



MOMENTUM

PORTRAITS OF HOPE, INNOVATION AND TRIUMPH

RESEARCH GRANT WIN

Big news in the treatment of melanoma

REMARKABLE DISCOVERY

New molecule is showing big promise

FUELING THE FIGHT

NFL Hall of Famer Bob Griese is back in the huddle



Alan F. List, M.D.
President & CEO
Moffitt Cancer Center

MOFFITT MOMENTUM

INAUGURAL ISSUE

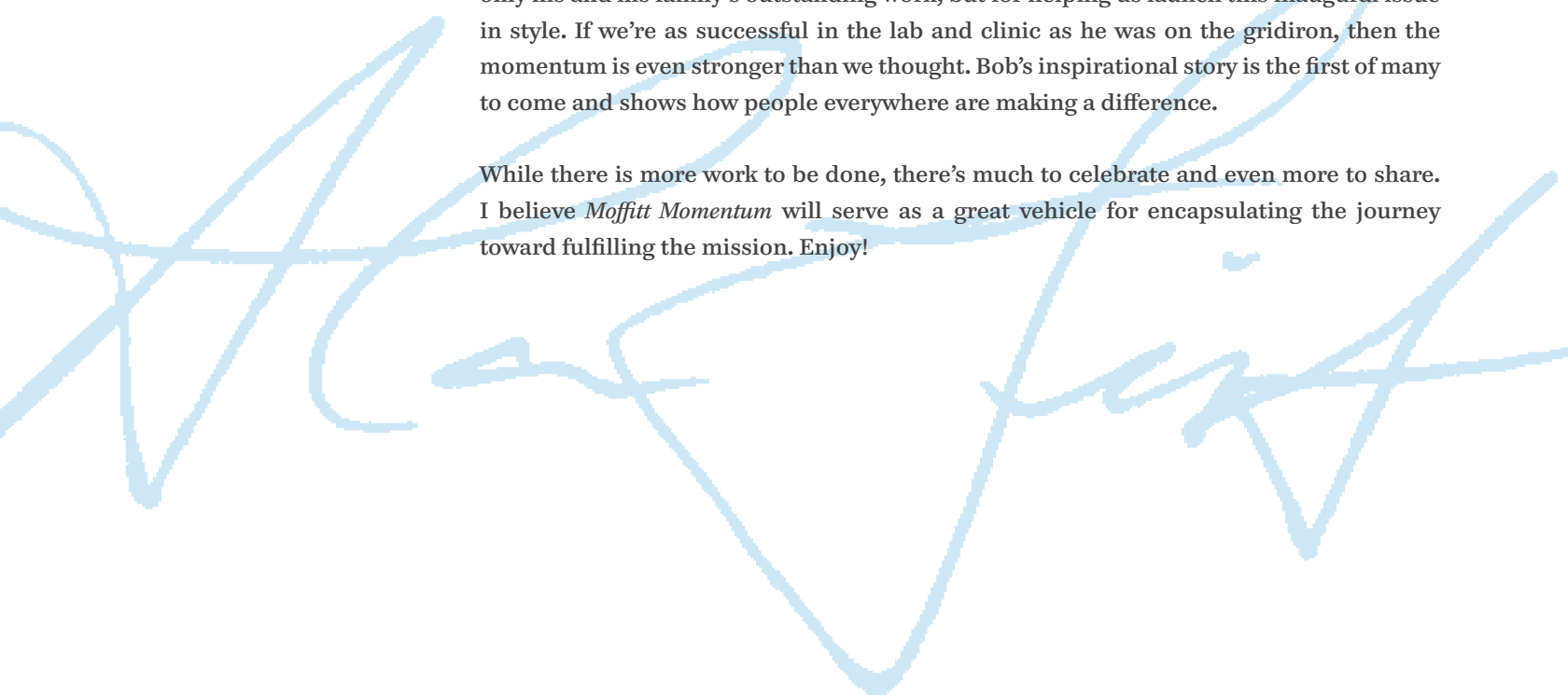
Dear Friends,

I am proud to announce an exciting new way for Moffitt Cancer Center to tell the story of the fight against cancer. Since 1986, our single focus has been to contribute to the prevention and cure of this disease. In short, to end cancer. And today, the work being done here at Moffitt is transforming the way cancer is treated and perceived around the globe. But as you'll see in this and every issue of *Moffitt Momentum*, the story is not just about us.

Patients, families, partners, donors and friends locally and worldwide continue to inspire us to fight harder. And along with our faculty, staff, clinicians and researchers, they have their own stories when it comes to being touched by cancer and the commitment to help defeat it. *Moffitt Momentum* will tell these stories, sharing portraits of the fight in a way we think will be more engaging and memorable than what you might be used to. Have you ever imagined a magazine about science, research and medicine looking and feeling more like a coffee table book? Neither had we. But then we asked the question that's heard quite often around here. Why not?

I invite you to get to know the new layout and read about what's happening in discovery, health and wellness as well as efforts and opportunities to fuel the fight through funding and involvement. Speaking of that, I'd like to thank Bob Griese, an NFL legend, for not only his and his family's outstanding work, but for helping us launch this inaugural issue in style. If we're as successful in the lab and clinic as he was on the gridiron, then the momentum is even stronger than we thought. Bob's inspirational story is the first of many to come and shows how people everywhere are making a difference.

While there is more work to be done, there's much to celebrate and even more to share. I believe *Moffitt Momentum* will serve as a great vehicle for encapsulating the journey toward fulfilling the mission. Enjoy!





4 **CANCER ON THE SMALL SCREEN**
Perspective from a TV critic



6 **MORE THAN BRAINS**
Get to know one of our brightest minds



17 **OUTREACH HERO**
Awareness and prevention's translator



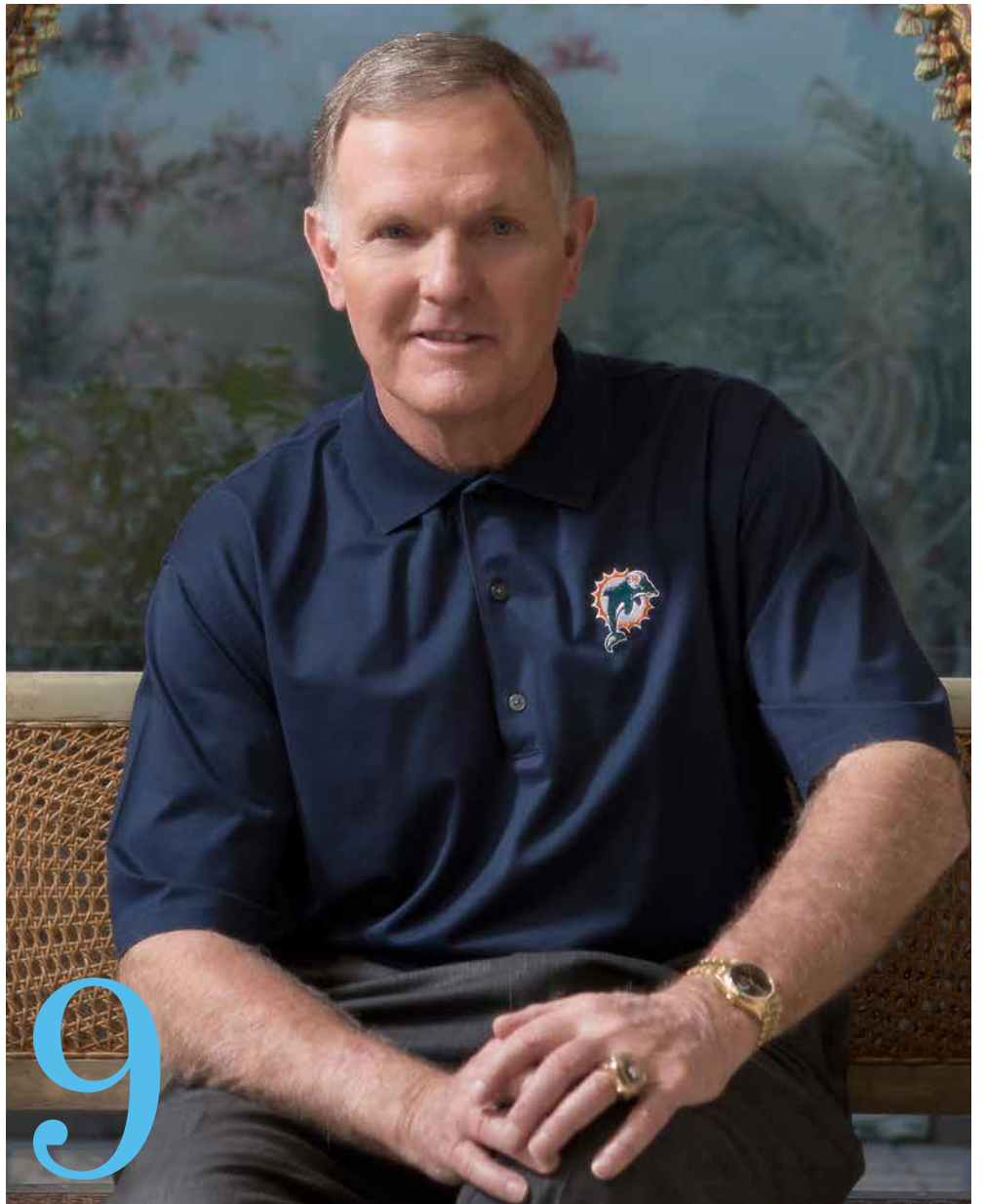
20 **SIT, STAY, INSPIRE**
This tail wagger is lifting spirits



13 **IN THE SPOTLIGHT**
Skin cancer has a new foe



14 **I THINK I CAN**
Introducing the little molecule that could



9

COVER STORY
Bob Griese wants to go undefeated again

PRIME TIME

CANCER'S SMALL SCREEN JOURNEY

ERIC DEGGANS
Guest Columnist
TV Critic, NPR

Robert Thompson just might have the coolest job in academia; he gets paid to study – and opine to nosy journalists at length about – what we all watch on television.

As head of Syracuse University's Bleier Center for Television and Pop Culture, there's little Thompson doesn't know about the small screen and its impact on America. But there's one type of television he's often avoided in more than two decades as a professional couch potato. TV programs dealing with cancer.

That's because Thompson was the primary caregiver for his mother when she was dying of cancer in the 1970s. And back then, he recalled, it wasn't hard to avoid television programs dealing with such an illness, in a TV universe which mostly avoided the problems of real life.

"TV was all about flying nuns and talking horses and escaping from reality," Thompson said. "For a long time, it was considered impossible to talk about cancer on a TV show without risking your audience."

Flash forward to modern times, and it seems there are few boundaries left in how television depicts cancer.

A major character on NBC's family drama *Parenthood*, Monica Potter's suburban mom Kristina Braverman, spent an entire season of the show fighting breast cancer. Viewers saw Kristina and her family struggle with her loss of energy, disappearing hair, debilitating chemotherapy treatments and much more.

And there have been two recent series centered on characters who had cancer throughout the run of the program: Showtime's *The Big C*, and AMC's breakout hit about a high school science teacher with lung cancer who becomes a methamphetamine-making drug lord, *Breaking Bad*.

On *The Big C* in particular, producers and star Laura Linney wanted to focus the show's drama on all the changes and choices someone is forced to make when struggling with a

terminal illness. Light years removed from the days when TV shows barely acknowledged the details of the disease, *The Big C* focused like a laser on a suburban wife and mother's process of figuring out how to spend her last months, weeks and days.

"It was important to me that you actually see what's happening to her, that you see the cancer, and you can see



how it changes people,” Linney told the public radio show *Fresh Air*, noting that she accepted the role of cancer patient Cathy Jamison not long before her father, playwright Romulus Linney, died of the disease.

“There is something about what happens to the soul of a person as they are battling with an illness; the days when they’re feeling weak, the days where they’re strong, how that shifts and changes, what happens to the voice, how the body moves,” she added.

Experts say people tend to absorb and believe health information depicted in TV and movies more readily. So modern TV’s evolution toward a more realistic and detailed depiction of cancer can mark a major evolution in how the public views serious illnesses and the people who struggle with them. 🎧



THE IMPACT OF BRIAN’S SONG

When talk turns to early depictions of cancer, it’s tough to avoid 1971’s landmark, made-for-TV movie, *Brian’s Song*.

Featuring James Caan as Chicago Bears running back Brian Piccolo and Billy Dee Williams as teammate Gayle Sayers, *Brian’s Song* recounts the two players’ close friendship, which lasted until Piccolo died at age 26 of cancer.

Thompson, who still shows the film to his classes at Syracuse University, said the movie reflected how TV often handled portrayals of cancer back then: the process of treating and living with the disease was rarely shown, and the illness was treated as a death sentence.

“It was almost the opposite of the *Parenthood* storyline,” the professor added. “Perhaps cancer is a little less scary in modern times, because we understand it a little better.”

Other notable cancer depictions from that era included a storyline on CBS’ *All in the Family* in which character Edith Bunker mistakenly thought a lump in her breast might be cancer and a 1978 TV movie, *First You Cry*, featuring Mary Tyler Moore as a TV anchor who gets breast cancer.

Even on the groundbreaking 1980s medical drama *St. Elsewhere*, one storyline featured a cancer patient who was shot to death by a relative, seemingly put out of his misery. But the rise of popular, creatively strong medical dramas such as *ER* and *Chicago Hope* helped add to more realistic depiction in the 1990s and beyond.

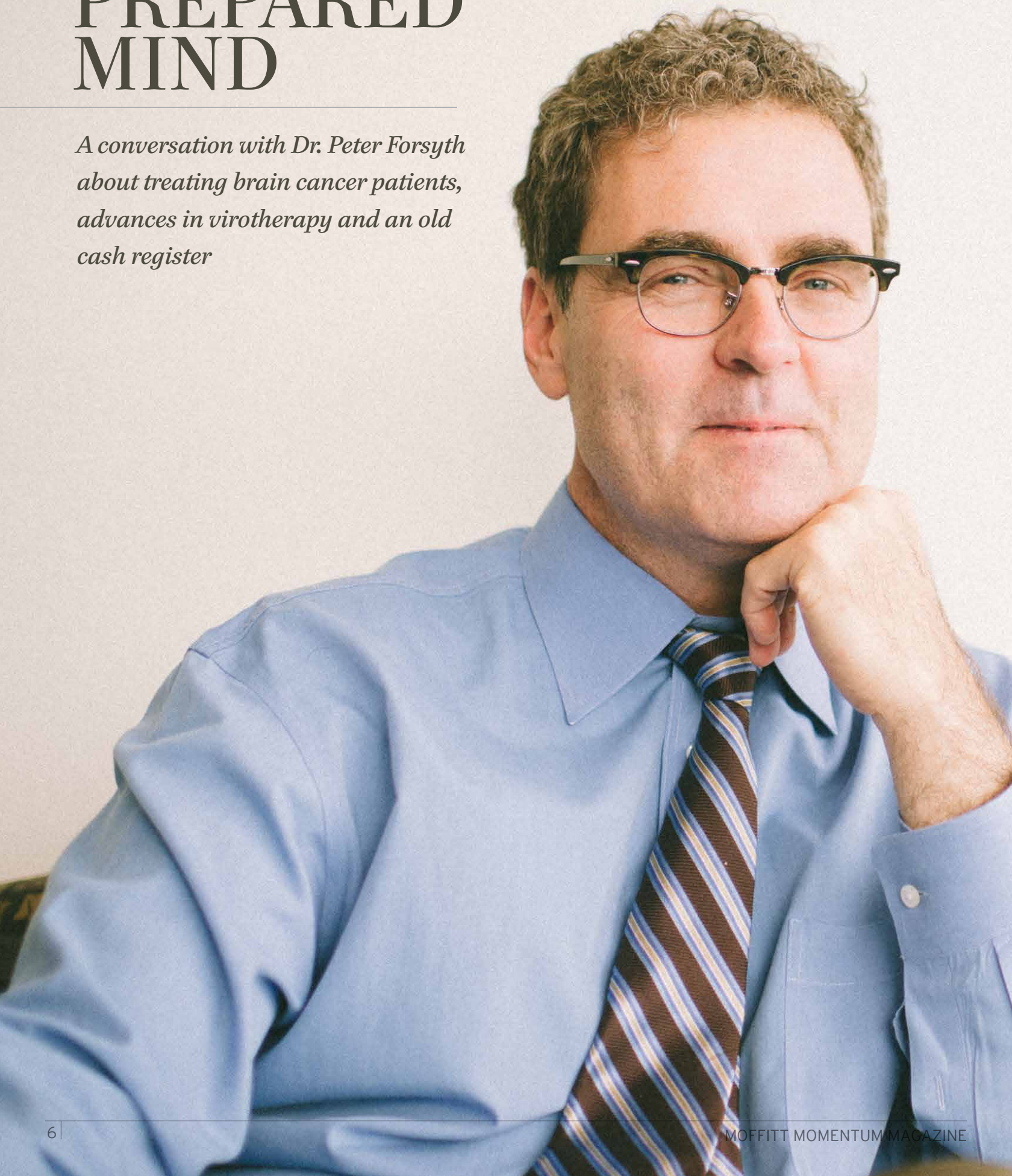
“*ER*...was a realistic prime time drama and huge ratings success, showing people were not turned off [by depictions of serious illness],” said Sheila Murphy, an associate professor at the University of Southern California who has written studies tracking the evolution of health depictions in television. “*ER* was unique in that it had actual [medical doctors] as writers and producers and these MDs typically wanted more realistic storylines.”

Later, TV shows such as *thirtysomething*, *Sex and the City*, *Desperate Housewives* and *Grey’s Anatomy* would feature storylines with major characters fighting cancer. But it wasn’t until *Breaking Bad* in 2008 and *The Big C* in 2010 that major TV series were centered on a starring character with cancer – and both those shows were on cable channels with smaller audiences than broadcast networks.

“[TV shows] still have to make cancer interesting and not off putting,” Murphy added. “Which is why most medical dramas [still] have ancillary characters get cancer.”

CHANCE FAVORS THE PREPARED MIND

*A conversation with Dr. Peter Forsyth
about treating brain cancer patients,
advances in virotherapy and an old
cash register*



Neuroscience, molecular genetics, bioinformatics and epidemiology. Words like these would make most people feel a little intimidated about sitting down with Moffitt Cancer Center's Neuro-Oncology Department Chair who collaborates with some of the brightest minds in the world to understand how and why tumors develop in the central nervous system, as well as what causes their growth and resistance to therapy. But anyone who spends a little time with Dr. Peter Forsyth can easily see that his scientific side is more than matched by his deep sense of compassion. Especially for cancer patients. And so, the intricate words were dismantled pretty easily as he began with a simple story about a woman and her restaurant.

“We’ve accepted cancer as a society, because we’re not surprised by it anymore. We need to start saying no.”

“I went into this because I was interested in diseases, and I thought the brain was cool, because it’s so complicated. And then I met a patient whose restaurant was losing money because she worked the cash register. It was a small, family-owned restaurant, and her husband noticed at the end of the day that they were taking in twenty bucks, or thirty bucks or something.” He explained how this woman had a tumor in one side of her brain that was making her ignore the left side of the world. Because of this, she wasn’t ringing in the dollars on the receipts – she was only ringing in the cents. “It’s true. I just thought it was fascinating. That this was a cancer that affected people’s lives in such a profound way.” The tone was set. While he would certainly be discussing some high-level subject matter, Dr. Forsyth would really be talking about human beings. And how their everyday lives are affected by a disease he is fighting with a healthy dose of big words and old-fashioned creativity.

Enter virotherapy – treatment that involves attacking tumors with live viruses. Not a new approach, but one that continues to evolve from its earliest days and reveal more possibilities on the horizon. Dr. Forsyth’s first experience with viruses and cancer cells came in 1997 when he teamed up with another scientist and conducted an experiment with a naturally occurring virus in an artificial environment. A month later, his partner called with the results: the virus had infected and killed cancer cells while leaving normal cells alone. They then tested it on animals, injecting 30 mice that had brain tumors. In about three weeks, most of the mice were cured and most of the tumors were gone. “They shrank and went away, so it was amazing,” Dr. Forsyth recalled. As he described their next experiment he sketched rapidly on a piece of paper, like a student in class whose mind is racing. “The other experiment we did is we took brain tumors. We put one here and we put one over here (pointing to his drawing) and only injected this side, but then the tumor on the other side shrank and went away from a viral infection. So it was really cool because it had a huge effect, it happened very rapidly and it would infect and kill remote cancer cells.” This is very important when it comes to brain tumors and their removal with surgery. Because it’s not just the tumor you’re dealing with, but also all the little tumor cells that spread to other parts of the brain. According to Dr. Forsyth, some viruses can actually go out and infect and kill those remote invasive cells, which are the ones you can’t get to with radiation or chemotherapy. This brings promise, driving further exploration and testing with viruses in the fight against cancer.

Currently Dr. Forsyth and his team are working with the myxoma virus, a relative of poxvirus that was proven to only infect European rabbits. In the 1950s myxoma was used in Australia as a solution to the rabbit overpopulation, but first it had to be tested on other species. And to alleviate public anxiety, lead investigators actually injected themselves with myxoma to confirm that it was also safe for humans – a move which today would only take place in a Hollywood blockbuster. Hollywood, however, couldn’t have scripted Dr. Forsyth’s story any better. That’s because he’s not only working with the world’s expert on myxoma, but also because this expert is his good friend and fellow Canadian, Dr. Grant McFadden, Professor of Molecular Genetics and Microbiology at the University of Florida. Along with Dr. McFadden, Dr. Forsyth is working on different ways to modify the myxoma virus. Because this virus has been mostly sequenced, it has a skeleton that you can add to and subtract from. This makes it possible to attack cancer cells with many different forms of it. But in order to have success, Dr. Forsyth says you have to be collaborating with others who think

about things from different angles. “It’s a teamwork thing. You need to be in a place where you’re part of a team and ready to make discoveries. And to do something. Chance favors the prepared mind.”



It’s hard not to get excited hearing Dr. Forsyth talk about his work with virotherapy as well as advances others are making. Shifting gears from mice to humans, however, it becomes clear that the excitement around use of viruses in treating cancer must be matched with the right levels of responsibility, patience and humility. “The challenge for us is, it’s easy to make discoveries in the lab and easy to make discoveries in animals. But it takes a while to get through the regulatory protections to make sure the kinds of things you want to do are safe.” According to Dr. Forsyth, having passionate people working too quickly and doing things unsafely can hurt everybody – not the least of which is patients. When it comes to being passionate, his work clearly speaks for itself. And as for describing his concern for patients, mere words simply fall flat. During this interview, the photographer struck up a conversation with Dr. Forsyth – nothing intended but to lighten the mood and create a relaxing atmosphere for nice pictures. “Brain cancer,” responded Dr. Forsyth when asked what he specifically treats. That’s when the photographer revealed he has a family member recovering from brain tumor surgery. And that’s when the rest of Dr. Forsyth’s world

disappeared. Suddenly there were no pictures being taken, no crew walking around with equipment, no tape recorders, no schedule to keep and no story. Only two men were left. One describing someone’s battle with cancer and the other hanging on every word.

“You need to be in a place where you’re part of a team and ready to make discoveries. And to do something. Chance favors the prepared mind.”

While one of Dr. Forsyth’s patients who was treated with a virus in 2003 is still alive and well today, many others have not experienced this success. Yet he doesn’t view this as some people might. Because to him it’s not just about numbers. “If you’re treating fifteen patients and the tumor shrinks in three people, and you think like a statistician, what does that matter? Nothing. But if you think like a person or a scientist, it’s different. Hold on, these people are still living five and seven years later. Like this one (referring to his patient). He’s telling me something, right? So we need to listen to him. What is it? Why did it work for him and not someone else? And focus on that. Medicine is not statistical, you know? It’s personal. Everybody matters.” When it comes to cancer itself, however, Dr. Forsyth has a little less compassion. He views the normalcy of the disease almost as an epidemic itself, and wants to change that. “We’ve accepted cancer as a society, because we’re not surprised by it anymore. We need to start saying no.” Then, in the same manner as when he began the interview, he shared a personal story.

“When I was a medical student in Canada I was walking to one of my classes. And there were all these huge, old buildings. There was a thousand-bed rehab center just empty and decaying, so it was obviously from the turn of the previous century. I met my mentor and asked him about it. I told him it was really creepy and looked like a Stephen King set or something. And he said, ‘Oh, it’s a TB sanatorium.’ And I was like, ‘Really? Well, what’s TB?’ He said, ‘You don’t know what TB is?’” Dr. Forsyth paused for a moment, his passion settling into quiet confidence and reflection. “We have to make cancer like TB, so that our kids don’t know what it is.”

DAVE HYDE
Guest Columnist
Sports Columnist, Sun Sentinel

QUARTERBACKING THE FIGHT



SHAY AND BOB GRIESE
Advocates



There is a moment each year, a moment without cameras or notebooks, when Bob Griese walks inside Moffitt Cancer Center and feels like a fan getting an inside look at the team he follows. That's how he refers to the doctors and researchers at Moffitt.

"My team," Griese calls them in the way football fans once did about his Miami Dolphins of the 1970s, the way he did as a youth about the New York Yankees, the way every sports fan does from his or her first cheer.

Everyone has a team. This is Griese's team now. As chairman of Moffitt's national Board of Advisors, he makes an annual tour to see the clinical trials, talk with the involved doctors and translate the year's progress against cancer in a manner he understands: as that of a football quarterback moving the ball downfield against the toughest opponent of them all.

"For a long time, we were backed against our goal line against cancer," he said. "Then we started to move the ball down the field some, slowly but surely. Now you can see it, the progress this team has made. You can feel the momentum from the work they're doing. The end zone's getting closer."

It was on one of these recent trips to Moffitt, as he studied the research and listened especially to breakthroughs in chemotherapy treatment, Griese realized something that marked progress more than any chart or medical analysis could. He realized his late wife, Judi, would have a great chance of surviving today. It struck him that an otherwise healthy 44-year-old woman – a nurse, no less – who discovered a small lump on her breast one morning would have a far greater chance of living more than the five years Judi did – watching her three sons grow and continuing a good life with her husband.

"OK, let's fight this," Judi said to her husband after each trip to the oncologist, each trip to chemotherapy, each time she was told the cancer spread until there was no way to stop it. That was 25 years ago, and the end of Judi's fight was the beginning of her husband's fight. It began privately, at home, with the shepherding of his three boys through the death of their mother. Griese knew what it was like to lose a parent. He was 10 years old and felt lost when his father died of a heart attack. He tells a story: As family and friends gathered at the family home to mourn his father, his mother suddenly realized Bob was missing. Everyone searched the house. People ran through the neighborhood, calling for him. Police arrived to help. Then someone heard a thumping sound upstairs. Alone, in a closet, Bob sat thumping his heels against a cedar chest and hiding from his changed world. He was traumatized by his father's death, and so gave great thought when Judi died to helping his sons, especially the youngest, Brian, who was 12 and the only one still living at home.

"We laughed and cried and were honest with each other about our feelings," Griese said. "I might hide my true thoughts and emotions in public. I never did inside the family."



FAMILY TRADITION

At the time his NFL career bloomed in Denver, Brian Griese showed all of a pro athlete's possibilities. And responsibilities. He didn't just think of succeeding in football. He thought of how to help the 12-year-old kid he once was.

That was the vision for Judi's House, a large, red-bricked haven where children, teens and young adults get help in dealing with the loss of a parent in the same way Brian lost his mother, Judi, to cancer in 1988.

Brian had his dad to help him through the grief. They talked. They cried. Day by day, they felt their way through the process, which the professional counselors at Judi's House navigate more easily.

Since it was founded in 2002, Judi's House has helped more than 6,000 children through their bereavement. Brian has stayed true to his cause despite an 11-year NFL career that took him from Denver to Miami, Tampa Bay and Chicago. Denver always remained his home in good part because of Judi's House.

Brian didn't just help children deal with issues similar to the ones he had of loneliness and anger over the loss of a parent; he memorialized his mother and heartened his father. "I'm more proud of what he's done off the field than anything he's done on the field," his father, Bob, said.

Brian also serves on Moffitt Cancer Center's Board of Advisors. To learn more about Judi's House, visit JudisHouse.org.

Over the years, Griese became a grandfather, re-married to Shay and continued the fight against cancer on a more public stage. He joined Moffitt. He lent his voice to fundraisers. He has become so known in this world that he often picks up his phone to hear a fragile voice asking for help. Sometimes it's a friend. Often, it's a stranger telling of a family member or co-worker who has been diagnosed with cancer and doesn't know where to turn. Griese recognizes those concerns, those questions and that scared voice as him all those years ago.

"I know exactly what it's like to go through that, to wonder about the unknown and worry about losing a loved one," Griese said. "I help them as best I can. But after a little bit I know exactly what they need."

Which is?

"For me to hand the phone to Shay," he says. Shay has a list of names and phone numbers at Moffitt, draws a picture of what they can expect in the days ahead and comforts them with knowledge and direction as much as any words. This is what a couple of decades involved with cancer has done, what they're hoping to lend a small hand to stopping.

"I don't know anybody that hasn't been touched by cancer in their circle of family or friends, somewhere," Griese said.

Just off his undefeated 1972 Dolphins team, Griese can go down a list of lost friends: linebacker Bob Matheson died of Hodgkin's Disease, which is cancer of the lymph nodes; Dorothy Shula, the wife of coach Don Shula, died of breast cancer; and tight end Jim Mandich died of bile duct cancer.

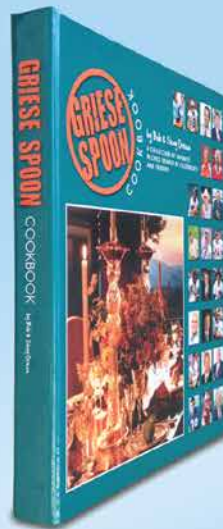
Judi is part of that tragic list. It explains why Griese joined Moffitt. It's why he roots for his team of doctors and researchers. He never expected this to be the road he took, but then life has been a surprise to him the whole way. He was only recruited by two colleges out of high school. He didn't think pro football was an option, back in the dark ages without wall-to-wall draft coverage, until he walked into the Purdue football office one day and was told, "The Miami Dolphins drafted you."

Two Super Bowl wins and a Hall of Fame football career later, his fight is with cancer. He's a foot soldier in it. The real quarterbacks are the doctors and researchers. The goal, he says, "is to see cancer eradicated in my lifetime. I'd love to see them all out of a job."

To that end, each year when he tours the Moffitt facility, Griese asks the same question from the same place of hope. "How come you guys aren't out of business yet?" he says. That will mean their work was successful, that cancer is gone. Griese knows his team isn't there yet. But he feels it is marching down the field, getting closer to making it happen. 🗣️

COOKING WITH SHAY

Shay Griese does some of her best work from the passenger seat of an airplane. It was flying from Miami to Dallas that she once struck up a conversation, then a card game with a quiet traveler who later became her husband, Bob. And when she considered how to raise money for Moffitt Cancer Center in the midst of a national economic downturn, she relied on broader airplane research.



Over years of talking with maybe a hundred seated neighbors, Shay came to realize men spent lavishly on two things: pets and food. She couldn't come up with a fundraising idea involving pets. But food? She didn't just love to cook. Her football-famous husband could find men to provide recipes for a celebrity cookbook.

"Bob began calling some friends, and in two or three weeks we had enough good recipes to fill a book," she said.

Griese Spoon Cookbook became the outgrowth. Bob's long-time partner announcing college football on ABC-TV, Keith Jackson, wrote the foreword and gave a salmon recipe. Among the 168 pages of recipes are Dan Marino's Bolognese sauce, Don Shula steak soup, Bryant Gumble's Creole stuffed mirlitons, Roger Staubach's chicken pot pie and country singer Kenny Chesney's key lime pie.

"I tested every item," Shay said. "The only wonder is how I didn't gain 30 pounds doing so."

Profits went to Moffitt and are still coming. The book is in its third printing in a year.

Shay is a member of Moffitt's Foundation Board of Directors. The book is available at the Cancer Center gift shop, wimmerco.com, amazon.com and barnesandnoble.com.

KILLER TAN

Research grant focuses efforts on disabling melanoma

Melanoma, the most lethal skin cancer, is the most common form of cancer for young adults 25 to 29 years old. It's also the second most common form of cancer for young people ages 15 to 29. But it can be avoided. In the words of Moffitt Cancer Center's Jeffrey Weber, M.D., Ph.D., "Melanoma continues to rise in incidence worldwide, and has advanced to soon become the fifth most common cancer in the U.S. It strikes those in the prime of life, in their fifties and sixties, and accounts for more years of life lost of any adult cancer." He goes on to say that this trend could be reversed if we engage in safe sun practices, and particularly avoid tanning salons – which are likely to increase the incidence of not only melanoma but also other types of skin cancer.

The Centers for Disease Control and Prevention (CDC) expressed concern for this growing problem, as people younger than 35 who participate in indoor tanning have a 75 percent higher risk of getting melanoma.

Obviously, prevention is key. Dr. Weber directs Moffitt's Donald A. Adam Comprehensive Melanoma Research Center of Excellence. The Center's goal is to contribute to the understanding, prevention and cure of melanoma – one of the most serious and difficult skin cancers to treat. He also oversees a newly awarded National Cancer Institute (NCI) Specialized Programs of Research Excellence (SPORE) grant for melanoma research, totaling \$8,829,020 over five years.

"SPORE grants were established to promote interdisciplinary research and help move basic findings from the laboratory to a clinical setting," says Dr. Weber. "The addition of a melanoma SPORE acknowledges the translational research being done by our Comprehensive Melanoma Research Center of Excellence. We are honored to be recognized by the NCI, and this grant will allow us to significantly enhance our efforts to contribute to the

prevention and cure of skin cancer." This is Moffitt's second SPORE grant. The first, for lung cancer research, was awarded in 2008. Moffitt is the only cancer center based in Florida that has received this prestigious grant.

The melanoma SPORE grant has been several years in the making. In 2007, Moffitt was awarded a melanoma SPORE planning grant from Florida's Bankhead-Coley Cancer Research Program spearheaded by Vernon K. Sondak, M.D., chair of Moffitt's Department of Cutaneous Oncology, to help recruit a team of interdisciplinary skin cancer researchers. That same year, Donald A. Adam, a melanoma survivor and banker, donated \$20.4 million to Moffitt for expanding expertise in the area of melanoma research. The gift led to the development of the Donald A. Adam Comprehensive Melanoma Research Center of Excellence and facilitated the recruitment of Dr. Weber.

Today, most melanoma patients participate in a clinical trial. And at Moffitt, several unique trials are exploring innovative approaches to skin cancer treatment aimed at improving the outlook for late-stage patients. Each study taps into Moffitt's culture of teamwork and adaptability in order to quickly bring new scientific discoveries from the laboratory to the bedside. "People are positive and feel rewarded about enrolling in a clinical trial even if the outcome is unknown," says Dr. Weber. According to him, realizing they might be helping someone in the future goes a very long way. 📞



STARTING SMALL



THINKING BIG

Is it possible that artists and musicians get too much of the credit when it comes to being creative and cool? What about someone who wears a lab coat and spends most of her day peering through a microscope?

From her days in graduate school at the University of Vermont and then postdoctoral training at the University of Arizona and Moffitt Cancer Center, Lori Hazlehurst, Ph.D., knew exactly where she was headed. And nothing about research seemed boring to her because of its opportunities to do something new. “My passion has always been drug discovery and development,” says the president and co-founder of Modulation Therapeutics, Inc., a Moffitt startup and early-stage company dedicated to creating new ways to target difficult-to-treat tumors. The company’s journey began with the discovery of a new molecule under the watch of William S. Dalton, Ph.D., M.D. (former Moffitt CEO), who Hazlehurst worked for as a postdoc and now serves as a board member. Developing this molecule, now patented as MTI-101, Dr. Hazlehurst and her team worked with Moffitt’s Office of Technology Management and Commercialization and are now transforming her passion into reality.

What can MTI-101 potentially do? It could possibly help solve the difficult puzzle of cancers that metastasize to the bone. It was specifically designed to disrupt bone metastasis seen in multiple myeloma and other blood cancers, which are very

“MTI-101 targets a cell adhesion molecule that is required for cancer cells to travel to the bone.”

hard to treat successfully. “MTI-101 targets a cell adhesion molecule that is required for cancer cells to travel to the bone,” explains Dr. Hazlehurst. “It disrupts the tumor-host interaction by targeting alternative pathways not used by standard chemotherapies to induce programmed cancer cell death.” Because the treatment has been so promising in laboratory tests, Modulation Therapeutics has received more than \$1 million in funding from a variety of sources in order to continue developing MTI-101 and other compounds that may have application for a broader range of cancers. For example, early test results have shown that the molecule could also be very effective for treating lung cancer.

According to Dr. Hazlehurst, Modulation Therapeutics plans to stay true to its roots as a drug discovery and development company. Dr. Hazlehurst and her partners realize the need and urgency to develop strategic partnerships with pharma, the National Cancer Institute and cancer foundations. Strategic partnerships will allow for a more rapid FDA approval process, ultimately getting the treatment to patients who need it.

While certainly excited about this molecule and the progress of her very creative company, Dr. Hazlehurst really perks up when talking about her team. She stresses the importance of collaboration across disciplines as well as interactions with clinical scientists to move discoveries forward. And perhaps remembering her own path, she emphasizes the critical role

played by grad students and postdocs. Talking with Dr. Hazlehurst gives you the sense there’s definitely something great about being small and nimble. Describing the other members of her team as two chemists, two pharmacologists and a “Jack of all trades,” she grins about the different personalities and smiles about the possibilities.

So perhaps cancer researchers are cool after all. And anyone who still disagrees should consider heading to the beach on a windy weekend day. Look out toward the horizon. You might just see Lori and her husband. They’ll be the ones shredding the waves on their kite boards like a couple of semi-pros. Pretty cool indeed. 🌀



Moffitt’s Office of Technology Management and Commercialization

Established in 2004 and recently celebrating its 100th licensing deal, the OTMC helps facilitate, launch and grow faculty startup companies that license Moffitt technologies. The goal is simple: move ideas along the development process and get discoveries to the patient’s bedside as quickly as possible. Not only does this help pay off the time and effort expended by Moffitt researchers like Dr. Hazlehurst, it also brings us that much closer to the goal of defeating cancer.



「 LORI HAZLEHURST, PH.D.
MODULATION THERAPEUTICS, INC. 」

SAVING

VIDAS



Meet Myriam Escobar, a champion of life-saving change. Myriam is a Community Outreach Worker with the Moffitt Diversity Department's Yo Me Cuido[®] program, a Latina breast health education project.

Recently, she was one of only eight individuals nationwide honored at the White House as a "Champion of Change." She was recognized by the president for her work inspiring healthy changes among Hispanic women.

INTERVIEWER: With all of the breast cancer awareness groups, rallies, fundraising events and news stories that take place every day, is there still a lack of information that is reaching the Hispanic community?

MYRIAM ESCOBAR: Yes, there is still a need for information among the Hispanic community, because of different factors. Some are cultural – simply because the families of these women never spoke about the subject. There is also a lack of interest, because they consider their work more important and they are afraid of losing it, they spend a lot of time with their families and always put themselves last. When they hear us saying that they need to come first to take care of their health so they can help their families, they start realizing they are important.

INTERVIEWER: Statistics show that Hispanic women are more likely to be diagnosed at the later stages of breast cancer. What are your thoughts on why this is so?

MYRIAM: It's true, statistics clearly show that and the reality is that we are diagnosed in the later stages of the disease because we put ourselves last. We don't [typically] believe in early prevention and we go to the doctor when we are sick, and in many cases when it's too late.

INTERVIEWER: When did you first realize you wanted to reach out to the Hispanic community in this way? Did something in your own life prompt this?



MYRIAM ESCOBAR
Moffitt M-POWER

“Para mí es muy importante que todas las mujeres comprendan la importancia de la prevención.”

- FOR ME IT IS SO IMPORTANT THAT WOMEN UNDERSTAND THE IMPORTANCE OF PREVENTION.

MYRIAM: I have worked my whole life with communities in different areas. But in 2008, my sister-in-law died of breast cancer. We were like sisters and she fought a long battle for 9 years against cancer. And all because she didn't pay attention to the symptoms. That's why for me it is so important that women understand the importance of prevention because, like in the case of my sister-in-law, she shouldn't have died because she didn't have information about how to prevent it.

INTERVIEWER: This outreach program has gotten a lot of national attention and is growing beyond the Tampa Bay area. How is that progress coming along?

MYRIAM: We have been in different counties and we want Yo Me Cuido® to reach the entire nation. It is our dream that all Hispanic women can get this information in their language, because that's what makes this program so successful. We hope to get outside the Tampa area, reach the whole Florida and eventually all the states of the nation.

INTERVIEWER: Educating the community is Yo Me Cuido®'s first step. How important is the individual's first step, examination?

MYRIAM: A lot, because when they start understanding the importance of prevention, they realize it's not just about hearing the message but about taking action. We help them a lot in that sense, because we start calling them, sending them emails and postcards reminding them of the mammograms and once they do it their fears vanish and they keep doing it year after year.

INTERVIEWER: Are you seeing a new sense of empowerment among these women you've met?

MYRIAM: Yes, definitely yes. A large percentage of these women come out of the class motivated, and they know they have in their hands the power to change not only their own lives but also the lives of all their family members.

INTERVIEWER: One day you're here in Tampa, working with a group of women in their homes. The next day you're at the White House being honored by the President of The United States. What was this like for you?

MYRIAM: First, it was surprising because we never expected something of this magnitude. We are a small department with the funds we have to do what we can. [It was] an honor and above all a great opportunity.

INTERVIEWER: How many people have participated in the Yo Me Cuido® program to date?

MYRIAM: To date, we have educated more than 2,000 women and I can tell you with certitude there are at least 2,100. From those 2,100, 48 percent of the women over age 40 have had their mammograms done - and there is a large percentage that doesn't show up in any statistics because it's very difficult to follow the number of women who have their mammograms done as the result of a reference. Many women call me and say "I am a friend of someone who went to Yo Me Cuido®."

INTERVIEWER: Prior to working at Moffitt, you were a bus driver for the school system. How did that experience help you get hired at Moffitt?

MYRIAM: I always say that God puts His hands in all these things. A month before my sister-in-law died, someone called me and told me that Moffitt was going to offer mammograms, and at that time I didn't have any [health] insurance. I called and made an appointment for my mammogram. When I got there, Jeannette Palencia, the person who helped me with the application, seemed so nice and I got the courage to ask

“Las mujeres saben que tienen en sus manos el poder de cambiar no sólo sus propias vidas si no también la de la familia entera.”

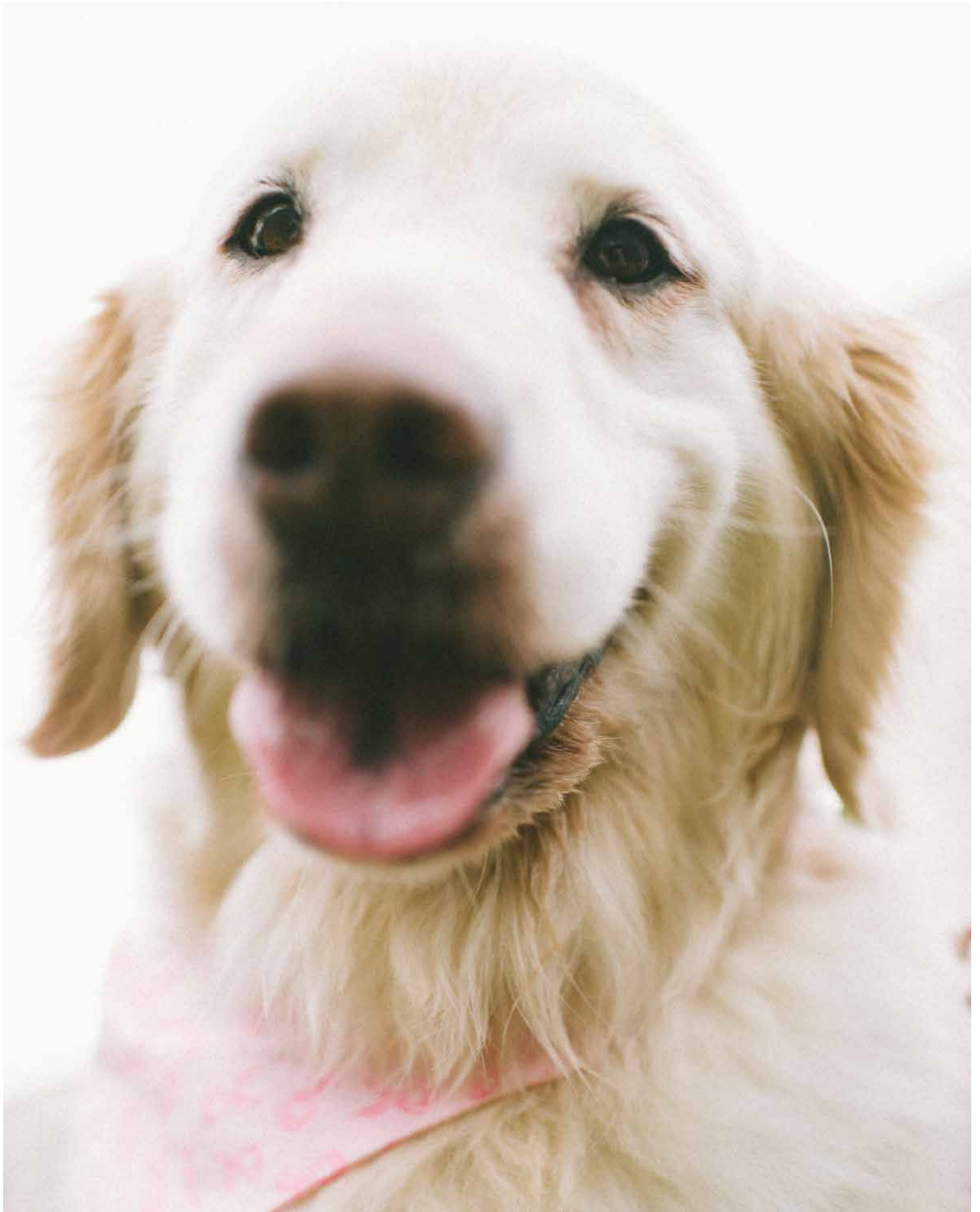
- THE WOMEN KNOW THEY HAVE IN THEIR HANDS THE POWER TO CHANGE NOT ONLY THEIR OWN LIVES BUT THOSE OF THEIR FAMILY.

if there was a position available at Moffitt. I didn't like my job and I already knew Moffitt, and I loved it because I could tell that when my sister-in-law went there she felt at home. For her, Moffitt was her lifeline for 9 years. I dreamed about working at Moffitt. Then they asked me if I had a driver's license, because they were looking for a person to drive the bus and also to help with the applications, and that's how I got to know the community little by little. Two years later they retired the mobile unit and that's when Yo Me Cuido® was born. One thing led to the next: the day after my sister-in-law died, I was working at Moffitt. These are God's things. Now I'm here and at every class we teach I know she's there with us. Her fight was not in vain.

INTERVIEWER: Is there anything else you'd like to add?

MYRIAM: I think it is very important to mention that the program has been funded by The American Cancer Society and by Walmart Foundation. We are running the fourth phase of the program from September 1st through end of August of 2014. There is a new ingredient in the program, nutrition, which we are going to treat in depth, so we can start changing certain habits regarding the nutrition of our families. 🍷

Para leer toda la entrevista en español, visite MOFFITT.org/Momentum.



HOLLY
Volunteer

T H E

WALKING SMILE

Thursdays might seem like average, ordinary days at Moffitt Cancer Center. But an average day at Moffitt includes groundbreaking research and treatments with remarkable patient care and unmistakable, exceptional compassion. An average Thursday might also include a visit with a beautiful Golden Retriever named Holly.

Through Moffitt's Pet Therapy Program, qualified dogs like Holly are able to visit and interact with patients, family and friends. This program is just one of the support services Moffitt offers to care for patients' physical, spiritual and emotional needs through every step of their journey.

Holly's job keeps her busy in the clinic lobby. She calms the patients and comforts them, which sometimes even lowers their blood pressure. It seems like a simple thing, letting people pet her and in turn "smiling" at them, but she lights up the room and the impact is almost overwhelming. Holly almost always makes a connection with the patients she meets, and now they share a unique and even stronger bond. She has also been diagnosed with cancer and is in the middle of the same scary fight. But she has yet to stop smiling and she still looks forward to visiting with her friends - old and new - on Thursdays.

That's when she gets her ears rubbed, her neck hugged, her belly scratched and her name called again and again. Holly loves it. She has even been nicknamed "The Walking Smile." This dog has so much love to give that she wouldn't be able to do anything else. This may be because she grew up alone on the streets and wasn't rescued until she was four or five years old. Her owner, Kelly Pavone, adopted Holly in June of 2009 and says rescue dogs know they've been rescued. They are so thankful to be loved they just give it right back tenfold. That is what Holly does. That's what she is uniquely equipped to do. Kelly says Holly has a sixth sense and knows exactly who to visit and how to help. She's right. Holly is patient with the children who run up and fall all over her. She is sweet to the elderly who reach down to give a gentle pat. She leans into you when she knows you need a hug. There is a noticeable difference in everyone after meeting this charming golden dog. She really is perfect for this job.

Kelly was first introduced to the idea of pet therapy when her father was able to interact with a pet therapy dog before going in for an open-heart surgery. She loved that idea and has wanted to care for others in the same manner ever since.

When Kelly adopted Holly she noticed right away the dog's special qualities and knew she was the right partner for Moffitt's Pet Therapy Program. Every dog has a personality, but Holly is full to the brim with it. She is mischievous, loving, quirky and charismatic. She has a few fantastic nicknames you will have to ask Kelly about, a favorite toy that is almost impossible to steal away and a history that rivals any orphan turned superhero. A dog this special deserves every chance.



Kelly and Holly

Holly's original diagnosis included seven tumors on her lungs and one on her chest. She was given only months to live and there didn't seem to be much hope, but Kelly believes Holly has much more love to give. So she began the search for any and all available treatments. After hearing about Holly's work with Moffitt, a research and development company agreed to treat her with an experimental vaccine that is part of a clinical trial for animals. The vaccine is showing promise and will be going into human clinical trials in 2014 at the University of Nebraska Medical Center. Holly recently had her sixth cancer vaccine and the cancer in the lungs has stabilized, but the tumor on the chest continues to vary in size. Holly is monitored closely, though she doesn't even seem to know she has cancer. She goes about her day as happy as ever, wagging her tail just as often and loving those around her with the same amount of enthusiasm.

Kelly knows Holly has a purpose. She knows the fight against cancer is tough, and she hopes the clinical trial will lead to improvements in the treatment of animals and, ultimately, humans. She knows Holly is a huge part of Moffitt where so many are cheering for this great friend. Holly continues to do her job and brighten the clinic lobby every Thursday, which is anything but ordinary. 🐾



NOTABLE

HOWARD MCLEOD, PHARM.D., IS MOFFITT'S FIRST CANCER RESEARCH ENDOWED CHAIR, as established by the Florida Legislature. Dr. McLeod serves as medical director of the DeBartolo Family Personalized Medicine Institute, which was founded to seek out and share targeted treatments with the aim of improving outcomes, curing disease, extending survivorship and improving quality of life for patients in Florida and beyond.

MOFFITT CANCER CENTER RECEIVED A \$5 MILLION DONATION FROM CHRIS SULLIVAN, restaurant developer and co-founder of Outback Steakhouse and its parent company Bloomin' Brands, Inc. The gift will help address the pressing need for more effective therapy for patients with melanoma. The contribution will support work at Moffitt's Donald A. Adam Comprehensive Melanoma Research Center of Excellence where researchers are sequencing the human genome and developing personalized treatments for melanoma to ultimately improve patient survival. Melanoma is the most common form of cancer for young adults 25 to 29 years old and the deadliest form of skin cancer.

MEDICAL/SCIENTIFIC ADVISOR
Frank D. Vrionis, M.D., M.P.H., Ph.D.

MANAGING EDITOR
Cathy Clark

H. Lee Moffitt Cancer Center & Research Institute, an NCI Comprehensive Cancer Center – Tampa, FL
© 2014 H. Lee Moffitt Cancer Center & Research Institute, Inc. All rights reserved.

SHARE YOUR
THOUGHTS



EDITOR@MOFFITT.ORG

FLORIDA IS THE OFFICIAL PLACE OF BUSINESS FOR THE MOFFITT CANCER CENTER FOUNDATION. A COPY OF THE OFFICIAL REGISTRATION AND FINANCIAL INFORMATION MAY BE OBTAINED FROM THE DIVISION OF CONSUMER SERVICES BY CALLING 1-800-435-7352 TOLL-FREE WITHIN THE STATE. REGISTRATION DOES NOT IMPLY ENDORSEMENT, APPROVAL, OR RECOMMENDATION BY THE STATE. FLORIDA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES REGISTRATION NUMBER CH-4675. NO PERCENTAGE OF CONTRIBUTIONS ARE RETAINED BY A PROFESSIONAL SOLICITOR, 100% OF ALL DONATIONS ARE RECEIVED BY THE FOUNDATION.

EACH YEAR BRINGS HOPE, INNOVATION, TRIUMPH AND AN ANNUAL REPORT

NEW RESEARCHERS, AN EXPANDED CELL THERAPIES FACILITY AND A QUEST TO DEFEAT WOMEN'S CANCERS. JUST A FEW OF THE FEATURES IN MOFFITT CANCER CENTER'S 2013 ANNUAL REPORT. AVAILABLE ONLINE TODAY AT **MOFFITT.ORG/2013ANNUALREPORT**

MOFFITT CANCER CENTER
12902 MAGNOLIA DRIVE, TAMPA, FL

MOFFITT CANCER CENTER
AT INTERNATIONAL PLAZA
4101 JIM WALTER BOULEVARD, TAMPA, FL

H. LEE MOFFITT CANCER CENTER & RESEARCH INSTITUTE
AN NCI COMPREHENSIVE CANCER CENTER, TAMPA, FL | 1-888-MOFFITT



CLOSER TO OUR PATIENTS.
CLOSER TO A CURE.®



12902 Magnolia Drive, Tampa, FL 33612

TO CONTRIBUTE TO THE PREVENTION AND CURE OF CANCER

MOFFITT.ORG | 1-888-MOFFITT