'll continue to get regular scans for a couple of years and there will always be a little bit of doubt in the back of my mind whispering, 'Is this thing going to come back?'" he admits, "but I trust these doctors."

son David is 25 and lives in New York City pursuing a career in the entertainment industry as an actor/musician. "What a pleasant, supportive family," Sheykholeslami says. "His wife was always there for him."

that I don't look my age, but frankly, that was the least of my

concerns," Spadora adds. The couple has two sons: Dan, 30, is a

social media manager and married to Maggie, a financial services manager. They have two young children, Michael and Abigail. Their

### Right Hands, Right Time

O n August 30, 2015, before the procedure, Spadora's nose was injected four times, twice inside and twice outside, with a chemical to track cancer cells that might have spread. "That was painful," he recalls. Sheykholeslami planned to take out nodes in Spadora's neck if needed. The good news: there was no spread. So in a four and a half hour procedure, Sheykholeslami cleared the original area of the tumor cutting away any remaining cancer and then reconstructed the nose. "The nose needs cartilage so I borrowed



# Wind Beneath His Wings

hen David Walther was diagnosed with acute myeloid leukemia, he put his trust in the expertise of those in the Blood and Marrow Transplant Program at Rutgers Cancer Institute of New Jersey and its flagship hospital Robert Wood Johnson University Hospital (RWJ). But he had no idea at the time that his recovery also would depend on the generosity of a total stranger on the other side of the country — an 'angel' who is now considered 'part of the family.

he ride home from his job as a supervisor in the New Jersey Department of Military and Veterans Affairs in March 2013 was typical at first - until the searing pain in his left arm hit. David Walther wondered, "Am I having a heart attack?" That scare immediately prompted this grandfather of two to go to his local hospital, where they kept him overnight for observation and a bone marrow biopsy due to low blood counts. Discharged the next morning, Walther resumed his normal activities, assured that his heart was fine. A few days later, however, he received the call that he had acute myeloid leukemia (AML). "They told me to stop what I was doing and immediately get to New Brunswick, where they had arranged for me to meet with Dr. Roger Strair. They gave me instructions as to what to do if I developed a fever or started bleeding on the drive there. I had always been vigilant about my health. I had no symptoms. The news was numbing," the 70-year-old Walther recalls.

BY MICHELE FISHER PORTRAIT BY NICK ROMANENKO



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would not be where I am today were it not for the love and support of my wife, Myra, and the excellent care of my doctors at Rutgers Cancer Institute," says David Walther.

Roger Strair, MD, PhD, leads the Blood and Marrow Transplant Program at Rutgers Cancer Institute, where he collaborates with a team of experts focused on cancers of the blood – including hematologist/oncologist, Vimal Patel, MD, who was brought in on the case. Both physicians are faculty members at Rutgers Robert Wood Johnson Medical School.

AML is a cancer of the blood and bone marrow. The "acute" in AML refers to the fast progression of the disease. It is a "myeloid leukemia" because it affects a group of white blood cells called myeloid cells that normally develop into various types of mature white blood cells, red blood cells and platelets. AML develops due to genetic changes in a precursor cell of myeloid lineage. These changes alter normal growth and differentiation of these cells, resulting in an accumulation of large numbers of abnormal, immature myeloid cells in the bone marrow and peripheral blood. The consequence is a constellation of signs and symptoms that may mimic the flu such as fevers, bone pain, lethargy, fatigue, shortness of breath, infections, easy bruising and unusual bleeding. The most common type of acute leukemia in adults, AML can progress quickly if not treated.

Dr. Patel would first put Walther on induction chemotherapy to kill the leukemia cells in the blood and marrow in order to put the cancer in remission. But that's only the first step. Post-remission therapy is then administered to kill any remaining leukemia cells that could pose a risk for a relapse, but not every patient will respond favorably to the same treatment. "We learned from Dr. Patel that David needed to be in the hospital for the next 31 days," recalls Walther's wife Myra. "The gravity of those words was not lost on us." Admitted to RWJ under the care of the Rutgers Cancer Institute team, Walther was started on induction therapy consisting of two standard chemotherapy agents, idarubicin and cytarabine. The aim was to kill off the cancer cells so Walther's healthy white blood cells could develop. "Early during the induction chemotherapy, we received genetic data from the leukemia cells," explains Patel. "In Mr. Walther's case, we found multiple complex chromosomal abnormalities which portends an unfavorable prognosis. It was clear that post-remission chemotherapy alone would not reduce his risk of relapse. What he needed was a bone marrow transplant — the help of someone else's healthy, leukemia-free stem cells that would replace the unhealthy marrow and produce immune cells capable of fighting the leukemia.

Transplant Coordinator Mary Kate McGrath, MSN, RN, APN-C, OCN, BMTCN, got to work on finding a suitable donor through the National Marrow Donor Program registry — a process that often takes some time. "Given that Mr. Walther is Caucasian, the odds were better for finding the right candidate," notes Patel, adding that despite 12.5 million selfless volunteers who stand ready to be a bone marrow donor in the Be the Match Registry, not all populations are as fortunate in finding a match (*see sidebar, right*). While the process of locating a matched donor continued, Walther received an additional two cycles of chemotherapy — stretching his 31 days to 92 over the next five months.

### Trisha's Story

A round 1996, Trisha Marchant learned of a child in her Utah neighborhood with an immunodeficiency disease known as Wiskott-Aldrich Syndrome, for which a bone marrow transplant is the only known cure. This neonatal intensive care nurse was inspired to put herself on the national bone marrow registry. Fast forwarding 17 years she learned a friend was diagnosed with AML. It made her think about the registry and wonder if they still had her on the list. Just three weeks later, she received the devastating news that her friend had passed away. "It was on that very day I received a call from the registry saying my tissue was a match for a candidate. It was meant to be," remembers a tearful Marchant. "My husband and four sons were on board with my decision and" — at 48-years old — "I began the process with some blood tests in May (2013)."

Donors and patients are matched by their specific human leukocyte antigen (HLA) types, which is very different than matching blood types. The best outcomes happen when a patient's HLA and the HLA of the donor is a close match. HLA is a protein or marker found on most cells of the body. The immune system uses HLA markers to

### **Three Minutes**

Vimal Patel, MD is David Walther's hematologist/oncologist. He notes an incredible need for bone marrow/stem cell donors.



hree minutes. That is the length of time that elapses before another person is diagnosed with a blood cancer in the United States. For those diagnosed like David Walther, their lives will be irrevocably changed.

Blood cancer is an all-inclusive term for

malignancies of the blood, bone marrow or lymph nodes that affect normal blood cell production or function. As these malignant blood cells proliferate, they cause life-threatening damage to the hematologic and immune systems.

Many patients will need months of intensive chemotherapy and for others, the best chance at survival will be a stem cell transplant. This potentially lifesaving therapy is a form of immune therapy that works with the donor stem cells (from the bone marrow, peripheral blood, or umbilical cord) giving rise to a new immune system having the potential to view the cancerous cells as foreign and leading to their eradication.

About 30 percent of patients in the United States will be able to find a matching donor within their families, but 70 percent nearly 14,000 each year — must rely on the selflessness of a stranger to donate their stem cells. The unrelated-donor registries of adult volunteers and banked umbilical cord-blood units, such as the Be the Match Registry operated by the National Marrow Donor Program (NMDP), provide potential sources of donors. The NMDP has grown to include over 12.5 million volunteers and more than 200,000 cord-blood units.

Despite this, six of 10 patients will be unable to find a suitable donor. The probability is even lower for those of diverse ancestry (African Americans, Native Americans, Alaskan natives, Asians including South Asians, Pacific Islanders including Hawaiian natives and Hispanics). This is due to the genetic variability within these ethnic/race groups and the under-representation of these groups in the registries.

Clearly there is a need to recruit additional donors into the registries. Registering is easy and requires mailing back a swab of cheek cells that are used for tissue typing and matching. On average, one in 500 members will be selected to donate their stem cells — a potentially lifesaving measure. To learn more, visit BeTheMatch.org.

(Sources: BeTheMatch.org and Gragert et al, 2014, HLA match likelihoods for hematopoietic stem cell grafts in the U.S. registry, 'New England Journal of Medicine,' 371:339-48)

know which cells belong in the body and which do not. There are more than 13,000 HLA markers which results in an infinite number of combinations for one person. What is critical to a successful transplant however, involves the matching of only certain markers. An ideal match would be a match at a minimum of eight basic HLA markers. A close match is essential for the engraftment of new healthy cells and reduces the risk of a post-transplant complication called graft-versus-host disease (GVHD). Some transplants can move forward with a lower number match, but overall survival may not be as favorable, says Patel. Marchant was an eight out of eight HLA match. It was determined that she would give peripheral blood stem cells – a type of stem cell transplant that is similar to bone marrow or umbilical cord stem cells but different in how the cells are harvested.

The closest collection agency to Marchant's Utah home was in Berkeley, California. But before the harvesting, which is a non-surgical process also known as apheresis, Marchant underwent a five-day preparation that included injections of a medicine to boost the production of blood stem cells. On the day of the donation, blood was removed through a needle in one of Marchant's arms and passed through a machine that separated out the stem cells. The remaining blood returned to her via the other arm. "I think people have the misconception that surgery is involved — it's not. It was really no different than giving blood or platelets, with the exception that it lasted about five hours. My bones felt slightly achy afterwards, but that was it," she shares, adding the preparation was simple too. One thing she thought was interesting "was that they actually asked me to refrain from skydiving!" "There's a good reason for that," interjects Patel. "It's a leap of faith," he says, (no pun intended) "because part of the transplant involves a conditioning regimen where we kill the patient's

### NEW! Bone Marrow Transplant Support Group

Had an allogeneic bone marrow transplant? Want to talk to other people who "get it?" Come to our newest support group for patients who are post allogeneic (donor cell) stem cell transplant. This new group meets twice a month (one afternoon/one evening). Registration is not required. For additional information, call Lauren Kriegel, MSW, LSW at 732-235-8522. (diseased) marrow cells with chemotherapy before the donor cells are even harvested. We're counting on the donor's stem cells to come in — so if there is an accident that delays or prevents the harvesting of these cells, the outcome is most likely grave." Marchant recalls being told, "If you back out, the patient will die."

### The **Big** Day

The Walthers were informed of a matched donor. Keep in mind, there was no face or name to put with this person — just the knowledge that someone out there was generous enough to give of themselves in this way — "an angel," says Walther. They were grateful. Due to confidentiality policies, donors and recipients are not permitted to have direct contact with each other for at least one year, however each case is unique and waiting periods may even be longer.

On August 6, 2013, a nurse came into Walther's room with a small ice cooler containing the harvested cells and told him they would soon be ready for the transplant. The cells would be infused into Walther's body much the same way as they were collected from Marchant. "I thought there would be more to it. When she brought the little cooler in, I thought it might be her lunch!" acknowledges Walther's wife with a laugh.

But before the infusion took place, the cells were taken into the lab and evaluated to see how many stem cells there were and if they were in good condition. Prior to the infusion, Walther received chemotherapy over the course of a few days — designed to cleanse his bone marrow, suppress his immune system, and kill any remaining leukemia cells so that the body would be less likely to reject the new stem cells. This was followed by the infusion — a 30-minute procedure in which the harvested stem cells are transfused into the recipient. It takes about two weeks for those newly-infused cells to grow and develop into mature blood cells. Some of these immune cells become not only infection fighters but also leukemia fighters in the recipient to reduce the risk of the disease relapsing.

For the most part, Walther responded well, says his doctor. Walther visited with Patel and the team twice a week for the first 100 days. He was placed on immunosuppressive medications designed to calm the donor cells, as "they can be feisty at first," shares Patel. Those first 100 days were a bit challenging, as Walther experienced fatigue, hair loss, and changes to his skin. "We had to keep our home extremely clean to avoid infection and to adhere to dietary restrictions and strict food preparation guidelines," adds his wife. Six months into his recovery, Walther had his first bout of graft-versus-host disease; however, with



the careful monitoring by Patel, his symptoms were well managed. "I would not be where I am today were it not for the love and support of my wife and the excellent care of my doctor."

### A Special Anniversary

Archant received a one-month update from the registry letting her know her recipient was doing well. Still — no names were attached. One year post transplant, Walther was still doing well and he and his wife were eager to connect with the donor. Bone marrow transplant coordinator Jackie Manago, RN, BSN, BMTCN, reached out through the registry, gaining Marchant's information and contacted her. She received a quick response back. "We sent flowers to Trisha," recalls Walther's wife. "We wanted that first contact to be meaningful." E-mails, letters and texting soon followed. Walther then called, leaving a message for Marchant who was not home at the time. "It was hard for him to make the initial call," says Myra Walther. "It was extremely emotional for him. I listened in. He said 'I love you' at the end." "I played that voicemail over and over," Marchant fondly remembers.

Special gifts to one another to "break the ice" were sent – and Marchant hung a photo of the Walthers in her home. "I now have family in New Jersey," she says. The bond grew even more when Mrs. Walther casually mentioned to Marchant that she was planning a special party in New Jersey in August 2015 to mark the two-year Exactly two years to the day of the transplant, donor Trisha Marchant (above, third from right) flew from Utah to New Jersey to meet the recipient, David Walther (third from left) and his wife Myra (second from left). After finally meeting, they had a mini-reunion with David Walther's care team at Rutgers Cancer Institute of New Jersey: Mary Kate McGrath, MSN, RN, APN-C, OCN, BMTCN (far left); Vimal Patel, MD (second from right); and Jackie Manago, RN, BSN, BMTCN.

anniversary of the transplant. Marchant asked if she could fly in from Utah to surprise him. "I was overwhelmed at her graciousness and the prospect of having the opportunity to thank her face to face for this precious gift of life," says Mrs. Walther. So, exactly two years to the day of the transplant, donor and recipient finally embraced at the airport. They spent five days together, learning about each other and the bond that they now share.

Marchant jokes with Walther that he needs to remember he has some of her T-cells now – a type of white blood cell important to the immune system. "'T' not only stands for 'Trisha,'" she muses, "but also for 'together.'" An unintended pairing, this duo of donor and recipient has expanded the definitions of 'together' and 'family' — and 'angel.' "It's amazing to me that something so simple saved someone's life," notes Marchant. "I would do it again."



### Always Up to the Challenge

**Serving** as a member to numerous advisory and foundation boards for a variety of healthcare-related entities in the greater New Brunswick area for the past several decades, retired Johnson and Johnson executive **Robert E. Campbell** is quite familiar with fast-paced growth and development. But to watch a first-of-its kind, fledgling cancer center in the state catapult itself to prestigious recognition by the National Cancer Institute in its first few years, maintain and broaden its designation and continue with steep trajectory advancement after only 20-plus years is "incredible," says Campbell.

Credited among a group of healthcare, industry and civic leaders that laid the groundwork for the concept of Rutgers Cancer Institute of New Jersey in 1991 (the center physically opened as a storefront operation on George Street in New Brunswick to begin seeing patients in October 1993), Campbell notes a great leadership team and organization were created under the Cancer Institute's first director **William N. Hait, MD, PhD**, and its legacy of growth



Robert E. Campbell (far left) at a Rutgers Cancer Institute of New Jersey Gala launch reception at the home of Rutgers University President Robert Barchi this past fall. From left: Campbell; Rutgers University President Robert Barchi, MD, PhD; Rutgers Cancer Institute Director Robert DiPaola, MD; and Janssen Pharmaceuticals Global Head of Research and Development and Rutgers Cancer Institute former Director William N. Hait, MD, PhD.

continued under the "admirable guidance" of Dr. Hait's successor, **Robert DiPaola**, **MD**. "People inevitably come and go, but it's the center itself that remains steadfast. This is attributed in part to the leaders assembled in those early days (many of whom still are at Rutgers Cancer Institute) along with all of those who have joined the team since then. Their dedication and vision have allowed for the continued, steady success of the center ensuring its bright future," observes Campbell, who sits on the Institute's Director's Advisory Board.

The structure created led to collaboration with medical institutions, academia, foundations, the pharmaceutical industry and other cancer-related entities across the state and nationwide resulting in the development of world-class research programs, cutting-edge therapies and comprehensive advanced care so that New Jersey patients could remain close to



home. Wanting to "keep that momentum going," Campbell and his wife Joan have made a \$1 million challenge gift to support Rutgers Cancer Institute for the upcoming **Rutgers Cancer Institute of New Jersey Gala**. The aim of the event is to raise an additional \$1.5 million totaling \$2.5 million to support the four strategic research priorities of the institution: genomic science, immunotherapy, cancer metabolism and cancer disparities. The couple's generous gift will be leveraged to ensure the success of not only the event, but also the strategic priorities of the Rutgers Cancer Institute.

Having been involved with Rutgers Cancer Institute since its inception, there certainly is an "emotional tie" for the Campbells in giving the gift, but he says the aim is to present a true challenge to others and "to create a goal in the minds of individuals to motivate them to support the center. If they see someone else coming forth, they may be encouraged to give as well. It is important to set goals and benchmarks (when it comes to fundraising). When a goal is reached, there's a sense of accomplishment and progress being made." Campbell and his family have been part of the center's

### **Future Investment**

The American Cancer Society has awarded Rutgers Cancer Institute of New Jersey a \$360,000 Institutional Research Grant to support the development of its future cancer researchers at the center. Attending the check presentation were leaders representing both institutions. (From left) Frank Mascia and James McGovern, American Cancer Society; Robert DiPaola, MD, Rutgers Cancer Institute; Michael Nissenblatt, MD, American Cancer Society; and Christopher Molloy, PhD, RPh, Rutgers University. longtime progress, having made their first charitable gift upon formation of the Cancer Institute of New Jersey Foundation in 1996 and have been generous benefactors since then. The center's Campbell Family Pavilion was named for the family in 2002.

What accounts for this charitable nature? It comes from "being sensitive toward other people and realizing that if one has the benefit of health or wealth or education, there is an obligation to give back to society," shares Campbell. His parents weren't wealthy, but they were "caring and respectful of others." Campbell took careful note, also learning it's not all about giving financially. "I learned people can give in different ways - such as time and effort - and still make a significant difference." With that, Campbell and his family not only give back to the community through their family foundation but also through their involvement on various boards and by spearheading events such as the Rutgers Cancer Institute of New Jersey Gala.

Named to the newly established Founders Circle — designated for those considered pillars of Rutgers Cancer Institute since its inception — Campbell (who is co-chairing the Gala with Hait) has a key task: foster relationship building. "Maintaining and establishing new relationships with regard to Rutgers Cancer Institute is exceedingly important," notes Campbell, adding that leveraging the vast networks of those community leaders, executives and top fundraisers named to the Founders Circle will further strengthen Rutgers Cancer Institute's ability to grow and provide opportunities to create and accelerate relationships in cancerfocused areas throughout the state and beyond for years to come. "I'm proud to be a part of it."

For additional information, visit cinj.org/gala.

### Supporting New Discoveries

**Rutgers** cancer Institute of New Jersey Associate Director for Translational Science Shridar Ganesan, MD, PhD (below), was recently recognized by the Fifth District AHEPA Cancer



Research Foundation at the group's 26th Annual Gala. He received the Foundation's "Axios Award" for his contributions to cancer research and notes he is "grateful" for the Foundation's support. Other team members honored

include medical oncologist **Kim Hirshfield**, **MD**, **PhD**, of the **Stacy Goldstein Breast Cancer Center** and its Director and Rutgers Cancer Institute Chief Medical Officer **Deborah Toppmeyer**, **MD**. They were awarded a \$20,000 grant for their study of triple-negative breast cancer. This brings the AHEPA Foundation's total giving to Rutgers Cancer Institute to \$259,000. ■

### Driving to the Hoop for a Good Cause



Rutgers Men's Basketball Coach Eddie Jordan (left) poses with the Scarlet Knight at a pre-season tip-off event that benefited pediatric cancer research at Rutgers Cancer Institute of New Jersey.



A 'Compass' in Compassionate Care

### Undergoing surgery for a

gynecologic cancer is a trying experience in itself, but having to deal with the precise coordination of care leading up to the procedure and following can be daunting. Recognizing a great need to better assist cancer patients undergoing this form of treatment, **Leslie Logan Taylor** (*right*) – a member of the Rutgers Cancer Institute of New Jersey Director's Advisory Board and former chair and founding member of the Cancer Institute of New Jersey Foundation Board of Trustees – has provided the inaugural gift for a gynecologic oncology nurse navigator

to help these patients and their families with their journey.

The role of the nurse navigator is to enhance patient services, remove barriers to care, and improve patient care coordination. This assistance can run the gamut – from aiding with the scheduling of appointments, tests and procedures to identi-



fying and facilitating appropriate support services for patients and family members to educating about treatment options, medications and side effects. **Edite Valentim RN, MSN** (*left*), was brought on to the gynecologic oncology team as the program's nurse navigator to help patients with these important aspects of care.

Jacqueline Aiss is just one of numerous patients to benefit from the patient navigator services. "As scared as I was of my cancer diagnosis, I was relieved to find out there



### **Thank You!**

Members of the Steven A. Cox Foundation board, along with Shabbar Danish, MD, and Robert DiPaola, MD, of Rutgers Cancer Institute of New Jersey, and keynote speaker Kelsey Flanigan at the 26th Annual Cox Charity Classic at National Golf Club in Basking Ridge, New Jersey, this past fall. This year's event raised \$60,000 for several initiatives at Rutgers Cancer Institute. The group will tee off again October 3. Learn more at CoxCharityClassic.com. was a navigator that I could phone at any time with my questions. Whenever I was not sure what to do, I called Edite. She either answered right away or found out the answer the same day for me. She came to see me whenever I had treatment and assisted me in scheduling my tests when I had issues with my insurance. I felt she cared. It made me feel so much better," notes Aiss.

"It is an honor to assist patients and their families as they navigate through the difficult times they face from diagnosis through survivorship by providing knowledge and support to regain their physical and emotional strength. I am grateful to have such a wonderful opportunity to make a positive impact on the lives of our patients and their loved ones by paving an otherwise complex road into a smooth one and setting them on a path of physical and emotional wellness," shares Valentim.

The reasoning behind Taylor's gift for the nurse navigator position is something that hits close to home. "My sister had breast cancer when she was in her early 30s and married with three very young children. There is no cancer history in our family so it was an enormous shock," Taylor recalls. "She lived in Connecticut - only 30 minutes from New York City where there is excellent cancer treatment available. But she was intimidated by the complexity of her treatment plan and those institutions and fearful of the impersonal care she might receive there. There were no nurse navigator programs then. She couldn't imagine how she could manage everything, thus chose to receive her treatment in her local community hospital. We were afraid it was the wrong choice made for the wrong reason. Happily she is well and completely cancer free today but it could have had an entirely different and worse ending. The Nurse Navigator Program is a 21st century answer to a dilemma like my sister faced so many years ago."

Taylor also was inspired by the care given by Cancer Institute gynecologic oncologists **Darlene G. Gibbon, MD**, and **Lorna Rodriguez, MD, PhD**, to her family's "Nana Rose" when she was diagnosed with ovarian cancer. "They always addressed Rose's non-medical needs," says Taylor. "Dr. Rodriguez would come out to the car on a bitter cold day to give Rose a hug and words of encouragement. Dr. Gibbon and Rose would speak almost like mother and daughter about Rose's worries. They know that medicine and treatment only goes so far and that the entirety of a patient's plan is daunting. Our family's decision to help launch the navigator program was sparked by their absolute dedication to the whole patient."

"As a National Cancer Institute-designated Comprehensive Cancer Center, Rutgers Cancer Institute of New Jersey is not only committed to research, prevention and treatment but also to education and providing the full continuum of care for our patients. Thanks to Leslie's generous support, the patients in our program will have the ability to access resources and services in a timely and less stressful manner so that they may instead focus on improving their health," notes Dr. Gibbon, who is the chief of gynecologic oncology at Rutgers Cancer Institute and an associate professor of obstetrics, gynecology and reproductive sciences at Rutgers Robert Wood Johnson Medical School.

Taylor, a long time healthcare advocate, served 15 years on the Robert Wood Johnson University Hospital Board of Directors and in addition to the Rutgers Cancer Institute Advisory Board also serves on the PSEG Children's Specialized Hospital Foundation Board of Trustees. She is hopeful the Nurse Navigator Program will be an assist to patients and stimulate others to support it. "A line from one of our family's favorite movies is 'what we do in life echoes in eternity.' We hope our gift in a small way eases the experience for those whose lives were changed forever with the words 'you have cancer' by making their personal treatment process a well-charted path guided by people, like those at Rutgers Cancer Institute, who care about the person inside the patient," she notes.

### **Cycling Strong**



Supporters of the Century for the Cure bike ride came out to Rutgers Cancer Institute of New Jersey recently to celebrate the record-setting \$275,000 raised at the 2015 event held this past fall. Ride founder Scott Glickman (above, left) presented a check to Rutgers Cancer Institute Chief of Hematologic Malignancies Roger Strair, MD, PhD, whose research benefits from this effort. And be sure to get involved with the upcoming 12th annual ride slated for September 18. Registration is now open at CenturyForTheCure.com.

### Health and Wellness

A special thanks to **Stop and Shop**, which provides healthy snacks for the monthly **Employee Wellness Program at Rutgers Cancer Institute of New Jersey**. Whether it's a yoga class, tips on stress relief or a class on good nutrition, the Employee Wellness Program provides our team members with the tools they need to remain healthy and fit.



## Rutgers Cancer Institute of New Jersey Network Spotlight



## The

Rutgers Cancer Institute of New Jersey Network of hospitals offers its patients access to the latest cutting-edge cancer therapies and state-of-the-art cancer care available only at NCI-designated Cancer Centers and their networks, while helping patients remain close to home. For more information, visit cinj.org/network. Breast Cancer Survivor Finds Hope at Meridian Cancer Care



**AS** a wife and mother to a 12year-old daughter, Sandra Doyle Ferullo has regular mammograms and maintains her health. When she found a breast lump two years ago, additional mammograms and ultrasounds didn't show anything unusual, but instinct told her to look further. A biopsy revealed that Ferullo had stage IV breast cancer. Even more devastating was learning that it had spread to her lymph nodes, liver and other areas.

"When I was first diagnosed, I said 'I hope I choose the right doctors. I hope I get the best treatment plan. I hope I choose the right facility'," says Doyle Ferullo. "The reality is I found all of those things through **Jersey Shore University Medical Center**."

Having a stellar team that would work

Sandra Doyle Ferullo (right) and Denise Johnson-Miller, MD, FACS, medical director of breast surgery for Meridian Health.

collaboratively was a key factor in Doyle Ferullo's fight. The Meridian Cancer Care team of experts in breast surgery, medical oncology, radiation oncology, plastic surgery, and nurse navigation prospectively reviewed her case and determined the best treatment plan.

From the moment Doyle Ferullo met breast surgeon **Denise Johnson-Miller, MD, FACS**, and **Kenneth Nahum, DO**, she knew she was in good hands. "My hope turned into a reality with the entire team that has supported and guided me throughout this journey," notes Doyle Ferullo.

### Robert Wood Johnson University Hospital Somerset: 3-D Mammography Promotes Early Detection



**Diagnosed** with breast cancer in June, Mary Alden says she feels "lucky."

"Lucky" because she was one of the first patients at **Robert Wood Johnson University Hospital Somerset** to have a 3-D mammogram at the **Sanofi US Breast Care Program at the Steeplechase Cancer Center**. This new state-of-the-art technology helped radiologists diagnose the lump – which was only 1 centimeter in size and was too small to feel – as stage I invasive ductal carcinoma. Because it was found in its earliest stage, it had not spread to the lymph nodes.

The 61-year-old Alden was able to have a breast-conserving lumpectomy to remove the cancer, rather than a mastectomy to remove the entire breast. Her radiologist **Myra Wedmid, MD**, co-director of the Above: A patient undergoes a mammography with the new 3-D equipment at Steeplechase Cancer Center.

Sanofi US Breast Care Program, says Alden's lesion didn't look suspicious on a 2-D image, but on the 3-D mammography it was "very obvious" that the mass was abnormal.

"It's possible by the time it showed up on a standard mammography, it would have been a larger lesion," she says. "3-D mammography detects more invasive breast cancers than standard mammography because it provides clearer images and more accurately shows the size and shape of abnormalities. It gives me more confidence as a radiologist in determining whether something looks cancerous or benign."

For more information about breast cancer services at the Steeplechase Cancer Center at Robert Wood Johnson University Hospital Somerset, visit SteeplechaseCancerCenter.com.

"When I was first diagnosed, I said 'I hope I choose the right doctors. I hope I get the best treatment plan. I hope I choose the right facility.' The reality is I found all of those things through Jersey Shore University Medical Center."

- Sandra Doyle Ferullo

that an immediate course of chemotherapy drugs were the first line of attack followed by a double mastectomy. Today, she remains on chemotherapy and is in the final stages of reconstruction. "I lost my father to lung cancer when I was 10 years old, and I am determined to win this fight and be here for my family," says Doyle Ferullo. "I am very thankful to Dr. Johnson-Miller and everyone at Meridian "

The multi-disciplinary team determined

Doyle Ferullo recently shared her inspiring story during the groundbreaking ceremony for the new cancer center at Jersey Shore University Medical Center. The project is part of a larger commitment, where Meridian is 'BuildingHope' with a three-year investment of \$128 million towards community-based cancer services at six locations in Monmouth and Ocean counties.

Learn more at MeridianCancerCareNJ.com.



### **Christina Fichner**

With a communications degree in hand from Kean University, Christina Fichner was already taking the world by storm, having been recruited as a sales representative for an apparel company right after graduation in 2011. It was on a business trip in December 2013 that a bout with the flu uncovered concerns with a low white blood count. A few months and a few routine blood tests later, it was recommended she have a bone marrow biopsy. In March 2014, she heard the words that would change her life: "You have cancer." Referred to the care of Rutgers Cancer Institute of New Jersey hematologist/oncologist Dale Schaar, MD, PhD, and colleagues, Fichner was treated for acute myeloid leukemia (AML) through a pediatric clinical trial and a stem cell transplant. Now considered 'cancer free,' this 26-year-old woman is rebuilding her life - starting with new career aspirations. She's back in school, studying to become a nurse.

### **Q:** Why nursing? Is it related to your diagnosis?

A: Yes. Before I was diagnosed with leukemia, I was terrified of needles. I thought, "How ironic. The girl that is afraid of needles and blood has a blood cancer." Needless to say, I have overcome that fear and have returned to school to study to become a nurse. My main focus is oncology. You really learn a lot being a patient, and now I understand so much more about the tests, results and diagnoses that I receive.

Save the Date! **Rutgers Cancer** Institute of New Jersey ANNUAL Guest Speaker: Sunday, June 12th at the Hyatt Regency New Brunswick





### **Q:** What have you learned throughout your journey?

A: Life can change in an instant. Never take a single moment for granted - and to always have a positive attitude/outlook. Not that I ever doubted my treatment or diagnosis, but I do contribute my recovery and outcome to a positive mind and a great support system. I couldn't have done it without all those wonderful people cheering me on — including my parents, brother and best friend Jordan, along with Mary Kate McGrath, MSN, RN, APN-C, OCN, BMTCN, and Laura Ciavolino, APN, and other nurses, doctors and staff in the **Blood and Marrow Transplant Program.** 

### **Q:** What is some advice you might offer to others faced with the same battle?

A: Fight, fight, fight! Never lose hope. Keep smiling, even on the bad days. Tell yourself that you're going to stay strong. It will be the hardest obstacle you will ever overcome in your life, and you'll never sweat the small stuff ever again. You're stronger than you think. And when you're having a bad day or moment, don't be ashamed to cry. Let it out and move on. Don't dwell on something you cannot control. And again, keep a positive outlook. Your mind is a powerful tool.

Fichner celebrated her one year post transplant anniversary in September 2015 and was honored during that time by the Leukemia and Lymphoma Society as the 2015 'Light the Night Hero' for Morris Plains. Over the past year, she has shared her experience before numerous audiences and is pleased to share her story with 'Cancer Connection' readers. Fichner is also a hospice volunteer, and when she's not busy studying, she enjoys watching football and hockey "and of course shopping!"

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### Simple Pleasures

onsidered J to be in pretty good health through the years, David Walther never expected a cancer diagnosis. But thanks to the generosity of a stranger on the other side of the country, Walther is doing well and back to enjoying the simple things in life, including a favorite pastime of following the Rutgers University football team. Learn more about Walther's journey on page 20.

